

**MEMORANDUM**

**To:** Alabama’s Education and Workforce Development Stakeholders  
**From:** Nick Moore, Director, Governor’s Office of Education and Workforce Transformation  
**Date:** 1 December 2020  
**Subject:** The Centrality of Transparent, Quality Non-Degree Credentials to Alabama’s Talent Development Strategic Plan

**Table of Contents**

***1 Introduction: Developing Pathways to the Middle Class by Developing a Currency of Quality Non-Degree Credentials ..... 2***

***2 Alabama’s Postsecondary Attainment and Credential Attainment Goals ..... 3***

***2.1 Measuring and Tracking Progress Against the Five Success Plus Postsecondary Education Attainment Goal .....3***

***3 Defining Non-Degree Credentials ..... 5***

***3.1 Background on Alabama’s Non-Degree Credential Quality Assurance Initiative .....5***

***4 Non-Degree Credential Quality Assurance ..... 6***

***4.1 The Alabama Committee on Credentialing and Career Pathways (ACCCP).....6***

***4.2 The Five-Star Rubric for Identifying In-Demand Occupations..... 8***

***4.3 Developing Competency Models and Career Lattices .....8***

***4.4 The Alabama Occupation Ontology.....9***

***4.5 The Alabama’s Competency Taxonomy .....9***

***4.6 The Seven-Tiered Alabama Competency Taxonomy .....9***

***4.6.1 Tier One .....9***

***4.6.2 Tier Two .....10***

***4.6.3 Tier Three .....10***

***4.6.4 Tier Four .....10***

***4.6.5 Tier Five .....10***

***4.6.6 Tier Six .....10***

***4.6.7 Tier Seven .....11***

***4.7 Developing the Compendia of Valuable Credentials .....11***

***4.7.1 The Alabama Credential Taxonomy .....11***

***4.7.2 Tier One Review .....12***

***4.7.3 Tier Two Review .....13***

***5 Non-Degree Credential Transparency ..... 14***

***6 Demand and Data-Driven Talent Ecosystems ..... 16***

***7 Integrating the Delivery of Human and Workforce Services ..... 17***

***7.1 Mitigating Benefit Cliffs as a Pandemic Response and Reemployment Strategy .....17***

7.2 The Dashboard for Alabamians to Visualize Income Determinations (DAVID).....18

7.3 Human Capital Development ..... 18

8 Competency- and Work-Based Learning ..... 19

8.1 Competency-Based Education .....19

8.2 Skills-Based Job Candidate Matching and Hiring .....20

8.3 Competency-Based Education and Skills-Based Hiring as Degree Inflation Mitigation Tactics

8.4 Alabama Skills-Based Hiring Initiative.....23

9 The Future of Work in the COVID-19 Environment..... 23

9.1 Strada Public Insights Survey .....23

9.2 The Alabama Underemployment and Unemployment Survey .....24

10 Alabama’s Competency- and Skills-Based Response to the COVID-19 Pandemic..... 25

## 1 Introduction: Developing Pathways to the Middle Class by Developing a Currency of Quality Non-Degree Credentials

As Jamie Merisotis, President and CEO of the Lumina Foundation aptly stated in his second book, *Human Work in the Age of Smart Machines*, “[i]n today’s economy, and even more in tomorrow’s, people need to own their learning in much the same way as they need to own their health. Transparent credentials are owned by the people who earn them, and they make it possible for them to leverage their learning in whatever ways they can to advance their careers, do meaningful work, and build better lives for themselves and their families.”<sup>1</sup> Non-degree credentials (certificates, industry certifications, apprenticeship certificates, and occupational licenses) are key to surpassing Alabama’s Success Plus postsecondary education attainment goal of adding 500,000 credentialed workers to the workforce by 2025 and responding to the Coronavirus Disease 2019 (COVID-19) pandemic. Alabama’s competency-based approach to human capital development is assisting Alabamians with limited labor force attachment, due to benefits cliffs or other barriers to entering the workforce, use credentials of value as a means of attaining economic mobility by progressing from an entry-level position, to a middle-skills job, to an advanced occupation. States and governors have a critical role in vouchsafing the quality of non-degree credentials by (1) developing standardized definitions for different types of non-degree credentials; (2) understanding and assessing the quality of credentials; (3) ensuring that non-degree credentials are accepted as college credit and embedded into degree programs; (4) supporting worker upskilling and reskilling programs that lead to high-quality credentials.<sup>2</sup> Enhancing non-degree credential quality and transparency are key elements of Governor Ivey’s workforce development strategic plan. The Governor’s Office of Education and Workforce Transformation (GOEWT) has been imminently focused on non-degree quality assurance and transparency to develop a credential currency that enables Alabamians to progress through a

<sup>1</sup> Jamie Merisotis, *Human Work in the Age of Smart Machines*, Rosetta Books, New York, 2020, page 108.

<sup>2</sup> National Governors Association and WorkCred, “Understanding Quality: The Role of States in Supporting Quality Non-Degree Credentials,” 17 September 2020, accessed on 29 November 2020 <<https://www.workcred.org/Documents/Understanding-Quality-Workcred-NGA-Report-2020.pdf>>.

career pathway and earn wage increases by earning a sequence of stackable credentials that denote mastery of workplace competencies aligned to occupations that are part of a career pathway. Quality non-degree credentials provide individuals with the means to equitably achieve their informed employment and educational goals. By providing a standardized process for vetting and publishing data on credentials of value, mapping credentials to workforce competencies, developing stackable sequences mapped to those competencies, and articulating the credit value for non-degree credentials towards traditional degrees, Alabama is making non-degree credential attainment an indelible component of Alabama's education workforce ecosystem. Alabama is collaborating with the Lumina Foundation, the National Skills Coalition, and the Workforce Data Quality Initiative to establish a standardized protocol to inventory, publish, and evaluate credentials. The Alabama Terminal on Linking and Analyzing Statistics (ATLAS) on Career Pathways, the state's longitudinal database system, will serve as Alabama's Credential Registry. Alabama won a grant from Credential Engine in June 2019 to establish a standardized protocol to inventory and publish credentials. As part of the process of vetting a credential for inclusion on the state's list of credentials of value (the Alabama Compendium of Valuable Credentials), relevant credential data will be published to the Alabama Credential Registry. Alabama was one of the first states to adopt the National Skills Coalition's definition of a quality non-degree credential. Alabama is participating in phase two of the National Skills Coalition's Non-Degree Credential Quality Assurance Project to receive technical assistance and to learn from other states while implementing career pathways predicated on non-degree credentials of value.

## 2 Alabama's Postsecondary Attainment and Credential Attainment Goals

### 2.1 Measuring and Tracking Progress Against the Five Success Plus Postsecondary Education Attainment Goal

As part of the Strong Start, Strong Finish Initiative, Governor Ivey set a post-secondary education attainment goal for Alabama of adding 500,000 highly-skilled employees to Alabama's workforce by 2025 through the Success Plus plan, which will equate to approximately 60 percent of Alabamians holding post-secondary credentials, degrees, and certificates of value.<sup>3</sup> Like the Commonwealth of Virginia, Alabama has also set a target that 10-percent of all credentials earned towards the Success Plus postsecondary education attainment goal will be non-degree credentials.<sup>4</sup> The Lumina Foundation, a non-profit organization committed to increasing the number of Americans who hold quality post-secondary credentials, has set the goal that 60 percent of Americans will hold a high-quality degree, certificate, or credential by 2025.<sup>5</sup> Between now and 2025, assuming current rates of degree and certificate production continue, about 24.2 million Americans will earn postsecondary credentials. To reach the 2025 goal, 16.4 million more high-skilled workers need to be added to that total.<sup>6</sup> Alabama's

<sup>3</sup> Governor Kay Ivey, *Preparing Alabama's Workforce for Opportunity and Growth: Recommendations from the Alabama Workforce Council's Statewide Education Attainment Committee*, 30 April 2018, accessed on 29 November 2020, page 3, [https://alabamaworks.com/wp-content/uploads/2018-12-27-AWC-Attainment-Report\\_final.pdf](https://alabamaworks.com/wp-content/uploads/2018-12-27-AWC-Attainment-Report_final.pdf).

<sup>4</sup> Lumina Foundation, *A Stronger Nation: Learning Beyond High School Builds Talent*, "America's Progress, States, Alabama, accessed on 29 November 2020 <<https://www.luminafoundation.org/stronger-nation/report/2020/#nation>>.

<sup>5</sup> *Lumina Foundation Strategic Plan for 2017 to 2020*, Lumina Foundation, accessed on 29 July 2018 <<https://www.luminafoundation.org/files/resources/strategic-plan-2017-to-2020-apr17.pdf>>.

<sup>6</sup> *Ibid.*

attainment gap is similar to the national numbers. Alabama’s 2016 attainment rate was 43.1 percent and the current attainment rate is 44 percent (7.8 percent of Alabamians hold short-term credentials and 36.2 percent hold an associate degree or higher)<sup>7</sup>; however, Alabama’s demand for post-secondary education attainment in 2025 will be 51 percent.<sup>8</sup> To reach the Success Plus postsecondary education attainment goal, Alabama must maintain current rates of attainment and significantly increase the number of people who enroll in programs and earn all types of postsecondary credentials. With the inclusion of workforce certificates (beginning in 2014) and certifications (in 2018), Alabama’s postsecondary attainment rate has increased by 12.4 percent since 2008.<sup>9</sup>

## ALABAMA

**SUCCESS+ Goal = 500,000**

**Annual LFP Goal = 40,000**

Special Population Groups	Population Estimates	Share of Aggregate of Attainment Goal	2019-2020 Annual Attainment Goal	2019-2020 Annual Labor Force Participation Goal
Displaced Home maker	280,438	24,027	2,403	2,303
Caregiver	154,574	25,651	2,565	2,465
Adults with Aging Dependents	134,990	10,038	1,004	1,054
Unemployed or Underemployed	83,565	66,241	6,624	0
Low-Income	849,699	113,888	11,389	10,645
Indians, Alaskan Natives, Native Hawaiians	27,311	788	79	68
People with Disabilities	775,390	82,689	8,269	8,229
Older Individuals	1,065,625	29,908	2,991	2,891
Ex-Offenders	15,224	10,690	1,069	1,069
Homeless Individuals	17,546	3,844	384	374
Youth Who Aged Out of Foster System	572	827	85	85
English Language Learners	20,725	7,024	702	580
Individuals with Low Levels of Literacy	48,998	28,663	2,863	2,488
Individuals with Substantial Cultural Barriers	106,217	22,076	2,208	2,208
Migrant & Seasonal Farmworkers	18,266	3,797	380	379
Individuals Nearing TANF Exhaustion	8,565	3,430	343	343
Single Parents	178,243	46,215	4,622	3,991
Long-Term Unemployed	15,960	11,939	1,194	0
Individuals Preparing for Nontraditional Fields	N/A	3,708	371	371
Youth with Parents in Active Duty Military	8,750	4,557	456	456

Alabama is committed to meeting the Alabama postsecondary attainment goal of adding 500,000 credential holders to the workforce by 2025 through human capital development. Alabama’s attainment goal is founded on an equity imperative to expand postsecondary attainment for populations with barriers to entering the workforce. Competency-based career pathways and credentials of value provide the basis for multiple points of entry and exit into and out of the workforce and education, which permits an individual to signal the mastery of new skills to employers through earning stackable credentials linked to traditional academic coursework while on the pathway to earning a degree or terminal credential. To achieve Governor Ivey’s human capital development strategy of ensuring that all Alabamians are self-sufficient, the work of developing competency-based career pathways is being coupled with a continuum of services

<sup>7</sup> Lumina Foundation, *A Stronger Nation: Learning Beyond High School Builds Talent.*”

<sup>8</sup> *Preparing Alabama’s Workforce for Opportunity and Growth: Recommendations from the Alabama Workforce Council’s Statewide Educational Attainment Committee*, 30 April 2018, page 2, accessed on 27 November 2020 <[https://alabamaworks.com/wp-content/uploads/2018.04.30\\_SuccessPlus.pdf](https://alabamaworks.com/wp-content/uploads/2018.04.30_SuccessPlus.pdf)>.

<sup>9</sup> Lumina Foundation, *A Stronger Nation: Learning Beyond High School Builds Talent.*”

approach to provide wrap-around services for Alabamians who are struggling to overcome barriers to entering education and the workforce. Governor Ivey established annual and aggregate special populations, career cluster, and career pathway attainment targets, by region and statewide, as a strategy for surpassing the postsecondary attainment goal by 2025. Alabama’s attainment efforts are focused on high school students (Grades 9–12); out-of-school youth; post-secondary students (18-24 years old); adult learners; veterans; individuals in the corrections system; and populations with significant barriers to post-secondary educational attainment opportunities in Alabama, including disabled and special needs individuals, English language learners, first-generation college students, low-income individuals, minorities, rural residents, women, and “individuals with barriers to employment” in the 2020 WIOA Combined State Plan in accordance with WIOA sec. 3(24).

**Career Clusters**

Career Cluster	2016	2026	Change	Annual Growth	Annual Growth Openings	Annual Exit Openings	Annual Total Openings	Goal 2019-2020
Manufacturing	272,130	298,680	26,551	0.94%	2,655	11,150	13,805	7,735
Health Science	190,320	216,060	25,736	1.28%	2,575	7,345	9,920	6,977
Hospitality & Tourism	239,910	263,070	23,161	0.93%	2,315	18,055	20,370	6,904
Transportation, Distribution & Logistics	188,220	203,010	14,792	0.76%	1,475	8,775	10,250	4,747
Business Management & Administration	311,200	315,180	3,981	0.13%	400	14,630	15,030	4,158
Marketing	242,010	249,310	7,304	0.30%	735	14,840	15,570	3,907
Architecture & Construction	144,630	155,380	10,747	0.72%	1,075	5,260	6,330	3,536
Human Services	83,110	93,160	10,044	1.15%	1,000	5,495	6,495	2,726
Education & Training	140,630	148,830	8,201	0.57%	815	6,345	7,160	2,688
Finance	68,440	72,100	3,655	0.52%	365	2,340	2,705	1,452
Information Technology	38,240	42,720	4,479	1.11%	450	685	1,130	1,212
Science, Technology, Engineering & Mathematics	34,410	39,300	4,889	1.34%	485	830	1,315	1,204
Law, Public Safety, Corrections & Security	67,070	69,580	2,511	0.37%	250	2,750	3,000	1,185
Agriculture, Food & Natural Resources	79,940	81,460	1,519	0.19%	150	3,750	3,900	1,105
Government & Public Administration	16,500	17,430	926	0.55%	90	605	695	308
Arts, Audio/Video Technology & Communications	22,550	21,780	-779	-0.35%	0	835	755	155

**3 Defining Non-Degree Credentials**

**3.1 Background on Alabama’s Non-Degree Credential Quality Assurance Initiative**

On September 18, 2019, the National Skills Coalition released *Expanding Opportunities: Defining Quality Non-Degree Credentials for States*, a paper that has become one of the definitive resources on non-degree credential quality assurance.<sup>10</sup> Alabama participated, along with Iowa, New Jersey, Tennessee, Virginia, and Washington, as a round-one state in the National Skills Coalitions (NSC) non-degree credential quality assurance project. This effort led to the acceptance of several general principles for the definition of a non-degree credential of quality, including the need for the definition to be student-focused, to support equitable credential attainment, to be flexible while safeguarding quality, and should include a public process for determining which credentials are quality credentials. Alabama participated in a National Skills Coalition Convening on Quality Assurance for Non-Degree Credentials as part of

<sup>10</sup> Amy Ellen Duke-Benfield, Bryan Wilson, Kermit Kaleba, and Jenna Leventoff, *Expanding Opportunities: Defining Non-Degree Credentials for States*, September 2019, accessed on 29 November 2020 <[https://www.nationalskillscoalition.org/resources/publications/file/9.18-NSC\\_QNDC-paper\\_web.pdf](https://www.nationalskillscoalition.org/resources/publications/file/9.18-NSC_QNDC-paper_web.pdf)>.

the round one project on March 26, 2019, in New Orleans, Louisiana, along with several other states. The information gathered at the convening informed the development of *Expanding Opportunities*. Governor Ivey signed the Alabama Industry Recognized and Registered Apprenticeship Program Act (SB 295) in law as Act 2019-506 on May 30, 2019, which passed the Senate 32-0 and the House 97-0-4. Act 2019-506 created the Alabama Committee on Credentialing and Career Pathways (ACCCP), which is a public-private non-degree credential quality and transparency entity organized in industry-based sector strategies. Alabama also participated in a National Skills Coalition webinar on November 4, 2019, that addressed how defining quality non-degree credentials benefits workers, students, businesses, and state policymakers alike and state policies to support increasing the attainment of such credentials, including the importance of robust data policies to ensure equity. Mr. Kermit Kaleba, Policy Director for the National Skills Coalition, presented virtually on how expanding non-degree credential quality will enhance opportunities for Alabamians during the ACCCP kickoff meeting in Montgomery, Alabama on December 18, 2019. On December 18, 2019, the GOEWT advisory board adopted a state definition for quality non-degree credentials that was closely modeled on the National Skills Coalition definition. The Alabama definition of a quality non-degree credential is as follows: “(a) quality non-degree credential is one that provides individuals with the means to equitably achieve their informed employment and educational goals. There must be valid, reliable, and transparent evidence that the credential satisfies the criteria that constitute quality, which include (1) substantial jobs opportunities, (2) transparent evidence of the competencies mastered by credential holders, (3) evidence of the employment earning outcomes of individuals after obtaining employment, and (4) stackability to additional education or training is strongly preferred.” Earnings thresholds are important to maintaining quality, as well. Often, earnings thresholds are based on a wage premium above the average earned by someone with a high school diploma alone. According to the U.S. Department of Education, the average annual earnings of an individual in the United States with a high school diploma alone between the ages of 25 and 34 is \$28,000. The Lumina Foundation recommends at least a 20 percent wage premium over a high school diploma or \$33,600 nationally. The GOEWT recently participated in the U.S. Department of Labor, Education and Training Administration’s Credential Attainment Cohort. Participation in this cohort will allow Alabama to help set the next definition of a credential of value in a future reauthorization of WIOA and will allow the Alabama Occupational Ontology (described below) to reach a broader audience. Developing a currency of quality credentials also provides Alabama with an opportunity to improve the entire non-degree quality assurance process, including the state Eligible Training Provider List (ETPL) for the Workforce Innovation and Opportunity Act, the private provider licensure approval process, Veterans’ Administration program approval, and policies on credit for prior learning and prior learning assessment. Alabama amended its WIOA ETPL and WIOA credential policies in the 2020 WIOA Combined State Plan to reflect the Alabama Committee on Credentialing and Career Pathways (ACCCP) non-degree credentials quality-assurance process (described below.)

## 4 Non-Degree Credential Quality Assurance

### 4.1 The Alabama Committee on Credentialing and Career Pathways (ACCCP)

The Alabama Committee on Credentialing and Career Pathways (ACCCP), a public-private non-degree credential quality-assurance entity was codified by Act 2019-506. Act 2019-506 was sponsored by Senator Orr, passed the Legislature unanimously during the 2019 session, and was signed into law by Governor Ivey on June 10, 2019. The ACCCP is tasked with a two-fold

mission (1) to identify Alabama's regional and statewide in-demand occupations and (2) to identify competency models, career pathways, and credentials of value linked to those in-demand occupations using labor market information. The ACCCP uses a process called the five-star rubric to create the list of in-demand occupations and uses a two-tier review process to register credentials. Thus, credentials of value are linked to one or more specific competencies and the competencies are sequenced within a competency model to build the occupational DNA for a job. Occupations are then sequenced as part of a stackable progress that provides for career pathways with multiple points of entry and exit. This strategy also allows for unbundling and modularizing traditional degrees (particularly associate degrees.)

The ACCCP proper is composed of nine *ex officio* members and seven gubernatorial appointments who each represent one of the seven Alabama workforce regions, which are the members of the Alabama Workforce Council's (AWC) ACCCP Committee. The ACCCP includes 16 Technical Advisory Committees (TACs) that are each composed of seven gubernatorially-appointed members who are members of business and industry. The first annual ACCCP regional appointments and TAC appointments were made on December 5, 2019. Each of the seven members of each TAC represents one of the seven Alabama workforce regions. Each TAC is led by an officer. The members of the ACCCP held its kickoff event on December 18, 2019, at the Hyundai Training Center in Montgomery, Alabama, which featured a keynote address by Governor Ivey. Chairman Cleve Poole, of the AWC ACCCP Committee, serves as the chief officer of the ACCCP. There are 64 subject-matter experts (SMEs) who have passed the SME assessment. Approximately 4-6 SMEs serve each TAC. The SMEs are employed by state education and workforce agencies. The SMEs help TAC members translate their ideas into action by navigating the education and workforce systems. The ACCCP Transition Task Force conducted a six-week training session for the SMEs between September 4 and November 6, 2019, to prepare the SMEs to serve the ACCCP's TACs. The six-week SME training course covered the six elements of career pathways, the Alabama Competency Taxonomy, the five-star rubric for identifying in-demand occupations, the two-tier credential review process, and the ACCCP's process for developing competency models and career pathways. An SME assessment study guide was provided on October 23, 2019, a review session was held on November 6th, 2019, and the assessment was conducted for the first time on November 20, 2019. Subject-matter experts were required to reach 70-percent proficiency on the assessment to move forward. The SMEs who passed the assessment were mailed a Commitment to the Alabama Worker Certificate signed by Governor Ivey.

The ACCCP approved the 2020 regional and statewide lists of in-demand occupations for their cluster on December 18, 2019. The TACs received draft competency models for each of the occupations on their regional and statewide lists of in-demand occupations on June 17, 2020. The inaugural Governor's Survey of Employer Competencies (GSEC), an establishment-based survey commissioned by the GOEWT, was conducted statewide between June 15 and July 3, 2020, and 1,501 employers completed the survey. TACs received the results of the GSEC on July 13, 2020. Between July 13, 2020, and August 10, 2020, the TAC officers held TAC meetings to review the draft competency models against the survey of employer competency results and the comprehensive competency dictionary. The TACs submitted their revisions to the competency models on August 24, 2020. Between August 24 and September 18, 2020, the TACs completed career pathways by stacking approved competency models into career pathways. The

TACs submitted the draft career pathways to the ACCCP for approval on September 18, 2020. Each TAC developed dynamic career pathways that are connected to one of the 79 base career pathways associated with its cluster. The ACCCP approved all revised competency models and career pathways at the October 21, 2020 Quarter Three meeting. The ACCCP promulgated the first official list of in-demand occupations, competency models, and career pathways and lattices on October 21, 2020.

#### 4.2 The Five-Star Rubric for Identifying In-Demand Occupations

The GOEWT and the Alabama Department of Labor developed the Five-Star Rubric for Identifying In-Demand Occupations. The seven regional lists of in-demand occupations are compiled by evaluating each occupation in the region against the Five-Star Rubric for Identifying In-Demand Occupations. Occupations must possess each of criteria I-III and one or both of criteria IV and V to be included on a regional list. Occupations that are included on three or more regional lists will be included on the statewide list of in-demand occupations.

<b>ACCCP</b>				
<b>The Five-Star Rubric for Identifying In-Demand Occupations</b>				
<b>Criteria I</b>	<b>Criteria II</b>	<b>Criteria III</b>	<b>Criteria IV</b>	<b>Criteria V</b>
<b>Occupation must earn at least 70 percent of the median regional wage</b>	<b>Occupation shows positive projected growth over the coming decade</b>	<b>Occupation is projected to have a minimum of 15 openings a year</b>	<b>Occupation median wage exceeds the current lower living standard income level (LLSIL) 70%</b>	<b>Occupation requires a postsecondary degree, certificate, or credential for initial employment</b>
<ul style="list-style-type: none"> <li>• Occupations will be evaluated against the Five-Star Rubric for Identifying In-Demand Occupations to qualify for each of the seven regional lists of in-demand occupations.</li> <li>• Occupations must possess all of Criteria I-III and one or both of Criteria IV and V to qualify for a regional list.</li> <li>• Occupations that qualify for at least three regional lists will qualify for the statewide list of in-demand occupations.</li> </ul>				

#### 4.3 Developing Competency Models and Career Lattices

After identifying the regional and statewide in-demand occupations, the TACs use the results of the annual Governor’s Survey of Employer Competencies to review draft competency models and career pathways associated with the in-demand occupations. Each of the industry competency models and competency-based career lattices must include the sequence of personal effectiveness competencies, workplace competencies, industry-recognized technical competencies, sector-specific competencies, occupation-specific competencies, and management-level competencies in that occupation.



#### 4.4 The Alabama Occupation Ontology

The ACCCP has developed a state-specific, seven-tiered, alpha-numeric competency taxonomy for classifying competencies and a state-specific, five-tiered, alpha-numeric competency taxonomy (the Alabama competency ontology is based on work done through the Lumina Foundation’s Beta Credential Project). Taken together, the Alabama Competency and Credential Taxonomies for the Alabama Occupational Ontology to build the occupational DNA for a job.

#### 4.5 The Alabama Competency Taxonomy

The Alabama Competency Taxonomy is a seven-tiered system for coding each individual competency that composes an occupation. Through the Alabama Competency Taxonomy, each of the competencies can be coded, organized, and mapped onto a credential of value so that the credential of value can be recognized as certifying mastery of that competency. The Alabama Competency Taxonomy will allow employers to develop skills-based job descriptions by customizing the ACCCP’s competency models and career pathways. On March 24, 2020, Alabama was awarded funding of \$200,000 from the Lumina Foundation to implement common state criteria for credentials of value in Alabama over the next year.<sup>11</sup> Through the work of the GOEWT and the Alabama Committee on Credentialing and Career Pathways (ACCCP), Alabama has begun to develop a competency-based framework for evaluating credentials for inclusion in the Compendium of Valuable Credentials. Initially based on O\*NET competency frameworks and Lumina’s Connecting Credentials Framework, the Alabama Competency Taxonomy is a seven-tiered system for describing an occupation in terms of its personal effectiveness competencies, academic competencies, workplace competencies, industry-wide competencies, sector-specific competencies, occupation-specific competencies, and management competencies.

#### 4.6 The Seven-Tiered Alabama Competency Taxonomy

2342-	KNO-	06-	08	20190817	E	094161258
Career Cluster-Career Pathway-Occupation-Competency	KNO-Knowledge SPE-Specialized Skill PER-Personal Skill SOC-Social Skill COM-Competency	Rate of Decay (in months)	Level of Proficiency	Date of Current Assessment	Summative Assessment Format A—Artifact E—Exam P—Performance	D-U-N-S Number

##### 4.6.1 Tier One

The first tier of the competency taxonomy details the career cluster, career pathway, and specific occupation in which the knowledge, skill, attitude, or competency exists. The competency identifier consists of four alphanumeric digits that are specific to the assigned competency. The code will be assigned as follows: career cluster—career

<sup>11</sup> Email from Dr. Amber Garrison Duncan to Nick Moore, RE: Invitation to Submit a Proposal to Lumina, 24 March 2020.

pathway—occupation and occupation-specific competency model—occupation-specific competency (0-0-0-0).

#### 4.6.2 Tier Two

The second tier of the competency taxonomy consists of three alphanumeric characters that reflect the knowledge, specialized skills, personal skills, and social skills as articulated in the Lumina Beta Credential Framework. They include:

1. **Knowledge (KNO):** What a learner knows, understands, and can demonstrate in terms of the body of facts, principles, theories, and practices related to broad, general, or specialized fields of study or work;
2. **Specialized Skill (SPE):** Skills that are occupational and discipline-specific;
3. **Personal Skill (PER):** Competencies required to act in an independent and responsible manner in various situations, to exercise judgment, demonstrate critical thinking and problem solving, reflect on one’s own actions and on the actions of others, and to continue to develop his/her own competencies;
4. **Social Skill (SOC):** An individual’s ability to be aware of the behavior of others and of differing viewpoints, to communicate with others effectively, and to work effectively with people from diverse backgrounds and points of view; and
5. **Competency (COM):** A learnable, measurable, role-relevant, and behavior-based characteristic or capability

#### 4.6.3 Tier Three

The third tier of the competency taxonomy includes a two-digit, rate-of-decay code that is reflective of the number of months between the time of initial certification or recertification of the competency and the time that the individual earning the competency will need to be recertified.

#### 4.6.4 Tier Four

The fourth tier of the competency taxonomy is the proficiency indicator, which is based on an eight-level proficiency system identified in the Beta Credential Framework. Scale of proficiency from one to eight does not reflect the level of individual mastery, but, rather, it reflects the level of proficiency needed to adequately perform the underlying occupation.

#### 4.6.5 Tier Five

The fifth tier of the competency taxonomy reflects the last date on which proficiency for the competency was assessed, if applicable. These eight characters represent the date, using Gregorian calendar notation, on which the proficiency was assessed by the validating agency, credential provider, or TAC, as determined by each TAC. The data format follows a *yyyymmdd* date schema.

#### 4.6.6 Tier Six

The sixth tier of the competency taxonomy details the type of assessment used to determine the proficiency achieved by the learner. There are three assessment types identified:

1. Artifact
2. Exam
3. Performance

These three methods represent the majority of assessments that would measure and validate proficiency of knowledge, skill, or competency.

#### 4.6.7 Tier Seven

The seventh tier of the competency taxonomy includes a nine-digit Dun & Bradstreet (D-U-N-S Numbers.) Because there is no central repository for all institutions, organizations, and employers, this portion of the code is difficult to detail. For this reason, the Dun & Bradstreet (D-U-N-S Numbers) system will be used, as these are both international and non-sector specific. This nine-digit number is required of all entities that do business with the federal government. Because these numbers are assigned without a fee, it would appear to be a strong solution for many of the institutions and employers likely to verify knowledge, skills, and competencies.<sup>12</sup>

### 4.7 Developing the Compendia of Valuable Credentials

The ACCCP must create an annual Compendium of Valuable Credentials composed of the regional and state lists of credentials that are mapped onto the regional and state in-demand career occupations. Credential providers may register a credential to the Alabama Credential Registry. The TACs will review credentials referred to them against the Alabama non-degree credential quality-assurance criteria, as described in tier-one review credential review. Credentials will be given a unique identifier using the Alabama Credential Taxonomy in stage-two review. The ACCCP has adopted the following procedures by which the TACs shall review and vote to recommend credentials to the regional and statewide compendia of valuable credentials: An industry or trade association group, the Alabama Workforce Council, the Alabama Office of Apprenticeship; the Alabama State Workforce Investment Board, the Alabama State Department of Education, the Alabama Community College System, and the Alabama Commission on Higher Education may apply to the Alabama Committee on Credentialing and Career Pathways to include a credential possessing one or more of the ten characteristics of a valuable credential, described in tier-one review, on a regional or statewide Compendium of Valuable Credentials. The ACCCP refers each application, by career cluster and pathway, to a TAC for stage one review. Each TAC will accept credential applications for review between July 1, 2020, and March 5, 2021. The TACs will assist members of business and industry and education, training, and licensing authorities with registering credentials to the Alabama Credential Registry. Credential providers register credentials by sending the provider registration form to [alcredentials@ache.edu](mailto:alcredentials@ache.edu) (the form is located on [credentials.ache.edu](http://credentials.ache.edu)). The ACCCP staff matches the registered credentials to competencies and competency models. The TACs will compile a compendium of valuable credentials composed of the credentials registered to the Alabama Credential Registry that are matched to the competencies and competency models covered by each TAC. Each TAC will compile its recommended lists of regional and statewide compendia of valuable credentials and submit it to the ACCCP by March 5, 2021. The ACCCP will approve each TAC's compendia of valuable credentials on March 17, 2020. The first regional and statewide compendia of valuable credentials will become effective on March 31, 2021.

#### 4.7.1 The Alabama Credential Taxonomy

The ACCCP developed a five-tier credential taxonomy that will include the following information: Career Cluster (each of the 16 career clusters will be given a numeric code); Career Pathway (each of the career pathways will be given a numeric code); Division (Secondary of

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<sup>12</sup> *Connecting Credentials: A Beta Credentials Framework*, Lumina Foundation, May 2015, accessed on November 30, 2020 <<https://www.luminafoundation.org/wp-content/uploads/2017/08/connecting-credentials.pdf>>.

Postsecondary); Category (Basic or Advanced); and Classification (Complementary, Regional, or Statewide).

<b>02</b>	<b>43</b>	<b>S</b>	<b>B</b>	<b>R</b>	<b>2342-KNO-06-08-20190717-E-094161258</b>
Career Cluster (01-16)	Career Pathway (01-79)	Division (Secondary or Postsecondary)	Category (Advanced or Basic)	Complementary (C), Regional (R), or Statewide (S)	Competencies Mapped to the Credential (Not included as part of the five-digit taxonomy for the compendia of valuable credentials.)

The TACs will also map all related competencies to the credential during stage two review. Each credential undergoes a two-tier review process by the TAC.

#### 4.7.2 Tier One Review

Tier one review includes reviewing the credential application against the following criteria:

- (1) The TAC shall classify the underlying credential referenced in the application as either required by law, including any credential mandated by the laws or regulations of the State of Alabama or the United States of America; mandated by industry, which shall include any credential mandated by two (2) or more firms within an industry sector; or preferred by industry, which shall include any credential endorsed, but not required, by two or more firms within an industry sector.
- (2) The TAC shall determine whether the credential is required to obtain a job (counts toward attainment goal and is an advanced credential on the compendium of valuable credentials); part of a stackable sequence leading to a credential that is required for employment (included on the compendium of valuable credentials as a basic credential, but these credentials do not count towards the attainment goal); complementary credentials with skills that are affiliated with the career pathway but are not directly aligned to the credential sequence (can be included on the compendium of valuable credentials as a complementary credential but are not included in credential sequences and do not count towards the attainment goal);
- (3) Accredited or recognized by a statewide or national industry-recognized accrediting body, such as a sector or industry association;
- (4) Aligned to an occupation on a regional or statewide list of in-demand occupations;
- (5) Achievable by students in a secondary and/or the postsecondary level of study;
- (6) Earned after a minimum number of hours of instruction time, as determined by the Alabama Committee on Credentialing and Career Pathways, and awarded after achieving a passing score, as determined by the sponsoring industry sector, on a proctored examination;
- (7) Stackable in a sequence of aligned competencies that progress along with the rigor of advanced training programs;
- (8) Valuable as determined by leading to at least a twenty (20)-percent wage premium over a high school diploma;

- (9) Traceable and trackable by the ATLAS on Career Pathways as determined by the Office of Education and Workforce Statistics;
- (10) Portable across or within an industry sector to establish the qualifications of individuals in multiple geographic areas, among multiple education and training institutions, and by diverse employers.

Credentials that possess one or more of the characteristics reviewed during tier-one review and that are vetted and receive a majority vote of approval by the TAC proceed to stage two review.

#### 4.7.3 Tier Two Review

The Compendia of Valuable Credentials will include a unique code for each credential to provide for common identification for each credential registered on the Alabama Credential Registry, which includes the codes for each competency, based on the Alabama Competency Taxonomy, for which the credential denotes mastery. Credentials that possess one or more of the characteristics reviewed during tier-one review and that are vetted and receive a majority vote of approval by the TAC proceed to stage two review. Each TAC should make the following considerations when moving a credential forward for two-tier review, if the credential is not complementary, and if the credential does not possess the following tier-one criteria:

- If a credential is not mandated by industry, required by law, or preferred by industry, the credential must be complementary.
- Only credentials that are required to obtain a job can be counted towards the attainment goal and be counted as an advanced credential for tier-two review. Stackable credentials that are not required to obtain a job are counted as basic credentials for tier-two review.
- A credential is complementary if it does not denote mastery of one or more competencies required for one or more occupations on one or more regional or the statewide list of in-demand occupations.
- A credential is complementary if it is not nationally, regionally, or locally recognized by business or industry.
- A credential that is not achievable at the secondary or postsecondary level is complementary and a credential only achievable at the secondary level is basic for tier-two review.
- A credential that is not achievable through 130 hours of coursework or through a proctored examination should include an artifact or performance-based examination to move forward for tier-two review. A TAC may, on a case-by-case basis and with the recommendation of relevant members of industry, lower the required number of hours for a time-based credential.
- A credential is either complementary or a stand-alone credential of value, such as an apprenticeship completion credential or a long-term certificate, if it is not stackable.
- A credential is either complementary or basic if it does not provide at least a 20-percent wage premium over a high school diploma.
- A credential is trackable by the ATLAS on Career Pathways if it has been registered into the Alabama Credential Registry, which is required before Tier One review may begin. Credential providers who refuse, or who cannot, provide the information necessary to register credentials onto the Alabama Credential Registry, will not be able to process an application for inclusion on the Compendium of Valuable Credentials.
- A non-portable credential is either regional or complementary. A non-portable credential may be basic or advanced.

During stage two review, credentials are placed in the five-level credential taxonomy:

- (1) credentials are categorized by career cluster;
- (2) credentials are categorized by career pathway;
- (3) credentials are categorized into either the secondary or postsecondary division of the Alabama Compendium of Valuable Credentials. Secondary are high school credentials and below and postsecondary credentials are at the college level;
- (4) credentials in both the secondary and the postsecondary divisions will be classified as either basic or advanced. Basic certifications are the first level or industry certification, or a relevant stand-alone certification. Advanced credentials are part of a stackable sequence of credentials that are linked to an occupation on the ACCCP’s list of regional and state in-demand career pathways; and
- (5) basic and advanced credentials will be categorized as either a statewide, regional, or complementary credential. Statewide credentials must be linked to an in-demand career pathway on the ACCCP’s state list of in-demand career pathways. A regional credential must be linked to a career pathway on the ACCCP’s regional list of in-demand career pathways. Complementary credentials, such as first aid or digital literacy, have value across industry sectors.

A subgroup of credentials on statewide or regional compendia of valuable credentials classified in the secondary, basic, and complementary divisions may be endorsed by the relevant TAC as a “Success” Credential that may be designed to provide basic, foundational, or essential skills. Credentials deemed as “Success Credentials” shall be duly noted. A subgroup of credentials on statewide or regional compendia of valuable credentials classified in the secondary or postsecondary, advanced, and the regional or statewide divisions of the compendia of valuable credentials, that also lead to no fewer than twelve (12) postsecondary credit hours towards a postsecondary degree aligned to a career pathway on a regional or statewide list of in-demand career pathways, may be designated by the relevant Technical Advisory Committee as a “Success Plus” credential. Credentials deemed “Success Plus” credentials shall be duly noted.

## 5 Non-Degree Credential Transparency

As averred by Credential Engine in the November 2020 report, entitled *Making Sense of Credentials: A State Roadmap and Action Guide for Transparency*, “. . . with over 750,000 different credentials it is hard to easily find reliable and actionable information on the value of various credentials, where to get them, what each competency and skill means, cost, and employment opportunities associated with each opportunity.”<sup>13</sup> Alabama is in the midst of developing a competency-based, learner-centered education and workforce ecosystem centered on credential transparency. The Alabama approach seeks to solve the three big problems related to the current lack of credential transparency identified by Jamie Merisotis: (1) it’s not clear what most credentials represent in terms of knowledge, skills, and abilities; (2) employers, educators, and individuals all speak different languages when it comes to knowledge and skills; and (3) pathways through education and careers are either non-existent or nearly impossible for outsiders to fathom.<sup>14</sup> The state is creating bespoke competency and credential taxonomies that provide for

<sup>13</sup> Credential Engine, *Making Sense of Credentials: A State Roadmap and Action Guide for Transparency*, 16 November 2020, Washington, D.C., author, accessed on 29 November 2020 <<https://credentialengine.org/wp-content/uploads/2020/10/State-Roadmap-and-Action-Guide.pdf>>.

<sup>14</sup> Jamie Merisotis, *Human Work in the Age of Smart Machines*, Rosetta Books, New York, 2020.

competency-based career pathways predicated on stackable, transparent, recognized, postsecondary credentials of value that are aligned to in-demand occupations. These advancements have provided the foundation for economic upward mobility by permitting an individual to progress from an entry-level position, to a middle-skills job, and then to an advanced career through the mastery of increasingly rigorous levels of competencies (the mastery of which are denoted by credentials of value).<sup>15</sup> Alabama is collaborating with the Lumina Foundation, the National Skills Coalition, and the Workforce Data Quality Initiative to establish a standardized protocol to inventory and publish credentials. Alabama has begun to develop a competency-based framework for evaluating credentials for inclusion in the Compendium of Valuable Credentials. Alabama won a grant from Credential Engine in June 2019 to establish a standardized protocol to inventory and publish credentials. As part of the process of vetting a credential for inclusion on the state’s list of credentials of value (the Alabama compendium of valuable credentials), relevant credential data will be published to the Alabama Credential Registry. The ACCCP is publishing credential information as structured linked data in the Credential Transparency Description Language (CTDL) and the Credential Transparency Description Language - Achievement Standards Network (CTDL-ASN) using the JSON-LD format. The CTDL is an open-source language and is the “Lingua Franca” or Rosetta Stone that permits all credentials to be cataloged, organized, and compared.<sup>16</sup> Under the leadership of Governor Ivey and the Alabama Commission on Higher Education (ACHE), Alabama is using the CTDL and CTDL-ASN to set up the hardware and software infrastructure for collecting and organizing credential program data in the state. ACHE is using the infrastructure to create the Alabama Credential Registry that will also connect to the ATLAS on Career Pathways.<sup>17</sup> Alabama will reach the “tipping point” goal of publishing over half of the credentials in the state to the Alabama Credential Registry by 2022. Using the CTDL-ASN as the format for publishing credentials will enhance the scope of audiences who use the ATLAS on Career Pathways to access credentialing information. Industry-recognized credentialing organizations will be a required partner for vetting credentials of value added to the Alabama compendium of valuable credentials. It has been estimated that there are over 5,000 industry certifications in the U.S. credential marketplace, and not all are of equal quality.<sup>18</sup> Employers are key in the process of identifying and making transparent the industry certifications that are most in-demand. A Burning Glass analysis of jobs posted in 2015 determined that a mere 50 industry certifications composed two-thirds of the industry certifications mentioned in the job postings.<sup>19</sup> Encouraging employer participation in the identification of valuable credentials for inclusion on the Alabama Compendium of Valuable credentials has generated greater interest among employers in hiring credentialed employees possessing the competencies reflected in stackable credential sequences vetted by the ACCCP.

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<sup>15</sup> Ruder, Alex, “Benefits Cliffs and Career Choice: Understanding the Financial Incentives for Career Advancement,” AASD/NASTA Annual Educational Conference, August 26, 2019 (h/t to Dr. Ruder for his assistance.)

<sup>16</sup> Credential Engine, *Making Sense of Credentials: A State Roadmap and Action Guide for Transparency*, 16 November 2020, page 12.

<sup>17</sup> *Ibid.*, page 8.

<sup>18</sup> Michelle Van Noy, Rutgers Education and Employment Research Center, Rutgers School of Management and Labor Relations, *Identifying High Quality Industry Certifications*, September 2020, accessed on 29 November 2020 <[https://smlr.rutgers.edu/sites/default/files/rutgers\\_eerc\\_identifying\\_high\\_quality\\_industry\\_certifications\\_final.pdf](https://smlr.rutgers.edu/sites/default/files/rutgers_eerc_identifying_high_quality_industry_certifications_final.pdf)>

<sup>19</sup> *Ibid.*, page 3.

## 6 Demand and Data-Driven Talent Ecosystems

In the COVID-19 environment, over three-quarters of employers will reevaluate their hiring requirements to fill open positions, and employers will likely use skills-based assessments to evaluate competence for those positions.<sup>20</sup> The number of organizations devoted to providing skills-based hiring is also growing. Skillful, an initiative of the Markle Foundation, is developing skills-based training and employment practices in collaboration with state governments, local employers, educators, and workforce development organizations to help Americans get good jobs based on the skills they have or the skills they can learn. In August 2020, Governor Ivey joined the Skillful State Network, an initiative of the Markle Foundation, so that Alabama can learn from peers regarding non-degree credential quality assurance, expanding work-based learning, and coupling career pathways with supportive services. Joining the Skillful State Network is particularly timely now since we are in the midst of recovering our workforce and economy from the coronavirus disease (COVID-19) pandemic. The COVID-19 environment generated a greater focus on developing short-term pathways to opportunity. Alabama will also utilize its membership in the Skillful State Network to advance the development of skills-based job descriptions in Alabama. The U.S. Chamber of Commerce Foundation’s Job Data Exchange (JDX) is designed to help employers move towards competency-based hiring in a scalable and sustainable way. JDX is modernizing how the internet reads job data by updating the standards employers use in job descriptions. As real-time LMI data rely on job descriptions, improving those will carry tremendous insights about in-demand skills in real-time.<sup>21</sup> As the middle-skills pathways become increasingly prominent for individuals, particularly in the post-COVID-19 workforce, Alabama is creating stackable pathways that allow the credentials earned in the middle-skills pathway to transfer into an associate or bachelor’s degree. As Nan Travers, Larry Good, and Holly Zanville identified in “An Rx for an Ailing Postsecondary Education System: Credential As You Go,” “[o]ur four-tiered degree-based system (associate, bachelor’s, master’s, doctorate) is punitive to anyone who does not complete. The belief that a formal degree is the only way to be recognized for postsecondary knowledge and work readiness is ingrained into our culture. This is not helpful to the millions of Americans who have college-level learning but have not completed a degree.”<sup>22</sup> Career-specific education in shorter-term programs has strong short-term value because it prepares people for immediate employment. At the same time, career-specific programs can be a risky investment, as they convey knowledge and skills that are most useful in specific occupations and industries.<sup>23</sup> In contrast to career-specific credentials, general associate degrees or bachelor’s degrees confer marketable general skills regardless of a student’s field of study or major. General education programs develop students’ general knowledge and skills, such as reading and writing, and general cognitive abilities, such as critical thinking, that are useful in a broad range of occupations. Ultimately, the most valuable education over the long

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<sup>20</sup> Brian K. Fitzgerald and Jennifer Thorton, “Skills-Based Hiring: Opportunity or Illusion?” 6 August 2020, accessed on 3 September 2020 <<https://www.diplomaticourier.com/posts/skills-based-hiring-opportunity-or-illusion>>.

<sup>21</sup> *Ibid.*

<sup>22</sup> Nan Travers, Larry Good, and Holly Zanville, “An Rx for an Ailing Postsecondary Education System: Credential As You Go,” Corporation for a Skilled Workforce, medium.com, 24 November 2020, accessed on 29 November 2020 <<https://corp4skilledwork.medium.com/an-rx-for-an-ailing-postsecondary-education-system-credential-as-you-go-9a98071f440f>>.

<sup>23</sup> Brian K. Fitzgerald and Jennifer Thorton, “Skills-Based Hiring: Opportunity or Illusion?” 6 August 2020.



term is the one that provides the most marketable combination of specific and general skills.<sup>24</sup> As Burning Glass Technologies identified, foundational skills for the digital economy have emerged in three groups (1) human skills; (2) digital building block skills; and (3) business enabler skills. Within these three groups, there are fourteen foundational skills (from managing data, to project management, to critical thinking) that are in high demand within the digital economy. However, less than a fifth of incumbent workers and job-seekers list skills from all three skill groups on their resumes.<sup>25</sup>

Governor Ivey has charged the GOEWT with establishing a statewide longitudinal database system—the ATLAS on Career Pathways. The ATLAS on Career Pathways will be governed by the P20-W Council (a body composed of each agency head that is a partner to the ATLAS on Career Pathways data-sharing agreement) and will be managed by the Office of Education and Workforce Statistics. Alabama is also developing a solution to operationalize skills-based matching and hiring. The ACCET will also serve as a learning and employment record (LER) that will allow an employer to post a job and then geofence the candidate pool that has the recognized credentials that are required for the position. Employers will begin including recognized non-degree credentials in job descriptions and providing pay increases for attaining those credentials, which will reduce employee turnover and increase the productivity and skill level of the workforce. The ACCET will also serve as a verified, digital resume to display industry-recognized credentials and progress against established competency models. Credential information displayed through the ACCET will signal to employers that a worker or student possesses the requisite skills for either an entry-level job or progressive wage increases as a result of mastering the next competency within a stackable sequence. The ACCET will allow employers to auto-populate a list of the individuals who possess the credentials and competencies best suited for each job posting, which will reduce hiring costs and will incentivize employers to add credentials to job descriptions. This reciprocal feedback loop will incentivize competency-based education and hiring practices. The ACCET will also serve as a single point-of-entry to the public workforce system and will provide for an integrated WIOA case management system that will help braid resources to assist individuals who need to overcome benefit cliffs while entering paid employment, which increases their chances of persisting in the workforce.

## 7 Integrating the Delivery of Human and Workforce Services

### 7.1 Mitigating Benefit Cliffs as a Pandemic Response and Reemployment Strategy

To achieve Governor Ivey’s human capital development strategy of ensuring that all Alabamians are self-sufficient, the work to develop competency-based career pathways must be coupled with a continuum of services approach to provide wrap-around services that generate a negative marginal tax rate for Alabamians who are struggling to overcome the benefits cliff and to persist in a career pathway. Any marginal tax rate less than zero indicates resources are increased by an amount greater than new earnings alone. A negative rate incentivizes work and boosts earnings. A good example is the federal or state Earned Income Tax Credit (EITC) which provides low-income taxpayers with refundable credits that increase with income. A marginal tax rate of -25

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<sup>24</sup> *Ibid.*

<sup>25</sup> Will Markow, Debbie Hughes, and Andrew Bundy, *The New Foundational Skills for the Digital Economy*, Burning Glass Technologies, 2018, accessed on 3 May 2020 <[https://www.burning-glass.com/wp-content/uploads/New\\_Foundational\\_Skills.pdf](https://www.burning-glass.com/wp-content/uploads/New_Foundational_Skills.pdf)>.

percent means \$400 in earnings becomes \$500.<sup>26</sup> Generally, government-financed, public-assistance programs are designed to phase-out as the recipient’s earnings increase. In practicable terms, however, this often has the effect of causing the loss of benefits to exceed the income gained through the earning increase. This phenomenon, thus, has the simultaneous effects of increasing the effective tax rate for low-income individuals and creating a negative incentive for entering the workforce for some Alabamians. Many other barriers—such as a lack of transportation, childcare, or basic skills—were reported in each region. However, the benefits cliff is the most nefarious, since it impedes access to the other needs identified by stakeholders, such as transportation and childcare. The objective of the public workforce system is to identify the barriers to entry into the workforce and providing the skills training and education needed to overcome those barriers. Aligning the benefits provided by the plethora of federally funded, means-tested and categorical workforce, human services, and education programs administered in Alabama around a continuum of services that assist an individual in overcoming the benefits cliff will enable more Alabamians who are currently not in the labor force to persist in a career pathway and ultimately attain employment in an occupation that pays a family-sustaining wage.<sup>27</sup>

## 7.2 The Dashboard for Alabamians to Visualize Income Determinations (DAVID)

The Governor’s Human Capital Development Task Force, chaired by Alabama Department of Human Resources Commissioner Nancy Buckner, has partnered with Julie Kornegay, Senior Education Outreach Manager, Federal Reserve Bank of Atlanta – Birmingham Branch and Dr. Alex Ruder, Principal Adviser, Community and Economic Development, Federal Reserve Bank of Atlanta to understand the increased marginal tax rates—or benefit cliffs—faced by individuals transitioning into paid employment. Dr. Alex Ruder has developed a benefit cliff and self-sufficiency tool to help individuals understand how much money they will gain through income and gain or lose in benefits as they progress through a career pathway. The tool is also designed to help individuals understand when they will reach self-sufficiency, based on income, region, occupation, and family dynamics. The tool has been branded as DAVID, the Dashboard for Alabama to Visualize Income Development, and is designed to help individuals advance into higher-paying careers. DAVID will help operationalize the goal of developing a no-wrong-door approach to the workforce development system. DAVID will be integrated into the ACCET to assist case managers and career coaches to provide a continuum of services approach for consumers of workforce and education programs. On October 21, 2020, DAVID was launched at the Quarter Three Combined Workforce Day, and the Atlanta Fed and the State of Alabama entered into a data-sharing agreement to power DAVID.

## 7.3 Human Capital Development

Individuals seeking access to education and workforce training must be provided with integrated case management by a cross-trained staff who understands how to develop an individual employment plan, provide a comprehensive needs assessment, and how to pre-certify for program eligibility. People should not be asked to visit multiple locations when seeking education and

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<sup>26</sup> Ibid.

<sup>27</sup> Ruder, Alex, “Benefits Cliffs and Career Choice: Understanding the Financial Incentives for Career Advancement,” AASD/NASTA Annual Educational Conference, August 26, 2019 (h/t to Dr. Ruder for his assistance.)

workforce training. All staff within Alabama’s state and federally-funded public workforce system will be trained to utilize a “no-wrong-door-entry strategy” that will allow individuals to enter into the myriad of state and federally funded workforce development programs through the Department of Human Resources (DHR), one-stop centers, community colleges, and through community-based organizations. In September 2020, the Alabama Department of Labor and DHR entered into a memorandum of understanding to permit Supplemental Nutrition Assistance Program (SNAP) and Temporary Assistance for Needy Families (TANF) clients to pre-certify for WIOA training services at DHR centers without having to physically visit a one-stop center.

## 8 Competency- and Work-Based Learning

### 8.1 Competency-Based Education

Time and credit hours are used as a proxy for learning and the mastery of skills and competencies. Many structured secondary and postsecondary education courses are measures in terms of credit hours earned. Students must earn a certain number of credit hours to earn a degree. For over a century, the credit hour has been a unit of measure in U.S. postsecondary education, a recognized “currency” for educational achievement and completion of credentials.<sup>28</sup> As Scott, Eyster, Collins, et. al., identified, “[i]n decades past, when fewer people went to college, employers routinely used credentials such as college degrees as a proxy for the skills and knowledge they needed in new hires. This signally worked fairly well, in part because businesses invested significantly in training both new hires and incumbent workers to develop the competencies required for specific jobs. At the time, workers changed jobs less often, so employers worried less about sunk costs from investing in training.”<sup>29</sup> Processes built around credit hours are based on industrial-age, highly structured, time-based educational models, presenting challenges in adapting these processes in an information-age economy that relies on greater flexibility and the ability to apply learning in rapidly changing circumstances. Recent innovations in competency-based education address 21st-century needs by focusing on mastery of competencies regardless of “seat time,” providing opportunities to reconsider how educational systems can be structured around learning outcomes. This shift in focus can generate a new “currency” based on the value of competencies among stakeholders in our educational and workforce ecosystems. The “Carnegie Unit” was originally defined in the late 19<sup>th</sup> century as a way of standardizing students’ high school work to facilitate college admissions. Soon the “Carnegie unit” was adapted to define time-based “credit hour” units for determining faculty teaching load as part of the standardization of educational processes and degrees in an industrial era. The credit hour was never intended to measure student learning, but over the years it accrued value as a proxy for student outcomes and as a well-understood, common unit of course and credential time-based processes.<sup>30</sup> As Jamie Merisotis keenly observed, “[o]ur current system won’t work in the future. . . We desperately need a more open and transparent way to navigate

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<sup>28</sup> Deborah Seymour, Deborah Everhart, and Karen Yoshino, “The Currency of Higher Education: Credits *and* Competencies,” the American Council on Education and Blackboard, accessed on 7 September 2020 <<https://www.luminafoundation.org/files/resources/currency-of-he.pdf>>.

<sup>29</sup> Molly M. Scott, Lauren Eyster, Christian Collins, Semhar Gebrekristos, and Yipeng Su, “Better Connecting Students to Jobs: A Guide for Policymakers to Encourage and Support Integrating Competencies in Postsecondary Education and Training,” May 2020, accessed on 29 November 2020 <[https://www.urban.org/sites/default/files/publication/102281/better-connecting-students-to-jobs\\_1.pdf](https://www.urban.org/sites/default/files/publication/102281/better-connecting-students-to-jobs_1.pdf)>.

<sup>30</sup> *Ibid.*

learning and careers, and we have the building blocks to create it . . . . Competency-based pathways through learning and jobs will become the norm, not the exception.”<sup>31</sup>

Competency-based education (CBE), broadly defined as a form of higher education in which credit is provided on the basis of student learning rather than credit or clock hours, has begun to catch the attention of federal and state policymakers, foundations, and colleges. Students can earn credit in CBE programs through two distinct forms: prior learning assessments (PLA), which grant credit for content that a student has previously mastered, and newer competency-based coursework, in which students progress toward a degree as they demonstrate mastery of new academic content.<sup>32</sup> Several national organizations are spearheading the expansion of CBE. The Competency-Based Education Network (C-BEN) recognizes that competency-based education is still a nascent field with a small number of people and institutions understanding enough to describe it or implement it. To ensure its impact on the future of learning and student success, C-BEN is committed to growing demand, building capacity, and removing barriers for competency-based education.<sup>33</sup> The Council for Adult and Experiential Learning (CAEL), a Strada Education Network affiliate, is growing the capacity for CBE by expanding the prevalence and quality of prior learning assessment and access to CBE for adult learners.<sup>34</sup> One major barrier to the widespread adoption of CBE is the federal higher education financial aid system. Pell grants bring \$517 million of revenue to Alabama’s 2 and 4-year colleges and serve as Alabama’s default student aid program. However, the Pell Grant is not available for many competency-based and short-term workforce training programs, since programs must have a minimum number of “clock” and “credit” hours to be eligible for the Pell Grant and other HEA Title IV financial aid programs.

## 8.2 Skills-Based Job Candidate Matching and Hiring

Skills-based hiring is an approach to talent management that starts with identifying the particular skills required in a role and recruiting candidates who have passed competency- or performance-based assessments. Skills-based hiring promises to empower employers to align recruitment around business results, rather than around résumés. Skills-based hiring also empowers students, workers, and schools to establish and follow classroom-to-career pathways. Thus, skills-based hiring can aid workers with moving out of poverty through entry-level and mid-level roles that prepare them to obtain the transferable skills needed to move laterally between industries.<sup>35</sup> CBE provides the promise of skills-based job candidate matching and hiring, but few employers have embraced these practices. Education and workforce providers have chased the ephemeral dream of connecting education and workforce training programs directly to employer demand for years. Skills-based job descriptions that allow employers to screen job applicants for the specific skills and competencies needed to do a job is needed now more than ever; nevertheless, in practice,

<sup>31</sup> Jamie Merisotis, *Human Work in the Age of Smart Machines*, Rosetta Books, New York, 2020, pages 104-5.

<sup>32</sup> Robert Kelchen, *Competency-Based Education: Enrollments, Demographics, and Affordability*, January 2015, accessed on 7 September 2020 <<https://www.luminafoundation.org/files/resources/competency-based-education-landscape.pdf>>.

<sup>33</sup> Competency-Based Education Network (C-BEN), accessed on 7 September 2020 <<https://www.cbenetwork.org/about/>>.

<sup>34</sup> The Council for Adult and Experiential Learning (CAEL), accessed on 7 September 2020 <<https://www.cael.org/about/us>>.

<sup>35</sup> Southern New Hampshire University, College for America, “The Coming Paradigm Shift in Competency-Based Hiring,” 12 April 2017, accessed on 3 September 2020 <<https://collegeforamerica.org/competency-based-hiring/>>.

skills-based hiring remains elusive for most employers. For the majority of companies that have not yet shifted to skills- and competency-based hiring practices, they have shared four leading challenges:

1. Shifting to a skills-based talent model requires a top-to-bottom retooling of organizational-leadership models and culture, as well as talent acquisition and development models. This presents complex change management issues and requires continuous improvement.
2. In a rapidly evolving economy, even before COVID-19, businesses have difficulty anticipating skill needs. Many business leaders admit they lack the tools and insights to effectively anticipate trending skills in their company and their sector.
3. Businesses do not know what skills their employees possess. Many companies do not routinely assess their employees’ skills and voluntary reporting from employees has proven ineffective.
4. Businesses are unsure how to implement skills-based hiring and fear that poor implementation will exacerbate hiring challenges.<sup>36</sup>

### 8.3 Competency-Based Education and Skills-Based Hiring as Degree Inflation Mitigation Tactics

The Harvard Business School has identified degree inflation—the rising demand for a four-year college degree for jobs that previously did not require one—as a substantive and widespread phenomenon that is making the U.S. labor market more inefficient.<sup>37</sup> Postings for many jobs traditionally viewed as middle-skill jobs (those that require employees with more than a high school diploma but less than a college degree) in the United States now stipulate a college degree as a minimum education requirement, while only a third of the adult population possesses this credential. This phenomenon hampers companies from finding the talent they need to grow and prosper and hinders Americans from accessing jobs that provide the basis for a decent standard of living. An analysis of more than 26 million job postings found that the degree gap (the discrepancy between the demand for a college degree in job postings and the employees who are currently in that job who have a college degree) is significant. For example, in 2015, 67 percent of production supervisor job postings asked for a college degree, while only 16 percent of employed production supervisors had one. The Harvard Business School analysis indicates that more than 6 million jobs are currently at risk of degree inflation.<sup>38</sup>

Degree inflation is a barrier to entry for many workers: among workers over 25, only 40 percent of non-Hispanic white Americans and 26 percent of Black Americans have a bachelor’s degree or higher. Given the racial gap in college attainment, however, degree inflation has a disparate

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<sup>36</sup> Brian K. Fitzgerald and Jennifer Thorton, “Skills-Based Hiring: Opportunity or Illusion?” 6 August 2020, accessed on 3 September 2020 <<https://www.diplomaticourier.com/posts/skills-based-hiring-opportunity-or-illusion>>.

<sup>37</sup> Joseph B. Fuller and Manjari Raman, *Dismissed by Degrees: How degree inflation is undermining U.S. competitiveness and hurting America’s middle class*,” Accenture, Grads of Life, Harvard Business School, October 2017, accessed on 7 September 2020 <<https://www.hbs.edu/managing-the-future-of-work/Documents/dismissed-by-degrees.pdf>>.

<sup>38</sup> *Ibid.*

impact on Black Americans.<sup>39</sup> In the Spring of 2020, eight economists wrote a National Bureau of Economic Research working paper, entitled *Searching for Stars: Work Experience as a Job Market Signal for Workers Without Bachelor's Degrees*, that questioned the fundamental assumption undergirding the proliferation of degree requirements: that workers without four-year degrees who earn low wages are low-skilled.<sup>40</sup> For the 71 million U.S. workers who have a high-school diploma but not a four-year degree, the working paper used the skill profile of their current jobs as a proxy for their employability for higher-wage work. Their job experience suggests they are skilled through alternative routes, so the working paper calls them by the acronym STARS. They make up 60 percent of the active U.S. workforce. The working paper states that 16 million STARS have the skills for high-wage work, defined as earning more than twice the national median; however, 11 million are currently employed in low-wage or middle-wage work. This suggests an extraordinary market failure: U.S. companies are systematically overlooking talent. Furthermore, African Americans are underrepresented among the five million STARS currently employed in high-wage work. Employers are missing out on talented workers without bachelor's degrees, and African American workers in particular. The working paper suggests there are changes companies should hire *for skills and work experience, not degrees*. Rather than using the degree requirement as a default, employers should examine the skills that their jobs require and then use skill requirements for job postings, screenings, and assessments. For example, IBM adopted this type of skills-based approach with its New Collar initiative, launched in 2017.<sup>41</sup>

Competency-based education and skills-based hiring may reduce degree inflation. As the Georgetown Center on Education and the Workforce's study entitled *The Overlooked Value of Certificates and Associate's Degrees* aptly avers, the middle-skills pathway that includes a post-secondary education beyond high school, but less than a bachelor's degree, is overlooked.<sup>42</sup> In all 16 states with sizable African American populations, African Americans are overrepresented in certificate attainment. In Alabama, African Americans comprise 27 percent of the population and earn 38 percent of certificates conferred.<sup>43</sup> Career-specific education in shorter-term programs has strong short-term value because it prepares people for immediate employment. At the same time, career-specific programs can be a risky investment, as they convey knowledge and skills that are most useful in specific occupations and industries.<sup>44</sup> In contrast to career-specific credentials, general associate's degrees or bachelor's degrees confer marketable general skills regardless of a student's field of study or major. Ultimately, the most valuable education over the long term is the one that provides the most marketable combination of specific and general

<sup>39</sup> Peter Q. Blair and Shad Ahmed, "The Disparate Impact of Requiring a College Degree," *The Wall Street Journal*, 28 June 2020, accessed on 7 September 2020 <<https://www.wsj.com/articles/the-disparate-racial-impact-of-requiring-a-college-degree-11593375171>>.

<sup>40</sup> Peter Q. Blair, Tomas G. Castagnino, Erica L. Groshen, *et al.*, Working Paper, *Searching for Stars: Work Experience as a Job Market Signal for Workers Without Bachelor's Degrees*, March 2020, accessed on 7 September 2020 <<http://www.nber.org/papers/w26844.pdf>>.

<sup>41</sup> Peter Q. Blair and Shad Ahmed, "The Disparate Impact of Requiring a College Degree," *The Wall Street Journal*, 28 June 2020, accessed on 7 September 2020 <<https://www.wsj.com/articles/the-disparate-racial-impact-of-requiring-a-college-degree-11593375171>>.

<sup>42</sup> Anthony P. Carnevale, Tanya I. Garcia, Neil Ridley, and Michael C. Quinn, Georgetown Center on Education and the Workforce, *The Overlooked Value of Certificates and Associate's Degrees*, 27 January 2020, accessed on 26 April 2020 <<https://1gyhoq479ufd3yna29x7ubjn-wpengine.netdna-ssl.com/wp-content/uploads/CEW-SubBA.pdf>>.

<sup>43</sup> *Ibid.*

<sup>44</sup> *Ibid.*

skills.<sup>45</sup> As Michelle Weise and Clayton Christensen stated in *Hire Education*, [t]he signaling effect of a college degree appears to be an imprecise encapsulation of one’s skills for the knowledge economy of the times.”<sup>46</sup>

#### 8.4 Alabama Skills-Based Hiring Initiative

The Alabama Skills-Based Hiring Initiative will generate interest, capacity, and standards for skills-based job descriptions in Alabama. The Alabama Workforce Council (AWC) will lead the initiative as an extension of the Commitment to the Alabama Worker. The Skills-Based Hiring Initiative should be messaged as the culmination of the two-year-long effort conducted by the ACCCP to develop the Alabama Credential and Competency Taxonomies that, together, produce the Alabama Occupational Ontology. The Alabama Occupational Ontology is the DNA of each occupation. Employers will be able to see, and contribute to, the state encyclopedia of occupational skills and credentials of value that denote mastery of those skills. Each employer may access the Alabama Occupational Ontology through their employer profile on the ACCET to create customized occupational competency models for their firms, to post jobs, and review the verified digital resumes of interest candidates through the ACCET. Through the Skills-Based Hiring Initiative, the AWC will provide training for employers on creating skills-based job descriptions using the Alabama Occupational Ontology. The training will include using the competency models and Alabama Credential Registry to create job descriptions that use the competency statement used by the ACCCP. The training will also provide education on degree inflation and how skills-based job descriptions can increase employee retention. Employers will also be given tips on how to develop in-house career pathways using skills-based job descriptions to stack credentials and competencies. The AWC will launch the Alabama Network of Open Competencies (ANOC). The ANOC will be a feature of the ACCET that will allow employers to select the competencies and competencies statements aligned to the occupations, occupational competency models, career pathways, and credentials of value identified by the ACCCP that are aligned to the occupations that employers are trying to fill. Employers will have the option to actively contribute information and feedback directly to the TACs to improve the resources aligned to those occupations.

## 9 The Future of Work in the COVID-19 Environment

### 9.1 Strada Public Insights Survey

The Strada Center for Consumer Insights began conducting a weekly public viewpoint survey on the effects of COVID-19 on work and education on March 25, 2020.<sup>47</sup> Notably, one-third of Americans believe they would need more education to find a comparable job if they were to lose theirs. That belief is most pronounced among Generation X and millennials.<sup>48</sup> Strada released the results of the fifth week of the survey (covering April 22-23, 2020) on April 29,

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<sup>45</sup> *Ibid.*

<sup>46</sup> Michelle R. Weise and Clayton M. Christensen, *Hire Education: Mastery, Modularization, and the Workforce Revolution*, Clayton Christensen Center for Disruptive Innovation, 2014, accessed on 3 May 2020 <<https://www.christenseninstitute.org/wp-content/uploads/2014/07/Hire-Education.pdf>>.

<sup>47</sup> Strada Education Network, Public Viewpoint, COVID-19 Education and Work Survey, accessed on 11 April 2020 <<https://www.stradaeducation.org/publicviewpoint/>>.

<sup>48</sup> Strada Center for Consumer Insights, Public Viewpoint: COVID-19 Work and Education Survey, Results from 8-9 April 2020, accessed on 16 April 2020 <<https://www.stradaeducation.org/wp-content/uploads/2020/04/Public-Viewpoint-Report-Week-2.pdf>>.

2020.<sup>49</sup> The findings from the fifth week showed that a solid majority of Americans who are considering enrolling in an education program in the next six months are considering a non-degree program. Alarming, the fifth week's findings demonstrate that 28 million Americans, or 11 percent of American adults, have canceled their education plans due to COVID-19.<sup>50</sup> Strada released the results of the week sixteen Public Viewpoint COVID-19 Work and Education Survey on August 26, 2020, which was based on a national representative survey sample of over 16,000 responses collected between March 25 and August 20, 2020.<sup>51</sup> The week sixteen Strada Public Viewpoint research shows that the majority of Americans (62 percent) have expressed a consistent preference for nondegree and skills training options, citing as their top reasons: (1) better value; (2) better fit for my personal needs; (3) benefit to my job and career advancement.<sup>52</sup> Strada released the results of the week seventeen Public Viewpoint COVID-19 Work and Education Survey on September 16, 2020, which was based on a national representative survey sample of over 17,000 responses collected between March 25 and September 3, 2020.<sup>53</sup> The week seventeen Strada Public Viewpoint research shows that two in three (68 percent) of adults considering enrolling in education programs prefer non-degree pathways, which is an increase from one in two (50 percent) one year ago.<sup>54</sup>

## 9.2 The Alabama Underemployment and Unemployment Survey

In the wake of the economic calamity caused by the COVID-19 pandemic, Alabama is retraining and upskilling unemployed Alabamians into new positions in more resilient industries. Individuals who were employed in many occupations prior to the COVID-19 pandemic were unable to contemplate enrolling in training or upskilling into a new position. Many of these individuals are now unemployed, or underemployed, which presents an opportunity for them to have enough time to enroll in a training program that will allow them to upskill or retool into an occupation that provides a pathway to a family-sustaining wage. A major component of Alabama's workforce response to COVID-19 will be assisting individuals who have been displaced by COVID-19 from the most-affected industry sectors, including hospitality, retail, and other public-facing industries. The Alabama Workforce Council and the GOEWT have commissioned a survey of 500 underemployed and unemployed Alabamians that was conducted by Cygnal between August 4 and August 20, 2020, to determine which population segments are the most likely to be open to being reskilled and placed in more resilient industries, the nature of past resistance to reskilling or training, steps respondents are willing to take to find new employment (training, professional development, short-term education, and long-term education), and the messages that resonate with each population. The sample consisted of about

<sup>49</sup> Strada Center for Consumer Insights, Public Viewpoint: COVID-19 Work and Education Survey, Results from 22-23 April 2020, accessed on 3 May 2020 <<https://www.stradaeducation.org/publicviewpoint/>>.

<sup>50</sup> *Ibid.*

<sup>51</sup> Strada Center for Consumer Insights, Public Viewpoint: COVID-19 Work and Education Survey, Results from 25 March to 20 August 2020, accessed on 29 August 2020

<[https://www.stradaeducation.org/publicviewpoint/?\\_hsmi=93965923&\\_hsenc=p2ANqtz--4dHBsEY3ZxqsuqtMqraQNSEBS7fj\\_V8hu0jTcDY4tpw9Fp3OmdJBOGFrYjJWUXwg6z1ft4GH UIozDaYsDbP-WHA\\_hmtfc7raMvKP70z5uTm\\_EyBI&utm\\_medium=email&utm\\_content=93965923&utm\\_source=hs\\_email](https://www.stradaeducation.org/publicviewpoint/?_hsmi=93965923&_hsenc=p2ANqtz--4dHBsEY3ZxqsuqtMqraQNSEBS7fj_V8hu0jTcDY4tpw9Fp3OmdJBOGFrYjJWUXwg6z1ft4GH UIozDaYsDbP-WHA_hmtfc7raMvKP70z5uTm_EyBI&utm_medium=email&utm_content=93965923&utm_source=hs_email)>.

<sup>52</sup> *Ibid.*

<sup>53</sup> Strada Center for Consumer Insights, Public Viewpoint: COVID-19 Work and Education Survey, Results from 25 March to 3 September 2020, accessed on 19 September 2020 <<https://www.stradaeducation.org/wp-content/uploads/2020/09/Report-September-16-2020.pdf>>.

<sup>54</sup> *Ibid.*



70 percent unemployed persons and 30 percent underemployed, defined as having a job but not earning enough to cover their essential expenses. Of the underemployed, the last full employment was most likely to have been 3-6 months ago, which corresponds with the beginning of the COVID-19 pandemic. Furthermore, about 40 percent say they have been unemployed for 3-6 months, while about one-third have been unemployed for more than 6 months.

The industries from which respondents are most likely to be drawn are manufacturing; hospitality and tourism; human services; agriculture and natural resources; and transportation, distribution, and logistics. More than half of respondents were laid off. About one-third were laid off because the business closed, and one-fifth were laid off, but the business is still open. Sixty-five percent of respondents say that COVID-19 was very or somewhat likely to have caused their job loss. Less than one-quarter say it was unlikely to have been a factor. Close to half of respondents say that they want to stay home because of COVID-19, while 32 percent say that work is unavailable or hard to find. Eighty-one percent of respondents are likely or somewhat likely to say they will look for another job in the next 12 months. Fifty-nine percent of respondents say that they will look beyond their previous industry for their next opportunity. When asked what industries they would consider for their next position, manufacturing and human services were the fields most often cited, at 25 percent. STEM, government, and public safety jobs are the least selected.

If free job training were provided, respondents are most likely to say they would consider a position in human services, followed by business management and administration. Half of respondents say they would accept part-time work if it would increase their chances of finding full employment. Another 39 percent say they would accept temporary work, 35 percent would change industries, and 34 percent would undertake short term online training. Respondents prefer shorter education and training programs. Their main goals are “a certificate, certification, or license” (27 percent) or “one or more courses to get some skills I need for work” (25 percent). Less than one-third of respondents indicated they have completed additional training during unemployment. A plurality of respondents have not sought additional training because of the expense (37 percent). While most haven't heard of AlabamaWorks!, there are some groups where the majority have. These include men, people 45 or older, and married respondents. Respondents are fairly equally divided between online career coaching, skills training, and community college as the most important programs or resources to help them prepare for a new job.

**10 Alabama's Competency- and Skills-Based Response to the COVID-19 Pandemic**  
Between March 21, and November 21, 2020, 855,836 Alabamians filed an initial unemployment claim, which is far greater than the 500,000 additional credentialed workers who need to be added to Alabama's workforce by 2025 to achieve the Governor's postsecondary education attainment goal.<sup>55</sup> A major component of Alabama's workforce response to COVID-19 will be assisting individuals who have been displaced by COVID-19 from the most-affected industry sectors, including hospitality, retail, and other public-facing industries. According to a recent

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<sup>55</sup> Governor's Office of Education and Workforce Transformation Analysis of Alabama's UI Claims for the Week Ending on 21 November 2020, Based on Unemployment Compensation and Layoff Estimates Provided by the Alabama Departments of Labor and Commerce, 25 November 2020.

McKinsey Global Institute report, up to one-third of jobs in the United States may be vulnerable to COVID-19, and 80 percent of the vulnerable jobs are held by low-income workers.<sup>56</sup> In fact, up to 86 percent of the vulnerable jobs pay less than \$40,000 annually. Furthermore, more than half of the vulnerable jobs in the private sector were in firms with fewer than 500 employees, and almost 40 percent were from businesses with fewer than 100 employees. During the COVID-19 shutdown, 44-57 million jobs are vulnerable to reduced income, furloughs, and layoffs. Even more sobering, two industries (accommodation/foodservice and retail) account for 42 percent of vulnerable jobs. States with other public-facing industries will be the hardest hit. Tourism-dependent states, such as Nevada, Florida, Montana, Hawaii, South Carolina, Louisiana, and California may see the largest percentage decline in jobs.<sup>57</sup> As the data presented above demonstrate, individuals who are employed in public-facing industries and in hourly positions are most at risk of being laid off, furloughed, or having their hours reduced due to COVID-19. As Matt Siegleman, CEO of Burning Glass Technologies, stated in the April 14, 2020 episode of the Work in Progress Podcast, jobs that are place-based and the most at risk due to automation are also the most at risk to dislocation due to COVID-19.<sup>58</sup> Furthermore, individuals who were employed in retail or hospitality jobs prior to the COVID-19 pandemic were unable to contemplate enrolling in training or upskilling into a new position. Many of these individuals are now unemployed, or underemployed, which presents an opportunity for them to have enough time to enroll in a training program that will allow them to upskill or retool into an occupation that provides a family-sustaining wage. In fact, economists predict that as many as 40 percent of jobs will never return.<sup>59</sup> MIT economist David Autor has dubbed the COVID-19 pandemic an “automation forcing event,” which could result in millions of Americans facing structural unemployment and the need to reskill into a very different labor market than they left.<sup>60</sup> As the *Wall Street Journal* put it, “[t]he coronavirus pandemic is forcing the fastest reallocation of labor since World War II, with companies and governments mobilizing an army of idled workers into new activities that are urgently needed.”<sup>61</sup>

During the COVID-19 pandemic, “Americans aren’t turning their backs on education; they are reconsidering how to obtain it. Enrollment in short-term credential classes during the pandemic increased 70% to nearly 8 million over the same period last year . . . [t]hat increase came as

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<sup>56</sup> Susan Lund, Kweilin Ellingrud, Bryan Hancock, James Manyika, and Andre Dua, “Live and Livelihoods: Assessing the near-term impact of COVID-19 on US workers,” McKinsey Global Institute, April 2020.

<sup>57</sup> *Ibid.*

<sup>58</sup> Ramona Schindelheim, “How we win the COVID-19 economic recovery,” Work in Progress Podcast, workingnation.com, 14 April 2020, accessed on 3 May 2020 <<https://workingnation.com/covid-19-how-we-win-the-economic-recovery/>>.

<sup>59</sup> Jose Maria Barrero, Nick Bloom, and Steven J. Davis, *COVID-19 Is Also a Reallocation Shock*, Working Paper, Becker Friedman Institute for Economics, University of Chicago, 5 May 2020, edited 25 June 2020, accessed on 3 September 2020 <[https://bfi.uchicago.edu/wp-content/uploads/BFI\\_WP\\_202059.pdf](https://bfi.uchicago.edu/wp-content/uploads/BFI_WP_202059.pdf)>.

<sup>60</sup> Scott Cheney and Brian Sponsler, “Credential pollution: Workers need better information to navigate a hazy labor market,” WorkingNation, 2 September 2020, accessed on 7 September 2020 <<https://workingnation.com/credential-pollution-workers-need-better-information-to-navigate-a-hazy-labor-market/>>.

<sup>61</sup> Ruth Bender and Matthew Dalton, “Coronavirus Pandemic Compels Historic Labor Shift,” 29 March 2020, accessed on 7 September 2020 <<https://www.wsj.com/articles/coronavirus-pandemic-compels-historic-labor-shift-11585474206>>.

freshman college enrollment dropped by 16%.”<sup>62</sup> Alabama’s approach to the workforce response to the COVID-19 pandemic may also provide an opportunity to scale CBE in the state since Alabama is assisting individuals with entering into a competency-based training program within a resilient industry that is not as heavily affected by COVID-19. The Alabama Workforce Investment Board was awarded a three-year, \$17.8 million Reimagine Workforce Preparation grant from the U.S. Department of Education on September 25, 2020, to scale the Alabama Workforce Stabilization Program (AWSP). The AWSP is a first-of-its-kind non-traditional, short-term educational program that is potentially significant for gathering data on the quality and efficacy of short-term, competency-based education programs that articulate to traditional postsecondary programs. The AWSP will provide funding for short-term programs that are not currently eligible for Federal Pell Grant and student loans under Title IV of the Higher Education Act. The income premium for adults without a college degree who earn a short-term certification or credential varies by occupation. Carnevale, Schmidt, and Strohl identified in, *that* “Postsecondary programs of study more than quintupled from 1985 to 2010, from 410 to 2,260. Since 1950, the number of college students has increased tenfold, and the number of occupations recognized in government statistics has tripled to more than 800 . . . Colleges are offering a blizzard of degrees, certificates, licenses, certifications, badges, and other micro-credentials, all of which purport to qualify the recipients to enter an occupation. But who really know what they all mean?”<sup>63</sup> The premium is as high as \$25,000 for some occupations, yet there is almost no value for certificates in other occupations.<sup>64</sup> The AWSP is focused on the occupational clusters that yield a significant wage-premium for certificate holders and that have proven most resilient to COVID-19 (1) advanced manufacturing; (2) healthcare; (3) information technology; (4) transportation, distribution, and logistics; and (5) construction. In fact, many of Alabama’s industries have proven to be quite resilient. Career-specific education in shorter-term programs has strong short-term value because it prepares people for immediate employment. Thus, the AWSP focuses on connecting short-term programs for rapid entry or reentry into the workforce, coupled with a focus on the Ability to Benefit Program for AWSP participants to continue their post-secondary education and articulate AWSP credits towards a long-term certificate or associate degree.

The AWSP will be bolstered by the Alabama Human Capital Development Fund. The AWSP participants will also qualify for individual training accounts (ITAs) funded by Title I of the Workforce Innovation and Opportunity Act (WIOA). The fund will extend individual training accounts (ITAs) for (Supplemental Nutrition Assistance Program) SNAP-eligible AWSP participants. Non-federal, state-invested portions of the AWSP will trigger a SNAP Education and

<sup>62</sup> Douglas Belkin, “Is This the End of College as We Know It?” *The Wall Street Journal*, 12 November 2020, accessed on 29 November 2020 <<https://www.wsj.com/articles/is-this-the-end-of-college-as-we-know-it-11605196909>>.

<sup>63</sup> Anthony P. Carnevale, Peter Schmidt, and Jeff Strohl, *The Merit Myth: How Our Colleges Favor the Rich and Divide America*, The New Press, New York, 2020, page 215.

<sup>64</sup> Strada Education Network, Gallup, and Lumina Foundation, “Certified Value: When do Adults without Degrees Benefit from Earning Certificates and Certifications?” 13 May 2019, page 9, accessed on 23 August 2020 <[https://cdn2.hubspot.net/hubfs/5257787/StradaLuminaGallup\\_Report\\_FiNAL-1.pdf?utm\\_campaign=Gallup%20Report%3A%20Certified%20Value&utm\\_medium=email&\\_hsenc=p2ANqtz--6dSRavA-qJE0X3lpPCmfDr1XcnoJ8yyHG\\_ukBS10rS\\_BrUT9MbpttBJMf81C8YaSQJ4dQZz-hxmTBWNjcRe4JEHkhMdoSSlmIUHnF5wf674xnDU&\\_hsmi=72630832&utm\\_content=72630832&utm\\_source=hs\\_automation&hsCtaTracking=1354c347-29f4-4d06-a22f-3fa5cf2aac2d%7Cdf76db14-d0d1-472b-a716-bcbd1c1d7a34](https://cdn2.hubspot.net/hubfs/5257787/StradaLuminaGallup_Report_FiNAL-1.pdf?utm_campaign=Gallup%20Report%3A%20Certified%20Value&utm_medium=email&_hsenc=p2ANqtz--6dSRavA-qJE0X3lpPCmfDr1XcnoJ8yyHG_ukBS10rS_BrUT9MbpttBJMf81C8YaSQJ4dQZz-hxmTBWNjcRe4JEHkhMdoSSlmIUHnF5wf674xnDU&_hsmi=72630832&utm_content=72630832&utm_source=hs_automation&hsCtaTracking=1354c347-29f4-4d06-a22f-3fa5cf2aac2d%7Cdf76db14-d0d1-472b-a716-bcbd1c1d7a34)>.

Training Program (E&T) 50-percent match. The SNAP E&T 50-percent reimbursement will, through memoranda of understanding by the partners, be used to endow the Alabama Human Capital Development Fund in each local workforce investment area. Each local workforce board will then partner with the Alabama Department of Human Resources to award human capital development funds to extend the ITAs of SNAP-eligible AWSP participants, who also received the AWSP, to offset costs associated with transportation, childcare, housing, and equipment costs related to their apprenticeship programs.