



## Today's Realities— Tomorrow's Workforce:

### Addressing Region 7's Rural Workforce Mismatch

December 2016



## ACKNOWLEDGMENTS

Jobs for the Future wants to thank the stakeholders of the Southwest Alabama Workforce Development Council—employers, educators, policymakers, government officials—for their many hundreds of hours of collaboration and interviews, and for their recommendations to help improve the workforce in rural counties. Of course, none of this would have been possible without the support of SAWDC and the generous financial support of the Delta Regional Authority.

## ABOUT SAWDC



Southwest Alabama Workforce Development Council is one of Alabama's seven Regional Workforce Councils, focused on developing partnerships and programs to address the workforce needs of local industry. SAWDC covers nine counties in Southwest Alabama, which constitutes Region 7 in the state's regional workforce development structure. Those counties include the following: Baldwin, Choctaw, Clarke, Conecuh, Escambia, Mobile, Monroe, Washington, and Wilcox. SAWDC's vision is to develop a comprehensive, integrated workforce development system, which creates a skilled workforce that better meets the needs of employers and leads to a better quality of life for our citizens. Its mission is to develop strategic partnerships which attract, educate, and train students and workers to better meet employer needs and foster economic growth in a global marketplace. In order to ensure the regional workforce planning is comprehensive and considers the variety of workforce needs in its nine counties represented, SAWDC has broad and deep representation, both geographically and across industry sectors, with representation from each of the targeted industry clusters—aviation, maritime, construction, health care, and manufacturing—chosen due to the high-demand and high-growth prospects for these industries. With a dual customer approach, SAWDC convenes, organizes key stakeholders, and maintains persistent attention to the needs of the two main customers: employers and workers. By engaging employers and other partners in identifying workforce needs, SAWDC aligns funding from various sources and brokers services that address the career advancement needs of employers and lower-skilled adults.

## ABOUT THE DELTA REGIONAL AUTHORITY



The Delta Regional Authority works to improve regional economic opportunity by helping to create jobs, build communities, and improve the lives of the 10 million people who reside in the 252 counties and parishes of the 8-state Delta region. Led by the Delta Regional Authority Board—comprised of the federal co-chairman, appointed by the president and confirmed by the U.S. Senate, and the governors of the 8 states—the Delta Regional Authority fosters local and regional partnerships that address economic and social challenges to ultimately strengthen the Delta economy and the quality of life for Delta residents.

Established in 2000 by Congress, the Delta Regional Authority makes strategic investments of federal appropriations into the physical and human infrastructure of Delta communities. Through the States' Economic Development Assistance Program, these investments help to improve transportation and basic public infrastructure and to strengthen the workforce development system and local business environments. The Delta Regional Authority supports job creation and economic development through innovative approaches to growing local and regional leadership, increasing access to quality health care and boosting opportunities for entrepreneurs to obtain affordable capital.

The 252 counties and parishes served by the Delta Regional Authority make up the most distressed area of the country. The time for action has arrived, and the Delta Regional Authority is poised to work with local, state, and federal leaders to bring investment and opportunity back to the Delta region.

## ABOUT JOBS FOR THE FUTURE



Jobs for the Future is a national nonprofit that works to ensure educational and economic opportunity for all. We develop innovative career pathways, educational resources, and public policies that increase college readiness and career success, and build a more highly skilled workforce. With over 30 years of experience, JFF is the national leader in bridging education and work to increase mobility and strengthen our economy. Visit JFF's website at [www.jff.org](http://www.jff.org).

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*Photography courtesy of SAWDC*

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## EXECUTIVE SUMMARY

The Southwest Alabama Workforce Development Council leadership is concerned about workforce challenges in the southwest corner of the state. The rural counties of Region 7, a sub-state area designated by the state for addressing workforce development issues, have lagged behind their urban neighbors in recovering from the economic recession of 2007. SAWDC recognizes that a new and expanded effort is required to improve the rural economy and better align demand and supply of workers attempting to connect around real-time hiring needs.

Nationally, middle-skill jobs have become increasingly important. These are positions that pay at least \$13.76 per hour and require either a high school diploma and on-the-job training, or a postsecondary credential or associate's degree. Middle-skill jobs pay family-sustaining wages that can provide financial stability and career growth to workers. Given the rural counties' employment demands and the need for better-paying jobs, developing a workforce strategy that emphasizes middle-skill jobs has significant potential for the region.

To determine the best strategies to achieve this, JFF did an extensive data review and conducted interviews with local stakeholders. Several factors about the existing local economy and labor force emerged. These factors must be considered when assessing how to develop a more robust workforce development strategy.

## RURAL ECONOMY

Region 7 contains 2 urban counties, Mobile and Baldwin, and 7 rural counties, Choctaw, Clarke, Conecuh, Escambia, Monroe, Washington, and Wilcox. The economy of the rural counties is significantly different from the economy of the urban counties. The population in the rural counties of Region 7, which represents 18 percent of the region's total, was 136,715 in 2016, and has declined by 4.6 percent over the last 6 years.

The rural counties are dwarfed by the two urban counties. Eighty-six percent of private sector jobs in Region 7 are located in Mobile and Baldwin counties, and only 14 percent of private sector jobs are in the rural regions.

Although located adjacent to the urban counties of Mobile and Baldwin, the industry character and labor markets function more independently than would be expected given their geographic proximity. The manufacturing operations located in the rural counties have few linkages to the highly industrialized Mobile economy.

Between 2007 and 2016, every rural county in Region 7 lost jobs. Escambia County lost only 2.2 percent of its total employment while job losses in the remaining counties ranged from 12.5 percent in Choctaw County to 26.3 percent in Monroe County. Looking forward, all rural counties except Choctaw and Wilcox are expected to see job gains by 2022. However, total employment in each county by 2022 is expected to remain below their 2007 level.

The large geographic size of the rural region results in jobs being dispersed over wide areas making transportation for employment and for training a major challenge because of limited road and highway access. In fact, both workers and employers see neighboring areas of Florida and Mississippi as fertile areas for jobs and from which to recruit because of better transportation access.

## WORKFORCE ANALYSIS

### Educational Attainment is a Critical Issue

In general, employers are requiring higher levels of educational attainment, training, and experience to be hired for middle-skill jobs. The rural population has not kept up with the needed level of education. In the rural counties, the percentage that completed their education with a high school diploma ranges from a low of 35.2 percent to a high of 48.5 percent. More telling is that across the rural county region, 25 percent of the population had an associate's degree or some postsecondary education and only 13 percent had a bachelor's degree or higher. This lack of postsecondary credentials is a drag on the economy and must be addressed to support the region's workforce and economic development.

### Both Underemployment and Unemployment Are Concerns

Workers accept jobs that underutilize their experience, training, or skills, and/or are part-time or temporary jobs. The underemployed are a potential pool of new jobseekers for employers only if workers change careers or add to their skill sets to better fit what employers now seek. Many of the underemployed find it difficult to advance to full-time employment, particularly in middle-skill jobs.

Unemployment rates in the rural counties exceed the urban counties of Region 7 and the state of Alabama as a whole. The unemployment rate is likely understating the total population without jobs since some of the unemployed have stopped looking for work. Getting the unemployed back into jobs in the critical industries will be a challenge because unemployed persons in the rural counties often have little educational attainment or lack the kinds of skills and experience that are in demand.

### Journey to Work

The commuting patterns of rural residents reflect both the dispersed nature of employment in the region and the limited highway access. Rural workers more often commute to workplaces *outside* Region 7 than to another county *inside* the region. Only workers from Washington and Escambia more often commute into Mobile or Baldwin for their jobs. Significant numbers of rural workers find it more possible to commute to Florida and Mississippi due to better highway access than within the counties, creating an outflow of workers from Region 7. Overall, the research found that rural jobseekers commute to workplaces outside Region 7 because they

cannot find employment locally that requires the skills and work experiences they have, and too often, they are forced to accept jobs locally that leave them underemployed. In addition, workers lacking access to personal transportation have no reliable alternative transportation options.

## Evidence of a Skills Gap in Rural Counties of Region 7 is Clear

**Many of the rural counties' adults are underprepared for middle-skill jobs, lacking the minimum educational requirements, technical skills, and employability skills.** Although high school graduation rates are improving, the number of residents with postsecondary credentials is below Alabama and national averages. An estimated 4,800 of those working at rural workplaces actually live outside of Region 7. This suggests that employers are hiring workers from outside the region, with the result being that about 8 percent of all rural area jobs are held by these workers. Employers, in part, hire these workers because they are not satisfied with the technical and/or employability skills that local jobseekers have to offer. Access to workers outside of Region 7 may relieve the pressure on local employers to take more actions to address the gap in skills and job experience found in local applicants for middle-skill jobs. Likewise, rural jobseekers resort to commuting outside Region 7, if they are able to do so. About 4,000 employed residents commute to jobs outside of Region 7. Some of these do so because they cannot find employment locally that fits their skills and work experiences. In other cases, they may simply accept jobs locally that leave them underemployed. This is evidence of a classic skills mismatch within the rural Region 7 labor market.

**Employability skills are in demand.** Employers want to hire workers who are effective communicators, planners, and problem solvers; are comfortable with technology; and possess other employability or workforce-readiness skills. Many jobseekers lack these skills, and incumbent workers are unable to keep up with evolving technology in their workplaces. Further, employers find themselves frustrated by capacity and access issues when they attempt to arrange training through vendors or by partnering with postsecondary educators in the region.

**Employers regularly fill open positions by hiring workers already employed at other firms.** This is not sustainable in the long term, as it is a zero-sum outcome for the region.

## CRITICAL INDUSTRIES AND THEIR CHALLENGES

Manufacturing, health care, and transportation and warehousing are the critical industries in the region. They provide the majority of the region's private-sector jobs.

### Manufacturing

Manufacturing is the largest employer, providing 19.8 percent of total employment in the region. One hundred and thirty-one manufacturing companies are located in the rural region. The average manufacturing annual salary in the rural region is \$65,757, more than 72 percent higher than the overall average wage. Yet manufacturing employers are facing difficulties in filling their available job openings. Many applicants lack sufficient work experience to be employed, even

when they have the requisite education. There is also a shortage of new skilled workers interested in the manufacturing industry. The industry's challenges will be further exacerbated when the incumbent workforce begins retiring.

## Health Care

In 2016 in the rural counties, there were a total of 3,592 people employed in health care, and the sector demand for positions is projected to grow 11 percent in the next 5 years. There is already an acute shortage of workers to fill open positions in occupations requiring less than a bachelor's degree such as registered nurses, certified nursing assistants, and health information technicians.

Employers identified many workforce challenges, including large numbers of impending retirements—especially in jobs that are already hard to fill. Training programs face recruitment challenges, particularly from the residents of the region. Potential students have negative perceptions of health care employment opportunities and limited awareness of the diversity of opportunities in the health care field. In addition, many graduates of the region's community college programs leave the region upon degree completion. The industry has very high turnover in frontline occupations. Factors cited as reasons for this high turnover include the physical demands of the occupations, low wages, the demands of shift work, and poor employability skills on the part of some employees.

## Transportation and Warehousing

There were 2,077 jobs in the transportation and warehousing sector in the rural counties in 2015. This sector includes the full range of transportation services from pipelines to shipments; travel by air, ground, and water; and corresponding warehousing services for goods and fleets used in transportation. For the rural counties, 75 percent of these firms are involved in truck transportation. Long-distance trucking provides 75 percent of jobs in truck transportation, with the remaining balance being local transportation of goods and services.

Hiring necessary workers and high turnover rates are the two greatest—and most related—workforce challenges in the trucking and warehousing sector. Turnover is a particularly grave challenge for long-distance truck companies.

## RECOMMENDATIONS

Recommendations for action to address the challenges of the rural region and its key industries are provided. These recommendations were developed through facilitated planning sessions with business leaders, elected officials, economic developers, and other workforce development stakeholders. The recommendations are divided into seven categories outlined below. These same stakeholders—along with other key leaders from the rural counties, and with support from SAWDC—will need to develop a leadership structure to drive program development to implement these recommendations. Each recommendation will have to be evaluated based on



factors such as ease of implementation, financial implications, and whether or not the rural counties need to involve additional stakeholders from outside the region.

### **Improve Alignment between Industry Needs and the Community Colleges**

There is wide agreement in every part of the country that partnerships between employers and community colleges are key to developing a workforce that meets the demands of local employers. To maximize the impact of the region's community colleges, the region should develop additional satellite sites for the provision of postsecondary education and training services in close proximity to key industry clusters. Community colleges should consider hiring instructors with industry experience. Employability skills should be integrated into every training program. The region's community colleges should also develop alternative education models that address barriers to entering community college degree and certificate programs, such as the Washington State I-BEST model.

### **Increase Public Workforce System Services to the Rural Area**

The public workforce investment system must be a key partner in any successful regional workforce development effort. Rural stakeholders must ensure that rural workforce priorities are included in the expanded workforce development board that will include the rural counties in the future. Regional stakeholders should also work to improve access to public workforce development services through virtual programming, increased service hours outside of the traditional nine to five, and the use of informal satellite locations such as libraries and town halls throughout the region.

### **Address Regional Infrastructure Issues**

The rural region faces infrastructure issues that are barriers to workforce development efforts, such as increasing education and training services and attracting employees. A key recommendation to support regional workforce development is to improve regional broadband access. Implementing this recommendation will support both commerce and education. Supporting regional transportation improvements will also support workforce and economic development in the region.

### **Expand and Improve the Pre-Employment Pool**

The region cannot afford to leave any potentially productive portion of its workforce on the sidelines. The region's stakeholders should encourage the development and expansion of programs that support the training and hiring of veterans, people with disabilities, and the long-term unemployed. Programs that support the ability of people with criminal backgrounds to reenter the workforce should also be explored.

## Implement Industry-Specific Recommendations

Workforce development efforts should always be based on the needs of specific industries. For the manufacturing industry, the development of training programs that build both experience and skills will be critical. Apprenticeship programs, degree programs with alternating periods of education and work, and incumbent worker training programs are options to meet this need. The region is also recommended to support manufacturing career awareness programs to attract more workers to the industry. Development of a satellite community college training center in Washington County, in close proximity to the chemical manufacturing cluster, would also support the manufacturing industry.

For the health care industry, developing retention and recruitment efforts to address upcoming nursing retirements will be critical. The region's educational leadership should also bring new models of training to the region to support career pathway development to produce more nurses and other caregivers from the existing workforce. Retention and recruitment efforts to address upcoming nursing retirements should also be explored. Finally, the region's workforce development stakeholders should build stronger relationships with regional home health organizations.

The transportation and warehousing industry would be supported by increasing targeted commercial driver's license training in the rural counties, building on the work that has been done in the region by Bishop State Community College and its partners.

## Engage in Additional Economic Development Activities

Since workforce development and economic development are inextricably linked, efforts to engage and expand partnerships between workforce and economic development should be pursued. Options for this engagement include:

- Expanding the industry awareness campaign to a regional economic development marketing campaign.
- Stressing to regional planners and other key decision makers the importance of clustering employment centers in the counties closest to residential clusters. This will help reduce travel times and lower transportation costs.
- Proposing an industrial/manufacturing land-use study for priority locations. This would encourage economic development entities to direct their efforts to targeted locations.
- Making a concerted effort to craft the story around the appeal of the rural area to the professional workforce.

## Create a Culture of Continuous Improvement and Adopt Measures of Success

Developing common measures and reporting results of workforce development efforts to industry and the public will help develop support for sustaining the recommendations discussed in this report. Programs should develop public dashboards that demonstrate the progress of the

workforce system in real time. Training programs should develop a voluntary comprehensive database of postsecondary education and training program participants to inform industry, and workforce development metrics should be included in performance measures for all community college programs. Finally, regional stakeholders should support continual improvement through long-term efforts to research and implement new models of workforce development that have been shown to be effective.

Each of these recommendations can contribute to the improvement of the workforce development in the rural counties of Region 7. Stakeholders must evaluate the resources—time, funding, and influence—as they prioritize the recommendations to create a better vision for the area.

## PROJECT OVERVIEW

SAWDC was awarded a \$150,000 grant—part of the Delta Regional Authority's \$1.7 million workforce development initiative, Reimagining the Delta Workforce—to help identify opportunities and implement strategies for enhancing regional and local workforce development systems throughout the DRA footprint. The capacity building and technical assistance was to help countywide, parishwide, and regionwide leadership teams develop programs and systems-based policies to build a more connected, comprehensive workforce system among educational institutions and business and industry sectors.

SAWDC contracted with JFF to assist in creating a workforce development strategy guided by employer demand for the rural counties of Region 7, which include Choctaw, Clarke, Conecuh, Escambia, Monroe, Washington, and Wilcox. These rural areas have not experienced the economic growth of neighboring Mobile and Baldwin counties. SAWDC leadership is concerned about the workforce challenges that exist in the rural counties and believes that a new and expanded effort is needed if both employers and workers are to achieve their full potential.

There are two parts to the project—research and strategy. JFF first identified the challenges and opportunities for workforce development through an analysis of labor market information and interviews with business leaders, economic developers, elected officials, and education and workforce professionals. This was followed by a series of facilitated discussions with key regional stakeholders to build strategies for improving the workforce in the region. This report combines insights from both to lay out recommendations to address the region's labor market challenges.

The remainder of the report proceeds as follows. In the following section, we provide detailed information on our research methodology, data sources and limitations, and analysis methods. The body of the report begins with an overview of the economy of Region 7's rural counties. This overview includes data on industries, employment, and the region's recovery from the Great Recession. The industry section begins with an overview of all of the industry sectors in the region, followed by the selection of manufacturing, health care, and transportation and warehousing as the region's critical industries. For each of the critical industries, we examine total employment over time and the critical occupations in the industry, and highlight the challenges the industry faces in meeting its workforce needs. The report provides additional detailed information on the region's workforce, and an analysis of the skills gap between the region's workforce and the skills needs of the critical industries. Finally, the report provides a series of recommendations to address the region's workforce development challenges.



## RESEARCH METHODOLOGY

Conducting a complete analysis of a regional workforce requires a thorough understanding of the data available, illuminating it with information from those operating in the region. This report reflects the strength and importance of enriching the often limited and/or dated secondary data analysis with firsthand accounts of issues, perceptions, and facts from major industry leaders in the region and especially in the rural area.

The goal of this research is to document these realities and suggest multiple ideas for short- and longer-term actions to address identified workforce issues.

### CREATING A FRAMEWORK USING SECONDARY DATA

The team used several different data sources on economic and labor market information for Region 7, with in-depth drilling down for the seven rural counties. The rural counties of the region considered initially for this report were Choctaw, Clarke, Conecuh, Escambia, Monroe, and Washington. Effective October 1, 2016, Wilcox County was added to the SAWDC region. Although the research for this report was concluded prior to this addition, several tables within the report include data on Wilcox County. A review by Wilcox County stakeholders indicated that the workforce development issues there are similar to those described in this report.

To provide a picture of the economy (e.g., description of employment status, income, poverty, and education attainment), JFF used Economic Modeling Systems International (Emsi) data aggregated from over 90 federal, Alabama, and private sources as well as data pulled from the federal government's American Community Survey. Emsi applies proprietary methods to remove suppressed data and include additional data to yield a comprehensive representation of the regional workforce. Some of the federal and state data sources Emsi uses contain non-disclosed or "suppressed" data points created by the government organizations that publish the data products in order for them to comply with laws and regulations that are in place to help protect the privacy of the businesses that report to them. In some cases, Emsi utilizes proprietary algorithms to replace suppressions with mathematically educated estimates, which can increase the margin of error when analyzing smaller labor market areas. The projection data presented here are based upon the extrapolation of past trends. While it is by no means definitive, it provides the best estimate for future growth, based upon current and past economic indicators.

To better understand the dynamics of the labor market activity that cannot be identified using traditional labor market data, especially previous experience, skills, and credentials employers expect when hiring, this report relies extensively on job posting data that were drawn from Burning Glass Technologies' Labor Insight. A direct investigation of jobs employers post online provides a more complete picture of jobs in demand as they emerge and change. Burning Glass identifies employers with high demand for workers and occupations with the most openings and reveals details about employers' demand for skills and credentials. Burning Glass has compiled a database of over 150 million job listings, updated daily from roughly 40,000 websites. The

database includes listings from major job boards, newspapers, government agencies, and a broad array of small, medium, and large employers—so long as they are placed online. The sites captured include a strong representation of the small businesses driving economic recovery; 51 percent of sites mined produce 20 or fewer jobs. Most sites are employer sites. Also, Burning Glass leverages patented text mining to code 70-plus data elements to render detailed skills-level intelligence on who is hiring and where, what jobs are in demand, and what skills and credentials employers now require for those jobs.

A deep dive into the labor market size and qualifications provides insight into how to improve the rural area's workforce and narrow the gaps employers are experiencing. Extensive use of data from the U.S. Census American Community Survey is used to profile the workforce and detail the challenges in keeping pace with changing employer demand.

## ENHANCING THE PICTURE THROUGH PRIMARY DATA

To give the data additional context, and to better understand the complexities of the region, JFF conducted intensive qualitative interviews with employers and community stakeholders to fill in the gaps in labor market information data, particularly related to the skills that employers demand of their workforce and the local labor market's ability to supply those demands. The JFF team interviewed 61 stakeholders and 53 organizations, including business leaders, K-12 and postsecondary educators and administrators, economic and workforce developers, and government and elected officials. The JFF team placed special emphasis on business leaders, who account for more than half of the interviews, especially those in sectors and subsectors providing high numbers of middle-skill jobs in industries including chemical manufacturing, health care, paper and wood products manufacturing, primary metal manufacturing, and fabricated metal manufacturing.

As a result of these interviews with regional stakeholders, the research focuses on the need for qualified workers to fill available middle-skill jobs—jobs that require a high school diploma and on-the-job training or a postsecondary credential or degree, and pay wages sufficient to cover basic family expenses plus all relevant taxes for a rural county-based family of four with two wage earners. These are the jobs that employers identified as critical to their operational success and that all stakeholders agree are key to improving the overall economic climate of the rural counties.

# DATA ANALYSIS AND IMPLICATIONS

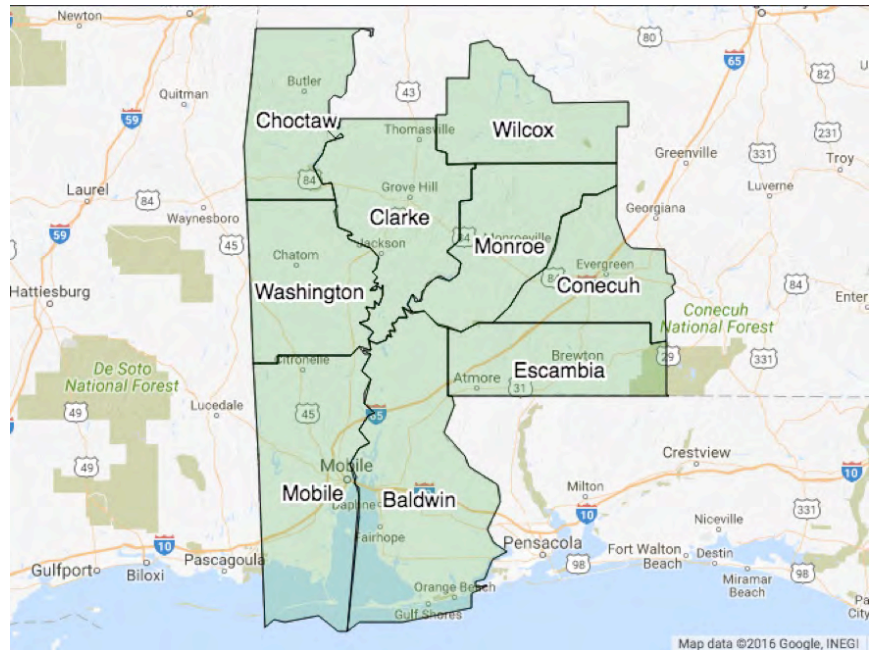
## REGIONAL OVERVIEW

With a population of 760,259 in 2016, SAWDC Region 7 comprises nine counties in the southwest corner of Alabama (Figure 1).<sup>1</sup> The region faces the Gulf of Mexico and is bordered by Florida along the Gulf and, to the west, Mississippi and the portion of Louisiana fronting the Gulf.

## PUTTING THE RURAL ECONOMY INTO THE REGIONAL CONTEXT

The seven rural counties, which are the subject of this report, are dwarfed by the two urban counties—both in terms of population and jobs. They have a population of 136,715, which represents only 18 percent of the region. In addition, as shown in Figure 2, only 14 percent of total jobs in Region 7 are located in the rural counties.<sup>2</sup>

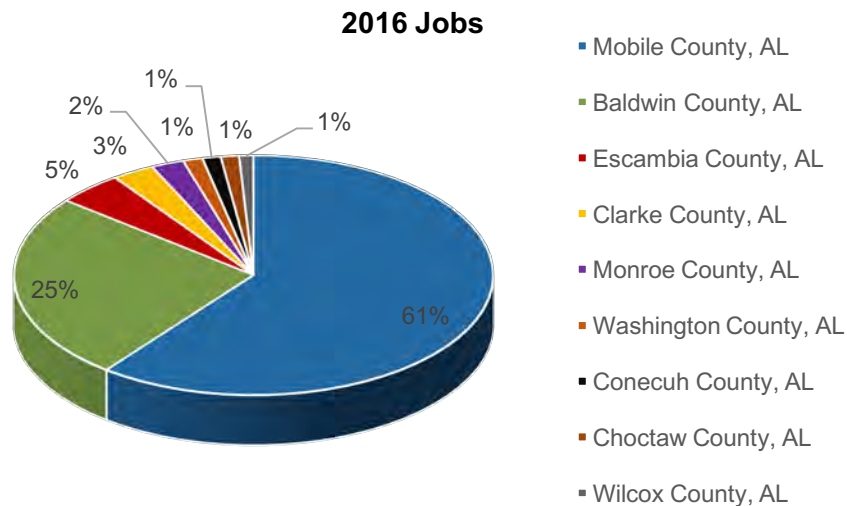
**Figure 1: Map of Region 7**



<sup>1</sup> Emsi 2016.4.

<sup>2</sup> *Ibid.*

**Figure 2: Percentage of Private Sector Jobs by County**



Source: Emsi 2016.4

Although located adjacent to the urban counties of Mobile and Baldwin, the industry character and labor markets of the rural counties function more independently than would be expected given their geographic proximity. The manufacturing operations located in the rural counties have few linkages to the highly industrialized Mobile economy. Consequently, the best strategies to address rural labor market challenges will be different from those that might be applicable in the urban counties.

## EMPLOYMENT IN THE RURAL COUNTIES

The rural counties' employment has been driven by manufacturing. This became a liability when the recession hit. Table 1 shows the total number of jobs by sector in 2007, 2015, and projections for 2022. Only four sectors show an increase in jobs during the period of 2007 to 2015—government, retail trade, accommodation and food services, and health care. Of these, only health care is considered a significant private-sector employment driver for the economy. In 2007, manufacturing had the most jobs in the rural region, providing 25 percent of Region 7's total job base. By 2015, the sector had only 8,349 manufacturing jobs—a significant decline. Even with this reduction, manufacturing still accounts for 19.8 percent of all jobs in the rural economy and provides the largest number of private-sector jobs. Its importance to the rural economy's future is paramount.



**Table 1: Total Jobs by Industry, 2007–2022**

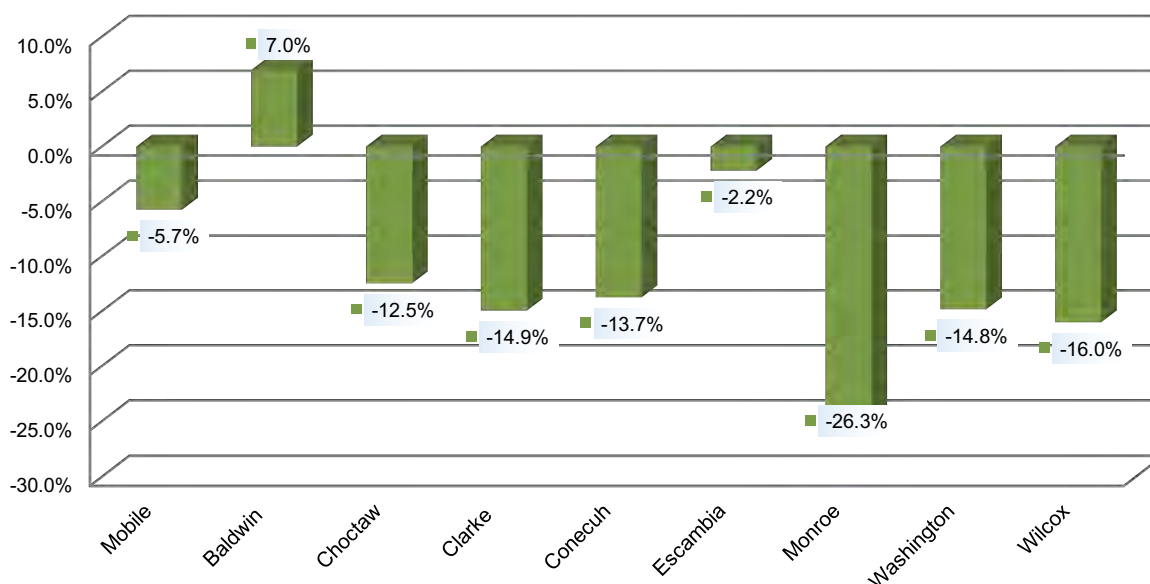
NAICS <sup>3</sup>	Description	Total Rural Counties						Change 2007 to 2022
		2007	% Total	2015	% Total	2022	% Total	
31	Manufacturing	11,574	24.0%	8,349	19.8%	7,944	18.2%	-31.4%
90	Government	11,073	23.0%	10,534	24.9%	10,552	24.1%	-4.7%
44	Retail Trade	5,821	12.1%	5,477	13.0%	5,930	13.6%	1.9%
62	Health Care and Social Assistance	3,737	7.8%	3,592	8.5%	4,065	9.3%	8.8%
23	Construction	2,836	5.9%	2,033	4.8%	2,290	5.2%	-19.3%
48	Transportation and Warehousing	2,643	5.5%	2,077	4.9%	1,931	4.4%	-26.9%
72	Accommodation and Food Services	2,503	5.2%	2,655	6.3%	2,821	6.4%	12.7%
81	Other Services (Except Public Administration)	2,518	5.2%	2,179	5.2%	2,174	5.0%	-13.7%
11	Crop and Animal Production	2,187	4.5%	1,591	3.8%	1,494	3.4%	-31.7%
52	Finance and Insurance	1,461	3.0%	1,335	3.2%	1,386	3.2%	-5.1%
42	Wholesale Trade	1,214	2.5%	1,200	2.8%	1,453	3.3%	19.7%
56	Administrative and Support and Waste Management and Remediation Services	1,182	2.5%	1,170	2.8%	1,364	3.1%	15.4%
54	Professional, Scientific, and Technical Services	581	1.2%	577	1.4%	632	1.5%	8.8%
51	Information	587	1.2%	294	0.7%	272	0.6%	-53.7%
61	Educational Services	460	1.0%	458	1.1%	428	1.0%	-7.0%
22	Utilities	429	0.9%	503	1.2%	512	1.2%	19.4%
53	Real Estate and Rental and Leasing	338	0.7%	251	0.6%	276	0.6%	-18.3%
21	Mining, Quarrying, and Oil and Gas Extraction	254	0.5%	308	0.7%	378	0.9%	48.8%
71	Arts, Entertainment, and Recreation	253	0.5%	188	0.4%	196	0.5%	-22.5%
55	Management of Companies and Enterprises	85	0.2%	130	0.3%	142	0.3%	67.1%
99	Unclassified Industry	0						
	<b>Total</b>	<b>48,124</b>		<b>42,222</b>		<b>43,721</b>		<b>-9.15%</b>

Source: Emsi 2016.4

Between 2007 and 2016 every rural county suffered a loss of jobs at local workplaces after 2007 (Figure 3). Monroe, which remains 26.3 percent below the total number of jobs in 2007, has seen the most significant decline. Baldwin is the only county to already be above the pre-recession levels in local jobs.

<sup>3</sup> The North American Industry Classification System (NAICS) is an industry classification system that groups establishments into industries based on the activities in which they are primarily engaged.

**Figure 3: Region 7, Job Gain or Loss, 2007–2016**



Source: Emsi 2016.4

## Occupations in the Rural Region

Table 2 captures the distribution of all industry jobs in the rural economy by the 15 occupations with the most jobs in 2016. This data shows that back office operations—support positions—are the predominant occupations followed by production and then sales.

**Table 2: Top 15 Occupations in Rural Industry**

	Jobs at Workplaces	
	#	%
Office and Administrative Support Occupations	5,932	13.2%
Production Occupations	5,151	11.5%
Sales and Related Occupations	4,771	10.6%
Transportation and Material Moving Occupations	4,391	9.8%
Health Care Practitioners and Technical Occupations	2,232	5.0%
Health Care Support Occupations	959	2.1%
Food Preparation and Serving-Related Occupations	2,834	6.3%
Installation, Maintenance, and Repair Occupations	2,822	6.3%
Education, Training, and Library Occupations	2,708	6.0%
Construction and Extraction Occupations	2,368	5.3%
Building and Grounds Cleaning and Maintenance Occupations	1,795	4.0%
Management Occupations	1,746	3.9%
Personal Care and Service Occupations	1,366	3.0%
Protective Service Occupations	1,136	2.5%
Farming, Fishing, and Forestry Occupations	1,029	2.3%

Source: Emsi 2016.4

## Jobs in Demand

Currently, jobs in demand, as demonstrated in job postings in the rural region (Table 3), are truck drivers with 36.5 percent of the postings, followed by registered nurses with 4.3 percent. Many of the jobs with highest demand are those that tend to have high turnover, including truck drivers and retail sales associates. Detail on jobs in specific sectors are highlighted later in this report.

**Table 3: Top Occupations by Job Postings  
November 2015–November 2016 in Region 7**

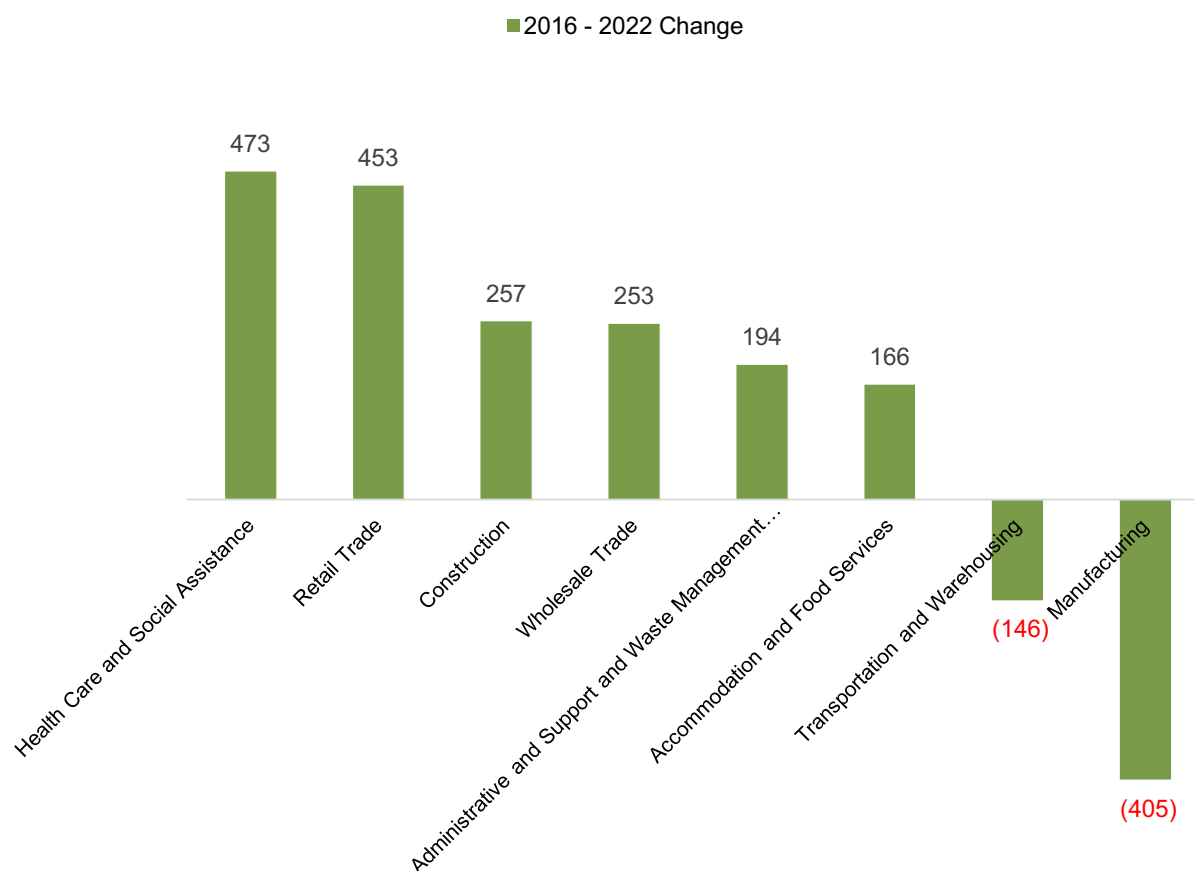
Occupation	Job Postings	Percent of Postings
Tractor-Trailer Truck Driver	3,159	36.5%
Registered Nurse	373	4.3%
Customer Service Representative	325	3.8%
Restaurant / Food Service Supervisor	238	2.8%
Sales Representative	229	2.6%
Retail Sales Associate	223	2.6%
Retail Store Manager / Supervisor	209	2.4%
Physical Therapist	167	1.9%
Food Service Team Member	166	1.9%
Merchandiser / Ad Set Associate	151	1.7%
Hazardous Materials Worker	99	1.1%
Physician	99	1.1%
Restaurant / Food Service Manager	93	1.1%
Waiter / Waitress	87	1.0%
Occupational Therapist	75	0.9%
Bookkeeper / Accounting Clerk	74	0.9%
Sales Delivery Driver	71	0.8%
Cashier	67	0.8%
Cook	65	0.8%
Office / Administrative Assistant	60	0.7%

Source: Labor Insight Jobs (Burning Glass Technologies)

## Projected Rural County Employment

Projections show an overall increase of 1,342 in job numbers for the rural counties between 2016 and 2022. However, these gains are not evenly dispersed. Health care, retail trade, construction, and wholesale trade are projected to experience large increases, while manufacturing stands out for large projected declines. Figure 4 shows the sectors projected to experience the most change in the near future.

**Figure 4: Change in Jobs by Sector, 2016–2022**



Source: Emsi 2016.4

Looking forward, all Region 7 counties except Choctaw likely will see job gains. However, as shown in Table 4, these gains are not evenly distributed across the counties.



The predictions used the base year of 2012, so they are only a rough expectation of job gains or losses. Still, they are useful in that they suggest a continuation of lackluster recovery throughout the rural economy of Region 7. Without a dramatic change in economic activity, private-sector employment is expected to remain below the pre-recession levels of 2007 through at least 2022.

## Implications

What is evident is that, if the rural private-sector economy is to perform better than projected, either existing industries need to bring new dollars into the region or new industries must develop in order to fuel support industries.

**Table 4: Predicted Jobs in 2022**

County Name	2022 Jobs Forecast	% Change 2016–2022
<b>Metropolitan Statistical Area (MSA)</b>		
Mobile	197,247	3.8%
Baldwin	87,793	10.8%
<b>Rural</b>		
Choctaw	3,793	-1.4%
Clarke	9,127	1.0%
Conecuh	4,038	3.9%
Escambia	14,917	6.3%
Monroe	7,029	2.0%
Washington	4,331	4.0%
Wilcox	3,007	1.4%
<b>Total Region 7</b>	<b>331,352</b>	<b>5.4%</b>

Source: Emsi 2016.4

## PORTRAIT OF THE WORKFORCE

To develop strategy to improve the rural economy and better align demand and supply of workers attempting to connect around real-time hiring needs, an understanding of the existing workforce is important.

The population in the rural counties of Region 7 was 136,715 in 2016, with 24.5 percent of the residents under age 20, 50 percent between 20 and 59, and 25.5 percent over the age of 59.<sup>4</sup> Between 2010 and 2016, the population of the rural region declined by 4.6 percent.<sup>5</sup> Much of this loss is due to more residents moving out of the region than moving in.

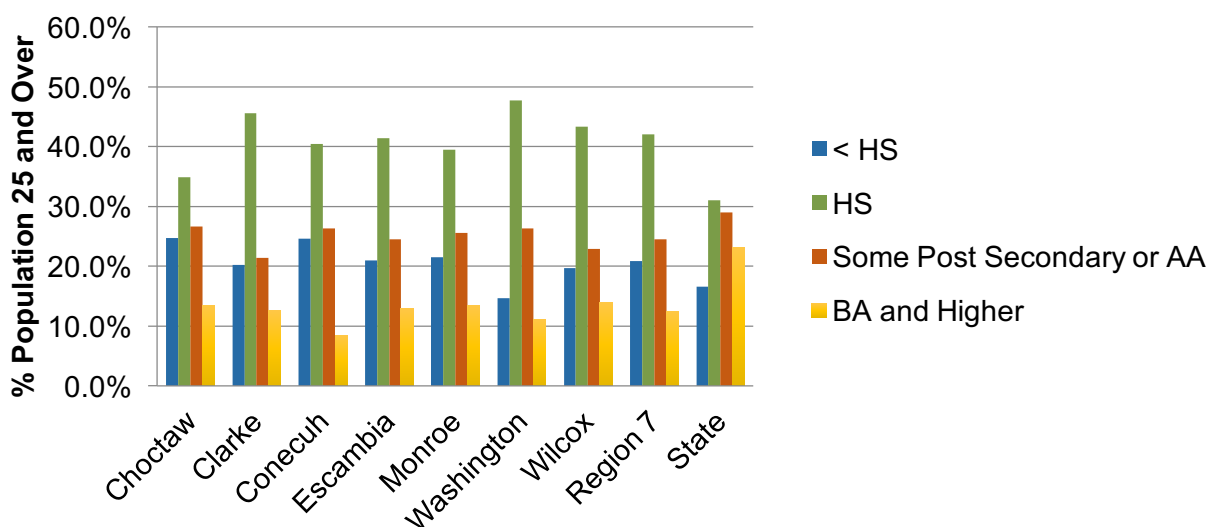
<sup>4</sup> Emsi 2016.4.

<sup>5</sup> Percent change in population by county between 2010 and 2016 was as follows: Choctaw (-5.8%), Clarke (-5.1%), Conecuh (-5.1%), Escambia (-1.7%), Monroe (-6.8%), Washington (-5.3%), and Wilcox (-5.6%). Source: Emsi.

## Low Educational Attainment

Few jobs exist today, and fewer still are posted online, that do not require at least a high school credential. In *Recovery: Job Growth and Education Requirements through 2020*, Anthony Carnevale and his coauthors estimated that, by 2020, 65 percent of all jobs in the economy will require postsecondary education.<sup>6</sup> Figure 5 shows the highest level of education achieved by residents in the rural counties. The data suggests that few residents will be prepared for these emerging positions.

**Figure 5: Educational Attainment by County**



Source: Emsi 2016.4

It is also true that the more educated the workforce, the greater percentage is employed because they are more likely to meet employer qualifications. In the rural areas, only 38 percent of all adults with no high school credential participate in the labor force and the unemployment rate is 27 percent. Labor force participation is markedly higher for those with a high school credential as their highest level of education attainment, at 61 percent, while unemployment is lower, at 17 percent. For the population with some college or an associate's degree, labor force participation jumps to 70 percent and unemployment drops to 10 percent. For those with a bachelor's degree or higher, 80 percent participate in the labor force and the unemployment rate is much lower, at 6 percent.<sup>7</sup>

To increase the supply of prepared workers in the rural area, there is a need to equip workers and those who are not in the labor force with the skills and educational credentials that employers demand.

<sup>6</sup> Carnevale, Anthony, Nicole Smith, & Jeff Strohl. 2013. *Recovery: Job Growth and Education Requirements Through 2020*. Washington, DC: Georgetown Public Policy Institute. Available at: [https://cew.georgetown.edu/wp-content/uploads/2014/11/Recovery2020.FR\\_Web.pdf](https://cew.georgetown.edu/wp-content/uploads/2014/11/Recovery2020.FR_Web.pdf)

<sup>7</sup> U.S. Census Bureau, American Community Survey, 2010–2014 5-Year Estimates.

The lack of educational attainment is widespread regardless of age (see Table 5). Every adult age cohort has limited educational attainment when compared to Alabama overall. Typically, younger adults have achieved more education than older persons in the community. That is not the case in rural Region 7, where adults with limited education are the norm no matter the age.

**Table 5: Educational Attainment by Age of the Rural Workforce**

Educational Attainment by Age Cohort	Alabama	Choctaw	Clarke	Conecuh	Escambia	Monroe	Washington	Wilcox
<b>Population 18 to 24 years</b>	481,858	1,071	2,155	1,157	3,650	1,923	1,517	967
High school graduate (includes equivalency)	29.8%	42.3%	53.7%	43.6%	32.7%	46.8%	44.5%	48.9%
Some college or associate's degree	45.8%	34.5%	20.6%	27.0%	30.6%	27.4%	34.7%	22.1%
Bachelor's degree or higher	7.0%	2.1%	1.2%	2.6%	2.9%	3.0%	1.3%	5.3%
<b>Population 25 to 34 years</b>	618,482	1,317	2,719	1,266	4,727	2,240	1,895	1,226
High school graduate or higher	85.4%	78.6%	83.6%	82.0%	79.2%	78.7%	90.0%	86.1%
Bachelor's degree or higher	25.2%	10.8%	5.7%	6.1%	12.20%	8.5%	10.1%	10.9%
<b>Population 35 to 44 years</b>	610,792	1,581	3,130	1,419	4,918	2,720	2,044	1,261
High school graduate or higher	86.5%	80.8%	87.5%	83.7%	79.7%	89.2%	87.1%	88.3%
Bachelor's degree or higher	25.8%	18.8%	11.6%	11.8%	13.6%	10.8%	7.5%	9.4%
<b>Population 45 to 64 years</b>	1,289,367	4,009	7,053	3,780	10,234	6,333	4,938	3,114
High school graduate or higher	86.0%	79.8%	81.8%	74.9%	79.9%	82.4%	81.9%	79.1%
Bachelor's degree or higher	23.3%	14.1%	14.5%	8.3%	11.7%	14.1%	9.7%	12.0%
<b>Population 65 years and over</b>	699,261	2,657	4,318	2,465	6,015	3,800	2,613	1,865
High school graduate or higher	75.4%	59.1%	69.8%	70.2%	74.8%	64.7%	72.3%	66.3%
Bachelor's degree or higher	18.4%	8.2%	11.9%	7.5%	13.3%	13.3%	13.6%	12.5%

Source: U.S. Census Bureau, American Community Survey, 2010–2014 5-Year Estimates

Despite the fact that average earnings are positively correlated with educational attainment, and that a majority of jobs will require some kind of postsecondary education, a relatively low percentage of residents have pursued higher education. The earnings uptick is dramatic for those with a high school credential and for those who achieve a bachelor's degree. On average, persons with no high school credential earned about \$17,000 a year as late as 2014, while those with a bachelor's degree earned about \$42,000, based on calculations for the counties using data from the American Community Survey.<sup>8</sup>

## Both Underemployment and Unemployment Are Concerns

A recent report, *The State of the Workforce Report IX*, Regions 6 and 9, estimates that significant numbers of employed residents are underemployed (see Table 6).<sup>9</sup> Workers accept jobs that underutilize them and/or are part-time or temporary jobs because their skill sets are not what employers need. The underemployed are a potential pool of new jobseekers for employers only if workers change careers or add to their skill sets to better fit what employers now seek.

<sup>8</sup> U.S. Census Bureau, American Community Survey, 2010–2014 5-Year Estimates.

<sup>9</sup> Researchers produced estimates of underemployed workers using surveying samples of workers. Thus, the data are best estimates, not data based on much more robust estimates of the workforce status of the population living in Region 7 and the individual counties. This report defines underemployed as “workers in occupation that underutilizes their experience, training, and skills.”

**Table 6: Employment and Underemployment by County**

Based on March 2016 labor force data and 2015 underemployment rates.

	Region 7	Choctaw	Clarke	Conecuh	Escambia	Monroe	Washington	Wilcox
<b>Labor Force</b>	318,921	4,343	7,958	4,659	14,576	7,197	6,682	2,833
<b>Employed</b>	297,169	3,946	7,096	4,248	13,595	6,467	6,123	2,439
<b>Underemployment Rate</b>	28.1%	26.2%	22.9%	31.7%	23.9%	33.3%	24.4%	26.8%
<b>Underemployed Workers</b>	83,415	1,033	1,626	1,347	3,251	1,577	1,643	697
<b>Unemployed</b>	21,752	397	862	411	981	730	559	394
<b>Unemployment Rate</b>	6.8%	9.1%	10.8%	8.9%	6.7%	10.3%	8.4%	13.9%
<b>Available Labor Pool</b>	105,167	1,430	2,488	1,758	4,232	2,307	2,202	1,091

Source: Addy, Samuel et al. 2015. *State of the Workforce Report IX*, Regions 6 and 9. Tuscaloosa, AL: Center for Business and Economic Research, The University of Alabama, and Alabama Department of Labor. Available at: [https://www.accs.cc/default/assets/File/dpe\\_gowd/wdca/Alabama\\_Workforce\\_Report\\_2014.pdf](https://www.accs.cc/default/assets/File/dpe_gowd/wdca/Alabama_Workforce_Report_2014.pdf)

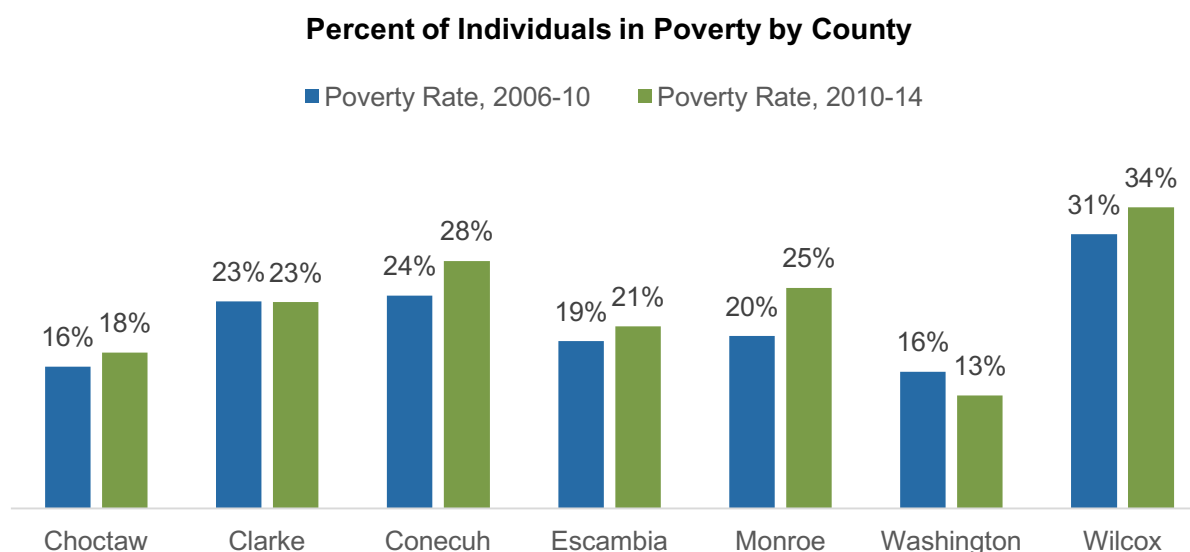
Workers have found jobs outside of Region 7, but unemployment rates remain higher than they are statewide. One in four employed persons in Region 7 are underemployed, and overall the total numbers of persons in the labor force exceed the total job base for the rural area. In addition, compared with the state, a higher share of people in the rural counties has stopped looking for work (i.e., are out of the labor force).

Unemployed persons in the rural counties not only have little educational attainment, but most seek reemployment in traditional lower-skill jobs that offer limited opportunities to build skills with the possibility of advancement. Based on resumes posted on Alabama Joblink, jobseekers are looking for positions as production workers, construction workers, cashiers, office workers, etc. This pattern holds across all counties. Without additional education and training, most of those who are still unemployed are likely to remain so.

## Poverty Rates Are Not Declining in All Areas

This lack of educational attainment and middle-level job skills may help explain why the percentage of families living below the poverty line increased or stayed the same from 2010 to 2014 in six of the seven counties (Figure 6). The majority of families in poverty are those in which the primary income earner (employed or not) has no more than a high school credential. The largest shares of those in poverty do not have a high school credential. Any efforts to reverse this trend require addressing the educational attainment of these adults.

**Figure 6: Change in Poverty Rates between 2010 and 2014**



Source: U.S. Census Bureau, American Community Survey, 2006–2010 and 2010–2014 5-Year Estimates.

## There Are More Residents Than Jobs, Causing Inter-Region Employment

In the rural counties, there are more residents employed than there are jobs supplied by all industry combined (see Table 7). Only Clarke has more jobs in local industry than employed residents. This does not include the number of residents still seeking employment.

**Table 7: Where Jobs are Located and Workers Live, 2015**

*2015 Annual Average*

	Labor Force	Employed	% of Region 7	Job Locations	Percent of Jobs	Jobs Less Employed	Unemployed	Rate
<b>Choctaw</b>	4,378	3,979	1.4%	3,507	1.2%	-472	399	9.1%
<b>Clarke</b>	7,994	7,054	2.5%	8,532	2.9%	1,478	940	11.8%
<b>Conecuh</b>	4,674	4,245	1.5%	3,685	1.3%	-560	429	9.2%
<b>Escambia</b>	14,575	13,555	4.6%	13,318	4.6%	-237	1,020	7.0%
<b>Monroe</b>	7,301	6,565	2.3%	6,435	2.2%	-130	736	10.1%
<b>Washington</b>	6,702	6,108	2.1%	3,706	1.3%	-2,402	594	8.9%
<b>Wilcox</b>	2,812	2,400	0.9%	3,033	1.0%	633	412	14.7%
<b>Mobile</b>	183,097	170,286	57.4%	177,725	61.2%	7,439	12,811	7.0%
<b>Baldwin</b>	87,316	82,525	27.4%	70,589	24.3%	-11,936	4,791	5.5%
<b>Region 7</b>	<b>318,849</b>	<b>296,717</b>	<b>100.0%</b>	<b>290,529</b>	<b>100.0%</b>	<b>-6,188</b>	<b>22,132</b>	<b>7.0%</b>

Source: Addy et al. *State of the Workforce Report IX*, Regions 6 and 9.

As a result, employers and employees must look to other counties within the region, as well as outside the region, to fulfill their employment needs.

The data in Table 8 suggest that employers are hiring workers from outside the region who are within daily commuting distance. This may be a result of not being able to find rural-based workers with the correct skills.

**Table 8: Trading Workers with Other Regions**

	Non-residents Workers Commuting into Region 7	Resident Workers Commuting outside Region 7	Export/Import of Workers
<b>Choctaw</b>	738	715	1.0
<b>Clarke</b>	882	455	0.5
<b>Conecuh</b>	476	390	0.8
<b>Escambia</b>	1,640	1,388	0.8
<b>Monroe</b>	301	147	0.5
<b>Washington</b>	414	883	2.1
<b>Wilcox</b>	550	429	0.8
<b>Total Rural</b>	<b>5,001</b>	<b>4,407</b>	
<b>Total</b>	<b>14,534</b>	<b>20,222</b>	<b>1.4</b>

Source: ACS 2009–2013 5-Year Estimates

As might be expected, rural residents tend to work in the county in which they live. In addition, more workers will be employed in the counties with more employment opportunities. Rural workers more often commute to workplaces outside of Region 7 than to another county inside the region. Table 9 shows the exception in that only workers from Washington and Escambia more often commute into Mobile or Baldwin for their jobs. Also, significant numbers of rural workers find it possible to commute to Florida and Mississippi for work. These patterns can be explained by looking at a map of the region. For example, given its location at the northern end of the region, the limited employment opportunities, and highway patterns into the region, over 28 percent of Choctaw’s residents are employed outside the region. The interstate highway that runs through Conecuh and Escambia county certainly contributes to over 10 percent of their workers traveling outside the county for employment.

**Table 9: County-to-County Commuting Patterns**

Workplace		Percentage Working in:									Total Working Inside Region 7	Total Working Outside Region 7
		MSA		RURAL								
Total Workers Residing in		Mobile	Baldwin	Choctaw	Clarke	Conecuh	Escambia	Monroe	Washington	Wilcox		
Residence												
Mobile	167,552	90.54%	2.59%	0.01%	0.01%	0.00%	0.09%	0.01%	0.66%	0.00%	93.90%	6.10%
Baldwin	80,568	19.10%	72.06%	0.03%	0.01%	0.06%	0.88%	0.08%	0.16%	0.00%	92.39%	7.61%
Choctaw	4,564	0.55%	0.00%	62.31%	3.83%	0.00%	0.00%	0.00%	4.78%	0.39%	71.87%	28.13%
Clarke	8,414	8.91%	0.61%	1.33%	73.33%	0.14%	0.13%	2.54%	4.75%	2.84%	94.59%	5.41%
Conecuh	3,738	1.26%	0.21%	0.00%	0.19%	55.19%	16.16%	16.75%	0.00%	0.00%	89.75%	10.25%
Escambia	12,403	3.34%	4.31%	0.00%	0.00%	3.51%	76.61%	1.09%	0.01%	0.00%	88.86%	11.14%
Monroe	7,216	1.97%	1.09%	0.00%	3.24%	2.84%	8.59%	78.55%	0.17%	1.51%	97.96%	2.04%
Washington	5,803	18.90%	0.28%	2.27%	10.86%	0.00%	0.00%	0.31%	67.50%	0.45%	100.00%	0%
Wilcox	2,556	0.00%	0.08%	0.04%	7.82%	0.16%	0.94%	4.46%	0.27%	69.44%	83.22%	16.78%
Total	292,814	57.91%	21.54%	1.07%	2.54%	0.95%	3.97%	2.34%	1.97%	0.74%	93.04%	6.96%

Source: U.S. Census, American Community Survey, 2009–2013 5-Year Estimates



These data also suggest workers will look for employment opportunities that are a better match for their skill sets. In addition, they may go outside the region because of limited highway access and significant travel times to jobs within the region. Workers lacking access to personal transportation have significantly more limited job opportunities.

**Table 10: County-to-County Commute to Work Pattern for Residents of Region 7**

Total Workers Residing in		Percentage Working in: Workplace				Total Working Outside Region 7
		Same County as They Live	Rural Workers Work in Another Rural County	Work in MSA	Total Working Inside Region 7	
<b>MSA</b>						
<b>Mobile</b>	167,552	90.5%			93.90%	<b>6.10%</b>
<b>Baldwin</b>	80,568	72.1%			92.39%	<b>7.61%</b>
<b>RURAL</b>						
<b>Choctaw</b>	4,564	62.3%	9.0%	0.5%	71.87%	<b>28.13%</b>
<b>Conecuh</b>	3,738	55.2%	33.1%	1.5%	89.75%	<b>10.25%</b>
<b>Clarke</b>	8,414	73.3%	11.7%	9.5%	94.59%	<b>5.41%</b>
<b>Escambia</b>	12,403	76.6%	4.6%	7.6%	88.86%	<b>11.14%</b>
<b>Monroe</b>	7,216	78.6%	16.4%	3.1%	97.96%	<b>2.04%</b>
<b>Washington</b>	5,803	67.5%	13.9%	19.2%	100.00%	<b>0.00%</b>
<b>Wilcox</b>	2,556	69.4%	13.7%	0.1%	83.22%	<b>16.78%</b>
<b>Total</b>	<b>292,814</b>					

Source: ACS 2009–2013

## Implications

With only 24.5 percent of the rural workforce having either an Associate's degree or having completed at least some college or vocational training, any growth in the number of residents holding middle-skill jobs is unlikely. However, 7 of every 10 of adults with some education beyond high school are in the labor force, yet 10 percent are still unemployed in 2016. This suggests that some residents with the education credentials lack the specific job experience and skills employers' need. This is a classic skills mismatch within the labor market. To improve employment outcomes—and as a result correct both under- and unemployment in the region as well as lowering the poverty rates—increasing the number of residents with some postsecondary education is critical to developing a robust pipeline of middle-skill workers in the rural counties of Region 7 to help close gaps between the skills of jobseekers and those sought by employers.

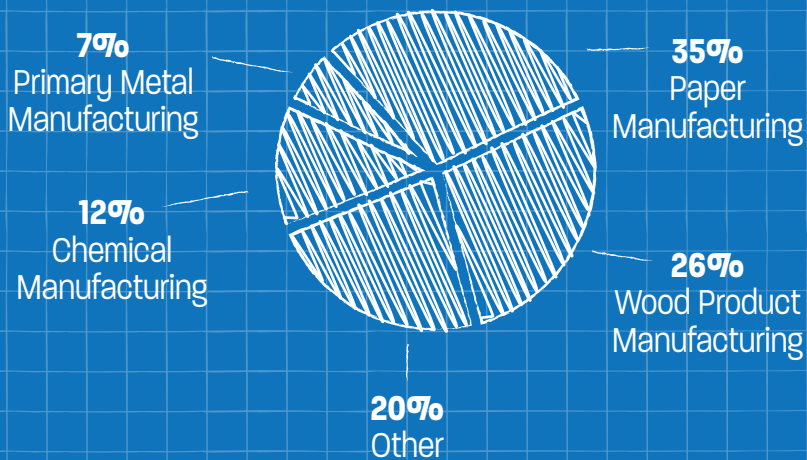
In addition, the improvement in educational attainment needs to occur in all the rural counties. It is clear, given the sheer size and commuting patterns of the rural counties, that employers should consider a local focus rather than relying on talent coming from across the region.

## KEY ECONOMIC SECTORS IN THE RURAL ECONOMY

In discussion with SAWDC leaders, manufacturing, health care, and transportation and warehousing sectors of the rural area were chosen for in-depth research because these sectors provide the majority of the region's private jobs and provide middle-skill jobs. Middle-skill jobs are defined as jobs that require a high school diploma and on-the-job training or a postsecondary credential or degree, and pay wages that cover basic family expenses plus all relevant taxes for a family of four with two wage earners. According to the Massachusetts Institute of Technology Living Wage Calculator, this is \$13.76 an hour for the rural counties. Each of these sectors are detailed in the next section.

# Manufacturing

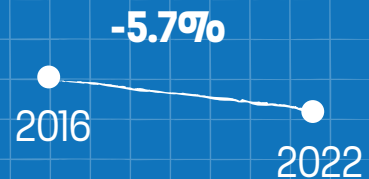
## Share of Employment



## Average Salary

  **65,757**

## Projected Growth



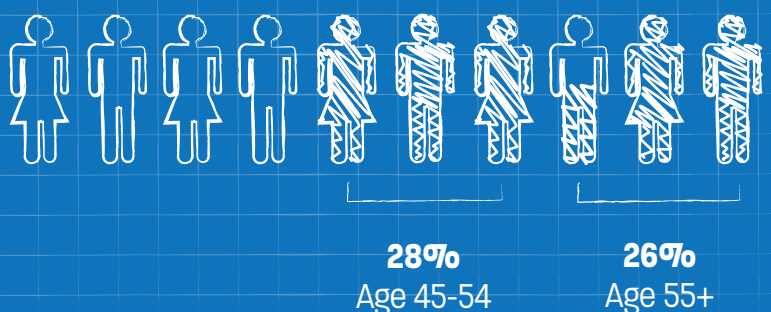
## Skills In Demand



## Top Middle-Skill Occupations

- Maintenance Technician (486)
- Production Supervisor (297)
- Quality Inspector / Technician (251)
- Maintenance / Service Supervisor (241)
  - Machinist (57)
  - Millwright (34)
- General / Electrical Engineering Technician (12)

## Age of Workforce



# MANUFACTURING

## IMPORTANCE OF MANUFACTURING TO RURAL COUNTIES

Manufacturing is a critical industry in Region 7's rural counties, as demonstrated by several factors. Manufacturing is a major employer—the 131 manufacturing companies located in the rural region provide 19.8 percent of the region's total employment. Jobs in manufacturing tend to pay well—the average manufacturing wage in the rural region is \$65,757, more than 67 percent higher than the overall average wage.<sup>10</sup> Industries such as manufacturing, which export products outside the region, are particularly important to areas with high poverty rates that cannot rely on local consumption to drive the economy. Finally, manufacturing in the region importantly builds on regional strengths such as natural resources (i.e., timber for the pulp and paper and sawmills sectors) and the salt caverns that support the chemical manufacturing sector in Washington County.

Manufacturing of both durable goods, which includes wood products and metals, and non-durable goods, which includes chemical, paper, plastics, and rubber products manufacturing, has and will have a major influence on the future of the rural counties and their workforce needs as a whole. Although there are significant differences in the growth and retirement trends facing employers in these two segments, they have similar needs for middle-skill workers and shared challenges in finding, training, and retaining a steady supply of these workers.

## MAJOR MANUFACTURING INDUSTRIES IN THE RURAL COUNTIES

The largest employers in the rural economy of Region 7 are national and foreign-owned companies that operate in the global market in the paper, wood products, chemical, and primary metals industries. Based on total jobs in 2016, these industries dominate the manufacturing landscape of the seven counties (see Table 11). The large location quotients indicate that these counties have a much higher percentage of jobs in these specific types of manufacturing than is true for the nation as a whole. Total jobs in the paper industry, for example, are 28 times as large as for the nation, based on jobs in the paper industry as a percentage of all jobs across all industries.

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<sup>10</sup> Emsi 2016.4.

**Table 11: Performance of Major Manufacturing Industries in Rural Areas**

Description	2007 Jobs	2016 Jobs	2022 Jobs	2007–2016 Change	2007–2022 % Change	Current Wages	2016 Location Quotient
<b>Paper Products</b>	<b>3,844</b>	<b>2,893</b>	<b>2,491</b>	<b>-25%</b>	<b>-35%</b>	<b>\$85,048</b>	<b>27.59</b>
Pulp Mills	677	451	419	-33%	-38%	\$99,574	286.29
Paper (Except Newsprint) Mills	1,754	1,326	937	-24%	-47%	\$88,620	79.35
Paperboard Mills	1,387	1,116	1,135	-20%	-18%	\$74,923	128.80
<b>Wood Products</b>	<b>2,785</b>	<b>2,165</b>	<b>2,163</b>	<b>-22%</b>	<b>-22%</b>	<b>\$50,143</b>	<b>18.93</b>
Sawmills	1,634	1,204	1,173	-26%	-28%	\$50,237	49.22
Wood Preservation	43	27	16	-37%	-63%	\$80,529	9.77
Hardwood Veneer and Plywood Manufacturing	135	268	384	99%	184%	\$42,912	61.82
Softwood Veneer and Plywood Manufacturing	680	323	134	-53%	-80%	\$56,314	82.64
Reconstituted Wood Product Manufacturing	157	204	257	30%	64%	\$64,187	52.88
Cut Stock, Resawing Lumber, and Planing	29	62	105	114%	262%	\$26,320	16.22
<b>Chemical Products</b>	<b>1,103</b>	<b>974</b>	<b>837</b>	<b>-12%</b>	<b>-24%</b>	<b>\$98,385</b>	<b>4.17</b>
Other Basic Inorganic Chemical Manufacturing	413	393	341	-5%	-17%	\$96,555	35.31
Pesticide and Other Agricultural Chemical Manufacturing	546	450	358	-18%	-34%	\$98,450	114.44
<b>Primary Metal Products</b>	<b>516</b>	<b>555</b>	<b>570</b>	<b>39</b>	<b>8%</b>	<b>\$46,407</b>	<b>5.24</b>
Iron and Steel Pipe and Tube Manufacturing from Purchased Steel	0	76	133	N/A	N/A	\$52,451	10.90
Iron Foundries	516	378	337	-27%	-35%	\$40,287	36.57

Source: Emsi 2016.4.

Note: Subsector totals do not equal sums of aggregate industry numbers, as this table does not represent all industries under each subsector.

For these long-established subsectors in the rural economy, all but primary metals were hit hard by the recession. Primary metals total jobs have grown by 7 percent since 2007, and this is the only sector that's projected to increase employment by 2022.<sup>11</sup>

**Paper Manufacturing.** According to Emsi data, between 2007 and 2016 the number of rural paper industry jobs declined by 951 jobs, a loss of 24.7 percent. These losses were spread across all product segments at local plants: paper mills and paper board mills.

**Wood Products.** This subsector also experienced a double-digit loss of jobs during the recession. However, there are several product segments of local industry that are growing jobs, including:

- Hardwood veneer and plywood
- Reconstituted wood products
- Cut stock, resawing lumber, and planing

<sup>11</sup> The composition of steel products appears to have changed to include pipe and tubing in addition to steel produced in foundries.

**Chemical Products.** While still hit by the recession, production and jobs in local chemicals fared better than either of the previous industries: Total jobs in the chemical industry in 2016 were only 12 percent lower than in 2007. Job loss in pesticides and agricultural chemicals suffered more than other basic organics with job losses of 18 percent and 5 percent, respectively.

## Leading Occupations

Below are listed the occupations with the most jobs currently, along with the expected growth in hourly earnings (Table 12). The openings numbers account for both growth and retirements and represent a conservative estimate of job openings in the given occupations.

**Table 12: Manufacturing Occupations with the Most Postings 2016—2022**

Occupation	2016 Jobs	2022 Jobs	Openings, 2016–2022	Median Hourly Earnings
Industrial Machinery Mechanics	470	474	98	\$28.31
Welders, Cutters, Solderers, and Brazers	180	210	65	\$16.81
First-Line Supervisors of Production and Operating Workers	297	289	37	\$28.22
Chemical Equipment Operators and Tenders	177	155	31	\$32.66
Chemical Plant and System Operators	127	109	26	\$26.93

Source: Emsi 2016.4

## Bright Signs of Diversification and Job Growth in Manufacturing

Table 13 lists industry sectors that added 539 total jobs to the economy between 2007 and 2016. In most cases, these sectors had few, if any, reported jobs in 2007. Examples are:

- Ready-mix concrete (67 new jobs)
- Metal windows and doors (94 new Jobs)
- Carpet and rugs (106 new Jobs)
- Motor vehicle stamping and transmission and parts (247 new jobs)

These positive gains in manufacturing jobs reflect a manufacturing environment in which companies and entrepreneurs are aggressively seeking new markets in established local industries (such as wood) or ways to diversify the economy by developing potentially new industries upon which to build competitive advantage within the rural economy of Region 7.



**Table 13: Signs of Diversification and Job Growth in Manufacturing Industries in Rural Areas**

Description	2007 Jobs	2016 Jobs	2022 Jobs	2007–2016 Change	2007–2022 Change	Current Wages	2016 Location Quotient
<b>Transportation Equipment</b>	36	286	463	693%	1,186%	\$43,316	0.62
Motor Vehicle Transmission and Power Train Parts Manufacturing	32	143	222	346%	594%	\$53,116	6.13
Motor Vehicle Metal Stamping	0	136	230			\$33,395	5.66
<b>Textile Product Mills</b>	<b>139</b>	<b>231</b>	<b>175</b>	66%	26%	\$21,854	<b>6.74</b>
Carpet and Rug Mills	53	159	162	199%	206%	\$24,246	17.96
<b>Fabricated Metal Products</b>	329	270	324	-18%	-2%	\$35,811	0.66
Metal Window and Door Manufacturing	32	126	163	293%	409%	\$35,637	7.70
<b>Food Manufacturing</b>	<b>121</b>	<b>207</b>	<b>205</b>	71%	69%	\$46,069	0.47
Meat Processed from Carcasses	97	122	94	25%	-3%	\$30,478	3.53
<b>Plastics and Rubber Products</b>	<b>99</b>	<b>33</b>	37	-67%	-63%	\$79,918	0.17
All Other Plastics Product Manufacturing	48	33	37	-32%	-23%	\$79,918	0.40
<b>Textile Mills</b>	<b>232</b>	<b>51</b>	<b>16</b>	-78%	-93%	\$44,258	<b>1.55</b>
Nonwoven Fabric Mills	56	49	14	-11%	-75%	\$44,097	13.23
<b>Nonmetallic Mineral Products</b>	283	279	262	-1%	-7%	\$49,966	2.39
Ready-Mix Concrete Manufacturing	74	141	175	90%	136%	\$54,769	5.31
Other Concrete Product Manufacturing	208	134	78	-35%	-63%	\$44,872	8.56

Source: Emsi 2016.4

## Industry Focus of Each Rural County

The degree and nature of manufacturing, however, varies among the counties. Manufacturing jobs as a percentage of total private jobs in each county ranges from a high of 32 percent and 30 percent in Washington and Choctaw counties, respectively, to a low of 20 percent for Wilcox County.

Local manufacturing firms produce products for the eight types of manufacturing product markets where most if not all outputs are provided to customers outside the region and, in some cases, to global markets. Distinctly different production technologies and systems are used in chemical processing and fabrications of wood, polymer, or metal products, etc. Paper mills and wood products depend on the local lumber mills, which in turn depend on the logging industry (which is extractive rather than manufacturing). These industries are clustered in Clarke, Monroe, and Choctaw, which are contiguous in the northern portion of the rural area.

The concentrations of these individual industries vary across the counties. Only Washington, Escambia, and Clarke counties host major firms in several of these industries. Choctaw and Conecuh counties are home to significant firms in a single industry, which helps account for the significance of manufacturing jobs for local workforces.

## IMPORTANT PERSPECTIVES FROM MANUFACTURING EMPLOYERS

A number of interviews were conducted with personnel from most of the companies identified above to better understand their views, concerns, and ideas for how to address the ongoing skill gaps they face in meeting hiring requirements and upskilling current workers. Included in the interviews were a few employers located in Mobile that have shared concerns for building a workforce of the future in the rural areas.

### Difficulties in Filling Job Openings

Employers in manufacturing are challenged to find job candidates with the technical and professional skills they require of successful middle-skill workers. In Region 7 overall, manufacturing business leaders said jobs needing experienced workers, not entry-level or management, were most difficult to fill. While local community colleges provide a baseline of these skills to graduates and maintain relationships with employers, the diversity of skill needs in the regional economy, evolving technology needs of employers, and demand for in-depth on-the-job training all complicate filling the pipeline.

Employers shared their views about difficult-to-fill positions:

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*“We get 700 applications of which maybe 30 are moved to the next level of the hiring process.”*

*“Rather than hiring workers to provide specific skilled services, we can contract out to other firms.”*

*“Too many of us [are] competing for the same pool of qualified workers; constantly hiring employees from each other. [We] don’t always know that when making hiring decisions.”*

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And occupations that are hard to fill cut across all the manufacturers, as demonstrated by these comments from employers from steel, paper, and chemical industries:

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*“It’s easier to hire a welder than a millwright.”*

*“[We] need millwrights, electricians, and process control technicians . . .”*

*“[We] need pipefitters with journey-level skills . . .”*

*“[We would] like to find heavy mechanical maintenance people ([who] know how rigging works, etc.).”*

*“[We] need electricians with process control knowledge.”*

*“[We] need operators with reactive process knowledge.”*

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*“We need workers with the technical skills that have the right virtues and talents and show up for work every day and understand safety . . . that’s what we’re looking for. It’s just harder and harder to find.”*

*“Industrial mechanics and industrial electricians are needed desperately. Unfortunately, seeing a lot of people on both ends (mechanical and electrical) from the construction industry, and that means they can manipulate steel, but they’re NOT operators.”*

## Importance of Employability Skills

*“Our employees have got to be capable of not just doing what they’re told, but taking these dictates and acting upon them.”*

Employers are seeking greater investigative and troubleshooting skills in their middle-skill workers. Maintenance technicians need to be able to do more than just replace a bearing—they need to have the ability to determine *why* the bearing failed and address it. Employees in all occupations need stronger basic academic, critical-thinking, and problem-solving skills. Employability skills can be as important as the technical skills required to perform well on the job.<sup>12</sup> This trend is evident in the data. An analysis of the demand for employability skills embedded in online job postings confirms their importance to employers (see Table 14).

**Table 14: Skills in Demand from Rural Manufacturers for Select Factory Jobs**

*General / Electrical Engineering Technician; Maintenance Technician; Machinist; Millwright; OR  
Maintenance / Service Supervisor*

Skill Clusters	Job Postings	
	#	%
<b>80 Posts</b>		
Information Technology: Microsoft Office and Productivity Tools	42	52.5%
Maintenance, Repair, and Installation: Basic Electrical Systems	28	35.0%
Information Technology: SAP	25	31.3%
Administration: Scheduling	23	28.8%
Business: Business Process and Analysis	20	25.0%
Industry Knowledge: Industrial Engineering Industry Knowledge	19	23.8%
Manufacturing and Production: Welding	16	20.0%

Source: Labor Insight Jobs (Burning Glass Technologies), November 2015–November 2016

Employers reported that while younger members of the workforce are seen as less intimidated by newer technological tools such as distributed control systems, they cited differences between generations in employability skills, especially in the communication skills of the younger workforce. An employer in the chemical industry observes:

*“Reading comprehension, computer skills, and critical thinking are key to understanding and reacting in a proper way.” Academic and problem-solving skills are important in the metals industry as well: “All successful applicants need ‘amplified’ math skills and communication*

<sup>12</sup> Employability skills are also known as workforce readiness skills, soft skills, power skills, or are defined by the U.S. Department of Education as the general skills required for success in the labor market at all employment levels and for all sectors.

*skills . . . algebra and physics are the two biggies out here . . . but geometry and communications and basic writing come in handy, too. Business writing is definitely a benefit. Finally, there's a need to hone problem-solving skills—especially in heated situations—and instill confidence.”*

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Other employability skills employers seek are basics like “reliability” and being at work on time. In numerous occupations, the increased importance of employability skills such as customer service, Microsoft applications, and communication skills raises the level of skills required to be job ready.<sup>13</sup>

## Need for Additional Training

Students who are graduating with the desired credentials require significant additional training because community colleges in the region are structured to offer more generalized training, like associate’s or credential degrees. Since recent graduates are unlikely to have the level of experience needed to achieve journeyman status (8,000 hours of field experience and 700 hours of classroom time), community colleges and employers may have to work together to develop career pathways that include the level of on-the-job training that employers need.

Career pathways have emerged in recent years as a very promising strategy for helping a wide range of students, jobseekers, and workers access and complete the education, training, and credentials needed for high-demand jobs. They are a series of connected education and training strategies and support services that are developed with the input of industry and enable individuals to secure industry-relevant certifications and obtain employment and advancement in an occupational area. Career pathway approaches offer great promise for individuals who are low skilled, underrepresented, or who have barriers to education and employment by helping them to pursue, progress through, and complete the education and training needed for industry-recognized credentials and family-supporting careers.

## Shortage of Skilled New Workers

To compensate for shortages in the available workforce, regional employers are forced to poach talent from other establishments. A chemical plant manager described his company’s solution this way:

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*“We have been able to fill the positions for the most part, but we’re basically stealing them from other steel, paper, and other chemical/petroleum companies.”*

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The completion data in Table 15 show that community colleges in the rural counties of Region 7 (Jefferson Davis, Reid State Technical, and Alabama Southern) are producing large numbers of welders and very low numbers of other skilled graduates.

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<sup>13</sup> Most of the frameworks for employability skills include familiarity with technology. Employers signal for this skill by requiring a competency in Microsoft Office.

**Table 15: Completers of Programs at Rural Public Institutions**

Program	Completions*
Drafting and Design Technology/Technician, General	2
Industrial Electronics Technology/Technician	2
Industrial Mechanics and Maintenance Technology	15
Industrial Production Technologies/Technicians, Other	13
Industrial Technology Technician	57
Small Engine and Repair Technology	7
Tool and Die Technology/Technician	11
Welding Technology/Welder	128
<b>Total</b>	<b>235</b>

Source: Alabama Commission on Higher Education. 2015. *Summer 2014 through Spring 2015 Completions of Students from Alabama Public Two-Year and Four-Year Institutions Sorted by Major*. Montgomery, AL: Author. Available at: <http://ache.state.al.us/Content/Abstract1516/Completions/Comp-By-Inst.pdf>

Given these completion data, it is not surprising that employers are struggling to find qualified local employees to fill positions such as industrial electronics technicians and millwrights—who are typically trained in the industrial mechanics and maintenance programs.

Employers also look to hire workers who live in adjacent counties outside Region 7. Several employers indicated that they extended their search for middle-skill workers beyond the rural area.

## Retirements

Paper and chemical manufacturing industries in rural Region 7 have the greatest percentages of workers who are close to retirement. Given expected job losses, vacancies created by retiring employees may simply reduce the number of layoffs and result in the permanent elimination of positions.

The chemical manufacturing workforce skews significantly older than the region's overall workforce. At one chemical plant:

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*"Retirements over the next five years represent more than 50 percent of the total site population. Most of our retirements are in the operator technician jobs and maintenance mechanics."*

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As shown in Table 16, chemical plant and system operators in particular are at or nearing retirement age en masse. This is a key occupation in the sector, with 230 people employed, which suggests that training programs need to address skills for this occupation to ensure a pipeline of talent for these positions.

**Table 16: Ages of Workers in Manufacturing Occupations**

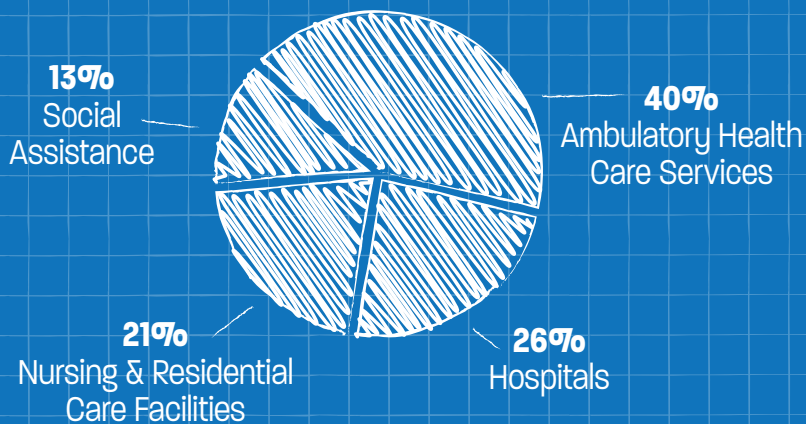
Occupations	% of Occupation Age 45–54	% of Occupation Age 55+
All Employees in the Rural Counties	25	23
Paper Goods Machine Setters, Operators, and Tenders	36	19
Chemical Plant and System Operators	27	43
Industrial Machinery Mechanics	32	28
Chemical Equipment Operators and Tenders	32	29
Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	31	20

Source: Emsi 2016.4



# Health Care

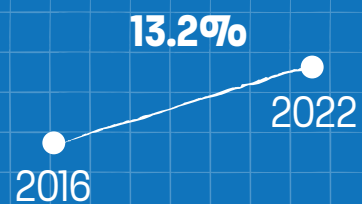
## Share of Employment



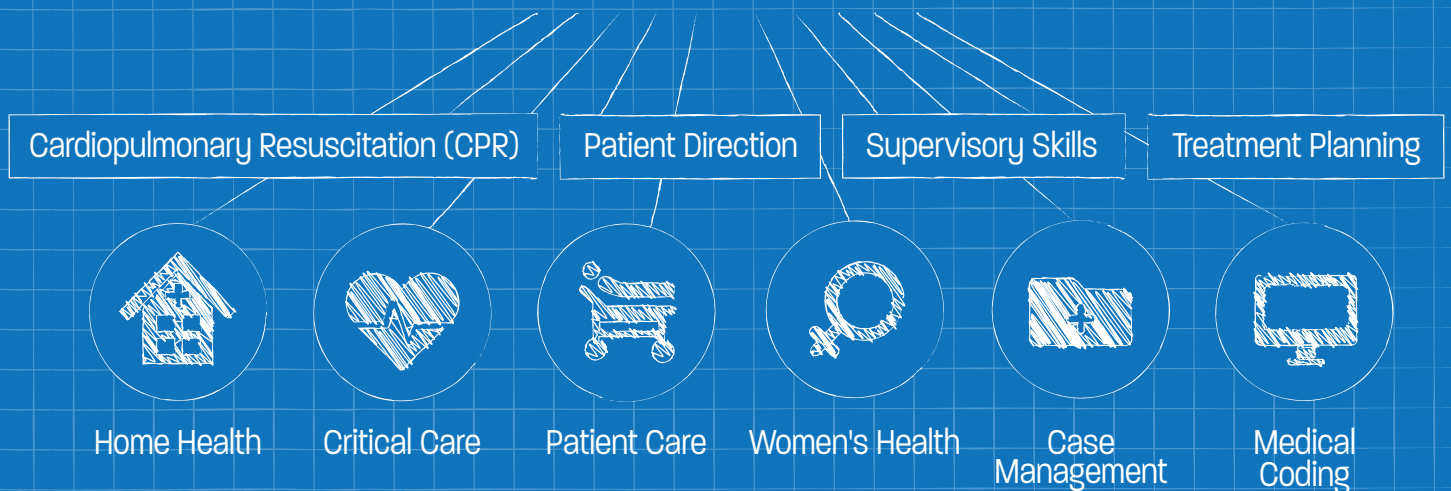
## Average Salary

  **34,448**

## Projected Growth



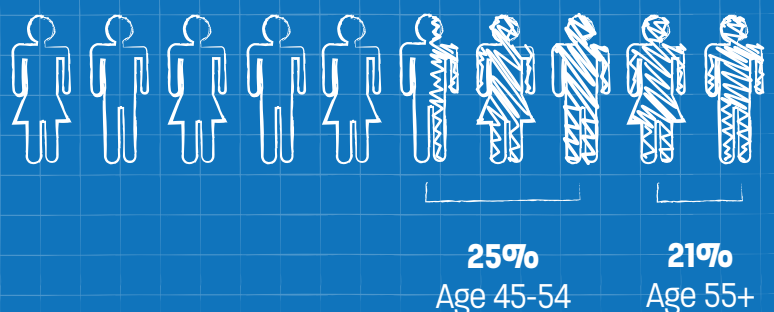
## Skills In Demand



## Top Middle-Skill Occupations

- Registered Nurses (778)
- Licensed Practical and Licensed Vocational Nurses (392)
- Radiologic Technologists (64)
- Medical and Clinical Laboratory Technologists (46)
- Physical Therapist Assistants (43)

## Age of Workforce



## HEALTH CARE

Health care is a critical industry for the rural region just as it is elsewhere in the country. In 2015 in the rural counties, there were a total of 3,592 people employed in health care, representing 8.5 percent of the total employment and the sector demand for positions is projected to grow 11.6 percent in the next five years.<sup>14</sup> There are structural factors that support the importance of the health care industry to a regional economy. Health care jobs are not easily offshored because services need to be provided to people on location and in real time. Health care is also a 24-hours-per-day, 7-days-per-week industry and therefore more workers are required to cover all of these shifts. Finally, it is worth noting that a strong health care system is vital to the residents of the region and so health care's contribution to the regional economy is likely to exceed its purely quantifiable impact.

There is already an acute shortage of workers to fill open positions in occupations requiring less than a bachelor's degree (registered nurses, certified nursing assistants, and health information technicians), and unless there is a huge increase in the number of graduates or an influx of these workers to the region, the shortage will grow as the sector grows. As noted for manufacturing, retirements are a looming issue. Registered nurses (RNs) and licensed practical nurses (LPNs) will be particularly effected by retirements. Community colleges report difficulty recruiting students for certified nursing assistant (CNA) and LPN programs, and high numbers of students from outside the region who enroll in local community colleges intend to leave the area after graduation. In addition, employers report that even when they are fortunate enough to hire someone for one of these high-demand positions, they are experiencing high turnover rates.

### Leading Occupations

Below are listed the occupations with the most jobs currently, along with the expected growth in hourly earnings (Table 17). The openings number accounts for both growth and retirements and represents a conservative estimate of job openings in a given occupation.

**Table 17: Health Care Occupations with the Most Postings, 2016–2022**

Occupation	2016 Jobs	2022 Jobs	Openings, 2016–2022	Median Hourly Earnings
Registered Nurses	778	889	238	\$24.94
Licensed Practical and Licensed Vocational Nurses	392	387	84	\$16.82
Physical Therapists	45	62	25	\$41.10
Pharmacists	76	88	25	\$70.66
Physical Therapist Assistants	43	53	19	\$25.75

Source: Emsi 2016.4

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<sup>14</sup> Emsi 2016.4

## Demand Outpaces Supply

Nationally, RNs are one of the largest occupations. They are stable jobs, but are often undersupplied by the institutions training RNs. Next is LPNs, although ads for those jobs appear in much smaller numbers. Physical therapy assistant and occupational therapy assistant are in demand and likely pay \$14 per hour in the rural area. Finally, there is demand for two occupations not usually considered: medical transcriptionist and medical coder. A coder is the person responsible for correctly coding services provided during patient care for medical records systems, to ensure quality data in the advancing health informatics used by providers. The demand for these positions is modest now but is expected to increase in time.

The rural region's health care providers are experiencing difficulty finding new hires and providing training to incumbent employees who they want to target for advancement. These employers cite acute unmet need for all types of nurses, physical therapy assistants, and radiologist technicians, among other occupations.

Business leaders' sense of in-demand occupations in their sector largely aligns with the job posting data. Employers made special note of RNs, CNAs, and health information technicians as high-demand occupations.<sup>15</sup> An acute care facility in the region cited demand for medical lab technicians and respiratory therapists, with the latter positions more difficult to fill due to recently imposed licensing requirements.

Postsecondary completions data give a rough measure of labor market supply. According to 2014 data from the Alabama Commission on Higher Education, there were 172 completers of programs related to the key middle-skill occupations in health care from rural county community colleges, and 415 posted jobs.

Based on the data in Table 18, it would appear that the region is producing enough LPNs but not nearly enough RNs. However, in the job posting data for RNs, LPNs are often also eligible to apply (something which would not show up in the Burning Glass data), which suggests that more LPNs are also needed for the region. It should be noted that the dates for the data are different, making a true comparison problematic. However, interviews with health care employers suggest that the misalignment remains.

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<sup>15</sup> Occupations such as CNA that pay less than the threshold of \$13.75 set for middle-skill employment are included here for two reasons: first, they're often an undersupplied element of the health care workforce; second, these positions have a recognized career ladder that allows lower-skilled health care workers to advance to higher-skill in-demand positions.

**Table 18: Supply of and Demand for Completers of Programs at Rural Public Institutions**

Program	Completions* Summer 2014– Spring 2015	Job Postings*** November 2015– November 2016
Emergency Medical Technology/Technician (EMT Paramedic)	3	25
Health Professions and Related Clinical Sciences, Other	13	61**
Licensed Practical/Vocational Nurse Training	66	43
Nursing Assistant/Aide and Patient Care Assistant/Aide	11	27
Registered Nursing / Registered Nurse	79	373

\*Alabama Commission on Higher Education. *Summer 2014 through Spring 2015 Completions of Students from Alabama Public Two-Year and Four-Year Institutions Sorted by Major.*

\*\*Includes Phlebotomists, Medical Transcriptionists, Medical Assistants, and Health Care Support All Other

\*\*\* Labor Insight Jobs (Burning Glass Technologies)

There is also an inadequate supply of applicants in other occupations, such as health information technology (IT) and emergency medical technician. The shortage of paramedics is exacerbated by low enrollment (there were 11 postings and three regional completions). As a hospital administrator explains, “We have a school [for paramedics] in Andalusia, but nobody is going into it, and we don’t know why.”

## Retirements

In addition to the short supply of new health care workers, the sector faces the challenges of large numbers of impending retirements, especially in jobs that are already hard to fill. The data show that the two most common middle-skill occupations, RNs and LPNs, skew older than the region’s workforce, with 55 percent of RNs and 52 percent of LPNs age 45 or older.<sup>16</sup>

**Table 19: Ages of Workers in Health Care Occupations**

Occupations	% of Occupation Age 45–54	% of Occupation Age 55+
All Employees in the Rural Counties	25%	23%
Registered Nurses	21%	32%
Nursing Assistants	22%	23%
Licensed Practical and Licensed Vocational Nurses	24%	27%
Emergency Medical Technicians and Paramedics*	16%	~13%
Pharmacy Technicians*	16%	~16%

Source: Emsi 2016.4

## Graduates Leaving the Region

The supply of qualified workers is further tightened by the fact that a large percentage of students enrolling in health care programs offered in the counties’ community colleges were coming from outside the area and never intended to stay, creating a smaller supply of workers than the completion data suggest. A hospital administrator explains:

<sup>16</sup> Emsi 2016.4

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*“Eighty percent of nursing students [in a local program] are from the Florida/Mobile area. Very few live here, but they go to school here because they get in. We graduate them, but once we get them out of school, they come, and they go. We train them for somebody else, essentially.”*

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## Recruitment and Retention Challenges

Recruiting students into health care entails a number of challenges: students are unaware of the many middle-skill, high-tech jobs in the field; the entry-level positions are unappealing to students; and there are few well-developed career pathways to attract students to CNA and LPN positions. Turnover in the sector is high: wages are low, and direct care jobs such as RN, CNA, and LPN are physically challenging and often have inconvenient or irregular schedules.

## Negative Perceptions and Limited Awareness of Opportunities

Negative student perceptions of opportunities in the medical field are a significant challenge to recruitment. A hospital administrator commented:

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*“I do Leadership Brewton every year. No students ever say medical as a career goal unless it’s to be a doctor.”*

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And many students simply do not realize that there are many middle-skill opportunities in health care that don’t require direct patient care. A nonprofit leader observes:

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*“A lot of them just don’t want to do anything medical, but it’s not all doctors and nurses; there’s lab techs, radiology techs, registration clerks . . .”*

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To counteract this dynamic, the Southern Alabama Area Health Education Center works with students in the region to make them aware of careers in the medical field and scholarships for working in rural areas, facilitates job-shadowing opportunities, and works with colleges and universities to place their clinical studies students in rural areas.

## Difficulty Attracting Students to LPN and CNA Programs

A long-term care employer expressed concern about students trending away from enrolling in LPN programs and instead studying to be an RN. They called it the “biggest issue in long-term care.” Other employers noted a dearth of CNA training options locally. One employer who experienced a lot of turnover in this position felt it was because students did not truly understand the work involved until they started working.

## Difficulty Recruiting for Graduate-Level Positions

Health care employers, like their counterparts in manufacturing, also noted difficulty finding candidates to fill positions requiring graduate degrees:

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*“We have difficulty staffing physical therapists and occupational therapists. It’s hard in rural areas; there’s very little industry in the area and uncertain employment opportunity for a spouse.”*

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## High Turnover Rates

Health care can be physically taxing. In fact, “physical demand” appears on the list of top baseline skills. One employer observed that the grueling nature of the work, not an absence of skills, was the primary source of turnover in their facility.

High turnover in nursing could also be a function of low wages. A large health care employer noted that after increasing their pay rate, “my turnover is almost gone.” Other employers that could offer nurses stable hours during the day articulated less difficulty hiring and retaining nurses than counterparts that mandated night shifts.

Poor employability skills are also a central factor in high turnover rates. Employers described candidates and even many incumbent workers lacking these crucial skills:

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*“We need good people. Customer service and basic computer skills for staff would be wonderful, health science background would be fantastic, but we’re talking about our front door. Applicants don’t articulate well. They don’t communicate with people well. And every bit of it bleeds over into the rest of the hospital.”*

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And while employers do provide on-the-job training, the challenges remain, as one hospital administrator explains:

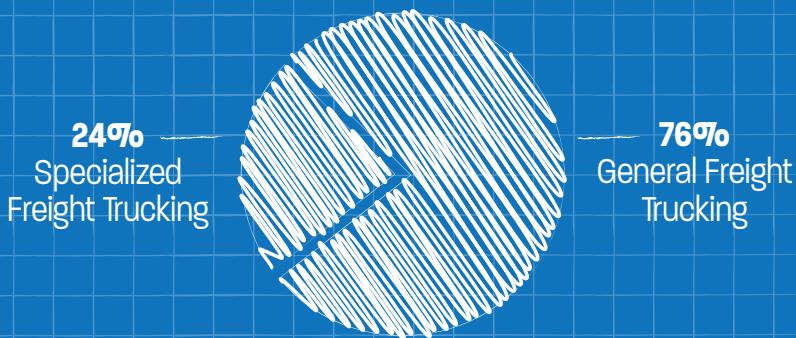
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*“Customer service, basic computer skills, bad grammar, spelling, communication skills . . . we train them, but it doesn’t always take, and upping the pay scale hasn’t yielded greater quality hires.”*

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# Truck Transportation

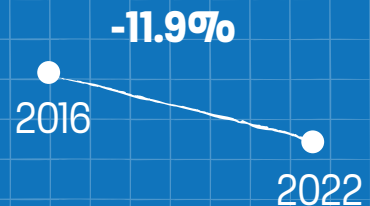
## Share of Employment



## Average Salary

  **44,458**

## Projected Growth



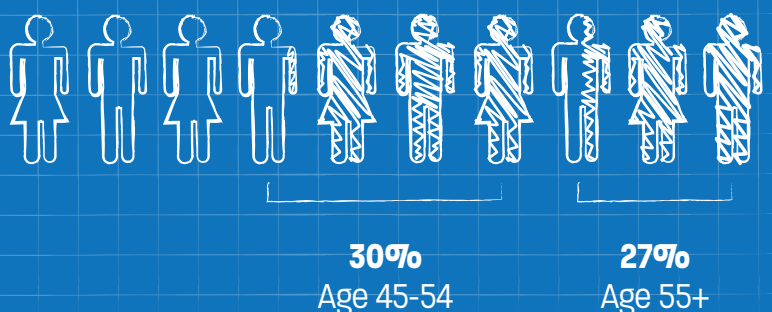
## Skills In Demand



## Top Middle-Skill Occupation

- Heavy- and Tractor-Trailer Truck Drivers (1,069)

## Age of Workforce





# TRANSPORTATION AND WAREHOUSING

This sector includes the full range of transportation services from pipelines to shipments and travel by air, ground, and water, and corresponding warehousing services for goods and fleets used in transportation.

For the rural counties, 75 percent of the 97 firms are involved in truck transportation, which is JFF's focus. Long-distance trucking firms provide 75 percent of the 1,574 jobs in truck transportation, with the remaining jobs in truck transportation specializing in local transportation of goods and services.

Tractor-trailer truck drivers are 83 percent of all the regional jobs in long-distance trucking. Truck driving requires a valid commercial driving license which is viewed as an additional credential. Drivers often need to operate forklifts for loading and unloading trucks, must be able to inspect loads for safety purposes and make related repairs, and have basic skills in record-keeping and customer service. These jobs are important to the region because they pay well and require little formal education. These are middle-skill jobs that are short-term job placements for many workers.

Transportation and warehousing as a sector of the rural economy is incurring job loss, declining from 2,643 jobs in 2007 to a projected 1,931 in 2022. The majority of jobs in transportation and warehousing are for truck drivers, an occupation projected to decline 11.9 percent between 2016 and 2022. Shortages of truck drivers will impact other sectors as well. While 61 percent of truck drivers in the region work in the truck transportation subsector, the remaining 39 percent of truckers hold significant numbers of jobs in manufacturing (230), forestry and logging (202), and wholesale trade (77), among other sectors. In total, 1,747 workers are employed as heavy and tractor trailer truck drivers in Region 7 as of 2016.

## Leading Occupations

Below are listed the occupations with the most jobs currently, along with the expected growth in hourly earnings (Table 20). The openings number accounts for both growth and retirements and represents a conservative estimate of job openings in a given occupation.

**Table 20: Trucking Occupations with the Most Postings 2016–2022**

Occupation	2016 Jobs	2022 Jobs	Openings, 2016–2022	Median Hourly Earnings
Heavy and Tractor-Trailer Truck Drivers	1,747	1,611	216	\$18.75
Industrial Truck and Tractor Operators	262	253	44	\$13.74
First-Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators	115	113	25	\$25.04
Crane and Tower Operators	44	48	15	\$13.99
First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand	55	56	13	\$21.13

Source: Emsi 2016.4

## High Turnover Rates Drive up Demand

The country is facing extensive workforce shortages in heavy-truck and tractor-trailer drivers.<sup>17</sup> Long-distance trucking produces very high job turnover despite the good pay. Trucking companies are constantly in search of replacement workers.

The challenges facing this sector locally are largely the same as those facing the industry nationally: severe shortages in qualified drivers, difficulty recruiting new drivers, and very high levels of turnover. Difficult work conditions contribute to high turnover. Truck drivers spend very long hours each day behind the wheel, sometimes for weeks at a time. In addition to time away from home, amenities on the road are slim. Drivers also complain about their treatment at shipping and receiving facilities.<sup>18</sup>

In contrast, turnover is much lower in local truck load and private fleets, since drivers are paid more and are home more frequently. According to the American Trucking Association's 2014 Compensation Study, "Local truck load carriers had a turnover rate of 12 percent, while private fleets reported a turnover rate of just 8 percent." This is compared with rates of over 90 percent for over-the-road truckload carriers.

## Few Qualified Applicants

Contributing to these workforce shortages are: the aging of the trucking workforce—nationally the current age of drivers is 49, while in the rural counties 54 percent of the trucking workforce is 45 years or older; the small share of women choosing this career (3.4 percent in the rural counties); and difficulty finding candidates that meet strict safety and qualification standards.<sup>19</sup>

According to the American Trucking Association report on workforce shortages in the sector, "Despite receiving applications for employment, motor carriers are finding few eligible candidates, which is a quality issue. In 2012, 88 percent of fleets said that most applicants were simply not qualified." Because of the importance and emphasis on safety, candidates who are otherwise qualified can be disqualified for poor driving records. Insurance companies may also require drivers to have two to three years of experience, which contributes to difficulty in hiring.

Conecuh and Monroe counties have 18 percent and 10 percent, respectively, of their job base in tractor-trailer drivers: Access to U.S. Route 84 and I-65 supports long-distance hauling in all directions. For these two counties, it is important that trucking firms have little difficulty replacing drivers as job turnover occurs.

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<sup>17</sup> Costello, Bob & Rod Suarez. 2015. *Truck Driver Shortage Analysis 2015*. Arlington, VA: American Trucking Associations. Available at: <http://www.trucking.org/ATA%20Docs/News%20and%20Information/Reports%20Trends%20and%20Statistics/10%206%2015%20ATAs%20Driver%20Shortage%20Report%202015.pdf>; Journal of Commerce. 2016. "The Driver Shortage." Available at: <http://www.joc.com/special-topics/driver-shortage>

<sup>18</sup> Harrison, Haskel D. et.al. 2009. *Examining Driver Turnover and Retention in the Trucking Industry*. Memphis, TN: University of Memphis. Available at: [http://www.memphis.edu/ifti/pdfs/cifts\\_examining\\_driver\\_turnover.pdf](http://www.memphis.edu/ifti/pdfs/cifts_examining_driver_turnover.pdf)

<sup>19</sup> Emsi 2016.4

## Few Training Programs

Attracting adults to truck driving is limited due to the lack of training programs near trucking firms located in these two counties. Driver training programs are expensive, and starting up these programs requires significant investment in fleets and facilities, as well as liability insurance. Private firms do most of the training, as only the larger community colleges have the capacity to create such programs. A partnership between the trucking firms and public colleges would be necessary to hedge against the risks involved in creating these programs and attracting and placing a sufficient flow of new drivers to make this financially viable.

# OVERARCHING ISSUES FOR RURAL COUNTY WORKFORCE DEVELOPMENT

Several important challenges are critical to assessing the exact scale and root causes of the obstacles facing employers and workers.

## Lack of Diversity in the Rural Economic Base

An August 5, 2015, *Alabama NewsCenter* article summed up the ongoing challenges:

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*“The same problems that have hampered economic development efforts in rural Alabama for decades are still cited as the greatest impediments today.*

*A lack of population means a lack of workforce. Education shortfalls lead to a lack of trained workers. Infrastructure gaps from interstates to fiber optics lead to a lack of suitable sites.*

*More often than not, major project announcements in the state go to counties with big cities, which have large populations to support the workforce and developed sites close to interstates and railways.”<sup>20</sup>*

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The dominance of manufacturing in the rural areas leaves the counties’ economic success more vulnerable to the ups and downs of industry and the national economy. This sector, especially the manufacturing of durable goods, is highly susceptible to the business cycle. Durable goods, by definition, are products that can be used for several years on average. Consequently, customers can more easily postpone new purchases when the economy slows down and spending needs to be cut by businesses.

The rural manufacturing sector remains dependent on the chemical, paper, and metalworking industries, which emerged in part due to substantial local natural resources available. On the national level, these industries do not need as large a workforce due to advanced technology and increased labor productivity, a reality that may explain the lack of job recovery since the recession ended. Increased investment in modernizing plants and equipment, which some major facilities are undergoing, will only exacerbate the problem of finding qualified middle-skill workers.

## Rural Industry Base Will Become More Technology Driven

The substantial lack of demand as evidenced by online job postings for higher-skill workers by rural industry suggests that this rural economy is lagging the nation in adopting new, advanced technology into how or what it makes or that all the needs for these new skills are being filled by either incumbent employers or contractors. An engineer from Georgia-Pacific indicated that

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<sup>20</sup> Tomberlin, Michael. 2015. “Rural economic development remains a challenge in Alabama.” *Alabama NewsCenter*. Available at: <http://alabamane.wscenter.com/2015/08/06/rural-economic-development-remains-a-challenge-in-alabama/#sthash.pC6xk1vI.dpuf>

“innovation” is the company’s focus. However, the impact of plant modernization and automation is not evident when analyzing job postings. There are no job ads online from private industry seeking skills from workers that are critical to workforce abilities in the emerging industrial economy.<sup>21,22</sup> One positive note comes from BASF, which recently announced an investment to expand the capacity of its local production facilities, citing improved regional demand for its products. However, no new hiring is expected in the near term.<sup>23</sup> In this case, existing staff may be retrained to operate any new equipment; this will not result in significant changes to the overall labor market.

Given the increasing emphasis on the impact of disruptive technologies in industry, both industry and the education sector need to focus on the need to identify assets that the rural Alabama workforce has to offer firms to expand or locate to compete for new business.<sup>24</sup>

## Transportation Barriers within Region 7

Connecting people to jobs and training is a challenge in the rural counties where these offerings are far away, car ownership for the unemployed and those with low-incomes is expensive, and there is limited public transportation.<sup>25,26</sup> To have a rural lens, labor market development needs to take into consideration rural geographies (distances) and the difficulty people (especially low-income and unemployed) have covering these distances for training and jobs (Table 21). Even when using reliable personal transportation, it is problematic for workers to make daily round trips to the large job base in Mobile County from Choctaw and Clark counties, and maybe others as well. The feasibility of daily

**Table 21: Travel Time One Way from Cities in Rural Counties to Mobile to Access Jobs**

*Personal Transportation*

City	Miles	Travel Time
Butler, Choctaw	110	2:15
Thomasville, Clark	95	1:40
Evergreen, Conecuh	95	1:25
Brewton, Escambia	85	1:25
Monroeville, Monroe	85	1:35
Chatom, Washington	60	1:15

Source: Taylor | Future Solutions, LLC; Travelmath

<sup>21</sup> There are no mentions of skills needed when working with automated equipment or advanced robotics, no mention of skills needed to work with computerized production systems, and, most importantly, none listed by manufacturing employers for IT skills vital for working with big data, cybersecurity of networks or data systems, etc. These skill requirements are routinely emerging in most regional economies with strong manufacturing centers such as those that exist in rural Region 7.

<sup>22</sup> Schwab, Klaus. 2016. “The Fourth Industrial Revolution: what it means, how to respond.” *Global Agenda*. Available at: <https://www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond/>

<sup>23</sup> Specker, Lawrence. 2016. “BASF’s \$200 million expansion plan includes boost for McIntosh plant.” *AL.com*. Available at: [http://www.al.com/news/mobile/index.ssf/2016/11/basfs\\_200\\_million\\_expansion\\_pl.html](http://www.al.com/news/mobile/index.ssf/2016/11/basfs_200_million_expansion_pl.html)

<sup>24</sup> Sumners, Joe A. & Larry Lee. 2004. *Crossroads and Connections: Strategies for Rural Alabama*. Auburn, AL: Auburn University. Available at: [http://www.auburn.edu/outreach/publications/cross\\_connections.pdf](http://www.auburn.edu/outreach/publications/cross_connections.pdf)

<sup>25</sup> On average for the counties, the total housing and transportation costs as a percentage of annual income ranges from 62 percent to 78 percent, pushing the average into the low-to-mid-70 percent range. Note, too, that the transportation costs are always higher than housing. High transportation costs suggest the need for public transportation to help low-income residents connect to training and jobs. (Location Affordability Index. U.S. Department of Housing and Urban Development, Taylor/Future Solutions.)

<sup>26</sup> No regional-serving transit connects the counties directly into Mobile, and federal funding is not available for this type of service. Currently, the provision of transit is limited to demand-response type service, with a social service focus. (From interview with Alabama Tombigbee Regional Commission.)

commutes over longer distances is constrained by the transportation network and the mode of travel available to workers.

The distance and lack of access to transportation help explain the lack of workers commuting into Mobile and Baldwin counties from the more remote rural counties in Region 7. In addition, daily travel to work, college, etc., between the seven rural counties is equally hampered because of limited road and highway access.

- As noted earlier in this report, significant numbers of rural workers find it possible to commute to Florida and Mississippi due to better highway access than within the counties.
- Spending two-and-a-half hours or more each day just traveling to work likely discourages most workers in these rural counties from seeking employment in Mobile. Most of these counties are not contiguous to Mobile and lack limited-access highways connecting them to workplaces in Mobile.
- In addition, for workers lacking access to personal transportation, no alternative transportation options exist. Access to on-demand options or ride-sharing arrangements typically can be depended upon for commuting to work without posing problems of tardiness or missing work.

## Limited Access to Urban Amenities and Job Opportunities

Attracting higher-skill and professional workers to the rural counties is hampered by limited job opportunities for spouses and limited access to the goods and services found in urban areas. Employers report that it is hard to recruit top talent to the rural setting to fill more senior or professional positions. While industry has difficulty in hiring these new workers from outside Alabama, at the same time few are currently employed. In considering where to locate, these workers are no different than businesses when considering alternative places to relocate in pursuit of a career. They evaluate regions in terms of future job opportunities by looking for a critical mass of senior and professional jobs, should they need to change employers in the future. With so few of these positions in local industry, their options for future advancement through a change of employers are limited in rural Region 7.

## Limited Access to Broadband in the Rural Areas

Stakeholders recognized limitations in broadband as a key barrier to labor market development in the rural counties. As one elected official observed,

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*“A ‘digital divide’ and the lack of broadband access is a complicated, statewide issue that hinders both communication of available jobs and obtaining the training necessary to land them.”*

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The lack of rural industry that requires wide use of advanced technologies is directly linked to the spotty, uneven, and, in some areas, complete absence of broadband width. This poses serious limitations on workforce development and industrial growth. Advanced manufacturing

industries cannot survive without the ability to transmit digital data on a large scale. Job ads that ask for digital skills, the ability to write code, and to work with advanced IT products are exceptionally low in Region 7 for all, but especially for rural employers. Currently, according to Emsi, of 44,900 total jobs in the rural region in 2016, 309 (0.69 percent) of them are in IT and roughly 878 (1.96 percent) are computer, engineering, or science focused.

## SUMMARY

In summary, there is significant need to develop a strong, middle-skills workforce in Region 7 that closes the gap between the skills employers seek and those that jobseekers offer. Employers are experiencing a shortage of job applicants who have the skills and experience they want, and some workers cannot find job openings that demand the skills and experience they possess. This is a classic skills mismatch within the labor market.

Aligning education and training programs with industry needs is essential if the rural counties are to take advantage of the post-recession economic improvement. The lack of education attainment drags down the number of residents who are in the labor force and further limits the actual supply of workers with the qualifications employers need. The gap simply expands as the demand for middle-skill jobs increases, while workers lag behind in expanding their skill sets and gaining additional educational credentials.

The sectors on which the report focused identified similar issues in filling their talent pipeline. This includes the need to find employees with strong employability skills and to hire workers from outside the region who are within daily commuting distance in part because they are not satisfied with the skills that local jobseekers (employed or not) have to offer. Also, these industries all face the potential of a significant number of retirees in the near future.

Further, many incumbent workers are unable to keep up with evolving technology in their workplaces. Employers face capacity and access issues in arranging for training through vendors or by partnering with postsecondary educators in the region

The central issues surrounding the skills gap in the rural area of Region 7 are complex and cannot be addressed without a set of integrated strategies. The recommendations in the next section seek to address this mismatch.



## VISION FOR RURAL REGION 7

The vision for the rural counties of Region 7 should focus on the potential to increase the supply of prepared workers by increasing the skill and educational credentials of those already in the labor force and attracting more adults currently not in the labor force to pursue additional training. In addition, efforts need to be made to expand the demand for workers' services. Therefore, the recommendations put forth below include proposals to address overarching issues as well as specific recommendations to address the needs of selected critical industries.

The recommendations were developed in several ways. The quantitative and qualitative data on the status of specific industries and workforce in the region suggested recommendations to address obvious workforce gaps. The JFF team also facilitated a series of discussions with regional stakeholders to review the data collected and solicit suggestions to address the identified gaps. Many of the recommendations were developed from the input of industry partners in the rural counties. In addition, recommendations are included that draw on JFF and the research team's collective workforce development experience with models of excellence in workforce development from across the country.

## LEADERSHIP FOR A RURAL FOCUS

An organizational structure with a rural focus is needed to guide the development of a workforce development strategy. SAWDC has broad responsibilities as a workforce intermediary for the nine-county region, which includes both the rural and metropolitan counties of the region, each with significantly different needs. The key leaders from the rural counties—including business leaders, elected officials, educators, economic developers, public workforce investment system staff, and industry representatives—with support from SAWDC, need to determine how to lead regional coordination for workforce efforts. This structure will provide a vehicle for rural employers to influence other regional stakeholders, particularly the community college system and the public workforce investment system, to achieve specific workforce development goals.

This report contains a large number of recommendations for SAWDC and its stakeholders to consider and implement. Each recommendation has the potential to improve the workforce development opportunities within the region. However, most of these recommendations will require the cooperation and resources of more than one organization and may require significant planning and new funding to be implemented. In fact, many of the recommendations may require state action and others may be influenced by federal policy. At the end of this report there is a list of questions that SAWDC and its partners can use to determine which options to focus on and in what order.

The recommendations are divided into seven groupings:

- Improve the alignment between industry needs and the community colleges
- Increase public workforce system services to the rural area
- Address regional infrastructure issues—broadband and transportation

- Expand and improve the pre-employment pool
- Implement industry-specific recommendations
- Engage in additional economic development activities
- Create a culture of continuous improvement and adopt measures of success

Each of these groupings will be explained in detail below.

## **Group 1: Improve the Alignment Between Industry Needs and the Community Colleges.**

There is wide agreement in every part of the country that partnerships between employers and community colleges are key to developing a workforce that meets the demands of local employers. The employers that participated in this study—either through interviews or participating in the stakeholder meetings, recognized the key role community colleges play in the development of the rural workforce. A key to building these partnerships is for the community college and employers to develop long-term employer advisory boards where employers are fully engaged in partnering with this critical training provider. To enhance these important partnerships, we recommend the following:

- **Redesign programs of study to better match employers' changing needs**

Employers and community colleges could design programs that provide strong technical and professional skills and include an expectation of further training in a specific industry. Additional training could be after graduation or as part of the degree or certificate program. This would allow for a greater integration of work-based learning, reversing a trend of declining use of this critical training approach.<sup>27</sup> Addressing common skill needs across industry and occupations might be more effective an approach given the relatively small size of the regional workforce and training faculty. It would also shift the responsibilities for teaching niche or proprietary skills to the employer.

- **Develop additional satellite sites for the provision of postsecondary education and training services**

To the maximum extent possible, postsecondary education and training programs should be located close to industry and residential clusters. This proximity will allow for greater interaction between industry and the training programs, including being able to use industry practitioners as instructors. In addition, incumbent workers or those who are working and are seeking additional training for another field will be better able to participate in relevant training because it will be easier to reach. (See additional recommendation in the Industry section below.)

Developing satellite training sites near key industry sectors is becoming common practice for effective community college systems. For example, the Community College of Rhode Island recently located a satellite center near General Dynamics Electric Boat, a major shipbuilding

<sup>27</sup> Cahill, Charlotte. 2016. *Making Work-Based Learning Work*. Boston, MA: Jobs for the Future. Available at: <http://www.jff.org/publications/making-work-based-learning-work>

employer in the region. The facility will offer typical college classes as well as specialty technical training.

With the partnership, Electric Boat will offer workforce development classes to its employees in fields including carpentry and pipefitting. In addition, Electric Boat and the college will begin a program for high schoolers, similar to vocational training, which could culminate in a job following graduation.<sup>1</sup>

- **Develop alternative education models that address barriers to entering community college degree and certificate programs**

Across the country, many underprepared community college students remain enrolled in developmental courses and use up their financial aid resources without entering degree or certificate programs. Alternative models such as the Integrated Basic Education and Skills Training (I-BEST) program that quickly teach students literacy, work, and college-readiness skills so they can enter formal training programs should be brought to the community college system.

I-BEST is a strategy developed in Washington State to combine basic skills and technical instruction for college-level occupational classes. By integrating basic skills and professional-technical skill instruction, I-BEST speeds up the rate at which adult basic education and English-as-a-second-language students complete postsecondary credentials rather than spending extensive periods of time in developmental education courses. The model has been extensively studied by the Community College Research Center, among others, and has been shown to be effective in improving educational outcomes.<sup>2</sup> The I-BEST model is being utilized extensively in many other states, including Mississippi.<sup>3</sup> This study from The Century Foundation details other states' efforts to help students advance and complete more quickly, and may be relevant to the region.<sup>4</sup>

- **Encourage community colleges to hire experienced workers nearing retirement as instructors**

Across the country, community colleges lament their difficulty finding qualified instructors because industry pays higher wages. In this region, as the manufacturing workforce ages, community colleges may be able to recruit these retirees to transition to instructor roles. Many retirees choose second careers to give back to the community.<sup>5</sup> IBM, in its Transition to Teaching program, encourages its retirees to return to the classroom.<sup>6</sup> By teaching in the community college, these retirees would contribute to the educational programs in the region. Businesses should encourage this transition to help ensure that community colleges produce highly qualified workers.

- **Integrate employability skills into all programs of study**

In interviews, rural county business and industry leaders emphasized the importance of employability skills and repeatedly suggested that these skills are both in high demand and lacking in applicants and new entrants to the workforce. These skills allow individuals to

navigate the workplace by demonstrating problem solving, critical thinking, teamwork, professionalism, basic computer skills, writing, etc.<sup>28</sup> Over the past four decades there has been a nationwide shift in work from routine and manual tasks toward analytical and interpersonal tasks. Further, several recent reports demonstrate that jobs with high social-skill requirements have experienced greater wage growth than others. And both employment and wage growth have been strongest in occupations that require both strong social skills and high levels of cognitive skills.<sup>29</sup> Employability skills will help workers navigate and withstand changes in the economy caused by expected advancements in technology or more disruptive evolutions to the way we do business, and must be included in all educational / workforce development initiatives. Community colleges are recognizing the critical nature of these skills and have developed several approaches to teaching employability skills.

Lorain County Community College in Ohio has redesigned its English as a Second Language, Adult Basic Education, and After School Enrichment programs to integrate career readiness skills into them per state requirements. North Shore Community College in Massachusetts has developed specific required employability skills curriculum for use in some of its non-credit programs. Other schools, such as LaGuardia Community College, integrate these skills into the curriculum. Operators of non-credit programs say using industry executives as instructors has helped integrate these skills into their programs. Others work with outside vendors to use boot-camp models, online offerings, or assessments. Lone Star College in Texas includes 32 employability skills in its Energy, Manufacturing & Skilled Trades cluster. Administrators believe that having these skills makes the employee appear more experienced and therefore of more value to an enterprise.

## Group 2: Increase Public Workforce System Services to the Rural Area.

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The public workforce investment system must be a key partner in any successful regional workforce development effort. The state of Alabama is in the process of aligning the regional workforce development areas with the workforce council regions. For the SAWDC region, this means that Mobile Works will see its footprint expand from Mobile County to the entire region.

- **Include rural priorities in the expanded regional workforce development board**

It will be imperative that the needs of the rural counties and their workforce be considered in the planning and implementation process of the expansion. SAWDC and its partners would be a valuable partner to Mobile Works by providing the voice for rural county priorities. A seat on the board of directors of the expanded workforce development board would be an important step in assuring that the region's needs are addressed.

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<sup>28</sup> These skills are known by many names including soft skills, foundational skills, 21<sup>st</sup>-century skills, deeper learning, executive functions, and personal success skills. For this report, the term “employability skills” is used.

<sup>29</sup> Burning Glass Technologies. 2015. *The Human Factor: The Hard Time Employers Have Finding Soft Skills*. Boston, MA: Author. p. 5. Available at: <http://burning-glass.com/research/baseline-skills/>

- **Improve access to public workforce system services**

Currently, there are only two Alabama Career Centers in the rural area. Many residents face a drive of more than 45 minutes to get to one of these centers, creating a significant barrier for eligible participants. Locating satellite job centers at public libraries and other public places would significantly improve access. Services could be provided through a combination of computer-based technologies and scheduled in-person staffing. Virtual programming can also be provided via the Internet for anyone with a broadband Internet connection. The City of Thomasville has already begun using its library as an informal satellite location.<sup>7</sup> This work should be replicated in other locations.

Another example is the Pasco Hernando Workforce Board in Florida, which used a Workforce Innovation Fund grant to develop and implement distance services. This resulted in cost savings to the board and increased the likelihood that jobseekers would find employment. Participants can receive services remotely and connect with staff as needed. Remote services include registration, completing online orientation, job search, and identifying sources of training. An evaluation of the grant showed that people who completed services remotely or on a self-service basis were 15 percent more likely to become employed than those who were primarily staff assisted.<sup>8</sup>

- **Provide workforce services during nontraditional hours**

The lack of availability of services such as career counseling, Workforce Innovation and Opportunity Act intake and assessment, and financial aid application assistance outside of traditional eight-to-five service hours is a barrier to people who work or have child care or other family responsibilities. Expanding the services to nontraditional hours, such as evenings and weekends, would allow people to have access to these much-needed services.

### **Group 3: Address Regional Infrastructure Issues.**

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The rural county region faces infrastructure issues that are barriers to workforce development efforts, such as increasing education and training services and attracting employees.

- **Improve broadband access**

Advances in telecommunication technology have the potential to overcome one of the biggest barriers to rural participation in the global economy—its isolation.<sup>9</sup> The Internet is a critical tool in education, training, and workforce service provision throughout the country. It is particularly important in rural regions. Expanding high-speed broadband service across the region through libraries, schools, government offices, and private-sector hotspots so that all residents are within 20 minutes of broadband access would allow residents to take advantage of this resource for both commerce and learning. This lack of broadband may also explain the few IT job postings in the region—businesses can't rely on the Internet. Other states with significant rural populations have taken action to improve access. For example, the state of Kentucky is in the process of implementing the KentuckyWired Statewide Broadband Network Initiative to support economic

and workforce development. KentuckyWired is a statewide, open-access fiber optic network designed to deliver robust, reliable, and affordable Internet to communities across the state through broadband technology. The program is in the early stages of buildout.<sup>10</sup>

- **Support regional transportation improvement projects**

Improving mobility for commuters and companies with goods to move to market is an integral part of enhancing the regional economy given the size of the rural counties and the dispersion of residents and employers. Options to improve transportation for the workforce include:

- Urging the state of Alabama to allocate transportation funds to support the regions' transit programs for more robust regional coverage. Reducing the cost of transportation would make training and employment opportunities more accessible.
- Approaching cities and towns in the region to help fund regional transit for their constituents.
- Considering a bi-regional (Alabama Tombigbee and Southwest Alabama Regional commissions) commuter bus service for the region to and from Mobile; one from the north (Thomasville area) and one from the southeast (Evergreen area).
- Investigating shared mobility options such as van and car pools and identify public and private funding options to support them.
- Evaluating the potential to create a nonprofit Transportation Management Association that focuses on the travel needs of large employers. TMAs help pool resources; address the described transportation issues of time, distance, and costs; and allow public and private cooperation.

#### **Group 4: Expand and Improve the Pre-Employment Pool.**

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The region cannot afford to leave any potentially productive portion of its workforce on the sidelines. Underrepresented segments of the population often require additional wraparound services such as child care, transportation assistance, counseling, or housing to reach their full potential, but the return on investment for the employer and community can be significant.

- **Explore programs that support people with criminal backgrounds to reenter the workforce**

Individuals who have been to jail do return to their communities. U.S. Department of Justice research reveals that at least 95 percent of state prisoners will be released back to their communities at some point.<sup>11</sup> Statistics also show that 30 percent of adult offenders released from state prisons are rearrested within the first six months of their release.<sup>12</sup> These statistics are particularly troubling for Alabama, given the severe overcrowding of the state prisons.<sup>13</sup> There is an urgent need for proper successful reentry programs to help ex-offenders secure employment. This includes supporting community-based organizations that provide supports to the reentry population. The state should also “ban the box” to remove the criminal history checkbox on job applications.<sup>14</sup>

In addition, the state may want to learn from North Carolina, where recent reforms created a system to closely evaluate, educate, treat, and supervise prisoners after release to reduce recidivism, among other benefits.<sup>15</sup>

- **Encourage employers to explore programs for hiring veterans**

The value of hiring veterans continues to be demonstrated, yet often veterans find the hiring process difficult. These issues include lack of degree, difficulty translating military service experience into civilian language, and general discomfort with the civilian workforce.<sup>16</sup>

Fortunately, there are many resources available to both community colleges and employers to help veterans translate the skills acquired in the military into employer-recognized credentials. In addition, there are tax incentives and other programs designed to encourage employers to hire veterans.<sup>30</sup> Recent surveys also suggest that employers are interested in hiring veterans for the kinds of jobs available in the region including production, distribution, and logistics.<sup>17</sup>

- **Promote the hiring of people with disabilities**

People with disabilities are the single largest minority group in the United States, and yet they are significantly underrepresented in the labor market and more likely to be unemployed than their non-disabled counterparts.<sup>31</sup> The Alabama Department of Rehabilitation Services has several programs designed to make it easier to hire a person with a disability, including internship programs, onsite coaching, and wage reimbursements.<sup>18</sup> In fact, the ADRS reports it has the longest-standing vocational rehabilitation-business relations program in the country.<sup>19</sup>

- **Develop programs to support low-income residents**

Despite the drop in unemployment and the steady rates of labor force participation, poverty rates rose in five of the seven counties and fell in two counties between 2010 and 2014.<sup>32</sup> For comparison, poverty in the state and in the nation also rose during the same time period. One reason for this apparent paradox of falling unemployment, steady labor force participation, and rising poverty is that wages aren't high enough to move people out of poverty. Working adults in low-wage jobs could be explicitly tapped and targeted for career pathways efforts, including programs that provide bridges to postsecondary education and employment that can help them move into family-supporting employment.

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<sup>30</sup> The Conference Board. 2013. *Leveling the Playing Field: Attracting, Engaging, and Advancing People with Disabilities*. New York, NY: Author. p. 57.

<sup>31</sup> The Conference Board. 2014. *Tapping Hidden Talent Pools: Recruiting, Developing, and Retaining Veterans and people with Disabilities*. New York, NY: Author.

<sup>32</sup> 2014 is the latest year data is available for counties in the American Community Survey.



## Group 5: Implement Industry-Specific Recommendations to Better Meet the Needs of Manufacturing, Health Care, and Transportation and Warehousing.

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The following are recommendations tied to the needs of each critical industry in the rural regions, as identified in the technical section of this report. With the exception of transportation and warehousing, the research team conducted individual interviews with key business leaders in each sector. These were followed up with a series of facilitated planning sessions. These recommendations are based on those conversations.

### Manufacturing

The rural area has both durable and non-durable manufacturing operations that need workforce development.

- **Implement a regional manufacturing industry awareness campaign**

The manufacturing industry is crucially important to the region's economic success. Manufacturing makes up more than 20 percent of the region's private-sector employment and pays some of the highest median wages. However, residents do not necessarily know what types of jobs are available and what skills, education, and experience they need to access them. SAWDC provides its annual Worlds of Opportunity expo for eighth graders, which is highly regarded by employers and educators. This work should be built on by seeking the resources to contract with a professional marketing firm to conduct a comprehensive marketing campaign. The primary goal of this campaign would be to inform all residents about the centrality of manufacturing to the region and what the critical jobs and the educational criteria are for the industry. The National Association of Manufacturers supports "Dream It. Do It."<sup>20</sup> manufacturing marketing campaigns at the state level to surface the importance of the manufacturing industry and to demonstrate the excellent career opportunities it provides. The employers could also use as a model the Southern Alabama Area Health Education Center's efforts to make students in the region aware of careers in the medical field, facilitate job shadowing opportunities, and work with colleges and universities to place their clinical studies students in rural areas.

The campaign could also expand its breadth by linking to the broader economic development goals of the counties in the region (see Group 7).

- **Support the development of training for incumbent worker career advancement**

Developing incumbent workers to advance within an organization is smart business. Incumbent workers in the industry represent a key pool of workers for more advanced positions. Many companies in this sector place a strong priority on experience when hiring for middle-skill jobs. However, given the low educational achievement rates of many in the workforce, many incumbent workers are unable to advance without additional training. Many workers in the region face significant barriers to participating in training. Many of these people have not been in

formal education for many years, and this can be compounded by the long travel distance to existing training programs.

A comprehensive analysis of the needs of companies and incumbent workers for upskilling should be conducted. SAWDC and its partners should enhance efforts to provide cost-effective, convenient, and efficient incumbent worker training. Specific ways this could be accomplished include developing local or employer-based training sites, portfolio programs to give workers credit for what they have learned on the job, and creating work-based learning models that would allow workers to learn more while engaged in work processes, filled in with formal education where necessary.

There are several kinds of collaborative models between employers and training providers to address the upskilling of incumbent workers. The Multi-State Advanced Manufacturing Consortium, led by Henry Ford Community College (MI), consists of 13 community colleges across 10 states.<sup>21</sup> Each consortium member worked closely with auto industry leaders such as GM, Chrysler, and Ford to develop competency-based curriculums and offer hands-on education in manufacturing. Using a performance-based objective process, they developed customized skills check sheets to assess student or employee skills in the classroom or on the plant floor. In addition, Toyota West Virginia donated \$1 million to launch the Advanced Technology Center at BridgeValley Community and Technical College.<sup>22</sup>

In addition, several states, including Connecticut,<sup>23</sup> Massachusetts,<sup>24</sup> and Florida,<sup>25</sup> have developed incumbent worker training funds. Employers are eligible to apply for state funding to train their current workers. This can be used to fund training by community colleges, four-year colleges and universities, and for-profit training providers. The Connecticut Manufacturing Innovation Fund Incumbent Worker Training program provides financial assistance to Connecticut manufacturers for growing innovative and technology-based manufacturing businesses in Connecticut. The goals are:

- To support advanced manufacturing and innovative companies in their efforts to train incumbent workers in the appropriate skills to meet current and emerging market needs.
- To bring technological innovation to the market and help manufacturing companies leap ahead in productivity and efficiency by enhancing the skills of their current workforce.
- To maintain sales and grow revenue and profitability.

It is also a matching fund program to help manufacturing companies provide training for their workforce. It offers up to \$100,000 per employer, per calendar year equal to the approved amount. For example, if a company is provided \$50,000 in Manufacturing Innovation Fund Incumbent Worker Training program funds, the employer must also provide at least \$50,000 in matching funds, totaling \$100,000.

- **Develop training programs that combine alternating learning and working periods**

A key point raised by manufacturing business leaders during this research is that training alone is not enough to make people workforce ready—they also need on-the-job experience. In talking about industrial electricians, a critical occupation in the region, business leaders indicated they

were looking for close to a journeyman's level of experience, which could not be provided by traditional associate's degree programs, even if the student worked summers between college semesters. The region's community colleges should be encouraged to pilot an associate's degree training program that would alternate quarters (four per year) of education and work, allowing students to obtain an associate's degree in three or four years, rather than the traditional two years, but with far more hands-on work experience than can be obtained currently.

This would have several advantages. Students would earn significant wages for half of each year, allowing them to graduate with less financial aid debt. The arrangement would make education more accessible to students who can't afford to stop working to enter a full-time program. Students would also gain from having far greater work experience on their resumes than is currently possible. Businesses would benefit from having their workforce needs better met by having a pool of more experienced workers available.

A model for this kind of earn and learn model is the Kentucky Federation for Advanced Manufacturing Education, or KY FAME. Developed by Toyota's North American Production Support Center in Kentucky, the program allows students to earn a two-year associate's degree that includes five straight semesters of course work. The learner spends two days at school and three days at work each week, allowing for significant on-the-job training, course work that is work related, and an income in a chosen field.<sup>26</sup>

- **Development of formal and informal apprenticeships**

To better meet the experience requirements for critical occupations, SAWDC and its partners should explore apprenticeship models and determine their applicability to the needs of the manufacturing industry in the rural region. Funding options specific to apprenticeships currently exist and could be accessed by the state of Alabama, SAWDC, and its partners.

Macomb Community College and the Michigan Coalition for Advanced Manufacturing developed a Registered Apprenticeship in which employers provide paid, on-the-job training. M-CAM involves eight colleges, employers, and the public workforce system, who collaboratively build seamless pathways to credentials with labor-market value and jobs in Michigan's manufacturing sector.<sup>27</sup>

Apprenticeship Carolina, a division of the South Carolina Technical College System, works to ensure that all employers in South Carolina have access to information and technical assistance to create demand-driven Registered Apprenticeship programs.<sup>28</sup> These apprenticeships are available in a wide variety of industries, including manufacturing, health care, and IT. The program provides apprenticeship consultants who work with companies to develop apprenticeships. In 2007, South Carolina had 777 apprentices. There are now more than 11,000 and they are averaging more than 120 new apprentices per month.

RevUp Montana is another apprenticeship example.<sup>29</sup> RevUp Montana is led by Great Falls College MSU, the state's community colleges, and the Montana Department of Labor and Industry. The program engaged 579 business partners (72 percent of all listed manufacturers in

the state), to design and initiate Registered Apprenticeship programs and create a new system of short-term incumbent-worker training modules to upskill workers to meet the needs of manufacturers in the state.

- **Support the development of a satellite community college training center in Washington County**

Washington County has the highest concentration of non-durable goods manufacturing companies in the region. These companies face a high demand for an educated workforce due to both current demand for workers and because they face an upcoming retirement crisis. The critical occupations of plant operator, industrial maintenance, instrumentation and electronics technician, and industrial electrician all require community college education and work experience. The region's community colleges have the required training. However, all of them are located a significant travel distance from these employers. This is a barrier to upskilling and integration of the training programs and the employers. SAWDC and its partners should pursue creating a training center in Washington County, closer to the concentration of companies in this industry. The center could provide training for both new jobseekers and incumbent workers.

## Health Care

Interestingly, few of the health care leaders in the region have a current nursing shortage. However, almost all the people interviewed in health care were concerned that the average age of their nurses is over 50. The retirement wave is clearly on the horizon for nursing. The region has several well-regarded nursing programs, such as Reid State Technical College and Alabama Southern Community College, that produce quality graduates, but more needs to be done to be sure that the supply of health care workers will meet the demand. Specifically, developing career pathways that lead CNAs and LPNs into higher-skill, higher-paying jobs is essential to widening the pipeline of skilled health care workers, as is improving working conditions and educating young people and their families about the wide variety of middle-skill jobs available in health care.

- **Develop retention and recruitment efforts to address upcoming nursing retirements**

There was concern that many of these graduates leave the region upon graduation. Maximizing retention of these new graduates in the region will be very important over the next 10 years. Employers will need to examine workplace policies to see if changes are required to improve retention.

The region also has an opportunity to recruit new nurses from outside the region. In many metro regions and suburban areas, hospitals prioritize hiring only RNs with bachelor's degrees. This was not the case for any of the health care providers interviewed for this research. Therefore, a national recruitment campaign for associate's degree nurses who are looking for hospital employment could be productive. However, other employers commented on the difficulty of recruiting more professionals to the area. An examination of the reasons health care graduates

do not stay in the area or why other employers can't entice some workers will be important to the recruitment of these critical health care workers as well as employees in other sectors.

- **Bring new models of training to the region to support career pathway development to produce more nurses and other caregivers from the existing workforce**

New models of training are another way to supply the region's needs for additional nurses and other caregivers. These could include work-based learning, programs that connect K-12 and higher education, incumbent worker training, and apprenticeships. Work-based learning takes a number of forms, but at its core it involves using work processes as part of the training program. Work-based learning has been demonstrated to assist in training incumbent health care workers for career advancement to positions including nursing. Training new nurses from a pool of people who have already demonstrated commitment to the health care field and to specific employers in the region is a great opportunity to offset some of the expected nursing retirements.

Programs to institute work-based learning include:

- The H2P (Health Professions Pathway), which was created with Trade Adjustment Assistance Community College Career Training grant funding in 2011.<sup>30</sup> It is a partnership of nine colleges. The program includes a competency-based core curriculum to assure basic knowledge, avoid repetition of courses, expose students to a variety of health pathways, and earn industry recognized stacked credentials. The grant required collaboration between community colleges and workforce investment boards, career assessment and credit for prior learning, intrusive advising, and wraparound supports. Jefferson Community and Technical College (Louisville, KY) created "grow your own" incumbent worker training programs with regional health systems, which are designed stackable credentials based on industry needs.
- Rhode Island Nurses Institute Middle College, a charter high school in Providence, RI, created to build a pipeline of nursing candidates while offering opportunities to disadvantaged youth in the state.<sup>31</sup> Students attain a high school degree while taking prerequisites for entry into one of the state's bachelor of science in nursing programs. They also acquire certified nursing assistant credentials.
- New Paths to Professional Nursing, a program of the Robert Wood Johnson Foundation's New Jersey Health Initiatives, funded partnerships of nursing schools and health care employers (hospitals and long-term care) to enable incumbent entry-level workers (and LPNs, in one site) to enter a pathway to bachelor of science in nursing programs.<sup>32</sup> Students received intensive coaching and tutoring, financial support, and mentoring from both faculty and nurses in their workplaces. Many of them have completed prerequisite courses and are now enrolled in bachelor of science in nursing programs.
- CareerSTAT, an initiative to document and endorse the business case for investments in frontline hospital workers and to promote investments that yield strong skill development

and career outcomes for low-wage, frontline hospital workers, would be a good resource for health care employers to turn to for additional best practices.<sup>33</sup>

- **Build stronger relationships with regional home health organizations**

Home health care is the fastest-growing sector of the health care industry and is projected to continue growing rapidly for at least the next 10 years. Developing a strong relationship with home health businesses serving the rural counties will be particularly important in serving the entire health care workforce.

- The Paraprofessional Healthcare Institute works to transform elder care and disability services.<sup>34</sup> PHI promotes quality direct-care jobs as the foundation for quality care. PHI is based in New York City, where it sponsors a service network that provides high-quality home care for thousands of elders and people with disabilities.
- Cooperative Home Care Associates, a South Bronx home care agency owned by its 1,920 employees, includes an employer-based training program that trains hundreds of inner-city women each year.<sup>35</sup> CHCA was founded in 1985 to provide quality home care to clients by providing quality jobs for direct-care workers. CHCA started with 12 home health aides. It maintains an employer-based workforce development program that provides free training for 600 low-income and unemployed women annually.
- The SEIU Healthcare NW Training Partnership (Washington State) has developed a successful Registered Apprenticeship program for home care aides, responding to increased training standards for home care workers as well as high turnover and a lack of career opportunities in this occupation.<sup>36</sup> Employers and participants have expressed strong satisfaction with the results.

## Transportation and Warehousing

- **Support targeted commercial driver's license training**

Across the country, the occupation “truck driver” often has one of the highest number of job postings. Research shows, however, that these postings often inflate the number of positions to be filled. These jobs tend to have high turnover, so employers leave the postings up to ensure a steady stream of applicants. Interviews with Alabama Career Centers staff confirm that commercial driver's licenses are in high demand in the region. Recently, Bishop State Community College conducted a commercial driver's license (CDL) class in the region in partnership with the local America's Job Center in Jackson. Additional targeted training, in collaboration with local employers, should be explored. Given the high cost of providing this training, metrics to determine effectiveness, as described below, should be included in any additional training investment.

## Group 6: Engage in Additional Economic Development Activities.

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Our work focused on how to improve workforce development opportunities in the rural counties of the SAWDC region. While conducting the analysis, it became clear that one of the elements of improving the employment outcomes for the workforce is related to the overall opportunities available in the employment area. Some recommendations as to how SAWDC and its stakeholders can think about enhancing the employment opportunities include:

- Expanding the industry awareness campaign to a regional economic development marketing campaign.
- Stressing to regional planners and other key decision makers the importance of clustering employment centers in the counties closer to residential locations. This will help reduce travel times and lower transportation costs.
- Proposing an industrial/manufacturing land-use study for priority locations. This would encourage economic development entities to direct their efforts to targeted locations.
- Making a concerted effort to craft the story around the appeal of the rural area to the professional workforce. Both manufacturing and health care employers mentioned the difficulty of recruiting this segment of the workforce.
- Supporting the location of manufacturing suppliers in the rural counties. As the aviation, shipbuilding, and other advanced manufacturing industry sectors expand in Mobile and Baldwin counties, more suppliers are moving into southwest Alabama. There may be good locations for some of these suppliers in the rural counties. SAWDC and its partners should work with the region's economic developers and elected officials to recruit suppliers that express an interest in developing new facilities in the region. This takes advantage of the available highway capacity and puts jobs closer to the workforce. Delivery times to Mobile also can be staged to avoid hours when there may be high congestion.

## Group 7: Create a Culture of Continuous Improvement and Adopt Measures of Success.

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One of the criticisms local stakeholders shared during the research process was that many programs in the rural region are isolated. Having a variety of disparate programs with different metrics makes it difficult to have a comprehensive system to meet industry needs. The following recommendations are aimed at developing common measures and reporting results to industry and the public regularly.

- **Develop public dashboards that demonstrate the progress of the workforce system in real time**

A wide range of stakeholders contribute to the achievement of workforce development goals and to meeting the needs of industry in the region. Transparency and accountability can best be achieved by ensuring that all stakeholders have at least some outcome metrics in common. Currently, information on the performance of the many contributors to the workforce system is



fragmented, infrequently updated, and not easily accessible by the public and industry. This lack of timely information makes it difficult to advocate for the system based on its achievements. For training and education providers, the public workforce investment system, and SAWDC as a workforce intermediary, these should include placement rates for participants, if participants were placed in jobs related to their training, entry-level wage rates, and retention rates once employed. SAWDC could adapt its current dashboards for rural-specific needs.

- **Develop a voluntary comprehensive database of postsecondary education and training program participants to inform industry**

Industry would benefit from knowing the status of the workforce development pipeline. Many of the training programs designed to train employees for specific occupations take one year or more to complete. Community colleges don't provide information on how many people are currently in the pipeline and when they are anticipated to be ready to enter employment. A database of people in training or seeking employment, such as the West Alabama Works Career Connect system, could help address these issues, resulting in an increased likelihood of making the best possible matches between industry needs and individual jobseekers' efforts to gain family-supporting employment.

- **Continual improvement—research and implement effective workforce models**

There are many positive training models across the nation that are relevant to the critical industries in the SAWDC rural counties. I-BEST is a strong model for rapid developmental education. Apprenticeship models in South Carolina, manufacturing training in Wisconsin, and health care training in Kentucky all may be effective in the region.<sup>37,38,39</sup> SAWDC and its partners should develop and implement a formalized knowledge-acquisition process to ensure that the best programs are brought to the region. Site visits to effective programs should also be encouraged.

- **Include workforce development metrics in performance measures for all community college programs**

The region's community colleges lack performance measures of workforce development metrics such as employment status, job retention, and wages for people completing degree and certificate programs. These metrics should be included in the measurement and evaluation of the region's community colleges.

Other states are including these metrics to drive improvement. The Florida College System, which includes the state's community colleges, is running a pilot program using job placement and entry wages as metrics for its Performance Funding Model.<sup>40</sup> New funds provided to community colleges in Kansas are subject to a menu of performance metrics from which institutions can select, including percentage of students employed and wages of students hired post program, in addition to traditional performance metrics.<sup>41</sup> Texas State Technical College operates on a performance-based funding model that uses job placement and 12-month wages, among others, as metrics to determine its state funding.<sup>42</sup>

The collection of data on workforce development such as job placement, retention, and wage gains can be challenging because of privacy issues and lack of cooperation agreements among state agencies. However, many colleges have been able to build relationships with their public Unemployment Insurance systems to collect wage record data to see whether and where their graduates are employed. All community colleges in Missouri and Mississippi have such an agreement, as do Mitchell Technical Institute in South Dakota, Washburn Institute of Technology in Kansas, and Front Range Community College in Colorado.

## PRIORITIZING ACTIONS

As noted, there are a large number of recommendations for SAWDC and its stakeholders to consider and implement. Each recommendation has the potential to improve the workforce development opportunities within the region. However, most of these recommendations will require the cooperation and resources of more than one organization and may require significant planning and new funding to be implemented. In fact, many of the recommendations may require state action and others may be influenced by federal policy. Here is a list of questions or criteria that SAWDC and its partners can use to determine which options to focus on and in what order.

**Low-hanging fruit.** Have any of these recommendations been suggested previously and are ready for a new champion to be implemented? Or are any of them part of a bigger strategy to which it could be added?

**“No man is an island.”** Very few of these recommendations can be accomplished unilaterally, but some may require the approval or involvement of fewer stakeholders than others. Each recommendation needs to be evaluated as to the number of players required to make change happen. A stakeholder analysis will reveal whether a change can be made with just regional stakeholders, or whether state or federal actors are required.

**Sphere of influence.** Do the rural regional players have the connections with the external stakeholders to make the change required? What level of commitment is required from outside the rural area? Are other players necessary to influence the necessary decision makers? How will recruiting these stakeholders delay the change process?

**Financial implications.** What are the costs of making this change? Do the regional stakeholders have the funds available, or does it require new funding sources or taking funding from other areas?

**State priorities.** Does this change align with any existing state projects or initiatives that could be leveraged?

**Federal priorities.** Does this change align with any existing federal projects or initiatives that could be leveraged?

	Low-Hanging Fruit	No Man is an Island	Sphere of Influence	Financial Implications	State Priority	Federal Priority
	Is this an easy recommendation to implement?	Stakeholder analysis: How many parties are involved?	Do the regional stakeholders have authority for this recommendation on their own?	Identify the costs involved and where the funding would come from.	Identify any state policies or initiatives that would help implement the recommendation.	Identify any federal policies or initiatives that would help implement the recommendation.
<b>Group 1</b>						
<b><i>Improve Alignment Between Industry Needs and Community Colleges</i></b>						
Redesign programs of study to better match employers' changing needs						
Develop satellite sites for the provision of postsecondary education and training services						
Develop alternative education models that address barriers to entering community college degree and certificate programs						
Encourage community colleges to hire experienced workers nearing retirement as instructors						
Integrate employability skills into all programs of study						

	Low-Hanging Fruit	No Man is an Island	Sphere of Influence	Financial Implications	State Priority	Federal Priority
	Is this an easy recommendation to implement?	Stakeholder analysis: How many parties are involved?	Do the regional stakeholders have authority for this recommendation on their own?	Identify the costs involved and where the funding would come from.	Identify any state policies or initiatives that would help implement the recommendation.	Identify any federal policies or initiatives that would help implement the recommendation.
<b>Group 2</b>						
<b><i>Increase Public Workforce System Services to the Rural Counties</i></b>						
Include rural priorities in the expanded workforce development board						
Improve access to public workforce system services						
Provide workforce services during nontraditional hours						

	Low-Hanging Fruit	No Man is an Island	Sphere of Influence	Financial Implications	State Priority	Federal Priority
	Is this an easy recommendation to implement?	Stakeholder analysis: How many parties are involved?	Do the regional stakeholders have authority for this recommendation on their own?	Identify the costs involved and where the funding would come from.	Identify any state policies or initiatives that would help implement the recommendation.	Identify any federal policies or initiatives that would help implement the recommendation.
<b>Group 3</b>						
<b><i>Addressing Regional Infrastructure Issues</i></b>						
Improve broadband access						
Support regional transportation improvement projects						

	Low-Hanging Fruit	No Man is an Island	Sphere of Influence	Financial Implications	State Priority	Federal Priority
	Is this an easy recommendation to implement?	Stakeholder analysis: How many parties are involved?	Do the regional stakeholders have authority for this recommendation on their own?	Identify the costs involved and where the funding would come from.	Identify any state policies or initiatives that would help implement the recommendation.	Identify any federal policies or initiatives that would help implement the recommendation.
<b>Group 4</b>						
<b><i>Expand and Improve the Pre-Employment Pool</i></b>						
Explore programs that support people with criminal backgrounds to reenter the workforce						
Encourage employers to explore programs for hiring veterans						
Promote hiring of people with disabilities						
Develop programs to support low-income residents						

	Low-Hanging Fruit	No Man is an Island	Sphere of Influence	Financial Implications	State Priority	Federal Priority
	Is this an easy recommendation to implement?	Stakeholder analysis: How many parties are involved?	Do the regional stakeholders have authority for this recommendation on their own?	Identify the costs involved and where the funding would come from.	Identify any state policies or initiatives that would help implement the recommendation.	Identify any federal policies or initiatives that would help implement the recommendation.
<b>Group 5</b>						
<b><i>Implement Industry-Specific Recommendations to Better Meet Needs of Sectors—Manufacturing</i></b>						
Implement a regional manufacturing industry awareness campaign						
Support the development of training for incumbent worker career advancement						
Develop training programs that combine alternating learning and working periods						
Develop formal and informal apprenticeship models						
Support the development of a satellite community college training center in Washington County						



	Low-Hanging Fruit	No Man is an Island	Sphere of Influence	Financial Implications	State Priority	Federal Priority
	Is this an easy recommendation to implement?	Stakeholder analysis: How many parties are involved?	Do the regional stakeholders have authority for this recommendation on their own?	Identify the costs involved and where the funding would come from.	Identify any state policies or initiatives that would help implement the recommendation.	Identify any federal policies or initiatives that would help implement the recommendation.
<b>Group 5</b>						
<b><i>Implement Industry-Specific Recommendations to Better Meet Needs of Sectors—Health Care</i></b>						
Develop retention and recruitment efforts to address upcoming nursing retirements						
Bring new models of training to the region to support career pathway development to produce more nurses and caregivers						
Build stronger relationships with regional home health organizations						
<b><i>Implement Industry-Specific Recommendations to Better Meet Needs of Sectors—Transportation</i></b>						
Support targeted CDL training						

	Low-Hanging Fruit	No Man is an Island	Sphere of Influence	Financial Implications	State Priority	Federal Priority
	Is this an easy recommendation to implement?	Stakeholder analysis: How many parties are involved?	Do the regional stakeholders have authority for this recommendation on their own?	Identify the costs involved and where the funding would come from.	Identify any state policies or initiatives that would help implement the recommendation.	Identify any federal policies or initiatives that would help implement the recommendation.
<b>Group 6</b>						
<b><i>Engage in Additional Economic Development Activities</i></b>						
Expand industry awareness campaign to regional economic development						
Encourage clustered employment centers						
Propose an industrial/ manufacturing land-use study for priority locations						
Develop a campaign to appeal to professional workers						
Support location of manufacturing suppliers in rural counties						

	Low-Hanging Fruit	No Man is an Island	Sphere of Influence	Financial Implications	State Priority	Federal Priority
	Is this an easy recommendation to implement?	Stakeholder analysis: How many parties are involved?	Do the regional stakeholders have authority for this recommendation on their own?	Identify the costs involved and where the funding would come from.	Identify any state policies or initiatives that would help implement the recommendation.	Identify any federal policies or initiatives that would help implement the recommendation.
<b>Group 7</b>						
<b><i>Create a Culture of Continuous Improvement and Adopt Measures of Success</i></b>						
Develop public dashboards that demonstrate the progress of the workforce system in real time						
Develop a voluntary comprehensive database of postsecondary education and training program participants						
Research and implement effective workforce models						
Include workforce development metrics in performance measures for all community college programs						

# BIBLIOGRAPHY

- Aaronson, Daniel, Bhashkar Mazumder, & Shani Schechter. 2010. "What is behind the rise in long-term unemployment?" *Federal Reserve Bank of Chicago, Economic Perspectives*. Vol. 34, No. 2.
- Addy, Samuel et al. 2015. State of the Workforce Report IX, Region 7. Tuscaloosa, AL: Center for Business and Economic Research, The University of Alabama, and Alabama Department of Labor.
- Altstadt, David, Mamadou Ndiaye, Mary Wright, & Dudley Sylla. 2015. *Opportunity Awaits: Reconnecting Franklin County Young Adults to School and Work*. Boston, MA: Jobs for the Future.
- Anderson, Julie, Elyse Shaw, Chandra Childers, Jessica Milli, & Asha DuMonthier. 2015. *The Status of Women in the South*. Washington, DC: The Institute for Women's Policy Research.
- Appalachian Regional Commission. 2014. *Economic Diversity in Appalachia: Statistics, Strategies, and Guide for Action*. Washington, DC: Author.
- Boswell, Katherine. 2016. *The Arkansas Career Pathways Initiative: Phase One Research Results*. College Count\$.
- College and Career Ready Task Force. 2014. *2014-2015 Council Recommendations to Governor Robert Bentley*. Montgomery, AL: Alabama Workforce Council. Available at: <http://governor.alabama.gov/assets/2014/07/College-and-Career-Ready-Standards.pdf>
- Ezzell, Tim, Dayton Lambert, & Eric Ogle. 2012. *Strategies for Economic Improvement in Appalachia's Distressed Counties: An analysis of ten distressed and formerly distressed Appalachian counties*. Appalachian Regional Commission. Knoxville, TN: University of Tennessee, Knoxville.
- Gabler, Kathleen. 2011. *The Great Recession: 18-Months Before, During, and After*. Tuscaloosa, AL: Center for Business and Economic Research, the University of Alabama.
- Gafford, Traci. 2014. "What We Heard in Alabama." Federal Reserve Bank of Atlanta. Available at: <http://southpoint.frbatlanta.org/southpoint/2014/09/what-we-heard-in-alabama.html>
- Garr, Emily. 2009. *The Landscape of Recession: Unemployment and Safety Net Services Across Urban and Suburban America*. Washington, DC: Metropolitan Policy Program at Brookings.
- Hertz, Tom, Lorin Kusmin, Alex Marré, & Tim Parker. 2014. *Rural Employment Trends in Recession and Recovery*. Washington, DC: U.S. Department of Agriculture.
- Hertz, Tom & Tracey Farrigan. 2014. *Understanding the Evolution of Rural Child Poverty*. Washington, DC: U.S. Department of Agriculture.
- Hoke, Linda et al. 2014. *Re-imagining Workforce Development: 2013 Report on the Future of the South*. Clarksdale, MS: Delta Regional Authority.
- Lee, Tonya. n.d. *Alabama Education & Training Outlook: Occupational Projections 2012–2022*. Montgomery, AL: Alabama Department of Labor, Labor Market Information Division.
- LeRoy, Greg, Carolyn Fryberger, Kasia Tarczynska, Thomas Cafcas, Elizabeth Bird, & Philip Mattera. 2015. *Shortchanging Small Business: How Big Businesses Dominate State Economic Development Incentives*. Washington, DC: Good Jobs First.

- Liu, Amy. 2016. *Remaking Economic Development: The Markets and Civics of Continuous Growth and Prosperity*. Washington, DC: Metropolitan Policy Program at Brookings.
- McIlvaine, Leigh & Greg LeRoy. 2012. *Breaking Down Silos Between Economic Development and Public Transportation: An Evaluation of Four States' Modest Efforts in Making Job Subsidies Location-Efficient*. Washington, DC: Good Jobs First.
- MDC, Inc. 2014. *State of the South: Building an Infrastructure of Opportunity for the Next Generation*. Durham, NC: Author.
- National Fund for Workforce Solutions. 2008. *Exploring Rural Context and Opportunities*. Boston, MA: Jobs for the Future.
- Lichter, Daniel T., Domenico Parisi, & Michael C. Taquino. 2013. *The Geography of Exclusion: Race, Segregation, and Concentrated Poverty*. Ann Arbor, MI: Gerald R. Ford School of Public Policy, University of Michigan.
- Partridge, Mark. 2013. *Fighting Poverty One Place at a Time*. Columbus, OH: Department of Agricultural, Environmental, and Development Economics, Ohio State University.
- Poole, Ken et al. 2015. *Appalachia Then and Now: Examining Changes to the Appalachian Region Since 1965*. Washington, DC: Appalachian Regional Commission.
- Jobs for the Future. 2015. *The Road Forward: Transforming Union and Webster Counties into Work Ready Communities*. Boston, MA: Author.
- Ross, Martha, Carolyn Gatz, Richard Kazis, John Ng, and Nicole Prchal Svajlenka. 2015. *Unemployment Among Young Adults: Exploring Employer-Led Solutions*. Washington, DC: Metropolitan Policy Program at Brookings.
- Spence, Michael & Sandile Hlatshwayo. 2011. *The Evolving Structure of the American Economy and the Employment Challenge*. New York, NY: Council on Foreign Relations.
- U.S. Chamber of Commerce Foundation. 2014. *Enterprising States 2014: Re-creating Equality and Opportunity*. Washington, DC: Author.
- U.S. Department of Agriculture. 2016. *Rural America at a Glance: 2015 Edition*. Washington, DC: Author.

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## RESOURCES

In the recommendation section of the report, specific programs are referenced as examples for implementing the suggested solutions. The URLs for these are listed below.

<sup>1</sup> RI NPR. 2016. "CCRI Breaks Ground on New Facility in Partnership with Electric Boat." <http://ripr.org/post/ccri-breaks-ground-new-facility-partnership-electric-boat>

<sup>2</sup> CCRC. "How I-BEST Works: Findings from a Field Study of Washington State's Integrated Basic Education and Skills Training Program." <http://ccrc.tc.columbia.edu/publications/how-i-best-works.html>

<sup>3</sup> Hope Policy Institute. 2015. "MI-BEST Secures Better Economic Outcomes for Mississippi's Working Poor Mothers." <http://hopepolicy.org/blog/mi-best-secures-better-economic-outcomes-for-mississippis-working-poor-mothers>

<sup>4</sup> The Century Foundation. 2016. "When College Students Start Behind." <https://tcf.org/content/report/college-students-start-behind>

<sup>5</sup> Encore.org. [www.encore.org](http://www.encore.org)

<sup>6</sup> IBM. 2008. "Transition to Teaching." <http://www.ibm.com/ibm/responsibility/teaching.shtml>

<sup>7</sup> Thomasville Public Library. <http://www.thomasvillepubliclibrary.org>

<sup>8</sup> Workforce Innovation Fund. *Pasco-Hernando Workforce Innovation Fund Project*. Washington, DC: Author. <https://innovation.workforcegps.org/~media/WorkforceGPS/innovation/Files/Pasco-Hernando-Lessons-Learned-Case-Study-090415.pdf>

<sup>9</sup> Sumners, Joe A. & Larry Lee. 2004. *Crossroads and Connections: Strategies for Rural Alabama*. Auburn, AL: Auburn University. p.15. <http://www.auburn.edu/outreach/gedi/publications.htm>

<sup>10</sup> Kentucky Wired. <http://kentuckywired.ky.gov>

<sup>11</sup> Hughes, Timothy & Doris James Wilson. 2002. *Reentry Trends in the United States*. Washington, DC: U.S. Department of Justice, Bureau of Justice Assistance. [bjs.ojp.usdoj.gov/content/pub/pdf/reentry.pdf](https://bjs.ojp.usdoj.gov/content/pub/pdf/reentry.pdf)

<sup>12</sup> The United States Attorney's Office Southern District of Alabama. "Project H.O.P.E. Re-Entry Initiative." <https://www.justice.gov/usao-sdal/programs/ex-offender-re-entry-initiative>

<sup>13</sup> Prison Legal News. 2016. "Alabama Forced to Confront Criminal Justice Reform." <https://www.prisonlegalnews.org/news/2016/may/5/alabama-forced-confront-criminal-justice-reform>

<sup>14</sup> Equal Voice. 2016. "'Ban the Box' Enhances Chances for Workers to Succeed." <http://www.equalvoiceforfamilies.org/ban-the-box-enhances-chances-for-workers-to-succeed>

<sup>15</sup> Haskins, Shelly. 2015. "Five Things Alabama Can Learn from North Carolina's Prison Reforms." *Justice Center*. <http://csgjusticecenter.org/jr/north-carolina/media-clips/five-things-alabama-can-learn-from-north-carolinas-prison-reforms>

<sup>16</sup> Strauss, Karen. 2016. "How Veterans Adjust to the Civilian Workforce." *Forbes*. <http://www.forbes.com/sites/karstenstrauss/2016/11/11/how-veterans-adjust-to-the-civilian-workforce/#12d32ae251c5>

<sup>17</sup> CareerBuilder. 2016. "Annual CareerBuilder Survey Finds That Hiring Veterans Remains a Strong Focus, but Veteran Job Satisfaction Takes a Dip." <http://www.careerbuilder.com/share/aboutus/pressreleasesdetail.aspx?id=pr973&sd=11/9/2016&ed=11/09/2016>

<sup>18</sup> Alabama Department of Rehabilitation Services. 2012. "Business Relations Program: Incentive\$." [http://www.rehab.alabama.gov/business-partners/incentive\\$](http://www.rehab.alabama.gov/business-partners/incentive$)

- 
- <sup>19</sup> Godfrey, Ryan. 2016. "Video to Showcase ADRS Business Relations Versatility." *Alabama Department of Rehabilitation Services, Rehab News*. <https://adrsrehabnews.com/2016/07/21/video-to-showcase-adrs-business-relations-versatility>
- <sup>20</sup> Manufacturing Institute. 2016. "Inspiring Youth with Dream It. Do It." <http://www.themanufacturinginstitute.org/Image/Dream-It-Do-It/Dream-It-Do-It.aspx>
- <sup>21</sup> Multi-State Advanced Manufacturing Consortium (M-SAMC). <http://www.msamc.org>
- <sup>22</sup> BridgeValley Community & Technical College. "History." <http://www.bridgevalley.edu/history>
- <sup>23</sup> The Connecticut Department of Labor. "Connecticut Manufacturing Innovation Fund Incumbent Worker Training Program." <https://www.ctdol.state.ct.us/IWTmanufappform.htm>
- <sup>24</sup> Massachusetts Labor and Workforce Development. 2016. "Workforce Training Fund Programs (WTFP)." <http://www.mass.gov/lwd/employment-services/business-training-support/wtfp>
- <sup>25</sup> CareerSource Florida. 2016. "Training Grants." <http://careersourceflorida.com/business-services/training-grants>
- <sup>26</sup> KY FAME. 2016. "To remain competitive, manufacturers must create a pipeline of highly skilled workers." <http://kyfame.com/about>
- <sup>27</sup> M-CAM. <http://www.m-cam.org>
- <sup>28</sup> Apprenticeship Carolina. <http://www.apprenticeshipcarolina.com>
- <sup>29</sup> RevUp Montana. <http://www.revupmontana.com>
- <sup>30</sup> Health Professions Pathways. 2016. "About Us." <http://www.h2p.careers/about-us>
- <sup>31</sup> Rhode Island Nurses Institute Middle College Charter School. <http://www.rinimc.org>
- <sup>32</sup> New Jersey Health Initiatives. 2016. "Video—New Paths to Professional Nursing." <http://www.njhi.org/news/video-new-paths-to-professional-nursing>
- <sup>33</sup> National Fund for Workforce Solutions. 2016. "CareerSTAT Leadership." <https://nationalfund.org/initiatives/careerstat/careerstat-leadership>
- <sup>34</sup> PHI Quality Care Through Quality Jobs. <http://phinational.org>
- <sup>35</sup> Cooperative Home Care Associates. 2013. "Who We Are." <http://www.chcany.org>
- <sup>36</sup> Myseiubenefits. 2015. "In the News: Apprenticeship Program, HCA Tech Pilot." <http://www.myseiubenefits.org/training/apprenticeship-program>
- <sup>37</sup> Apprenticeship Carolina. <http://www.apprenticeshipcarolina.com>
- <sup>38</sup> WRTP/BIG STEP. <http://www.wrtp.org>
- <sup>39</sup> Altstadt, David, Maria Flynn, & Randall Wilson. 2012. *Better Care, Better Careers: The Jobs to Careers Strategy for Growing a Skilled Health Care Workforce*. Boston, MA: Jobs for the Future. [http://www.jff.org/sites/default/files/publications/J2C\\_BetterCareBetterCareers\\_041812.pdf](http://www.jff.org/sites/default/files/publications/J2C_BetterCareBetterCareers_041812.pdf)
- <sup>40</sup> Florida State Board of Education. 2015. *Florida College System Performance Funding Overview*. Tallahassee, FL: Florida Department of Education. <http://www.fldoe.org/core/fileparse.php/12078/urlt/performance.pdf>; Florida State Board of Education. 2016. *Florida College System Performance Based Funding*. Tallahassee, FL: Florida Department of Education. <http://www.fldoe.org/core/fileparse.php/15219/urlt/fcsp perf.pdf>
- <sup>41</sup> Kansas State Legislature. 2014. "2014 Statute." [http://kslegislature.org/li/b2013\\_14/statute/074\\_000\\_0000\\_chapter/074\\_032\\_0000\\_article/074\\_032\\_0002\\_d\\_section/074\\_032\\_0002d\\_k/](http://kslegislature.org/li/b2013_14/statute/074_000_0000_chapter/074_032_0000_article/074_032_0002_d_section/074_032_0002d_k/); Kansas Board of Regents. "Performance Agreements." [https://www.kansasregents.org/academic\\_affairs/performance\\_agreements](https://www.kansasregents.org/academic_affairs/performance_agreements)
- <sup>42</sup> Texas Association of Community Colleges. 2016. "Student Success Points." <http://www.tacc.org/pages/data-and-info/student-success-points>; Selingo, Jeffrey J. and Van Der Werf, Martin. 2016. *Linking Appropriations for the Texas State Technicaql College System to Student Employment Outcomes*. Indianapolis, IN: Lumina Foundation. <https://www.luminafoundation.org/files/resources/linking-appropriations-to-outcomes-tx-1.pdf>