SOUTH CAROLINA
MANUFACTURERS
+ COMMERCE

SCFutureMakers

The Economic Impact of Manufacturing in South Carolina

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EXECUTIVE SUMMARY

- Manufacturing is one of South Carolina's largest industries and has long been a primary driver of the state's economy. Over the past 30 years, the Palmetto State has transformed into a globally competitive, export-oriented manufacturing hub that includes a strong and expanding statewide presence.

- Transportation Equipment Manufacturing is the largest and fastest-growing manufacturing subsector in South Carolina, having nearly doubled as a share of the state's total manufacturing industry over the past twenty years (from 11.9% to 20.3%).

- The current economic impact of the manufacturing industry in South Carolina is estimated to total between $294 billion and $313 billion annually. This figure reflects the dollar value representing all final goods and services produced statewide that can be attributed (directly or indirectly) to manufacturing. This level of economic activity corresponds to between 734,114 and 782,867 jobs and to between $55 billion and $59 billion in labor income for South Carolinians.

- This level of economic activity also implies that manufacturing supports (directly and indirectly) more than 30 percent of the state's employment base and is one of the few industry sectors that makes relatively high contributions to both GDP and employment. Moreover, manufacturing provides employment opportunities in small- and mid-sized communities where economic growth has often lagged that of larger, metropolitan regions.

- One of the primary contributing factors to manufacturing's sizable statewide economic footprint in South Carolina is a large and diverse network of suppliers, logistics providers, and professional service providers that all generate additional jobs and economic activity across the state. As a result, manufacturing maintains among the highest employment multiplier effects in South Carolina.

- Automotive manufacturing maintains an especially high employment multiplier of 4.6. This means that for every 10 jobs created in automotive manufacturing, an additional 36 jobs are created elsewhere in South Carolina. When compared to the average employment multiplier across all South Carolina industries (at 1.7), this shows that new automotive manufacturing investments have a relatively unique ability to scale-up employment in the Palmetto State.

- Because manufacturing in South Carolina is increasingly focused on high-value production through the use of innovative technologies and high-skill labor, manufacturing jobs typically pay above-average wages and offer a variety of strong career pathways for workers, including those without four-year degrees. Manufacturing jobs in South Carolina currently pay a wage premium of approximately 24 percent over the average South Carolina job.

- This focus on high-value production has also helped South Carolina's manufacturing industry to narrow the wage gap with traditional Rust Belt states that have historically dominated U.S. manufacturing. Since 2004, South Carolina's average manufacturing wage has increased by 11 percentage points relative to manufacturing wages in the Rust Belt.

- Despite the high degree of volatility over the past five years, South Carolina remains among the most competitive locations for U.S. manufacturing. Not only has South Carolina manufacturing employment expanded at more than twice the national average since 2010 (+26.4% vs. +9.4%), it has also remained relatively resilient throughout the 2020s. Between 2019 and 2025, manufacturing employment in South Carolina expanded by a total of approximately of +1.2 percent, compared to a pullback of -1.8 percent at the national level.

- The share of workers in older age groups within the manufacturing industry has been steadily growing over the past fifteen years, which signals that a substantial portion of the workforce is approaching traditional retirement age. As these workers retire, significant workplace gaps in experience and productivity could emerge. This reinforces the importance of firm investments in workforce upskilling to minimize such losses as the number of worker retirements increases.

SECTION I
INTRODUCTION

Manufacturing has long been a cornerstone of South Carolina's economy. As one of the state's largest industries, manufacturing serves not only as a primary basis for local job and income creation, but also as a major source of South Carolina's long-run economic growth.

Over the past 30 years, the Palmetto State has transformed into a globally competitive, export-oriented manufacturing hub that includes a strong and expanding presence in aerospace, automotive, advanced materials, chemicals, and food processing. As these manufacturing sectors have grown, they have also attracted a broad network of suppliers, logistics providers, and professional service providers that all generate additional job creation and economic activity across the state. As a result, manufacturing maintains among the highest employment multiplier effects in South Carolina.

Because manufacturing in South Carolina is increasingly focused on high-value production through the use of innovative technologies and high-skill labor, manufacturing jobs typically pay above-average wages and offer a variety of strong career pathways for workers, including those without four-year degrees. Moreover, manufacturing provides employment opportunities in small- and mid-sized communities where economic growth has often lagged that of larger, metropolitan regions.

Given the vital role that manufacturing plays in shaping South Carolina's economy, it is important to fully understand the breadth of the industry's economic footprint along with the broader changes in the market environment that are likely to impact both the size and growth rate of manufacturing over time. The purpose of this study is to specifically conduct a comprehensive assessment of the manufacturing industry in South Carolina.

This study begins with an overview of the importance that manufacturing has had to South Carolina's long-run economic growth and how recent trends compare to that of other states that have historically dominated U.S. manufacturing. Section III then provides a description of the economic impact methodology used to quantify manufacturing's economic impact in South Carolina along with the primary results of this study. Next, Section IV outlines the short-run challenges and long-run opportunities for South Carolina manufacturing that have emerged in the post-pandemic economy, while Section V provides a workforce profile of the occupations that are likely to be in highest demand in the coming years. Finally, Section VI offers a brief conclusion.

What is Manufacturing?

Manufacturing Definition

Manufacturing is the process of **making standardized products, usually in large quantities, using machines, tools, and labor.** Often taking place in factories, manufacturing involves turning **raw materials** (like metal, plastic, harvested logs, or food ingredients) into either **intermediate goods** or **finished goods** that can be sold to other businesses or to the public.

Why isn't a pizza restaurant considered to be a manufacturer?
A pizza restaurant is similar to a manufacturer in that it assembles ingredients to make a product (pizzas). However, pizza restaurants are generally considered service providers because they are preparing and serving customized meals for immediate consumption. By contrast, an example of a pizza manufacturer would be a facility that produces standardized, frozen pizzas in large quantities that are then packaged and sold in many locations that are independent of the production site.

Why is a sawmill considered to be a manufacturer but a logging company is not?
Sawmills engage in the process of creating new, standardized products (e.g., lumber, boards, or chips) from raw materials (i.e., harvested logs). By contrast, logging companies engage in the process of natural resource extraction – that is – the process of cutting and transporting trees from forests. Or put another way, logging companies locate, cut, and transport trees, but do not create the trees themselves.

Borderline Cases: Bakeries and Breweries
Bakeries and breweries are located at the intersection of manufacturers and service providers and share characteristics of both. Their classification depends on (1) how they produce and (2) for whom they produce. Large commercial bakeries and breweries that use standardized recipes, engage in continuous production, and distribute to wholesalers or retailers would likely be considered manufacturers. By contrast, small bakers or breweries that produce in small batches, customize their products, or provide an on-site customer experience (e.g., a dining area or tasting room) would more likely be considered a service provider.

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MANUFACTURING AND ITS IMPORTANCE TO SOUTH CAROLINA

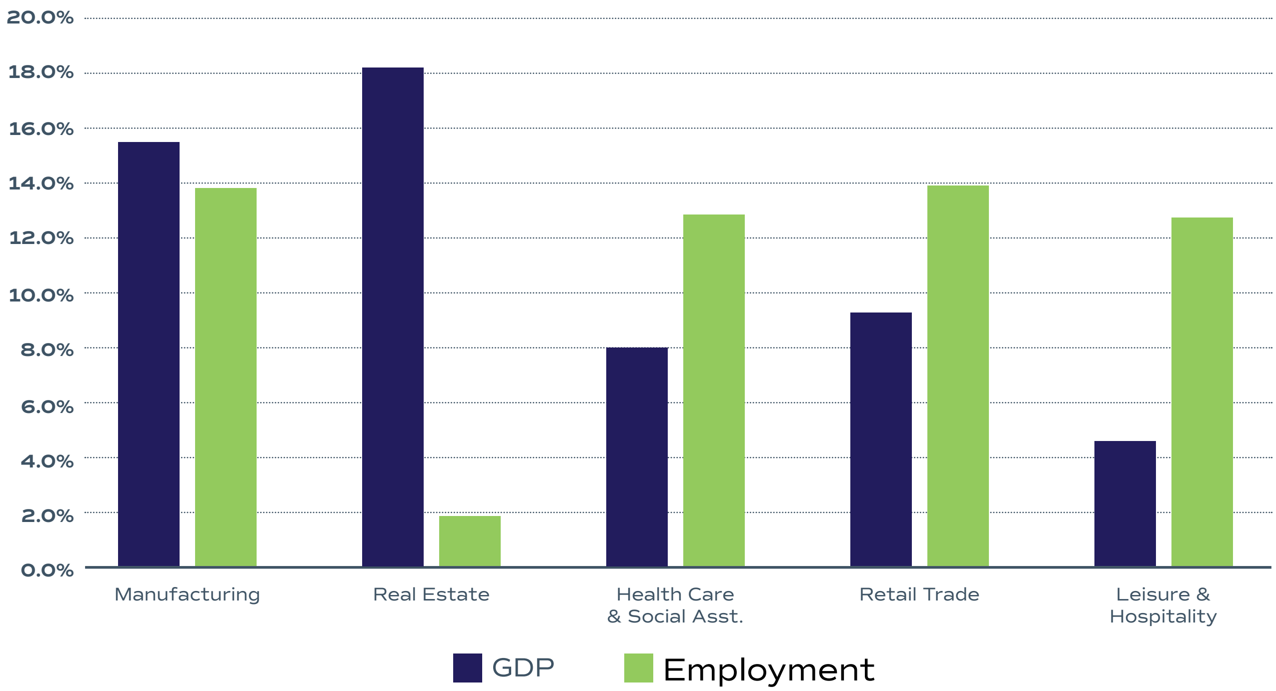
A manufacturer is typically defined as any firm that engages in making, fabricating, or changing things into new forms or in refining, rectifying, or combining different materials. In South Carolina, the U.S. Bureau of Labor Statistics estimates that there are currently 263,500 individuals working for manufacturing firms. These firms are broadly classified based on the type of product made, with the single largest subsector being Transportation Equipment Manufacturing. This is followed by Plastics & Rubber Products Manufacturing and Fabricated Metal Product Manufacturing.

Manufacturing has a sizable economic footprint in South Carolina that can be observed in multiple ways. First, manufacturing is relatively unique among all industry sectors in that it is among the highest contributors to both GDP and employment. As such, a given level of growth in manufacturing translates into a much higher economic contribution to the state's economy than the same level of growth would in a smaller industry. Consider two industry sectors, one containing 50,000 employees and one containing 100,000 employees. A two percent annual employment growth rate in both sectors would generate twice as many new jobs in the larger industry. **Figure 1** specifically illustrates several of the largest industry sectors in South Carolina that contribute most to the state's economy. Notice that manufacturing maintains relatively high contributions to both GDP and employment.

Manufacturing is relatively unique among all industry sectors in that it is among the highest contributors to both GDP and employment.

Figure 1 Percentage Contributions to GDP & Employment: South Carolina

Source: U.S. Bureau of Labor Statistics & U.S. Bureau of Economic Analysis, 2024



This economic footprint also extends statewide. Across South Carolina, manufacturing employment is geographically concentrated in and around the state's major metropolitan regions, which reflects broader national economic growth patterns in which the bulk of economic and industrial activity is increasingly concentrated within large population centers. The Upstate Region, the Midlands Region, and the Charleston tri-county region generally contain the largest number of manufacturing jobs, with Spartanburg and Greenville counties ranking first and second, respectively. **Figure 2** specifically highlights the statewide distribution of manufacturing employment.

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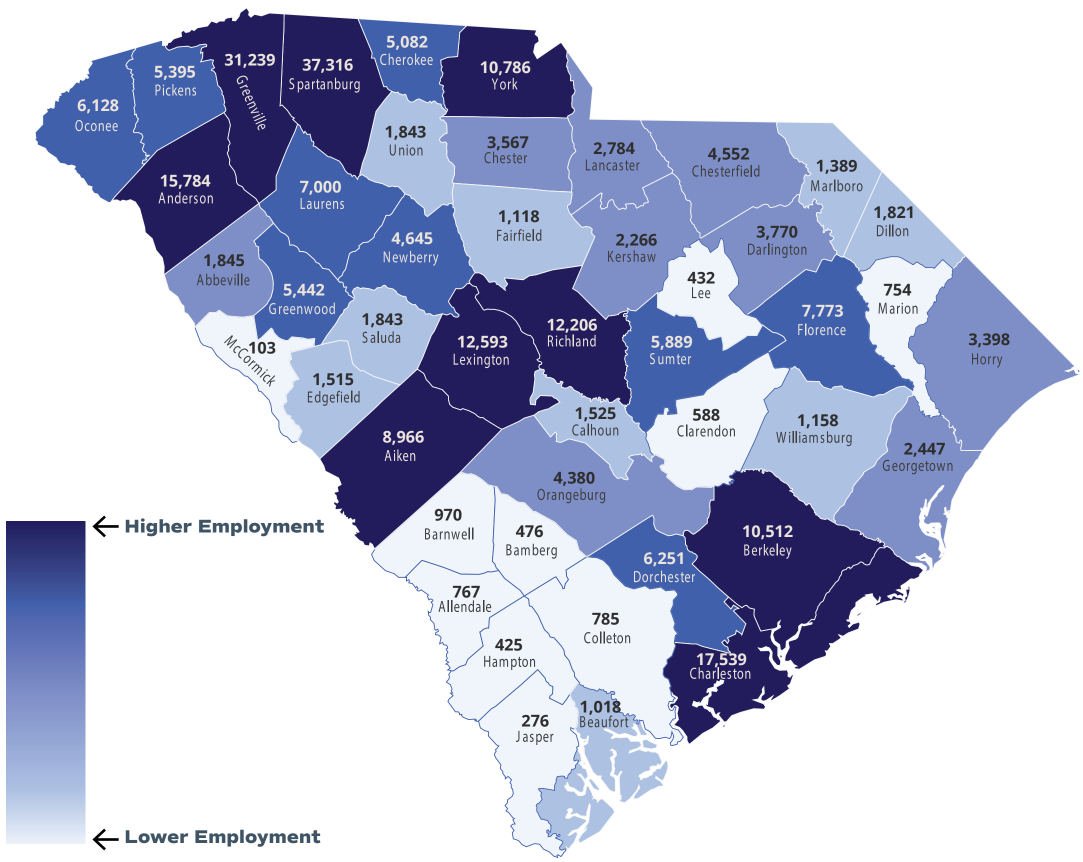
Figure 2 Total Manufacturing Employment by County

Source: U.S. Bureau of Labor Statistics, 2024



Yet despite manufacturing's general importance for South Carolina as a whole, its importance to the economy of the Upstate is especially pronounced. Upstate South Carolina has the highest concentration of manufacturing in the state, containing nearly half of South Carolina's direct manufacturing employment base (48%)[1]. Such a concentration means that many Upstate counties disproportionately rely on the manufacturing industry for their long-run economic success. For example, more than 40 percent of all jobs in Saluda, Abbeville, and Laurens counties are in manufacturing. Moreover, of the 15 South Carolina counties with the highest concentration of manufacturing, nine are contained within the Upstate. **Figure 3** breaks down this county-level industry concentration.

[1] Upstate South Carolina is defined to include the counties of Abbeville, Anderson, Cherokee, Edgefield, Greenville, Greenwood, Laurens, McCormick, Newberry, Oconee, Pickens, Spartanburg, and Union.

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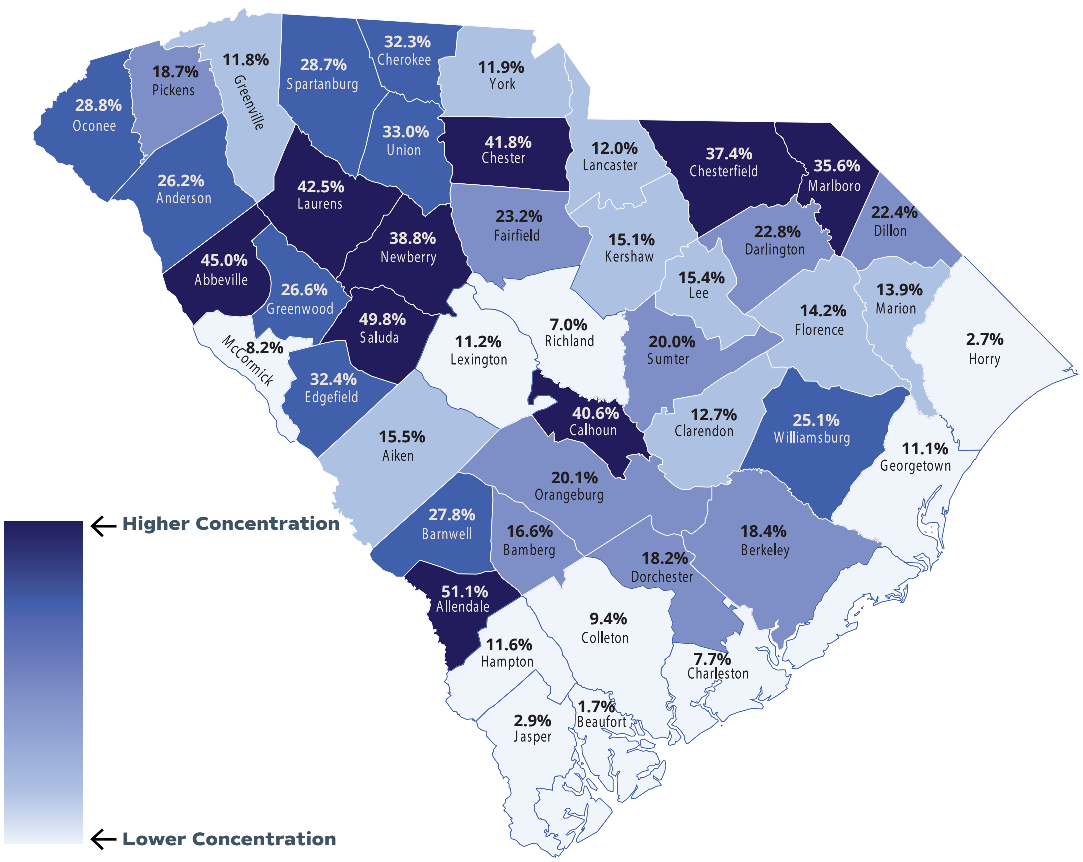
Figure 3 Pct. of Total County Employment in Manufacturing

Source: U.S. Bureau of Labor Statistics, 2024



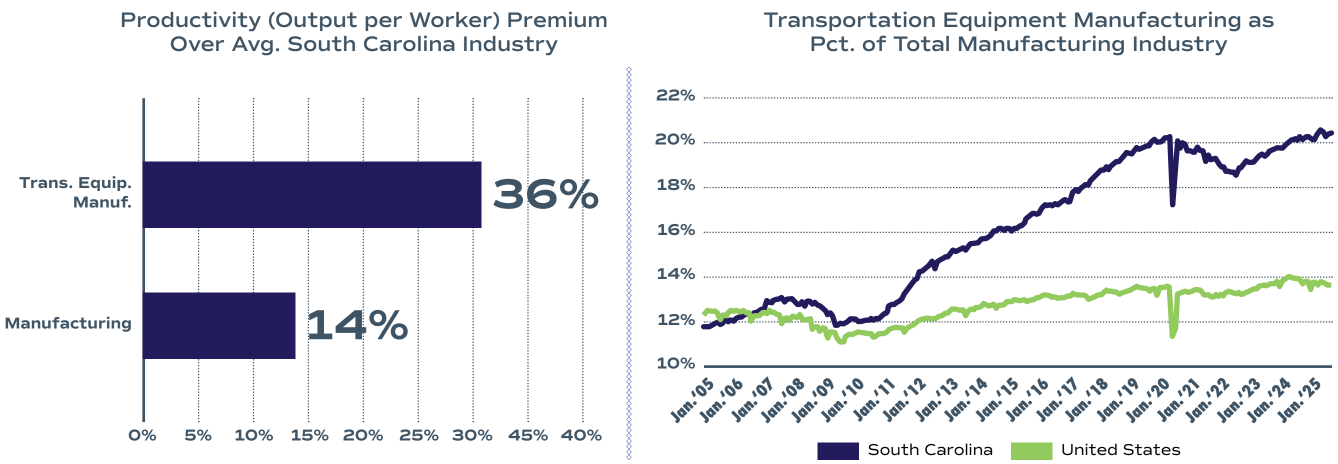
In addition to making substantial contributions to South Carolina's overall employment base, ***the specific jobs that are created by manufacturing are typically skilled, high-wage positions that accompany the high-value production taking place in many of the state's manufacturing subsectors.*** This is most easily observed by examining trends in Transportation Equipment Manufacturing, which is also the subsector more commonly referred to as advanced manufacturing. Transportation Equipment Manufacturing is the largest manufacturing subsector in South Carolina, which encompasses the aerospace and automotive sectors (along with their major suppliers) and includes many well-known international companies located throughout the state's major metropolitan regions.

The high-value production in which Transportation Equipment Manufacturing firms are engaged can be seen directly by examining productivity levels, which are measured by output per worker – that is – the average economic value generated by each employee. As seen in **Figure 4**, productivity levels in the manufacturing industry as a whole are approximately 14 percent higher than that of the average South Carolina industry. This "productivity premium" is even higher for Transportation Equipment Manufacturing, where output per worker is approximately 36 percent higher than that of the average South Carolina industry. Higher worker productivity, in turn, is what generally drives higher wage levels.

Furthermore, over the past 20 years, Transportation Equipment Manufacturing has also been among the fastest growing manufacturing subsectors in South Carolina, and as such, its share of the state's total manufacturing industry has risen significantly. This can also be observed in **Figure 4**. Note that from 2005 to 2025, Transportation Equipment Manufacturing as a share of total manufacturing in South Carolina increased from 11.9 percent to 20.3 percent. This can be compared to national trends, in which its share remained relatively stable, increasing from 12.5 percent to 13.7 percent over the same time period.

Figure 4 Transportation Equipment Manufacturing: Employment and Productivity Comparisons

Source: U.S. Bureau of Labor Statistics, U.S. Bureau of Economic Analysis



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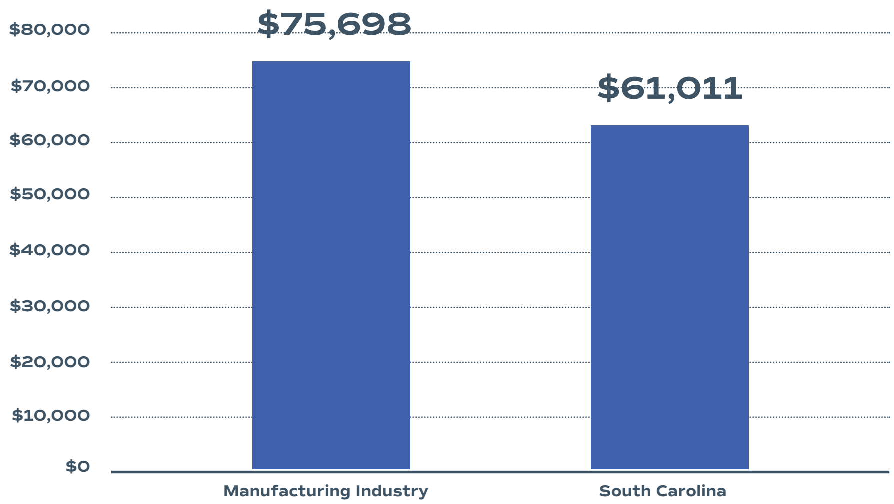
The net effect of these trends is that manufacturing jobs in South Carolina maintain a wage premium of roughly 24 percent over the average South Carolina job. As **Figure 5** denotes, the annual wage of the average manufacturing job in South Carolina is $75,698, compared to $61,011 for all jobs across South Carolina. ***Thus, manufacturing is a major generator of jobs for South Carolinians, both in terms of job quantity and job quality.***

Figure 5 South Carolina Annual Wage Comparisons

Source: U.S. Bureau of Labor Statistics

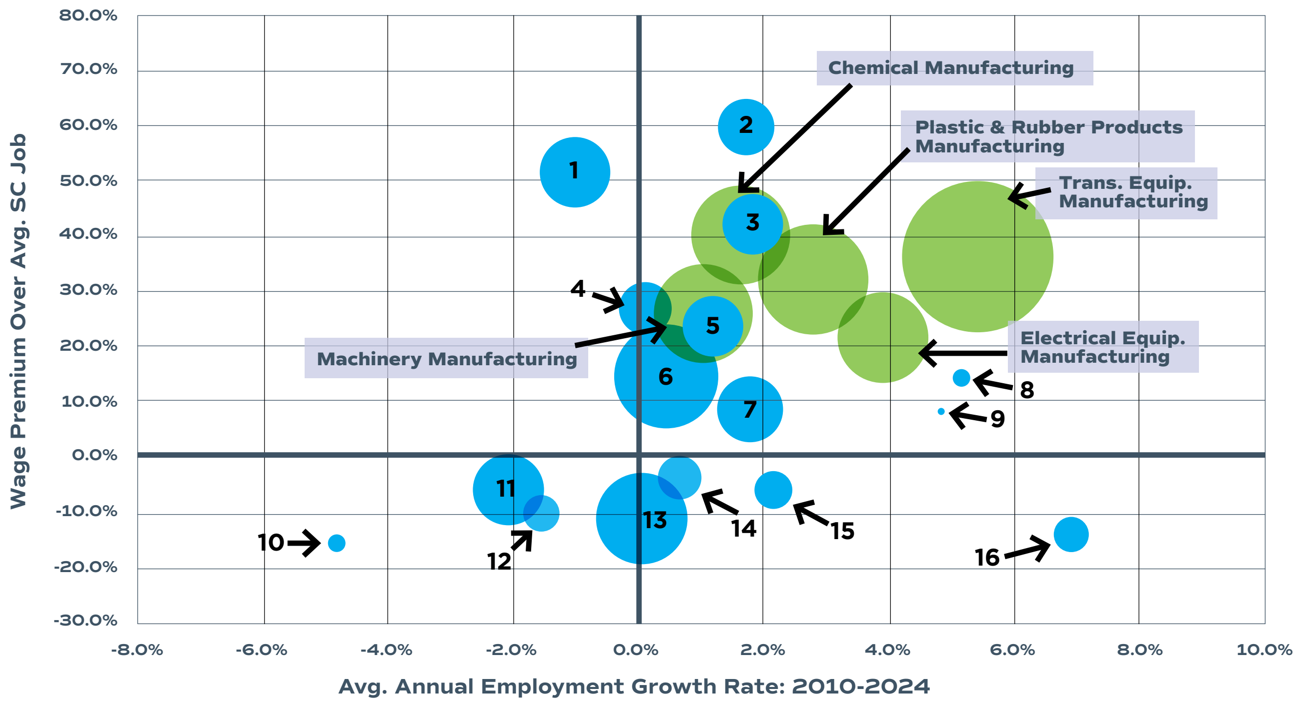


Despite Transportation Equipment Manufacturing's disproportionate contribution to this wage premium due to it being the industry's largest subsector, it is also important to recognize that approximately 80 percent of the state's manufacturing base falls outside of this subsector – including many companies that fall within this subsector's supply chain. Perhaps the most well-known example of such a supplier base is the tire industry, which comprises the bulk of the Plastic and Rubber Products Manufacturing subsector in South Carolina. **Figure 6** summarizes the 21 subsectors of manufacturing in South Carolina by displaying their varying rates of employment growth, wage premiums, and relative sizes. Each of these three factors helps determine a subsector's contribution to the state's economy. In general, subsectors with larger bubble sizes that are in the upper right quadrant are the largest contributors.

In **Figure 6**, the five subsectors highlighted in green reflect those ranking highest across all three aforementioned factors. Chemical Manufacturing has one of the highest overall wage premiums, while Transportation Equipment Manufacturing has experienced among the highest employment growth rates in recent years and is the single largest manufacturing subsector. Plastic and Rubber Products Manufacturing, Machinery Manufacturing, and Electrical Equipment Manufacturing – all of which contain companies that serve as suppliers to firms within Transportation Equipment Manufacturing – have also generated relatively high employment growth rates and maintain wage premiums over the average South Carolina job.

Figure 6 Employment and Wage Trends of Manufacturing Subsectors in South Carolina

Source: U.S. Bureau of Labor Statistics
Note: Bubble size represents number of employees



Subsector Legend

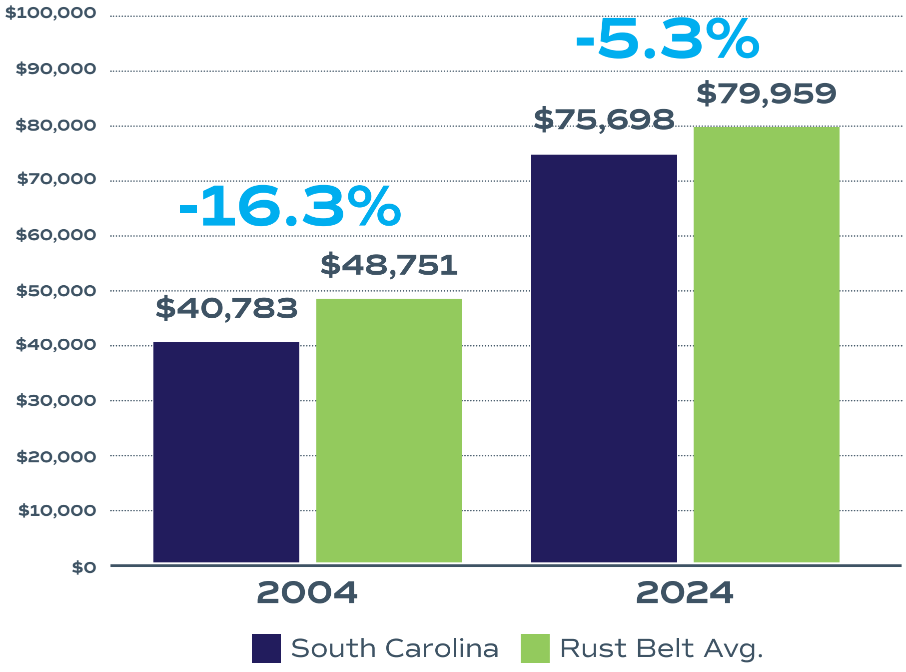
No.	Name
1	Paper Manuf.
2	Primary Metal Manuf.
3	Wood Product Manuf.
4	Nonmetallic Mineral Product Manuf.
5	Miscellaneous Manuf.
6	Fabricated Metal Product Manuf.
7	Computer & Electronic Product Manuf.
8	Petroleum & Coal Products Manuf.

No.	Name
9	Leather & Allied Product Manuf.
10	Apparel Manuf.
11	Textile Mills
12	Textile Product Mills
13	Food Manufacturing
14	Printing and Related Support Activities
15	Furniture & Related Product Manuf.
16	Beverage & Tobacco Product Manuf.

With this long-run transformation of South Carolina's manufacturing sector towards a focus on high-value production, South Carolina is also closing the pay gap with other manufacturing-intensive states. Although the average wage of manufacturing workers in South Carolina has long been at or above the level of other Southeastern states, throughout the 21st century the Palmetto State has made significant gains and become much more competitive with U.S. Rust Belt states in the Great Lakes and Mid-Atlantic regions that have historically dominated U.S manufacturing.[2] For example, as **Figure 7** shows, while the average annual manufacturing wage in South Carolina is below that of the average Rust Belt state, this gap has shrunk from -16.3 percent in 2004 to -5.3 percent in 2024, ***meaning that South Carolina's average manufacturing wage has increased by 11 percentage points relative to Rust Belt states.*** Moreover, South Carolina has made major gains in every Rust Belt state, with the largest gains coming in Michigan (+19.1%), Ohio (+13.1%), and Wisconsin (+13.0%).

Figure 7 Average Annual Manufacturing Wage: South Carolina vs. Rust Belt

Source: U.S. Bureau of Labor Statistics



Throughout the 21st century the Palmetto State has made significant gains and become much more competitive with U.S. Rust Belt states in the Great Lakes and Mid-Atlantic regions that have historically dominated U.S manufacturing.

[2] *Rust Belt states include Illinois, Indiana, Michigan, New York, Ohio, Pennsylvania, and Wisconsin*

SECTION II

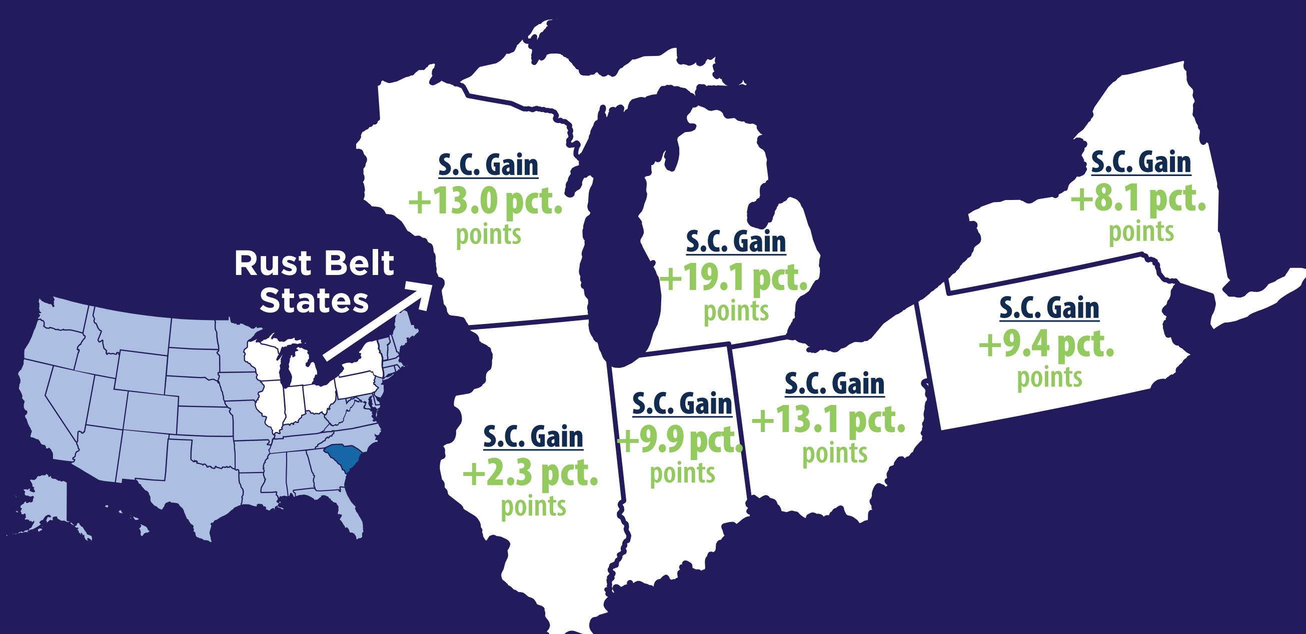
South Carolina Manufacturing
Closing the Wage Gap

- Historically, the average wage for employees in South Carolina's manufacturing industry has been about 16% lower than that of the average manufacturing wage in the seven primary Rust Belt States.

- Yet South Carolina is catching up! By 2024, the average wage for employees in South Carolina's manufacturing industry had closed to within 5% of the average manufacturing wage in these Rust Belt states – and the gap is continuing to shrink.

- This improvement is largely due to the sizable growth in Transportation Equipment Manufacturing in South Carolina. This manufacturing subsector maintains productivity levels that are 36 percent higher than that of the average South Carolina industry. Higher productivity, in turn, is what generally drives higher wage levels.

	Illinois	Indiana	Michigan	New York	Ohio	Pennsylvania	Wisconsin
Avg. Manuf. Wage (2004)	$48,639	$47,638	$56,073	$50,256	$47,506	$45,953	$44,153
S.C. Manuf. Wage (2004)	$40,783	$40,783	$40,783	$40,783	$40,783	$40,783	$40,783
Difference	-16.2%	-14.4%	-27.3%	-18.8%	-14.2%	-11.3%	-7.6%
Avg. Manuf. Wage (2024)	$87,924	$79,292	$82,422	$84,752	$76,503	$77,198	$71,806
S.C. Manuf. Wage (2024)	$75,698	$75,698	$75,698	$75,698	$75,698	$75,698	$75,698
Difference	-13.9%	-4.5%	-8.2%	-10.7%	-1.1%	-1.9%	5.4%
South Carolina Gain	+2.3 pct. points	+9.9 pct. points	+19.1 pct. points	+8.1 pct. points	+13.1 pct. points	+9.4 pct. points	+13.0 pct. points



SECTION III
THE CURRENT ECONOMIC IMPACT OF MANUFACTURING IN SOUTH CAROLINA

Establishing a Comprehensive Industry Definition

Manufacturing has long been recognized as one of the largest industry sectors in South Carolina. Nevertheless, manufacturing's impact on the South Carolina economy tends to be systematically underreported due to the way in which many manufacturers hire workers. Specifically, manufacturers often heavily rely on staffing agencies to help them identify and recruit qualified workers. In such a hiring model, staffing agencies are the employers of record who then "place" workers with the manufacturing firms. This provides a number of benefits to the manufacturers, including the flexibility to more easily adjust the size of their workforce as needed to accommodate regular changes in market demand. Thus, the workforce of many manufacturing firms includes direct hires as well as a contingent labor force.

Because the staffing agencies are the employers of record for the contingent labor force, these workers do not show up as manufacturing employees in the standard manufacturing industry classification codes as compiled by the U.S. Bureau of Labor Statistics (BLS). Rather, they are classified under the "Employment Services" category as a subset of the broader "Professional and Business Services" employment category. In order to address this limitation, this study defines manufacturing as a set of occupations using standard occupational code (SOC) listings as maintained by the BLS.

Consider the fact that all manufacturing employees work in positions that fall into one of the following three categories:

(1) Manufacturing occupations in the manufacturing industry

(2) Non-manufacturing occupations in the manufacturing industry (e.g., accountants employed in manufacturing)

(3) Manufacturing occupations in non-manufacturing industries (e.g., employment services/staffing agencies)

Standard manufacturing industry codes will generally capture categories **(1)** and **(2)** while leaving out category **(3)**. In some cases, this can be a significant omission. For instance, in the case of the occupation category "Assemblers and Fabricators," approximately 78.5 percent of these employees are estimated to be working within the manufacturing industry. However, another 10.2 percent are estimated to work in the employment services industry – that is – likely working in manufacturing through staffing firms. Estimating the full impact of the manufacturing industry begins by quantifying each of these three categories.

As a first step, data from the U.S. Bureau of Labor Statistics' Industry/Occupation Matrix is used to identify all 867 occupation categories in the United States and to determine – for each occupation category – (a) what percentage of the manufacturing workforce is comprised of that occupation category and (b) what percentage of total employees in that occupation (across all industries) is employed in manufacturing. These data can then be used to quantify components (1)-(3) listed above. In conjunction with the South Carolina Future Makers (SCFM), the full list of these 867 occupation categories as maintained by the BLS were evaluated and 127 were identified to be considered as "manufacturing occupations" for the purposes of this study. These categories were then combined with South Carolina employment data in order to arrive at the estimates of components (1)-(3). These are summarized in **Table 1**. Note that all manufacturing data reflect employment totals from August 2025.

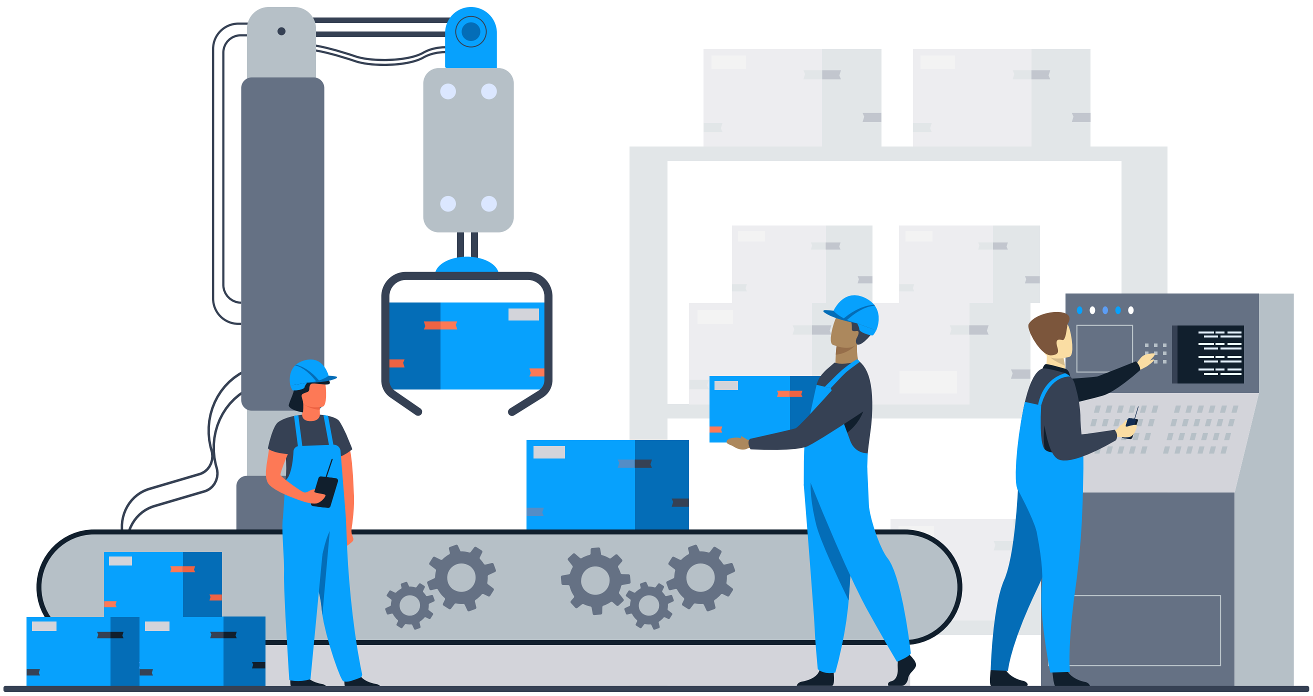
Table 1 Total Direct Employment of the Manufacturing Industry in South Carolina

Category	Employment Total
Manufacturing Occupations in the Manufacturing Industry	160,998
Non-Manufacturing Occupations in the Manufacturing Industry	102,502
Manufacturing Occupations in Non-Manufacturing. Industries (Lower Bound)	27,346
Manufacturing Occupations in Non-Manufacturing Industries (Upper Bound)	46,661
Total (Lower Bound)	290,846
Total (Upper Bound)	310,161

The total number of employees in South Carolina working directly for manufacturing companies is estimated to be 263,500. Of this total, 160,998 (61%) are in manufacturing occupations, while the remaining 102,502 (39%) are not. Manufacturing occupations include categories such as "First-Line Supervisors of Production and Operating Workers," "Machinists," and "Welders, Cutters, Solderers, and Brazers." Non-manufacturing occupations include categories such as "Operations Specialties Managers," "Buyers and Purchasing Agents," and "Financial Analysts."

In addition to the employees working directly for manufacturing firms, there are also individuals working in manufacturing occupations for non-manufacturing firms. As previously noted, many staffing firms hire workers in manufacturing occupations who are then placed with manufacturing or manufacturing-related firms. As such, even though these workers are not employed by manufacturers directly, they nevertheless are part of the economic footprint of manufacturing in South Carolina.

This additional manufacturing employment base was specifically quantified by using the 127 aforementioned manufacturing occupations as a starting point. For each occupation, if the BLS Industry/Occupation Matrix reported that the total number of employees in that occupation (across all industries) employed in manufacturing was greater than 70 percent, it was assumed that ***all of the remaining employees in South Carolina working in that occupation were also employed in manufacturing-related firms***. This assumption is based on the premise that manufacturing-related occupations that are most heavily employed in the manufacturing industry as defined by BLS are likely to be employed in manufacturing-related firms even if they are not explicitly identified as such. An additional, broader scenario was also modeled using the assumption of 50 percent instead of 70 percent. **Table 1** illustrates the estimated number of employees working in manufacturing occupations for non-manufacturing firms to be between 27,346 (lower bound) and 46,661 (upper bound). This implies that the true direct employment base of manufacturing in South Carolina is between 290,846 and 310,161 workers. **Appendix I** provides a list of all occupations included in these employment estimates.



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SECTION III

Methodology

As previously shown, manufacturing in South Carolina directly supports thousands of workers across the state and generates billions of dollars in economic activity every year. This includes all economic activity at manufacturing firms as well as additional manufacturing-related production generated by workers in manufacturing occupations who are employed in non-manufacturing firms. For example, if a temporary staffing firm were to hire and place 1,000 workers with manufacturing firms in South Carolina, the economic activity generated by these 1,000 workers would be considered to be part of manufacturing's direct impact.

Yet these activities do not provide a complete picture of the impact of manufacturing on South Carolina's economy. The expenditures that occur within the manufacturing industry and within non-manufacturing firms that involve manufacturing production lead to additional job creation and economic activity throughout South Carolina by way of the economic multiplier effect (or economic ripple effect).

Economic multiplier effects can be divided into direct, indirect, and induced impacts. The direct impact reflects all in-state purchases made by firms conducting manufacturing-related activities. These include, for example, employee wages and benefits, equipment, building construction and remodeling, technology services, vendors, and other overhead or administrative costs. This spending activity increases demand and leads to the creation of new jobs and more income for employees and suppliers of these firms.

The indirect impact reflects additional economic activity that results from inter-industry linkages between local firms in South Carolina. For example, if an automotive manufacturer were to purchase computer equipment from an in-state supplier, then this computer equipment supplier would experience an increase in demand. To satisfy this demand, the computer equipment supplier would purchase additional inputs from its own vendors, and so on. These indirect effects ripple through the economy and affect many industrial sectors of South Carolina.

The induced impact reflects additional economic activity that results from increases in the spending of household income. For example, when the aforementioned computer equipment supplier purchases raw materials from one of its vendors and the overall demand for this vendor rises, some of the staff working for this vendor will see a rise in their income levels (or the vendor may hire new staff). Part of this income will then be spent locally on, for example, food, entertainment, or health care. These industries will then also see an increase in demand for their goods and services, which will lead to higher incomes for some of their employees, part of which will also be spent locally.

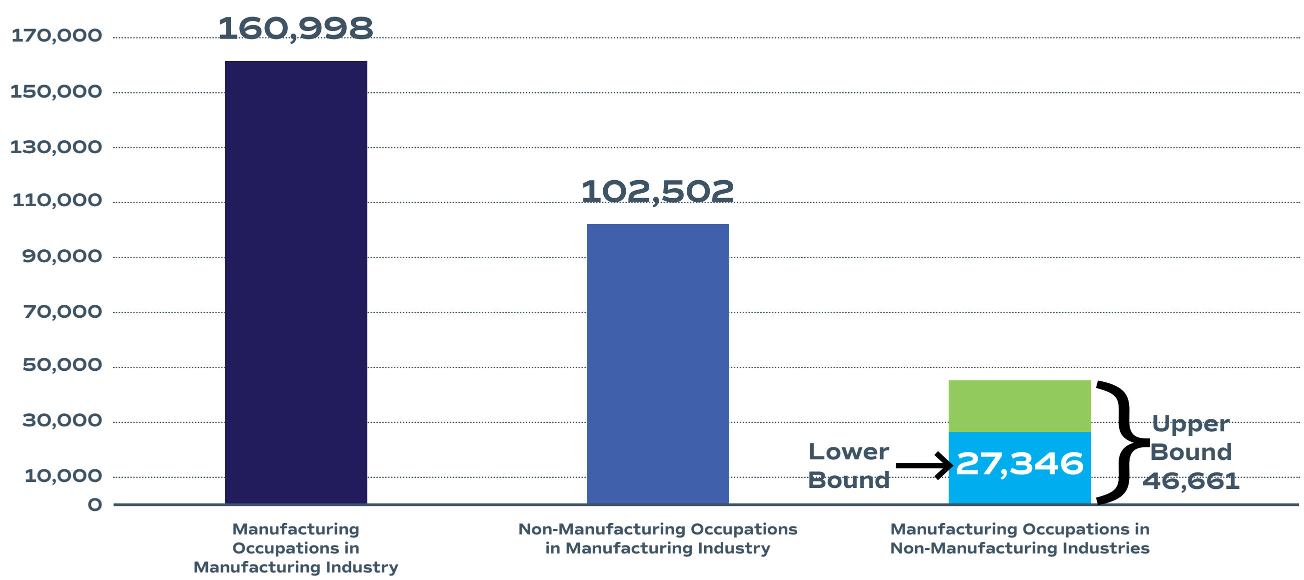
These successive rounds of indirect and induced spending do not go on forever, which is why it is possible to calculate a value for each of them. In each round, money is "leaked out" for a variety of reasons. For example, firms will purchase some of their supplies from vendors located outside of the local region. In addition, employees will save part of their income or spend part of it with firms located outside of the region. In order to determine the total economic impact that will result from an initial direct impact, economic multipliers are used. An economic multiplier can be used to determine the total impact (direct, indirect, and induced) that results from an initial change in economic activity (the direct impact). Multipliers are different in each sector of the economy and are largely determined by the size of the local supplier network as well the particular region being examined. Economic multipliers are available to calculate not just the total economic impact of an industry, but also the total employment and income levels associated with the total impact.

In this analysis, all multiplier effects are calculated using input-output analysis, which is the industry-standard method for estimation that is widely implemented across the United States. This analysis uses customized input-output models of the state of South Carolina and its local regions, which contain specific information on economic linkages of over 500 different industries for each region. The IMPLAN software package was combined with these models to generate all estimates in this report.

Primary Results

As previously described, the direct impact of manufacturing in South Carolina as estimated earlier in this study is between 290,846 and 310,161 workers, which supports between $193 billion and $206 billion in annual direct economic activity for South Carolina's economy. This direct employment impact is divided into three components that are illustrated in **Figure 8**.

Figure 8 Components of Direct Manufacturing Employment Base in South Carolina



The largest part of the direct manufacturing employment base is represented by the 160,998 workers in manufacturing occupations working for manufacturing firms (or firms in the manufacturing industry). The second largest component is represented by the 102,502 workers in non-manufacturing occupations working for manufacturing firms (or firms in the manufacturing industry). Thus, collectively these two components represent all employees working for manufacturing firms in South Carolina. The right hand bar in **Figure 8**, by contrast, represents employees working in manufacturing occupations for non-manufacturing firms. This study estimates that between 27,346 and 46,661 employees in South Carolina are working in manufacturing occupations doing manufacturing-related production for non-manufacturing firms.[3]

[3] Note that a firm is considered to be a "non-manufacturing firm" if it is not contained within the standard North American Industry Classification Code (NAICS) industry definitions of 31-33.

These direct impacts also generate significant multiplier effects that make the total impact of manufacturing in South Carolina far larger. The structural input-output models used in this analysis estimate impacts in terms of three specific measures: economic output, employment, and labor income. Economic output reflects the dollar value of all final goods and services that can be attributed (directly or indirectly) to manufacturing in South Carolina. It can also be thought of as an aggregate measure of total spending activity that results from an initial direct expenditure. Because it includes all spending by consumers and businesses on both goods and services, it is an all-inclusive measure of the impact on total economic activity. Employment measures the total number of full-time equivalent positions associated with total economic output. Labor income reflects all employee compensation associated with total employment estimates, including wages, salaries, and benefits. **Tables 2 and 3** below highlight these estimates.

Table 2 Economic Impact of Manufacturing on South Carolina: Lower Bound

	Economic Output	Employment	Labor Income
Direct Impact	$193.1 Billion	290,846	$27.7 Billion
Indirect Impact	$67.5 Billion	264,239	$18.4 Billion
Induced Impact	$33.3 Billion	179,029	$9.3 Billion
Total Impact	**$293.9 Billion**	**734,114**	**$55.4 Billion**

Table 3 Economic Impact of Manufacturing on South Carolina: Upper Bound

	Economic Output	Employment	Labor Income
Direct Impact	$205.9 Billion	310,161	$29.6 Billion
Indirect Impact	$71.9 Billion	281,787	$19.7 Billion
Induced Impact	$35.6 Billion	190,919	$9.9 Billion
Total Impact	**$313.4 Billion**	**782,867**	**$59.2 Billion**

The 290,846 workers that represent the lower bound estimate of the direct employment base of manufacturing in South Carolina generate a total of $193.1 billion in total economic output annually. This level of direct economic activity leads to indirect effects totaling approximately $67.5 billion in economic output and 264,239 jobs. These estimates reflect increased demand for goods and services of in-state suppliers resulting from in-state expenditures on the part of manufacturing firms and manufacturing-related production. The direct economic activity also leads to induced effects totaling $33.3 billion in economic output and 179,029 jobs. This is a reflection of economic activity in South Carolina generated across all industries that is the result of increased household spending. The combination of the direct, indirect, and induced effects leads to a total economic impact of approximately $293.9 billion, which is associated with 734,114 jobs across South Carolina. The upper bound estimate of the direct employment base of manufacturing in South Carolina increases the total impact estimates further to $313.4 billion in annual economic output along with 782,867 jobs.

One important takeaway from these estimates is to simply note the sheer size of manufacturing's economic presence in South Carolina. Although manufacturing's direct employment base alone represents 10.9 percent of all jobs in South Carolina, after accounting for the additional impacts resulting from all economic multiplier effects, this percentage jumps to 30.2 percent. Or put more succinctly, manufacturing supports, either directly or indirectly, over 30 percent of all jobs in South Carolina, making it among the state's largest industry sectors. This means that future gains (or losses) in the manufacturing industry will have disproportionately large effects on South Carolina employment.

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SECTION III

South Carolina's manufacturing industry also exhibits some of the state's highest employment multiplier effects. **Tables 2 and 3** reveal that the aggregate employment multiplier effect across the entire statewide manufacturing base is approximately 2.5. This implies that for every 10 jobs that are supported directly by South Carolina manufacturing, an additional 15 jobs are created elsewhere in South Carolina. This multiplier effect is higher than that of the average industry in South Carolina, which is estimated to be approximately 1.7. Moreover, many of the state's largest manufacturing sectors have multipliers well in excess of this state average. **Table 4** specifically highlights the state's 20 largest manufacturing sectors, which together comprise nearly 40 percent of the manufacturing employment base in South Carolina. Notice that the employment multipliers are all above 1.7, with many being significantly higher.

Table 4 South Carolina Manufacturing Employment Multipliers

South Carolina's 20 Largest Manufacturing Sectors[4]

Manufacturing Industry Sectors	Employment Multiplier
Automobile and light duty motor vehicle manufacturing	4.59
Tire manufacturing	2.23
Iron and steel mills and ferroalloy manufacturing	5.62
Pharmaceutical preparation manufacturing	2.42
Aircraft manufacturing	1.89
Artificial and synthetic fibers and filaments manufacturing	2.78
Other motor vehicle parts manufacturing	2.35
Plastics material and resin manufacturing	3.27
Paperboard mills	4.57
Petrochemical manufacturing	7.60
Paperboard container manufacturing	2.83
Other basic organic chemical manufacturing	6.21
Other plastics product manufacturing	2.01
Motor vehicle transmission and power train parts manufacturing	2.62
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	2.53
Other basic inorganic chemical manufacturing	3.69
Plastics packaging materials and unlaminated film and sheet manufacturing	2.12
Major household appliance manufacturing	2.19
Sanitary paper product manufacturing	2.84
Ball and roller bearing manufacturing	2.21
Average South Carolina Employment Multiplier: 1.72	

[4] Note that these categories reflect IMPLAN manufacturing sectors

SECTION III

Another major impact that the manufacturing industry generates for the state of South Carolina comes from the state tax revenue that results from the economic activity it supports. As shown in **Table 2** above, the total economic impact of manufacturing on the state of South Carolina conservatively approximates $293.9 billion annually.

Historically, every additional dollar that is generated in economic activity (i.e., nominal gross state product) within South Carolina also generates 4.4 cents in new state tax revenue.[5] By applying this figure to the economic activity generated by South Carolina manufacturing, the tax revenue from this total volume of activity can be estimated.[6] **Table 5** displays these results, which show that the annual total estimated tax revenue that arises from manufacturing in South Carolina is approximately $4.6 billion.

Table 5 Annual State Tax Revenue Derived from South Carolina Manufacturing

Category	Dollar Value
Estimated Economic Output for South Carolina	$293,912,051,742
Estimated Tax Revenue Generated for South Carolina	$4,603,729,617

[5] *The historical relationship between South Carolina nominal gross state product and the South Carolina general funds revenue (as measured and tracked by the South Carolina Board of Economic Advisors) was estimated using industry-standard time-series regression techniques.*

[6] *Economic output represents the value of industry production and is therefore not synonymous with gross state product. As such, the dollar value of all intermediate inputs was subtracted from economic output before the 4.4-cent estimate was applied to estimate total tax revenue.*

At-a-Glance:
South Carolina's Automotive Industry

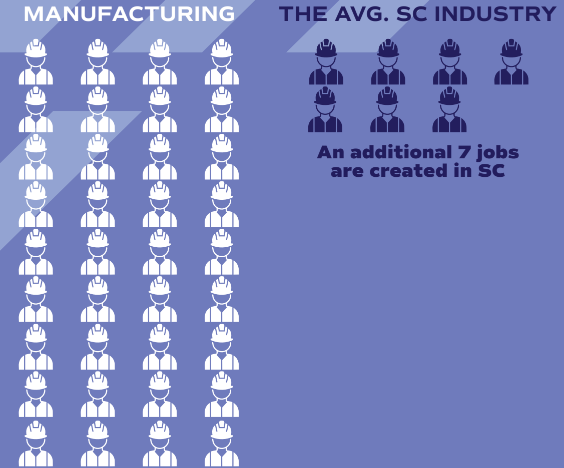
Annual Economic Impact

$64.6 Billion

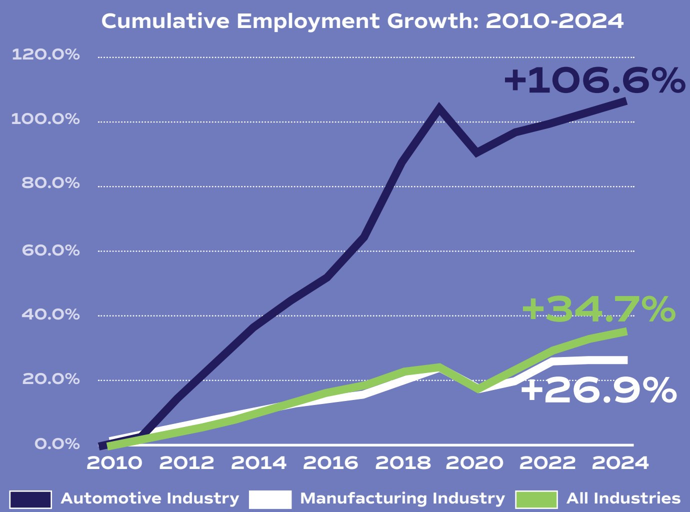
119,475 Jobs

The automotive industry comprises 16% of SC's total manufacturing footprint

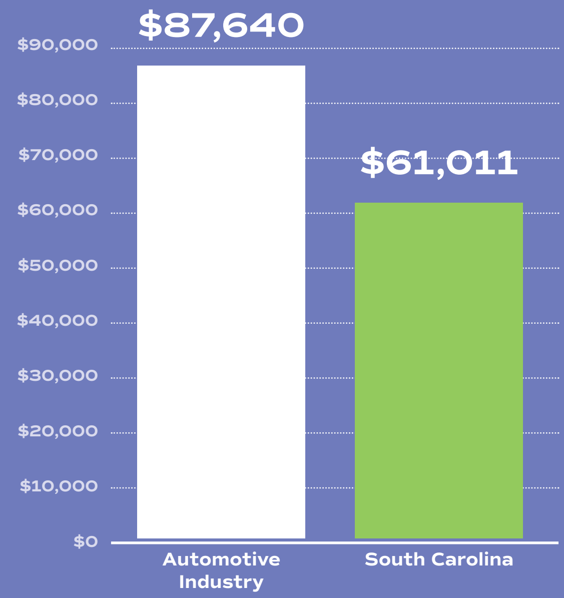
For every 10 jobs created in...



The automotive industry has grown more than three times faster than the manufacturing industry as a whole and faster than the state of South Carolina



Automotive manufacturing maintains a 44% wage premium over the average S.C. job



SOUTH CAROLINA MANUFACTURERS + COMMERCE

SCFutureMakers

SECTION IV
SHORT-RUN CHALLENGES AND LONG-RUN OPPORTUNITIES

The Pandemic Manufacturing Bubble and Changes in Tariff & Trade Policies: 2020-2025

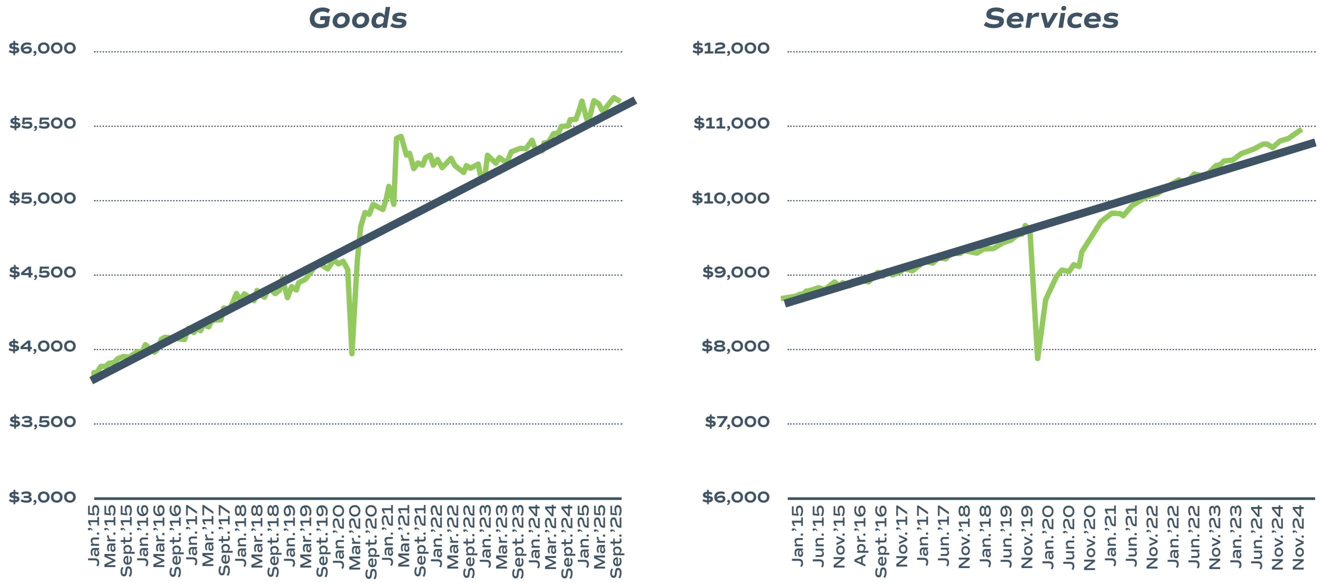
After a decade-long period of strong and stable growth throughout the 2010s, manufacturing in South Carolina has experienced a much higher degree of volatility in recent years in the aftermath of the pandemic. Following the COVID-19 recession that took place between February and April of 2020, the U.S. experienced a rapid labor market recovery as businesses that were previously shut down began to reopen. This was accompanied by a series of federal stimulus packages in 2020 and 2021 that totaled approximately $6 trillion. Many of these stimulus dollars were targeted directly to households and American consumers, including individual stimulus checks and a variety of tax credits. As a result of access to these dollars and the wages individuals earned when returning to work, household disposable income levels temporarily increased by more than 25 percent above pre-pandemic levels.

After a decade-long period of strong and stable growth throughout the 2010s, manufacturing in South Carolina has experienced a much higher degree of volatility in recent years in the aftermath of the pandemic.

This increase in disposable income led to a rapid increase in consumer spending. Furthermore, because of social distancing norms that persisted throughout 2020 and 2021 that kept most people at home, most of these dollars were spent in the consumer goods sector (rather than in the consumer services sector). This generated a "goods bubble" that emerged in 2020, peaked in 2021, and took until 2024 to fully "deflate." **Figure 9** highlights these specific consumer spending trends in both the goods and services sectors.

Figure 9 Real U.S. Consumer Spending: Goods vs. Services

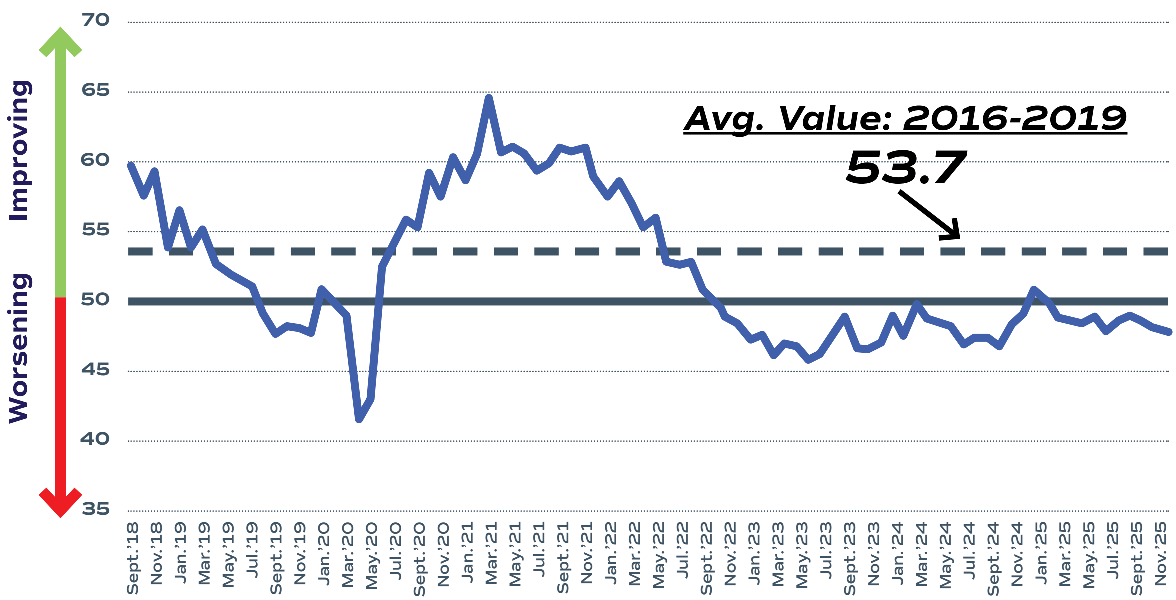
Source: U.S. Bureau of Economic Analysis, in billions



This goods bubble manifested itself as a surge in demand across many industries – most notably in manufacturing. **Figure 10** provides a closer look at the "manufacturing bubble." More specifically, **Figure 10** summarizes the U.S. ISM Purchasing Managers Index, which is a broad index representing current levels of U.S. manufacturing activity as measured by the total volume of new orders, production levels, employment levels, supplier deliveries, and inventory levels. An index value greater than 50 represents industry expansion, while a value below 50 represents industry contraction. ***As with the consumer goods bubble more generally, a manufacturing bubble also emerged following the onset of the pandemic, peaked in 2021, and then subsequently began returning to pre-pandemic norms.***

Figure 10 U.S. ISM Purchasing Managers Index

Source: Institute for Supply Management



However, because of the increase in economic uncertainty that has come about due to the back-and-forth on new tariff and trade policies, growth in the manufacturing industry remains relatively sluggish heading into 2026. Uncertainty often breeds paralysis in the business community, meaning that many businesses have adopted a "wait-and-see approach" to investment and hiring, postponing major decisions until they have a better understanding of what long-run trade policy is likely to be and how it may affect both the market environment and the specific cost structure of their businesses.

The Strength of South Carolina's Long-Run Competitiveness

Yet despite this high degree of volatility over the past five years, South Carolina remains among the most competitive locations for U.S. manufacturing. Not only has South Carolina manufacturing employment expanded at more than twice the national average since 2010 (+26.4% vs. +9.4%), it has also remained relatively resilient throughout the 2020s. Between 2019 and 2025, manufacturing employment in South Carolina expanded by a total of approximately of +1.2 percent, compared to a pullback of -1.8 percent at the national level. It is important to recognize that the short-term disruptions in economic activity that have taken place since the onset of the pandemic do not undermine the long-run competitiveness of South Carolina manufacturing. In fact, South Carolina's long-run competitiveness has likely increased since 2020. This can be observed in at least two ways.

First, there has been a major shift in the migration patterns of the United States since the onset of the pandemic. Specifically, the pandemic has accelerated the rate at which the U.S. population is migrating to the Southeast. This means that there will be an increasing demand for manufactured goods in the region over time, which will attract manufacturers who are looking to access this growing segment of the U.S. market. Because some manufacturers want to locate near consumers, a fast-growing population base puts the Southeast in a strong position to compete for these companies. South Carolina is located in the heart of the Southeastern United States – and this geographic location combined with access to South Carolina's port facilities puts the state in a unique position to significantly expand its role in the manufacturing and distribution of goods to both domestic and global markets.

Second, recent labor force growth trends across the Southeastern U.S. highlight another key competitive advantage for South Carolina. The Palmetto State has added approximately 170,000 labor market participants since 2022, reflecting an outsized gain relative to its population and has specifically seen more gains than North Carolina (+97K), Tennessee (+147K), and Georgia (+136K). This is especially striking considering that North Carolina and Georgia are approximately twice the size of South Carolina. This expanding labor force provides a larger pool of workers for employers and is a key resource for long-run economic growth.

> *The short-term disruptions in economic activity that have taken place since the onset of the pandemic do not undermine the long-run competitiveness of South Carolina manufacturing.*

SECTION V
A WORKFORCE PROFILE OF SOUTH CAROLINA MANUFACTURING

As this report has shown, manufacturing is a key contributor to South Carolina's economy, providing jobs and driving economic activity across the state. Manufacturing encompasses a wide range of occupations, from hands-on production roles like assemblers and machinists to technical and engineering positions that support complex operations. Understanding this workforce is critical to anticipating the industry's future. This report now turns to examining the projected demand of South Carolina's manufacturing workforce through the early 2030s. Using South Carolina employment projections and data on occupational exposure to automation, it highlights which roles are expected to see the greatest growth and how skill requirements may evolve.

Workforce Projections

A core goal of this workforce profile is to identify which manufacturing occupations are expected to see the greatest increase in demand through the early 2030s. Using employment projections from the South Carolina Department of Employment and Workforce (DEW), this study identifies the top 20 manufacturing roles likely to experience the most new job growth by 2032. As **Figure 11** shows, these include both traditional production jobs like assemblers, machinists, and welders, as well as more advanced and technical roles such as industrial engineers, mechanics, and supervisors.

Figure 11 South Carolina Manufacturing Occupation Projections through 2032

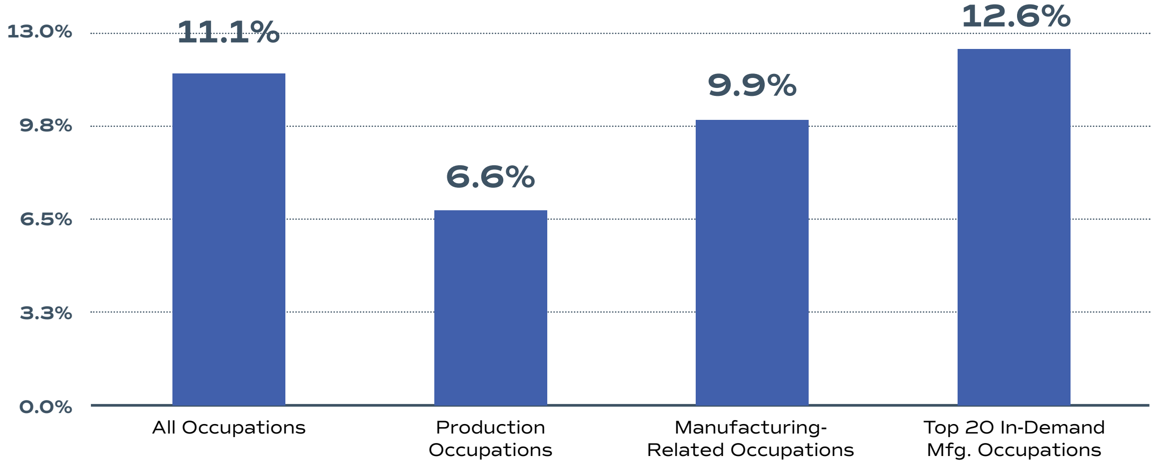
Note: Top 20 Occupations Ranked by Number of New Jobs Expected
Source: S.C. Department of Employment and Workforce

SOC Code	Occupation Title	Number of New Jobs by 2032	Average Annual Wage (2024)	Pct. Growth
51-2090	Miscellaneous Assemblers and Fabricators	4,841	$44,970	10.3%
49-9071	Maintenance and Repair Workers, General	3,458	$49,370	11.9%
49-9041	Industrial Machinery Mechanics	2,291	$62,480	25.6%
17-2112	Industrial Engineers	1,774	$101,530	26.1%
51-2028	Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers	1,204	$44,210	27.7%
51-1011	First-Line Supervisors of Production and Operating Workers	1,167	$76,100	8.6%
17-2141	Mechanical Engineers	988	$107,690	20.4%
43-5061	Production, Planning, and Expediting Clerks	987	$58,550	17.3%
51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	951	$48,450	18.2%
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	946	$47,890	6.3%
53-7064	Packers and Packagers, Hand	934	$32,290	10.2%
51-9111	Packaging and Filling Machine Operators and Tenders	872	$39,900	12.6%
51-4121	Welders, Cutters, Solderers, and Brazers	851	$50,900	9.5%
51-4041	Machinists	843	$54,360	11.9%
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	773	$76,230	8.8%
11-3051	Industrial Production Managers	525	$130,680	10.2%
51-9199	Production Workers, All Other	442	$41,380	11.2%
53-7063	Machine Feeders and Offbearers	401	$40,170	25.6%
51-9124	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	340	$51,620	11.3%
17-2071	Electrical Engineers	302	$111,210	12.4%

Collectively, these top 20 occupations are expected to grow by approximately 12.6 percent through 2032, outpacing the 9.9 percent projected growth rate across all manufacturing-related occupations statewide as well as the 6.6 percent projected growth rate for all production-specific occupations.

Figure 12 Projected Employment Growth 2022-2032

S.C. Department of Employment and Workforce

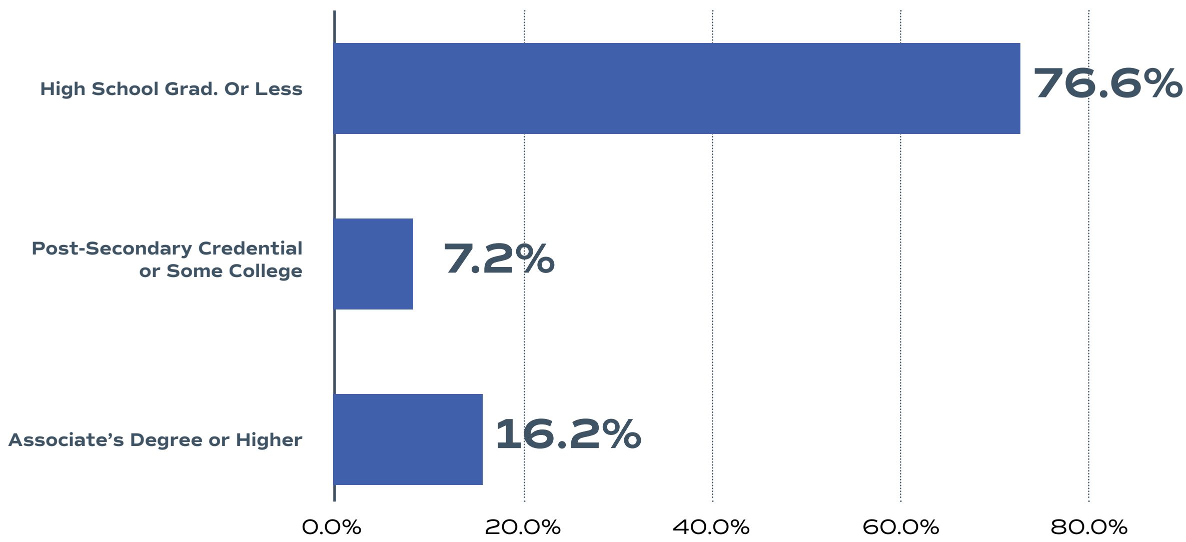


While the majority of South Carolina's largest manufacturing occupations remain accessible with a high school diploma, the broader trajectory of the industry points toward increasing skill requirements over time. Advances in automation, robotics, and digital manufacturing are reshaping the tasks workers perform, emphasizing technical literacy, problem-solving, and adaptability. Even in roles that currently require lower levels of formal education, employees will increasingly need the ability to upskill or reskill throughout their careers to operate advanced machinery, troubleshoot automated processes, or leverage data-driven production tools. This suggests that while entry level educational attainment requirements remain relatively low, lifelong learning and continuous training will be critical for workers to remain competitive and for manufacturers to maintain productivity in a rapidly evolving technology landscape.

Figure 13 shows the expected entry-level education requirements for the manufacturing occupations described in full in **Appendix 1**. Note that more than 75 percent of all occupations require a high school diploma or less for entry-level positions. Another seven percent require some type of post-secondary credential or some college. The remaining 16 percent require an associate's degree or higher. These are typically associated with occupations such as engineers, engineering technicians, and drafters.

Figure 13 Entry-Level Education Requirements for Manufacturing Occupations

Source: U.S. Bureau of Labor Statistics



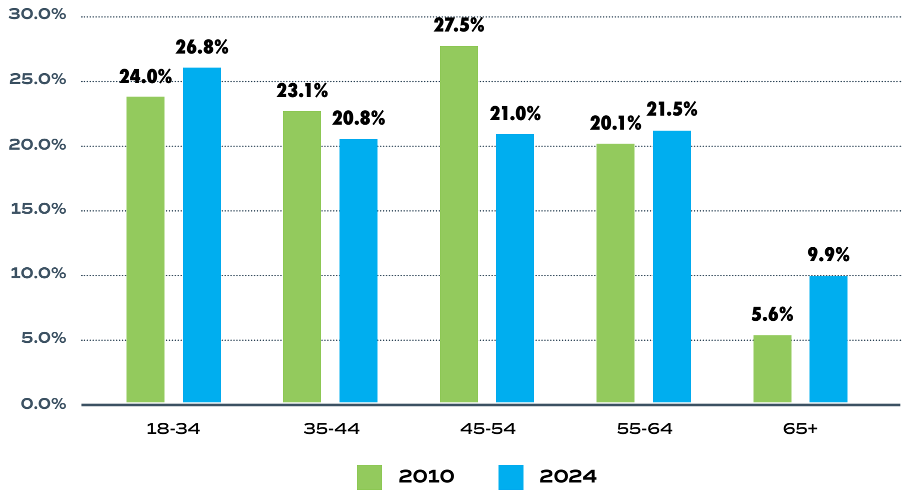
Education and skill levels provide one lens into workforce readiness, but examining the age distribution adds another. Understanding the age composition of the current manufacturing workforce further highlights the challenges and opportunities for skill development. As the workforce ages, firms will need to anticipate retirements and ensure that both experienced and new employees have the training needed to operate increasingly automated and technologically sophisticated equipment.

SECTION V

Figure 14 illustrates the distribution of South Carolina's workforce by age in 2010 and 2024. Over this period, the share of workers in older age groups has increased noticeably, while the proportion of workers aged 35-54 has declined. For example, workers aged 55-64 now comprise 21.5 percent of the workforce, up from 20.1 percent in 2010, and those aged 65 and older have grown from 5.6 percent to 9.9 percent. Meanwhile, the 35-54 age groups are slightly smaller as a share of the total. This shift signals that a substantial portion of the workforce is approaching or at traditional retirement age, creating potential gaps in experience and productivity. This reinforces the importance of firm investments in workforce upskilling to minimize such losses as the number of worker retirements increases.

Figure 14 Percentage of South Carolina Manufacturing Workforce by Age, 2010 vs. 2024

Source: U.S. Census Bureau, American Community Survey 1-Year 2024 estimates



An Eye Towards Automation

Beyond age and education, technology changes are reshaping the content of manufacturing work itself, influencing which skills will be most valuable in the years ahead. To better understand how technological change may influence the manufacturing labor market, analysts increasingly look beyond simple job counts to measures of automation exposure. The LMI Institute's Automation Exposure Score is one such tool designed to capture the extent to which the tasks performed within an occupation are exposed to automation technologies such as robotics, software automation, and other programmable systems. These attributes include abilities, work activities, and work contexts that are statistically associated with routine or manual tasks that are more susceptible to automation. Scores range from 1 (least exposed) to 10 (most exposed). A high score does not necessarily predict imminent job loss, but rather indicates that the underlying work content of the occupation comprises more tasks that could be automated if firms choose to adopt the relevant technologies.

In South Carolina, the average automation exposure score for the state's top 20 in-demand occupations (as shown in **Figure 15**) is approximately 6.9, compared with 7.4 for the broader set of manufacturing-related occupations. This suggests that while the most in-demand jobs are somewhat less exposed to automation than other manufacturing roles, the sector overall remains concentrated in work with moderately high exposure to automation technologies. Notably, production occupations (SOC code group 51) rank among the highest in exposure risk across all occupation groups, reflecting the routine and manual nature of many traditional manufacturing tasks.

[6] *https://www.lmiontheweb.org/automation-exposure-score/*

Figure 15 South Carolina Manufacturing Occupation Automation Risk Scores

Note: Top 20 Occupations Ranked by Number of New Jobs Expected
Source: LMI Institute

SOC Code	Occupation Title	LMI Institute Automation Risk (1=Low; 10=High)	SC Employment (2024)
51-2090	Miscellaneous Assemblers and Fabricators	8	47,370
49-9071	Maintenance and Repair Workers, General	7	3,820
49-9041	Industrial Machinery Mechanics	7	4,000
17-2112	Industrial Engineers	7	14,900
51-2028	Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers	7	7,200
51-1011	First-Line Supervisors of Production and Operating Workers	8	5,910
17-2141	Mechanical Engineers	8	7,600
43-5061	Production, Planning, and Expediting Clerks	9	4,530
51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	8	4,020
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	9	720
53-7064	Packers and Packagers, Hand	9	2,930
51-9111	Packaging and Filling Machine Operators and Tenders	5	13,540
51-4121	Welders, Cutters, Solderers, and Brazers	5	9,060
51-4041	Machinists	5	6,320
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	7	27,820
11-3051	Industrial Production Managers	7	9,520
51-9199	Production Workers, All Other	4	7,270
53-7063	Machine Feeders and Offbearers	5	5,060
51-9124	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	6	6,080
17-2071	Electrical Engineers	4	2,450

These patterns align with broader evidence that while automation often complements labor, it also reshapes skill demand, particularly by substituting for routine task content and raising the value of skills that involve complex problem-solving, adaptability, and interaction with automated systems. Even occupations with relatively lower exposure scores may still require workers to upskill or reskill over time to effectively integrate and manage automation and emerging technologies like artificial intelligence.

SECTION VI
CONCLUSION

Manufacturing is a key pillar of South Carolina's economy and a defining source of the state's long-term competitiveness. Over the past several decades, this industry cluster has evolved into a high-value, export-oriented engine of growth that delivers outsized contributions to job and income creation along with overall economic activity. With an estimated annual economic impact of between $294 billion and $313 billion annually, manufacturing directly and indirectly supports more than 30 percent of all jobs in South Carolina that pay significantly above the state's average wage. Few industries combine an impact of this magnitude with such broad geographic reach, particularly in small and mid-sized communities.

The strength of South Carolina manufacturing is reinforced by a broad-based supplier and logistics network, resulting in some of the highest employment multipliers in the state, especially within automotive manufacturing. At the same time, the industry's shift toward advanced, high-skill production has helped narrow historic wage gaps with traditional manufacturing states in the Rust Belt and has positioned South Carolina as a nationally competitive location for investment, even amidst recent economic volatility.

Looking ahead, changing workforce demographics represent one of the primary challenges for South Carolina's manufacturing industry. An aging manufacturing workforce makes investments in training, upskilling, and talent development critical for future success and will help ensure that manufacturing continues to serve as an economic pillar for the Palmetto State.

Appendix I Occupations in the South Carolina Manufacturing Industry

**Denotes non-manufacturing occupations contained within the manufacturing industry*

Occupation Title
Adhesive bonding machine operators and tenders
Aerospace engineering and operations technicians
Aerospace engineers
Aircraft structure, surfaces, rigging, and systems assemblers
Assemblers and fabricators, all other, including team assemblers
Bakers
Biomedical engineers
Butchers and meat cutters
Cabinetmakers and bench carpenters
Camera and photographic equipment repairers
Chemical engineers
Chemical equipment operators and tenders
Chemical plant and system operators
Chemical technicians
Cleaning, washing, and metal pickling equipment operators and tenders
Coating, painting, and spraying machine setters, operators, and tenders
Coil winders, tapers, and finishers
Coin, vending, and amusement machine servicers and repairers
Computer numerically controlled machine tool programmers, metal and plastic
Computer-controlled machine tool operators, metal and plastic
Computer, automated teller, and office machine repairers
Cooling and freezing equipment operators and tenders
Crushing, grinding, and polishing machine setters, operators, and tenders
Cutters and trimmers, hand
Cutting and slicing machine setters, operators, and tenders
Cutting, punching, and press machine setters, operators, and tenders, metal and plastic
Dental laboratory technicians
Drafters, all other
Drilling and boring machine tool setters, operators, and tenders, metal and plastic
Electric motor, power tool, and related repairers
Electrical and electronics drafters
Electrical and electronics engineering technicians
Electrical and electronics repairers, commercial and industrial equipment
Electrical and electronics repairers, powerhouse, substation, and relay
Electrical engineers
Electrical, electronic, and electromechanical assemblers, except coil winders, tapers, and finishers
Electro-mechanical technicians
Electronic home entertainment equipment installers and repairers
Electronics engineers, except computer
Engine and other machine assemblers

APPENDIX I

Appendix I Occupations in the South Carolina Manufacturing Industry

**Denotes non-manufacturing occupations contained within the manufacturing industry*

Occupation Title
Engineering technicians, except drafters, all other
Engineers, all other
Extruding and drawing machine setters, operators, and tenders, metal and plastic
Extruding, forming, pressing, and compacting machine setters, operators, and tenders
Fabric menders, except garment
Fiberglass laminators and fabricators
First-line supervisors of mechanics, installers, and repairers
First-line supervisors of production and operating workers
Food and tobacco roasting, baking, and drying machine operators and tenders
Food batchmakers
Food cooking machine operators and tenders
Food processing workers, all other
Forging machine setters, operators, and tenders, metal and plastic
Foundry mold and coremakers
Furnace, kiln, oven, drier, and kettle operators and tenders
Furniture finishers
Grinding and polishing workers, hand
Grinding, lapping, polishing, and buffing machine tool setters, operators, and tenders, metal and plastic
Heat treating equipment setters, operators, and tenders, metal and plastic
Helpers–production workers
Industrial engineering technicians
Industrial engineers
Industrial machinery mechanics
Industrial production managers
Inspectors, testers, sorters, samplers, and weighers
Installation, maintenance, and repair workers, all other
Jewelers and precious stone and metal workers
Lathe and turning machine tool setters, operators, and tenders, metal and plastic
Layout workers, metal and plastic
Locksmiths and safe repairers
Machine feeders and offbearers
Machinists
Maintenance and repair workers, general
Maintenance workers, machinery
Materials engineers
Meat, poultry, and fish cutters and trimmers
Mechanical drafters
Mechanical engineering technicians
Mechanical engineers
Medical appliance technicians

Appendix I Occupations in the South Carolina Manufacturing Industry

**Denotes non-manufacturing occupations contained within the manufacturing industry*

Occupation Title
Metal workers and plastic workers, all other
Metal-refining furnace operators and tenders
Milling and planing machine setters, operators, and tenders, metal and plastic
Millwrights
Mixing and blending machine setters, operators, and tenders
Model makers, metal and plastic
Molders, shapers, and casters, except metal and plastic
Molding, coremaking, and casting machine setters, operators, and tenders, metal and plastic
Multiple machine tool setters, operators, and tenders, metal and plastic
Nuclear technicians
Ophthalmic laboratory technicians
Packaging and filling machine operators and tenders
Packers and packagers, hand
Painters, transportation equipment
Painting, coating, and decorating workers
Paper goods machine setters, operators, and tenders
Patternmakers, metal and plastic
Plant and system operators, all other
Plating and coating machine setters, operators, and tenders, metal and plastic
Pourers and casters, metal
Power distributors and dispatchers
Power plant operators
Prepress technicians and workers
Print binding and finishing workers
Printing press operators
Production workers, all other
Production, planning, and expediting clerks
Refractory materials repairers, except brickmasons
Rolling machine setters, operators, and tenders, metal and plastic
Sawing machine setters, operators, and tenders, wood
Semiconductor processors
Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders
Sewing machine operators
Slaughterers and meat packers
Stationary engineers and boiler operators
Structural metal fabricators and fitters
Textile, apparel, and furnishings workers, all other
Timing device assemblers and adjusters
Tire builders
Tool and die makers

Appendix I Occupations in the South Carolina Manufacturing Industry

**Denotes non-manufacturing occupations contained within the manufacturing industry*

Occupation Title
Tool grinders, filers, and sharpeners
Weighers, measurers, checkers, and samplers, recordkeeping
Welders, cutters, solderers, and brazers
Welding, soldering, and brazing machine setters, operators, and tenders
Wind turbine service technicians
Woodworkers, all other
Woodworking machine setters, operators, and tenders, except sawing
Laborers and freight, stock, and material movers, hand*
Operations specialties managers*
Sales representatives, wholesale and manufacturing, except technical and scientific products*
General and operations managers*
Shipping, receiving, and traffic clerks*
Customer service representatives*
Office clerks, general*
Industrial truck and tractor operators*
Heavy and tractor-trailer truck drivers*
Other management occupations*
Bookkeeping, accounting, and auditing clerks*
Buyers and purchasing agents*
Secretaries and administrative assistants, except legal, medical, and executive*
Accountants and auditors*
Advertising, marketing, promotions, public relations, and sales managers*
Marketing and sales managers*
Architectural and engineering managers*
Business operations specialists, all other*
Software developers, applications*
Janitors and cleaners, except maids and housekeeping cleaners*
First-line supervisors of office and administrative support workers*
Human resources specialists*
Market research analysts and marketing specialists*
Sales representatives, wholesale and manufacturing, technical and scientific products*
Electricians*
Light truck or delivery services drivers*
Managers, all other*
Logisticians*
Computer user support specialists*
Chemists*
Sales managers*
Financial managers*
Computer systems analysts*

Appendix I Occupations in the South Carolina Manufacturing Industry

**Denotes non-manufacturing occupations contained within the manufacturing industry*

Occupation Title
Graphic designers*
Retail salespersons*
Purchasing managers*
Training and development specialists*
Marketing managers*
Administrative services managers*
Computer and information systems managers*
Cost estimators*
Management analysts*
Financial analysts*
Network and computer systems administrators*
Cashiers*
Executive secretaries and executive administrative assistants*
Carpenters*
Sheet metal workers*
Aircraft mechanics and service technicians*
Textile knitting and weaving machine setters, operators, and tenders*
Textile winding, twisting, and drawing out machine setters, operators, and tenders*
Upholsterers*
Petroleum pump system operators, refinery operators, and gaugers*
Cleaners of vehicles and equipment*
Human resources managers*
Chief executives*
Computer network architects*
Computer occupations, all other*
Health and safety engineers, except mining safety engineers and inspectors*
Food scientists and technologists*
Occupational health and safety specialists*
Payroll and timekeeping clerks*
Human resources assistants, except payroll and timekeeping*
Transportation, storage, and distribution managers*
Natural sciences managers*
Compliance officers*
Computer programmers*
Computer hardware engineers*
Medical scientists, except epidemiologists*
Commercial and industrial designers*
Merchandise displayers and window trimmers*
Technical writers*
Security guards*

Appendix I Occupations in the South Carolina Manufacturing Industry

**Denotes non-manufacturing occupations contained within the manufacturing industry*

Occupation Title
Food preparation workers*
Bartenders*
Waiters and waitresses*
First-line supervisors of non-retail sales workers*
Demonstrators and product promoters*
Sales engineers*
Billing and posting clerks*
Procurement clerks*
Order clerks*
Receptionists and information clerks*
Dispatchers, except police, fire, and ambulance*
Graders and sorters, agricultural products*
Farmworkers and laborers, crop, nursery, and greenhouse*
First-line supervisors of construction trades and extraction workers*
Construction laborers*
Operating engineers and other construction equipment operators*
Plumbers, pipefitters, and steamfitters*
Avionics technicians*
Bus and truck mechanics and diesel engine specialists*
Heating, air conditioning, and refrigeration mechanics and installers*
Textile cutting machine setters, operators, and tenders*
Extruding and forming machine setters, operators, and tenders, synthetic and glass fibers*
Driver/sales workers*
Crane and tower operators*
Information security analysts*
Biological technicians*
Laborers and freight, stock, and material movers, hand*
Architectural and civil drafters*
Biochemists and biophysicists*
Life, physical, and social science technicians, all other*
First-line supervisors of food preparation and serving workers*
Cooks, restaurant*
First-line supervisors of retail sales workers*
Cashiers*
Executive secretaries and executive administrative assistants*
Data entry keyers*
Structural iron and steel workers*
Automotive body and related repairers*
Mobile heavy equipment mechanics, except engines*

APPENDIX I

SOUTH CAROLINA
MANUFACTURERS
+ COMMERCE

SCFutureMakers