

The Economic Impact of Manufacturing in South Carolina



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Primary Goal

Conduct a comprehensive assessment of the manufacturing industry on South Carolina

- (1) Assess the total size of manufacturing statewide economic footprint*
- (2) Develop a manufacturing workforce profile*



Manufacturing's Economic Footprint in South Carolina



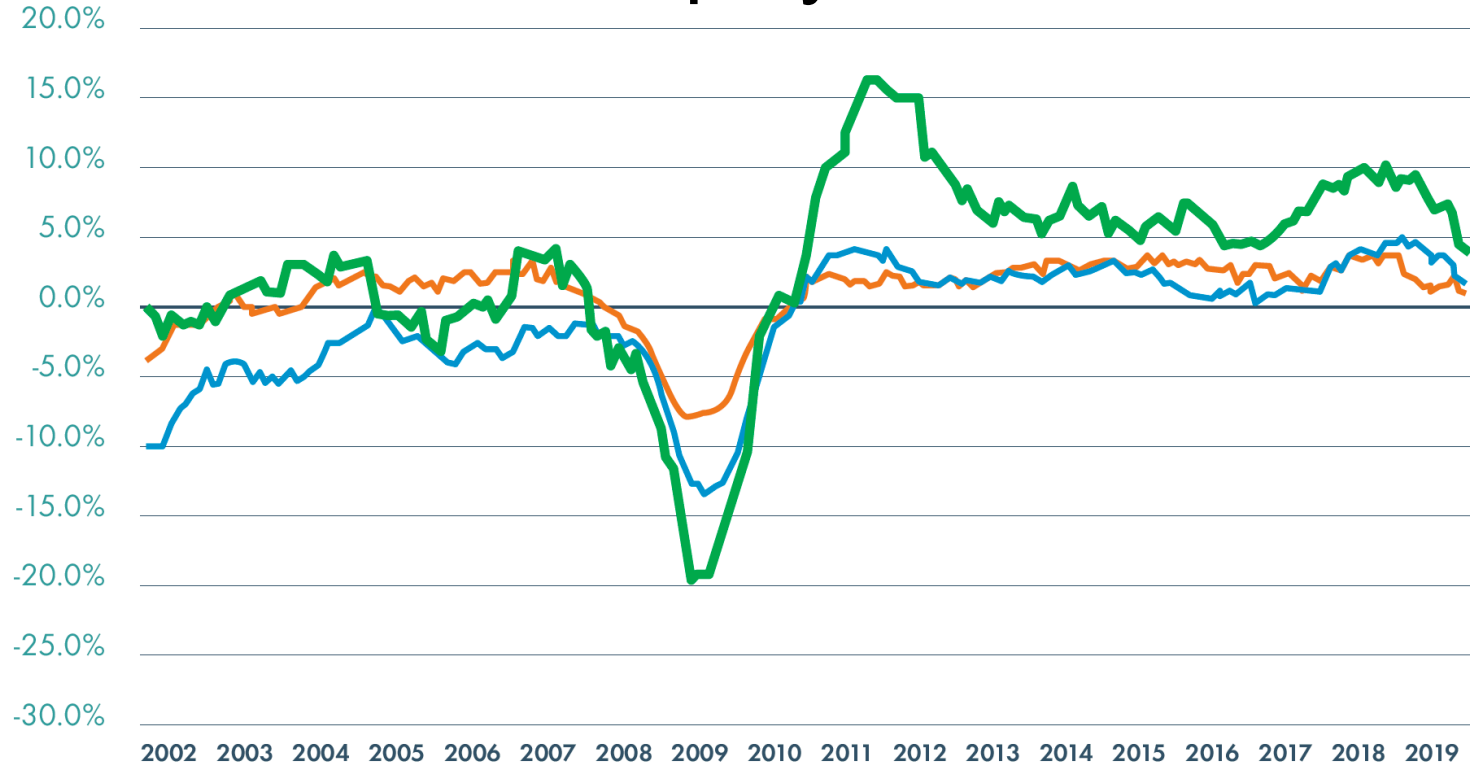
Pct. Contributions to GDP & Employment in S.C. by Industry



Source: Figure 1, pg. 6



South Carolina Employment Growth Rates

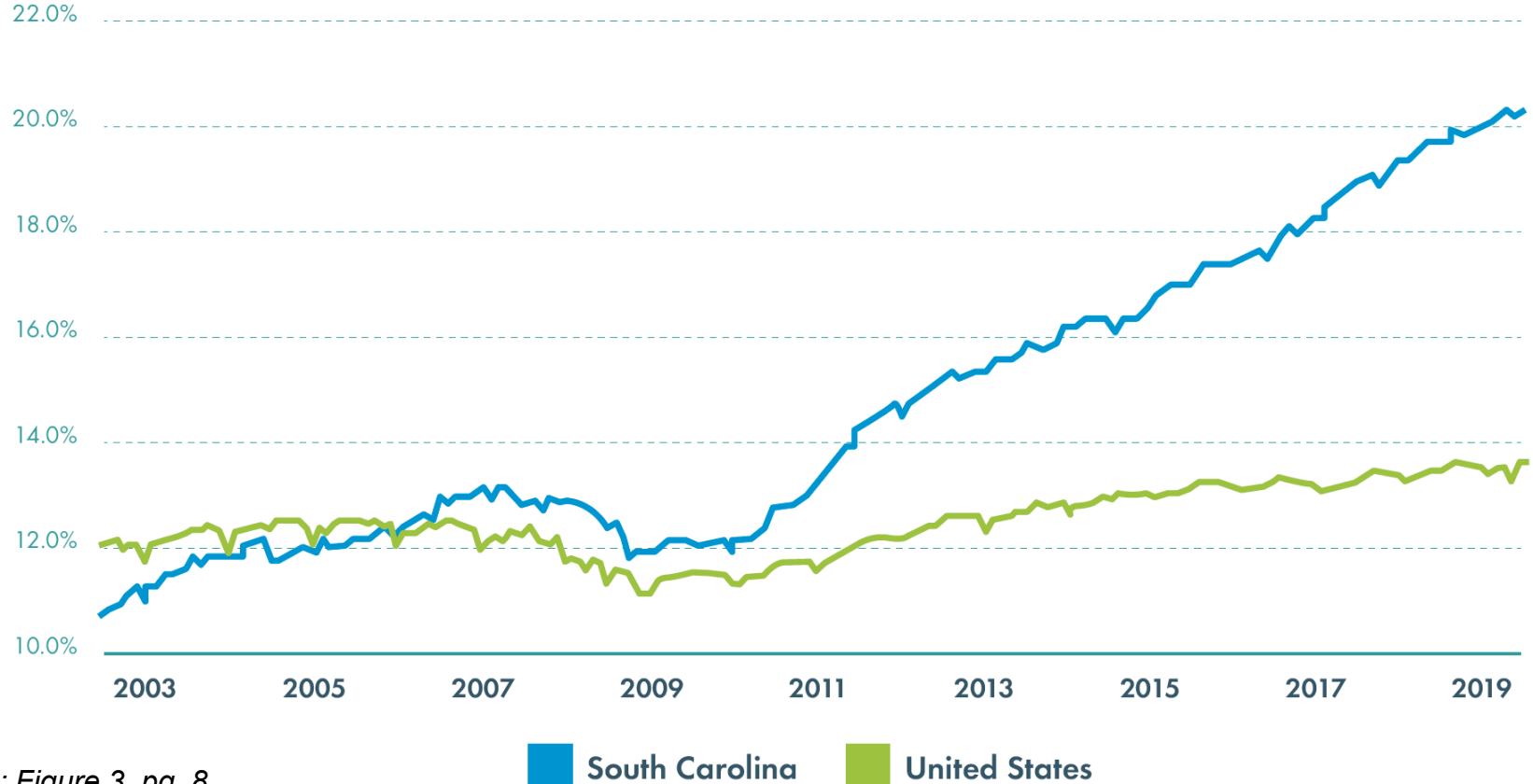


Source: Figure 2, pg. 7

South Carolina Manufacturing Trans. Equip. Manuf.



Trans. Equip. Manuf. as Pct. of Total Manufacturing Industry

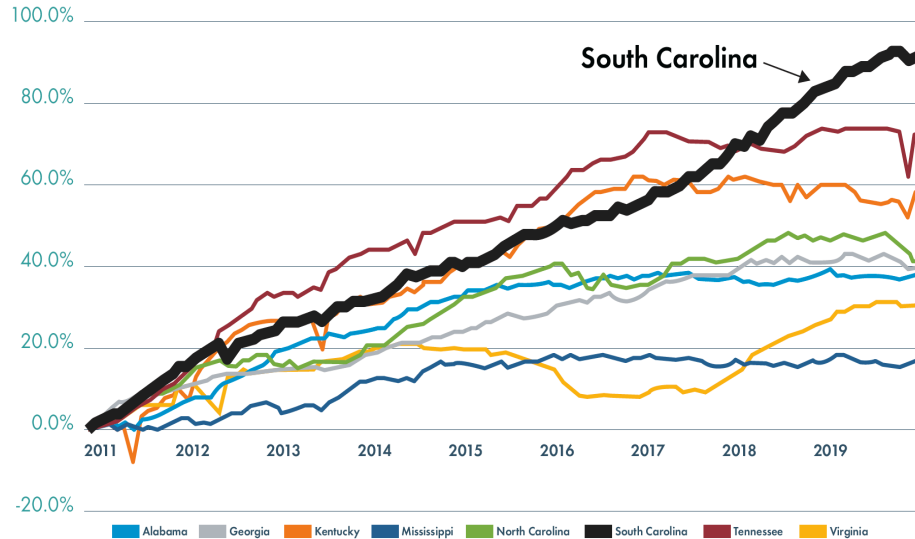


Source: Figure 3, pg. 8

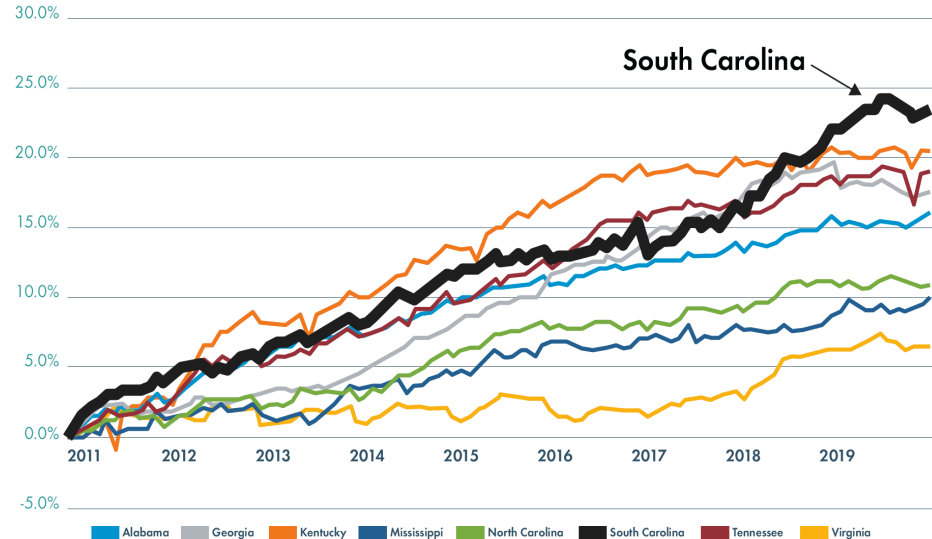


Cumulative Employment Growth Since 2011 by State

Transportation Equipment Manufacturing



All Manufacturing

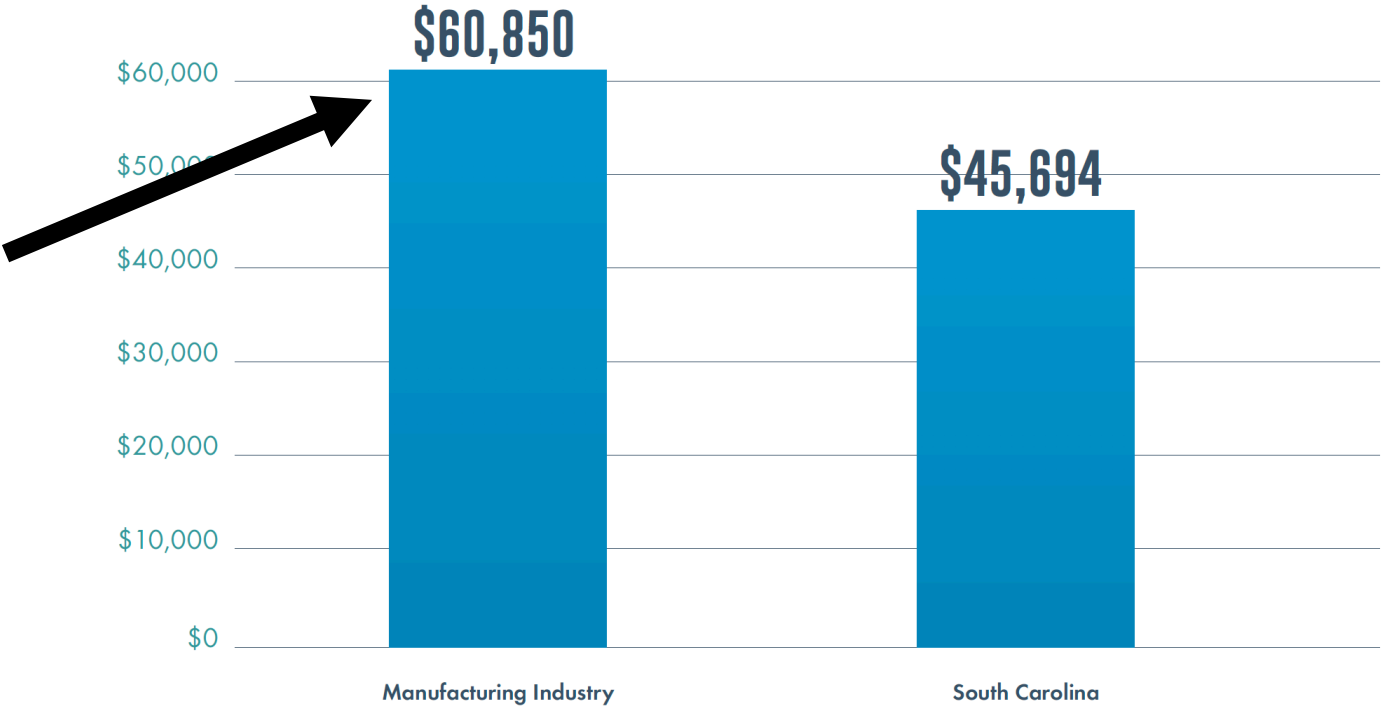


Source: Figures 4-5, pgs. 9-10



South Carolina Annual Wage Comparisons

33%
wage premium



Source: Figure 6, pg. 11



- *Manufacturing represents a principal driver of South Carolina's economic growth*
- *Yet the size of South Carolina's manufacturing industry is often underreported*



A New Definition

- (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)*



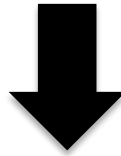
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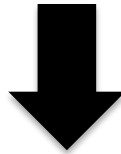


Economic Impact Analysis

Initial change in economic activity (e.g., new business activity)



Increased total local spending

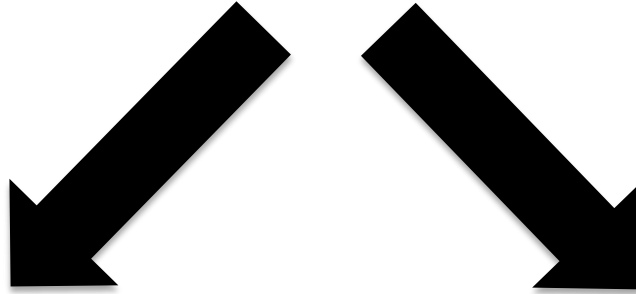


Economic activity (GDP), Job gains, Income gains



Economic Impact Analysis

Direct Impacts



Indirect Impacts
(Supply Chain)

Induced Impacts
(Household Spending)



Economic Impact of Manufacturing on South Carolina: Lower Bound

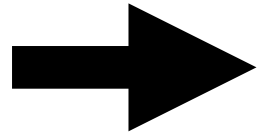
	Economic Output	Employment	Labor Income
Direct Impact	\$138.8 Billion	277,590	\$15.8 Billion
Indirect Impact	\$30.9 Billion	196,369	\$10.7 Billion
Induced Impact	\$24.2 Billion	188,432	\$7.6 Billion
Total Impact	\$193.9 Billion	662,391	\$34.1 Billion

Economic Impact of Manufacturing on South Carolina: Upper Bound

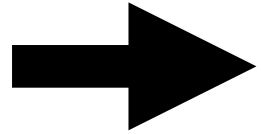
	Economic Output	Employment	Labor Income
Direct Impact	\$147.4 Billion	294,642	\$16.8 Billion
Indirect Impact	\$32.8 Billion	208,432	\$11.4 Billion
Induced Impact	\$25.7 Billion	200,007	\$8.0 Billion
Total Impact	\$205.9 Billion	703,081	\$36.2 Billion

Source: Tables 2-3, pg. 19





*Manufacturing supports, directly or indirectly, **over 30% of all jobs** in S.C.*



*This implies that **38% of the state's General Fund Revenue** can be attributed to manufacturing in S.C.*



A Workforce Profile of South Carolina Manufacturing



S.C. Long-Run Competitive Advantages

- *Infrastructure*
- *Workforce Development Initiatives*



Assessing Manufacturing Workforce Needs in the 2020s

(1) What are the manufacturing occupations projected to be in highest demand?

(2) What are the characteristics of these jobs?



South Carolina Manufacturing Occupation Projections

(through 2028)

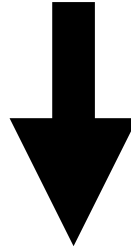
Occupation Title	Number of New Jobs by 2028	Average Annual Wage (2019)	Pct. Growth
Assemblers and fabricators, all other, including team assemblers	4,950	\$34,890	+10.3%
Maintenance and repair workers, general	3,561	\$37,630	+11.8%
Industrial engineers	2,201	\$89,090	+30.2%
Machinists	1,855	\$39,860	+14.7%
Industrial machinery mechanics	1,758	\$53,400	+19.3%

The 20 most in-demand manufacturing occupations will comprise about 80 percent of all new manufacturing jobs created by 2028

Source: Table 6, pg. 25



- *Higher Educational Requirements*
- *More Experience*

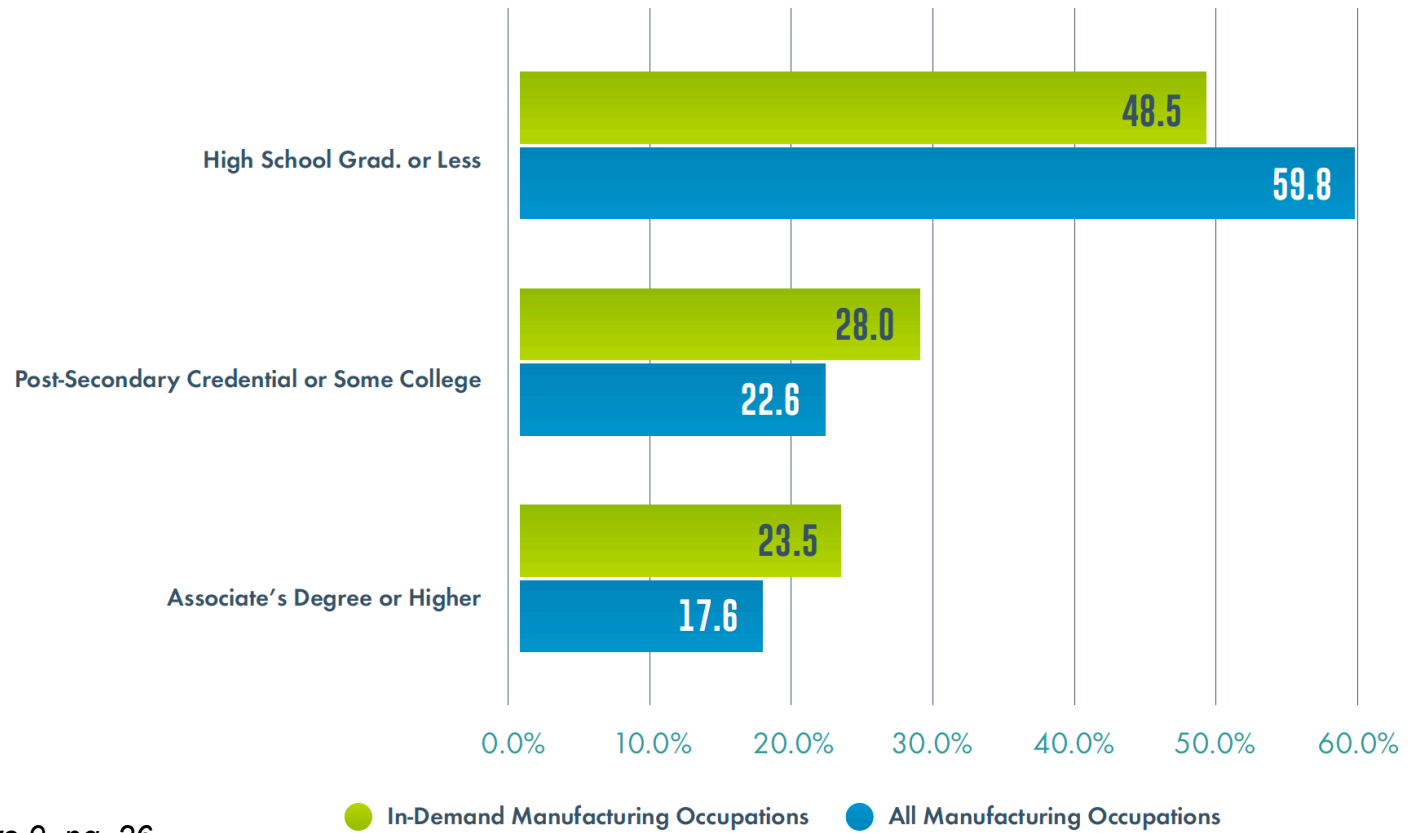


Major Shift Towards High-Skilled Labor

Although only 10 percent of all manufacturing-related occupations represent high-tech, non-production fields, nearly half of the high demand occupations fall within these two categories

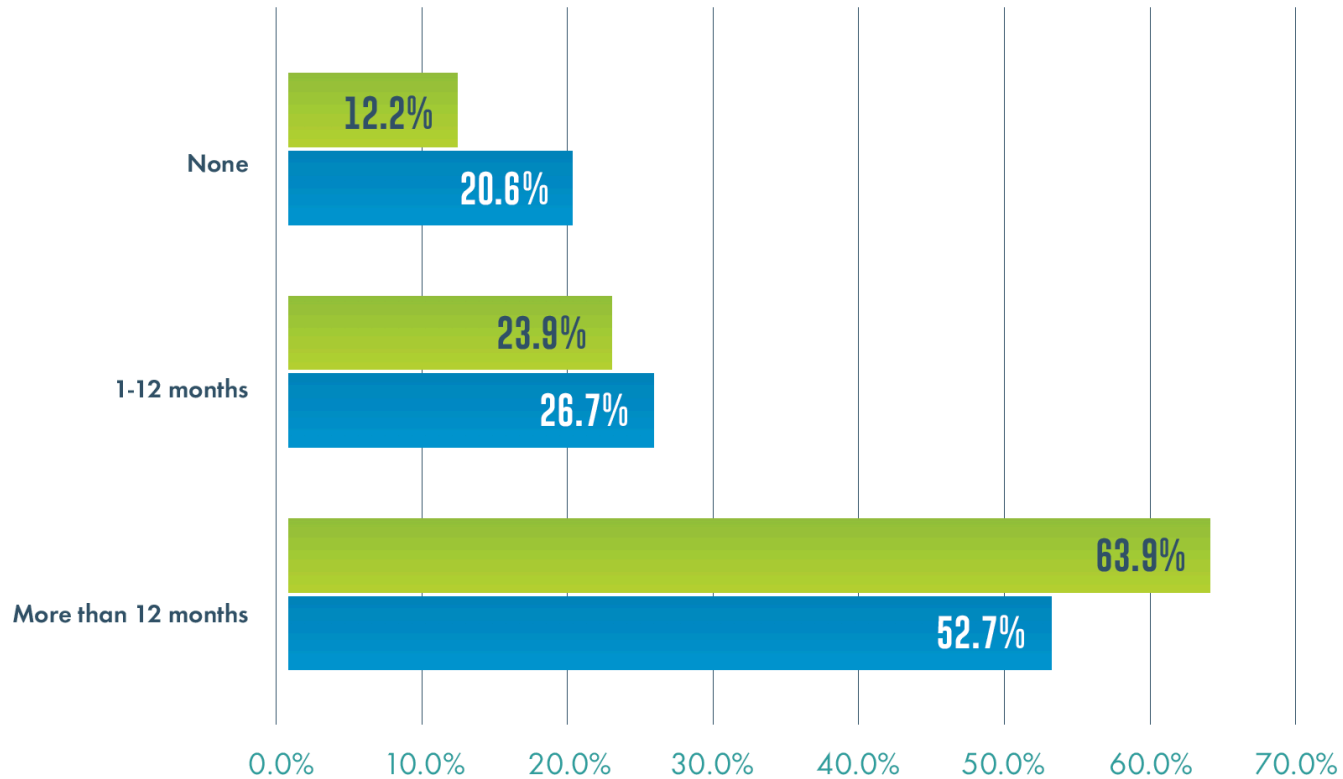


Education Requirements for S.C. Manufacturing Occupations



Source: Figure 9, pg. 26

Experience Requirements for S.C. Manufacturing Occupations

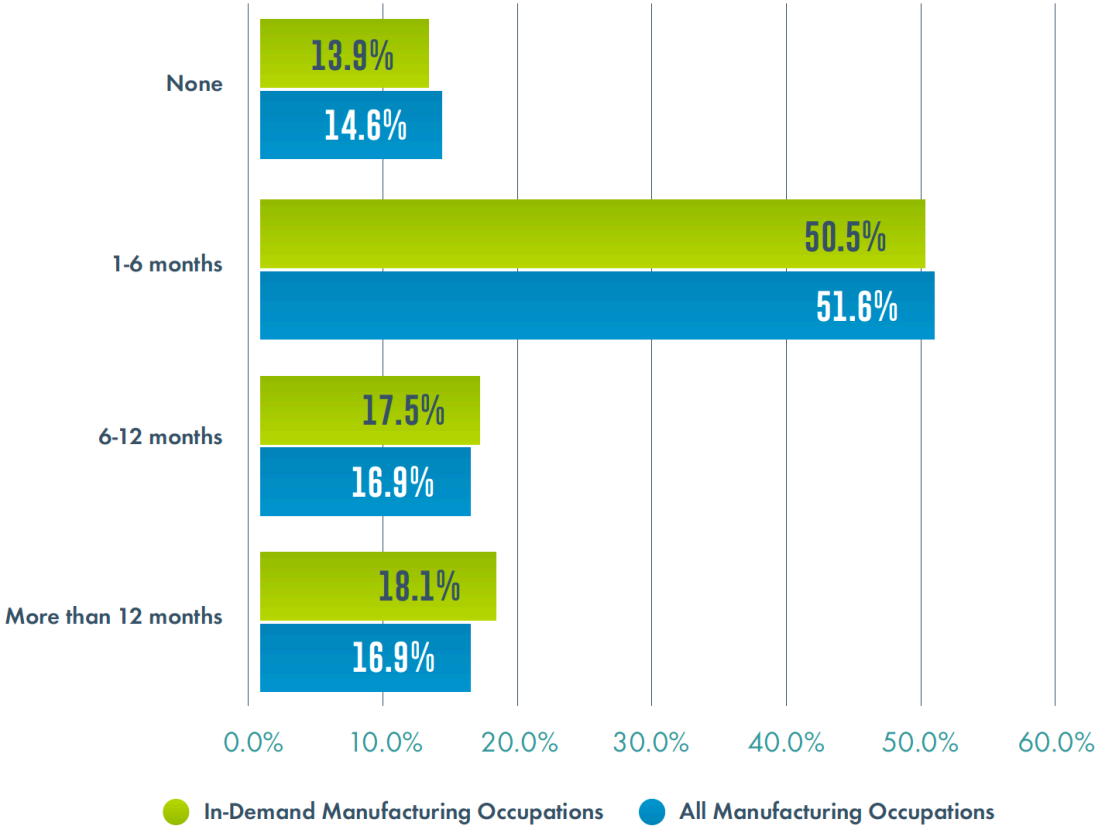


Source: Figure 10, pg. 27

● In-Demand Manufacturing Occupations ● All Manufacturing Occupations



On-the-Job Training Time for S.C. Manufacturing Occupations



Source: Figure 11, pg. 28



Looking Ahead to the Summer...

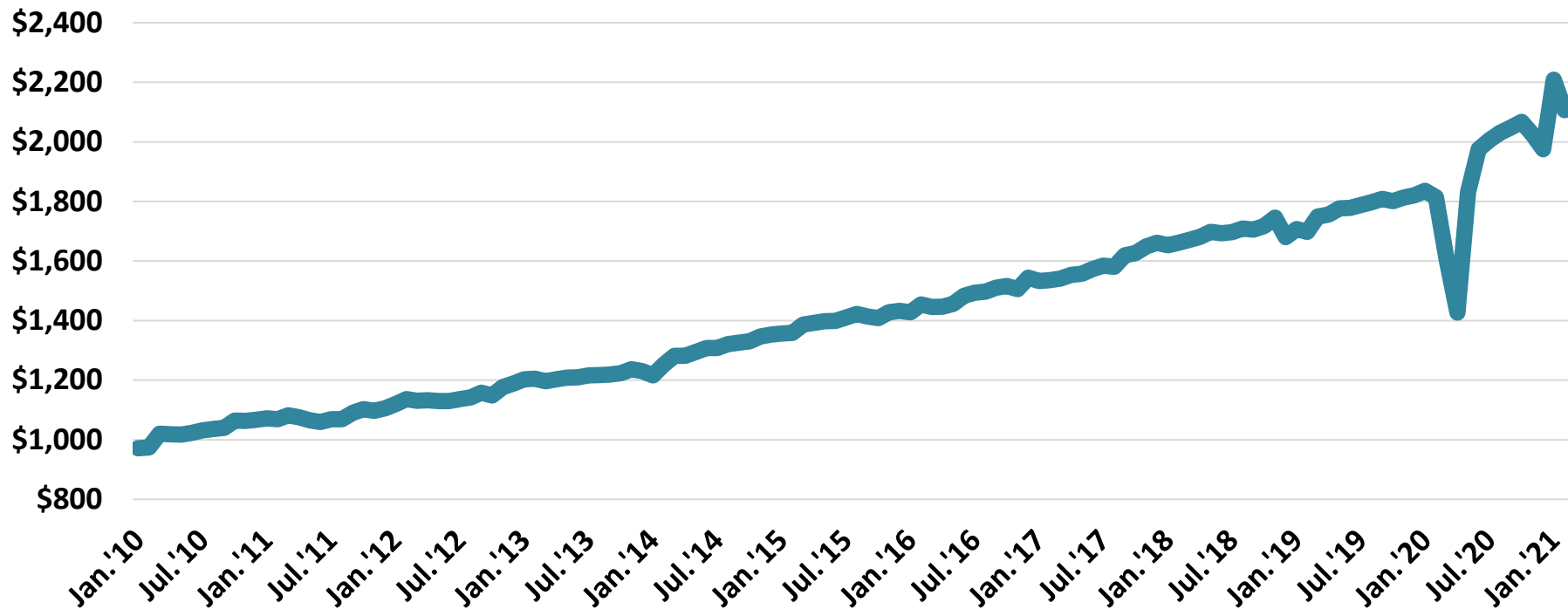


There May Be Some Light at the End of the Tunnel!



U.S. Consumer Spending: Durable Goods

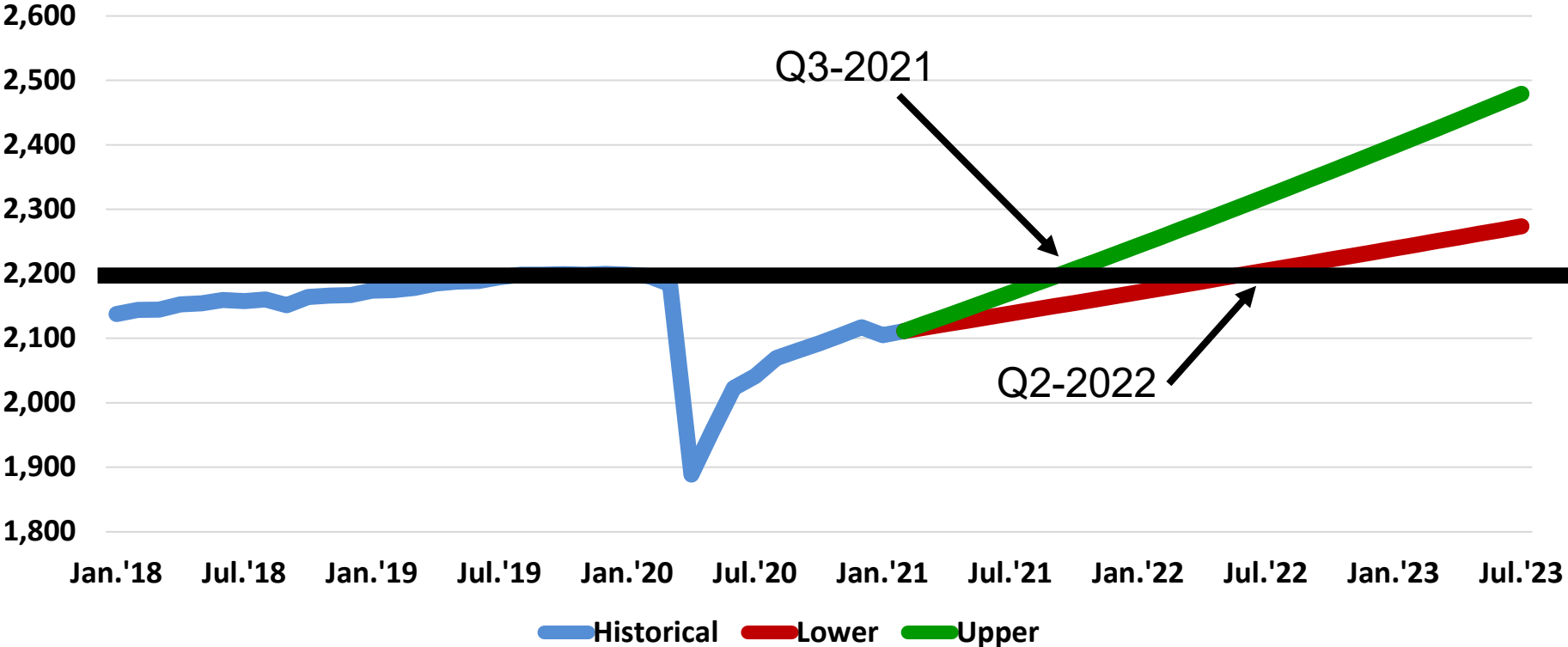
Note: Values Represent Real Annualized Totals, in billions



Source: U.S. Bureau of Economic Analysis



S.C. Possible Emp. Recovery Scenarios



Source: U.S. Bureau of Labor Statistics, CES-SA & Division of Research

The Bottom Line

- *South Carolina continues to enjoy a thriving and globally competitive manufacturing base that is a principal driver for the Palmetto State's economic growth.*
- *This can be observed through manufacturing's annual economic impact of between \$194B and \$206B annually, supporting between 662,391 and 703,081 jobs. Manufacturing-related jobs also pay a wage premium of about one-third above that of the average South Carolina job.*
- *Manufacturing supports over 30% of all jobs in South Carolina (directly or indirectly) and approximately 38% of the General Fund Revenue.*



The Bottom Line

- *An examination of the requirements associated with manufacturing occupations projected to be in the highest demand over the next decade suggests a significant shift towards a more high-skilled, experienced workforce.*
- *Nearly half of high demand manufacturing-related occupations represent high-tech, non-production fields – even though these occupations only represent ten percent of all manufacturing occupations.*
- *In the short-run, full recovery for South Carolina's economy likely in 2021 with continued strong demand in the automotive sector. Strength of demand will depend on how quickly spending patterns begin to shift towards pre-pandemic norms.*



Thank You!

