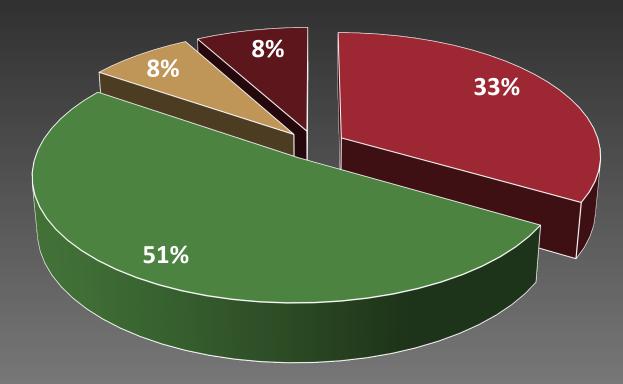


Accelerate Alabama Metals/Advanced Materials

Alabama Department of Labor Labor Market Information Division

Alabama Metals/Advanced Materials Employment by Industry Sectors



Primary Metal Manufacturing

Fabricated Metal Product Manufacturing

 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing
Ship and Boat Building

Source: Quarterly Census of Employment and Wages, 2021 Annual Average

Alabama Metals/Advanced Materials Industry Overview

Sector	# of Companies	# Employed	
Primary Metal Manufacturing	146	16,917	
Fabricated Metal Product Manufacturing	1,177	25,918	
Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing	38	3,768	
Ship and Boat Building	51	4,068	

Source: Quarterly Census of Employment and Wages, 2021 Annual Average

Primary Metal Manufacturing

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and super alloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

146 companies; 16,917 employed;33% of Metal/Advanced MaterialsIndustry Employment

# of Employees	% of Companies
1-49	56%
50-99	14%
100-249	18%
250+	12%

Source: Quarterly Census of Employment and Wages, 2021 annual average. *Note: Numbers may not equal 100% due to rounding.*

Top 5 Job Categories:

- 9% Rolling Machine Setters, Operators, and Tenders, Metal and Plastic
- 8% Industrial Machinery Mechanics
- 7% Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic
- 5% Supervisors of Production and Operating Workers
- 5% Metal-Refining Furnace Operators and Tenders

Source: 2021 Release of the Occupational Employment Statistics (OES) Report in cooperation with the Bureau of Labor Statistics.

Primary Metal Manufacturing Firm Age Workforce Indicators

Firm Age	Employment	Monthly Earnings New Hires		Turnover
0 – 1 Year	46	\$5,735	\$5,012	15.2%
2 – 3 Years	293	\$5,352	\$4,410	10.4%
4 – 5 Years	*	\$4,623	\$2,509	*
6 – 10 Years	19	\$4,573	\$3,062	11.8%
11+ Years	15,354	\$7,769	\$5,056	4.8%
All Firm Ages	15,711	\$7,715	\$5,017	5.0%

Source: Local Employment Household Dynamics Partnership between Alabama Department of Labor, Labor Market Information Division, and the U.S. Census Bureau, LED Extraction Tool; 2021 annual average data shown. *Data not available or marked confidential. Note: Data may not add due to rounding.

Fabricated Metal Product Manufacturing

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture, or treat metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

1,177 companies; 25,918 employed; 51% of Metal/Advanced Materials Industry Employment

# of Employees	% of Companies
1-49	89%
50-99	7%
100-249	3%
250+	1%

Source: Quarterly Census of Employment and Wages, 2021 annual average. *Note: Numbers may not equal 100% due to rounding.*

Top 5 Job Categories:

- 10% Welders, Cutters, Solderers, and Brazers
- 8% Machinists
- 7% Miscellaneous Assemblers and Fabricators
- 6% Structural Metal Fabricators and Fitters
- 5% Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic

Source: 2021 Release of the Occupational Employment Statistics (OES) Report in cooperation with the Bureau of Labor Statistics.

Fabricated Metal Product Manufacturing Firm Age Workforce Indicators

Firm Age	Employment	Monthly Earnings New Hires		Turnover
0 – 1 Year	324	\$4,410	\$3,585	14.2%
2 – 3 Years	752	\$4,375	\$3,783	11.0%
4 – 5 Years	418	\$3,779	\$3,206	13.6%
6 – 10 Years	1,341	\$4,288	\$3,462	11.7%
11+ Years	20,817	\$5,082	\$3,657	6.9%
All Firm Ages	23,651	\$4,982	\$3,630	7.6%

Source: Local Employment Household Dynamics Partnership between Alabama Department of Labor, Labor Market Information Division, and the U.S. Census Bureau, LED Extraction Tool; 2021 annual average data shown. *Data not available or marked confidential. Note: Data may not add due to rounding.

Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing

3252 Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing

This industry group comprises establishments primarily engaged in one of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; (3) manufacturing synthetic rubber; (4) manufacturing cellulosic (e.g., rayon, acetate) and noncellulosic (e.g., nylon, polyolefin, polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow; or (5) manufacturing and texturizing cellulosic and noncellulosic fibers and filaments.

38 companies; 3,768 employed;8% of Metal/Advanced MaterialsIndustry Employment

# of Employees	% of Companies
1-49	50%
50-99	18%
100-249	21%
250+	11%

Source: Quarterly Census of Employment and Wages, 2021 annual average. *Note: Numbers may not equal 100% due to rounding.*

Top 5 Job Categories:

- 17% Chemical Equipment Operators and Tenders
- 11% Chemical Plant and System Operators
- 7% Industrial Machinery Mechanics
- 6% Supervisors of Production and Operating Workers
- 5% Extruding and Forming Machine Setters, Operators, and Tenders, Synthetic and Glass Fibers

Source: 2021 Release of the Occupational Employment Statistics (OES) Report in cooperation with the Bureau of Labor Statistics.

Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing Firm Age Workforce Indicators

Firm Age	Employment	Monthly Earnings	Monthly Earnings New Hires	Turnover
0 – 1 Year	*	*	*	*
2 – 3 Years	*	*	*	*
4 – 5 Years	*	\$4,126	\$3,220	*
6 – 10 Years	168	\$4,571	\$3,652	11.2%
11+ Years	3,459	\$7,637	\$6,069	2.8%
All Firm Ages	3,655	\$7,452	\$5,466	3.3%

Source: Local Employment Household Dynamics Partnership between Alabama Department of Labor, Labor Market Information Division, and the U.S. Census Bureau, LED Extraction Tool; 2021 annual average data shown. *Data not available or marked confidential. Note: Data may not add due to rounding.

Ship and Boat Building

3366 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with dry-docks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

51 companies; 4,068 employed; 8% of Metal/Advanced Materials Industry Employment

# of Employees	% of Companies
1-49	84%
50-99	8%
100-249	6%
250+	2%

Source: Quarterly Census of Employment and Wages, 2021 annual average. *Note: Numbers may not equal 100% due to rounding.*

Top 5 Job Categories:

- 20% Welders, Cutters, Solderers, and Brazers
- 20% Structural Metal Fabricators and Fitters
- 8% Electricians
- 7% Plumbers, Pipefitters, and Steamfitters
- 3% Inspectors, Testers, Sorters, Samplers, and Weighers

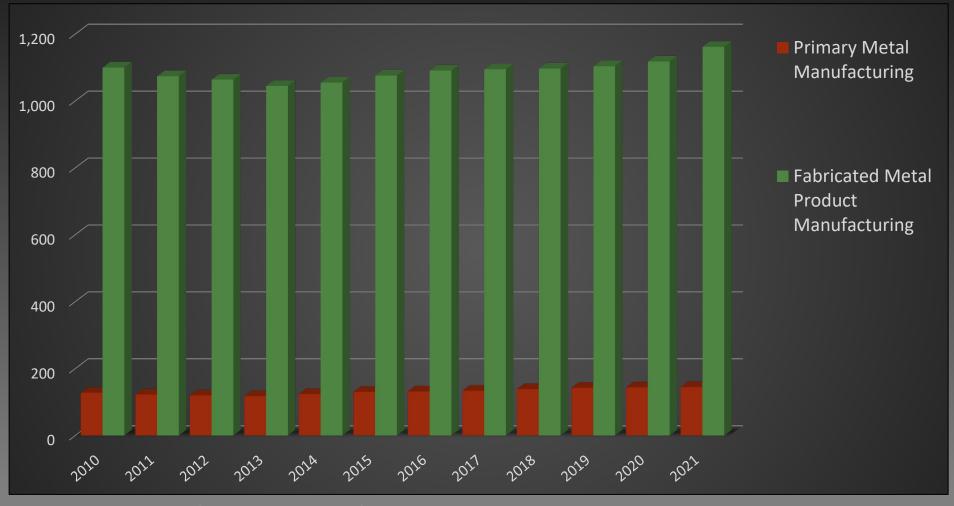
Source: 2021 Release of the Occupational Employment Statistics (OES) Report in cooperation with the Bureau of Labor Statistics.

Ship and Boat Building Firm Age Workforce Indicators

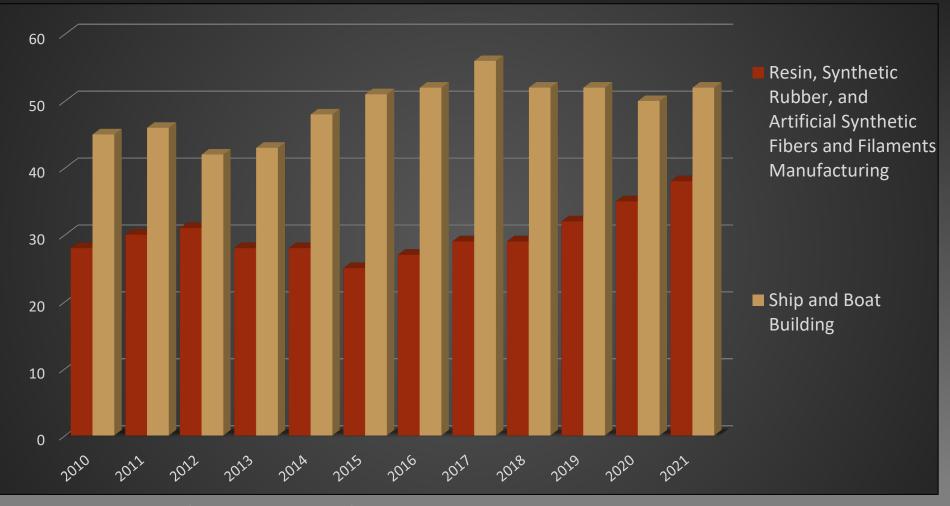
Firm Age	Employment	Monthly Earnings	i Farnings i	
0 – 1 Year	77	\$4,371	\$2,906	12.2%
2 – 3 Years	212	\$5,996	\$5,766	14.5%
4 – 5 Years	*	\$2,648	\$2,568	*
6 – 10 Years	106	\$3,971	\$2,524	13.4%
11+ Years	3,138	\$5,550	\$4,127	5.7%
All Firm Ages	3,501	\$5,539	\$4,100	6.5%

Source: Local Employment Household Dynamics Partnership between Alabama Department of Labor, Labor Market Information Division, and the U.S. Census Bureau, LED Extraction Tool; 2021 annual average data shown. *Data not available or marked confidential. Note: Data may not add due to rounding.

Development of Alabama's Metals/Advanced Materials Industry by Company



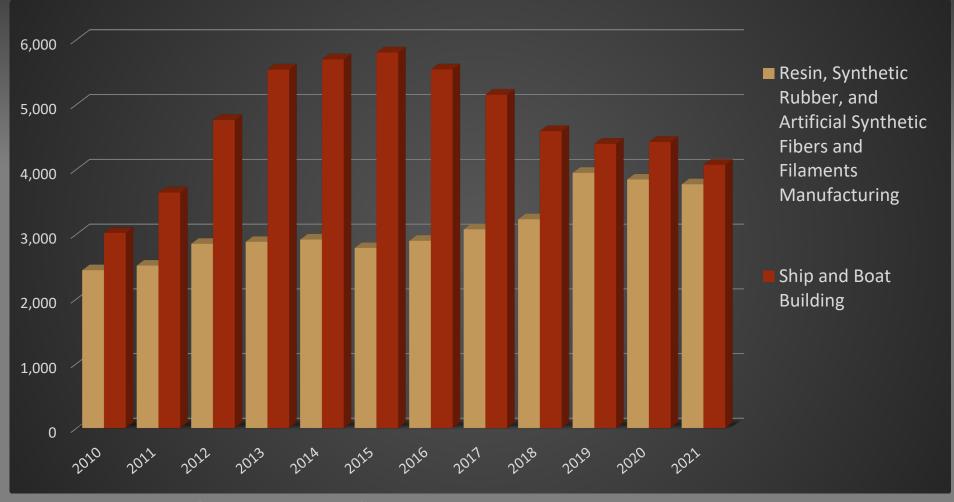
Development of Alabama's Metals/Advanced Materials Industry by Company



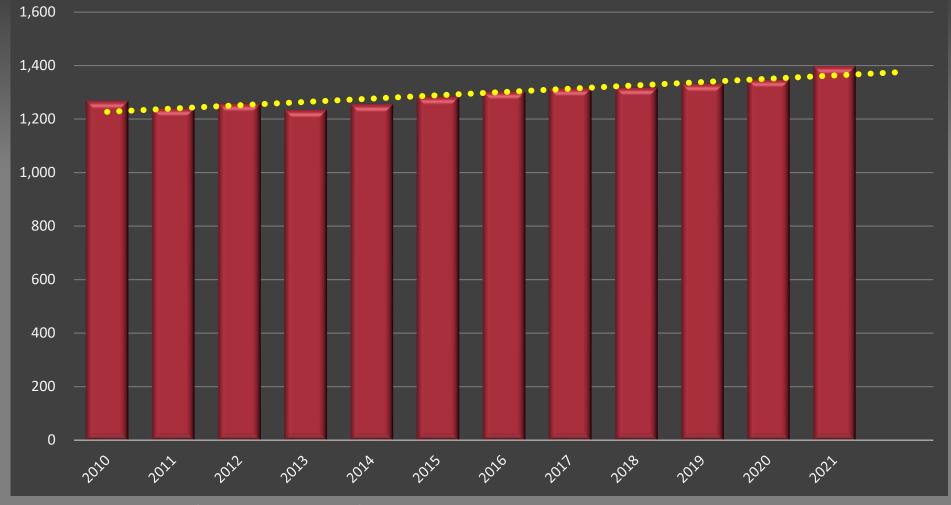
Development of Alabama's Metals/Advanced Materials Industry by Employment



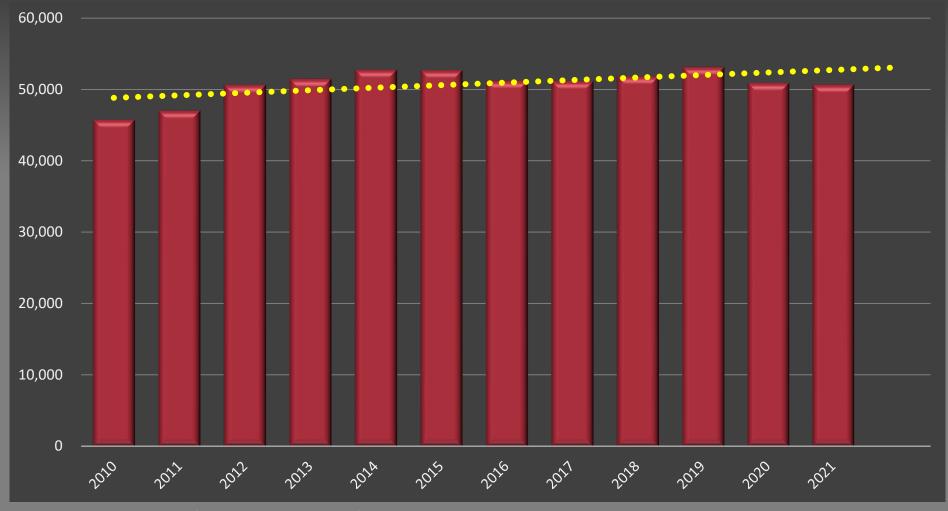
Development of Alabama's Metals/Advanced Materials Industry by Employment



Cluster Change Since 2010 Total Establishment



Cluster Change Since 2010 Total Employment



Top Occupations for Metals/Advanced Materials by Rounded Employment

Occupations	# of Jobs	% of Total
Welders, Cutters, Solderers, and Brazers	3,640	6.7%
Supervisors of Production and Operating Workers	2,700	4.9%
Industrial Machinery Mechanics	2,610	4.8%
Structural Metal Fabricators and Fitters	2,450	4.5%
Machinists	2,410	4.4%
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	2,060	3.8%
Miscellaneous Assemblers and Fabricators	1,860	3.4%
HelpersProduction Workers	1,630	3.0%
Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	1,590	2.9%
Remaining Occupations	33,660	61.7%

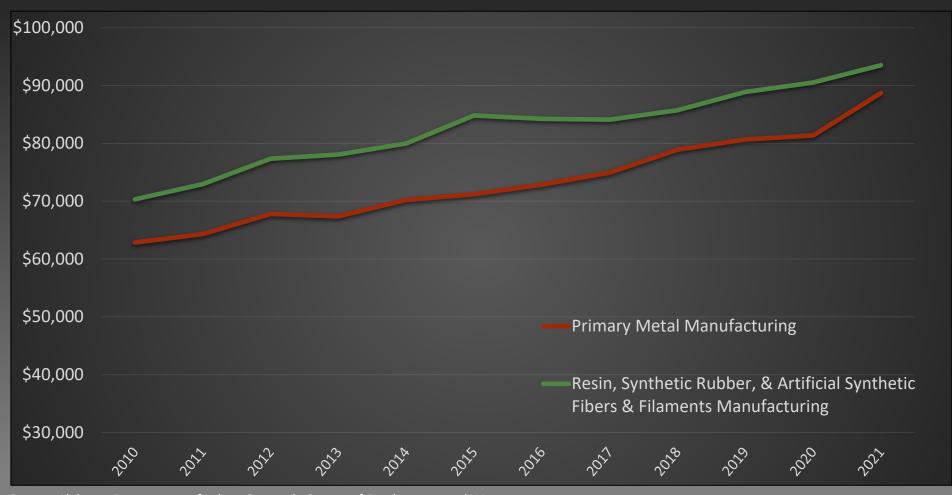
Source: Alabama Department of Labor, Labor Market Information Division in cooperation with the Projections Managing Partnership program and U.S. Bureau of Labor Statistics. Employment rounded to the nearest 10.

Wage Information Top 10 by Rounded Occupational Employment

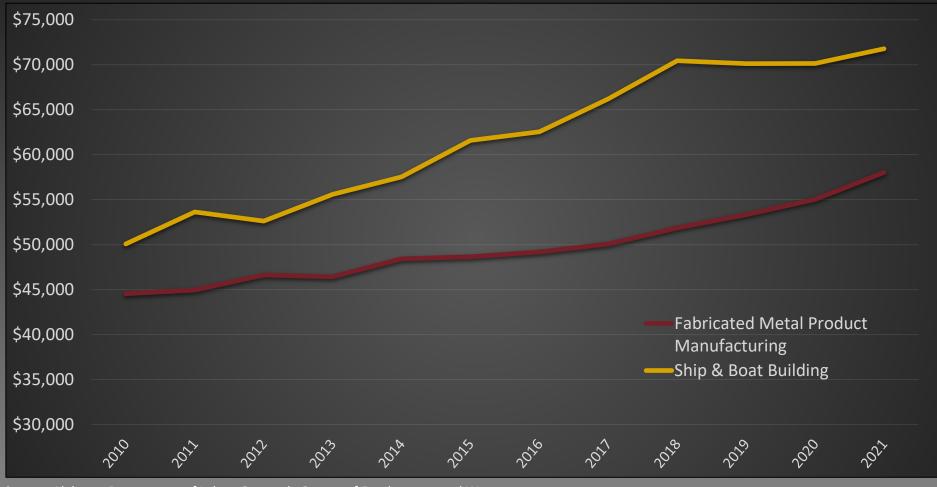
Occupation	Rounded Emp.	Entry Hourly	Entry Annual	Median Hourly	Median Annual	Experienced Hourly	Experienced Annual
Welders, Cutters, Solderers, and Brazers	3,640	\$14.59	\$30,342	\$19.61	\$40,796	\$23.02	\$47,876
Supervisors of Production and Operating Workers	2,700	\$19.40	\$40,353	\$29.83	\$62,044	\$37.63	\$78,277
Industrial Machinery Mechanics	2,610	\$17.54	\$36,491	\$24.39	\$50,722	\$29.24	\$60,828
Structural Metal Fabricators and Fitters	2,450	\$14.16	\$29,453	\$19.13	\$39,795	\$23.21	\$48,274
Machinists	2,410	\$15.04	\$31,280	\$22.16	\$46,088	\$26.12	\$54,319
Cutting, Punching, & Press Machine Setters, Operators, & Tenders	2,060	\$12.46	\$25,911	\$17.19	\$35,748	\$20.05	\$41,700
Misc. Assemblers and Fabricators	1,860	\$11.34	\$23,580	\$15.74	\$32,737	\$19.77	\$41,127
HelpersProduction Workers	1,630	\$9.28	\$19,310	\$12.16	\$25,298	\$14.72	\$30,628
Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	1,590	\$15.12	\$31,448	\$18.95	\$39,407	\$22.73	\$47,275
Chemical Equipment Operators and Tenders	1,420	\$16.66	\$34,644	\$29.91	\$62,217	\$33.33	\$69,325

Source: 2021 release of the Occupational Employment Statistics (OES) Report in cooperation with the Bureau of Labor Statistics; wage data aged using the most current Employment Cost Index (ECI) factors. Annual wage information rounded to the nearest whole dollar. *Note: Data reflects wages across all industries, not specifically to respective industry cluster.* Entry and Experienced Wages equal 10th percentile and 90th percentile wages, respectively.

Wage Information Total Wages by Industry



Wage Information Total Wages by Industry

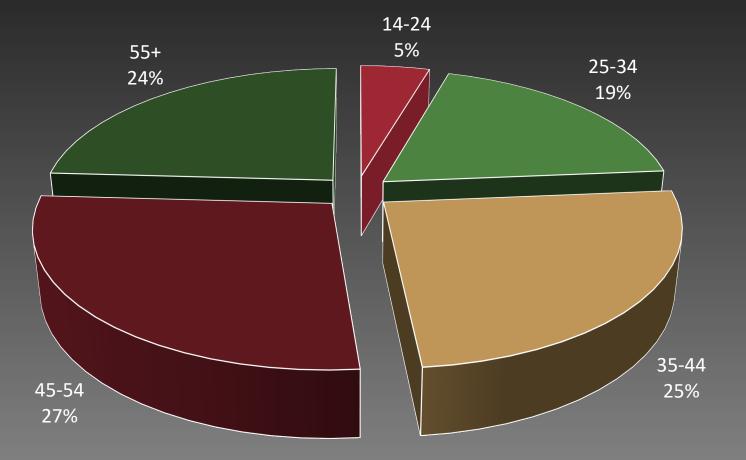


2021 Quarterly Workforce Indicators

NAICS	Industry	Average Turnover Rate	Average Job Gains	Average Net Job Flows	Average Monthly Earnings	Average Monthly Earnings – New Hires
331	Primary Metal Manufacturing	5.0%	241	-37	\$7,715	\$5,017
332	Fabricated Metal Product Manufacturing	7.6%	842	96	\$4,982	\$3,630
3252	Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing	3.3%	45	-1	\$7,452	\$5,466
3366	Ship and Boat Building	6.5%	42	-131	\$5,539	\$4,100

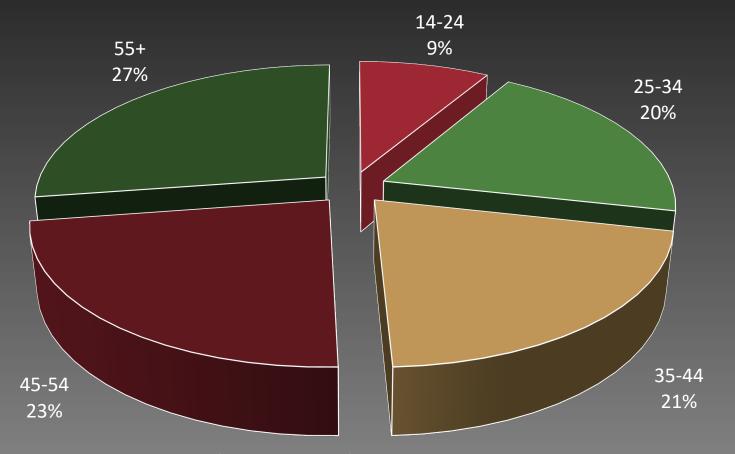
Source: Partnership between the Alabama Department of Labor, Labor Market Information Division and the U.S. Census Bureau, Longitudinal Employment-Household Dynamics (LEHD) Program, Quarterly Workforce Indicators (QWI) data.

331 Primary Metal Manufacturing 2021 Average Annual Employment by Age Group



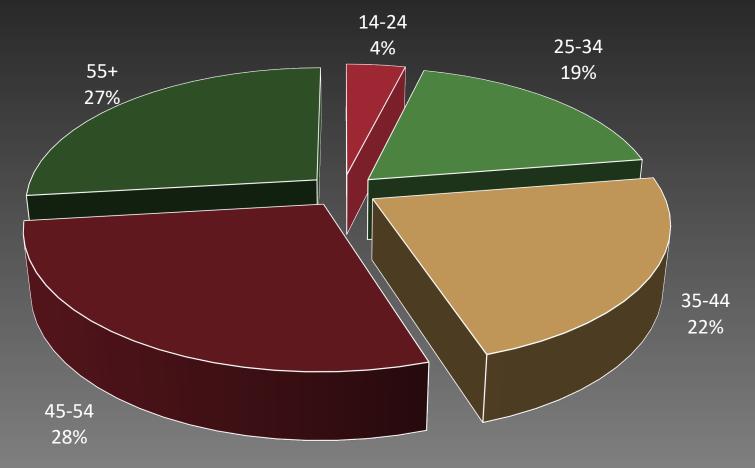
Source: Partnership between the Alabama Department of Labor, Labor Market Information Division and the U.S. Census Bureau, Longitudinal Employment-Household Dynamics (LEHD) Program, Quarterly Workforce Indicators (QWI) data.

332 Fabricated Metal Product Manufacturing 2021 Average Annual Employment by Age Group



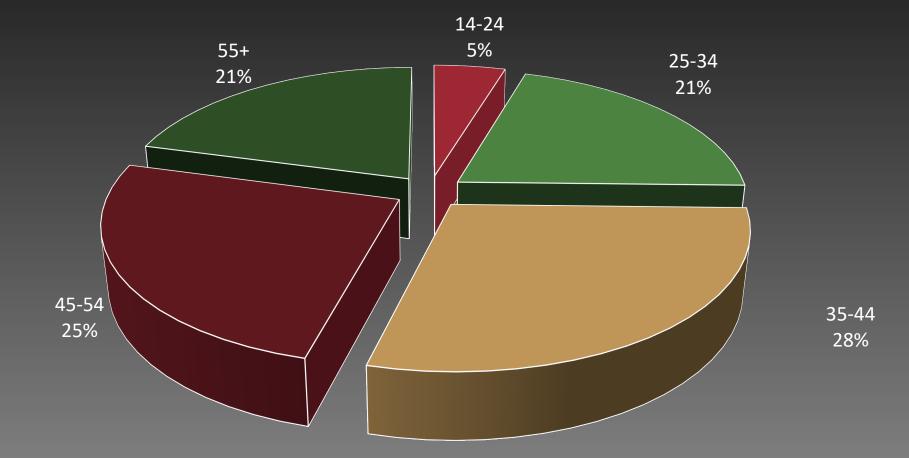
Source: Partnership between the Alabama Department of Labor, Labor Market Information Division and the U.S. Census Bureau, Longitudinal Employment-Household Dynamics (LEHD) Program, Quarterly Workforce Indicators (QWI) data.

3252 Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing 2021 Average Annual Employment by Age Group



Source: Partnership between the Alabama Department of Labor, Labor Market Information Division and the U.S. Census Bureau, Longitudinal Employment-Household Dynamics (LEHD) Program, Quarterly Workforce Indicators (QWI) data.

3366 Ship and Boat Building 2021 Average Annual Employment by Age Group



Source: Partnership between the Alabama Department of Labor, Labor Market Information Division and the U.S. Census Bureau, Longitudinal Employment-Household Dynamics (LEHD) Program, Quarterly Workforce Indicators (QWI) data.

Projections Information 2020 – 2030 Industry Projections by NAICS Code

NAICS	Industry	2020	2030	Net Change	Percent Change	Average Annual Growth	U.S. Average Annual Growth	Location Quotient
331	Primary Metal Manufacturing	16,720	16,280	-440	-2.66%	-0.27%	-0.13%	3.38
332	Fabricated Metal Product Manufacturing	25,920	28,190	2,270	8.77%	0.84%	0.37%	1.33
3252	Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing	3,840	4,290	450	11.74%	1.12%	*	*
3366	Ship and Boat Building	4,420	4,580	160	3.69%	0.36%	-1.25%	2.28

Source: Industry Projections, produced by the Labor Market Information Division in cooperation with the Projections Managing Partnership (PMP).

Major Metals/Advanced Materials Regions

Metals/Advanced Materials Industry Maps:

Statewide Region 1 Region 2 Region 3 Region 4 Region 5 Region 6