

MARINE & POWERSPORTS

2024 Supply & Demand Analysis Overview

Published January 2025



MINNESOTA STATE
Transportation Center of Excellence



**Developed for the Minnesota State
Transportation Center of Excellence
by RealTime Talent**

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Introduction and Sector Overview

This report highlights key opportunities in the Marine and Power Sports career pathway for Minnesota’s Transportation Industry. Professionals in Marine and Power Sports work in diverse roles including industrial equipment maintenance, outdoor power equipment maintenance, and small engine, motorboat, and motorcycle mechanics, serving a variety of industries. In all, about 4,149 people work in Marine and Power Sports roles in Minnesota as of the second quarter of 2024—a 3.2% decrease (135 workers) from a year prior (2023Q2).

Overall employment in Minnesota grew by nearly 25,855 workers (0.8%) between the second quarter of 2023 and the second quarter of 2024, a cooling of the growth seen in the prior year. Over the past five years (since the second quarter of 2019), employment grew by about 8,807 workers, or a 0.1% average annual growth in total statewide employment. Over the next five years, overall employment is forecast to remain flat (0.0% average annual growth), while all Transportation Occupations together forecast moderate growth of 0.1% average annual growth. During this time frame, Marine and Power Sports employment is anticipated to decline slightly, declining by about 27 jobs (-0.1% annually). Total baseline demand for Marine and Power Sports talent is anticipated to be around 2,413 professionals needed to fill positions due to job exits and transfers, such as retirements and job changes.

Transportation Pathways in Minnesota – Baseline Forecast, 2024Q2¹

Occupation	Current					5-Year History		5-Year Baseline Forecast				
	Empl	Avg Ann Wages ²	LQ	Unempl	Unempl Rate	Empl Change	Ann % Change	Total Demand	Exits	Transfers	Empl Change	Ann % Change
Automotive Technology Pathway	20,796	\$70,800	0.97	323	1.5%	-806	-0.8%	7,773	2,869	4,826	78	0.1%
Aviation and Drone Technology Pathway	10,297	\$132,400	0.96	105	1.0%	308	0.6%	4,427	1,450	3,034	-57	-0.1%
Collision Repair Pathway	7,342	\$58,400	1.09	179	2.4%	244	0.7%	3,035	1,186	1,950	-101	-0.3%
Diesel Equipment and Truck Pathway	12,514	\$68,400	1.02	92	0.7%	282	0.5%	5,328	2,000	3,244	84	0.1%
Marine and Power Sports Pathway	4,149	\$52,000	0.83	125	2.9%	-10	0.0%	2,413	1,027	1,413	-27	-0.1%
Truck Driving Pathway*	96,100	\$55,400	0.95	3,351	3.4%	857	0.2%	53,460	24,107	28,491	862	0.2%
Transportation Occupations	141,847	\$64,100	0.95	3,852	2.6%	616	0.1%	71,066	29,736	40,624	706	0.1%
Total - All Occupations	3,101,622	\$69,500	1.00	90,732	2.8%	8,807	0.1%	1,656,897	685,274	973,094	-1,471	0.0%

*This pathway includes School Bus Driver careers as of 2022, which were not included in the 2020 or 2021 estimates of career pathway employment or demand.

Source: [JobsEQ®](#)

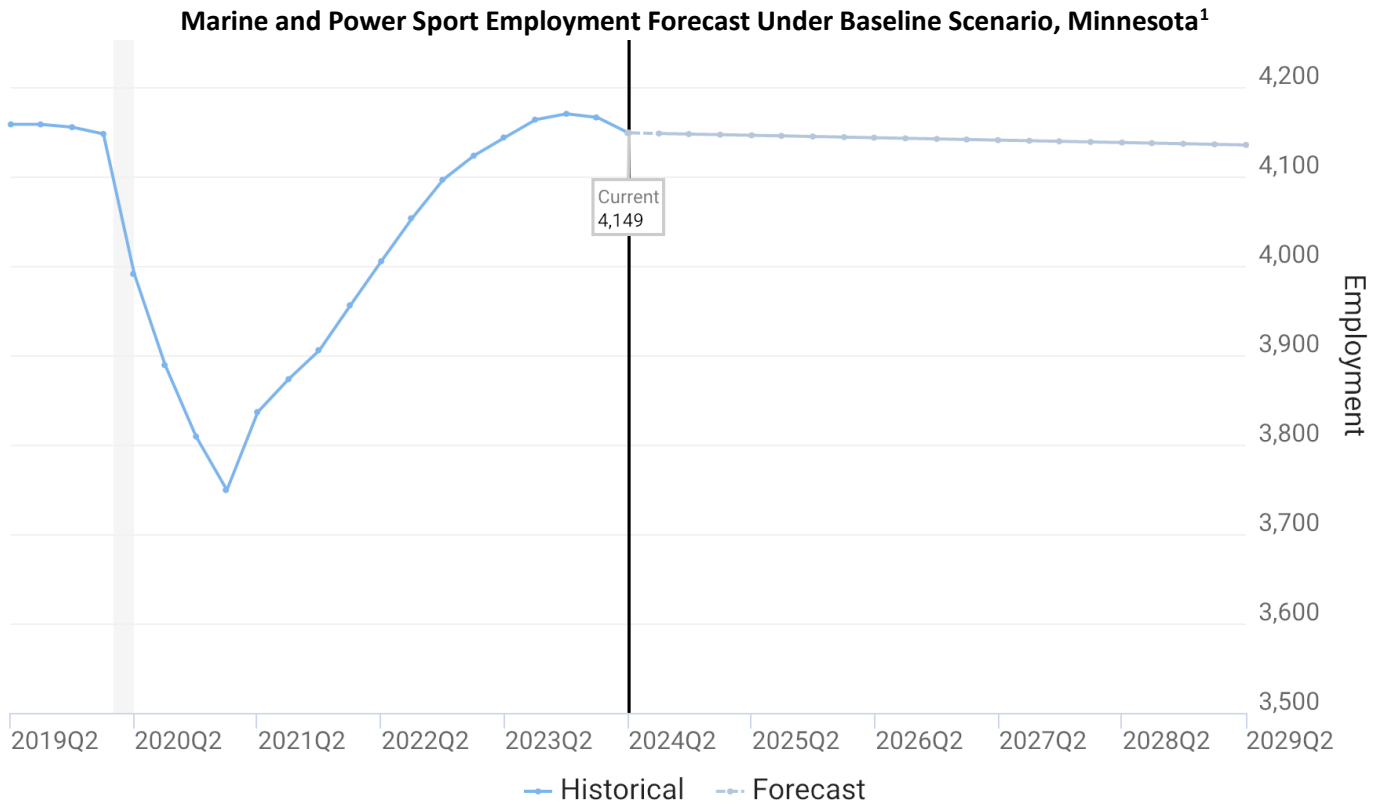
Data as of 2024Q2 unless noted otherwise

Note: Figures may not sum due to rounding.

1. Data based on a four-quarter moving average unless noted otherwise.

2. Wage data represent the average for all Covered Employment

Minnesota’s job market continued to cool in 2024 from the strong recoveries between 2021 and 2023. Unemployment rates have stabilized around 2.8% as of 2024. Marine and Power Sports employment rose rapidly beginning in 2021Q2, leveling off near pre-pandemic employment figures in 2023 and beginning a downturn in the first two quarters of 2024. Forecasting future needs under current conditions with an eye to anticipated talent pipelines into Marine and Power Sports suggest that there may be shortages of talent across a large share of occupations that will stifle ongoing growth in this career pathway unless more talent decides to enter the field. Growth has remained flat since 2023Q2, and the pathway continues to forecast a decline of -0.1% by the second quarter of 2029.



Source: JobsEQ® Data as of 2024Q2 The shaded areas of the graph represent national recessions.

¹ Historical employment numbers have been updated from the prior year’s report. Data shown here are the most accurate available employment figures based on JobsEQ modeling.

Industry/Occupation Mix

Marine and Power Sports talent is primarily concentrated in the Other Motor Vehicle Dealers industry (16.2%), returning down to 2022 estimates. The next highest industry of employment concentration is now Support Activities for Air Transportation (9.8%). These same top two industries are forecast to have the greatest amount of total demand over the next ten years.

Top Industry Distribution for Marine and Power Sports Pathway Occupations in Minnesota

NAICS Code	Industry Title	CURRENT			10-YEAR DEMAND			
		% of Occ Empl	Empl	Avg Ann Wages	Exits	Transfers	Empl Growth	Total Demand
4412	Other Motor Vehicle Dealers	16.2%	671	\$51,300	366	330	19	715
4881	Support Activities for Air Transportation	9.8%	405	\$41,500	210	398	0	607
8111	Automotive Repair and Maintenance	8.8%	366	\$38,500	187	351	-14	523
4571	Gasoline Stations	6.9%	286	\$36,900	139	264	-37	366
8114	Personal and Household Goods Repair and Maintenance	6.4%	264	\$52,700	142	128	4	275
7139	Other Amusement and Recreation Industries	5.5%	229	\$54,500	125	124	13	261
4411	Automobile Dealers	5.3%	222	\$41,700	116	220	4	341
4442	Lawn and Garden Equipment and Supplies Retailers	3.3%	139	\$47,400	73	64	-9	128
4811	Scheduled Air Transportation	3.3%	138	\$42,600	70	134	-4	200
4441	Building Material and Supplies Dealers	2.4%	98	\$46,600	53	47	1	101
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	2.1%	88	\$53,200	45	42	-5	81
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	1.9%	78	\$74,800	27	35	-3	59
5617	Services to Buildings and Dwellings	1.9%	77	\$55,800	42	37	2	82
9211	Executive, Legislative, and Other General Government Support	1.5%	64	\$60,000	29	41	-1	69
4451	Grocery and Convenience Retailers	0.9%	35	\$38,300	18	34	-3	49
4552	Warehouse Clubs, Supercenters, and Other General Merchandise Retailers	0.8%	34	\$40,200	17	30	-2	45
8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	0.7%	31	\$65,700	13	15	1	30
4931	Warehousing and Storage	0.7%	30	\$76,500	12	16	6	34
2211	Electric Power Generation, Transmission and Distribution	0.7%	28	\$128,200	8	11	-8	12
3353	Electrical Equipment Manufacturing	0.6%	25	\$69,900	9	11	-1	20
-	All Others	20.3%	842	-	353	491	-17	828

Source: JobsEQ®
 Data as of 2024Q2. Note that occupation-by-industry wages represent adjusted national data and may not be consistent with regional, all-industry occupation wages shown elsewhere in JobsEQ.
 Note: Figures may not sum due to rounding.

Talent Demand Detail

Employment and Wage Overview

Of all occupations found in the Marine and Power Sports pathway, Aircraft Service Attendants, Motorcycle Mechanics and Motorboat Mechanics and Service Technicians are uniquely concentrated in Minnesota to a higher degree than seen in the nation overall. On average, Marine and Power Sports careers pay about \$52,000 per year (up from \$48,700 last year)—well below the average wage statewide across all positions. Demand was relatively flat over the past year, seeing employment growth of 0.1% since the second quarter of 2023.

Marine and Power Sports Pathway in Minnesota - Baseline, 2024Q2¹

SOC	Occupation	Current					5-Year Forecast				
		Empl	Avg Ann Wages ²	LQ	Unempl	Unempl Rate	Total Demand	Exits	Transfers	Empl Change	Ann % Change
53-6031	Automotive and Watercraft Service Attendants	1,068	\$38,300	0.59	43	3.8%	762	271	517	-26	-0.5%
49-3053	Outdoor Power Equipment and Other Small Engine Mechanics	774	\$50,500	1.06	6	0.7%	390	208	185	-3	-0.1%
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	702	\$82,100	0.64	41	5.3%	268	121	159	-11	-0.3%
53-6032	Aircraft Service Attendants	639	\$41,700	1.23	25	3.9%	480	166	315	-1	0.0%
49-3051	Motorboat Mechanics and Service Technicians	580	\$55,500	1.19	4	0.8%	315	160	142	13	0.5%
49-3052	Motorcycle Mechanics	347	\$49,400	1.20	3	0.8%	177	94	83	0	0.0%
53-5022	Motorboat Operators	38	\$58,300	0.63	2	5.0%	20	8	12	0	0.0%
16420	Marine and Power Sports Pathway	4,149	\$52,000	0.83	125	2.9%	2,413	1,027	1,413	-27	-0.1%
00-0000	Total - All Occupations	3,101,622	\$69,500	1.00	90,732	2.8%	1,656,897	685,274	973,094	-1,471	0.0%

Source: [JobsEQ®](#)

Data as of 2024Q2 unless noted otherwise

Note: Figures may not sum due to rounding.

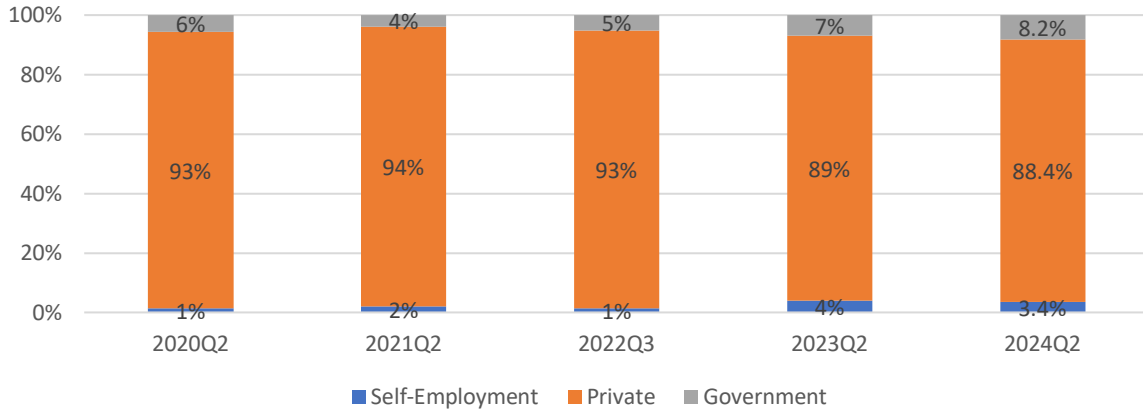
1. Data based on a four-quarter moving average unless noted otherwise.

2. Wage data are the average for all Covered Employment

Employment Types

About 88% of people employed in Marine and Power Sports careers in Minnesota work for private employers (nearly the same as 2023), while an estimated 3.4% are self-employed (an increase from past years). The remaining 8% work for state, federal, or local government entities – a share that has grown moderately over the past three years.

Employment Types, Minnesota 2020-2024



Wage Analysis

Marine and Power Sports saw some significant wage gains across the pathway, with average wages rising by \$3,300 from prior estimates. Entry-level wages in the pathways exceed the average entry-level wages observed across all occupations statewide by nearly \$7,000, paying an average of \$41,500 annually for entry-level talent. Education and training requirements vary slightly across the different occupations in this pathway, with most occupations requiring either a certificate or high school diploma or equivalent. Only one of these occupations require previous work experience (Motorboat Operators) and every occupation except Motorboat Operators require some level of on-the-job training.

Marine and Power Sports Pathway Wages and Experience Level Requirements, MN, 2024Q2

SOC	Occupation	Empl Count	Mean	Entry Level	Experienced	Percentiles					Education and Training		
						10%	25%	50% (Median)	75%	90%	Typical Entry-Level Education	Previous Work Experience	Typical On-the-Job Training
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	702	\$82,100	\$65,400	\$90,400	\$63,400	\$70,300	\$80,600	\$87,900	\$99,200	Certificate	None	Long-term OJT
49-3051	Motorboat Mechanics and Service Technicians	580	\$55,500	\$42,800	\$61,900	\$40,600	\$47,400	\$54,400	\$61,600	\$67,600	HS/GED	None	Long-term OJT
49-3052	Motorcycle Mechanics	347	\$49,400	\$32,100	\$58,000	\$26,600	\$38,500	\$49,800	\$58,200	\$63,700	Certificate	None	Short-term OJT
49-3053	Outdoor Power Equipment and Other Small Engine Mechanics	774	\$50,500	\$41,100	\$55,300	\$39,100	\$45,000	\$50,300	\$55,700	\$60,100	HS/GED	None	Moderate-term OJT
53-5022	Motorboat Operators	38	\$58,300	\$35,900	\$69,500	\$33,000	\$41,300	\$53,700	\$71,900	\$89,000	Certificate	<5 years	None
53-6031	Automotive and Watercraft Service Attendants	1,068	\$38,300	\$33,100	\$40,900	\$32,100	\$35,300	\$38,300	\$41,400	\$44,300	None	None	Short-term OJT
53-6032	Aircraft Service Attendants	639	\$41,700	\$34,000	\$45,500	\$32,100	\$37,500	\$42,200	\$47,200	\$49,500	HS/GED	None	Short-term OJT
	Marine and Power Sports Pathway	4,149	\$52,000	\$41,500	\$57,300	\$39,400	\$45,400	\$51,700	\$57,300	\$62,600			
	Total - All Occupations	3,101,622	\$69,500	\$34,600	\$87,000	\$32,000	\$39,600	\$54,500	\$81,600	\$119,000			

Wages in the Marine and Power Sports pathway vary across the three regions of Rural Greater Minnesota, Urban Greater Minnesota, and the 7-county MSP Metro. The MSP Metro region has the highest average and median wages across experience levels and percentiles and contains 57% of the pathway's total statewide employment. The Rural Greater Minnesota region and the Urban Greater Minnesota region have close average and very close median wage rates. Average Marine and Power Sports Pathway wages in the Greater Minnesota regions are about \$5,000 below the average pathway wages in the MSP Metro.

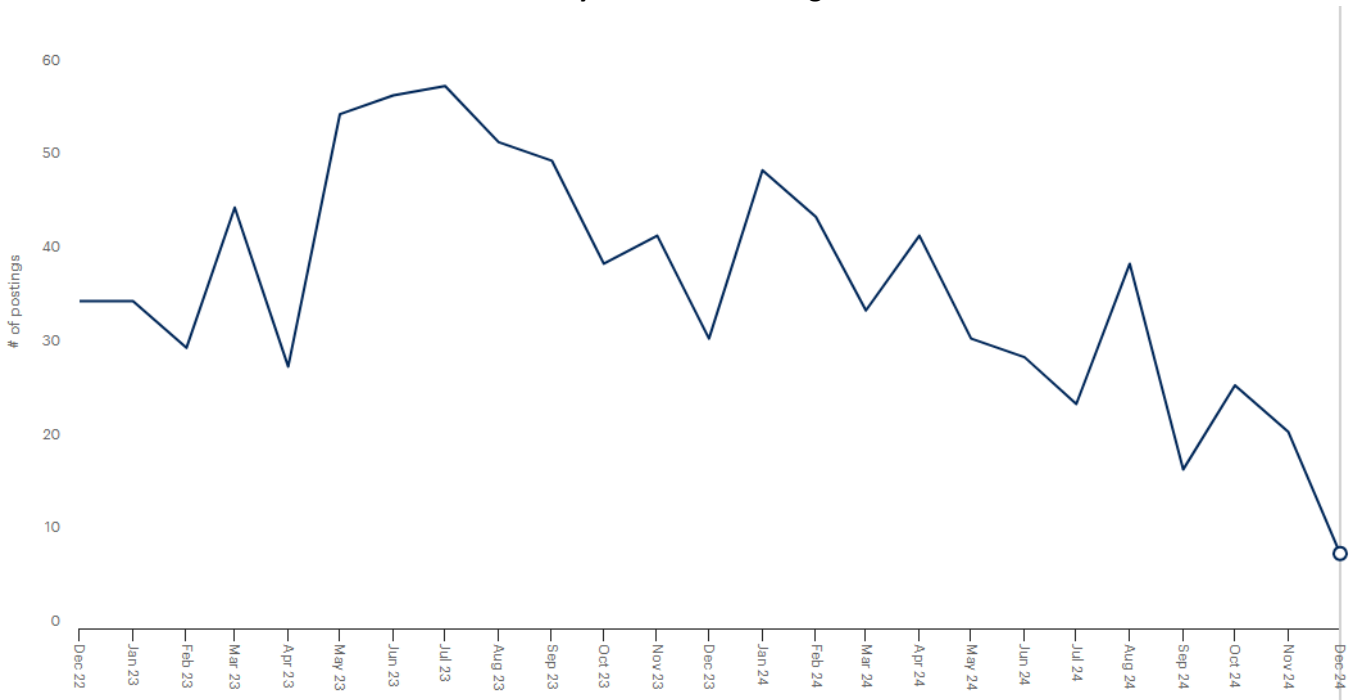
Marine and Power Sports Pathway Wages, 2024Q2

Region	Empl Count	Mean	Entry Level	Experienced	Percentiles				
					10%	25%	50% (Median)	75%	90%
Rural Greater Minnesota	1,114	\$47,900	\$38,900	\$52,500	\$37,000	\$42,200	\$48,200	\$52,700	\$57,500
Urban Greater Minnesota	603	\$49,700	\$40,900	\$54,000	\$39,200	\$44,000	\$49,300	\$54,100	\$60,600
MSP Metro	2,345	\$54,200	\$44,300	\$59,200	\$42,500	\$47,700	\$54,300	\$58,700	\$65,900
Minnesota	4,149	\$52,000	\$41,500	\$57,300	\$39,400	\$45,400	\$51,700	\$57,300	\$62,600

Job Posting Trends

Data in this section focuses on jobs newly advertised between January 1 and December 31, 2024 in Marine and Power Sports roles across Minnesota. Volume of total job postings, employer types (direct versus staffing), and top employers by unique job posting volumes comes from TalentNeuron; industry detail, skill and certification analysis, wage trends, and posting to hire analysis are from the Lightcast 2024Q4 dataset. Overall, there were 364 new jobs advertised in Marine and Power Sports during this time frame, a decrease of 30% from the prior 12-month period (2023). The total share of posted positions advertised by staffing and temp agencies in the Marine and Power Sports pathway decreased to 7% in 2024, similar to the levels seen in 2021 (5%). Posted wages remained nearly the same from 2022 and 2023 with an average of \$20.49 per hour, and there were an average of four hires per every one unique job posting advertised based on Lightcast estimates.

Volume of Career Pathway Online Job Postings in 2023 and 2024



Source: RealTime Talent analysis of Chmura Economics JobsEQ®, <http://www.chmuraecon.com/jobseq/>. Job Posting Trends section uses data from TalentNeuron, accessed 1/10/2025 at talentneuron.com. Industry detail, skill and certification analysis, wage trends, and posting to hire analysis are from the Lightcast 2024Q4 dataset accessed at analyst.lightcast.io

Top Employers by Volume of New Job Postings, With Change from Prior Year

	Employer	Percent Change between 2022 and 2023
1.	Army	-12%
2.	Signature Aviation	33%
3.	PENSKE	-32%
4.	Michael Foods, Inc.	-59%
5.	Walser Automotive Group	500%
6.	Garlock Equipment Company	0%
7.	Xcel Energy	25%
8.	ERMC Aviation	400%
9.	Luther Automotive Group	0%
10.	TC Energy	0%

New Job Postings Advertised in Minnesota by Employer Type

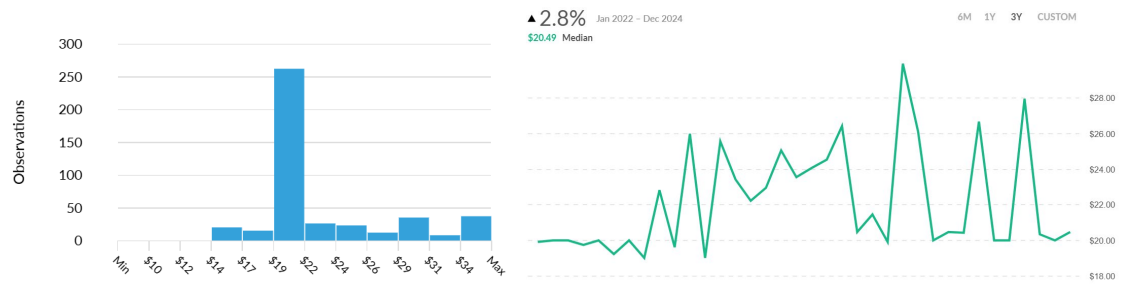


New Job Postings by Industry or Employer Type

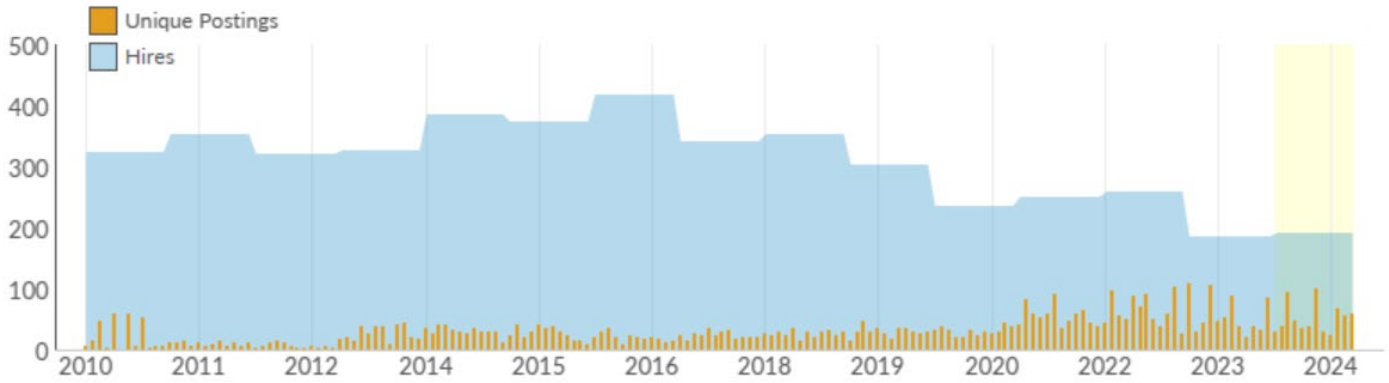
Industry	Total/Unique (Jan 2024 - Dec 2024)	Posting Intensity	Median Posting Duration
Warehouse Clubs and Supercenters	450 / 224	2 : 1	35 days
Employment Placement Agencies	59 / 33	2 : 1	33 days
Other Miscellaneous Durable Goods Merchant Wholesalers	67 / 19	4 : 1	33 days
Boat Dealers	57 / 18	3 : 1	41 days
Motorcycle, Bicycle, and Parts Manufacturing	15 / 12	1 : 1	28 days
Hardware Retailers	15 / 9	2 : 1	13 days
Electrical Contractors and Other Wiring Installation Contractors	11 / 8	1 : 1	22 days
General Freight Trucking, Local	24 / 8	3 : 1	47 days
Janitorial Services	46 / 8	6 : 1	n/a
Farm and Garden Machinery and Equipment Merchant Wholesalers	9 / 7	1 : 1	32 days

Pathway Advertised Salary Range

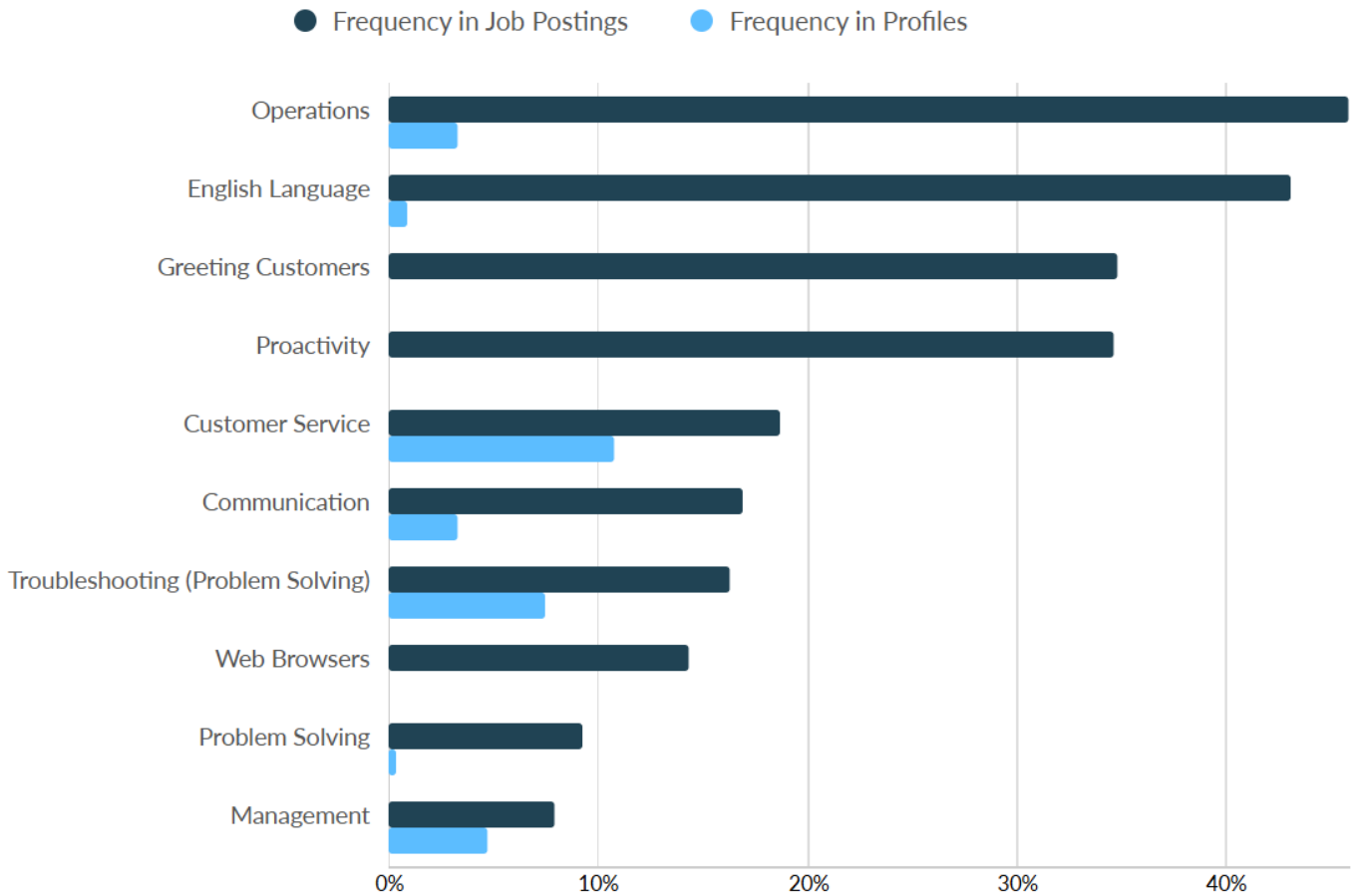
\$20.49/hr
Median Advertised Salary



Monthly Ratio of Unique Job Postings to Estimated Hires

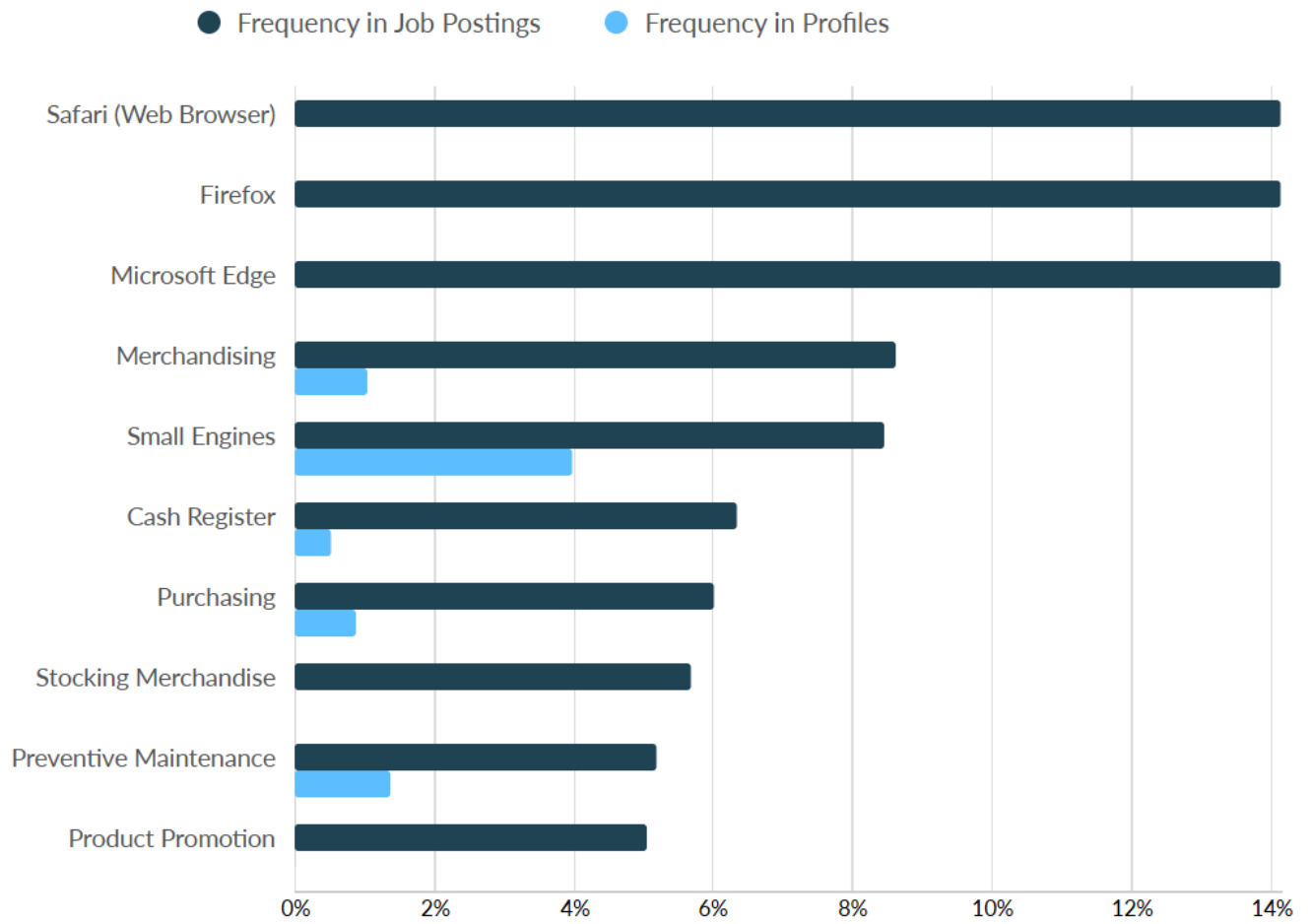


Top Common Skills



Source: RealTime Talent analysis of Chmura Economics JobsEQ®, <http://www.chmuraecon.com/jobseq/>. Job Posting Trends section uses data from TalentNeuron, accessed 1/10/2025 at talentneuron.com. Industry detail, skill and certification analysis, wage trends, and posting to hire analysis are from the Lightcast 2024Q4 dataset accessed at analyst.lightcast.io

Top Specialized Skills



Top Certifications and Qualifications

Qualification	Postings with Qualification
Valid Driver's License	81
USCG Master Captain's License	3
EPA 608 Technician Certification	3
Commercial Driver's License (CDL)	3
National Center For Construction Education & Research (NCCER) Certification	2
Boating License	2
DOT Certification	2
Medical Certificate	2
30-Hour OSHA General Industry Card	1
NATE Certification (North American Technician Excellence)	1

Talent Supply Detail

Talent Unemployment, Underemployment, and Educational Attainment

At an overall pathway unemployment rate of 2.9% (down from 3.7% in 2023Q2), there are about 125 unemployed Marine and Power Sports professionals statewide. While unemployment rates for Automotive and Watercraft Service Attendants and Aircraft Service Attendants declined substantially from very high figures in 2023Q2 (7.3% and 7.5% respectively, now 3.8% and 3.9%), unemployment for Electrical and Electronics Repairers rose to 5.3% and the rate for Motorboat Operators grew to 5.0%. An additional 594 (up from 485 in 2023Q3) Marine and Power Sports professionals are underemployed—meaning they are working in roles for which they are overqualified by education or experience.²

Marine and Power Sports Pathway in Minnesota

SOC	Occupation	Empl (Place of Residence)							Total Empl	Overall Occupation ¹		
		< High School	High School	Some College	2-Year	4-Year	Master's	PhD		Underemployed	Unemployed	Unempl Rate
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	2.5%	23.9%	21.8%	34.1%	15.1%	1.3%	1.3%	733	126	41	5.3%
49-3051	Motorboat Mechanics and Service Technicians	8.2%	42.0%	17.7%	21.4%	9.5%	1.1%	0.0%	579	55	4	0.8%
49-3052	Motorcycle Mechanics	8.0%	42.5%	17.7%	21.7%	9.0%	1.0%	0.0%	353	29	3	0.8%
49-3053	Outdoor Power Equipment and Other Small Engine Mechanics	8.3%	41.8%	17.6%	21.4%	9.7%	1.2%	0.0%	773	79	6	0.7%
53-5022	Motorboat Operators	2.7%	32.3%	16.1%	11.2%	29.7%	7.6%	0.5%	37	13	2	5.0%
53-6031	Automotive and Watercraft Service Attendants	9.0%	39.4%	19.5%	14.5%	15.9%	1.3%	0.5%	1,096	155	43	3.8%
53-6032	Aircraft Service Attendants	9.6%	35.7%	19.3%	13.1%	20.0%	1.7%	0.6%	626	137	25	3.9%
Marine and Power Sports Pathway		7.6%	37.1%	19.1%	20.5%	13.9%	1.3%	0.5%	4,198	594	125	2.9%
Total - All Occupations		5.2%	20.6%	14.8%	13.9%	31.0%	10.7%	3.9%	3,094,991	533,165	90,732	2.8%

Source: JobsEQ®

Data as of 2024Q2 unless noted otherwise

Note: Figures may not sum due to rounding.

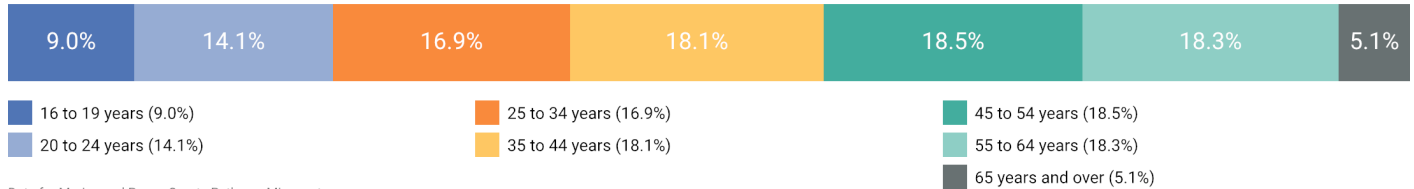
1. "Overall occupation" characteristics refer to attributes across all individuals in those occupations, not just those limited to the demographic categories shown in this table.

² Chmura adopts the New York Fed methodology of counting as underemployed only those who have acquired at least a Bachelor's degree and yet are working in an occupation that does not typically require a Bachelor's degree. In Occupation Diversity, the only occupations shown in the Underemployment table are "non-college jobs", as designated by the New York Fed. Per the New York Fed, "a job is classified as a college job if 50 percent or more of the people working in that job indicate that at least a bachelor's degree is necessary; otherwise, the job is classified as a non-college job."

Workforce Demographics

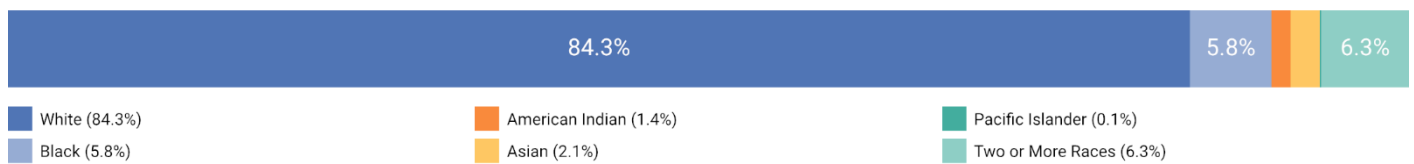
Talent currently employed in this career pathway in Minnesota are relatively young overall, consistent with observations over the past three years. About 23.1% of the Marine and Power Sports workforce is under the age of 25, and this share has increased over the past two years. Workers over 64 years old now account for 5.1% of the workforce. The largest demographic group by race are white, representing 84.5% of the total pathway’s workforce, with the next largest cohort being talent of two or more races, representing 6.3% of the workforce. Just over 5% of the pathway’s workforce are Hispanic or Latinx, and 13.3% are female.

Marine and Power Sports Workforce Age Demographics, 2024Q2



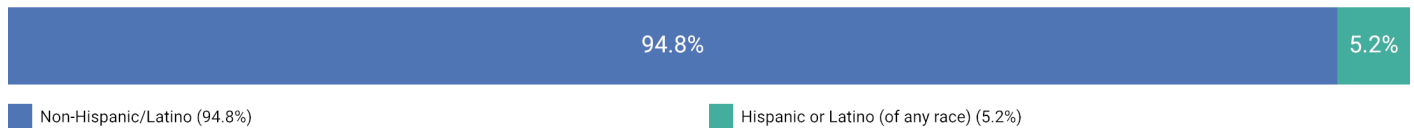
Data for Marine and Power Sports Pathway, Minnesota
Source: JobsEQ®. Data as of 2024Q2.

Marine and Power Sports Workforce Race Demographics, 2024Q2



Data for Marine and Power Sports Pathway, Minnesota
Source: JobsEQ®. Data as of 2024Q2.

Marine and Power Sports Workforce Ethnicity Demographics, 2024Q2



Data for Marine and Power Sports Pathway, Minnesota
Source: JobsEQ®. Data as of 2024Q2.

Marine and Power Sports Workforce Gender Demographics, 2024Q2



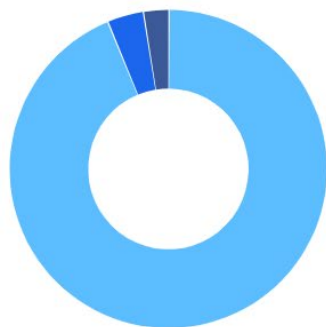
Data for Marine and Power Sports Pathway, Minnesota
Source: JobsEQ®. Data as of 2024Q2.

Aligned Postsecondary Programs

There were about 270 awards conferred at 11 different Minnesota postsecondary institutions in programs aligned to Marine and Power Sports careers in SY2023. In SY2023, there were 54 more completions compared to SY2022. Among these, 108 were at the Associate level, and 124 were certificates that could be earned in less than two years. The average school had about 24 completions but total completions by institution range from seven to 59 completions. One institution delivered a program remotely in SY2023, up from zero the prior year. The most closely-aligned programs fall in the center of this table, including Marine Maintenance, Small Engine Mechanics, and Motorcycle Maintenance programs which in total conferred 91 certificate and Associate degree awards statewide in SY2023.

Marine and Power Sports Postsecondary Program Awards by Level, SY2023

CIP Code	Title	Certificate < 1 Yr	Certificate 1+ but < 2 Yr	Associate's	Certificate 2+ but < 4 Yr	Bachelor's	Master's	Doctorate	Total Awards
15.0303	Electrical, Electronic, and Communications Engineering Technology/Technician	14	20	59	5	7	0	0	105
47.0605	Diesel Mechanics Technology/Technician	4	24	42	14	0	0	0	84
47.0616	Marine Maintenance/Fitter and Ship Repair Technology/Technician	0	38	7	20	0	0	0	65
47.0606	Small Engine Mechanics and Repair Technology/Technician	0	12	0	3	0	0	0	15
47.0611	Motorcycle Maintenance and Repair Technology/Technician	0	11	0	0	0	0	0	11
47.0104	Computer Installation and Repair Technology/Technician	1	0	0	0	0	0	0	1
47.0103	Communications Systems Installation and Repair Technology/Technician	0	0	0	0	0	0	0	0
	Total	19 6.8%	105 37.4%	108 38.4%	42 14.9%	7 2.5%	0 0%	0 0%	281


























Institution Type	Completions (2023)	Market Share
Public, 2-year	253	93.7%
Private not-for-profit, 4-year or above	10	3.7%
Public, 4-year or above	7	2.6%

Source: RealTime Talent analysis of Chmura Economics JobsEQ®, <http://www.chmuraecon.com/jobseq/>. Job Posting Trends section uses data from TalentNeuron, accessed 1/10/2025 at talentneuron.com. Industry detail, skill and certification analysis, wage trends, and posting to hire analysis are from the Lightcast 2024Q4 dataset accessed at analyst.lightcast.io

About 94% of related pathway awards were conferred by public 2-year institutions, with Hennepin Technical College and Alexandria Technical and Community College awarding largest number of completions in SY2023 (21.9% and 18.1% of awards conferred, respectively). Completions have grown 15% since SY2019.

Marine and Power Sports Postsecondary Program Awards by Institution, SY2023

Institution	Completions (2023)	Growth % YOY (2023)	Market Share (2023) 	IPEDS Tuition & Fees (2023)	Completions Trend (2019-2023)
 Hennepin Technical College	59	43.9%	21.9%	\$5,881	
 Alexandria Technical & Community College	49	4.3%	18.1%	\$6,213	
 Central Lakes College-Brainerd	40	0.0%	14.8%	\$6,209	
 Anoka Technical College	35	150.0%	13.0%	\$6,267	
 Lake Superior College	23	91.7%	8.5%	\$5,785	
 Minnesota State Community and Technical College	19	11.8%	7.0%	\$5,900	
 Minnesota West Community and Technical College	11	-35.3%	4.1%	\$6,484	
 Dunwoody College of Technology	10	42.9%	3.7%	\$25,659	
 Minnesota State College Southeast	9	350.0%	3.3%	\$7,820	
 Riverland Community College	8	-20.0%	3.0%	\$6,249	
 Minnesota State University-Mankato	7	133.3%	2.6%	\$9,490	

Graduate Demographics

Postsecondary program graduate diversity varies by program across the Marine and Power Sports pathway. There were no international student completions in SY2023, but in SY2022, there were two completions by international students. All programs continue to have an overrepresentation of male students. Electrical, Electronic, and Communication Engineering Technology/Technician continues to have the most diverse graduates.³

Race and Gender of Graduates Receiving Postsecondary Awards in SY2023, Minnesota

CIP Code	Description	All 2023 Graduates	International Student*	Black or African American, non-Hispanic	American Indian or Alaska Native	Asian, Native Hawaiian or Other Pacific Islander	Hispanic or Latino	White, non-Hispanic	Multiple or unknown race/ethnicity	Gender - Males	Gender - Females
15.0303	Electrical, Electronic, and Communications Engineering Technology/Technician	105	0	5	0	15	2	69	14	100	5
47.0103	Communications Systems Installation and Repair Technology/Technician	0	0	0	0	0	0	0	0	0	0
47.0104	Computer Installation and Repair Technology/Technician	1	0	0	0	0	0	1	0	1	0
47.0605	Diesel Mechanics Technology/Technician	84	0	0	0	1	1	81	1	81	3
47.0606	Small Engine Mechanics and Repair Technology/Technician	15	0	0	1	0	1	13	0	13	2
47.0611	Motorcycle Maintenance and Repair Technology/Technician	11	0	0	0	0	10	4	0	11	0
47.0616	Marine Maintenance/Fitter and Ship Repair Technology/Technician	65	0	0	0	0	4	61	0	60	5
All Marine and Power Sports Postsecondary Programs		270	0	5	1	16	8	225	15	255	15

IPEDS SY2023 demographics by award conferred. Count of awards may double count individuals who obtained multiple credentials in the same calendar year. *[NCES IPEDS](https://nces.ed.gov/ipeds/report-your-data/race-ethnicity-definitions) refers to international students that do not have resident status in the United States as “nonresident aliens.” This title aligns to Federal tax definitions and according to NCES IPEDS refers to “a person who is not a citizen or national of the United States and who is in this country on a visa or temporary basis and does not have the right to remain indefinitely. Note: Nonresident aliens are reported separately, rather than in any of the racial/ethnic categories.” They are not included in calculations of BIPOC talent in this report as race and ethnicity information is not provided for these international students. The terminology of “international student” has been used in this report as it is more familiar to a common audience. <https://nces.ed.gov/ipeds/report-your-data/race-ethnicity-definitions>. For more information, view this article from Berkeley on tax filing status of international students. <https://internationaloffice.berkeley.edu/taxes/tax-filing-status>

Only one of the postsecondary programs aligned to all Marine and Power Sport pathway occupations (Electrical and Electronics Repairers) is now underproducing graduates in comparison to national benchmarks, shown in pink in the table below. The seven aligned programs for the Marine and Power Sport pathway all have a low share of BIPOC graduates, and a low share of female graduates. The share of BIPOC graduates decreased by nearly ten percentage points from the 2022 school year and the share of female graduates decreased by four percentage points from the 2022 school year.

³ [NCES IPEDS](https://nces.ed.gov/ipeds/report-your-data/race-ethnicity-definitions) refers to international students that do not have resident status in the United States as “nonresident aliens.” This title aligns to Federal tax definitions and according to NCES IPEDS refers to “a person who is not a citizen or national of the United States and who is in this country on a visa or temporary basis and does not have the right to remain indefinitely. Note: Nonresident aliens are reported separately, rather than in any of the racial/ethnic categories.” They are not included in calculations of BIPOC talent in this report as race and ethnicity information is not provided for these international students. The terminology of “international student” has been used in this report as it is more familiar to a common audience. <https://nces.ed.gov/ipeds/report-your-data/race-ethnicity-definitions>. For more information, view this article from Berkeley on tax filing status of international students. <https://internationaloffice.berkeley.edu/taxes/tax-filing-status>

Postsecondary Strategy Summary Table, Minnesota 2024

Occupation	Related Programs*	2024Q2 Empl	Workforce BIPOC by Race	Workforce Hispanic/Latinx	Workforce Female	Workforce Under 45	SY2023 Graduates (Certificate and AA/AS only)	Award Gap (All Award Levels)**	Graduates BIPOC by Race or Ethnicity (All Award Levels)	Graduates Female (All Award Levels)
Automotive and Watercraft Service Attendants	<ul style="list-style-type: none"> Personal Watercraft/Boating Education (not offered in Minnesota) 	1,068	19.8%	5.0%	25.8%	71.9%	N/A	N	N/A	N/A
Electrical and Electronics Repairers, Commercial and Industrial Equipment	<ul style="list-style-type: none"> Electrical, Electronic, and Communications Engineering Technology/Technician Computer Installation and Repair Technology/Technician Communications Systems Installation and Repair Technology/Technician 	702	11.2%	4.8%	4.3%	54.0%	99	Y	29.2%	4.7%
Outdoor Power Equipment and Other Small Engine Mechanics	<ul style="list-style-type: none"> Small Engine Mechanics and Repair Technology/Technician 	774	11.8%	5.4%	4.8%	46.0%	15	N	13.3%	13.3%
Motorboat Mechanics and Service Technicians	<ul style="list-style-type: none"> Diesel Mechanics Technology/Technician Marine Maintenance/Fitter and Ship Repair Technology/Technician Small Engine Mechanics and Repair Technology/Technician 	580	11.0%	4.9%	4.8%	45.8%	164	N	5.5%	6.1%
Motorcycle Mechanics	<ul style="list-style-type: none"> Small Engine Mechanics and Repair Technology/Technician Motorcycle Maintenance and Repair Technology/Technician 	347	9.5%	4.4%	4.9%	45.2%	26	N	11.5%	7.7%
Aircraft Service Attendants	N/A	639	26.2%	6.5%	24.4%	73.5%	N/A	N	N/A	N/A
Motorboat Operators	<ul style="list-style-type: none"> Personal Watercraft/Boating Education (not offered in Minnesota) 	38	14.7%	5.7%	23.7%	44.7%	N/A	N	N/A	N/A
Marine and Power Sports Pathway	All seven aligned programs	4,149	15.7%	5.2%	13.3%	58.2%	274	Y	14.6%	5.3%
Total - All Occupations		3,101,622	17.1%	5.6%	47.8%	57.2%	28,275		36.7%	66.3%

NOTE: Red highlighting indicates lower than overall share of workforce or graduate pool, or existence of occupation or award gap. *Related programs may overlap among occupations within the pathway or across other Transportation career pathways. Only those programs most tightly aligned to the occupation in question are listed in this column. **Award gaps are estimated based on a wider alignment of programs than what is illustrated in this table.

Conclusion

Despite a rapid recovery in 2021 and 2022, employment in the Marine and Power Sports pathway leveled off near pre-pandemic employment figures in 2023 and began a downturn in early 2024. Over the next five years, Marine and Power Sports employment is anticipated to decline slightly, declining by about 27 jobs (-0.1% annually). Total baseline demand for Marine and Power Sports talent is anticipated to be around 2,413 professionals needed to fill positions due to job exits and transfers, such as retirements and job changes.

Of the seven occupations included within this pathway, Aircraft Service Attendants, Motorcycle Mechanics and Motorboat Mechanics and Service Technicians are uniquely concentrated in Minnesota to a higher degree than seen in the nation overall. On average, Marine and Power Sports careers pay about \$52,000 per year (up from \$48,700 last year)—well below the average wage statewide across all positions.

At an overall pathway unemployment rate of 2.9% (down from 3.7% in 2023Q2), there are about 125 unemployed Marine and Power Sports professionals statewide. While unemployment rates for Automotive and Watercraft Service Attendants and Aircraft Service Attendants declined substantially from very high figures in 2023Q2 (7.3% and 7.5% respectively, now 3.8% and 3.9%), unemployment for Electrical and Electronics Repairers rose to 5.3% and the rate for Motorboat Operators grew to 5.0%. Each of the seven programs aligned with the Marine and Power Sports pathway have a low share of BIPOC graduates and a low share of female graduates, showcasing the opportunity to diversify student enrollment into these programs.

FAQ

How is employment forecast determined?

Forecast employment growth uses national projections from the Bureau of Labor Statistics, forecasts for 2024-2034, adapted for regional growth patterns by Chmura. Employment data are based on [occupation forecasts](#) and event-based forecasts if applicable. Forecasts are developed at the county level; therefore, for detailed (6-digit NAICS) ownership-specific industries, the forecast employment growth for a zip code or place (city, town, etc.) is taken from the forecast of the county to which it belongs.

What is a location quotient?

A location quotient (LQ) is a measurement of concentration in comparison to the nation. An LQ of 1.00 indicates a region has the same concentration of an industry (or occupation) as the nation. An LQ of 2.00 would mean the region has twice the expected employment compared to the nation and an LQ of 0.50 would mean the region has half the expected employment in comparison to the nation.

What is a cluster?

A cluster is a geographic concentration of interrelated industries or occupations. If a regional cluster has a location quotient of 1.25 or greater, the region is considered to possess a competitive advantage in that cluster.

What is separation demand?

Separation demand is the number of jobs required due to separations—labor force exits (including retirements) and turnover resulting from workers moving from one occupation into another. Note that separation demand does not include all turnover—it does not include when workers stay in the same occupation but switch employers. The total projected demand for an occupation is the sum of the separation demand and the growth demand (which is the increase or decrease of jobs in an occupation expected due to expansion or contraction of the overall number of jobs in that occupation).

What is the difference between industry wages and occupation wages?

Industry wages and occupation wages are estimated via separate data sets, often the time periods being reported do not align, and wages are defined slightly differently in the two systems (for example, certain bonuses are included in the industry wages but not the occupation wages). It is therefore common that estimates of the average industry wages and average occupation wages in a region do not match exactly.

What is NAICS?

The North American Industry Classification System (NAICS) is used to classify business establishments according to the type of economic activity. The NAICS Code comprises six levels, from the “all industry” level to the 6-digit level. The first two digits define the top level category, known as the “sector,” which is the level examined in this report.

What is SOC?

The Standard Occupational Classification system (SOC) is used to classify workers into occupational categories. All workers are classified into one of over 804 occupations according to their occupational definition. To facilitate classification, occupations are combined to form 22 major groups, 95 minor groups, and 452 occupation groups. Each occupation group includes detailed occupations requiring similar job duties, skills, education, or experience.

Who created this report?

This report was developed by RealTime Talent for the Transportation Center of Excellence. If you have questions about the data found in this report, or are interested in learning more, please contact Catherine Jett, Research Strategist for RealTime Talent at catherine@realtimetalentmn.org or visit the RealTime Talent website at www.realtimetalent.org

