SUPPLY AND DEMAND ANALYSIS

2024 Transportation Pathways Overview

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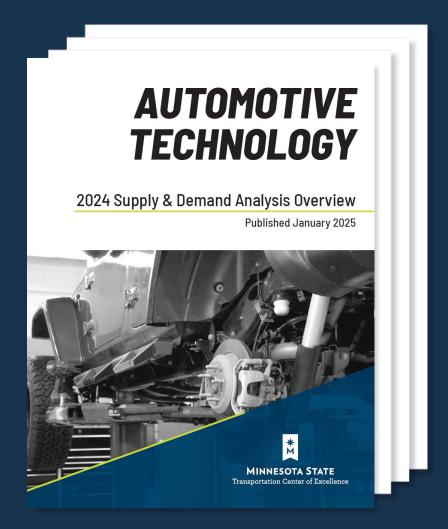




SECTOR DEEP DIVE.

What's inside?

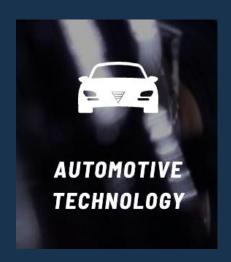
- Critical workforce trends and opportunities
- Future sector growth
- Foundational and trending skills

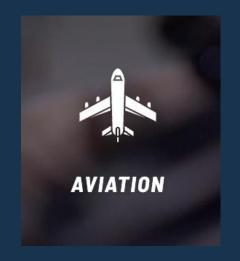


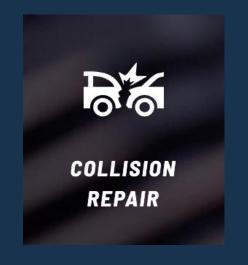


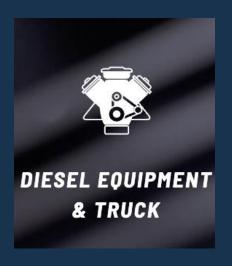


DIVIDED INTO SIX SECTORS

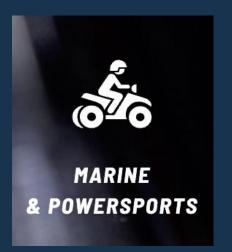
















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THE TRANSPORTATION SECTOR

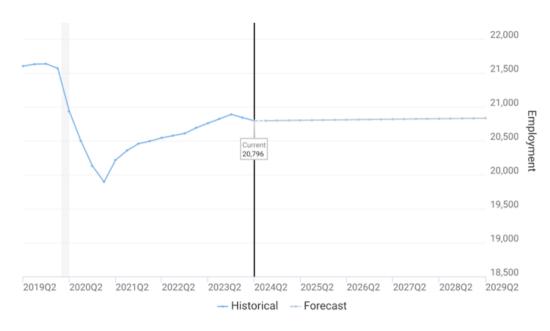
		Curr	ent		5-Year	History	5-Y	ear Baseline Fore	cast
Occupation	Employment	Avg Ann Wages ²	LQ	Unemploym ent Rate	Employment Change	Ann % Change	Total Demand	Employment Change	Ann % Change
Automotive Technology Pathway	20,796	\$70,800	0.97	1.5%	-806	-0.8%	7,773	78	0.1%
Aviation and Drone Technology Pathway	10,297	\$132,400	0.96	1.0%	308	0.6%	4,427	-57	-0.1%
Collision Repair Pathway	7,342	\$58,400	1.09	2.4%	244	0.7%	3,035	-101	-0.3%
Diesel Equipment and Truck Pathway	12,514	\$68,400	1.02	0.7%	282	0.5%	5,328	84	0.1%
Marine and Power Sports Pathway	4,149	\$52,000	0.83	2.9%	-10	0.0%	2,413	-27	-0.1%
Truck Driving Pathway*	96,100	\$55,400	0.95	3.4%	857	0.2%	53,460	862	0.2%
Transportation Occupations	141,847	\$64,100	0.95	2.6%	616	0.1%	71,066	706	0.1%
Total - All Occupations	3,101,622	\$69,500	1.00	2.8%	8,807	0.1%	1,656,897	-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.





Career Pathway 5-Year Forecast



Top Industries of Employment

- Automotive Repair and Maintenance (25.4%)
- Automobile Dealers (23.1%)
- Architectural, Engineering, and Related Services (5.3%)

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Takeaways

- Relatively flat five-year forecast
- Second highest total employment among transportation pathways
- About 38% of positions held today will need to be filled by new talent in the next five years.



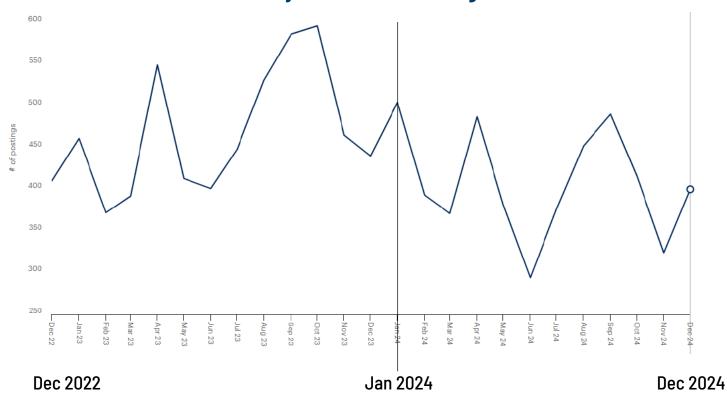


Occupations of Employment in Automotive Technology, 2024Q2

			Curre	ent		5-Year Baseline Forec	ast	
soc	Occupation	Employment	Avg Ann Wages ²	LQ	Unemploymen t Rate	Total Demand	Employment Change	Ann % Change
49-3023	Automotive Service Technicians and Mechanics	13,796	\$56,700	0.92	1.5%	5,541	-78	-0.1%
17-2141	Mechanical Engineers	5,931	\$103,600	1.08	1.5%	1,820	180	0.6%
17-3027	Mechanical Engineering Technologists and Technicians	788	\$71,600	1.01	2.3%	311	-14	-0.4%
49-2096	Electronic Equipment Installers and Repairers, Motor Vehicles	144	\$55,100	0.85	2.2%	41	-13	-1.8%
49-2093	Electrical and Electronics Installers and Repairers, Transportation Equipment	138	\$86,400	0.97	0.9%	59	3	0.4%
Auto	omotive Technology Pathway	20,796	\$70,800	0.97	1.5%	7,773	78	0.1%
Total - Al	l Occupations	3,101,622	\$69,500	1.00	2.8%	1,656,897	-1,471	0.0%



Volume of Career Pathway Online Job Postings in 2023 and 2024



Job Postings

- 4,889 unique job postings (-14%)
- Average of 1 hire for every 1 unique job posting





Automotive Technology Pathway Wages and Experience Level Requirements, 2024Q2

						Percentiles		Education and Train	ning
soc	Occupation	Empl Count	Mean	Entry Level	Experienced	50% (Median)	Typical Entry-Level Education	Previous Work Experience	Typical On-the- Job Training
17-2141	Mechanical Engineers	5,931	\$103,600	\$70,700	\$120,100	\$97,900	ВА	None	None
17-3027	Mechanical Engineering Technologists and Technicians	788	\$71,600	\$52,500	\$81,200	\$73,300	AS	None	None
49-2093	Electrical and Electronics Installers and Repairers, Transportation Equipment	138	\$86,400	\$59,400	\$99,800	\$86,600	Certificate	None	Long-term OJT
49-2096	Electronic Equipment Installers and Repairers, Motor Vehicles	144	\$55,100	\$42,600	\$61,300	\$56,100	HS/GED	None	Mod-term OJT
49-3023	Automotive Service Technicians and Mechanics	13,796	\$56,700	\$38,800	\$65,600	\$55,300	Certificate	None	Short-term OJT
Automot	ive Technology Pathway	20,796	\$70,800	\$48,600	\$82,000	\$68,300			
Total - Al	l Occupations	3,101,622	\$69,500	\$34,600	\$87,000	\$54,500			



Automotive Technology Pathway Wages by Region, 2024Q2

Region	Employment Count	Mean	Entry Level	Experienced	50% (Median)
Rural Greater Minnesota	5,501	\$61,900	\$44,800	\$70,400	\$85,700
Urban Greater Minnesota	3,174	\$63,400	\$44,200	\$72,900	\$90,600
MSP Metro	11,765	\$76,700	\$52,800	\$88,600	\$106,600
Minnesota	20,796	\$70,800	\$48,600	\$82,000	\$99,400

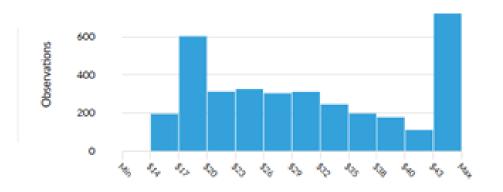
- Over half of statewide employment (57%) in the MSP Metro
- Little to no difference between urban and rural Greater Minnesota wages
- \$15,000 wage gap between Urban Greater Minnesota and MSP Metro median wages





Automotive Technology Pathway Salary Range, 2024

\$28.98/hr Median Advertised Salary









Automotive Technology Pathway Talent Highest Levels of Employment, 2024Q2

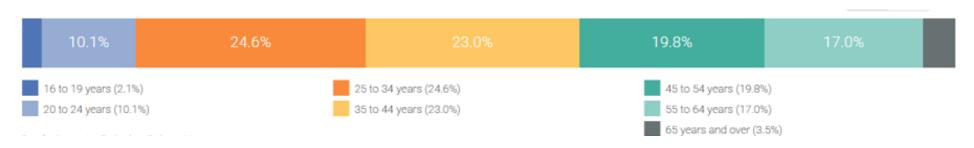


- 323 people unemployed (1.5%)
 - Highest for Mechanical Engineering Technologists and Technicians (2.3%)
- 1,307 underemployed
 - Highest for Automotive Service Techs and Mechanics
- Nearly 1 in 4 Automotive Tech professionals hold a Bachelor's Degree; nearly 1 in 10 hold a Master's or PhD

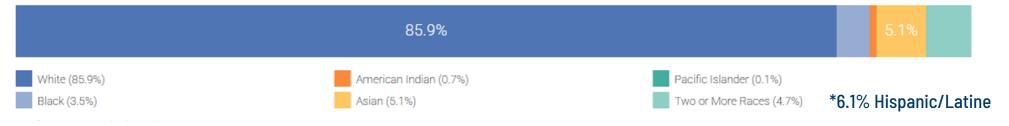




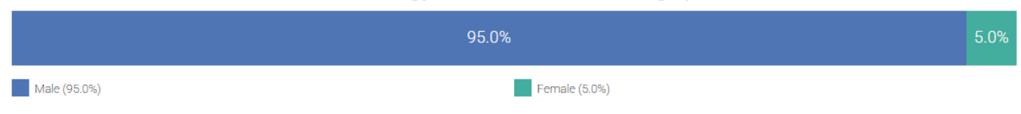
Automotive Technology Workforce Age Demographics, 2024Q2



Automotive Technology Workforce Race Demographics, 2024Q2



Automotive Technology Workforce Gender Demographics, 2024Q2



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Note: Programs (CIP codes) included here may appear in multiple pathways. CIP-SOC "crosswalks" are inclusive, rather than exclusive, given that individuals gaining related skillsets may find application for their learning in a variety of careers. All associated programs have been included to show the versatility of these programs.

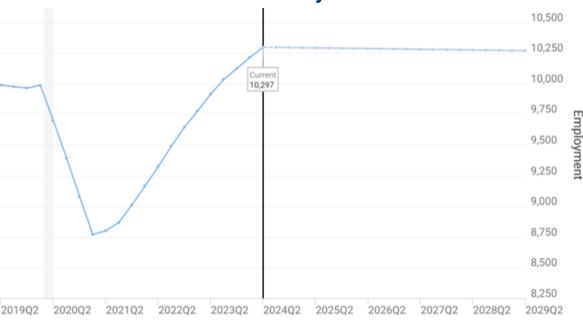
Related Postsecondary Program Awards by Level, SY2023

CIP Code	Title	Certificate <	Certificate 1+ but < 2 Yr	Associate's	Certificate 2+ but < 4 Yr	Bachelor's	Master's	Doctorate	Total Awards
14.1901	Mechanical Engineering	0	0	0	0	487	66	28	581
47.0604	Automobile/Automotive Mechanics Technology/Technician	54	90	162	128	0	0	0	434
15.0406	Automation Engineer Technology/Technician	21	43	99	10	0	0	0	173
15.1103	Hydraulics and Fluid Power Technology/Technician	61	50	28	0	0	0	0	139
47.0605	Diesel Mechanics Technology/Technician	4	24	42	14	0	0	0	84
47.0613	Medium/Heavy Vehicle and Truck Technology/Technician	3	10	36	15	0	0	0	64
15.0803	Automotive Engineering Technology/Technician	0	0	0	0	20	0	0	20
15.0805	Mechanical/Mechanical Engineering Technology/Technician	0	0	6	0	0	0	0	6
47.0614	Alternative Fuel Vehicle Technology/Technician	0	0	0	0	0	0	0	0
	Total	143 (10%)	217 (14%)	373 (25%)	167 (11%)	507 (34%)	66 (4%)	28 (2%)	1,501





Career Pathway 5-Year Forecast



Top Industries of Employment

- Scheduled Air Transportation (39.5%)
- Support Activities for Air Transportation (9.9%)
- Management of Companies and Enterprises (4.0%)

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Takeaways

- Flat five-year forecast
- Unemployment fell to 1.0% from 1.5% one year prior
- Highest average annual wage among transportation pathways (\$132,400)
- About 43% of positions held today will need to be filled by new talent in the next five years



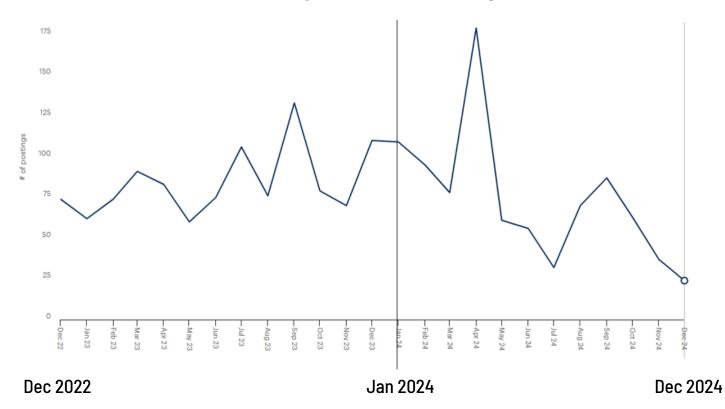


Occupations of Employment in Aviation and Drone, 2024Q2

			Current	t		5-Ye	ar Baseline Fore	cast
soc	Occupation	Employment	Avg Ann Wages ²	LQ	Unemploy- ment Rate	Total Demand	Employment Change	Ann % Change
53-2011	Airline Pilots, Copilots, and Flight Engineers	2,516	\$194,000	1.42	0.5%	1,369	-33	-0.3%
17-2199	Engineers, All Other	2,302	\$120,800	0.78	1.4%	664	16	0.1%
49-3011	Aircraft Mechanics and Service Technicians	2,097	\$91,800	0.76	0.5%	775	-7	-0.1%
53-2012	Commercial Pilots	1,410	\$144,400	1.29	0.5%	798	2	0.0%
53-2021	Air Traffic Controllers	652	\$167,500	1.55	0.5%	279	-7	-0.2%
53-2022	Airfield Operations Specialists	406	\$71,100	1.28	0.5%	175	-4	-0.2%
17-3024	Electro-Mechanical and Mechatronics Technologists and Technicians	345	\$65,900	1.18	2.2%	131	-10	-0.6%
49-2091	Avionics Technicians	232	\$70,700	0.52	7.2%	87	0	0.0%
53-1041	Aircraft Cargo Handling Supervisors	171	\$71,400	0.99	1.6%	84	0	0.0%
51-2011	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	165	\$70,600	0.31	5.5%	64	-16	-2.0%
	Aviation and Drone Technology Pathway	10,297	\$132,400	0.96	1.0%	4,427	-57	-0.1%
Total - A	Total - All Occupations		\$69,500	1.00	2.8%	1,656,897	-1,471	0.0%



Volume of Career Pathway Online Job Postings in 2023 and 2024



Job Postings

- 767 unique job postings (-16%)
- 3 hires for every 1 unique job posting





Aviation and Drone Pathway Wages and Experience Level Requirements, 2024Q2

						Percentiles		Education and Training	
SOC	Occupation	Employment Count	Mean	Entry Level	Experienced	50% (Median)	Typical Entry-Level Education	Previous Work Experience	Typical On-the- Job Training
17-2199	Engineers, All Other	2,302	\$120,800	\$84,300	\$139,100	\$117,200	ВА	None	None
17-3024	Electro-Mechanical and Mechatronics Technologists and Technicians	345	\$65,900	\$47,100	\$75,200	\$63,800	AS	None	None
49-2091	Avionics Technicians	232	\$70,700	\$45,000	\$83,500	\$71,700	Certificate	None	None
49-3011	Aircraft Mechanics and Service Technicians	2,097	\$91,800	\$56,100	\$109,600	\$84,100	Certificate	None	None
51-2011	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	165	\$70,600	\$47,900	\$81,900	\$69,200	HS/GED	None	Mod-term OJT
53-1041	Aircraft Cargo Handling Supervisors	171	\$71,400	\$53,400	\$80,400	\$59,900	HS/GED	< 5 years	None
53-2011	Airline Pilots, Copilots, and Flight Engineers	2,516	\$194,000	\$121,500	\$230,200	\$183,500	ВА	< 5 years	Mod-term OJT
53-2012	Commercial Pilots	1,410	\$144,400	\$101,700	\$165,700	\$132,900	Certificate	None	Mod-term OJT
53-2021	Air Traffic Controllers	652	\$167,500	\$116,100	\$193,300	\$176,100	AS	None	Long-term OJT
53-2022	Airfield Operations Specialists	406	\$71,100	\$41,900	\$85,800	\$61,000	HS/GED	None	Long-term OJT
Aviatio	n and Drone Technology Pathway	10,297	\$132,400	\$87,100	\$155,000	\$125,800			
	Total - All Occupations	3,101,622	\$69,500	\$34,600	\$87,000	\$54,500			





Aviation and Drone Pathway Wages by Region, 2024Q2

Region	Employment Count	Mean	Entry Level	Experienced	50% (Median)
Rural Greater Minnesota	902	\$104,300	\$71,400	\$120,800	\$99,000
Urban Greater Minnesota	851	\$116,300	\$74,800	\$137,100	\$109,500
MSP Metro	8,219	\$137,500	\$91,200	\$160,600	\$130,900
Minnesota	10,297	\$132,400	\$87,100	\$155,000	\$125,800

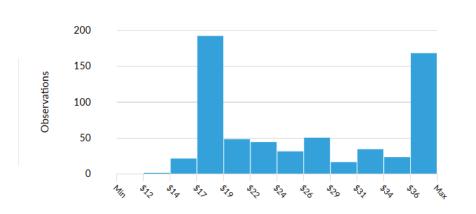
- Nearly 4 out of 5 Aviation professionals in Minnesota (79.8%) work in the MSP Metro
- Urban Greater Minnesota annual median wages exceed Rural by \$10,500
- \$21,400 wage gap between urban Greater Minnesota and MSP Metro median wages

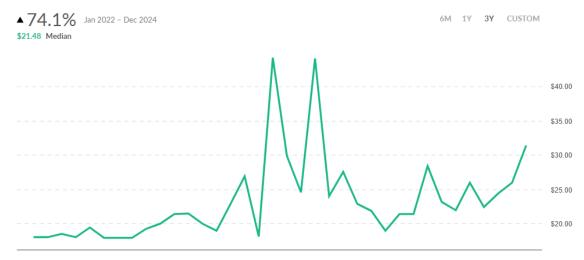




Aviation and Drone Pathway Salary Range, 2024



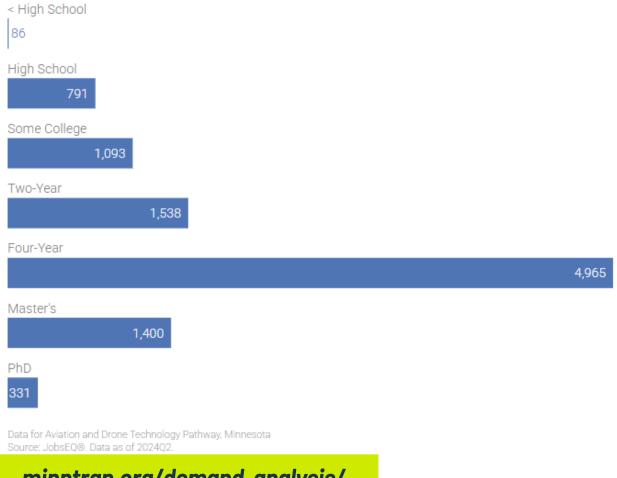








Aviation and Drone Pathway Talent Highest Levels of Employment, 2024Q2



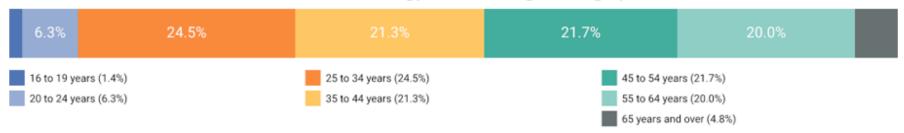
- 105 people unemployed (1.0%)
 - Highest for Avionics Technicians (7.2%)
- 1,209 underemployed
 - Highest for Aircraft Mechanics
- Nearly half (48.7%) of all Aviation professionals hold a Bachelor's Degree; Another 16.9% hold a Master's Degree or higher



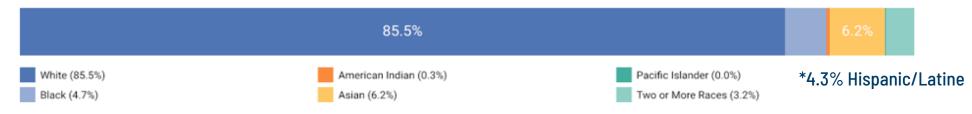


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Aviation and Drone Technology Workforce Age Demographics, 2024Q2

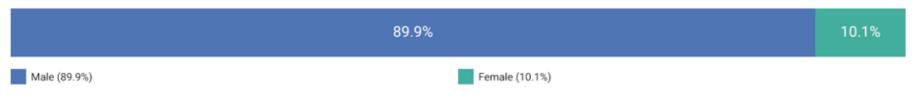


Aviation and Drone Technology Workforce Race Demographics, 2024Q2



*4.3% Hispanic/Latine

Aviation and Drone Technology Workforce Gender Demographics, 2024Q2







Note: Programs (CIP codes) included here may appear in multiple pathways. CIP-SOC "crosswalks" are inclusive, rather than exclusive, given that individuals gaining related skillsets may find application for their learning in a variety of careers. All associated programs have been included to show the versatility of these programs.

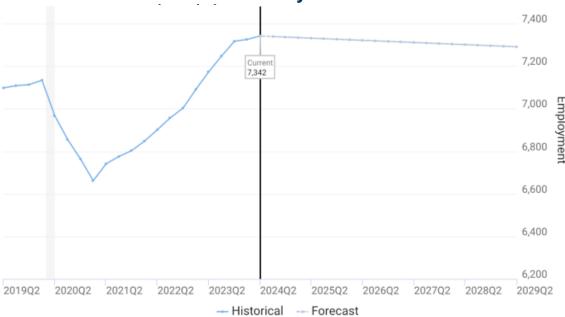
Related Postsecondary Program Awards by Level, SY2023

CIP Code	Title	Certificate < 1 Yr	Certificate 1+ but < 2 Yr	Associate's	Certificate 2+ but < 4 Yr	Bachelor's	Total Awards
15.0406	Automation Engineer Technology/Technician	21	43	99	10	0	173
15.0303	Electrical, Electronic, and Communications Engineering Technology/Technician	14	20	59	5	7	105
14.0101	Engineering, General	0	0	0	0	78	78
15.0405	Robotics Technology/Technician	10	0	34	0	0	64
47.0607	Airframe Mechanics and Aircraft Maintenance Technology/Technician	3	0	25	26	0	54
14.3601	Manufacturing Engineering	0	0	0	0	16	39
52.0203	Logistics, Materials, and Supply Chain Management	3	0	4	0	25	32
15.0404	Instrumentation Technology/Technician	0	0	25	4	0	29
15.0000	Engineering Technologies/Technicians, General	0	0	0	0	27	27
14.9999	Engineering, Other	0	0	0	0	0	21
49.0102	Airline/Commercial/Professional Pilot and Flight Crew	0	0	7	0	6	13
14.1201	Engineering Physics/Applied Physics	0	0	0	0	13	13
	*All remaining programs aligned to this pathway	15	4	13	5	21	69
	Total	66 (9.2%)	67 (9.3%)	266 (37.1%)	50 (7.0%)	193 (26.9%)	717









Top Industries of Employment

- Automotive Repair and Maintenance (48.5%)
- Automobile Dealers (7.5%)
- Coating, Engraving, Heat Treating, and Allied Activities (6.0%)

Takeaways

- Highest Location Quotient (1.09 LQ)
- Unemployment rate of 2.4% (179 people)
- About 41% of positions held today will need to be filled by new talent in the next five years



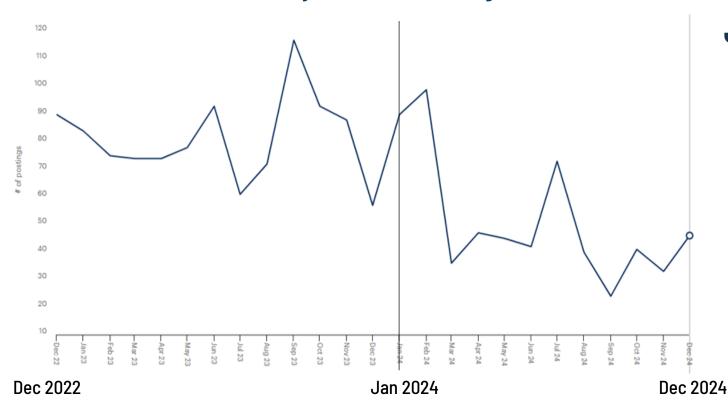


Occupations of Employment in Collision Repair, 2024Q2

			Curro	rrent 5-Year Baseline Forecast				
soc	Occupation	Employment	Avg Ann Wages ²	LQ	Unemployment Rate	Total Demand	Employment Change	Ann % Change
51-9124	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	3,517	\$54,600	1.12	4.1%	1,550	-58	-0.3%
49-3021	Automotive Body and Related Repairers	3,435	\$61,400	1.08	0.6%	1,335	-40	-0.2%
49-3022	Automotive Glass Installers and Repairers	390	\$66,600	0.93	2.0%	150	-2	-0.1%
	Collision Repair Pathway	7,342	\$58,400	1.09	2.4%	3,035	-101	-0.3%
Total -	All Occupations	3,101,622	\$69,500	1.00	2.8%	1,656,897	-1,471	0.0%



Volume of Career Pathway Online Job Postings in 2023 and 2024



Job Postings

- 616 unique job postings (-37%)
- Average of 4 hires for every 1 unique job posting





Collision Repair Pathway Wages and Experience Level Requirements, 2024Q2

						Percentiles	Ec	ducation and Trainin	_
soc	Occupation	Empl Count	Mean	Entry Level	Experienced	50% (Median)	Typical Entry-Level Education	Previous Work Experience	Typical On- the-Job Training
49-3021	Automotive Body and Related Repairers	3,435	\$61,400	\$39,600	\$72,300	\$58,800	HS/GED	None	Long-term OJT
49-3022	Automotive Glass Installers and Repairers	390	\$66,600	\$46,600	\$76,600	\$62,200	HS/GED	None	Mod-term OJT training
51-9124	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	3,517	\$54,600	\$41,500	\$61,100	\$52,300	HS/GED	None	Mod-term OJT
16417	Collision Repair Pathway	7,342	\$58,400	\$40,900	\$67,200	\$55,800			
Total - Al	l Occupations	3,101,622	\$69,500	\$34,600	\$87,000	\$54,500			





Collision Repair Pathway Wages by Region, 2024Q2

Region	Employment Count	Mean	Entry Level	Experienced	50% (Median)	
Rural Greater Minnesota	2,194	\$53,600	\$38,500	\$61,200	\$51,900	
Urban Greater Minnesota	1,013	\$53,300	\$39,800	\$60,100	\$50,100	
MSP Metro	4,045	\$62,300	\$44,400	\$71,300	\$58,400	
Minnesota	7,342	\$58,400	\$40,900	\$67,200	\$55,800	

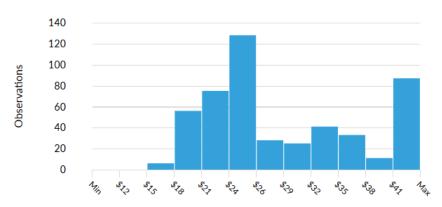
- Over half of statewide employment (55%) in the MSP Metro
- Little to no difference between urban and rural Greater Minnesota wages
- \$9,000 wage gap between urban Greater Minnesota and MSP Metro median wages





Collision Repair Pathway Salary Range, 2024



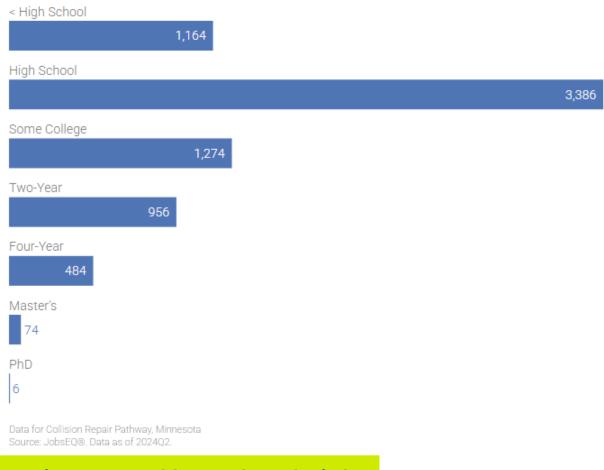








Collision Repair Pathway Talent Highest Levels of Education, 2024Q2



- 179 people unemployed (2.4%)
 - Highest for Coating Machine Operators (4.1%)
- 533 underemployed
 - Highest for Coating Machine Operators
- Almost half of professionals (46.1%) hold a High School diploma as their highest degree

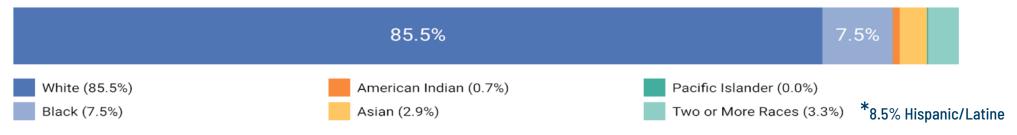




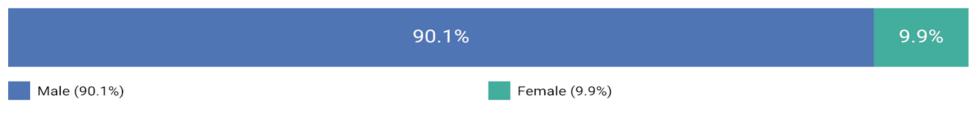
Collision Repair Workforce Age Demographics, 2024Q2



Collision Repair Workforce Race Demographics, 2024Q2



Collision Repair Workforce Gender Demographics, 2024Q2



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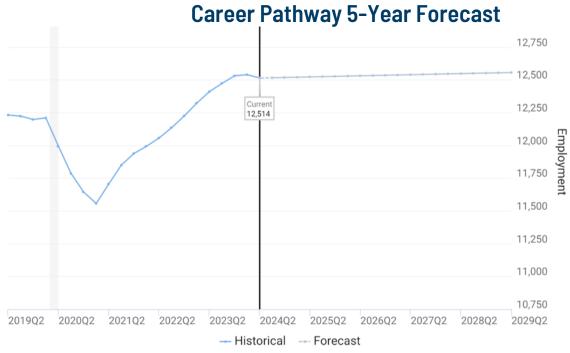


Related Postsecondary Program Awards by Level, SY2023

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
47.0603	Autobody/Collision and Repair Technology/Technician	72	25	22	20	0	0	0	139
	Total	72 (52%)	25 (18%)	22 (16%)	20 (14%)	0 (0.0%	0 (0.0%)	0 (0.0%)	139 (100%)



DIESEL



Top Industries of Employment

- Machinery, Equipment, and Supplies Merchant Wholesalers (18.0%)
- General Freight Trucking (6.7%)
- Motor Vehicle Parts and Supplies Merchant Wholesalers (4.9%)

Takeaways

- 2nd Highest Location Quotient, or concentration of roles in Minnesota among transportation pathways (1.02 LQ, but dropped)
- About 42.6% of positions held today will need to be filled by new talent in the next five years





DIESEL

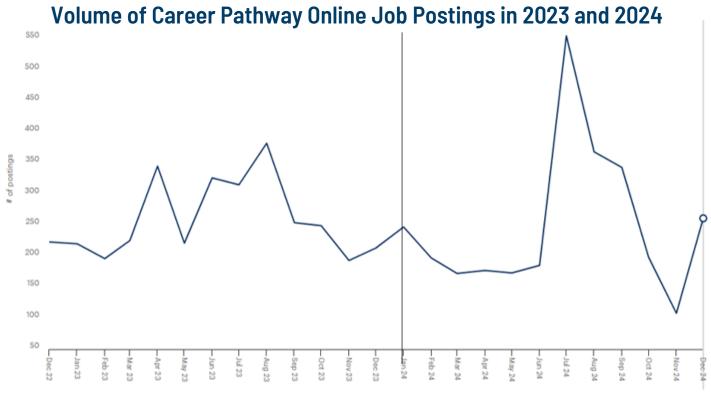
Occupations of Employment in Diesel, 2024Q2

		Current				5-Year Baseline Forecast			
			Avg Ann		Unemployment	Total	Employment	Ann %	
soc	Occupation	Employment	Wages ²	LQ	Rate	Demand	Change	Change	
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	6,167	\$67,000	1.10	0.3%	2,467	-42	-0.1%	
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	3,072	\$74,500	0.85	0.9%	1,358	85	0.5%	
49-3041	Farm Equipment Mechanics and Service Technicians	1,592	\$59,300	1.84	0.8%	693	37	0.5%	
47-5022	Excavating and Loading Machine and Dragline Operators, Surface Mining	713	\$75,500	1.13	0.2%	371	3	0.1%	
49-3043	Rail Car Repairers	452	\$62,300	1.17	0.8%	177	-4	-0.2%	
47-5023	Earth Drillers, Except Oil and Gas	304	\$65,400	0.86	6.8%	163	4	0.3%	
53-7021	Crane and Tower Operators	215	\$85,800	0.27	1.0%	100	1	0.1%	
	Diesel Equipment and Truck Pathway	12,514	\$68,400	1.02	0.7%	5,328	84	0.1%	
Total - All Occupations		3,101,622	\$69,500	1.00	2.8%	1,656,897	-1,471	0.0%	





DIESEL



Job Postings

- 2,984 unique job postings (-5%)
- Average of 2 hires for every 1 unique job posting

Dec 2022 Jan 2024 Dec 2024





Diesel Pathway Wages and Experience Level Requirements, 2024Q2

						Percentiles	I	Education and Trainin	g
SOC	Occupation	Employment Count	Mean	Entry Level	Experienced	50% (Median)	Typical Entry-Level Education	Previous Work Experience	Typical On-the- Job Training
47-5022	Excavating and Loading Machine and Dragline Operators, Surface Mining	713	\$75,500	\$53,900	\$86,300	\$73,800	HS/GED	Less than 5 years	Mod-term OJT
47-5023	Earth Drillers, Except Oil and Gas	304	\$65,400	\$53,600	\$71,200	\$64,500	HS/GED	Less than 5 years	Long-term OJT
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	6,167	\$67,000	\$48,600	\$76,200	\$65,000	HS/GED	None	Long-term OJT
49-3041	Farm Equipment Mechanics and Service Technicians	1,592	\$59,300	\$43,400	\$67,200	\$60,900	HS/GED	None	Long-term OJT
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	3,072	\$74,500	\$57,400	\$83,000	\$74,200	HS/GED	None	Long-term OJT
49-3043	Rail Car Repairers	452	\$62,300	\$49,900	\$68,500	\$57,600	HS/GED	None	Long-term OJT
53-7021	Crane and Tower Operators	215	\$85,800	\$60,500	\$98,500	\$80,600	HS/GED	Less than 5 years	Mod-term OJT
Diesel E	quipment and Truck Pathway	12,514	\$68,400	\$50,800	\$77,300	\$67,200			
7	Total - All Occupations	3,101,622	\$69,500	\$34,600	\$87,000	\$54,500			



Diesel Pathway Wages by Region, 2024Q2

Region	Employment Count	Count Mean Entry Level		Experienced	50% (Median)
Rural Greater Minnesota	3,863	\$62,400	\$46,500	\$70,400	\$63,000
Urban Greater Minnesota	2,247	\$66,800	\$51,100	\$74,700	\$65,600
MSP Metro	5,999	\$72,900	\$55,200	\$81,700	\$71,400
Minnesota	12,514	\$68,400	\$50,800	\$77,300	\$67,200

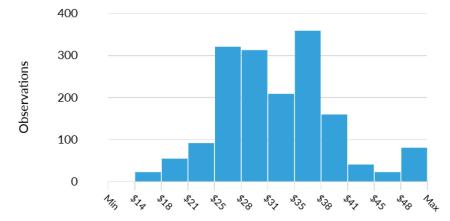
- Just under half of statewide employment (48%) in the MSP Metro
- Urban Greater Minnesota has higher average annual wages than Rural Greater Minnesota

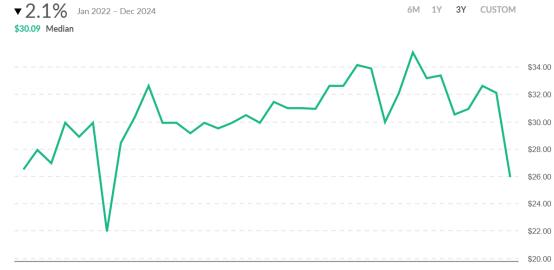




Diesel Pathway Salary Range, 2024

\$31.45/hr Median Advertised Salary

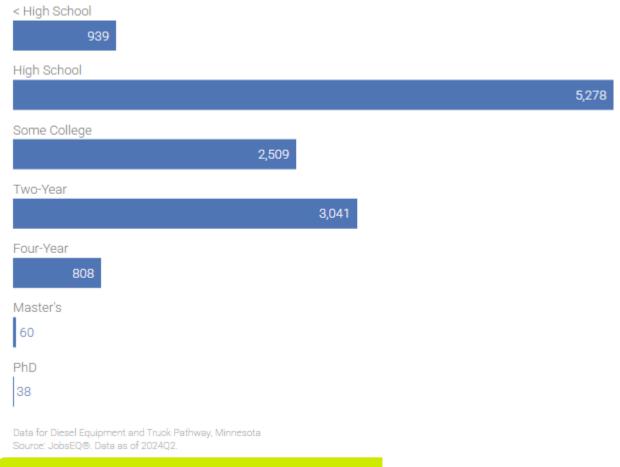








Diesel Pathway Talent Highest Levels of Education, 2024Q2



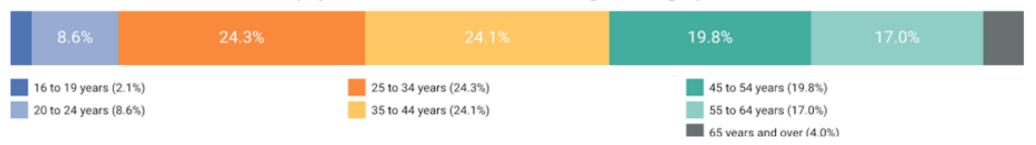
- 92 people unemployed (0.7%)
 - Highest for Crane and Tower Operators
- 833 underemployed
 - Highest for Bus and Truck Mechanics
- More than 2 in 5 professionals hold a High School diploma as their highest degree



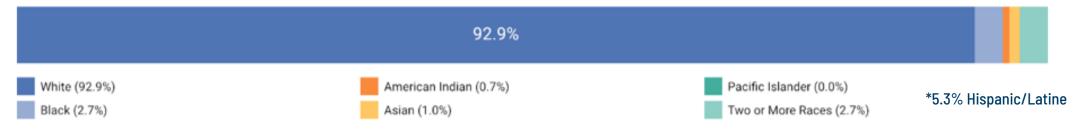


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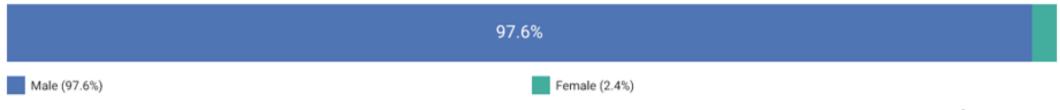
Diesel, Equipment, and Truck Workforce Age Demographics, 2024Q2



Diesel, Equipment, and Truck Workforce Race Demographics, 2024Q2



Diesel, Equipment, and Truck Workforce Gender Demographics, 2024Q2



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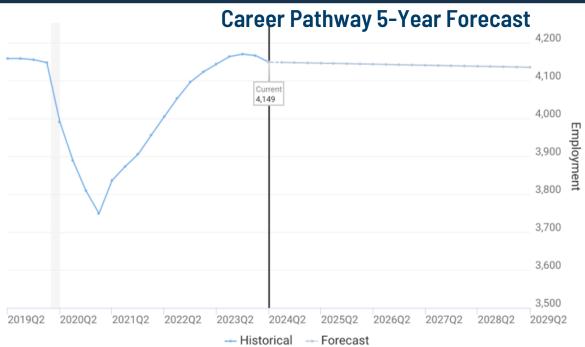


Related Postsecondary Program Awards by Level, SY2023

		Certificate	Certificate		Certificate 2+	Bachelor'		Doct	Total
CIP Code	Title	< 1 Yr	1+ but < 2 Yr	Associate's	but < 4 Yr	s	Master's	orate	Awards
47.0605	Diesel Mechanics Technology/Technician	4	24	42	14	0	0	0	84
47.0613	Medium/Heavy Vehicle and Truck Technology/Technician	3	10	36	15	0	0	0	64
49.0202	Construction/Heavy Equipment/Earthmoving Equipment Operation	0	0	0	49	0	0	0	49
47.0302	Heavy Equipment Maintenance Technology/Technician	0	0	20	12	0	0	0	32
01.0205	Agricultural Mechanics and Equipment/Machine Technology/Technician	0	0	4	5	0	0	0	9
01.0201	Agricultural Mechanization, General	0	0	0	0	4	0	0	4
01.0204	Agricultural Power Machinery Operation	0	3	0	0	0	0	0	3
47.0399	Heavy/Industrial Equipment Maintenance Technologies/Technicians, Other	0	0	0	0	0	0	0	0
	Total	7 3%	37 15%	102 42%	95 39%	4 2%	0 0%	0 0%	245







Top Industries of Employment

- Other Motor Vehicle Dealers (16.2%)
- Support Activities for Air Transportation (9.8%)
- Automotive Repair and Maintenance (8.8%)

Takeaways

- Smallest total employment of all transportation pathways
- About 58% of positions held today will need to be filled by new talent in the next five years



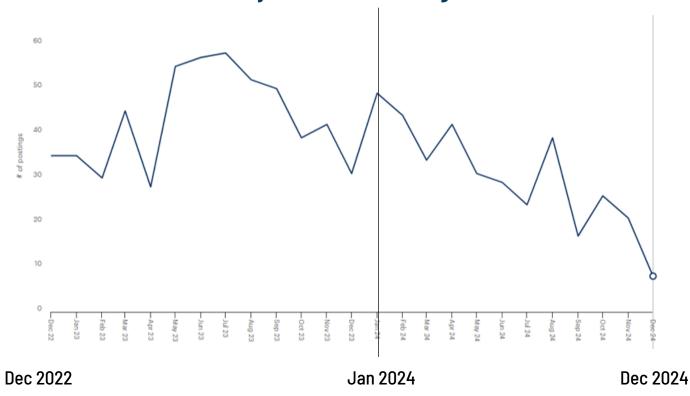


Occupations of Employment in Marine and Power Sports, 2024Q2

			Cu	ırrent		5-Year	Baseline Foreca	ast
soc	Occupation	Employme nt	Avg Ann Wages ²	LQ	Unemploymen t Rate	Total Demand	Employment Change	Ann % Change
53-6031	Automotive and Watercraft Service Attendants	1,068	\$38,300	0.59	3.8%	762	-26	-0.5%
49-3053	Outdoor Power Equipment and Other Small Engine Mechanics	774	\$50,500	1.06	0.7%	390	-3	-0.1%
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	702	\$82,100	0.64	5.3%	268	-11	-0.3%
53-6032	Aircraft Service Attendants	639	\$41,700	1.23	3.9%	480	-1	0.0%
49-3051	Motorboat Mechanics and Service Technicians	580	\$55,500	1.19	0.8%	315	13	0.5%
49-3052	Motorcycle Mechanics	347	\$49,400	1.20	0.8%	177	0	0.0%
53-5022	Motorboat Operators	38	\$58,300	0.63	5.0%	20	0	0.0%
16420	Marine and Power Sports Pathway	4,149	\$52,000	0.83	2.9%	2,413	-27	-0.1%
Total - A	Total - All Occupations		\$69,500	1.00	2.8%	1,656,897	-1,471	0.0%



Volume of Career Pathway Online Job Postings in 2023 and 2024



Job Postings

- 364 unique job postings (-30%)
- Average of 4 hires for every 1 unique job posting





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

						Percentiles	E	ducation and Trainin	g
SOC	Occupation	Employment Count	Mean	Entry Level	Experienced	50% (Median)	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	\$80,600	Certificate	None	Long-term OJT
49-3051	Motorboat Mechanics and Service Technicians	580	\$55,500	\$42,800	\$61,900	\$54,400	HS/GED	None	Long-term OJT
49-3052	Motorcycle Mechanics	347	\$49,400	\$32,100	\$58,000	\$49,800	Certificate	None	Short-term OJT
49-3053	Outdoor Power Equipment and Other Small Engine Mechanics	774	\$50,500	\$41,100	\$55,300	\$50,300	HS/GED	None	Moderate-term OJT
53-5022	Motorboat Operators	38	\$58,300	\$35,900	\$69,500	\$53,700	Certificate	<5 years	None
53-6031	Automotive and Watercraft Service Attendants	1,068	\$38,300	\$33,100	\$40,900	\$38,300	None	None	Short-term OJT
53-6032	Aircraft Service Attendants	639	\$41,700	\$34,000	\$45,500	\$42,200	HS/GED	None	Short-term OJT
	Marine and Power Sports Pathway	4,149	\$52,000	\$41,500	\$57,300	\$51,700			
	Fotal - All Occupations	3,101,622	\$69,500	\$34,600	\$87,000	\$54,500			



Marine and Power Sports Pathway Wages by Region, 2024Q2

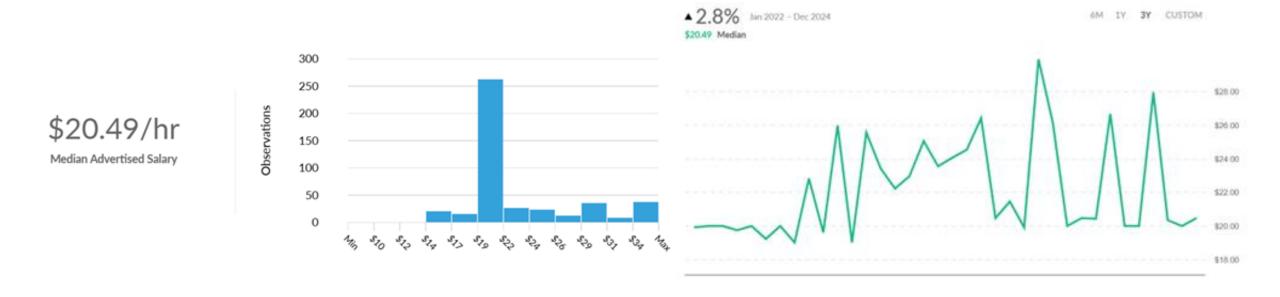
Region	Employment Count	ent Count Mean Entry Lev		Experienced	50% (Median)
Rural Greater Minnesota	1,114	\$47,900	\$38,900	\$52,500	\$48,200
Urban Greater Minnesota	603	\$49,700	\$40,900	\$54,000	\$49,300
MSP Metro	2,345	\$54,200	\$44,300	\$59,200	\$54,300
Minnesota	4,149	\$52,000	\$41,500	\$57,300	\$51,700

- Over half of statewide employment (57%) in the MSP Metro
- Little to no difference between urban and rural Greater Minnesota wages
- \$5,000 wage gap between urban Greater Minnesota and MSP Metro median wages





Marine and Power Sports Pathway Salary Range, 2024







Marine and Power Sports Pathway Talent Highest Levels of Education, 2024Q2

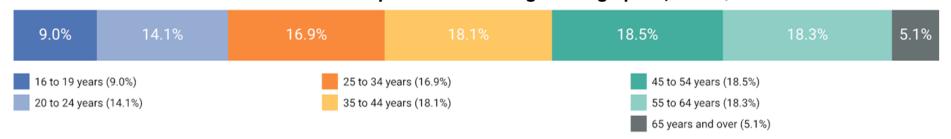


- 125 people unemployed (2.9%)
 - Highest for Auto and Watercraft Service Attendants
- 594 underemployed
 - Highest for Automotive and Watercraft Service Attendants
- Nearly 2 in 5 professionals hold a
 High School diploma as their highest
 degree; 7.6% don't have a High
 School diploma





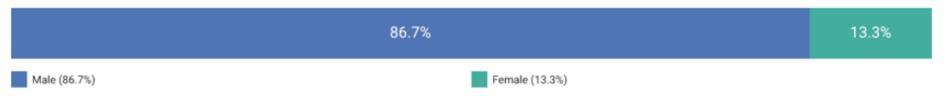
Marine and Power Sports Workforce Age Demographics, 2024Q2



Marine and Power Sports Workforce Race Demographics, 2024Q2



Marine and Power Sports Workforce Gender Demographics, 2024Q2





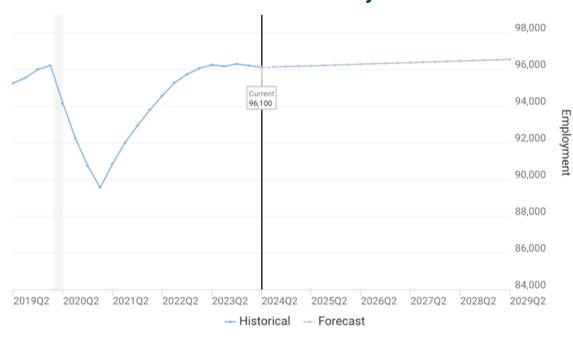


Related Postsecondary Program Awards by Level, SY2023

		Certificate	Certificate 1+ but < 2		Certificate 2+ but < 4			Doctor	Total
CIP Code	Title	< 1 Yr	Yr	Associate's	Yr	Bachelor's	Master's	ate	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



Career Pathway 5-Year Forecast



Top Industries of Employment

- General Freight Trucking (16.4%)
- School and Employee Bus Transportation (8.5%)
- Couriers and Express Delivery Services (6.6%)

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Takeaways

- Highest total employment of all transportation pathways by a factor of five (96,100 employed)
- Highest baseline average annual growth forecast (0.2%)
- Most vulnerable set of entry-level occupations to technology innovation in transportation
- About 56% of positions held today will need to be filled by new talent in the next five years





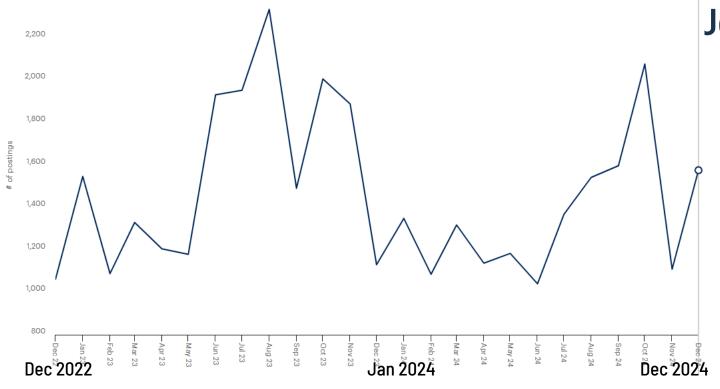
Occupations of Employment in Truck Driving, 2024Q2

			Cu	irrent		5-Year	Baseline Foreca	ast
soc	Occupation	Employme nt	Avg Ann Wages ²	LQ	Unemploymen t Rate	Total Demand	Employment Change	Ann % Change
53-3032	Heavy and Tractor-Trailer Truck Drivers	40,896	\$63,800	0.99	3.3%	21,088	186	0.1%
53-3033	Light Truck Drivers	18,555	\$52,400	0.92	3.3%	9,942	345	0.4%
53-3051	Bus Drivers, School	10,071	\$50,900	1.43	2.2%	7,520	13	0.0%
53-3031	Driver/Sales Workers	8,780	\$38,400	0.93	3.3%	4,733	183	0.4%
53-7051	Industrial Truck and Tractor Operators	8,112	\$54,700	0.56	4.6%	3,949	14	0.0%
53-3053	Shuttle Drivers and Chauffeurs	5,761	\$39,000	1.35	4.0%	3,933	124	0.4%
53-3052	Bus Drivers, Transit and Intercity	3,731	\$56,800	0.94	4.1%	2,197	0	0.0%
53-7121	Tank Car, Truck, and Ship Loaders	194	\$68,200	0.82	0.8%	98	-2	-0.2%
	Truck Driving Pathway	96,100	\$55,400	0.95	3.4%	53,460	862	0.2%
	Total - All Occupations	3,101,622	\$69,500	1.00	2.8%	1,656,897	-1,471	0.0%





Volume of Career Pathway Online Job Postings in 2023 and 2024



Job Postings

- 16,373 unique job postings (-14%)
- Average of 3 hires for every 1 unique job posting





Truck Driving Pathway Wages and Experience Level Requirements, 2024Q2

						Percentiles	E	ducation and Trainin	ıg
soc	Occupation	Employment Count	Mean	Entry Level	Experienced	50% (Median)	Typical Entry-Level Education	Previous Work Experience	Typical On-the- Job Training
53-3031	Driver/Sales Workers	8,780	\$38,400	\$25,300	\$44,900	\$32,600	HS/GED	None	Short-term OJT
53-3032	Heavy and Tractor-Trailer Truck Drivers	40,896	\$63,800	\$48,300	\$71,500	\$62,300	Certificate	None	Short-term OJT
53-3033	Light Truck Drivers	18,555	\$52,400	\$36,800	\$60,200	\$49,700	HS/GED	None	Short-term OJT
53-3051	Bus Drivers, School	10,071	\$50,900	\$40,400	\$56,200	\$51,600	HS/GED	None	Short-term OJT
53-3052	Bus Drivers, Transit and Intercity	3,731	\$56,800	\$40,400	\$65,000	\$53,100	HS/GED	None	Mod-term OJT
53-3053	Shuttle Drivers and Chauffeurs	5,761	\$39,000	\$30,600	\$43,300	\$38,400	None	None	Short-term OJT
53-7051	Industrial Truck and Tractor Operators	8,112	\$54,700	\$40,300	\$61,800	\$50,800	None	None	Short-term OJT
53-7121	Tank Car, Truck, and Ship Loaders	194	\$68,200	\$46,500	\$79,000	\$66,300	None	None	Short-term OJT
	Truck Driving Pathway	96,100	\$55,400	\$41,100	\$62,500	\$53,300			
	Total - All Occupations	3,101,622	\$69,500	\$34,600	\$87,000	\$54,500			



Truck Driving Pathway Wages by Region, 2024Q2

Region	Employment Count	Mean	Entry Level	Experienced	50% (Median)
Rural Greater Minnesota	25,060	\$52,500	\$39,400	\$59,000	\$50,500
Urban Greater Minnesota	14,340	\$53,500	\$39,700	\$60,500	\$52,000
MSP Metro	53,844	\$57,100	\$43,300	\$64,000	\$55,000
Minnesota	96,100	\$55,400	\$41,100	\$62,500	\$53,300

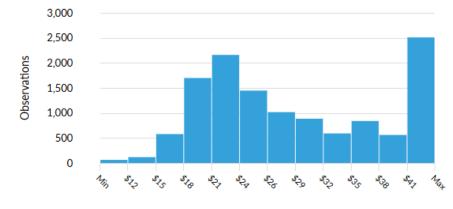
- Over half of statewide employment (56%) in the MSP Metro
- Little difference between urban and rural Greater Minnesota wages
- \$4,500 wage gap between urban Greater Minnesota and MSP Metro median wages





Truck Driving Pathway Salary Range, 2024

\$27.02/hr
Median Advertised Salary









Truck Driving Pathway Talent Highest Levels of Education, 2024Q2

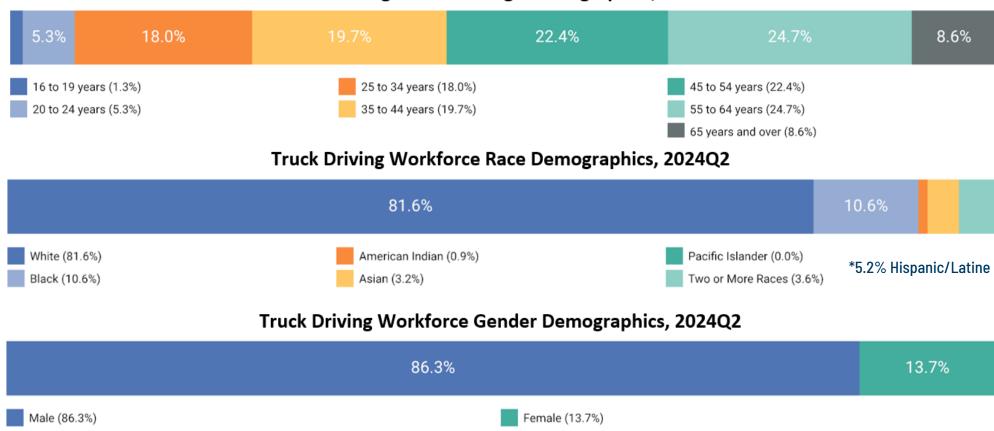


- 3,351 people unemployed (3.4%)
 - Highest for Industrial Truck and Tractor Operators
- 13,231 underemployed
 - Highest for Heavy and Tractor-Trailer Truck Drivers
- More than 2 in 5 professionals hold a High School diploma as their highest degree, 9.3% don't have a High School Diploma





Truck Driving Workforce Age Demographics, 2024Q2







Related Postsecondary Program Awards by Level, SY2023

			Certificate		Certificate				
		Certificate	1+ but < 2		2+ but < 4			Doctor	Total
CIP Code	Title	< 1 Yr	Yr	Associate's	Yr	Bachelor's	Master's	ate	Awards
49.0205	Truck and Bus Driver/Commercial Vehicle Operator and Instructor	103	0	0	0	0	0	0	103
	Total	103 (100%)	0	0	0	0	0	0	103





QUESTIONS?

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Appendix