COLLISION REPAIR

Supply & Demand Analysis 2022



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Introduction and Sector Overview

This report highlights the importance of the Collision Repair career pathway for Minnesota's Transportation Industry. Professionals in Collision Repair work in diverse roles from autobody repairers and glass installers to autobody painting, serving industries as diverse as Navigational Manufacturing and Automobile Dealerships. In all, about 6,757 people work in Collision Repair roles in Minnesota as of the third quarter of 2022—a slight decline (-107 workers) from a year prior.

Overall employment in Minnesota has grown by nearly 118,000 workers (4.0%) between the second quarter of 2021 and the third quarter of 2022, and the five-year forecast recovered with a 45,970 expansion of employment over five years as of the most current baseline forecasts, or about 0.3% average annual growth. During this time frame, Collision Repair employment is anticipated to decline slightly in Minnesota, declining by 34 total jobs (-0.1% annually) due to a tight talent pool. Total baseline demand for Collision Repair talent is anticipated to be around 3,236 professionals needed to fill positions due to job exits and transfers, such as retirements and job changes.

			Cu	rrent			5-Year	History	5-Year Baseline Forecast				
Occupation	Empl	Avg Ann Wages²	LQ	Unempl	Unempl Rate	Online Job Ads ³	Empl Change	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
Automotive Technology Pathway	21,227	\$66,900	1.02	387	1.8%	1,183	-819	-0.8%	8,677	3,181	5,821	-279	-0.4%
Aviation and Drone Technology Pathway	9,162	\$115,200	0.86	139	1.5%	313	-531	-1.1%	4,615	1,584	2,945	86	0.2%
Collision Repair Pathway	6,757	\$54,100	1.05	177	2.6%	359	-44	-0.1%	3,236	1,128	2,142	-34	-0.1%
Diesel Equipment and Truck Pathway	12,518	\$61,900	1.06	230	1.8%	593	-458	-0.7%	6,135	2,048	3,894	192	0.3%
Marine and Power Sports Pathway	4,799	\$46,200	0.95	205	4.2%	75	95	0.4%	3,046	1,062	1,946	38	0.2%
Truck Driving Pathway*	98,845	\$51,200	0.93	2,607	2.6%	6,446	5,748	1.2%	63,838	27,225	34,298	2,315	0.5%
Transportation Occupations	145,613	\$58,000	0.96	3,444	2.4%	8,585	1,899	0.3%	84,921	33,955	48,916	2,050	0.3%
Total - All Occupations	3,038,766	\$63,700	1.00	68,550	2.3%	170,185	-11,615	-0.1%	1,800,961	734,547	1,020,444	45,970	0.3%

Transportation Pathways in Minnesota – Baseline Forecast, 2022Q3¹

*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 2023Q3 unless noted otherwise

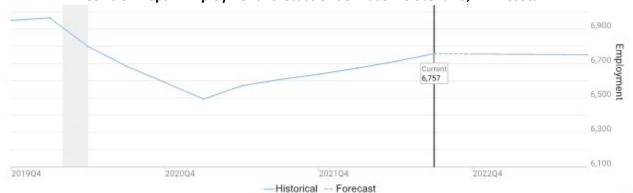
Note: Figures may not sum due to rounding.

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

2. Wage data represent the average for all Covered Employment

3. Data represent found online ads active within the last thirty days in the selected region; data represents a sampling rather than the complete universe of postings. Ads lacking zip code information but designating a place (city, town, etc.) may be assigned to the zip code with greatest employment in that place for queries in this analytic. Due to alternative county-assignment algorithms, ad counts in this analytic may not match that shown in RTI (nor in the popup window ad list).

Minnesota saw a strong job market throughout 2022 and elevated recruitment among employers across most sectors. As the available talent pool was exhausted, unemployment rates dropped dramatically across critical roles and in many scenarios demand far outpaced talent supply. Forecasting future needs under current conditions with an eye to anticipated talent pipelines into Collision Repair suggest that there may be shortages of talent across a large share of occupations in this career pathway unless more talent decides to enter the field. The pathway forecast has soured since estimates in late 2020, with a baseline forecast of about -0.1% average annual decline in overall employment by the second quarter of 2027. Following an initially strong recovery in early 2021, 2022 saw relatively flat employment numbers quarter-to-quarter.





Industry/Occupation Mix

Collision Repair talent is primarily concentrated in the Automotive Repair and Maintenance industry (45.2%), decreasing in its concentration from estimates in 2021 by 1.2 percentage points. The next highest industry of employment concentration is Automobile Dealers (7.5%), followed by general Coating, Engraving, Heat Treating, and Allied Activities as well as Architectural and Structural Metals Manufacturing employers.

		CUI	RRENT			5-YEAR DE			
NAICS Code	Industry Title		% of Occ Empl	Empl	Avg Ann Wages	Exits	Transfers	Empl Growth	Total Demand
8111	Automotive Repair and Maintenance		45.2%	3,051	\$55,100	550	915	-5	1,460
4411	Automobile Dealers		7.5%	506	\$53,200	93	143	-17	218
3328	Coating, Engraving, Heat Treating, and Allied Activities		6.3%	423	\$40,900	62	142	-10	194
3323	Architectural and Structural Metals Manufacturing		3.2%	215	\$47,700	33	76	8	117
3339	Other General Purpose Machinery Manufacturing		2.8%	189	\$47,700	27	62	-11	77
3331	Agriculture, Construction, and Mining Machinery Manufacturing		1.7%	118	\$47,700	17	38	-8	47
3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing		1.7%	113	\$47,700	17	39	1	57
3399	Other Miscellaneous Manufacturing		1.6%	111	\$47,700	17	40	5	62
3219	Other Wood Product Manufacturing		1.4%	91	\$39,800	14	32	2	48
3362	Motor Vehicle Body and Trailer Manufacturing		1.3%	89	\$44,700	14	31	3	49
3369	Other Transportation Equipment Manufacturing		1.2%	83	\$49,100	12	27	-6	33
3329	Other Fabricated Metal Product Manufacturing		1.2%	83	\$47,700	12	29	0	41
3222	Converted Paper Product Manufacturing		1.2%	83	\$55,100	12	28	-2	37
5613	Employment Services		1.2%	82	\$35,200	12	28	-1	39
4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers		1.1%	75	\$49,600	14	23	1	38
3261	Plastics Product Manufacturing		1.1%	73	\$43,500	11	26	3	41
3332	Industrial Machinery Manufacturing		1.0%	66	\$47,700	9	22	-4	27
3391	Medical Equipment and Supplies Manufacturing		1.0%	65	\$48,300	10	23	2	35
3327	Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing		0.9%	64	\$41,900	10	23	3	35
3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing		0.9%	60	\$47,700	8	19	-4	24
n/a	All Others		16.5%	1,117	n/a	173	375	-2	547

Top Industry Distribution for Collision Repair Pathway Occupations in Minnesota

Source: JobsEQ@

Data as of 2022Q3 except wages which are as of 2022. 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 the three occupations found in the Collision Repair pathway, Coating, Painting, and Spraying Machine Setters, Operators, and Tenders are uniquely concentrated in Minnesota to a higher degree than seen in the nation overall. On average, Collision Repair careers pay about \$54,100 per year (up from \$46,900 last year)—about \$9,600 below than the average wage statewide across all positions.

		•		•					-		-			
			Curi	rent			1-Year H	listory	1-Year F	orecast		5-Year	Baseline Fo	recast
Occupation	Empl	Avg Ann Wages²	LQ	Unempl	•	Online Job Ads ³	Empl Change	Ann %	Empl Change	Ann %	Total Demand	Exits	Transfers	Empl Change
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	3,535	\$51,200	1.17	96	2.7%	197	122	3.6%	-4	0.1%	1,720	527	1,212	-19

2 5%

1.9%

2.6%

2.3%

132

38

367

169,085

25

2

150

91,312

0.9%

0.6%

2.3%

3.1%

-4

0

-7

9,139

-0.1%

0.1%

-0.1%

0.3%

1.347

169

3.236

554

47

1.128

1,800,961 734,547 1,020,444

810

121

2.142

Collision Repair Pathway in Minnesota - Baseline Forecast, 2022Q3¹

Source: JobsEQ®

Repairers

Repairers

soc

51-9124

49-3021

49-3022

Data as of 2022Q3 unless noted otherwise

Automotive Body and Related

Automotive Glass Installers and

Collision Repair Pathway

Total - All Occupations

Note: Figures may not sum due to rounding.

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

2.863

359

6.757

3,038,766

\$58.300 0.93

1.00

1.05

1.00

\$48,800

\$54.100

\$63,700

74

7

177

68,550

2. Wage data are the average for all Covered Employment

3. Data represent found online ads active within the last thirty days in the selected region; data represents a sampling rather than the complete universe of postings. Ads lacking zip code information but designating a place (city, town, etc.) may be assigned to the zip code with greatest employment in that place for queries in this analytic. Due to alternative county-assignment algorithms, ad counts in this analytic may not match that shown in RTI (nor in the popup window ad list).

The Collision Repair pathway saw some significant wage gains across the pathway, with average wages rising by \$7,200 from prior estimates.² Entry-level wages in the pathways exceed the average entry-level wages observed across all occupations statewide, paying an average of \$37,900 annually for entry-level talent.

Occupation Wages, Average Annual in Minnesota, 2022Q3

							Percentiles		
SOC	Occupation	Mean	Entry Level	Experienced	10%	25%	50% (Median)	75%	90%
49-3021	Automotive Body and Related Repairers	\$58,300	\$40,300	\$67,300	\$37,700	\$45,400	\$52,500	\$63,300	\$79,100
49-3022	Automotive Glass Installers and Repairers	\$48,800	\$38,600	\$53 <i>,</i> 900	\$37,300	\$41,800	\$48,000	\$53,600	\$60,900
51-9124	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	\$51,200	\$35,800	\$58,900	\$33,900	\$40,000	\$48,400	\$59,000	\$67,800
	Collision Repair Pathway	\$54,100	\$37,900	\$62,200	\$35,700	\$42,400	\$50,100	\$60,600	\$72,300
	Total - All Occupations	\$63,700	\$31,400	\$79,800	\$29,100	\$35,700	\$49,800	\$75,000	\$108,400

Source: JobsEQ®

Wage data represent the average for all Covered Employment

Source: RealTime Talent analysis of Chmura Economics JobsEQ®, http://www.chmuraecon.com/jobseq/. Job Posting Trends section uses data from Gartner TalentNeuron Plan, accessed 1/10/2022 at talentneuronplan.gartner.com

-18

2

-34

45,970

Ann %

Change

-0.1%

-0.1%

0.1%

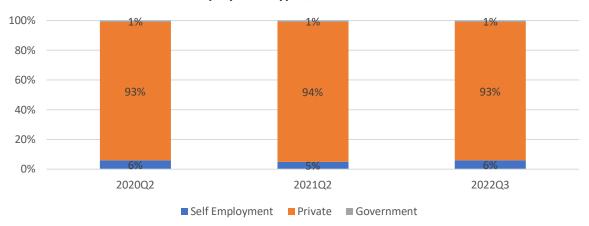
-0.1%

0.3%

¹ Methodology for estimating wages changed between the 2021 and 2022 reports and are new as of the 2022Q3 dataset used here. They are estimated for the most current quarter of data available (2022Q3) using a combination of data from the Bureau of Labor Statistics and Chmura RTI wages, and no longer lag by a calendar year.

Employment Types

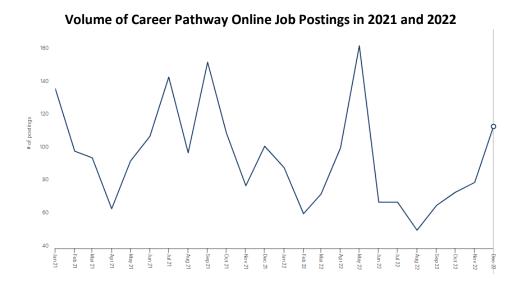
About 93% of people employed in Collision Repair careers in Minnesota work for private employers, while an estimated 6% are self-employed (a slight increase from 2021). The remaining 1% work for state, federal, or local government entities.



Employment Types, Minnesota 2020-2022

Job Posting Trends

Data in this section focuses on jobs newly advertised between January 1 and December 31, 2022 in Collision Repair roles across Minnesota. Volume of total job postings, employer types (direct versus staffing), and top employers by unique job posting volumes comes from Gartner TalentNeuron; industry detail, skill and certification analysis, wage trends, and posting to hire analysis are from the Lightcast 2022Q4 dataset. Overall, there were 1,008 new jobs advertised in Collision Repair during this time frame, a drop of -21% from the prior 12-month period (2021), following what had been a 79% increase between 2020 and 2021. The share of posted positions advertised by staffing and temp agencies in the Collision Repair pathway increased in 2021 compared to 2020, implying dramatic increases in challenges finding talent in this career pathway and direct employers resorting to using new strategies to find talent, but dropped again in 2022 as the market cools. Posted wages increased to a median hourly rate of \$22.46 as of 2022, and there was only one hire per every two unique job postings advertised based on Lightcast estimates.



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

	Employer	Percent Change between 2021 and 2022
1.	Caliber Collision Centers	-52%
2.	Safelite	331%
3.	GPAC	57%
4.	Safelite Autoglass	-63%
5.	Express Employment Professionals	-22%
6.	Walser Collision And Glass	19%
7.	Aerotek	38%
8.	Dent Wizard	450%
9.	Atlas Staffing Inc	100%
10.	Humanity	0%

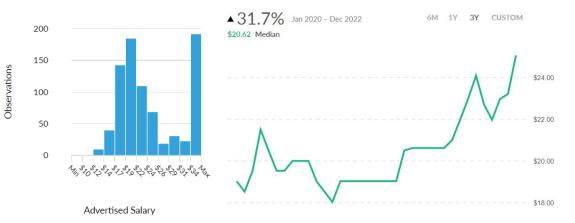
New Job Postings Advertised in Minnesota by Employer Type



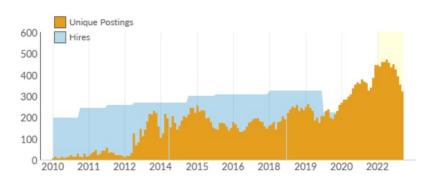
New Job Postings by Industry or Employer Type

Industry	Total/Unique (Jan 2022 - Dec 2022)	Posting Intensity	Median Posting Duration
Other Services (except Public Administration)	1,240 / 483	3:1	37 days
Manufacturing	574 / 270	2:1	32 days
Administrative and Support and Waste Management and Remediation Services	842 / 267	3:1	34 days
Retail Trade	429 / 142	3:1	35 days
Wholesale Trade	305 / 63	5:1	33 days
Construction	100 / 56	2:1	31 days
Professional, Scientific, and Technical Services	63 / 39	2:1	26 days
Real Estate and Rental and Leasing	42 / 16	3:1	44 days
Transportation and Warehousing	12 / 10	1:1	25 days
Health Care and Social Assistance	34 / 9	4:1	42 days

Pathway Advertised Salary Range

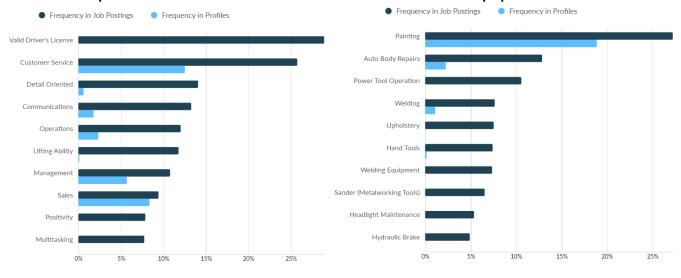


Monthly Ratio of Unique Job Postings to Estimated Hires



Top Common Skills

Top Specialized Skills



Top Certifications and Qualifications

Qualification	Postings with Qualification
Automotive Service Excellence (ASE) Certification	69
HVAC Certification	17
Commercial Driver's License (CDL)	12
Security Clearance	11
Forklift Certification	5
ASE Parts Specialist	2
Board Certified/Board Eligible	2
CompTIA A+	2
30-Hour OSHA General Industry Card	1
CDL Class B License	1

Talent Supply Detail

Talent Unemployment, Underemployment, and Educational Attainment

At an overall pathway unemployment rate of 2.6%, there are about 177 unemployed Collision Repair professionals statewide. An additional 463 Collision Repair professionals are underemployed, meaning they are working in roles for which they are overqualified by education or experience.

				Empl (Place of Res		Overall Occupation ¹					
SOC	Occupation	< High School	High School	Some College	2-Year	4-Year	Master's	PhD	Total Empl	Underemployed	Unemployed	Unempl Rate
49-3021	Automotive Body and Related Repairers	13.6%	46.4%	17.0%	16.9%	5.2%	0.7%	0.2%	2,836	279	96	2.5%
49-3022	Automotive Glass Installers and Repairers	10.3%	52.3%	25.2%	6.9%	4.6%	0.2%	0.6%	355	165	74	1.9%
51-9124	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	12.3%	47.4%	18.2%	13.1%	7.4%	1.4%	0.2%	3,484	19	7	2.7%
	Collision Repair Pathway	12.7%	47.2%	18.1%	14.4%	6.3%	1.0%	0.2%	6,674	463	177	2.6%
	Total - All Occupations	4.9%	21.1%	15.4%	14.1%	30.4%	10.3%	3.8%	2,944,602	511,822	68550	2.3%

Collision Repair Pathway in Minnesota

Source: JobsEQ®

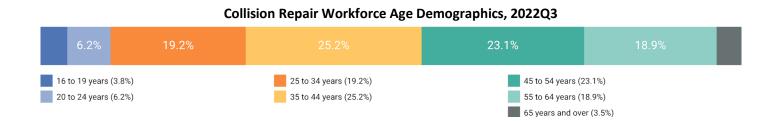
Data as of 2022Q3 unless noted otherwise

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.

Workforce Demographics

About 10% of the Automotive Technology workforce is under the age of 25, and 3.5% are over 64 years old. The largest demographic group by race are White, representing 88.1% of the total pathway's workforce, with the next largest cohort being Black talent and Multiracial talent each representing 3.5% of the workforce. About 8.5% of the pathway's workforce are Hispanic or Latinx and 6.3% are female.



Collision Repair Workforce Race Demographics, 2022Q3



Collision Repair Workforce Ethnicity Demographics, 2022Q3

9	01.5%	8.5%
Non-Hispanic/Latino (91.5%)	Hispanic or Latino (of any race) (8.5%)	

Collision Repair Workforce Gender Demographics, 2022Q3

	93.7%	6.3%
Male (93.7%)	Female (6.3%)	

Graduate Demographics

There is only one postsecondary program directly aligned to the Collision Repair pathway. There is an overrepresentation of male students and there are no international students in the Autobody/Collision and Repair Technology/Technician programs with completions in SY2021.³ The Autobody/Collision and Repair Technology/Technician program is more diverse than some of the other transportation programs with 42% of program graduates being BIPOC.

Race and Gender of Graduates Receiving Postsecondary Awards in SY2021, Minnesota

	-	All 2021	International	Black or African American, non-	American Indian or Alaska	Asian, Native Hawaiian or Other Pacific	Hispanic or	White, non-	Multiple or unknown	Gender -	Gender -
CIP Code	Description	Graduates	Student*	Hispanic	Native	Islander	Latino	Hispanic	race/ethnicity	Males	Females
47.0603	Autobody/Collision and Repair Technology/Technician	161	0	12	3	15	29	93	9	139	22
	All Collision Repair Postsecondary Programs	161	0	12	3	15	29	93	9	139	22

IPEDS SY2021 demographics by award conferred. Count of awards may double count individuals who obtained multiple credentials in the same calendar year. *<u>NCES IPEDS</u> 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. <u>https://nces.ed.gov/ipeds/report-your-data/race-ethnicity-definitions</u>. For more information, view this article from Berkeley on tax filing status of international students. <u>https://internationaloffice.berkeley.edu/taxes/tax-filing-status</u>

³ <u>NCES IPEDS</u> 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. <u>https://nces.ed.gov/ipeds/report-vour-data/race-ethnicity-definitions</u>. For more information, view this article from Berkeley on tax filing status of international students. <u>https://international.students</u>.

Source: RealTime Talent analysis of Chmura Economics JobsEQ®, http://www.chmuraecon.com/jobseq/. Job Posting Trends section uses data from Gartner TalentNeuron Plan, accessed 1/10/2022 at talentneuronplan.gartner.com

Talent Gap Analysis

Occupation Gaps

By 2027, it is likely that Minnesota will see a growing shortage of Auto Body Repairers, Coating, Painting, and Spraying Machine Setter, Operators and Tenders, and Automotive Glass Installers and Repairers (shown in red below). The estimated annual shortage in each of these occupations has worsened since 2021 estimates.

Estimated Occupation Gaps over Five Years in Minnesota

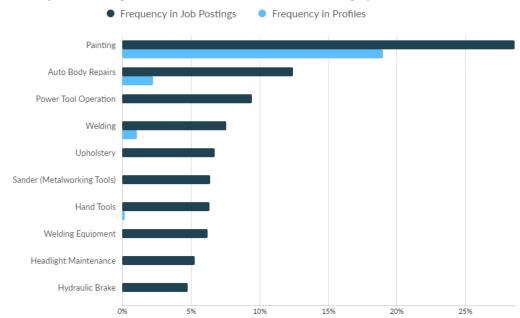


Award Gaps

There are no award gaps associated with the Collision Repair pathway. This occupation does not typically require a 2year degree or higher, and Minnesota postsecondary institutions are not underproducing credentials for Collision Repair professionals.

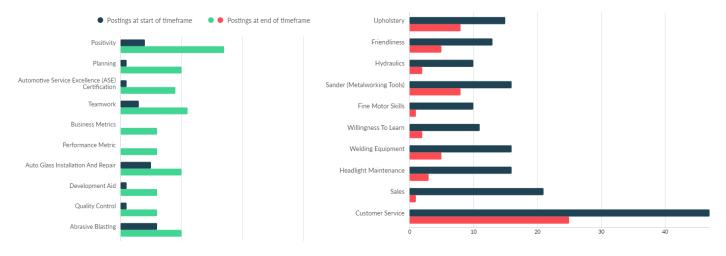
Skill Misalignments

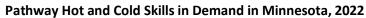
All specialized skills are more frequently found in job postings than in candidate profiles found online. Painting, Auto Body Repairs, Welding, and Hand Tools are all named more frequently in Collision Repair talent profiles online than they are mentioned in job postings.



Percent of Pathway Job Postings and Online Talent Profiles Indicating Specialized Skills in Minnesota, 2022

Several baseline requirements, such as positivity, teamwork, planning, and auto glass installation and repair, and quality control have been trending up at the close of 2022. The chart below indicates skills that have increased in frequency in online job postings between January and December 2022 (shown in green) and those that have declined in frequency (shown in red).





High Need, High Demand Pathways

There were about 161 awards conferred at 10 different Minnesota postsecondary institutions in programs aligned to Collision Repair careers in SY2021. Among, these 113 were certificates that could be earned in less than two years, 27 were at the Associate level, and 21 were certificates that could be earned in more than two years, but less than four years. The average school had about 16 completions, but range from two to 77 completions. No programs were delivered remotely.

Collision Repair Postsecondary Program Awards by Level, SY2021
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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	76	37	27	21	0	0	0	161
	Total	76 (47.2%)	37 (23.0%)	27 (16.8%)	21 (13.0%)	0 (0.0%	0 (0.0%)	0 (0.0%)	161 (100%)
									0.000

Institution Type	Completions (2021)	Market Share
Public, 2-year	154	95.7%
Private not-for-profit, 4-year or above	7	4.3%

Nearly all of the awards (95.7%) were conferred by public 2-year institutions. Just seven awards were conferred by private not-for-profit 4-year or above institutions. Completions are down overall by -12.5% from 2012.

Institution	Completions (2021)	Growth % YOY (2021)	Market Share (2021)	IPEDS Tuition & Fees (2021)	Completions Trend (2017-2021)
Hennepin Technical College	77	140.6%	47.8%	\$5,741	
Northland Community and Technical College	17	88.9%	10.6%	\$6,052	\frown
Century College	16	-5.9%	9.9%	\$5,907	
Lake Superior College	16	128.6%	9.9%	\$5,616	
Dakota County Technical College	10	-23.1%	6.2%	\$6,208	\frown
Ridgewater College	10	150.0%	6.2%	\$5,914	
Dunwoody College of Technology	7	133.3%	4.3%	\$23,863	\sim
St Cloud Technical and Community College	4	-63.6%	2.5%	\$5,874	$\overline{}$
Minnesota State College Southeast	2	-60.0%	1.2%	\$6,562	<u> </u>
South Central College	2	-75.0%	1.2%	\$5,966	

Collision Repair Postsecondary Program Awards by Institution, SY2021

While there are no award gaps for the Collision Repair pathway, there are talent shortages in each of the three occupations associated with the Collision Repair pathway. There is an opportunity for exploration of certificate, or 2-year program growth or development given local employer demand.

Promising Approaches to Addressing Possible Misalignments

A variety of strategies may improve the outlook for transportation talent in need. In the Collision Repair pathway, most occupations have low talent diversity by race and gender. All occupations in the Collision Repair pathway also have a lower share of their workforce that is over 45 years of age.

Postsecondary programs aligned to the Collision Repair pathway are not underproducing graduates in comparison to national benchmarks. However, all the occupations in the Collision Repair pathway are experiencing talent shortages, a low share of female workers and graduates, but have more diverse graduates by race and ethnicity. Coating, Painting, and Spraying Machine Setters, Operators, and Tenders have the highest volume of employment. Automotive Body and Related Repairers have the next highest volume of employment and the largest projected occupation gap.

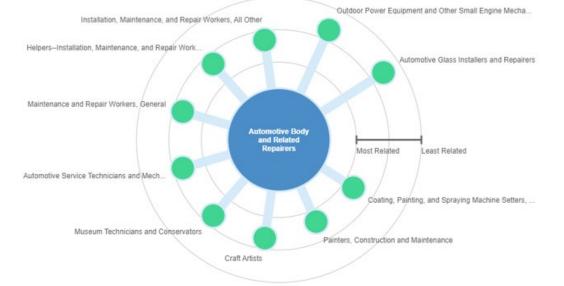
Postsecondary Strategy Summary Table, Minnesota 2022

Occupation	Related Programs*	2022Q3 Empl	Talent Shortage	Workforce BIPOC by Race	Workforce Hispanic/Latinx	Workforce Female	Workforce Under 45	SY2021 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)
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	 Autobody/Collision and Repair Technology/Technician 	3,535	Y	9.3%	8.2%	2.9%	52.7%	161	Ν	42.2%	13.7%
Automotive Body and Related Repairers	 Autobody/Collision and Repair Technology/Technician 	2,863	Y	12.3%	5.5%	5.3%	55.2%	161	Ν	42.2%	13.7%
Automotive Glass Installers and Repairers	 Autobody/Collision and Repair Technology/Technician 	359	Y	14.0%	9.0%	9.1%	55.7%	161	Z	42.2%	13.7%
Collision Repair Pathway	All aligned programs	6,757	Y	11.9%	8.5%	6.3%	54.4%	161	Ν	42.2%	13.7%
Total - All Occupations		3,038,766		15.0%	5.2%	48.3%	56.5%	29,484		37.3%	65.6%

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.

Career Pathway Opportunities

When considering occupations that have significant skill and experience overlap with the occupations of highest need in this pathway, the majority have low employment numbers or are other careers in the Transportation sector that share high demand. The graphic below offers several careers related to the Collision Repair occupation in skill demands that have highly relevant skill and experience overlap that would be strong feeder occupations for talent.



Feeder Occupations into Automotive Body and Related Repairer Roles, 2023Q1

Occupation	Category	Relevance	Avg. Unique Monthly Postings from Jan 2022 - Dec 2022	Mean Salary Diff.
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	Lateral Advancement	83%	38	-\$13,683
Painters, Construction and Maintenance	Lateral Advancement	81%	87	-\$11,701
Craft Artists	Lateral Advancement	67%	2	-\$6,668
Museum Technicians and Conservators	Lateral Advancement	65%	3	-\$7,771
Automotive Service Technicians and Mechanics	Advancement	65%	560	-\$5,774
Maintenance and Repair Workers, General	Lateral Advancement	65%	1,210	-\$10,354
HelpersInstallation, Maintenance, and Repair Workers	Lateral Advancement	65%	63	-\$18,161
Installation, Maintenance, and Repair Workers, All Other	Lateral Advancement	64%	41	-\$8,416
Outdoor Power Equipment and Other Small Engine Mechanics	Advancement	34%	4	-\$14,832
Automotive Glass Installers and Repairers	Advancement	28%	7	-\$12,984

FAQ

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 the Senior Director of Strategic Research Erin Olson at <u>erin@realtimetalentmn.org</u> or visit the RealTime Talent website at <u>www.realtimetalent.org</u>