# TRUCK DRIVING

Supply & Demand Analysis

2022



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# Introduction and Sector Overview

This report highlights the importance of the Truck Driving career pathway for Minnesota's Transportation Industry. Professionals in these careers work as heavy truck drivers, tractor drivers, bus drivers, sales truck drivers, and tank car drivers serving a variety of industries. In all, about 98,845 work in Truck Driving roles in Minnesota as of the third quarter of 2022—a 4.2% increase 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, Truck Driving employment is anticipated to rise respectably in Minnesota by about 2,315 total jobs (0.5% annually) due to a tight talent pool. Total baseline demand for Truck Driving talent is anticipated to be around 63,858 professionals needed to fill positions due to job exits and transfers, such as retirements and job changes.

#### Transportation Pathways in Minnesota – Baseline Forecast, 2022Q31

			Curr	ent			5-Year	History	5-Year Baseline Forecast				
Occupation	Empl	Avg Ann Wages <sup>2</sup>	LQ	Unempl	Unempl Rate	Online Job Ads <sup>3</sup>	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%

<sup>\*</sup>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.

<sup>1.</sup> Data based on a four-quarter moving average unless noted otherwise

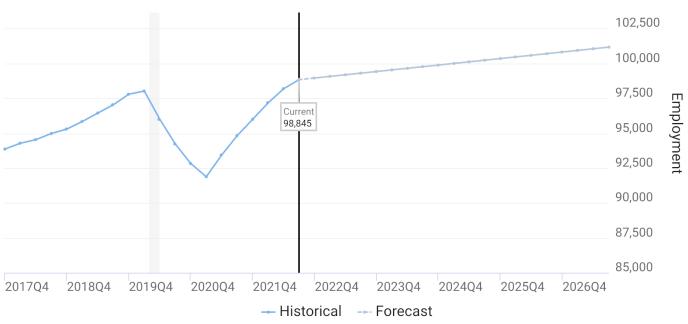
<sup>2.</sup> Wage data represent the average for all Covered Employment

<sup>3.</sup> 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 populo window ad list).

<sup>&</sup>lt;sup>1</sup> The occupation for School Bus Drivers was added to this pathway analysis as of 2022.

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 Truck Driving roles suggest that there may be long-term shortages of talent in several critical occupations in this career pathway unless more talent decides to enter the field. The pathway forecast soured since estimates in late 2020, but has recovered as of 2022 estimates to an 0.5% average annual growth through 2027.





Source: JobsEQ®,Data as of 2022Q3,The shaded areas of the graph represent national recessions.

# Industry/Occupation Mix

Truck Driving talent is primarily concentrated in the General Freight Trucking industry (15.1%, down 0.6 percentage points) and School and Employee Bus Transportation (7.7%, up 0.3 percentage points). The industry demand for Truck Driving talent is diverse, from warehousing to restaurant and grocery industry needs.

#### Top Industry Distribution for Automotive Technology Pathway Occupations in Minnesota

			10-YEAR D	EMAND					
NAICS Code	Industry Title	% of Occ Empl	Empl	Avg Ann Wages	Exits	Transfers	Empl Growth	Total Demand	
4841	General Freight Trucking	15.1%	14,880	\$54,100	6,792	10,545	-62	17,275	
4854	School and Employee Bus Transportation	7.7%	7,629	\$40,800	8,096	4,030	813	12,939	
4921	Couriers and Express Delivery Services	6.5%	6,389	\$62,400	3,118	4,830	900	8,848	
4842	Specialized Freight Trucking	4.4%	4,368	\$54,000	1,991	3,094	-25	5,059	
7225	Restaurants and Other Eating Places	4.1%	4,065	\$27,600	2,056	3,173	899	6,127	
4931	Warehousing and Storage	3.8%	3,787	\$51,000	1,512	3,104	542	5,159	
4244	Grocery and Related Product Merchant Wholesalers	3.6%	3,533	\$43,900	1,607	2,558	95	4,260	
6111	Elementary and Secondary Schools	2.5%	2,508	\$41,100	2,596	1,238	-35	3,799	
4922	Local Messengers and Local Delivery	2.0%	1,979	\$43,100	989	1,529	384	2,902	
4859	Other Transit and Ground Passenger Transportation	1.9%	1,918	\$34,400	1,614	1,108	221	2,944	
4851	Urban Transit Systems	1.9%	1,854	\$46,600	1,439	1,030	71	2,539	
5613	Employment Services	1.8%	1,738	\$41,500	683	1,353	82	2,118	
4853	Taxi and Limousine Service	1.7%	1,727	\$32,000	1,548	893	-38	2,403	
9211	Executive, Legislative, and Other General Government Support	1.5%	1,476	\$44,600	1,146	824	-2	1,968	
4249	Miscellaneous Nondurable Goods Merchant Wholesalers	1.4%	1,377	\$50,600	626	988	16	1,631	
2389	Other Specialty Trade Contractors	1.4%	1,351	\$54,700	615	956	-9	1,563	
4413	Automotive Parts, Accessories, and Tire Retailers	1.3%	1,301	\$29,700	596	923	6	1,525	
2373	Highway, Street, and Bridge Construction	1.3%	1,247	\$57,500	578	906	51	1,535	
5621	Waste Collection	1.2%	1,147	\$54,300	533	836	55	1,424	
4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	1.1%	1,041	\$36,200	481	751	32	1,264	
n/a	All Others	33.9%	33,530	n/a	15,860	23,959	712	40,531	
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.

# Pathway Detail

Of all occupations found in the Truck Driving pathway, Passenger Vehicle Drivers are uniquely concentrated in Minnesota to a higher degree than seen in the nation overall. On average, Truck Driving careers pay about \$51,200 per year—about \$12,500 below the average wage statewide across all positions. The Truck Driving Pathway saw

significant growth over the past year, increasing in total employment by 4.2%; however, the forecast for the coming year is more restrained for this pathway.

#### Truck Driving Pathway in Minnesota - Baseline Forecast, 2022Q31

			Current 1				1-Year History 1-Year Forecast			5-Year Baseline Forecast						
			Avg Ann			Unempl	Online	Empl	Ann	Empl		Total			Empl	Ann %
soc	Occupation	Empl	Wages <sup>2</sup> l	Q Une	empl	Rate	Job Ads <sup>3</sup>	Change	%	Change	Ann %	Demand	Exits	Transfers	Change	Change
53-3032	Heavy and Tractor-Trailer Truck Drivers	39,919	\$59,400 0	97 7	781	2.0%	3,144	962	2.5%	57	0.1%	8,677	3,181	5,821	-325	-0.3%
53-3033	Light Truck Drivers	19,832	\$50,000 0	92 3	383	2.0%	860	149	0.8%	124	0.6%	4,615	1,584	2,945	86	0.2%
53-3051	Bus Drivers, School	10,788	\$45,000 1	25 5	566	5.1%	102	1,057	10.9%	64	0.6%	3,236	1,128	2,142	-34	-0.1%
53-7051	Industrial Truck and Tractor Operators	9,821	\$51,600 0	61 3	313	3.2%	242	674	7.4%	48	0.5%	6,135	2,048	3,894	192	0.3%
53-3031	Driver/Sales Workers	9,758	\$34,500 0	93 1	194	2.0%	1,851	498	5.4%	103	1.1%	3,046	1,062	1,946	38	0.2%
53-3053	Shuttle Drivers and Chauffeurs	4,900	\$36,000 1	08 2	262	5.2%	212	674	15.9%	43	0.9%	63,838	27,225	34,298	2,315	0.5%
53-3052	Bus Drivers, Transit and Intercity	3,636	\$49,200 1	17 1	106	2.9%	29	-6	-0.2%	18	0.5%	84,921	33,955	48,916	2,050	0.3%
53-7121	Tank Car, Truck, and Ship Loaders	191	\$58,500 0	79	3	1.5%	5	5	2.8%	0	-0.2%	63,838	27,225	34,298	2,315	0.5%
	Truck Driving Pathway	98,845	\$51,200 0	93 2,	,607	2.6%	6,446	4,014	4.2%	457	0.5%	1,800,961	734,547	1,020,444	45,970	0.3%
	Total - All Occupations	3,038,766	\$63,700 1	00 68,	3,550	2.3%	170,185	91,312	3.1%	9,139	0.5%	8,677	3,181	5,821	-325	-0.3%

Source: JobsEQ®

Data as of 2022Q3 unless noted otherwise

Note: Figures may not sum due to rounding.

The Truck Driving pathway saw some moderate wage gains across the pathway.<sup>2</sup> Entry-level wages in the pathways exceed the average entry-level wages observed across all occupations statewide by about \$5,000, with Truck Driving careers paying an average of \$36,400 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%
53-3031	Driver/Sales Workers	\$34,500	\$24,700	\$39,400	\$23,900	\$26,100	\$30,900	\$39,300	\$50,900
53-3032	Heavy and Tractor-Trailer Truck Drivers	\$59,400	\$43,200	\$67,500	\$40,300	\$49,000	\$57,400	\$66,600	\$79,000
53-3033	Light Truck Drivers	\$50,000	\$32,200	\$58,800	\$28,700	\$37,800	\$48,700	\$59,100	\$77,500
53-3051	Bus Drivers, School	\$45,000	\$32,900	\$51,000	\$30,400	\$37,400	\$42,800	\$50,300	\$56,700
53-3052	Bus Drivers, Transit and Intercity	\$49,200	\$33,500	\$57,100	\$29,600	\$39,600	\$47,000	\$60,600	\$68,000
53-3053	Shuttle Drivers and Chauffeurs	\$36,000	\$27,400	\$40,400	\$25,600	\$30,200	\$35,700	\$40,500	\$44,300
53-7051	Industrial Truck and Tractor Operators	\$51,600	\$38,600	\$58,000	\$37,900	\$41,100	\$48,500	\$56,100	\$68,800
53-7121	Tank Car, Truck, and Ship Loaders	\$58,500	\$39,900	\$67,800	\$38,900	\$42,800	\$50,600	\$73,300	\$89,900
	Truck Driving Pathway	\$51,200	\$36,400	\$58,500	\$33,900	\$41,200	\$49,100	\$58,100	\$70,400
	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

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

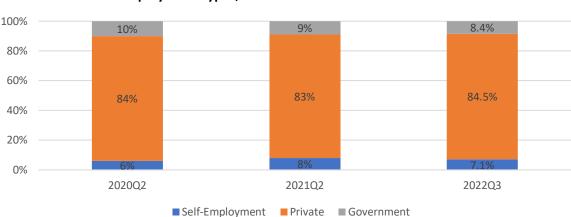
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<sup>&</sup>lt;sup>2</sup> Methodology for estimating wages changed between the 2021 and 2022 reports and are new as of the 2022Q3 dataset used here. They are estimated for the most current quarter of data available (2022Q3) using a combination of data from the Bureau of Labor Statistics and Chmura RTI wages, and no longer lag by a calendar year.

# **Employment Types**

About 84.5% of people employed in Truck Driving roles in Minnesota work for private employers, while an estimated 7.1% are self-employed. The remaining 8.4% work for state, federal, or local government entities.



#### **Employment Types, Minnesota 2020-2022**

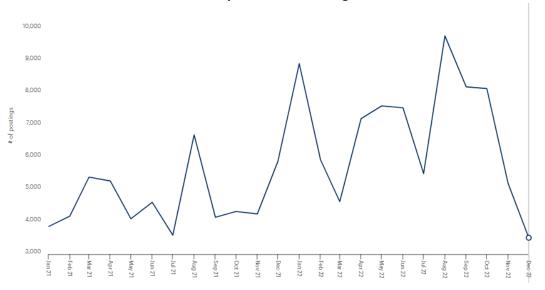
#### **Job Posting Trends**

Data in this section focuses on jobs newly advertised between January 1 and December 31, 2022 in Truck Driving 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 83,114 new jobs advertised in Truck Driving roles during this time frame, an increase of 46% from the prior 12-month period (2021). Volume of posted positions advertised by staffing and temp agencies in the Truck Driving pathway has remained consistent to trends in 2020 and 2021. Posted wages increased to an average \$22.98 per hour as of 2022 (\$23.85 median), and there were two hires per every one unique job posting advertised based on Lightcast estimates.

A look at all job postings that required a Commercial Drivers' License (CDL) upon hire resulted in a total of 56,485 unique job postings in Minnesota in 2022, representing 5% of all postings and an increase of 51% from 2021's demand for a CDL credential. In addition to the Truck Driving pathway careers analyzed in this report, 63 other occupations that often require a CDL including:

- Maintenance and Repair Workers
- Highway Maintenance Workers
- Laborers and Freight, Stock, or Material Movers
- Supervisors of Mechanics, Installers, or Repairers
- Construction Laborers
- Supervisors of Construction Trades and Extraction Workers
- Electrical Power-Line Installers and Repairers
- Operating Engineers and Other Construction Equipment Operators
- Telecommunications Equipment Installers and Repairers
- Rotary Drill Operators, Oil and Gas

#### Volume of Career Pathway Online Job Postings in 2021 and 2022

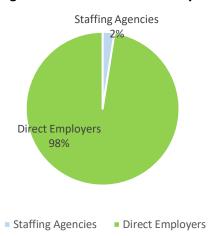


Top Employers by Volume of New Job Postings, With Change from Prior Year

	Employer	Percent Change between 2021 and 2022
1.	National Petroleum Trucking	2,408%
2.	Delivery Drivers Inc.	5,330%
3.	UPS	580%
4.	Amazon	205%
5.	Marten Transport	190%
6.	DART	167%
7.	Marvins Inc.	35,340%
8.	Hogan Transports	37%
9.	Ashley Distribution Services Ltd.	1,858%
10.	Sysco	90%

Note: Employer posting table does not include gig economy careers, such as UberEATS, goPuff, or Instacart

## New Job Postings Advertised in Minnesota by Employer Type



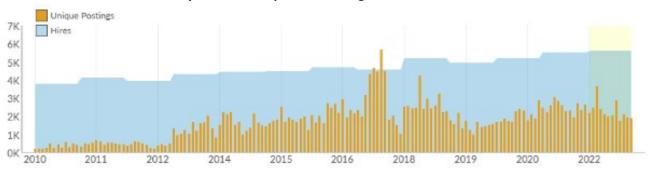
## **New Job Postings by Industry or Employer Type**

Industry	Total/Unique (Jan 2022 - Dec 2022)	Posting Intensity	Median Posting Duration
Transportation and Warehousing	29,517 / 6,693	4:1	21 days
Retail Trade	9,310 / 2,520	4:1	26 days
Wholesale Trade	10,054 / 2,392	4:1	27 days
Manufacturing	7,454 / 2,255	3:1	27 days
Administrative and Support and Waste Management and Remediation Services	5,498 / 2,146	3:1	28 days
Accommodation and Food Services	7,661 / 1,615	5:1	32 days
Construction	1,287 / 513	3:1	28 days
Professional, Scientific, and Technical Services	2,058 / 482	4:1	27 days
Real Estate and Rental and Leasing	1,105 / 393	3:1	33 days
Health Care and Social Assistance	963 / 370	3:1	31 days

# **Pathway Advertised Salary Range**

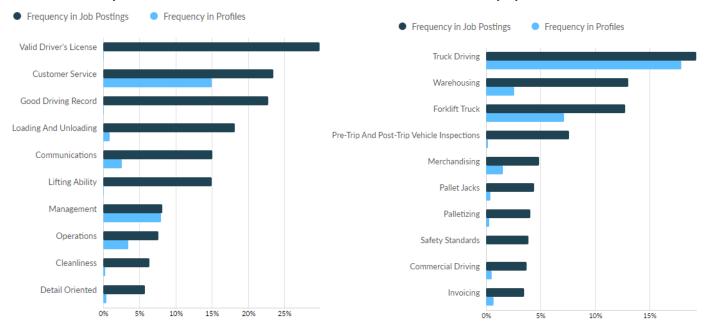


#### **Monthly Ratio of Unique Job Postings to Estimated Hires**



#### **Top Common Skills**

#### **Top Specialized Skills**



## **Top Certifications and Qualifications**

Qualification	Postings with Qualification
CDL Class A License	5,655
Commercial Driver's License (CDL)	5,565
CDL Class B License	1,505
Hazmat Endorsement	894
Tanker Endorsement	796
Doubles Endorsement	372
Forklift Certification	358
DOT Certification	259
Triples Endorsement	170
Transportation Worker Identification Credential (TWIC) Card	117

# Talent Supply Detail

# Talent Unemployment, Underemployment, and Educational Attainment

At an overall pathway unemployment rate of 2.6%, there are about 2,607 unemployed Truck Driving professionals statewide. An additional 12,888 Truck Driving professionals are underemployed, meaning they are working in roles for which they are overqualified by education or experience.

## **Truck Driving Pathway in Minnesota**

				E	mpl (Place of	Residence)				c	Overall Occupation <sup>1</sup>	
soc	Occupation	< High School	High School	Some College	2-Year	4-Year	Master's	PhD	Total Empl	Underemployed	Unemployed	Unempl Rate
53-3031	Driver/Sales Workers	9.2%	43.8%	20.4%	12.3%	12.1%	1.8%	0.4%	9,507	1,249	194	2.0%
53-3032	Heavy and Tractor-Trailer Truck Drivers	9.0%	44.0%	20.4%	12.6%	11.9%	1.7%	0.4%	38,843	4,583	781	2.0%
53-3033	Light Truck Drivers	9.2%	43.0%	20.4%	12.3%	12.7%	1.9%	0.4%	19,128	2,659	383	2.0%
53-3051	Bus Drivers, School	4.1%	37.4%	23.9%	16.3%	14.3%	3.2%	0.9%	10,548	1,665	566	5.1%
53-3052	Bus Drivers, Transit and Intercity	4.7%	36.2%	23.3%	15.7%	16.5%	3.0%	0.6%	3,516	621	106	2.9%
53-3053	Shuttle Drivers and Chauffeurs	6.2%	29.8%	19.4%	12.8%	24.0%	5.8%	2.0%	4,768	1,314	262	5.2%
53-7051	Industrial Truck and Tractor Operators	12.3%	49.6%	19.2%	10.9%	6.7%	0.8%	0.4%	9,437	778	313	3.2%
53-7121	Tank Car, Truck, and Ship Loaders	11.6%	47.4%	17.1%	12.2%	10.2%	1.3%	0.2%	191	19	191	1.5%
	Truck Driving Pathway (2023 Update)	8.6%	42.6%	20.7%	12.9%	12.6%	2.1%	0.5%	95,937	12,888	2,607	2.6%
	Total - All Occupations	4.9%	21.1%	15.4%	14.1%	30.4%	10.3%	3.8%	2,944,602	511,822	68,550	2.3%

Source: JobsEQ®

Data as of 2022Q3 unless noted otherwise

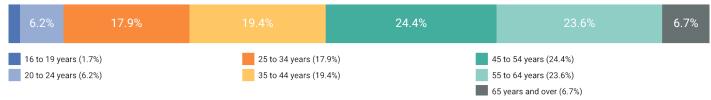
Note: Figures may not sum due to rounding.

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.

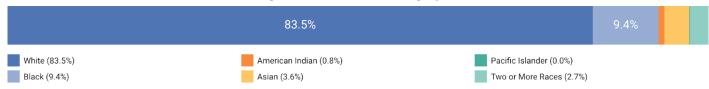
# Workforce Demographics

The Truck Driving workforce is older on average than the workforce as a whole in Minnesota. About 7.9% of the Truck Driving workforce is under the age of 25, and 6.7% are over 64 years old. The largest demographic group by race are White, representing 83.5% of the total pathway's workforce, with the next largest cohort being Black talent representing 9.4% of the workforce. About 6.5% of the pathway's workforce are Hispanic or Latinx, and 13.1% are female.





#### Truck Driving Workforce Race Demographics, 2022Q3



## Truck Driving Workforce Ethnicity Demographics, 2022Q3



#### Truck Driving Workforce Gender Demographics, 2022Q3



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## **Graduate Demographics**

Nearly 87% of students who obtained a truck driving or trucking instructor certificate from an accredited program reporting to NCES IPEDS in SY2021 were male, and 76.2% were non-Hispanic White students, aligning closely to the overall workforce demographics of the pathway.<sup>3</sup> In addition, there are many truck driving schools and academies in Minnesota which culminate in preparation for the knowledge test and road test. Of the twelve published on the Minnesota Department of Public Safety's website, six are in the seven-county MSP metro area.<sup>4</sup> There are over three million people in Minnesota with drivers' licenses, but an estimate of commercial licenses was unavailable at the time of the writing of this report. Other resources available online publish comprehensive lists of CDL schools in Minnesota.<sup>5</sup>

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

CIP Code	Description	All 2021 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
	Truck and Bus Driver/Commercial Vehicle Operator and	Graduates	Student	riispailic	Native	isianuei	Latillo	•	race/etimicity		remaies
49.0205	Instructor	84	1	3	0	2	8	64	6	73	11
	Truck Driving Postsecondary Programs, Percent	100%	1.2%	3.6%	0.0%	2.4%	9.5%	76.2%	7.1%	86.9%	13.1%

IPEDS SY2021 demographics by award conferred. Count of awards may double count individuals who obtained multiple credentials in the same calendar year. \*NCES IPEDS 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 students" has been used in this report as it is more familiar to a common audience. <a href="https://nces.ed.gov/ipeds/report-your-data/race-ethnicity-definitions">https://nces.ed.gov/ipeds/report-your-data/race-ethnicity-definitions</a>. For more information, view this article from Berkeley on tax filing status of international students. <a href="https://international-students-https:/

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

<a href="https://internationaloffice.berkelev.edu/taxes/tax-filing-status">https://internationaloffice.berkelev.edu/taxes/tax-filing-status</a>

<sup>&</sup>lt;sup>4</sup> Minnesota Department of Public Safety. Licensed Truck Driver Training Schools. November 2022. https://dps.mn.gov/divisions/dvs/forms-documents/Documents/LicensedTruckDriverTrainingList.pdf

<sup>&</sup>lt;sup>5</sup> CDL Training Today, https://cdltrainingtoday.com/schools/mn/

# Talent Gap Analysis

# Occupation Gaps

By 2027, both Heavy and Tractor-Trailer Truck Drivers and Transit Bus Drivers are now forecast to have talent shortages in the short- and long-term, breaking from last year's evaluation of local talent pool sufficiency. In addition, the location of talent in relation to opportunities available may not be fully aligned.

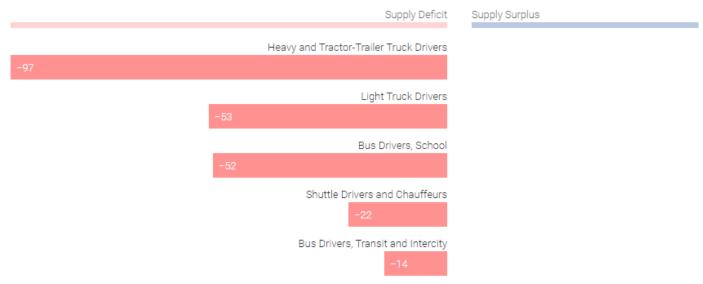
#### Estimated Occupation Gaps over Five Years, Minnesota 2022Q3



# Award Gaps

Minnesota postsecondary institutions are underproducing Truck Driver certificates when compared to national benchmarks for how many awards are typically conferred per local demand. This award gap coupled with the talent shortages highlighted above suggest that increasing the volume of graduates out of existing Truck and Bus Driver programs, or building new two- and four-year programs that would fill the shortages of new talent needed to enter into the occupations listed below.

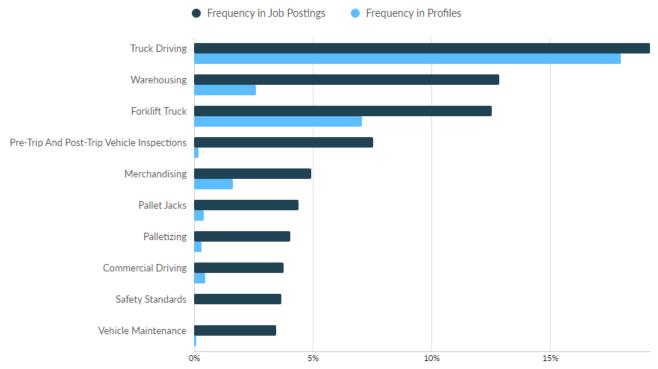
# Estimated Award Gaps, Minnesota 2022Q3



# Skill Misalignments

A number of specialized skills are more frequent in job postings than in candidate profiles found online, while others are found more frequently in profiles than they are mentioned in postings. Experience in warehousing, operating forklifts, inspecting vehicles, and merchandising are all more frequently referenced in job postings online than they are mentioned in talent profiles.





Several baseline requirements, such as operations, sales, and planning have been trending up at the close of 2022, while several core skills mentioned above are less frequent now in job postings than in prior years. 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). Overall, having a valid driver's license, a good driving record, and strong customer service skills have remained the top three most consistent requirements listed in job postings.

#### Pathway Hot and Cold Skills in Demand in Minnesota, 2022



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# High Need, High Demand Pathways

There were a total of 84 awards conferred at three different Minnesota postsecondary institutions in programs aligned to Truck Driving careers in SY2021. All of these awards were short-term certificates. The average school had about 28 completions, ranging from 25 to 30 completions. No programs were delivered remotely. In all, there are twelve driving training schools in Minnesota that train in CDL Class A, B, or C and offer preparation for knowledge tests and road tests, according to the Minnesota Department of Public Safety. These are listed in the Frequently Asked Questions section at the end of this report.<sup>6</sup>

Truck Driving Postsecondary Program Awards by Level, SY2021

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
49.0205	Truck and Bus Driver/Commercial Vehicle Operator and Instructor	84	0	0	0	0	0	0	84
	Total	84 (100%)	0	0	0	0	0	0	84



All awards were conferred by public two-year institutions in SY2021. Completions are down overall by 57.1% from 2012.

Truck Driving Postsecondary Program Awards by Institution, SY2021

Institution	Completions (2021)	Growth % YOY (2021)	Market Share (2021)	IPEDS Tuition & Fees (2021)	Completions Trend (2017-2021)
Riverland Community College	30	-3.2%	35.7%	\$6,060	
Alexandria Technical & Community College	29	61.1%	34.5%	\$5,910	
Minnesota State College Southeast	25	8.7%	29.8%	\$6,562	

A current list of CDL training schools associated with postsecondary institutions<sup>7</sup> in Minnesota include:

- Interstate Truck Driving School
- Alexandria Technical & Community College
- Century College
- Dakota County Technical College

<sup>&</sup>lt;sup>6</sup> Minnesota Department of Public Safety. Licensed Truck Driver Training. November 2022. <a href="https://dps.mn.gov/divisions/dvs/forms-documents/Documents/LicensedTruckDriverTrainingList.pdf">https://dps.mn.gov/divisions/dvs/forms-documents/Documents/LicensedTruckDriverTrainingList.pdf</a>

<sup>&</sup>lt;sup>7</sup> CDL Training Today. <a href="https://cdltrainingtoday.com/schools/mn/">https://cdltrainingtoday.com/schools/mn/</a>

- Minnesota State College Southeast Technical
- Riverland Community College
- St. Cloud Technical & Community College
- Transportation Center for Excellence
- Lake Superior College
- Central Lakes College

Drivers are most severely needed in the Heavy Truck Driving space, though shortages exist across the spectrum of commercial driver and bus driver opportunities. All three institutions offering truck driving programs may consider growth 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 Truck Driving pathway, all occupations have low talent diversity by gender. Many also have a higher than average share of their workforce that is over 45 years of age. Similarly, graduate diversity and graduate volumes are lagging.

#### Postsecondary Strategy Summary Table, Minnesota 2022

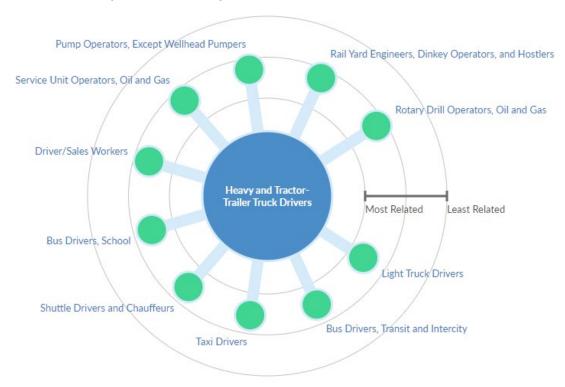
Occupation	Related Programs*	2022Q3 Empl	Talent Shortage	Workforce BIPOC by Race	Workforce Hispanic/Latinx	Workforce Female	Workforce Under 45	SY2021 Graduates (Certificate and AA/AS only)	Award Gap (All Award Levels)	Graduates BIPOC by Race or Ethnicity (All Award Levels)	Graduates Female (All Award Levels)
Heavy and Tractor-Trailer Truck Drivers		39,919	Y	13.9%	6.2%	8.1%	45.2%	84	Y	22.6%	13.1%
Light Truck Drivers		19,832	N	16.6%	6.6%	8.1%	46.4%	84	Υ	22.6%	13.1%
Bus Drivers, School		10,788	N	17.4%	4.9%	30.1%	39.9%	84	Υ	22.6%	13.1%
Industrial Truck and Tractor Operators		9,821	N	19.2%	10.4%	10.0%	57.5%	84	N	22.6%	13.1%
Drivers/Sales Workers		9,758	N	16.8%	6.5%	8.5%	46.2%	N/A	N	N/A	N/A
Shuttle Drivers and Chauffeurs		4,900	N	23.2%	5.5%	30.2%	41.9%	84	Y	22.6%	13.1%
Bus Drivers, Transit and Intercity		3,636	Υ	24.4%	3.8%	42.0%	23.4%	84	Υ	22.6%	13.1%
Tank Car, Truck, and Ship Loaders		191	N	14.6%	7.4%	21.2%	53.3%	NA	N	N/A	N/A
Truck Driving Pathway	Truck and Bus Driver/Commercial Vehicle Operator and Instructor	21,227	Υ	16.5%	6.5%	13.1%	45.2%	84	Y	22.6%	13.1%
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. \*There is only one program associated with occupations in this career pathway. For this reason, the Graduate and Demographics columns have identical information.

#### 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 Heavy and Tractor-Trailer Truck occupation in skill demands that have highly relevant skill and experience overlap that would be strong feeder occupations for talent.

#### Feeder Occupations into Heavy and Tractor-Trailer Truck Driver Roles, 2023Q1



Ava Unique

Occupation	Category	Relevance	Avg. Unique Monthly Postings from Jan 2022 - Dec 2022	Mean Salary Diff.	
Light Truck Drivers	Advancement	80%	356	-\$27,639	
Bus Drivers, Transit and Intercity	Advancement	74%	34	-\$28,942	
Taxi Drivers	Advancement	73%	33	-\$31,978	
Shuttle Drivers and Chauffeurs	Advancement	73%	32	-\$31,978	
Bus Drivers, School	Advancement	73%	26	-\$31,978	
Driver/Sales Workers	Advancement	69%	510	-\$31,542	
Service Unit Operators, Oil and Gas	Lateral Advancement	65%	0	-\$17,927	
Pump Operators, Except Wellhead Pumpers	Lateral Advancement	64%	3	-\$21,519	
Rail Yard Engineers, Dinkey Operators, and Hostlers	Lateral Advancement	61%	0	-\$23,596	
Rotary Drill Operators, Oil and Gas	Lateral Advancement	61%	3	-\$12,533	

# 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.

#### What has been updated since the 2021 report?

Several occupation codes were updated recently by the Bureau of Labor Statistics, giving new SOC codes and descriptors to several occupations within the Transportation sector. The only pathway that had a SOC code that was split into multiple new codes was the Truck Driving Pathway. The table below indicates what old SOC codes have been replaced with. School Bus Drivers was added to the search, but was excluded in prior versions of this report in 2020 and 2021.

SOC (OLD)	Occupation (OLD)	SOC (OLD)	Occupation (NEW)
53-3032	Heavy and Tractor-Trailer Truck Drivers	53-3032	Heavy and Tractor-Trailer Truck Drivers
53-3033	Light Truck Drivers	53-3033	Light Truck Drivers
53-3058	Passenger Vehicle Drivers, Except Bus Drivers, Transit and Intercity	53-3053	Shuttle Drivers and Chauffeurs
53-7051	Industrial Truck and Tractor Operators	53-7051	Industrial Truck and Tractor Operators
53-3031	Driver/Sales Workers	53-3031	Driver/Sales Workers
53-3052	Bus Drivers, Transit and Intercity	53-3052	Bus Drivers, Transit and Intercity
53-7121	Tank Car, Truck, and Ship Loaders	53-7121	Tank Car, Truck, and Ship Loaders
		53-3051	Bus Drivers, School
	Truck Driving Pathway		

# 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 <a href="mailto:erin@realtimetalentmn.org">erin@realtimetalentmn.org</a> or visit the RealTime Talent website at <a href="https://www.realtimetalent.org">www.realtimetalent.org</a>