# WISCONSIN TECHNICIAN Supply & Demand Report





The Wisconsin Automobile and Truck Dealers Foundation 150 E. Gilman St, Suite A-100 Madison, WI 53703

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On the Cover: Standing in front of her Ford Excursion is Bethany.

She is a WATDA Foundation scholarship recipient, technical college graduate, and is proudly employed at a Wisconsin dealership.

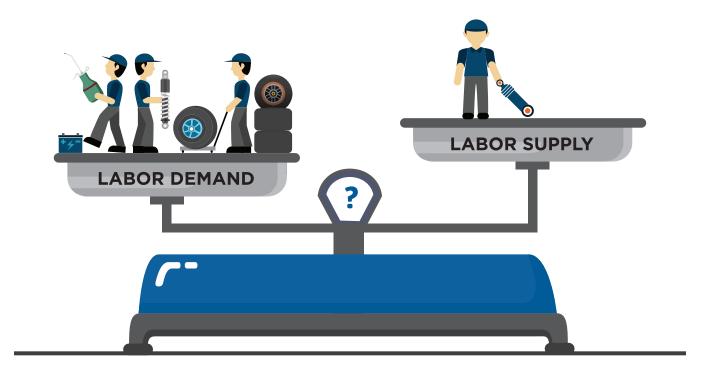
#### Introduction

The statewide technician talent shortage is real. Wisconsin dealerships, like dealerships across the United States, are facing historic technician shortages in automotive, collision, and diesel positions. Fewer students are pursuing a technician career, and dealerships are reporting increasingly shallow application pools for most positions. Addressing these shortages, while attracting, developing, and retaining top talent, is one of the most critical issues facing the industry.

The Wisconsin labor market is dynamic. From month-to-month there are hundreds or thousands of jobs that are lost or gained. There are job openings, hires, job separation, retirements, and lay-offs. The transportation industry is not much different than other industrial and service sector businesses. The transportation dealers in the state are continuing to struggle filling these positions.

In this report, you will find data and trends for the industry specific to Wisconsin. The data comes from several sources. Analysis of this data can enhance our understanding of the current dilemma but will also shed light on potential demands in the near and distant future.

In the needs section of the report is long-term projections for auto, collision, and diesel technicians. The supply section will primarily focus on technical college system graduates. We know there are some workers who will enter this profession sans a technical college education. Those individuals will not be accounted for. In addition to college graduates, this report will also look at the Wisconsin high school pipeline. It will show approximate high school program numbers and some aggregate data for ASE accredited programs. These pre-college students are engaged in transportation education and candidates to pursue a technician career pathway. Even though the high school analysis doesn't directly impact today's labor calculations, you can certainly make an argument they will influence the talent development pipeline for years into the future. It will be up to everyone in this industry to determine how big of an impact these students will make.



# TRANSPORTATION Demand

The transportation talent gap is a subject that has continued to gain momentum for decades. Since the COVID-19 pandemic, some will argue it has accelerated the problem. It has been a persistent problem that continues to compound and be further impacted by the decline in people entering transportation careers.

According to the Jobs Center of Wisconsin Employment Occupational Employment Projections (Long Term 2018 – 2028)¹ there will be significant annual openings in the transportation industry. The term 'openings' refers to a variety of reasons why the position is considered open including retirement, employee transferred to another position, employee left the industry, etc. The three occupation employment projections this supply and demand report will focus on are:

SOC Code	Occupation Title	Wisconsin Annual Total Opening 2018 - 2028
49-3021	Automotive Body and Related Repairers	393
49-3023	Automotive Service Technicians and Mechanics	1,331
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	675
		Total = 2,399 Annually

When you consider these projections for a single year it is concerning. When you consider these projections over the next eight years it causes great anxiety. Dealerships are already in dire straights finding technicians. Some dealerships have open positions for extended periods of time. Based on the outlook, hiring qualified technicians will not be getting easier anytime soon.

While it might seem surprising to see projected openings this significant, it should not. There are more and more cars on the road everyday. Dealerships are doing a fantastic job maintaining and repairing vehicles. Protecting one of largest expenses consumers will have in their life. The average age of industry technicians, as with many skilled trades, is getting older and they are retiring. Outdated industry stereotypes are also effecting young people pursuing transportation technician as a career. There are many factors that lead to this demand and it is real.

 $<sup>1\</sup> https://jobcenterofwisconsin.com/wisconomy/pub/occupation$ 

# TALENT Supply

Just as the demand side of this industry is not always straight forward and easy to understand, neither is the supply side. We know not all new hires in the industry are products of the technical college system. Some employees transfer from another internal position. Some new employees come from a neighboring employer. Some new hires make a career change from another industry. This report will focus on the Wisconsin Technical College System (WTCS) graduate data for three areas of focus (automotive, collision, diesel). This data includes program completers in one-year programs, two-year programs, associate degrees, technical diplomas, and short-term diplomas. The data used for this study includes college programs that best align with the three occupational areas (SOC 49-3021, 49-3023, 49-3031) discussed in the demand section. In total, depending on the reporting year, there are approximately 20 programs in the Transportation, Distribution and Logistics cluster used to compile this data. All technical colleges have at least one transportation program (automotive, collision, diesel) with most having more than one.

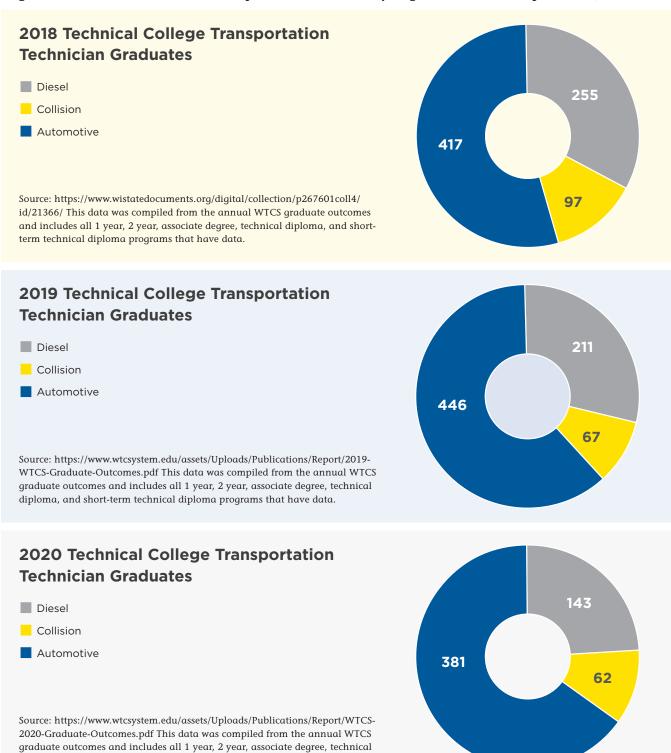
WTCS Campus	Automotive	Collision	Diesel
ВТС	•		•
CVTC	•	•	•
FVTC	<b>Ø</b>	•	•
GTC	<b>Ø</b>		0
LTC	•	•	
Madison College	•	•	•
MSTC	•		•
Milwaukee Area	<b>Ø</b>	•	•
МРТС	<b>Ø</b>		
Nicolet College	•		
NTC	•	•	•
NWTC	<b>Ø</b>	•	•
Northwood Tech	00		0
SWTC	<b>Ø</b>	•	
WCTC	•		•
WTC	<b>Ø</b>		•

Source: https://www.wtcsystem.edu/colleges/ & https://www.aseeducationfoundation.org/find-a-program

Notes: Blue highlight denotes an ASE accredited programs. Northwood has two ASE accredited automotive programs on different campuses.

#### The Graduates

The following graphs analyze the most recent three years of WTCS transportation graduates. These numbers are only the graduates. Most graduates are successfully employed in their graduate program area, but others will continue their education, enter different related fields of work, or go into a different but related occupation in the industry (e.g., service advisor, parts, etc.).



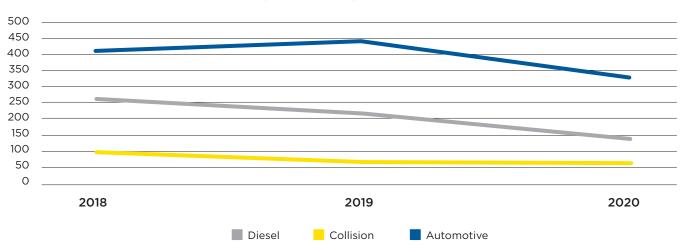
diploma, and short-term technical diploma programs that have data.

### **The Recent Supply Trends**

Over the past three years, the numbers are trending down according to the annual WTCS graduate outcome data. The following is a three-year graph. Each occupation area between 2018 and 2020 is declining. Only automotive had a slight increase in 2019 but dropped in 2020. Over the three years, diesel graduates dropped by 44%, collision dropped by 36%, and automotive dropped by 8.7%. Some of these numbers are eye opening, and all of them should be concerning.

Some of the 2020 numbers might be attributed to the global pandemic. Many students in a technical skill field such as transportation, learn best by doing the task in-person rather than virtually over a computer screen. These students might have struggled with virtual instruction, and the 2020 numbers might be a footnote with future hindsight. With that said, the pandemic might have had the reverse effect on fixed operations, with an increase in business. With the lack of new cars available, consumers are forced to service their current vehicles.

#### 2018 - 2020 WTCS Automotive / Collision / Diesel Graduates



Source: This data was compiled from the annual WTCS graduate outcomes and includes all 1 year, 2 year, associate degree, technical diploma, and short-term technical diploma programs that have data. In total there are 20 or more program titles for each year that account for this data. https://www.wtcsystem.edu/assets/Uploads/Publications/Report/WTCS-2020-Graduate-Outcomes.pdf https://www.wtcsystem.edu/assets/Uploads/Publications/Report/2019-WTCS-Graduate-Outcomes.pdf https://www.wistatedocuments.org/digital/collection/p267601coll4/id/21366/

### **Future Supply**

The lack of interest, enrollments, and graduates might be of concern, but should not be surprising. Many in this industry are uniquely aware of the age-old, untrue perception about automotive, collision, diesel technician jobs being "dull and dirty." Many are also aware of technical colleges being thought of as a default career pathway from the university track—an equally untrue perception. The lack of high school funding to support automotive programs is another critical factor for attracting young people into this career. When a school budget is tight, it is easy to look at an expensive program (as compared to other core academics required for a high school diploma) and consider making cuts or eliminating the program all together. And parents, the number one influence in a childs life, still have dated perceptions about technician careers, salary, and working conditions. All of this, and more, play into the future supply for high-quality technicians.

### **The High School Pipeline**

Even though high school numbers do not figure into this report, it is important to the overall talent pipeline. Wisconsin has approximately 200 high schools that have some type of transportation programing. This could include a course such as small engines/power equipment or consumer automotive, or an entire pathway at an Automotive Service Excellence (ASE) accredited school.

Automotive programs that earn ASE accreditation meet a series of industry determined benchmarks to receive this honor. The students at these schools can participate in automotive programming that prepares them for the next step in their career pathway journey if they choose. According to reporting numbers, there were 951 senior students taking some type of transportation courses during the 2020 – 2021 school year at these accredited high schools.

ASE Students in Wisconsin High Schools			
High School Name - City	2020 - 2021 Student Enrollment		
Arrowhead High School - Hartland	98		
Beloit Memorial High School - Beloit	82		
East High School - Appleton	66		
Fox Valley Technical College - Appleton	5		
Grafton High School - Grafton	28		
Jefferson High School - Jefferson	26		
LaFollette High School - Madison	83		
Madison Memorial High School - Madison	114		
McFarland High School - McFarland	59		
Mukwonago High School - Mukwonago	44		
Neenah High School - Neenah	52		
Oregon High School - Oregon	63		
Portage High School - Portage	36		
Pulaski High School - Milwaukee	35		
Shawano High School - Shawano	78		
Stoughton High School - Stoughton	12		
Sun Prairie High School - Sun Prairie	49		
Washington Park High School - Racine	21		
Total	951		

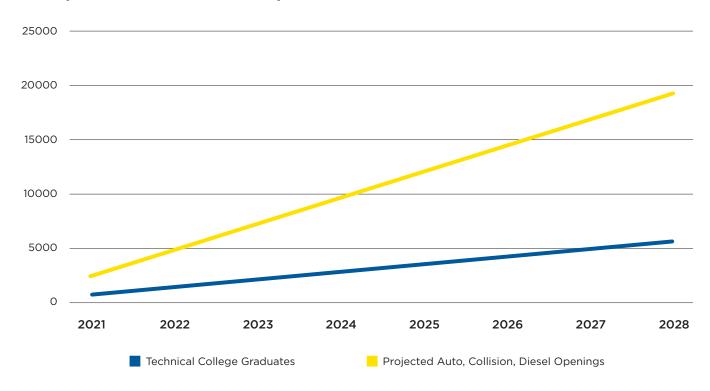
Source: WATDA Foundation ASE High School Enrollment Survey

# SUPPLY AND DEMAND Conclusion

The evidence is clear. The projections are worrisome. The lack of supply is alarming. When you analyze each career pathway, or combine all three area graduate numbers, the supply does not meet the occupational demand projections. The supply is nowhere near keeping pace with the demand. In fact, the problem is compounded year-after-year with a widening talent gap.

Based on the 2018 – 2020 three-year average (auto, collision, diesel), the WTCS campuses are graduating 693 students. According to the Jobs Center of Wisconsin Employment Outlook Employment Projections 2018 – 2028, there will be 2,399 combine openings in automotive, collision and diesel careers annually. Collectively from 2021 – 2028 there will be 19,192 opening vs. 5,544 technical college graduates. Both numbers are projections and averages, without benefit of a crystal ball. The ratio is an astonishing more than 3:1. That is a talent gap of 13,648 workers by the year 2028. An alarming disparity.

#### Projected Openings Vs. Three Year Average of Transportation Graduates Extrapolated Over Time



### **Call to Action**

If this supply and demand issue is going to be mitigated, action must be taken. There must be an industry wide concerted effort at every level of recruitment, hiring, employment, and partnerships. All Wisconsin schools that have transportation courses, have an opportunity to expose and encourage young people to these careers. If we as an industry do not engage middle and high school students, another skilled trade industry sector will. The carpenters, plumbers, welders, masons, brick layers, machinists, etc. will 'sell' their profession to impressionable hands-on orientated young people looking for their place in life. The Wisconsin Automobile and Truck Dealers Foundation is dedicated to helping solve this talent gap. If we all work together, we can have a collective impact.



## The Wisconsin Automobile and Truck Dealers Foundation

Founded in 1991 the WATDA Foundation is a non-profit, 501(c)3 organization with the mission of supporting educational initiatives and ensuring Wisconsin has a highly skilled transportation workforce. The Foundation is integral in supporting both high school and technical college transportation programs. This work includes supporting ASE accredited programs at both the secondary and post-secondary level. The Foundation also facilitates week-long middle school camps to engage students in transportation career exploration. And thanks to the generosity of its donors, the Foundation annually awards approximately \$500,000 in scholarships to people pursuing the technician profession

For more information, visit: https://www.watda.org/foundation.html

