

Automotive Sector Labour Market Information Report

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*The views and opinions expressed in this report are those of its author(s) and not the
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1. EXECUTIVE SUMMARY

Background and Purpose

The BC Automotive Sector is comprised of Aftermarket Parts retailers, Auto Glass Repair shops, Auto Rental and Leasing Agencies, Auto Recyclers, Collision Repair shops, Mechanical Repair shops, New Car Dealers, Power Sport Dealers, Used Car Dealers, and Towing and Recovery operators.

Demographic trends, competition from other sectors, advancements in automotive technology, the increasing complexity of the business environment and other influences are creating challenges for employers in BC's Automotive Sector with respect to recruitment and retention of staff.

To help understand and address the recruitment and retention challenges facing BC's Automotive Sector MNP was engaged to conduct a detailed analysis of current and future labour market conditions to inform the development of effective recruitment and retention strategies by industry and to inform government policies with respect to training.

The scope of the study included:

- Development of a description of each of the ten sub-sectors of the Automotive Sector.
- Development of estimates of the current workforce by occupation and forecasts by occupation for the period 2017 to 2026.
- Identification of recruitment and retention issues impacting the Automotive Sector.

Methodology

To assess the current labour market conditions in the Automotive Sector and to forecast future supply and demand information was gathered from both primary and secondary sources.

Primary research was conducted to gather information on the number of people employed in each occupation, demographics, vacancies, recruitment and expectations about future demand for labour in the Automotive Sector. Primary research activities included an online survey of Automotive Sector employers and interviews with employers that provided information through the online survey.

Current State Estimates

The Automotive Sector employs a variety of Skilled Trades, salespeople, administrative and management staff, and general labour. Table A shows the estimated workforce in 2016 by sub-sector and category of occupation. There were estimated to be approximately 47,308 people employed in the sector, approximately 28.7 percent of which were Skilled Trades, approximately 8.2 percent of which were Apprentices, approximately 24.9 percent of which were in Other Trades and Technical occupations and approximately 38.2 percent of which were in Sales, Management and Administration occupations.

Table A: Estimated Automotive Sector Workforce by Sub-sector and Category of Occupation, 2016

Sub-sector	NAICS Code	Skilled Trade Occupations	Apprentices	Other Trade and Technical Occupations	Sales, Management, and Administration Occupations	Estimated Workforce
Auto Recyclers	4153	110	5	180	59	354
New Car Dealers	44111	3,163	906	2,855	9,108	16,032
Used Car Dealers	44112	167	0	330	954	1,451
Power Sport Dealers	4412	417	207	2,867	1,641	5,132
Aftermarket Parts	44131	1,005	30	881	441	2,357
Towing and Recovery	48841	24	0	1,472	175	1,671
Auto Rental and Leasing	5321	237	0	474	638	1,349
Mechanical Repair	81111	5,012	1,846	1,095	3,346	11,299
Collision Repair	811121	2,938	650	1,577	1,437	6,602
Auto Glass Repair	811122	509	248	30	274	1,061
Total		13,582	3,892	11,761	18,073	47,308
Share of Total		28.7%	8.2%	24.9%	38.2%	100%

Labour market conditions were assessed to vary by category of occupation. The labour market for Skilled Trades was found to be very tight and in some cases shortages were identified while for most other occupations in the sector there was found to be an adequate supply of labour. Table B shows the occupations for which current labour market conditions were identified to be tight or difficult.

Table B: Occupations with Tight or Difficult Labour Market Conditions

Occupation (NOC Code)	Estimated Current Demand	Estimated Current Supply	Assessment
Automotive Service Technician (NOC 7321)	7,177	7,064	There are a number of unfilled positions and shops are unable to expand due to lack of staff.
Automotive Service Technician Apprentice (NOC 7321)	2,591	2,551	Shortage of apprentices and positions are going unfilled.
Collision Repair Technician (NOC 7322)	1,955	1,973	Very tight labour market and some positions are going unfilled.
Collision Repair Technician Apprentice (NOC 7322)	570	576	Shortage of apprentices
Automotive Glass Technician (NOC 7322)	709	714	Very tight labour market and some positions are going unfilled at small shops.
Automotive Glass Technician Apprentice (NOC 7322)	248	250	Difficult to find apprentices
Automotive Painter (NOC 7322)	898	905	Tight labour market.
Automotive Painter Apprentice (NOC 7322)	200	201	Difficult to find apprentices
Automotive Refinishing Prep Technician (NOC 7322)	190	191	Tight labour market.
Motorcycle Mechanic (NOC 7334)	150	153	Tight labour market.
Auto Dismantler (NOC 7445)	143	145	Difficult to find candidates in the Lower Mainland and for those employers seeking Collision Repair Technicians or Automotive Service Technicians.
Licensed Automotive Salesperson (NOC 6421)	4,030	4,241	Difficult to find suitable candidates.

Forecast of Labour Market Conditions 2017 to 2026

Table C shows the share of the current workforce by category of occupation that was forecast to retire or exit from the Automotive Sector between 2017 and 2026. Approximately 42.1 percent of the current workforce was forecast to leave the industry and need to be replaced. Retirements accounted for approximately 36 percent of exits. Among Skilled Trade occupations approximately half of exits were forecast to be due to retirements. For Other Trades and Technical occupations less than 20 percent of exits were forecast to be due to retirements while among Sales, Management and Administration occupations approximately 37.5 percent of exits were forecast to be due to retirements.

Table C: Summary of Workforce Changes, 2017 to 2026

	Share of Workforce		Total Share of Workforce Exiting
	Exiting Due to Retirements	Exiting Due to Other Reasons	
Skilled Trade Occupations	22.5%	21.8%	44.4%
Other Trade and Technical Occupations	8.0%	35.4%	43.4%
Sales, Management and Administration Occupations	18.1%	30.0%	48.1%
Total	15.2%	26.9%	42.1%

Table D shows the forecast job openings in the Automotive Sector between 2017 and 2026. There were forecast to be approximately 23,118 job openings. Approximately 31 percent of the job openings were forecast to be due to retirements, approximately 55 percent were forecast to be due to people leaving the industry for reasons other than retirement and the remaining 14 percent were forecast to be due to new positions.

Table D: Forecast Job Openings, 2017 to 2026

	Expansion Demand	Replacement Demand		Total Job Openings
		Retirements	Other Exits	
Skilled Trade Occupations	1,642	2,976	2,874	7,492
Other Trade and Technical Occupations	42	717	3,990	4,749
Sales, Management and Administration Occupations	1,413	3,495	5,968	10,876
Total	3,097	7,188	12,832	23,117

The number of apprentices forecast to complete their respective programs was less than the forecast number of job openings for most Skilled Trade occupations. Table E shows the forecast job openings and apprentice completions for each of the Skilled Trade occupations. For the Skilled Trades employed in Collision Repair shops the forecast number of apprentice completions was less than the forecast number of retirements and exits while for Automotive Service Technicians the gap between forecast job openings and apprentice completions was primarily due to expansion demand.

Table E: Forecast Job Openings and Apprentice Completions for Skilled Trade Occupations, 2017 to 2026

Occupation (NOC Code)	Job Openings	Apprentice Completions
Partsperson (NOC 1522)	1,124	1,019
Automotive Service Technician (NOC 7321)	3,915	2,584
Collision Repair Technician (NOC 7322)	1,206	790
Automotive Glass Technician (NOC 7322)	507	281
Automotive Painter (NOC 7322)	678	301
Automotive Refinishing Prep Technician (NOC 7322)	61	60

For all other occupations in the Automotive Sector the number of new entrants was forecast to meet or exceed the forecast number of job openings over the 10 year period.

Barriers to Recruitment and Retention

The most significant barriers to recruitment and retention that were identified by Automotive Sector employers were:

- **Pay** - employers in Collision Repair, Auto Glass Repair, Auto Recyclers, and Towing and Recovery perceived pay as being a significant barrier to recruitment and retention for Skilled Trades.
- **Competition within the Automotive Sector** - competition for Skilled Trades from other employers in the Automotive Sector was perceived to be a significant barrier for employers in Collision Repair, Auto Glass Repair and Mechanical Repair.
- **Competition from outside the Automotive Sector** - employers in all sub-sectors perceived competition from employers in other industries as being a significant barrier to recruitment and retention. This was of particular concern for employers in Collision Repair, Auto Glass Repair, Mechanical Repair and New Car Dealers, all of which employ significant numbers of Skilled Trades.
- **Lack of skills related to the Automotive Sector** – lack of mechanical aptitude among young people was perceived to be a barrier to recruiting apprentices and for Auto Dismantlers and Tow Truck Operators.
- **Poor image of the Automotive Sector** - employers interviewed by MNP felt that the Automotive Trades were perceived as being for those individuals who drop out of high school and that this made it difficult to attract suitable apprenticeship candidates.

Summary of Findings

Employers in the Automotive Sector are currently experiencing a tight labour market for Skilled Trades and it is unlikely that the current supply of apprentices will be able to fill the gaps in the workforce that are forecast due to retirements and exits in the near term. Consequently employers may need to look to other sources of Skilled Trades such as immigration to fill immediate needs.

In the longer term employers may consider:

- Developing strategies to improve the image of the Automotive Sector among young people to attract more apprentices.
- Reviewing the role of current compensation schemes in attraction and retention.

2. INTRODUCTION

Background and Purpose

The BC Automotive Sector is comprised of a collection of private businesses that includes aftermarket parts shops, auto glass repair shops, auto rental and leasing agencies, auto recyclers, collision repair shops, mechanical repair shops, new car dealers, used car dealers, and towing operators. These businesses play an important role in the economy through the provision of services that support the movement of people, and goods and services.

Demographic trends, competition from other sectors, advancements in automotive technology, the increasing complexity of the business environment and other influences are creating challenges for employers with respect to recruitment and retention of staff.

To help understand and address the recruitment and retention challenges facing BC's Automotive Sector MNP was engaged to conduct a detailed analysis of current and future labour market conditions. The objective of the study was to develop estimates of the current and future demand in the Automotive Sector for staff by occupation and sub-sector to inform the development of effective recruitment and retention strategies by industry and to inform government policies with respect to training.

Scope

The scope of the study included:

- Development of a description of each of the ten sub-sectors of the Automotive Sector.
- Development of estimates of the current workforce by occupation and forecasts by occupation for the period 2017 to 2026.
- Identification of recruitment and retention issues impacting the Automotive Sector.

Not included in the scope of the study were:

- Development of recommended strategies to address identified gaps in the workforce.
- Estimation of the number of Automotive Trades positions outside of the Automotive Sector.
- A review of industry training or training needs.
- Assessment of employee perceptions with respect to recruitment and retention.

Approach

MNP conducted the study between May 2016 and September 2016. In carrying out the study MNP completed the following activities:

- Developed a methodology for forecasting labour supply and demand in the Automotive Sector.
- Gathered and reviewed relevant secondary sources of information.
- Developed, tested and administered a survey of Automotive Sector employers.
- Received and validated data collected through the survey Automotive Sector employers.
- Interviewed employers in each of the ten sub-sectors.
- Developed estimates of the current Automotive Sector workforce by occupation.
- Developed demand and supply forecasts by occupation for the period 2017 to 2026.

Structure of the Report

The remainder of the report is structured as follows:

- Section 3 contains a description of the methodology used in conducting the study.
- Section 4 contains a description of the Automotive Sector in BC.
- Section 5 contains the estimates of supply and demand for the period 2016 to 2026.
- Section 6 describes employer perceptions of the barriers to recruitment and retention.
- Section 7 describes other considerations.
- Appendices B through G provide information on data sources and the approach used to developing the estimates.
- Appendices H through J provide additional information that was collected from employers as part of the study on wage rates and earnings, barriers to recruitment and employee tenure.

3. METHODOLOGY

To assess the current labour market conditions in the Automotive Sector and to forecast future supply and demand information was gathered from both primary and secondary sources.

Primary Research

Primary research was conducted to gather information on the number of people employed in each occupation, demographics, vacancies and recruitment in the Automotive Sector. Primary research activities included:

- An online survey of Automotive Sector employers was conducted between July 2016 and September 2016. Information on the survey was sent to employers throughout BC and respondents were given the option of completing the survey online or over the phone as part of an interview. Employers with multiple locations were given the option of completing an excel template. Responses were received from 233 employers representing 359 locations around BC.
- Interviews were conducted with 61 employers that provided information through the online survey to gather information on factors affecting the current workforce and expectations about future supply and demand of employees.

Appendix B provides details on the number of survey invitations that were sent to employers by region and sub-sector, the distribution of survey respondents by region and sub-sector and the distribution of interview participants by region and sub-sector.

Secondary Research

A review of relevant publicly available documents and statistics published by Statistics Canada, BC Stats, ICBC and industry associations was conducted to identify:

- Number of registered vehicles in BC over time.
- Accident rates and claims.
- Employment in the Automotive Sector.
- Number of employers in the Automotive Sector.
- Job vacancy statistics.
- Vehicle sales in BC.
- Number of people registered in Automotive Trade Apprenticeships in BC.
- Population statistics and projections.
- Employment insurance claimants.
- Trends and issues affecting the industry.
- Forecasts of future vehicle sales.

A list of secondary sources used is provided in Appendix C.

Limitations

The findings presented here are subject to the following limitations:

- There were relatively low participation rates from employers in the Aftermarket Parts, Auto Rental and Leasing, and Power Sport Dealer sub-sectors. The data and information collected from these sub-sectors was consistent with that collected from other sub-sectors with respect to identified gaps in the workforce and perceived challenges with respect to recruitment and retention; however, the findings of this study may not reflect the labour market conditions for occupations unique to the Aftermarket Parts, Auto Rental and Leasing, and Power Sport Dealer sub-sectors. We have noted in the report where sample sizes were too small to make inferences for specific occupations or sub-sectors in the report.
- A number of Automotive Trade occupations are also present in sectors outside of the Automotive Sector. For example, Automotive Service Technicians are often employed by businesses where large fleets of vehicles are common such as oilfield services companies, bus companies and construction companies while Auto Glass Technicians may be employed by glass contractors in the construction sector. Positions outside of the Automotive Sector have not been included in the estimates developed as part of this study. Consequently, the estimated employment in the Automotive Trade occupations in this study is not equivalent to the estimated employment in Automotive Trade occupations in BC. Rather the estimates presented here are for employment in the Automotive Sector in BC.

In addition, changes in demand for Automotive Trades outside the Automotive Sector may be expected to impact the labour market conditions within the Automotive Sector.

4. DESCRIPTION OF THE AUTOMOTIVE SECTOR IN BC

In BC, the Automotive Sector is primarily a service industry based around the sale, maintenance, repair, rental and disposal of motor vehicles. For the purposes of this study the industry has been defined to include the ten sub-sectors listed in Table 1. The analysis that follows is based on these sub-sectors. Where data were not available from Statistics Canada for each sub-sector as defined in Table 1, sub-sectors have been combined and data are reported based on four digit North American Industry Classification System (NAICS) codes.

Table 1: Definition of the BC Automotive Sector by NAICS

Sub-sector	NAICS Code ¹	Description
Auto Recyclers	41531	Used Motor Vehicle Parts and Accessories Wholesaler-Distributors
New Car Dealers	44111	New Car Dealers
Used Car Dealers	44112	Used Car Dealers
Power Sport Dealers	4412	Motorcycle, Recreational, Boat and Other Motor Vehicle Dealers
Aftermarket Parts	44131	Automotive Parts and Accessories Stores
Towing and Recovery	48841	Motor Vehicle Towing
Auto Rental and Leasing	5321	Automotive Equipment Rental and Leasing – includes Passenger Car Leasing and Rental; Truck, Utility Trailer and Recreational Vehicle Rental and Leasing
Mechanical Repair	81111	Automotive Mechanical, Electrical Repair and Maintenance
Collision Repair	811121	Automotive Body, Paint and Interior Repair and Maintenance
Auto Glass Repair	811122	Automotive Glass Replacement Shops

Source: Statistics Canada, North American Industry Classification System (NAICS) Canada 2012

Excluded are:

- 811192 Car Washes
- 811199 All Other Automotive Repair and Maintenance (e.g. Diagnostic centres, motor vehicle; Emissions testing service, automotive, without repair; Lubrication services, motor vehicles; Motor vehicle emissions testing, without repairs; Rustproofing service, automotive; Tire repairing; Undercoating service, automotive)
- 44132 Tire Dealers
- 418110 Recyclable Metal Wholesaler-Distributors - comprises establishments primarily engaged in buying, breaking up, sorting and selling ferrous and non-ferrous scrap metal, including automobiles for scrap². These are the companies that crush automobiles after they are dismantled for parts

¹ NAICS codes are assigned based on the primary purpose of the location. For example, a business that is primarily engaged in retailing parts but has a small shop where repairs are performed will be assigned to Aftermarket Parts while a shop that is primarily engaged in mechanical repair but also sells parts will be assigned to Mechanical Repair.

² Includes automotive wrecking for scrap, wholesale; dismantling machinery for scrap; dismantling ships; iron and steel scrap, wholesale; marine wrecking, ships for scrap; metal waste and scrap, wholesale; non-ferrous metals scrap, wholesale; wreckers, auto, wholesale.

Aftermarket Parts

The Aftermarket Parts sub-sector is comprised of retail businesses selling aftermarket automotive parts and accessories to the public and to other members of the Automotive Sector. They may also sell tools and equipment.

Auto Glass Repair

Auto Glass Repair shops provide repair and replacement services with respect to auto glass. They may also do residential and commercial glass repair and replacement. Much of the work undertaken by these shops related to auto glass repair is for insurance claims.

Auto Recyclers

Auto Recyclers dismantle vehicles and sell used parts to collision repair shops, mechanical repair shops, remanufacturers and retail customers.

Auto Rental and Leasing

Auto Rental and Leasing agencies rent and lease passenger vehicles, trucks, truck tractors, buses, semi-trailers, utility trailers and recreational vehicles to retail and commercial customers. These businesses may offer short term and/or long term rentals.

Collision Repair

Collision Repair shops provide repair services with respect to damage to vehicle bodies and interiors resulting from accidents or vandalism. Most of the work undertaken by these shops is related to insurance claims. These businesses may also provide auto glass repair and replacement services.

Mechanical Repair

Mechanical Repair shops provide mechanical or electrical repair and maintenance services for vehicles. This includes oil changes, engine repair, exhaust system replacement, transmission repair and electrical system repair.

New Car Dealers

New Car Dealers sell new and used vehicles including cars, sport utility vehicles, mini-vans, and light-duty trucks and vans. These businesses also typically sell replacement parts and accessories, and provide mechanical repair and maintenance services. In some cases, they also provide auto glass repair and collision repair services.

Power Sport Dealers

Power Sport Dealers sell new and used recreational vehicles such as motor homes, recreational trailers, campers, motorcycles, recreational watercraft, snowmobiles, and off-road all-terrain vehicles. They also sell parts and accessories for recreational vehicles and may provide repair and maintenance services.

Towing and Recovery Operators

Towing and Recovery Operators provide towing services for municipalities, auto clubs, retail customers and other customers. Services may also include road side assistance such as tire repair, battery boosting or lockouts.

Used Car Dealers

Used Car Dealers sell used passenger vehicles. These businesses may also offer mechanical repair services or auto rental and leasing.

Number and Size of Employers

The number of employers in the Automotive Sector was estimated based on the location counts from Statistics Canada's Business Register. In this data each location that an employer has is counted separately so an employer that has 10 stores will be counted as 10 locations. Also, the sub-sector assignments from the Business Register are based on the primary activity of the employer so an employer that offers multiple services will be counted in the sub-sector that corresponds to the employer's primary business activity. Consequently, the location counts for specific sub-sectors may under-represent the number of employers providing services in the sector.

Table 2 shows the number of locations by number of employees for each of the sub-sectors. Most employers in the Automotive Sector have fewer than ten employees. The exception to this New Car Dealers, 75 percent of which have more than 20 employees.

Table 2: Number of Locations by Number of Employees and Sub-sector, June 2016

Sub-Sector	NAICS Code	Number of Locations	Number of Employees			
			Less Than 10	10-20	20-49	50+
Auto Recyclers*	41531	42	35	5	2	0
New Car Dealers**	44111	435	54	54	202	125
Used Car Dealers**	44112	247	218	18	9	2
Power Sport Dealers**	4412	333	205	72	53	3
Aftermarket Parts	44131	402	238	146	15	3
Towing and Recovery	48841	176	134	22	16	4
Auto Rental and Leasing	5321	330	236	72	15	7
Mechanical Repair	81111	1,570	1,424	120	25	1
Collision Repair	811121	742	533	162	44	3
Auto Glass Repair***	811122	193	186	6	1	0
All Sub-sectors		4,470	3,263	677	382	148

Source: Statistics Canada, Business Register, June 2016

*Auto Recycling services in BC are also offered by a number of Towing and Recovery operators and Mechanical Repair shops. According to data from WorkSafe BC, there were 109 employers in BC registered as Auto Recyclers in 2014.

**According to data provided by the Motor Vehicles Sales Authority there were approximately 1,457 licensed new and independent auto dealers in BC as of September 2016. Of those, 472 were Franchise Auto Dealers, 793 were independent auto dealers, 92 were New and Used Recreational Vehicle Dealers and 100 were New and Used Motorcycle and Moped dealers.

***Auto glass repair services are offered by Auto Glass Repair shops, Collision Repair shops, New Car Dealers and Glass shops that primarily provide industrial, residential and commercial glass replacement services.

Table 3 shows the distribution of locations by region. The regional distribution of locations is closely related to the population distribution in BC. Over half of the businesses in the sector are in the Mainland/Southwest.

Vancouver Island/Coast accounts for the next largest share of businesses (approximately 16 percent) followed by Thompson/Okanagan (approximately 15 percent), Cariboo (approximately 5 percent), Kootenay (approximately 5 percent), Northeast (approximately 3 percent) and North Coast/Nechako (approximately 2 percent).

Within some sub-sectors the regional distribution of locations differs from that of BC's population. There are relatively more Collision Repair shops and Used Car Dealers in the Mainland/Southwest while there are relatively fewer Power Sport Dealers in the Mainland/Southwest and relatively more in Vancouver Island/Coast and Thompson/Okanagan.

Table 3: Distribution of Locations by Region, 2016

Sub-sector	NAICS Code	Mainland/ Southwest	Vancouver Island/ Coast	Thompson /Okanagan	Kootenay	Cariboo	North Coast/ Nechako	Northeast
Auto Recyclers	41531	37%	27%	15%	10%	10%	2%	0%
New Car Dealers	44111	50%	19%	15%	6%	5%	3%	3%
Used Car Dealers	44112	69%	15%	10%	2%	2%	0%	0%
Power Sport Dealers	4412	34%	25%	23%	4%	9%	4%	1%
Aftermarket Parts	44131	50%	14%	17%	6%	6%	5%	2%
Towing and Recovery	48841	41%	18%	18%	4%	8%	4%	6%
Auto Rental/Leasing	5321	56%	20%	11%	4%	3%	5%	2%
Mechanical Repair	81111	56%	16%	15%	5%	4%	2%	3%
Collision Repair	811121	64%	13%	12%	3%	5%	2%	2%
Auto Glass Repair	811122	53%	10%	21%	5%	6%	2%	4%
All Sub-sectors		54%	16%	15%	5%	5%	2%	3%

Source: Statistics Canada, Business Register, June 2016

Employment

Table 4 shows employment by sub-sector between 2011 and 2015. (Please note that employment data were not available at the NAICS level associated with each sub-sector as defined in Table 1 so employment is reported at the four digit NAICS level.) New and Used Car Dealers account for the largest share of employment in the sector (approximately 36.4 percent), followed by Collision Repair, Glass Repair and Mechanical Repair (approximately 29.4 percent), Aftermarket Parts (approximately 11.3 percent), Towing and Recovery (approximately 9.2 percent), Power Sport Dealers (approximately 6.6 percent), Auto Rental and Leasing (approximately 6.6 percent), and Auto Recyclers (approximately 0.5 percent).

Between 2011 and 2015 employment in the Automotive Sector grew at an average annual rate of approximately 2 percent. This resulted in an increase in employment of approximately 3,995. Approximately 60 percent of the growth in employment was in New and Used Car Dealers, approximately 29 percent was in Collision Repair, Glass Repair and Mechanical Repair and the remainder was in Towing and Recovery. Employment in Aftermarket Parts and Auto Recyclers declined.

Table 4: Employment by Sub-sector, Annual (Persons), 2011-2015

Sub-sector	NAICS Code	2011	2015	Share of Employment 2015	Average Annual Growth 2011-2015
Auto Recyclers	4153	313	227	0.5%	-7%
New and Used Car Dealers	4411	15,398	17,825	36.4%	4%
Power Sport Dealers	4412	3,015	3,227	6.6%	2%
Aftermarket Parts	4413	6,136	5,527	11.3%	-2%
Towing and Recovery	4884	4,101	4,527	9.2%	3%
Auto Rental and Leasing	5321	2,739	3,210	6.6%	4%
Collision Repair, Glass Repair and Mechanical Repair	8111	13,252	14,406	29.4%	2%
All Sub-sectors		44,954	48,949	100%	2%

Source: Statistics Canada, CANSIM Table - 281-0024 Survey of Employment, Payrolls and Hours (SEPH), employment by type of employee and detailed North American Industry Classification System (NAICS), annual (persons)

Note:

NAICS 4413 also includes tire dealers.

NAICS 8111 also includes Car Washes and All Other Automotive Repair and Maintenance (e.g. Diagnostic centres, motor vehicle; Emissions testing service, automotive, without repair; Lubrication services, motor vehicles; Motor vehicle emissions testing, without repairs; Rustproofing service, automotive; Tire repairing; Undercoating service, automotive)

NAICS 4884 also includes other support services for road transportation such as trucking terminals, inspection and weigh stations, and the operation of toll roads, bridges and tunnels.

The Automotive Sector employs a variety of Skilled Trades, salespeople, administration staff and general labour. Tables 5 through 8 show the occupations typically found in each sub-sector. A description of each occupation in the tables is provided in Appendix D.

Table 5 shows the Skilled Trade occupations that are typically found in each sub-sector. Each of these occupations is a designated Red Seal trade.

Table 5: Skilled Trades Occupations by Sub-sector

Sub-sector (NAICS Code)	Parts-person (NOC 1522)	Automotive Service Technician (NOC 7321)	Collision Repair Technician (NOC 7322)	Automotive Glass Technician (NOC 7322)	Automotive Painter (NOC 7322)	Automotive Refinishing Prep Technician (NOC 7322)	Motorcycle Mechanic (NOC 7334)
Auto Recyclers (4153)		X	X				
New Car Dealers (44111)	X	X	X	X	X	X	
Used Car Dealers (44112)		X					X
Power Sport Dealers (4412)	X	X					X
Aftermarket Parts (44131)	X						
Towing and Recovery (48841)		X					
Auto Rental and Leasing (5321)		X					
Mechanical Repair (81111)	X	X					
Collision Repair (81121)			X	X	X	X	
Auto Glass Repair (81122)				X			

Table 6 shows the Other Trades and Technical occupations that are typically found in each sub-sector. This group of occupations includes general shop labour, and drivers and delivery people. These occupations generally do not require a formal certification and most training is on-the-job.

Table 6: Other Trades and Technical Occupations by Sub-sector

Sub-sector (NAICS Code)	Inventory/ Warehouse Person (NOC 1522)	Lot Person (NOC 6742)	Auto Dismantler (NOC 7445)	Tow Truck Operator (NOC 7511)	Parts Delivery Driver (NOC 7514)	Detailer (NOC 7612)	Shop Helper (NOC 7612)
Auto Recyclers (4153)	X		X				
New Car Dealers (44111)	X	X			X	X	X
Used Car Dealers (44112)		X				X	X
Power Sport Dealers (4412)							
Aftermarket Parts (44131)	X				X		X
Towing and Recovery (48841)				X			
Auto Rental and Leasing (5321)		X				X	
Mechanical Repair (81111)							X
Collision Repair (811121)						X	X
Auto Glass Repair (811122)						X	X

Table 7 shows the Sales and Administration occupations typically found in each sub-sector. These occupations are generally customer facing or involve back office support functions. They include both entry level and more senior positions. Some industry experience is preferred for most of these positions.

Table 7: Sales and Administration Occupations by Sub-sector

Sub-sector (NAICS Code)	Business Office (NOC 1411)	Warranty Clerk (NOC 1411)	Customer Service Representative (NOC 1414)	Tow Dispatcher (NOC 1525)	Licensed Automotive Salesperson (NOC 6421)	Service Advisor (NOC 6552)	Estimator (NOC 7321/7322)
Auto Recyclers (4153)	X		X		X		
New Car Dealers (44111)	X	X	X		X	X	X
Used Car Dealers (44112)	X		X		X		
Power Sport Dealers (4412)	X		X		X		
Aftermarket Parts (44131)	X		X				
Towing and Recovery (48841)	X		X	X			
Auto Rental and Leasing (5321)	X		X		X		
Mechanical Repair (81111)	X		X		X		
Collision Repair (811121)	X		X				X
Auto Glass Repair (811122)	X		X				X

Table 8 shows Management occupations typically found in each sub-sector. These occupations are typically above entry level and include senior positions such as Controller. Most of the occupations in this group require industry experience.

Table 8: Management Occupations by Sub-sector

Sub-sector (NAICS Code)	Controller (NOC 0013)	Finance Manager (NOC 0122)	Sales Manager (NOC 0621)	Fixed Operations Manager (NOC 0621)	Parts Manager (NOC 1215)	Leasing Agent (NOC 6421)	Service Manager (NOC 7511)
Auto Recyclers (4153)	X						
New Car Dealers (44111)	X	X	X	X	X	X	X
Used Car Dealers (44112)	X	X	X	X		X	
Power Sport Dealers (4412)	X						
Aftermarket Parts (44131)	X				X		
Towing and Recovery (48841)							
Auto Rental and Leasing (5321)	X						
Mechanical Repair (81111)	X						X
Collision Repair (811121)	X						
Auto Glass Repair (811122)	X						

Demographics of the Workforce

The demographic information in this section was collected through a survey of Automotive Sector employers and validated through discussions with the Project Steering Committee and interviews conducted by MNP with Automotive Sector employers.

Table 9 shows the estimated age distribution of those employed in Skilled Trade occupations in the Automotive Sector. Approximately 45.2 percent of the Skilled Trades were estimated to be over 45 and 19 percent were estimated to be 55 years or older. Occupations related to providing collision repair services were estimated to have the oldest age distribution. Approximately 60 percent of Collision Repair Technicians were estimated to be 45 years or older and approximately 49 percent of Automotive Painters were estimated to be 45 years or older. After occupations related to collision repair services, Partsperson was the occupation estimated to have the oldest age distribution, with approximately 42 percent of the workforce estimated to be 45 years or older.

Table 9: Estimated Age Distribution by Occupation – Skilled Trades (N=172)

Occupation (NOC code)	Under 25	25-44	45-54	55-65	Over 65
Partsperson (NOC 1522)	11%	48%	18%	21%	3%
Automotive Service Technician (NOC 7321)	10%	55%	20%	12%	2%
Collision Repair Technician (NOC 7322)	5%	35%	36%	23%	1%
Auto Glass Technician (NOC 7322)	6%	56%	22%	13%	3%
Automotive Painter (NOC 7322)	3%	49%	31%	17%	1%
Auto Refinishing Prep Technician (NOC 7322)	37%	37%	16%	11%	0%
Motorcycle Mechanic** (NOC 7334)	X	X	X	X	X
Total	7%	47%	26%	17%	2%

Source: Survey of Automotive Sector Employers

**The sample size was too small to produce an estimated age distribution.

Table 10 shows the estimated age distribution of apprentices employed in the Automotive Sector. Most apprentices were estimated to be under 25; however, employers interviewed by MNP indicated that they were hiring an increasing number of apprentices that were in their 30s.

Table 10: Estimated Age Distribution by Occupation- Apprentice (N=172)

Occupation (NOC code)	Under 25	25-44	45-54	55-65	Over 65
Partsperson Apprentice (NOC 1522)	60%	20%	20%	0%	0%
Automotive Service Technician Apprentice (NOC 7321)	47%	50%	3%	0%	0%
Collision Repair Technician Apprentice (NOC 7322)	54%	44%	2%	0%	0%
Auto Glass Technician Apprentice (NOC 7322)	31%	69%	0%	0%	0%
Automotive Painter Apprentice (NOC 7322)	68%	28%	4%	0%	0%
Motorcycle Mechanic Apprentice** (NOC 7334)	X	X	X	X	X
Total	51%	46%	3%	0%	0%

Source: Survey of Automotive Sector Employers

**The sample size was too small to produce an estimated age distribution.

Table 11 shows the estimated age distribution of those employed in Other Trades and Technical occupations. The majority of those employed in Other Trades and Technical occupations in the Automotive Sector were estimated to be under 45 years of age. Auto Dismantlers were estimated to have a somewhat older age distribution than the other occupations in this group. The Auto Dismantler position is unique to the Auto Recyclers and according to interviews with Auto Recycler employers conducted by MNP, this position is often filled with those with training as Collision Repair Technicians or Automotive Service Technicians. Consequently, the estimated age distribution of Auto Dismantlers was similar to that of the Skilled Trade occupations.

Table 11: Estimated Age Distribution by Occupation – Other Trades and Technical (N=172)

Occupation (NOC code)	Under 25	25-44	45-54	55-65	Over 65
Inventory/Warehouse Person (NOC 1522)	12%	55%	17%	14%	2%
Lot Person (NOC 6742)	53%	32%	9%	6%	1%
Auto Dismantler (NOC 7445)	22%	22%	47%	6%	3%
Tow Truck Operator (NOC 7511)	8%	57%	20%	14%	1%
Parts Delivery Driver (NOC 7514)	15%	36%	21%	18%	9%
Detailer (NOC 7612)	39%	39%	11%	9%	3%
Shop Helper (NOC 7612)	43%	32%	9%	13%	4%
Total	33%	41%	13%	11%	2%

Source: Survey of Automotive Employers

Table 12 shows the estimated age distribution of those employed in Sales, Management and Administration occupations in the Automotive Sector. The majority of those employed in Sales, Management and Administration occupations were estimated to be between 25 years of age and 45 years of age. The age distribution of those in managerial occupations was estimated to be older than those in non-management occupations. Compared with the Skilled Trades and the Other Trades and Technical occupations, there were relatively more employees 55 years of age and older in Sales, Management and Administration occupations.

Table 12: Estimated Age Distribution by Occupation- Sales, Management and Administration (N=172)

Occupation (NOC code)	Under 25	25-44	45-54	55-65	Over 65
Controller (NOC 0013)	2%	32%	32%	24%	10%
Finance Manager (NOC 0122)	3%	69%	19%	6%	3%
Sales Manager (NOC 0621)	9%	60%	17%	12%	2%
Fixed Operations Manager (NOC 0621)	0%	38%	47%	13%	2%
Service Manager (NOC 0651)	9%	43%	43%	3%	3%
Parts Manager (NOC 1215)	1%	55%	27%	15%	2%
Business Office (NOC 1411)	4%	33%	24%	36%	2%
Warranty Clerk (NOC 1411)	30%	33%	20%	13%	4%
Customer Service Representative (NOC 1414)	34%	44%	14%	5%	4%
Tow Dispatcher (NOC 1525)	8%	38%	33%	17%	4%
Licensed Automotive Sales Representative (NOC 6421)	10%	52%	17%	16%	5%
Leasing Agent (NOC 6421)	0%	57%	7%	36%	0%
Service Advisor (NOC 6552)	0%	40%	29%	27%	4%
Estimator (NOC 7321/7322)	4%	47%	33%	12%	4%
Total	10%	46%	22%	18%	3%

Source: Survey of Automotive Sector Employers

Table 13 shows the estimated gender distribution and share of Aboriginals employed in Skilled Trades occupations in the Automotive Sector. Approximately one percent of those employed in Skilled Trades were estimated to be women. The occupations with the highest estimated share of women were Automotive

Refinishing Prep Technician and Partsperson. The occupation with the highest estimated share of Aboriginals was Collision Repair Technician.

Table 13: Estimated Gender Distribution and Share of Aboriginals by Occupation - Skilled Trades (N=178)

Occupation (NOC code)	Male	Female	Aboriginal
Partsperson (NOC 1522)	90%	10%	0%
Automotive Service Technician (NOC 7321)	99%	1%	0%
Collision Repair Technician (NOC 7322)	100%	0%	1%
Auto Glass Technician (NOC 7322)	99%	1%	0%
Automotive Painter (NOC 7322)	98%	2%	0%
Auto Refinishing Prep Technician (NOC 7322)	88%	12%	0%
Motorcycle Mechanic** (NOC 7334)	X	X	X
Total	99%	1%	0.5%

Source: Survey of Automotive Sector Employers

**The sample size was too small to produce an estimate.

Table 14 shows the estimated gender distribution and share of Aboriginals employed as apprentices in the Automotive Sector. Approximately five percent of apprentices were estimated to be women which suggests that more women are choosing to enter Automotive Trades than have in the past. The only apprenticeship in which the share of women was not estimated to be higher than the share in the current workforce was Automotive Service Technician. There were also estimated to be relatively more Aboriginals employed as apprentices than are currently employed in the Skilled Trades occupations.

Table 14: Estimated Gender Distribution and Share of Aboriginals by Occupation - Apprentice (N=178)

Occupation (NOC code)	Male	Female	Aboriginal
Partsperson Apprentice (NOC 1522)	83%	17%	0%
Automotive Service Technician Apprentice (NOC 7321)	100%	0%	1%
Collision Repair Technician Apprentice (NOC 7322)	99%	1%	2%
Auto Glass Technician Apprentice (NOC 7322)	96%	4%	0%
Automotive Painter Apprentice (NOC 7322)	88%	12%	7%
Motorcycle Mechanic Apprentice** (NOC 7334)	X	X	X
Total	95%	5%	1.4%

Source: Survey of Automotive Sector Employers

**The sample size was too small to produce an estimate.

Table 15 shows the estimated gender distribution and share of Aboriginals employed in other Trades and Technical occupations in the Automotive Sector. Approximately eight percent of those employed in other Trades and Technical occupations were estimated to be women. The occupations with the highest estimated share of women were Inventory/Warehouse Person and Detailer. Aboriginals were estimated to account for approximately one percent of those employed in Other Trades and Technical occupations. The occupations with highest estimated share of Aboriginals were Tow Truck Operator and Auto Dismantler.

Table 15: Estimated Gender Distribution and Share of Aboriginals by Occupation - Other Trades and Technical (N=178)

Occupation (NOC Code)	Male	Female	Aboriginal
Inventory/ Warehouse Person (NOC 1522)	78%	22%	0%
Lot Person (NOC 6742)	97%	3%	0%
Auto Dismantler (NOC 7445)	92%	8%	3%
Tow Truck Operator (NOC 7511)	99%	1%	4%
Parts Delivery Driver (NOC 7514)	97%	3%	2%
Detailer (NOC 7612)	84%	16%	1%
Shop Helper (NOC 7612)	94%	6%	1%
Total	92%	8%	1%

Source: Survey of Automotive Sector Employers

Table 16 shows the estimated gender distribution and share of Aboriginals by occupation for Sales, Management and Administration occupations. Approximately 37 percent of those employed in these occupations were estimated to be women. This was significantly higher than in the Skilled Trades and Other Trade and Technical occupations. The estimated share of Aboriginals employed in Sales, Management and Administration occupations was approximately one percent. This was similar to the estimated share of Aboriginals in other occupations in the Automotive Sector.

Table 16: Estimated Gender Distribution and Share of Aboriginals by Occupation - Sales, Management and Administration (N=178)

Occupation (NOC Code)	Male	Female	Aboriginal
Controller (NOC 0013)	33%	67%	0%
Finance Manager (NOC 0122)	55%	45%	1%
Sales Manager (NOC 0621)	96%	4%	0%
Fixed Operations Manager (NOC 0621)	92%	8%	0%
Service Manager (NOC 0651)	90%	10%	1%
Parts Manager (NOC 1215)	86%	14%	0%
Business Office (NOC 1411)	44%	56%	1%
Warranty Clerk (NOC 1411)	27%	73%	0%
Tow Dispatcher (NOC 1525)	66%	34%	6%
Customer Service Representative (NOC 1414)	14%	86%	1%
Leasing Agent (NOC 6421)	57%	43%	0%
Licensed Automotive Sales Representative (NOC 6421)	90%	10%	1%
Service Advisor (NOC 6552)	76%	24%	1%
Estimator (NOC 7321/7322)	87%	13%	1%
Total	63%	37%	1%

Source: Survey of Automotive Sector Employers

Trade Certification of Employees in the Automotive Sector

Table 17 shows the estimated share of employees with a trade certification that are employed in Skilled Trades occupations. The highest estimated shares of employees in the Skilled Trades occupations were Collision Repair Technician (approximately 91 percent), Automotive Service Technician (approximately 86 percent) and Automotive Painter (approximately 84 percent). Approximately 19 percent of Automotive Glass Technicians were estimated to have trade certification and approximately 7 percent of Parts Salespeople were estimated to have trade certification. These differences in certification rates likely reflect differences in service requirements in the sub-sectors. ICBC requires that certified technicians perform collision repairs.³ However for glass repairs, ICBC only requires that certified technicians perform repairs done in Glass Express shops.⁴ Similarly there is an expectation that Automotive Service Technicians working in New Car Dealers and Mechanical Repair shops have certification.

Table 17: Estimated Share of Employees with a Trade Certification- Skilled Trades (N=136)

Occupation (NOC Code)	Share
Partsperson (NOC 1522)	7%
Automotive Service Technician (NOC 7321)	86%
Collision Repair Technician (NOC 7322)	91%
Auto Glass Technician (NOC 7322)	19%
Automotive Painter (NOC 7322)	84%
Auto Refinishing Prep Technician (NOC 7322)	38%
Motorcycle Mechanic** (NOC 7334)	X

Source: Survey of Automotive Sector Employers

**The sample size was too small to produce an estimate.

Table 18 shows the estimated share of employees with a trade certification that are employed in Other Trades and Technical occupations. These occupations do not require a trade certification but according to interviews with employers conducted by MNP tradespeople may be employed in these occupations after they retire from their respective trade. In the case of Auto Dismantlers, some employers reported that they prefer to hire certified Collision Repair Technicians or Automotive Service Technicians for these positions.

³ ICBC c.a.r shop Program Guide, February 2016

⁴ ICBC Glass Express Program Guide, March 2015

Table 18: Estimated Share of Employees with a Trade Certification - Other Trades and Technical Occupations (N=136)

Occupation (NOC Code)	Share
Inventory/ Warehouse Person (NOC 1522)	22%
Lot Person (NOC 6742)	3%
Auto Dismantler (NOC 7445)	19%
Tow Truck Operator (NOC 7511)	1%
Parts Delivery Driver (NOC 7514)	2%
Detailer (NOC 7612)	15%
Shop Helper (NOC 7612)	2%

Source: Survey of Automotive Sector Employers

Table 19 shows the estimated share of employees with a trade certification that are employed in Sales, Management and Administration occupations. These occupations do not require a trade certification but like Other Trades and Technical occupations, employers reported that they are often filled by tradespeople that have left their certified trade.

Table 19: Estimated Share of Employees with a Trade Certification – Sales, Management and Administration (N=136)

Occupation (NOC code)	Share of Employees with a Trade Certification
Controller (NOC 0013)	8%
Finance Manager (NOC 0122)	5%
Sales Manager (NOC 0621)	4%
Fixed Operations Manager (NOC 0621)	9%
Service Manager (NOC 0651)	7%
Parts Manager (NOC 1215)	12%
Business Office (NOC 1411)	8%
Warranty Clerk (NOC 1411)	4%
Customer Service Representative (NOC 1414)	5%
Tow Dispatcher (NOC 1525)	0%
Leasing Agent (NOC 6421)	24%
Licensed Automotive Sales Representative (NOC 6421)	34%
Service Advisor (NOC 6552)	4%
Estimator (NOC 7321/7322)	21%

Source: Survey of Automotive Sector Employers

5. LABOUR MARKET ESTIMATES

Industry Trends

The key trends that are affecting the Automotive Sector in BC relate to changes in vehicle technology and improving reliability. The changes in vehicle technology that are affecting the skill requirements in the Automotive Sector include:

- *Hybrids and Electric Vehicles* – the demand for hybrid and electric vehicles is growing. In BC between 2010 and 2014 the number of hybrid vehicles grew by 65 percent from approximately 20,000 to 33,000 while the number of Electric vehicles grew from approximately 54 to 1,700.⁵ This is expected to change the skills and knowledge that technicians will need to have.
- *Collision Avoidance Technology* – According to IBIS world, demand for collision repair services in Canada is expected to decline as purchases of vehicles with crash avoidance technologies are expected to increase.⁶ Until recently collision avoidance technology was typically only available on luxury vehicles; however, it is increasingly becoming a standard feature on other types of vehicles.

While new vehicles are expected to experience fewer collisions, repairs are expected to be increasingly difficult to perform and are expected to require a certified technician to perform them.⁷

According to collision repair employers interviewed by MNP collision avoidance technology is reducing the severity of accidents and may increase the number of repairs in the near term. This suggests that the effects of collision avoidance technology in the near term will be to change the type of accidents that occur and are unlikely to reduce the overall rate of collisions.

The increasing reliability of vehicles and the tendency to drive fewer kilometres is expected to increase the average age of vehicles on the road. Between 1990 and 2010 the average age of passenger vehicles in BC rose from 8.25 to 9.69.⁸ Average kilometres driven per vehicle in Canada decreased from 17,000 to 15,336 between 2000 and 2009⁹ driven largely by increases in the price of fuel. These trends have a number of implications for employment in the industry. First, the demand for advanced diagnostic skills is expected to be stable while that for maintenance and minor repairs will grow. Secondly, older vehicles are more likely to have maintenance performed at independent shops¹⁰ so demand for small maintenance shops is likely to grow while that for dealership maintenance services is expected to follow the growth in the number of new cars on the road.

Current State Estimates

To estimate the current workforce in the Automotive Sector we used information on the number of staff and composition of staff from a survey of Automotive Sector employers and information on the number of locations

⁵ ICBC, Quick Stats (available here: <http://www.icbc.com/about-icbc/newsroom/Pages/Statistics.aspx>)

⁶ IBIS World, 2016, Car Body Shops in Canada Industry Report

⁷ IBIS World, 2016, Automobile Towing in the US Industry Report

⁸ La Coporation des concessionnaires d'automobiles du Quebec. *Âge moyen des véhicules par province - juillet 2010.* (<http://www.ccaq.com/fr/la-ccaq/statistiques.statistiques-pour-le-quebec-.php>)

⁹ Natural Resources Canada. *Canadian Vehicle Survey 2009 Summary Report.* 2011

¹⁰ Automotive Industries Association of Canada. *2012 Outlook Study: A Comprehensive Review of the Automotive Aftermarket Industry in Canada.* November 2012.

by sub-sector and region from Statistics Canada's Business Register. Estimates of the supply of labour were developed based on information on vacancies from a survey of Automotive Sector employers, unemployment rates by occupation and information on employment insurance claimants by occupation. Appendix E contains a description of the approach used to develop the current state estimates.

Workforce Estimates

Table 20 shows the current estimated Automotive Sector workforce in BC. Skilled Trade occupations (including apprentices) were estimated to account for approximately 36.9 percent of the jobs in the sector, Other Trades and Technical occupations were estimated to account for approximately 24.9 percent of jobs and Sales, Management and Administration occupations were estimated to account for the remaining 38.2 percent.

The sub-sectors that primarily provide repair services (e.g., Auto Glass, Collision Repair, and Mechanical Repair) were estimated to employ relatively higher shares of Skilled Trades than those sub-sectors primarily providing retail sales (e.g., New Car Dealers, Power Sport Dealers, Used Car Dealers).

Table 20: Estimated Automotive Sector Workforce, 2016

Sub-sector	NAICS Code	Skilled Trade Occupations	Apprentices	Other Trade and Technical Occupations	Sales, Management, and Administration Occupations	Estimated Workforce
Auto Recyclers	4153	110	5	180	59	354
New Car Dealers	44111	3,163	906	2,855	9,108	16,032
Used Car Dealers	44112	167	0	330	954	1,451
Power Sport Dealers	4412	417	207	2,867	1,641	5,132
Aftermarket Parts	44131	1,005	30	881	441	2,357
Towing and Recovery	48841	24	0	1,472	175	1,671
Auto Rental and Leasing	5321	237	0	474	638	1,349
Mechanical Repair	81111	5,012	1,846	1,095	3,346	11,299
Collision Repair	811121	2,938	650	1,577	1,437	6,602
Auto Glass Repair	811122	509	248	30	274	1,061
Total		13,582	3,892	11,761	18,073	47,308
Share of Total		28.7%	8.2%	24.9%	38.2%	100%

Labour Market Conditions

To assess the current labour market conditions for each of the occupations in the Automotive Sector we used information gathered through a survey of Automotive Sector employers on recent vacancies and the length of time it had taken to fill those vacancies and information gathered through interviews with employers in each sub-sector.

The supply of labour for an occupation was considered to be adequate when the following criteria were met:

- Estimated supply of labour exceeded the estimated demand for labour.
- Respondents to the survey of Automotive Sector employers reported that vacant positions were able to be filled within three months.
- Employers interviewed by MNP did not report difficulty in filling positions.

For occupations that did not meet one or more of the criteria for an adequate supply of labour, labour market conditions were categorized as follows:

- Difficult to find candidates – between 20 percent and 40 percent of respondents to the Survey of Automotive Sector employers reported that vacant positions took more than three months to fill and some employers interviewed by MNP identified positions as difficult to fill.
- Tight labour market – more than 40 percent of respondents to the Survey of Automotive Sector employers reported that vacant positions took more than three months to fill and most employers interviewed by MNP identified positions as difficult to fill.
- Shortage – estimated labour supply was less than estimated labour demand and a number of employers interviewed by MNP reported unfilled positions.

It is important to note that there are a number of reasons that labour market conditions may be difficult or tight despite the estimated supply being equal to or greater than the estimated demand. Workers may be unwilling to relocate to where there are job vacancies or the specific skills or experience of available workers may not be a match for employers.

Table 21 shows our assessment of the current labour market for Skilled Trades in the Automotive Sector. In general, the labour market for Skilled Trades was very tight and employers reported difficulty finding suitable candidates for vacant positions. Difficulties in filling positions were particularly acute for Collision Repair Technicians and Automotive Service Technicians. Employers reported that there are a number of positions in these two occupations that they have been unable to fill and in some cases this was preventing them from expanding their business. Partsperson was the only Skilled Trade occupation for which the current supply of labour was estimated to be adequate to meet demand.

Table 21: Labour Market Conditions for Skilled Trades, 2016

Occupation (NOC code)	Estimated Current Demand	Estimated Current Supply	Assessment
Partsperson (NOC 1522)	2,503	2,600	Current supply is adequate
Automotive Service Technician (NOC 7321)	7,177	7,064	There are a number of unfilled positions and shops are unable to expand due to lack of staff.
Collision Repair Technician (NOC 7322)	1,955	1,973	Very tight labour market and some positions are going unfilled.
Auto Glass Technician (NOC 7322)	709	714	Very tight labour market and some positions are going unfilled at small shops.
Automotive Painter (NOC 7322)	898	905	Tight labour market.
Auto Refinishing Prep Technician (NOC 7322)	190	191	Tight labour market.
Motorcycle Mechanic (NOC 7334)	150	153	Tight labour market.*

*This assessment is based on information provided through interviews conducted by MNP with employers. According to interviewees it is difficult to find Motorcycle Mechanics and employers are often competing with shops providing Mechanical Repair services.

Table 22 shows our assessment of the current labour market conditions for apprentices. Like Skilled Trades, the market for apprentices was very tight for most occupations. The only exception was Partsperson Apprentice.

Table 22: Labour Market Conditions for Apprentices, 2016

Occupation (NOC code)	Estimated Current Demand	Estimated Current Supply	Assessment
Partsperson Apprentice (NOC 1522)	283	294	Adequate supply at present.
Automotive Service Technician Apprentice (NOC 7321)	2,591	2,551	Shortage of apprentices and positions are going unfilled.
Collision Repair Technician Apprentice (NOC 7322)	570	576	Shortage of apprentices.
Auto Glass Technician Apprentice (NOC 7322)	248	250	Difficult to find apprentices.
Automotive Painter Apprentice (NOC 7322)	200	201	Difficult to find apprentices.
Motorcycle Mechanic Apprentice (NOC 7334)**	X	85	Unknown

**The estimate of supply is based on the number of active Motorcycle Mechanics registered with the Industry Training Authority. We were unable to provide an estimate of the current demand due to lack of information provided by employers for this occupation.

Table 23 shows our assessment of the current labour market conditions for Other Trade and Technical occupations. In general, there was an adequate supply of labour to fill these positions. The exceptions to this were Auto Dismantler in the Lower Mainland and Tow Truck Operator in urban areas. The difficulty with filling Auto Dismantler positions may have been related to the shortage of Skilled Trades as some shops reported that they prefer those with training as Automotive Service Technicians or Collision Repair Technicians for these

positions. For positions as Tow Truck Operator, employers reported that there is high turnover and that they often try multiple candidates before finding a suitable employee.

Table 23: Labour Market Conditions for Other Trades and Technical Occupations, 2016

Occupation (NOC code)	Estimated Current Demand	Estimated Current Supply	Assessment
Inventory/ Warehouse Person (NOC 1522)	558	581	Adequate supply.
Lot Person (NOC 6742)	1,903	2,163	Adequate supply.
Auto Dismantler (NOC 7445)	143	145	Difficult to find candidates in the Lower Mainland and for those employers seeking Collision Repair Technician or Automotive Service Technicians.
Tow Truck Operator (NOC 7511)	1,252	1,316	Difficult to find candidates and there is high turnover in urban areas.
Parts Delivery Driver (NOC 7514)	816	923	Adequate supply.
Detailer (NOC 7612)	2,469	2,798	Adequate supply.
Shop Helper (NOC 7612)	3,202	3,622	Adequate supply.

Table 24 shows our assessment of the labour market conditions for Sales, Management and Administration occupations. For this group of occupations there was currently an adequate supply of labour. However, employers did report difficulties in finding suitable candidates for Licensed Automotive Sales Representative positions.

Table 24: Labour Market Conditions for Sales, Management and Administration Occupations, 2016

Occupation (NOC code)	Estimated Current Demand	Estimated Current Supply	Assessment
Controller (NOC 0013)	407	411	Adequate supply.
Finance Manager (NOC 0122)	876	895	Adequate supply.
Sales Manager (NOC 0621)	1,358	1,418	Adequate supply.
Fixed Operations Manager (NOC 0621)	371	387	Adequate supply.
Service Manager (NOC 0651)	890	940	Adequate supply.
Parts Manager (NOC 1215)	615	638	Adequate supply.
Business Office (NOC 1411)	4,374	4,430	Adequate supply.
Warranty Clerk (NOC 1411)	149	150	Adequate supply.
Customer Service Representative (NOC 1414)	2,777	2,907	Adequate supply.
Tow Dispatcher (NOC 1525)	405	426	Adequate supply.
Leasing Agent (NOC 6421)	222	235	Adequate supply.
Licensed Automotive Sales Representative (NOC 6421)	4,030	4,241	Difficult to find suitable candidates.
Service Advisor (NOC 6552)	2,153	2,250	Adequate supply.
Estimator (NOC 7321/7322)	853	860	Adequate supply.

Forecasts of Labour Market Conditions 2017 to 2026

To forecast labour market conditions for the period 2017 to 2026 we used information on demographics and expected vacancies gathered through a survey of Automotive Sector Employers, population forecasts and labour market participation rate forecasts published by BC Stats, and information gathered through interviews with Automotive Sector Employers.

Forecast Assumptions

The labour demand forecasts were based on the following assumptions:

- Rate of growth of vehicles on the road will be similar to that over the period 2011-2016 (approximately two percent annually).
- Increasing prevalence of collision avoidance technologies will reduce the rate of collisions and change the mix of collisions that occur. The net effect of this will be that the growth rate in the number of repairs will be lower but repairs will become more complicated so total repair hours are expected to be unchanged between 2017 and 2021.
- Between 2021 and 2026 the impacts of the reduction in the rate of collisions were not expected to reduce the overall number of collisions as most vehicles on the road will not have collision avoidance technology. As a result, over the 2021 to 2026 forecast period the number of repair hours was assumed to grow by a rate similar to the number of vehicles on the road, approximately two percent annually.
- Land constraints in urban areas will make it difficult for expansion in the number of shops requiring light industrial zoning (e.g., collision and mechanical repair shops). Consequently, there was no growth assumed in the number of businesses in the sector.

Appendix F describes how these assumptions were applied in forecasting demand by occupation.

The labour supply forecasts for Skilled Trades were based on the following assumptions:

- The rate of youth entering apprenticeships is similar to the current rate and the apprenticeship completion rate is approximately 60 percent.¹¹
- Increasing prevalence of electric and hybrid technologies in new vehicles will change the composition of the fleet. This will have implications for the skills and knowledge of Collision Repair Technicians and Automotive Service Technicians and will lead more technicians to retire before 60. In addition the physical nature of these occupations means that those over 55 may be less able to do the work. Consequently, most Collision Repair Technicians and Automotive Service Technicians retire between 55 and 60 years of age.

For Sales, Management and Administration occupations that are not unique to the Automotive Sector the labour supply for the relevant NOC code from the BC Labour Market Outlook forecasts were used.

¹¹ The completion rate for apprentices was calculated based on data provided by the Industry Training Authority and is an average for all apprentices in the Automotive Trades.

Appendix F contains a list of considerations that should be taken into account in making comparisons between the forecasts presented here and those in the BC Labour Market Outlook.

Forecast Workforce 2017 to 2021

Table 25 shows the estimated labour demand in the Automotive Sector in 2021. Between 2016 and 2021 labour demand is forecast to increase by approximately 4.9 percent (approximately 1.0 percent per year) and approximately 2,323 new positions were forecast to be created. Most of the increase in demand was forecast to occur in the Skilled Trades occupations where 698 new positions were forecast to be created. Demand for Other Trade and Technical occupations is expected to be flat while demand for Sales, Management and Administration occupations is expected to grow by approximately 3.4 percent (approximately 621 positions).

Table 25: Forecast Labour Demand in the Automotive Sector, 2021

Sub-sector	NAICS Code	Skilled Trades	Apprentices	Other Trade and Technical Occupations	Sales, Management and Administration Occupations	Total Demand
Auto Recyclers	4153	111	0	180	60	351
Power Sport Dealers	4412	433	226	2,869	1,683	5,211
Auto Rental and Leasing	5321	253	0	477	652	1,382
New Car Dealers	44111	3,331	1,134	2,862	9,612	16,939
Used Car Dealers	44112	179	0	331	980	1,490
Aftermarket Parts	44131	1,012	30	883	443	2,368
Towing and Recovery	48841	26	0	1,472	175	1,673
Mechanical Repair	81111	5,316	2,336	1,097	3,374	12,123
Collision Repair	811121	3,058	816	1,581	1,440	6,895
Auto Glass Repair	811122	561	333	30	275	1,199
Total		14,280	4,875	11,782	18,694	49,631
Forecast Growth 2016-2021		698 (5.1%)	983 (25.3%)	21 (0.2%)	621 (3.4%)	2,323 (4.9%)

Job openings were categorized as either due to expansion demand or replacement demand. Expansion demand was job openings due to new positions that were created to meet increased demand for services. Replacement demand were job openings due to people leaving the Automotive Sector either due to retirement or for another reason.

Table 26 shows the forecast job openings by source for Skilled Trades occupations for the period 2017 to 2021. There was forecast to be approximately 3,240 job openings in Skilled Trades occupations and approximately 79

percent of these were forecast to be replacement openings. Occupations in Collision Repair had the highest shares of replacement openings forecast to be from retirements (between 45.2 percent and 57.1 percent). For Automotive Service Technician approximately 42 percent of replacement openings were forecast to be the result of retirements while the rest were forecast to be the result of exits from the Automotive Sector. Automotive Service Technician was also the occupation with the largest number of job openings forecast to be due to expansion demand (495). The growth in Automotive Service Technician positions accounted for approximately 21.1 percent of the overall forecast growth in demand in the Automotive Sector.

Table 26: Forecast Job Openings for Skilled Trades, 2017 to 2021

Occupation (NOC code)	Expansion Demand	Replacement Demand		Total Job Openings
		Retirements	Other Exits	
Partsperson (NOC 1522)	17	162	299	478
Automotive Service Technician (NOC 7321)	495	531	734	1760
Collision Repair Technician (NOC 7322)	5	236	177	418
Auto Glass Technician (NOC 7322)	73	85	62	220
Automotive Painter (NOC 7322)	98	106	129	333
Auto Refinishing Prep Technician (NOC 7322)	0	0	31	31
Motorcycle Mechanic** (NOC 7334)	X	X	X	X
Total	688	1,120	1,432	3,240
Share of Job Openings	21.2%	34.6%	44.2%	100%

** We were unable to produce forecasts for Motorcycle Mechanics due to lack of information provided by employers with respect to future demand.

Table 27 shows forecast job openings for Other Trade and Technical occupations. Openings in this group of occupations were forecast to be primarily due to replacement demand. The share of replacement demand openings from retirements was forecast to be approximately 13.6 percent with the highest share due to retirement being in Inventory/Warehouse Person occupations (approximately 48.4 percent).

Table 27: Forecast Job Openings for Other Trade and Technical Occupations, 2017 to 2021

Occupation (NOC code)	Expansion Demand	Replacement Demand		Total Job Openings
		Retirements	Other Exits	
Inventory/ Warehouse Person (NOC 1522)	4	59	63	126
Lot Person (NOC 6742)	0	74	253	327
Auto Dismantler (NOC 7445)	0	0	5	5
Tow Truck Operator (NOC 7511)	0	28	95	123
Parts Delivery Driver (NOC 7514)	0	86	248	334
Detailer (NOC 7612)	17	57	796	870
Shop Helper (NOC 7612)	0	0	461	461
Total	21	304	1,921	2,246
Share of Job Openings	0.9%	13.6%	85.5%	100%

Table 28 shows the forecast job openings for Sales, Management and Administration occupations between 2017 and 2021. Approximately 88 percent of the job openings in this group were forecast to be due to

replacement demand. The share of replacement demand due to retirements was forecast to be approximately 38.1 percent. For managerial occupations and those requiring technical knowledge (e.g., Estimator, Service Advisor) the share of replacement demand forecast from retirements was relatively higher than for entry level occupations or those occupations that are not unique to the Automotive Sector (e.g., Business Office, Customer Service Representative).

There were forecast to be approximately 466 openings due to expansion for Licensed Automotive Sales Representative. Those openings accounted for approximately 47.8 percent of the forecast openings for the position and approximately 20 percent of the total forecast growth in labour demand between 2017 and 2021.

Table 28: Forecast Job Openings for Sales, Management and Administration Occupations, 2017 to 2021

Occupation (NOC Code)	Expansion Demand	Replacement Demand		Total Job Openings
		Retirements	Other Exits	
Controller (NOC 0013)	0	31	39	70
Finance Manager (NOC 0122)	101	25	83	209
Sales Manager (NOC 0621)	9	127	157	293
Fixed Operations Manager (NOC 0621)	0	58	22	80
Service Manager (NOC 0651)	0	76	225	301
Parts Manager (NOC 1215)	0	169	88	257
Business Office (NOC 1411)	0	363	879	1,242
Warranty Clerk (NOC 1411)	1	30	51	82
Customer Service Representative (NOC 1414)	19	263	558	840
Tow Dispatcher (NOC 1525)	0	24	71	95
Leasing Agent (NOC 6421)	26	35	23	84
Licensed Automotive Sales Representative (NOC 6421)	466	89	419	974
Service Advisor (NOC 6552)	0	282	272	554
Estimator (NOC 7321/7322)	0	54	44	98
Total	622	1,626	2,931	5,179
Share of Job Openings	12.0%	31.4%	56.6%	100%

Labour Supply Assessment 2017 to 2021

Table 29 shows the forecast job openings and apprentice completions for Skilled Trades between 2017 and 2021. The number of apprentices completing their respective programs was forecast to be less than the number of job openings for most occupations. For Collision Repair Technician and Automotive Painter the forecast number of apprenticeship completions was less than the forecast number of job openings that were due to retirements and exits. For Automotive Service Technician and Glass Repair Technician the forecast number of apprenticeship completions is similar to the forecast number of job openings that were due to retirements and exits and the gap is due to job openings from expansion demand. For Automotive Refinishing Prep Technician and Partsperson the forecast number of apprenticeship completions was similar to the forecast number of job openings.

Table 29: Job Opening vs Apprenticeship Completions for Skilled Trades, 2017 to 2021

Occupation (NOC Code)	Job Openings	Forecast Apprenticeship Completions	Gap
Partsperson (NOC 1522)	478	486	8
Automotive Service Technician (NOC 7321)	1,760	1,275	(485)
Collision Repair Technician (NOC 7322)	418	357	(61)
Auto Glass Technician (NOC 7322)	219	129	(90)
Automotive Painter (NOC 7322)	333	166	(167)
Auto Refinishing Prep Technician (NOC 7322)	31	35	4
Motorcycle Mechanic** (NOC 7334)	X	X	X

** We were unable to produce forecasts of apprenticeship completions for Motorcycle Mechanics due to lack of information on this occupation provided by employers.

For all other occupations in the Automotive Sector the number of entrants was forecast to meet or exceed the forecast number of openings for the five year period.

Forecast Workforce 2022 to 2026

Table 30 shows the forecast labour demand in the Automotive Sector in 2026. Between 2022 and 2026 labour demand was forecast to grow by approximately 6.9 percent (approximately 1.3 percent annually) and 3,415 new positions were forecast to be created. Apprentices accounted for approximately 46 percent of the new positions, Skilled Trades accounted for approximately 28 percent of the new positions, Sales, Management and Administration occupations accounted for approximately 23 percent of the new positions and the remainder were in Other Trade and Technical occupations.

Table 30: Forecast Labour Demand in the Automotive Sector, 2026

Sub-sector	NAICS Code	Skilled Trades	Apprentices	Other Trade and Technical Occupations	Sales, Management and Administration Occupations	Total Demand
Auto Recyclers	4153	113	0	180	61	354
New Car Dealers	44111	3,514	1,492	2,869	9,958	17,833
Used Car Dealers	44112	191	0	333	998	1,522
Power Sport	4412	450	256	2,871	1,713	5,290
Aftermarket Parts	44131	1,019	30	885	445	2,379
Towing and Recovery	48841	27	0	1,551	175	1,753
Auto Rental and Leasing	5321	271	0	480	663	1,414
Mechanical Repair	81111	5,666	3,096	1,099	3,394	13,255
Collision Repair	811121	3,370	1,078	1,585	1,802	7,835
Auto Glass Repair	811122	623	484	30	275	1,412
Total		15,244	6,436	11,883	19,484	53,047
Forecast Growth 2022-2026		954 (6.8%)	1,560 (32%)	101 (0.9%)	790 (4.2%)	3,415 (6.9%)

Table 31 shows the forecast job openings for Skilled Trade occupations between 2022 and 2026. There were forecast to be 4,252 job openings in Skilled Trades occupations. Approximately 77.5 percent of those were forecast to be due to replacement demand. Among Skilled Trades occupations in collision repair the share of replacement openings forecast from retirements was between 57.4 percent and 66.7 percent. Glass Repair Technician was forecast to have similar shares of openings due to retirements. For Automotive Service Technician approximately 54.3 percent of replacement job openings were forecast to be from retirements.

Table 31: Forecast Job Openings for Skilled Trades, 2022 to 2026

Occupation (NOC Code)	Expansion Demand	Replacement Demand		Total Job Openings
		Retirements	Other Exits	
Partsperson (NOC 1522)	17	316	313	646
Automotive Service Technician (NOC 7321)	528	883	744	2,155
Collision Repair Technician (NOC 7322)	213	383	192	788
Auto Glass Technician (NOC 7322)	86	139	62	287
Automotive Painter (NOC 7322)	110	135	100	345
Auto Refinishing Prep Technician (NOC 7322)	-	-	31	31
Motorcycle Mechanic** (NOC 7334)	X	X	X	-
Total	954	1,856	1,442	4,252
Share of Job Openings	22.5%	43.6%	33.9%	100%

** We were unable to produce forecasts for Motorcycle Mechanic Apprentices based on the lack of information provided by employers with respect to future demand.

Table 32 shows the forecast job openings for Other Trades and Technical Occupations between 2022 and 2026. Most job openings in these occupations were forecast to be replacement demand and approximately 71.8 percent of those job openings were forecast to be in entry level positions such as Detailer, Shop Helper and Parts Delivery Driver. The share of replacement demand job openings due to retirements was forecast to be approximately 16.5 percent and the highest share of retirements was forecast to be in the Inventory/Warehouse Person occupation.

Table 32: Forecast Job Openings for Other Trades and Technical Occupations, 2022 to 2026

Occupation (NOC Code)	Expansion Demand	Replacement Demand		Total Job Openings
		Retirements	Other Exits	
Inventory/ Warehouse Person (NOC 1522)	4	124	72	200
Lot Person (NOC 6742)	0	80	252	332
Auto Dismantler (NOC 7445)	0	5	10	15
Tow Truck Operator (NOC 7511)	0	47	108	155
Parts Delivery Driver (NOC 7514)	0	86	249	335
Detailer (NOC 7612)	17	71	797	885
Shop Helper (NOC 7612)	0	0	581	581
Total	21	413	2,069	2,503
Share of Job Openings	0.8%	16.5%	82.7%	100%

Table 33 shows the forecast job openings for Sales, Management and Administration occupations between 2022 and 2026. There were forecast to be approximately 5,696 job openings and of those, 31.4 percent were forecast to be due to retirements. The Business Office and Customer Service Representative occupations were forecast to have the highest number of retirements. Licensed Automotive Salesperson and Business Office were the occupations that were forecast to have the highest number of new openings.

Table 33: Forecast Job Openings for Sales, Management and Administration Occupations, 2022 to 2026

Occupation (NOC Code)	Expansion Demand	Replacement Demand		Total Job Openings
		Retirements	Other Exits	
Controller (NOC 0013)	0	60	36	96
Finance Manager (NOC 0122)	69	57	93	219
Sales Manager (NOC 0621)	9	150	163	322
Fixed Operations Manager (NOC 0621)	0	73	44	117
Service Manager (NOC 0651)	0	90	221	311
Parts Manager (NOC 1215)	0	107	117	224
Business Office (NOC 1411)	360	578	877	1,815
Warranty Clerk (NOC 1411)	1	16	59	76
Customer Service Representative (NOC 1414)	19	263	559	841
Tow Dispatcher (NOC 1525)	0	24	85	109
Leasing Agent (NOC 6421)	17	45	31	93
Licensed Automotive Sales Representative (NOC 6421)	316	181	426	923
Service Advisor (NOC 6552)	0	153	277	430
Estimator (NOC 7321/7322)	0	72	49	121
Total	791	1,869	3,037	5,697
Share of Openings	13.9%	32.8%	53.3%	100%

Labour Supply Assessment 2022 to 2026

Table 34 shows the forecast job openings and apprentice completions for Skilled Trades between 2022 and 2026. The number of apprentices completing their respective programs was forecast to be less than the number of job openings for all occupations and in most cases the forecast number of apprenticeship completions was less than the forecast number of job openings that were due to retirements and exits.

Table 34: Job Opening vs Apprenticeship Completions for Skilled Trades, 2022 to 2026

Occupation (NOC code)	Job Openings	Forecast Apprenticeship Completions	Gap
Partsperson (NOC 1522)	646	533	(113)
Automotive Service Technician (NOC 7321)	2,156	1,309	(847)
Collision Repair Technician (NOC 7322)	788	434	(354)
Auto Glass Technician (NOC 7322)	287	152	(135)
Automotive Painter (NOC 7322)	345	135	(210)
Auto Refinishing Prep Technician (NOC 7322)	31	25	(6)
Motorcycle Mechanic** (NOC 7334)	X	X	X

** We were unable to produce forecasts for Motorcycle Mechanic Apprentices due to lack of information provided by employers with respect to future demand for this occupation.

For all other occupations in the Automotive Sector the number of entrants was forecast to meet or exceed the forecast number of openings for the five year period.

Summary of Workforce Changes 2017 to 2026

Table 35 shows the share of the current workforce by category of occupation that was forecast to retire or exit from the Automotive Sector between 2017 and 2026. Approximately 42.1 percent of the current workforce was forecast to leave the industry and need to be replaced. Retirements accounted for approximately 36 percent of exits. Skilled Trade occupations were forecast to have the highest share of retirements and the lowest share of exits for other reasons. Other Trades and Technical occupations were forecast to have the lowest share of retirements and the highest share those leaving the Automotive Sector for reasons other than retirement. Sales, Management and Administration occupations were forecast to have the largest share of exits from the Automotive Sector over the period.

Table 35: Summary of Workforce Changes, 2017 to 2026

	Share of Workforce		Total Share of Workforce Exiting
	Exiting Due to Retirements	Exiting Due to Other Reasons	
Skilled Trade Occupations	22.5%	21.8%	44.4%
Other Trade and Technical Occupations	8.0%	35.4%	43.4%
Sales, Management and Administration Occupations	18.1%	30.0%	48.1%
Total	15.2%	26.9%	42.1%

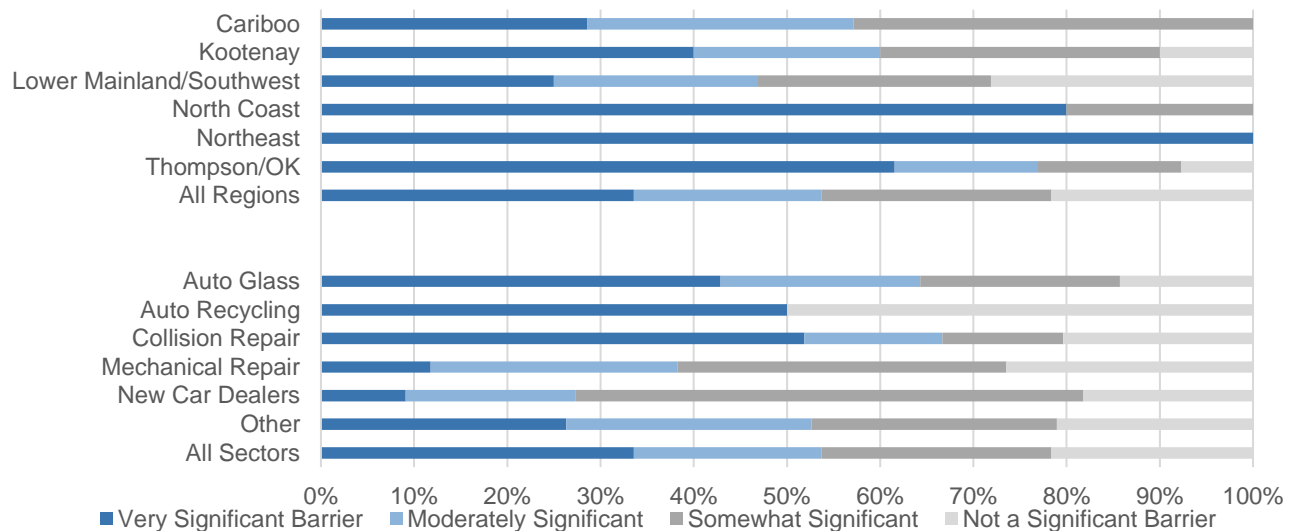
6. RECRUITMENT AND RETENTION

To identify barriers to recruitment and retention information was gathered through a survey of Automotive Sector employers and interviews with employers in each sub-sector. Most employers reported having experienced difficulties recruiting staff. The primary reasons for having difficulty recruiting identified by employers were pay, competition for Skilled Trades both within the Automotive Sector and from other industries, poor image of the industry and lack of available training. For apprentices and some Other Trades and Technical occupations lack of skills related to the industry were also identified by a number of employers as barriers to recruiting.

Pay

Figure 1 shows employer perceptions of the significance of pay as a barrier to recruiting.

Figure 1: Significance of Pay as a Barrier to Recruiting (N= 134)



Source: Survey of Automotive Sector Employers

Pay was perceived by employers in Collision Repair, Glass Repair, Auto Recyclers and Towing and Recovery as being a significant barrier to recruiting Skilled Trades. New Car Dealers and Mechanical Repair employers were less likely to report pay as being a significant barrier than other sub-sectors.

Collision Repair and Glass Repair employers interviewed by MNP reported that they were unable to raise wages in response to market conditions as the prices they charge are set by insurance companies and their profit margins are too low to allow them to raise wages and remain profitable.

Automotive Service Technicians, Automotive Painters and Collision Repair Technicians tend to be paid using the flat rate system. This means that they are paid a fixed rate per job based on industry standard hours for the job regardless of amount of time it takes to complete the work. Consequently, volume is an important determinant in overall income.

Employers interviewed by MNP that use the flat rate system identified the ability to provide high volumes of work as being an important factor in recruiting and retaining technicians.

Employers outside the Lower Mainland were more likely to report that pay was a significant barrier than employers in the Lower Mainland.

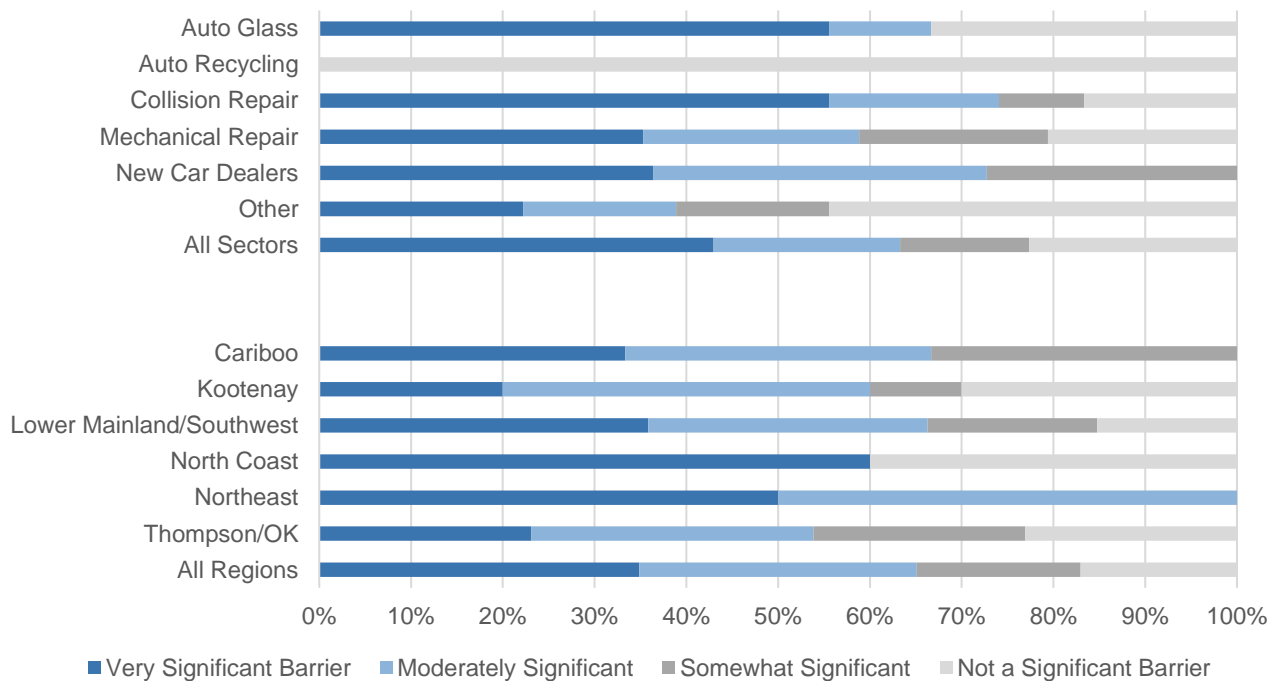
Pay structures for Licensed Automotive Sales Representatives were identified by some New Car Dealers that were interviewed as a barrier to recruitment. These positions are often paid on commission and some employers reported that it was difficult to find suitable candidates that were willing to work on commission.

Wage rates and income by occupation from a survey Automotive Sector employers is provided in Appendix H.

Competition within the Automotive Sector

Figure 2 shows employer perceptions of the significance of competition within the Automotive Sector as a barrier to recruiting.

Figure 2: Significance of Competition within the Automotive Sector as a Barrier to Recruiting (N= 128)



Source: Survey of Automotive Sector Employers

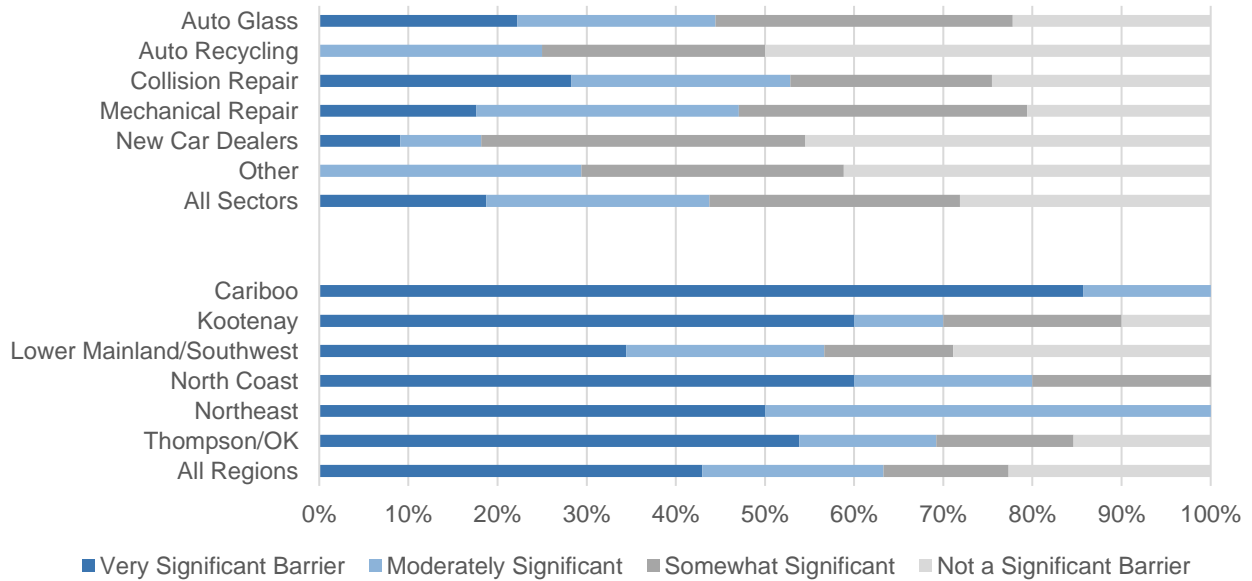
Competition from other employers in the Automotive Sector was perceived to be a significant barrier to recruiting. Employers in Mechanical Repair, Collision Repair and Glass Repair were more likely than employers in other sub-sectors to identify competition within the sector as being a significant barrier to recruiting. Employers interviewed by MNP indicated that most competition within the sector was for Skilled Trades and that those shops that could offer higher wages and/or higher volumes had less difficulty recruiting.

Competition within the Automotive Sector was indicated as a significant barrier in all regions.

Competition from Other Industries

Figure 3 shows employer perceptions of the significance of competition from other industries as a barrier to recruiting.

Figure 3: Significance of Competition from Other Industries as a Barrier to Recruiting (N=128)



Source: Survey of Automotive Sector Employers

Competition from other industries was identified as a significant barrier to recruitment for Skilled Trades. This was of particular concern for employers in Collision Repair, Glass Repair, Mechanical Repair, and New Car Dealers, all of which employ significant numbers of Skilled Trades. Those sectors with fewer Skilled Trades were less likely to report competition from other industries as being a significant barrier to recruitment.

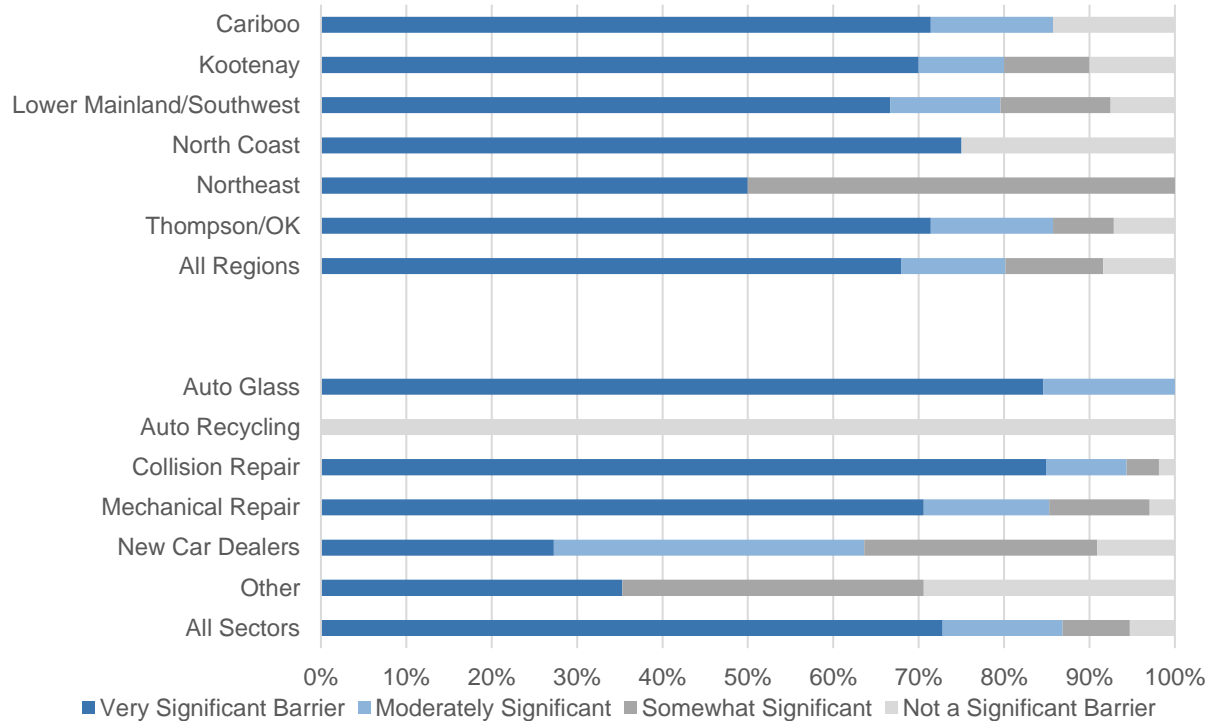
Employers in the Lower Mainland were less likely than employers in other regions to report competition from other industries as being a significant barrier to recruitment.

It is important to note that employers across all sub-sectors that were interviewed by MNP indicated that they felt that the decline in employment in Alberta's oil industry was resulting in a small decrease in competition for Skilled Trades from other industries.

Lack of Skills Related to the Industry

Figure 4 shows employer perceptions of the significance of lack of skills related to the industry as a barrier to recruiting.

Figure 4: Significance of Lack of Skills Related to the Industry as a Barrier to Recruiting (N=128)



Source: Survey of Automotive Sector Employers

Lack of skills related to the industry was identified as a significant barrier with respect to recruiting apprentices. A number of employers interviewed by MNP indicated that there was a lack of mechanical aptitude among candidates applying for apprenticeships and this made it difficult to find suitable candidates.

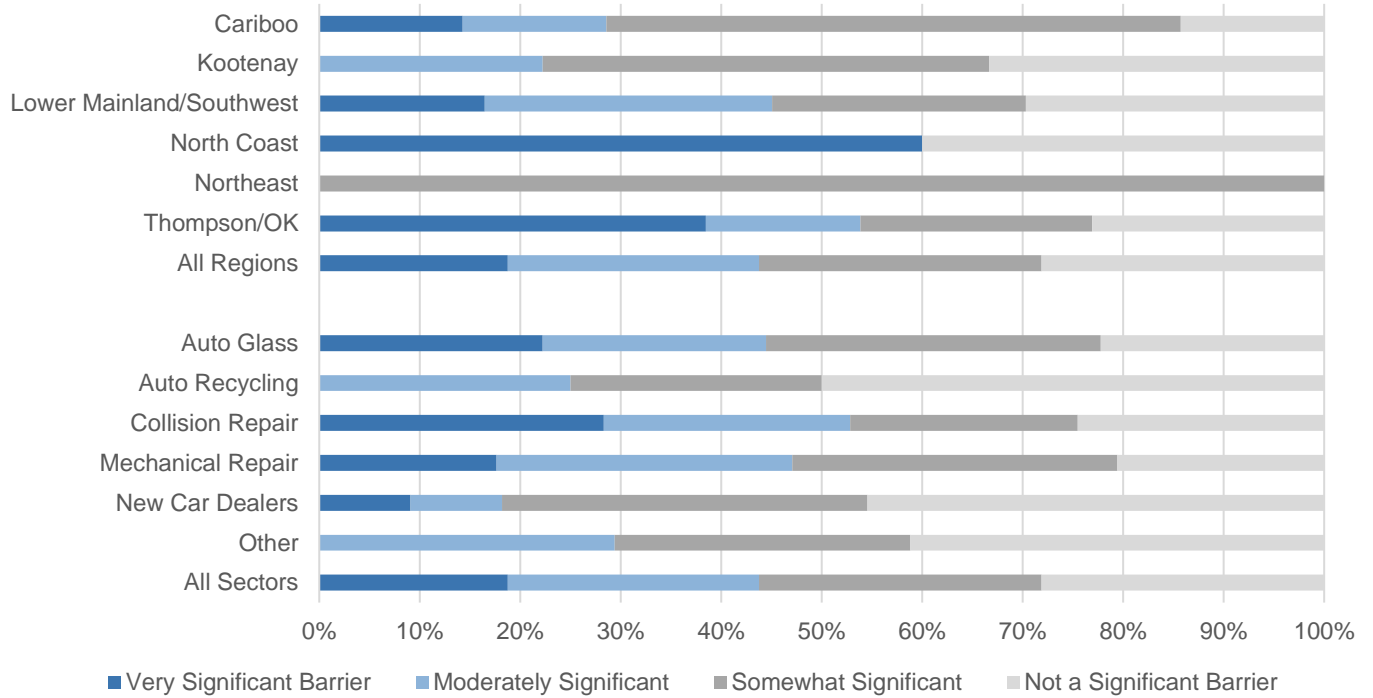
A lack of skills related to the industry was also reported by Auto Recycler and Towing and Recovery employers that were interviewed by MNP. These employers indicated that they felt that candidates for Tow Truck Operators and Auto Dismantlers often did not have mechanical experience or aptitude and this made it difficult to find suitable candidates that could be trained for the positions.

Examples of lack of mechanical aptitude that were provided by employers interviewed by MNP were that candidates did not have an understanding of how physical objects are constructed or how they worked and had no experience using tools. This meant that there was a very steep learning curve and candidates often found the work overwhelming and quit after a short period. In other cases candidates caused damage to vehicles and that damage had to be repaired by the employer.

Poor Image of Industry

Figure 5 shows employer perceptions of the significance of poor industry image as a barrier to recruiting.

Figure 5: Significance of Poor Industry Image as a Barrier to Recruiting (N=128)



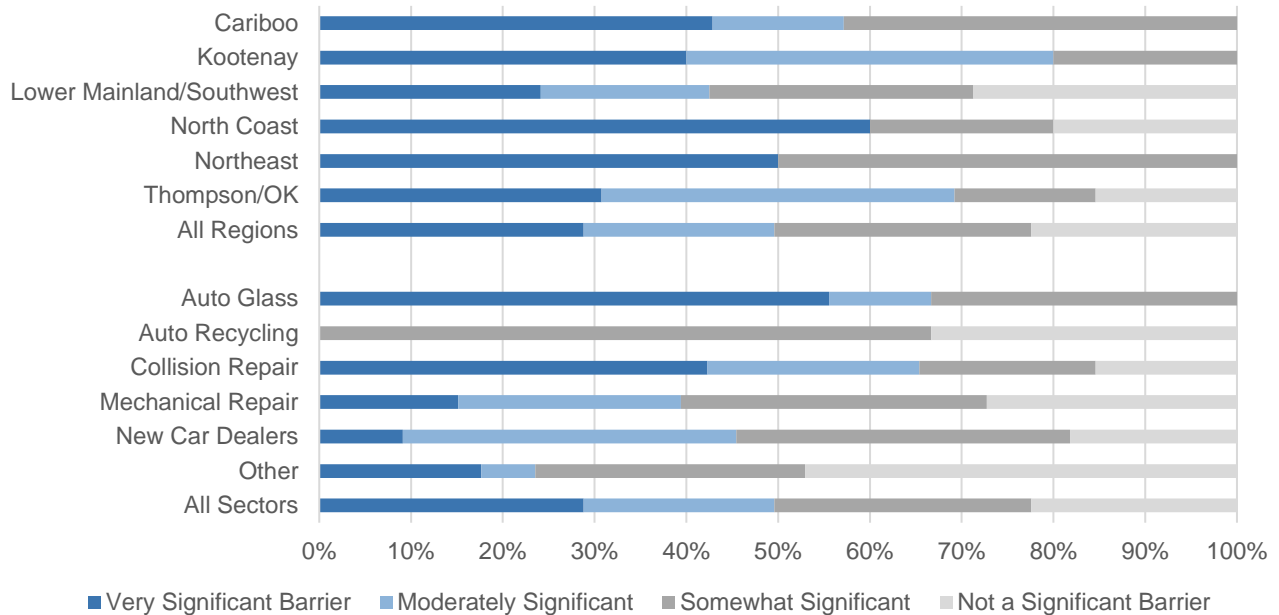
Source: Survey of Automotive Sector Employers

Employers that were interviewed by MNP indicated that they felt that automotive trades were perceived by young people as being for those that drop out of high school. A number of employers reported that they had tried to work with local high schools to get students to visit their business but there was a lack of interest both on the part of the school administration and on the part of students.

Lack of Available Training

Figure 6 shows employer perceptions of the significance of lack of available training in the area as a barrier to recruiting.

Figure 6: Significance of Lack of Available Training in the Area as a Barrier to Recruiting (N=125)



Source: Survey of Automotive Sector Employers

Survey respondents indicated that a lack of available training in the area was a significant barrier to recruiting. Respondents outside the Lower Mainland were more likely to report lack of training availability as a significant barrier.

Employers that were interviewed from Mechanical Repair indicated that there were challenges in providing training and support to technicians with respect to service requirements for new vehicles. This was due to service information and information on addressing known problems not always being readily available outside of dealer networks so technicians need to rely on informal networks and diagnostic skills when servicing these vehicles. This can cause significant stress and make it difficult to retain technicians with advanced diagnostic skills as they are highly valued both within the Automotive Sector and by other industries.

Other Barriers to Recruitment

A number of employers that were interviewed also indicated that they felt there was a general lack of job readiness skills among young people. This lack of skills was related to having appropriate expectations with respect to attendance and punctuality and the nature of employment. Common examples given by interviewees were that young people often have difficulty showing up for work on a regular basis and fail to advise their employer of absences, or do not provide notice when they quit.

Employers interviewed in the Lower Mainland indicated that the cost of living and in particular the cost of housing was creating issues with respect to recruiting for all occupations. Employees were not able to afford to live in the communities in which they worked and were facing significant commutes. This was perceived to be

increasing turnover rates and making it difficult to attract new employees. Some employers reported that they had responded to this by adjusting hours of work for employees to reduce the time staff spent commuting each day.

Employers outside the Lower Mainland also indicated that unwillingness to move was a barrier to recruiting.

Towing and Recovery Operators reported that hours of work were a barrier to recruiting. These employers provide 24 hour service and drivers and dispatchers may be required to work evenings, nights and weekends.

Appendix I contains information on employer perceptions of the significance of benefits, hours of work, job security, working conditions, the cost of tools and other barriers to recruiting. None of these factors was perceived to be a significant barrier by a majority of employers.

7. OTHER CONSIDERATIONS

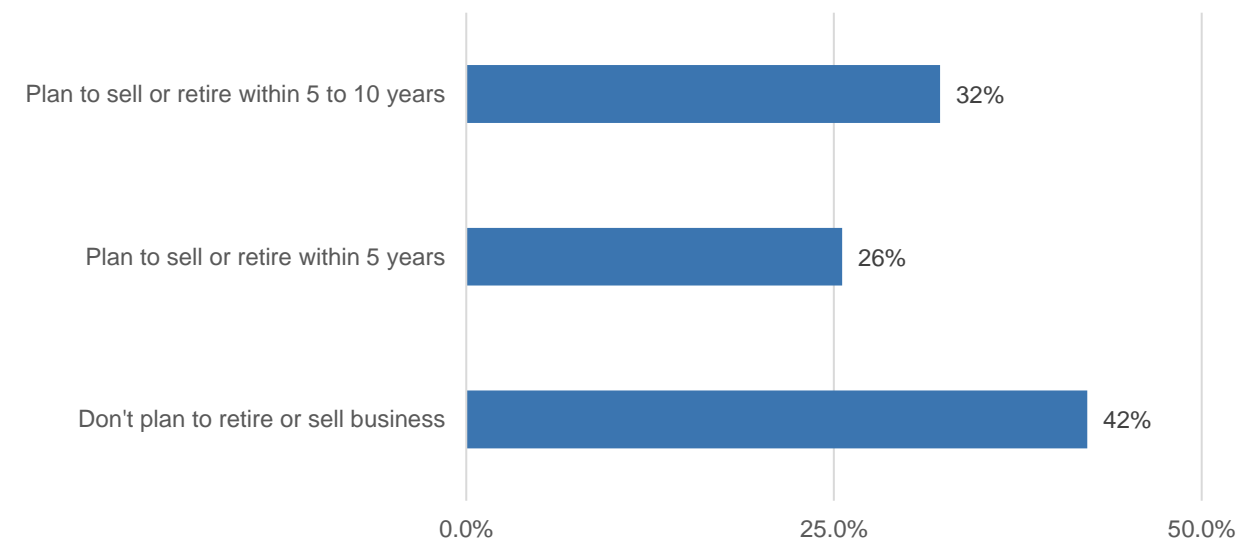
As part of a survey of Automotive Sector employers information was collected on succession plans, perceptions of the benefits of a collective pool of staff and suggestions for addressing the skills shortages in the Automotive Sector. The responses to these questions are presented in this section.

Succession Plans

Figure 7 shows the share of survey respondents that plan to sell their business between 2017 and 2026. Approximately 58 percent of employers reported that they planned to retire or sell their business during the period. Of those who plan to retire or sell their business approximately 69 percent expect their business to continue to operate.

Auto Glass Repair employers were the most likely to report plans to retire or sell their business while New Car Dealers were the least likely to report plans to retire or sell their business.

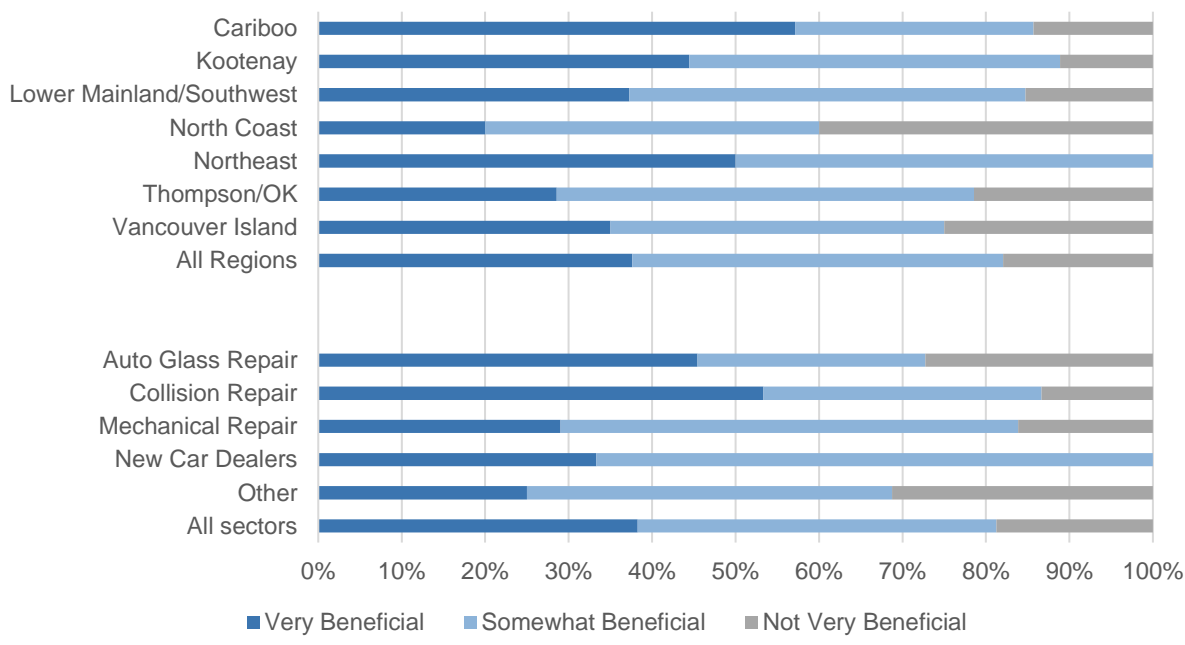
Figure 7: Do you plan to retire or sell your business? (N=90)



Source: Survey of Automotive Sector Employers

Figure 8 shows employer perceptions of the benefits of a collective pool of staff. Most employers perceived a collective pool of staff to be somewhat or very beneficial. Employers in Collision Repair and Auto Glass Repair were more likely than employers in other sub-sectors to indicate that a collective pool of staff would be very beneficial.

Figure 8: How beneficial to your business would a collective pool of staff that you could access in order to address short-term staffing needs be? (N=117)



Source: Survey of Automotive Sector Employers

Table 36 shows the comments by broad themes that were provided by employers in relation to the benefits of a collective pool of staff that could be accessed to address short term staffing needs. Please note that comments are presented as provided and have not been edited by MNP.

Table 36: Comments Provided by Employers on Pooling Staff Resources

Theme	Comments
Provide access to temporary workers / fill labour shortages	When apprentices go to school for 6 weeks, I hurt a lot. Having a temporary worker for that time would be extremely beneficial.
	If a reliable trustworthy person of experience could fill in for periods of time excellent.
	Short term gains to clear workload
	Very difficult to put a person in place for a short time frame in the shop. But for reception duties and general labour it would be helpful
	Most times we don't get much warning that someone is leaving, then the schedule is already set and customers are booked in. If there was a database we could access it would be very helpful to fill vacancies quickly.
	Geographically, we are located too far for anything of this sort to be worthwhile. If there was a local pool of staff to choose from, this might be helpful.
	Part time staff is rare in our sector and would fill a void.
	Having a pool to draw short term or possibly long term staff from would be a very beneficial service to draw from.
	With most of my staff nearing the end of their careers they miss more time & are not as fast as younger staff & @ times can't keep up. It would be nice to have a pool to draw from with eventual full time employment if work or staffing allows.
Provide access to technical staff / skilled labour	I need a body person.
	It would be very helpful to have access to trained people that could fill in vacancies.
	Especially in the area of tradesmen this would be great for vacation or sickness coverage.
	Technical only as administrative staff would be to involve/time consuming to orientate and trust.
	Always holidays, sickness days to be filled
	They would have to be certified. Also for quality control, and warranty it's better to have regular staff. also for security ,stealing we would have to know the person

Theme	Comments
	hard to find skilled
	It would be great to have a temp tech to fill a void until a permanent replacement can be found
	I believe our average age for auto body collision & painters techs avg age 45 - 55. the really only way of filling future spots will be via apprenticeship training , hopefully get more help from all levels of government
	Help maintain growth and profitability with trained techs at our disposal
	We need technicians or I may need to change my business plan and reduce non-technical staff further.
	Access to quality trained technicians is challenging. Certification programs are rarely offered at previous areas of employment and generally technicians seem unwilling to train beyond the minimum acceptable level.
	Very desperate at times for skilled workers, any means of finding them would be beneficial
	During busy times it would be great to have access to skilled tradespeople when needed.
	Difficult to find quality minded staff.
Support seasonal increases in workload / provide temporary labour relief to company staff	Not enough qualified staff available right now to cover vacations, sick leave and also to replace people that leave.
	Small company, low turnover. We could perhaps use vacation relief, but the person would have to be well versed in the type of work we do.
	Very beneficial as we are small, it would help during holidays
	So employees can take holidays.
	Great for temporary absences i.e. holidays, medical leave, etc.
	Sick days, mat leave.
	Would be beneficial to have reliable replacement staff for vacation, sickness and injured staff.
	To cover for vacation relief or extended absences
	Fill in for Employee Vacations would be helpful if qualified.
	would allow us to continue to run efficiently short staffed

Theme	Comments
	There are always times where holiday, sick and excessive busy spells bottleneck the shop
	With a constant need for more employees it makes it very difficult for our business to cover holidays and unexpected staff shortage from illness etc.
	Trying to find relief staff for holidays, unexpected leaves of absences and the like is VERY difficult, There aren't enough people in the industry to have an overflow pool
	Vacation Relief
	During holidays or when we have high volume.
	To minimally aid/cover holidays for my staff and not effect our service
	Would help during those seasonal times when business is busier
	Because we are backed up 1 - 2 months at all times it would be more beneficial to have full time employment.
	It takes to long to replace employees which leaves the shops short staffed for up to one year.
	Holidays

What approaches, mechanisms, training frameworks, and / or standards (if any) would you suggest to help address the skills shortages in the automotive industry?

Table 37 shows the suggestions by broad themes that were provided by employers in relation to addressing the skills shortages in the Automotive Sector. Please note that comments are presented as provided and have not been edited by MNP.

Table 37: Suggestions for Addressing Skills Shortage in Automotive Industry

Theme	Comments
<p>Inadequate basic training / Inadequate support from high school to promote trades</p>	<p>Too many new employees, students/ apprentices come to us without the basic hand/eye skills required to use hand tools and don't understand mechanical things from a hands on perspective, The physics of push/Pull or cause and effect or Action /reaction. The high schools have closed all there "shop" classes and replaced them with engineering and computer sciences classes. You can't build a house, do electrical and plumbing or change automotive brakes with an iPhone or Xbox remote!! the baby boomers tell their kids to stay out of the trades and to become lawyers and doctors, but that's not going to work because everyone drives cars and needs to get them fixed by someone.</p>
	<p>I believe the high schools have let down this industry the most. They do not promote our industry and have used it as a "dumping ground" for non academic students. Our trade is now highly skilled and technical, we are not attracting the right people! Most of the students that come out of the college pre-apprenticeship programs are not capable doing this job and should have never been enrolled. The collages are just out to make money on enrollment and their is no pre-qualifying to see of the student is even capable of this trade. Unfortunately the "right" type of person for our trade is not even looking in our direction as they have always be told by teachers & parents that our trade is dirty and beneath them!</p>
	<p>As glaziers there is not enough interest in trade fairs or schools</p>
<p>Enforcement of certification requirements</p>	<p>We need to put some weight behind the red seal certification and make it actually stand for something. We are constantly seeing sub-par repairs done by the customer or a 'friend' who does work on the side and it can sometimes be unsafe.</p>
	<p>Compulsory certification would ensure that employees have taken the necessary training.</p>
	<p>The Red Seal is nice however, there is no substitute for some experience and critical thinking.</p>
<p>Inadequate industry specific standards / regulations on licencing</p>	<p>Access to information, the price we have to pay for it and difficulty in licencing the technician. In the Automotive business environment the AST holds the place of the doctor. And does not have the respect or licencing to go with this new distinction. Very advanced skills also warrant a completely new way of looking at training and practical practice before permitted to preform repair and service duties on todays vehicles. How would you like to own a tesla and have an amateur</p>

Theme	Comments
	<p>service the electronic guidance system. Did you know a man was killed in a faulty Tesla a couple months ago.</p> <p>Hard to believe that with the complexity of today's vehicles that anyone can go out and purchase a business license and open up a repair shop with absolutely no qualifications or knowledge. But yet you have to be licensed to cut someone's hair for compensation! Don't recall the last time anyone was put into a potentially dangerous situation with their haircut but we see poor repairs on vehicles all the time which could lead to a very tragic end.</p> <p>We have perhaps 1 person who would benefit from training. All of our current drivers save the 1 youngster have several years, if not decades, of experience and at the upper levels of what they do. They will not be open to spending a day or a weekend proving to someone that they know what they are doing or writing/challenging a test. Wreckmaster is a nice start, if you're doing all work in a parking lot under great conditions. What happens when you're on a backwoods logging road alone with no cell service. There must be a plan that recognizes the long time, highly skilled tow operators.</p> <p>Give the training back to the industry, icbc training is a JOKE. Job placement after pre apprenticeship courses. Practicums or work experience to get young people interested in the trade.</p> <p>Setting standards that new employees expect and understand to help insure we have new blood in our industry. Inc proper wages and living increases such as other red sealed industries</p> <p>TOW AND RECOVERY INDUSTRY NEEDS SOME STANDARDS PARTICULAR TO THE INDUSTRY AS THERE ARE HUGE SAFETY ISSUES OVERLOOKED by ICBC, CVSE, Worksafe, Road Safety and the RCMP. Its crazy to think our industry can hire a person with a class 5 license with no training and put them into a tow/ recovery truck and set them lose on public roads and into dangerous conditions to earn a living.</p> <p>Cannot work on Insurance claims unless certified or working alongside certified person</p>
Wages / compensation	<p>Would bring greater credibility to the industry and a means to acquire greater compensation for what we do.</p> <p>Training people costs so much that you can't afford to pay competitive wages for apprentices.</p> <p>It's difficult to compete against other trades as far as entry level pay for apprentices.</p>
Low service charges	<p>Our door rates have been suppressed by the complete 3rd party style of monopolies that the insurance companies know they hold over us. Provincial</p>

Theme	Comments
	<p>financial or federal help with training expenses, employer wage subsidies for employing apprentices would all help our industries. Tool and training grants to apprentices would help them get into the trades without huge expenses to them. In short stop just talking about it, and start throwing some money around at these problems that have been very obvious for 20 plus years!!</p> <p>Our door rates are not high enough to draw young people. @ 73.41 compared to anywhere from \$90.00 to \$125.00hr depending on where you are, its hard to compete.</p> <p>The industry has failed miserably at supporting the up and comers, Higher rates will allow shops to provide training and equipment etc.</p> <p>We rebuild cars to accident ready condition under financial scrutiny and dictated profit schedules...all to OEM standards in a non factory setting. Please do the math</p>
<p>High expenses certification (schooling/training)</p>	<p>1. Help more with schooling. They only cover a portion of the school which the housing is expensive so that has not covered. Also with the lost wages EI goes not cover close to the wages. Then they have housing where they live that has to be paid. Then the employer has to be without a staff member while they are at school.</p> <p>2. Wages are going to have to change in order for wages to employees to change.</p> <p>3. Also more tool intensive because the cost for a body technician tools is approx. \$50,000 that is not something most can afford to start.</p> <p>you need a large investment of capital not only with equipment and constantly upgrades in training required for auto body technicians</p> <p>Distance, time and cost to attend on mainland can be a deterrent for technicians.</p>
<p>Limited interest from young people to join industry</p>	<p>Try to find young people for this trade</p> <p>Our industry appears to not have a good track record with the younger generation.</p> <p>Promote the trade to young people to encourage them to join. Increase labour rates to attract new tradespeople to the trade.</p>
<p>Promote the industry</p>	<p>This industry needs to let people know it is a good future for anyone getting into it.</p> <p>Clean up the reputation of the industry.</p>

APPENDIX A – LEGAL MATTERS

This report is provided for information purposes and is intended for general guidance only. It should not be regarded as comprehensive or a substitute for personalized business or investment advice. We have relied upon the completeness, accuracy and fair presentation of all information and data obtained from secondary sources and through primary research activities. The accuracy and reliability of the findings and opinions expressed in the presentation are conditional upon the completeness, accuracy and fair presentation of the information underlying them. As a result, we caution readers not to rely upon any findings or opinions expressed for business or investment purposes and disclaim any liability to any party who relies upon them as such.

Additionally, the findings and opinions expressed in the presentation constitute judgments as of the date of the presentation, and are subject to change without notice. MNP is under no obligation to advise of any change brought to its attention which would alter those findings or opinions.

Finally, our analysis is based on factors that rely on past events and approximations developed by government statistical agencies. These factors and approximations give expectation of current and future events. However, current and future events are not guaranteed to follow past events and results may vary, even significantly.

APPENDIX B – SURVEY OF AUTOMOTIVE SECTOR EMPLOYERS SAMPLE

Invitations

Invitations to participate in the study were sent to 1,884 members of the Automotive Sector. The distribution of invitations by category of business and region is shown in the table below.

Sub-sector	NAICS Code	Mainland/ Southwest	Vancouver Island/Coast	Thompson/ Okanagan	Cariboo	Kootenay	North Coast /Nechako	Northeast	Total
Auto Recyclers	4153	24	13	7	4	1	2	1	52
New Car Dealers	4412	154	65	67	24	27	13	11	361
Used Car Dealers	5321	468	104	122	26	21	11	3	755
Power Sport Dealers	44111	36	17	26	8	7	3	0	97
Aftermarket Parts*	44112	6	4	4	2	2	4	6	28
Towing and Recovery	44131	28	13	9	3	1	1	2	57
Auto Rental and Leasing	48841	3	2	0	0	0	0	0	5
Mechanical Repair	81111	112	17	6	5	5	1	5	151
Collision Repair	811121	141	24	23	8	13	3	3	215
Auto Glass Repair	811122	85	24	24	10	6	9	5	163
Total		1,052	279	284	88	81	43	31	1,884

*Invitations were sent to representatives at the large chains and each of these are counted as one.

The invitation list was compiled from a contact list of currently active dealers holding a Vehicle Sales Authority Dealer License provided by the Vehicle Sales Authority, member contact lists provided by the Automotive Retailers Association, and the list of designated vehicles inspection facilities posted on the Commercial Vehicle Safety and Enforcement website (http://www.th.gov.bc.ca/cvse/vehicle_inspections/PDF/DIFs.pdf).

Sample Design

Sub-sector	NAICS Code	Sample Design					Total Target Sample**	Invitations to be Sent	Notes
		Population* (Number of locations)	Lower Mainland Target	Vancouver Island Target	Other Regions Target				
Auto Recyclers	41531	43	5	2	3	10	30	Relatively small operations with relatively few employees	
New Car Dealers	44111	431	15	10	10	35	150	Combination of auto groups with multiple brands/locations and independents	
Used Car Dealers	44112	244	10	5	5	20	80		
Power Sport Dealers	4412	253	10	2	3	15	100		
Aftermarket Parts	44131	392	10	5	5	20	100	Few large players in this groups which will be targeted, as well as small shops.	
Towing and Recovery	48841	164	10	5	5	20	100	Primarily Independents serving specific geographic areas.	
Auto Rental and Leasing	5321	247	5	2	3	10	20	There are several large groups and a few independents. Large groups will be targeted.	
Mechanical Repair	81111	1,555	15	10	15	40	200	Mostly independent shops with some multi-location businesses	
Collision Repair	811121	733	15	10	15	40	200	Combination of large chains and independents.	
Auto Glass Repair	811122	185	15	10	15	40	130	Several large groups/chains will be targeted to provide employment information for all shops	
Total		4,247	110	61	79	250	1,110		

* Population is number of locations with employees from Statistics Canada. Table 552-0003 - Canadian business counts, location counts with employees, by employment size and North American Industry Classification System (NAICS), Canada and provinces, December 2015, semi-annual (number). A business with multiple locations will have each of its locations included in these counts.

**Includes large multi-location businesses. Each multi-location business is counted as one respondent.

Survey Respondents

The table below shows the distribution of survey respondents by sub-sector and region. These counts indicate the number employers, not the number of locations represented by the survey respondents.

Sub-sector	NAICS Code	Mainland/Southwest	Vancouver Island/Coast	Thompson / Okanagan	Kootenay	Cariboo	North Coast /Nechako	Northeast	Unknown	Total
Auto Recyclers	4153	4	2	1	1	2	0	0	0	10
New Car Dealers	4412	8	4	2	3	3	4	3	0	27
Used Car Dealers	5321	8	0	2	2	0	0	0	0	12
Power Sport Dealers	44111	4	2	0	0	0	0	1	0	7
Aftermarket Parts	44112	0	0	0	0	0	0	0	0	0
Towing and Recovery	44131	5	4	2	0	0	0	0	0	11
Auto Rental and Leasing	48841	5	2	0	0	1	0	0	0	8
Mechanical Repair	81111	39	6	1	2	2	0	0	0	50
Collision Repair	811121	49	14	11	5	4	3	1	0	87
Auto Glass Repair	811122	12	0	4	2	0	1	1	1	21
Total		134	34	23	15	12	8	6	1	233

The table below shows the distribution of locations represented by the survey respondents.

Sub-sector	NAICS Code	Mainland/Southwest	Vancouver Island	Thompson / Okanagan	Kootenay	Cariboo	North Coast /Nechako	Northeast	Unknown	Total
Auto Recyclers	4153	6	2	1	1	2	0	0	0	12
New Car Dealers	4412	25	4	2	3	3	6	3	0	46
Used Car Dealers	5321	8	0	2	2	0	0	0	0	12
Power Sport Dealers	44111	5	3	0	0	0	0	1	0	9
Aftermarket Parts	44112	0	0	0	0	0	0	0	0	0
Towing and Recovery	44131	8	4	2	0	0	0	0	0	14
Auto Rental and Leasing	48841	5	2	0	0	1	0	0	0	8
Mechanical Repair	81111	81	7	1	2	2	0	0	0	93
Collision Repair	811121	65	26	20	5	6	3	1	0	126
Auto Glass Repair	811122	13	0	4	2	1	3	1	15	39
Total		216	48	32	15	15	12	6	15	359

Interviews

The table below shows the distribution of interview participants by sub-sector and region. These counts indicate the number employers, not the number of locations represented by the interview participants.

Sub-sector	NAICS Code	Mainland/ Southwest	Vancouver Island/Coast	Thompson/ Okanagan, Cariboo, Kootenay	North Coast /Nechako, Northeast	Province- wide	Total
Auto Recyclers	4153	2	2	0	1	0	5
New Car Dealers	4412	1	2	4	0	1	8
Used Car Dealers	5321	0	0	1	0	0	1
Power Sport Dealers	44111	1	2	0	0	0	3
Aftermarket Parts	44112	0	0	1	0	1	2
Towing and Recovery	44131	4	2	3	0	0	9
Auto Rental and Leasing	48841	0	1	0	0	2	3
Mechanical Repair	81111	6	3	3	1	0	13
Collision Repair	811121	3	1	2	3	1	10
Auto Glass Repair	811122	4	1	0	2	0	7
Total		21	14	14	7	5	61

APPENDIX C – SECONDARY SOURCES

Description of Information	Source
Number of vehicles registered in BC	BC Stats
Number of policies in force	ICBC
Accident rates and claims	ICBC
Automotive workforce	Statistics Canada
Number of businesses	Statistics Canada
Job vacancy statistics	Statistics Canada
Vehicle Sales in BC	Statistics Canada
BC Student Outcomes Survey	BC Post Secondary Data Warehouse
Apprenticeships	Statistics Canada and Industry Training Authority
Apprenticeship completions	Industry Training Authority
Population statistics and projections	BC Stats
Wage rates by industry	Government of Canada Job Bank
Employment insurance recipients	Statistics Canada

APPENDIX D – OCCUPATION DESCRIPTIONS

The occupation descriptions contained in this appendix are based on National Occupation Classification System Codes for each occupation.

Skilled Trade Occupations

Occupation	NOC Code	Position Description
Partsperson (including apprentices)	1522	A partsperson rents, sells or leases tools, parts, vehicles and equipment to customers. They are employed by Aftermarket Parts retailers, wholesalers and New Car Dealers. They may also work in Auto Recyclers and Mechanical Repair shops.
Automotive Service Technician (including apprentices)	7321	Automotive Service Technicians examine, test and repair the parts and systems on cars and light trucks. Their work also involves reassembling and testing repaired items against manufacturers' standards and performing preventative maintenance such as wheel alignments, oil changes and tune ups. They are employed by Mechanical Repair shops and New Car Dealers.
Motor Vehicle Body Repairers (includes Collision Repair Technician, Automotive Glass Technician, Automotive Painter, Automotive Refinishing Prep Technician and apprentices)	7322	Motor vehicle body repairers repair and replace damaged vehicle body parts and interior finishing, repaint body surfaces and may replace automotive glass. They may be employed in Auto Glass Repair shops, Collision Repair shops, New Car Dealers, automobile appraisal centres and Auto Recyclers.
Motorcycle Mechanic (including apprentices)	7334	Mechanics in this unit group test, repair and service motorcycles, motor scooters, snowmobiles, forklifts and all-terrain vehicles. They are employed by the Power Sport Dealers and by independent repair establishments.

Other Trades and Technical Occupations

Occupation	NOC Code	Position Description
Inventory/Warehouse Person	1522	Inventory and Warehouse employees in the Automotive Sector compile and maintain records of quantity, type and value of material, equipment, merchandise, or supplies. They may be employed at Aftermarket Parts retailers, New Car Dealers, Power Sport Dealers and Auto Recyclers.
Lot Person	6742	Lot employees are responsible for managing and caring for the cars in a car lot. Attendants work at different kinds of lots, including at New Car Dealers, Used Car Dealers and Auto Rental and Leasing agencies.
Auto Dismantler	7445	Auto Dismantlers carefully takes a vehicle apart and places salvageable parts into an inventory to be sold or used in future auto repairs. They are employed by Auto Recyclers.
Tow Truck Operator	7511	Tow Truck Operators offer a variety of vehicle-related repair and hauling services to non-commercial and commercial vehicle drivers, police, municipalities and even other tow truckers. They may be employed by Towing and Recovery companies and other businesses in the Automotive Sector.
Parts Delivery Driver	7514	Delivery and courier service drivers drive automobiles, vans and light trucks to pick up and deliver auto parts. They are mainly employed by Aftermarket Parts retailers but may also be employed by New Car Dealers, Mechanical Repair shops, and elsewhere in the Automotive Sector.
Detailer	7612	Detailers clean, wash and wax vehicles such as passenger cars, trucks, vans and trailers. They may be employed by New Car Dealers, Used Car Dealers, Auto Rental and Leasing agencies, Collision Repair shops and Auto Glass Repair shops.
Shop Helper	7612	This unit group includes trade helper and labourers who assist skilled tradespersons and perform laboring activities in the maintenance and repair of vehicles, motorcycles, and other power sport vehicles. They are employed throughout the Automotive Sector.

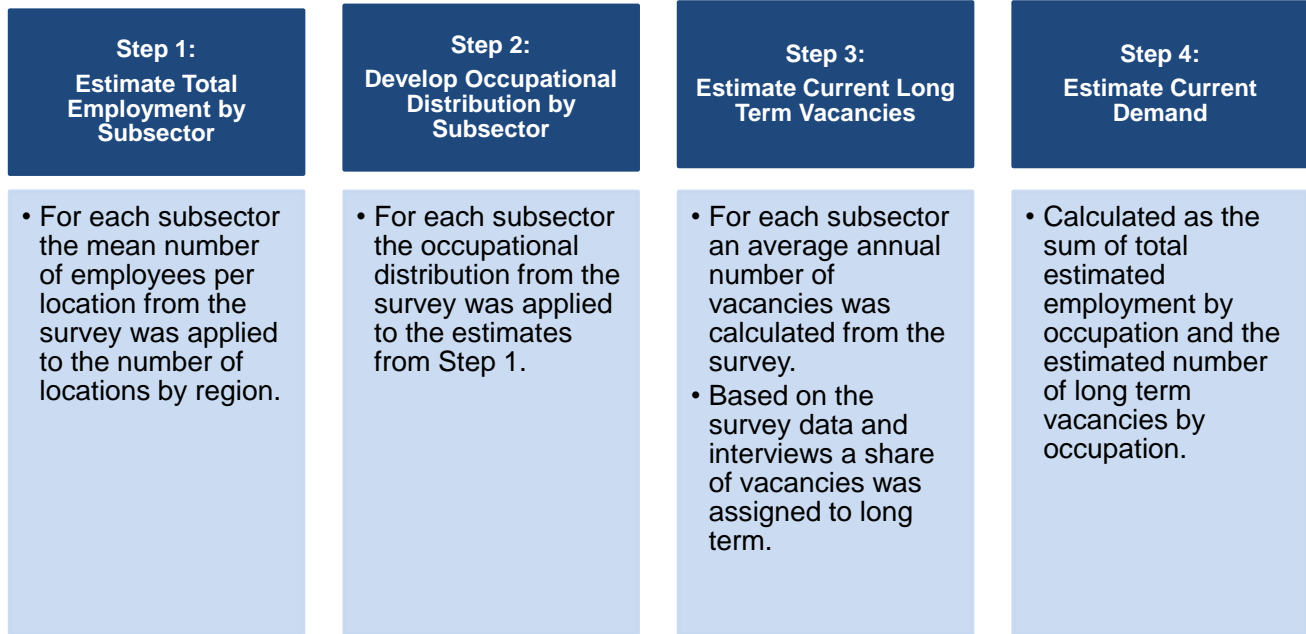
Sales, Management and Administration Occupations

Occupation	NOC Code	Position Description
Controller	0013	Controllers will hold a significant leadership position within a participating Automotive Sector company. They are responsible for planning, organizing, directing, controlling, and evaluating the operations of their Automotive Sector company /organization in relation to established objectives.
Finance Manager	0122	Finance Managers are responsible for overseeing the finance/credit departments in New Car Dealers and Used Car Dealers in the Automotive Sector. They may also be employed by Auto Rental and Leasing agencies. Their responsibilities include planning, organizing, directing, controlling and evaluating the activities of the department.
Sales Manager	0621	Sales Managers plan, organize, direct, control and evaluate the sales operations of establishments within the Automotive Sector that sell merchandise or services on a retail or wholesale basis. They are employed throughout the Automotive Sector.
Fixed Operations Manager	0621	Fixed Operations Manager plan organize, direct, control and evaluate the operations of repair and maintenance shops/garages or dealership's repair departments. They supervise a team of technicians, or other staff in the repair department or organization and are responsible for managing work load, inventory, and client service.
Service Manager	0651	Service Managers plan, organize, direct and control service departments in New Car Dealers. They respond to customer inquiries and resolve problems.
Parts Manager	1215	Supervisors in this unit group supervise and co-ordinate the activities of partspersons (NOC 1522). They are employed by Aftermarket Parts retailers, wholesalers, New Car Dealers, and Auto Recyclers.
Business Office (includes general administrators that are not customer facing and that perform multiple functions such as bookkeeping, payroll, human resources etc.)	1411	General office support workers prepare correspondence, reports, statements and other material, operate office equipment, answer telephones, verify, record and process forms and documents such as contracts and requisitions and perform general clerical duties according to established procedures. They are employed throughout the Automotive Sector.
Warranty Clerk	1411	Warranty Clerks organize, process and review warranty claims made by the customers and ensure that their employers are paid for all product maintenance parts or replacements covered under a warranty. They are usually employed by New Car Dealers or Aftermarket Parts retailers.

Occupation	NOC Code	Position Description
Customer Service Representative (includes receptionists and front desk staff and customer facing staff not otherwise specified)	1414	Customer Service Representatives are responsible for greeting customers arriving at the front desks / greeting areas, directing visitors to appropriate people or services, answering and forwarding telephone calls, taking messages, scheduling appointments and performing other clerical duties. They are employed throughout the automotive sector.
Leasing Agents	6421	Leasing Agents lease a range of vehicles including commercial, motorcycles, power sport vehicles, and personal vehicles to customers. They are employed by New Car Dealers, Power Sport Dealers and Auto Rental and Leasing agencies.
Licensed Automotive Salesperson	6421	Licensed Automotive Salespeople sell or lease a range of vehicles including commercial vehicles, motorcycles, power sport, and personal vehicles to customers. They are employed by New Car Dealers, Used Car Dealers and other businesses that sell vehicles..
Service Advisor	6552	Service Advisors supervise and co-ordinate the activities of Customer Service Representatives in the Automotive Sector. They are employed throughout the Automotive Sector by businesses offering repair services.
Estimator	7321/7322	Estimators inspect vehicles to determine the level of damage, and cost of repairs. Estimators may be employed by New Car Dealers, Used Car Dealers, Collision Repair Shops and Auto Glass Repair shops.
Tow Dispatcher	1525	Tow Dispatchers operate radios and other telecommunication equipment to support tow truck operators.

APPENDIX E – APPROACH USED TO ESTIMATE CURRENT WORKFORCE

Estimates of Labour Demand



The table below shows the mean number of employees by sub-sector that was used to estimate the current workforce.

Mean Number of Employees per Location

	Mean
Aftermarket Parts*	0.0
Auto Glass	5.6
Auto Recycling	8.8
Auto Rental and Leasing	5.3
Collision Repair	9.2
Mechanical Repair	7.3
New Car Dealer	37.2
Power Sport Dealer	15.4
Towing and Recovery	10.7
Used Car Dealer	5.8

Source: Survey of Automotive Employers

*Aftermarket Parts employees were estimated based on information provided through interviews and data from CANSIM Table 281-0024.

Occupational Distribution by Sub-sector

Occupation	NOC Code	Aftermarket Parts	Auto Glass	Auto Recycling	Auto Rental and Leasing	Collision Repair	Mechanical Repair	New Car Dealers	Power Sport Dealer	Towing and Recovery	Used Car Dealer
Skilled Trades											
Partsperson	1522	42.5%	0.0%	25.3%	0.0%	0.0%	3.6%	4.9%	3.9%	0.0%	0.0%
Automotive Service Technician	7321	0.0%	0.0%	2.5%	16.9%	0.0%	37.2%	14.0%	2.6%	1.4%	5.7%
Collision Repair Technician	7322	0.0%	0.0%	2.5%	0.0%	24.8%	2.0%	0.2%	0.0%	0.0%	0.0%
Automotive Glass Technician	7322	0.0%	47.6%	0.0%	0.0%	2.8%	0.0%	0.1%	0.0%	0.0%	0.0%
Automotive Painter	7322	0.0%	0.0%	0.0%	0.0%	13.0%	0.0%	0.1%	0.0%	0.0%	0.0%
Automotive Refinishing Prep Technician	7322	0.0%	0.0%	0.0%	0.0%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Motorcycle Mechanic	7334	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	5.7%
Apprentices											
Partsperson Apprentice	1522	1.3%	0.0%	1.3%	0.0%	0.0%	0.4%	0.4%	2.6%	0.0%	0.0%
Automotive Service Technician Apprentice	7321	0.0%	0.0%	0.0%	0.0%	0.0%	14.6%	4.9%	1.3%	0.0%	0.0%
Collision Repair Technician Apprentice	7322	0.0%	0.0%	0.0%	0.0%	6.8%	0.8%	0.1%	0.0%	0.0%	0.0%
Automotive Glass Technician Apprentice	7322	0.0%	23.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Automotive Painter Apprentices	7322	0.0%	0.0%	0.0%	0.0%	2.8%	0.0%	0.1%	0.0%	0.0%	0.0%
Motorcycle Mechanic Apprentice	7334	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Trades and Technical											
Inventory / Warehouse Person	1522	12.5%	0.0%	5.1%	0.0%	0.6%	0.0%	0.4%	2.6%	0.0%	0.0%
Lot Person	6742	0.0%	0.0%	0.0%	4.6%	0.0%	2.8%	8.9%	1.3%	0.0%	2.9%
Auto Dismantler	7445	0.0%	0.0%	39.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Tow Truck Operator	7511	0.0%	0.0%	3.8%	0.0%	0.0%	0.8%	0.0%	0.0%	68.3%	0.0%
Parts Delivery Driver	7514	25.0%	0.0%	1.3%	0.0%	0.2%	0.0%	1.3%	0.0%	0.0%	0.0%
Detailer	7612	0.0%	0.4%	0.0%	30.8%	8.8%	2.8%	5.0%	2.6%	0.0%	14.3%
Shop Helper	7612	0.0%	0.8%	0.0%	0.0%	1.6%	2.4%	1.3%	48.1%	0.0%	5.7%
Sales, Management and Administration											
Controller	0013	0.0%	0.4%	2.5%	0.0%	0.8%	0.4%	1.2%	1.3%	0.0%	2.9%
Finance Manager	0122	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	4.8%	1.3%	0.0%	0.0%
Fixed Operations Manager	0621	0.0%	0.0%	0.0%	0.0%	1.4%	0.4%	1.4%	0.0%	0.0%	0.0%
Sales Manager	0621	12.5%	0.4%	0.0%	1.5%	0.2%	0.0%	4.7%	1.3%	0.0%	14.3%
Service Manager	0651	0.0%	0.0%	1.3%	1.5%	0.4%	4.0%	1.6%	2.6%	0.0%	0.0%
Parts Manager	1215	6.3%	0.0%	0.0%	1.5%	0.6%	0.4%	1.4%	2.6%	0.0%	0.0%
Business Office	1411	0.0%	14.6%	8.9%	7.7%	12.0%	10.5%	6.7%	9.1%	9.0%	25.7%
Warranty Clerk	1411	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%
Customer Service Representative	1414	0.0%	9.8%	0.0%	26.1%	6.0%	2.8%	7.2%	6.5%	1.4%	5.7%
Tow Dispatcher	1525	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	18.6%	0.0%
Leasing Agent	6421	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%
Licensed Automotive Salespeople	6421	0.0%	0.0%	2.5%	6.2%	0.0%	1.6%	20.6%	5.2%	0.0%	14.3%
Service Advisor	6552	0.0%	0.8%	1.3%	1.5%	0.0%	8.9%	6.2%	1.3%	0.0%	2.9%
Estimator	7322	0.0%	1.6%	0.0%	0.0%	12.2%	0.0%	0.1%	0.0%	0.0%	0.0%

Vacancy Rates and Long Term Vacancies by Occupation

Occupation	NOC Code	Vacancy Rate*	Share Long Term Vacancies **
Skilled Trades			
Partsperson	1522	4%	0%
Automotive Service Technician	7321	9%	53%
Collision Repair Technician	7322	6%	48%
Automotive Glass Technician	7322	4%	35%
Automotive Painter	7322	11%	21%
Automotive Refinishing Prep Technician	7322	14%	10%
Motorcycle Mechanic	7334	X	X
Apprentices			
Partsperson Apprentice	1522	25%	0%
Automotive Service Technician Apprentice	7321	16%	21%
Collision Repair Technician Apprentice	7322	18%	29%
Automotive Glass Technician Apprentice	7322	3%	X
Automotive Painter Apprentices	7322	14%	21%
Motorcycle Mechanic Apprentice	7334	X	X
Other Trades and Technical			
Inventory / Warehouse Person	1522	6%	0%
Lot Person	6742	7%	0%
Auto Dismantler	7445	4%	25%
Tow Truck Operator	7511	3%	0%
Parts Delivery Driver	7514	10%	0%
Detailers	7612	10%	0%
Shop Helper	7612	7%	0%
Sales, Management and Administration			
Controller	0013	9%	0%
Finance Manager	0122	7%	0%
Fixed Operations Manager	0621	12%	0%
Sales Manager	0621	8%	0%
Service Manager	0651	10%	0%
Parts Manager	1215	13%	0%
Business Office	1411	8%	0%
Warranty Clerk	1411	14%	0%
Customer Service Representative	1414	8%	0%
Tow Dispatcher	1525	6%	0%
Leasing Agent	6421	6%	0%
Licensed Automotive Salespeople	6421	4%	0%
Service Advisor	6552	12%	0%
Estimator	7322	7%	0%

Source: Survey of Automotive Sector Employers

X – sample too small to produce and estimate.

*Vacancy rate is the estimated share of positions that become vacant in a given year.

** Share Long Term Vacancies are the share of vacancies that take more than three months to fill.

Estimates of Labour Supply

The following approach was used to calculate the current labour supply:

- Labour Supply = (current employed workforce) + (unemployed workers eligible for the position)
- Estimates of the number of unemployed for non-skilled trade occupations were derived based on the average unemployment rates by occupation in BC between January and June 2016.
- For unskilled entry level positions (e.g. Detailers, Lot Person, Shop Helper) the unemployment rate for those aged 15 to 24 was used.
- For Skilled Trades an unemployment rate was derived using data on EI claimants in Automotive Trades from Statistics Canada and the estimated workforce for skilled trades using the following assumptions:
 - EI claimants that were apprentices was estimated to be between 28 percent and 32 percent¹²
 - 60 percent of unemployed tradespeople are eligible for regular EI payments.¹³
 - Unemployed Skilled Trades = (number of EI claimants less estimated number of apprentices on EI)/0.6
 - Unemployment Rate = Unemployed Skilled Trades / (Employed Skilled Trades + Unemployed Skilled Trades)

Unemployment Rates by Occupation

NOC Code	Unemployment Rate	Source
0013	2.2%	Average unemployment rate in BC in Business, Finance and Administration Occupations Jan-Jun 2016, BC Stats Monthly Labour Force Periodical
0122	2.2%	
1411	2.2%	
7321	2.5%	MNP Estimate
7322	2.5%	
7334	2.5%	
7445	2.5%	
7511	2.5%	
0621	5.0%	Average unemployment rate in BC among Sales and Service Occupations Jan-Jun 2016, BC Stats Monthly Labour Force Periodical
0651	5.0%	
1215	5.0%	
1414	5.0%	
1525	5.0%	
6421	5.0%	
6552	5.0%	Average unemployment rate in BC among Trades Transport and Equipment Operators Jan-Jun 2016, BC Stats Monthly Labour Force Periodical
1522	5.1%	
7611	5.1%	Average unemployment rate in BC among 15-24 year olds Jan-Jun 2016, BC Stats Monthly Labour Force Periodical
6742	12.0%	
7514	12.0%	

¹² This estimate was derived based on information provided by Automotive Sector employers interviewed by MNP, seasonal variation in monthly claimants and correlation between changes in the number of monthly EI claimants and the availability of apprenticeship training.

¹³ This is based on an estimate that approximately 80 percent of the labour force is covered by EI in Canada and 75 percent of eligible unemployed Skilled Trades receive benefits while they are between jobs.

APPENDIX F – APPROACH USED IN DEMAND AND SUPPLY FORECASTS

This appendix describes our approach to estimating labour supply and demand projections and documents key assumptions related to industry and demographic trends over the next ten year period.

Labour Demand Assumptions

There are a number of factors that affect the demand for labour in the automotive sector. These factors vary by occupation and subsector. The following table highlights the approach used to develop labour demand projections for each occupation.

Job Type	Occupations	Job Growth Assumptions	Exceptions
Entry Level Occupations	<ul style="list-style-type: none"> Auto Dismantler Detailer Lot Person Parts Delivery Driver Shop Helper Administration Clerk Customer Service Representative Service Advisor Tow Dispatcher 	Demand for entry level occupations is based on growth in the number of locations in each sub-sector.	To adjust to changes in vehicle technology, collision repair shops will add an Administration research position in the 6 to 10 year forecast period. Demand for Detailer and Customer Service Representative at New Car Dealers is based on growth in the vehicle fleet.
Skilled Trades	<ul style="list-style-type: none"> Collision Repair Technician 	Demand for Collision Repair Technician is driven by the number of vehicle repairs in a given year, assuming that each repair requires 10 hours of a technician's time.	New jobs will be created once the utilization of existing Collision Repair Technicians exceeds 75%.
	<ul style="list-style-type: none"> Automotive Glass Technician 	Growth in the number of Automotive Glass Technician is driven by growth in the number of glass repairs.	
	<ul style="list-style-type: none"> Automotive Painter 	Demand for Collision Repair Technician is driven by the number of vehicle repairs in a given year, assuming that each repair requires 6 hours of a painter's time.	
	<ul style="list-style-type: none"> Automotive Refinishing Prep Technician 	Demand for Automotive Refinishing Prep Technician is driven by growth in the number of locations in each sub-sector.	
	<ul style="list-style-type: none"> Automotive Service Technician Motorcycle Mechanic 	Demand for Automotive Service Technician and Motorcycle Mechanic Apprentice is driven by growth in the fleet of registered vehicles.	
	<ul style="list-style-type: none"> Partsperson 	Demand for Partsperson is driven by growth in the number of locations in each sub-sector.	Demand for Partsperson at New Car Dealers is based on growth in the vehicle fleet.
Apprentices	<ul style="list-style-type: none"> Collision Repair Technician Apprentice Automotive Glass Technician Apprentice Automotive Painter Apprentice Automotive Service Technician Apprentice Partsperson Apprentice 	Demand for Apprentice is driven by retirements and exits of the workforce in each skilled trade occupations and growth in the vehicle fleet.	

Job Type	Occupations	Job Growth Assumptions	Exceptions
Management Occupations	<ul style="list-style-type: none"> • Controller • Fixed Operations Manager • Parts Manager • Sales Manager • Service Manager 	Demand for Controller, Fixed Operations Manager, Parts Manager, Sales Manager and Service Manager based on growth in the number of locations in each sub-sector.	Demand for Sales Manager at New Car Dealers is based on growth in the vehicle fleet.
	<ul style="list-style-type: none"> • Finance Manager 	Demand for Finance Managers is based on growth in vehicle sales.	
Other	<ul style="list-style-type: none"> • Inventory / Warehouse Person • Tow Truck Operator • Estimator • Warranty Clerk 	Demand for Inventory / Warehouse Person, Tow Truck Operator, Estimator and Warranty Clerk is based on growth in the number of locations in each sub-sector.	Demand for Inventory / Warehouse Person and Warranty Clerk at New Car Dealers is based on growth in the vehicle fleet.
	<ul style="list-style-type: none"> • Leasing Agents • Licensed Automotive Salesperson 	Demand for Leasing Agents and Licensed Automotive Salesperson is based on growth in vehicle sales.	

Key Assumptions

The key assumptions that were used to estimate the labour demand projections for each occupation are provided below:

- For each sub-sector, net growth in the number of locations is assumed to equal 0% annually from 2016 to 2026.
- Vehicle sales were expected to grow by 6.1% per year in 2017 and 2018, 4% annually between 2019 and 2021, and 3% annually between 2022 and 2026.
- The fleet of registered passenger and commercial vehicles is expected to grow by 2.1% annually from 2016 to 2026.
- The number of collision repairs as a percentage of registered vehicles is expected to be about 7.6% each year (equal to the three year historical average), resulting in growth in the number of repairs of 2.0% to 2.2% annually.
- The number of glass repairs as a percentage of vehicles is expected to be about 3.9% each year (equal to the three year historical average), resulting in growth in the number of glass repairs of 1.6% to 2.1% annually.

Labour Supply Assumptions

Our approach to labour supply projections takes into account the unique skill requirements of the skilled trade occupations relative to non-trades occupations. The following table highlights the approach used for each job type.

Job Type	Occupations	Labour Supply Assumptions
Entry Level Occupations	<ul style="list-style-type: none"> • Auto Dismantler • Detailer • Lot Person • Parts Delivery Driver • Shop Helper • Administration Clerk • Customer Service Representative • Service Advisor • Tow Dispatcher 	Labour supply is based on changes in working population aged 25 to 34.
Skilled Trades	<ul style="list-style-type: none"> • Collision Repair Technician • Automotive Glass Technician • Automotive Painter • Automotive Refinishing Prep Technician • Automotive Service Technician • Motorcycle Mechanic Apprentice • Partsperson 	Retirements/Exits: The share of the current workforce that is expected to retire or exit from the industry or workforce was calculated based on our survey of employers. New Entrants: New entrants to each trades position is equal to one-fourth of the supply of apprentices in the previous year assuming a 60% completion rate in the apprenticeship program.
Apprentice	<ul style="list-style-type: none"> • Collision Repair Technician Apprentice • Automotive Glass Technician Apprentice • Automotive Painter Apprentice • Automotive Service Technician Apprentice • Partsperson Apprentice 	Retirements/Exits: The share of current apprentices that were expected to exit the industry or workforce was calculated based on responses provided in our survey of employers. New Entrants: The number of new automotive apprentices is based on changes in the working population aged 20 to 24 (assumes a fixed proportion of Apprentice as a share of the working population aged 20 to 24).
Management Occupations	<ul style="list-style-type: none"> • Controller • Fixed Operations Manager • Parts Manager • Sales Manager • Service Manager • Finance Manager 	Labour supply is based on changes in working population aged 30 to 54.
Other	<ul style="list-style-type: none"> • Inventory / Warehouse Person • Tow Truck Operator • Estimator • Warranty Clerk • Leasing Agents • Licensed Automotive Salesperson 	Labour supply is based on changes in working population aged 25 to 44.

Making Comparisons with the BC Labour Market Outlook Forecasts

In comparing the forecasts in this study with the BC Labour Market Outlook (“LMO”) it is important to note the following:

- A number of Automotive Trade occupations are also present in sectors outside of the Automotive Sector. Consequently the employment estimates and demand estimates presented here are not equivalent to total estimated employment in Automotive Trade occupations in BC.
- The sector groupings used in the LMO are different than those used in this study. The primary difference is that the Automotive Sector as defined for this study includes a subset of the industry groups 8111 4413. As a result, total employment in these NAICS codes is not captured in the estimates presented in this study.
- Demand estimates for apprentices represent the number of apprentice positions that are needed to fill forecast vacancies for skilled trades taking into account attrition and completion rates. The demand estimates for apprentices are not equal to the future supply of skilled trades.
- According to employers interviewed by MNP, the nature and demand for estimator positions in Collision Repair shops has changed significantly since 2011 as more estimating is being done by shops rather than by the Insurance Corporation of British Columbia. The estimator position is classified as NOC 7322 – Motor Vehicle Body Repairer but is not a skilled trade position requiring certification. As a result, it is likely that estimates of employment based on Statistics Canada’s 2011 National Household survey will underestimate employment in this NOC code.

APPENDIX G – LABOUR DEMAND

Forecast Job Openings Mainland/Southwest

Forecast Job Openings 2017 to 2021 (Mainland/Southwest)

Occupation	NOC Code	Expansion Demand	Replacement Demand	Total Job Openings
Skilled Trades				
Partsperson	1522	8	227	235
Automotive Service Technician	7321	264	676	940
Collision Repair Technician	7322	3	260	263
Automotive Glass Technician	7322	40	82	122
Automotive Painter	7322	63	150	213
Automotive Refinishing Prep Technician	7322	X	20	20
Motorcycle Mechanics	7334	X	X	X
Other Trades and Technical				
Inventory / Warehouse Person	1522	2	57	59
Lot Person	6742	X	166	166
Auto Dismantlers	7445	X	2	2
Tow Truck Operators	7511	X	52	52
Parts Delivery Drivers	7514	X	168	168
Detailers	7612	9	478	488
Shop Helpers	7612	X	179	179
Sales, Management and Administration				
Controllers	0013	X	36	36
Finance Managers	0122	49	53	102
Fixed Operations Managers	0621	X	44	44
Sales Manager	0621	5	148	153
Service Managers	0651	X	153	153
Parts Managers	1215	X	124	124
Business Office	1411	X	670	670
Warranty Clerks	1411	0	40	41
Customer Service Representatives	1414	10	429	439
Tow Dispatchers	1525	X	42	42
Leasing Agents	6421	13	29	42
Licensed Automotive Sales People	6421	233	254	488
Service Advisors	6552	X	290	290
Estimators	7321/7322	X	63	63

X – too unreliable to publish.

Forecast Job Openings 2022 to 2026 (Mainland/Southwest)

Occupation	NOC Code	Expansion Demand	Replacement Demand	Total Job Openings
Skilled Trades				
Partsperson	1522	8	309	317
Automotive Service Technician	7321	283	869	1,152
Collision Repair Technician	7322	134	362	496
Automotive Glass Technician	7322	48	112	160
Automotive Painter	7322	70	165	234
Automotive Refinishing Prep Technician	7322	X	20	20
Motorcycle Mechanics	7334	X	X	X
Other Trades and Technical				
Inventory / Warehouse Person	1522	2	92	93
Lot Person	6742	X	169	169
Auto Dismantlers / Parts Pullers	7445	X	6	6
Tow Truck Operators	7511	X	66	66
Parts Delivery Drivers	7514	X	168	168
Detailers	7612	9	487	496
Shop Helpers	7612	X	226	226
Sales, Management and Administration				
Controllers	13	X	50	50
Finance Managers	122	33	73	107
Fixed Operations Managers	621	X	64	64
Sales Manager	621	5	163	168
Service Managers	651	X	158	158
Parts Managers	1215	X	108	108
Business Office	1411	231	784	1,016
Warranty Clerks	1411	1	37	38
Customer Service Representatives	1414	10	429	439
Tow Operators/ Dispatchers	1525	X	48	48
Leasing Agents	6421	9	38	47
Licensed Automotive Sales People	6421	158	304	462
Service Advisors	6552	X	225	225
Estimators	7321/7322	X	78	78

X – too unreliable to publish.

Forecast Job Openings Vancouver Island/Coast

Forecast Job Openings 2017 to 2021 (Vancouver Island/ Coast)

Occupation	NOC Code	Expansion Demand	Replacement Demand	Total Job Openings
Skilled Trades				
Partsperson	1522	3	78	81
Automotive Service Technician	7321	84	214	298
Collision Repair Technician	7322	1	54	55
Automotive Glass Technician	7322	8	16	24
Automotive Painter	7322	12	30	42
Automotive Refinishing Prep Technician	7322	X	4	4
Motorcycle Mechanics	7334	X	X	X
Other Trades and Technical				
Inventory / Warehouse Person	1522	1	21	22
Lot Person	6742	X	60	60
Auto Dismantlers / Parts Pullers	7445	X	1	1
Tow Truck Operators	7511	X	22	22
Parts Delivery Drivers	7514	X	50	50
Detailers	7612	3	145	148
Shop Helpers	7612	X	105	105
Sales, Management and Administration				
Controllers	0013	X	13	13
Finance Managers	0122	19	21	40
Fixed Operations Managers	0621	X	13	13
Sales Manager	0621	2	49	51
Service Managers	0651	X	54	54
Parts Managers	1215	X	46	46
Business Office	1411	X	209	209
Warranty Clerks	1411	0	15	15
Customer Service Representatives	1414	3	146	150
Tow Operators/ Dispatchers	1525	X	17	17
Leasing Agents	6421	5	11	16
Licensed Automotive Sales People	6421	88	96	184
Service Advisors	6552	X	97	97
Estimators	7321/7322	X	12	12

X – too unreliable to publish.

Forecast Job Openings 2022 to 2026 (Vancouver Island and Coast)

Occupation	NOC Code	Expansion Demand	Replacement Demand	Total Job Openings
Skilled Trades				
Partsperson	1522	3	107	110
Automotive Service Technician	7321	90	276	365
Collision Repair Technician	7322	28	75	103
Automotive Glass Technician	7322	9	22	31
Automotive Painter	7322	14	33	46
Automotive Refinishing Prep Technician	7322	X	4	4
Motorcycle Mechanics	7334	X	X	X
Other Trades and Technical				
Inventory / Warehouse Person	1522	1	34	34
Lot Person	6742	X	61	61
Auto Dismantlers / Parts Pullers	7445	X	4	4
Tow Truck Operators	7511	X	28	28
Parts Delivery Drivers	7514	X	50	50
Detailers	7612	3	147	150
Shop Helpers	7612	X	133	133
Sales, Management and Administration				
Controllers	0013	X	18	18
Finance Managers	0122	13	28	42
Fixed Operations Managers	0621	X	19	19
Sales Manager	0621	2	54	56
Service Managers	0651	X	56	56
Parts Managers	1215	X	40	40
Business Office	1411	45	245	290
Warranty Clerks	1411	0	14	14
Customer Service Representatives	1414	3	146	150
Tow Operators/ Dispatchers	1525	X	19	19
Leasing Agents	6421	3	14	17
Licensed Automotive Sales People	6421	60	114	174
Service Advisors	6552	X	75	75
Estimators	7321/7322	X	15	15

X – too unreliable to publish.

Forecast Job Openings Thompson/Okanagan, Cariboo and Kootenay

Forecast Job Openings 2017 to 2021 (Thompson/Okanagan, Cariboo and Kootenay)

Occupation	NOC Code	Expansion Demand	Replacement Demand	Total Job Openings
Skilled Trades				
Partsperson	1522	5	130	134
Automotive Service Technician	7321	121	310	432
Collision Repair Technician	7322	1	83	84
Automotive Glass Technician	7322	20	41	61
Automotive Painter	7322	19	46	65
Automotive Refinishing Prep Technician	7322	X	6	6
Motorcycle Mechanics	7334	X	X	X
Other Trades and Technical				
Inventory / Warehouse Person	1522	1	37	38
Lot Person	6742	X	83	83
Auto Dismantlers / Parts Pullers	7445	X	2	2
Tow Truck Operators	7511	X	36	36
Parts Delivery Drivers	7514	X	95	95
Detailers	7612	4	189	193
Shop Helpers	7612	X	155	155
Sales, Management and Administration				
Controllers	0013	X	18	18
Finance Managers	0122	27	29	56
Fixed Operations Managers	0621	X	19	19
Sales Manager	0621	2	72	74
Service Managers	0651	X	79	79
Parts Managers	1215	X	73	73
Business Office	1411	X	305	305
Warranty Clerks	1411	0	21	21
Customer Service Representatives	1414	5	203	208
Tow Operators/ Dispatchers	1525	X	27	27
Leasing Agents	6421	6	15	21
Licensed Automotive Sales People	6421	121	131	252
Service Advisors	6552	X	139	139
Estimators	7321/7322	X	19	19

X – too unreliable to publish.

Forecast Job Openings 2022 to 2026 (Thompson/Okanagan, Cariboo and Kootenay)

Occupation	NOC Code	Expansion Demand	Replacement Demand	Total Job Openings
Skilled Trades				
Partsperson	1522	5	177	182
Automotive Service Technician	7321	130	399	529
Collision Repair Technician	7322	43	115	158
Automotive Glass Technician	7322	24	56	81
Automotive Painter	7322	21	50	71
Automotive Refinishing Prep Technician	7322	X	6	6
Motorcycle Mechanics	7334	X	X	X
Other Trades and Technical				
Inventory / Warehouse Person	1522	1	59	60
Lot Person	6742	X	85	85
Auto Dismantlers / Parts Pullers	7445	X	5	5
Tow Truck Operators	7511	X	46	46
Parts Delivery Drivers	7514	X	95	95
Detailers	7612	4	193	196
Shop Helpers	7612	X	195	195
Sales, Management and Administration				
Controllers	13	X	25	25
Finance Managers	122	18	40	58
Fixed Operations Managers	621	X	28	28
Sales Manager	621	2	79	82
Service Managers	651	X	81	81
Parts Managers	1215	X	63	63
Business Office	1411	70	357	427
Warranty Clerks	1411	0	19	20
Customer Service Representatives	1414	5	203	208
Tow Operators/ Dispatchers	1525	X	31	31
Leasing Agents	6421	4	19	23
Licensed Automotive Sales People	6421	82	157	239
Service Advisors	6552	X	108	108
Estimators	7321/7322	X	24	24

X – too unreliable to publish.

Forecast Job Openings Northeast, Nechako and North Coast

Forecast Job Openings 2017 to 2021 (Northeast, Nechako and North Coast)

Occupation	NOC Code	Expansion Demand	Replacement Demand	Total Job Openings
Skilled Trades				
Partsperson	1522	1	27	28
Automotive Service Technician	7321	25	64	90
Collision Repair Technician	7322	0	16	16
Automotive Glass Technician	7322	4	8	12
Automotive Painter	7322	4	9	13
Automotive Refinishing Prep Technician	7322	X	1	1
Motorcycle Mechanics**	7334	X	X	X
Other Trades and Technical				
Inventory / Warehouse Person	1522	0	7	7
Lot Person	6742	X	18	18
Auto Dismantlers / Parts Pullers	7445	X	0	0
Tow Truck Operators	7511	X	13	13
Parts Delivery Drivers	7514	X	21	21
Detailers	7612	1	41	42
Shop Helpers	7612	X	21	21
Sales, Management and Administration				
Controllers	0013	X	3	3
Finance Managers	0122	6	6	11
Fixed Operations Managers	0621	X	4	4
Sales Manager	0621	0	14	15
Service Managers	0651	X	15	15
Parts Managers	1215	X	15	15
Business Office	1411	X	59	59
Warranty Clerks	1411	0	4	4
Customer Service Representatives	1414	1	43	44
Tow Operators/ Dispatchers	1525	X	9	9
Leasing Agents	6421	1	3	5
Licensed Automotive Sales People	6421	25	27	51
Service Advisors	6552	X	28	28
Estimators	7321/7322	X	4	4

X – too unreliable to publish.

Job Openings 2022 to 2026 (Northeast, Nechako and North Coast)

Occupation	NOC Code	Expansion Demand	Replacement Demand	Total Job Openings
Skilled Trades				
Partsperson	1522	1	36	37
Automotive Service Technician	7321	27	83	110
Collision Repair Technician	7322	8	22	31
Automotive Glass Technician	7322	5	11	15
Automotive Painter	7322	4	10	14
Automotive Refinishing Prep Technician	7322	X	1	1
Motorcycle Mechanics	7334	X	X	X
Other Trades and Technical				
Inventory / Warehouse Person	1522	0	11	12
Lot Person	6742	X	18	18
Auto Dismantlers / Parts Pullers	7445	X	0	0
Tow Truck Operators	7511	X	16	16
Parts Delivery Drivers	7514	X	21	21
Detailers	7612	1	42	42
Shop Helpers	7612	X	27	27
Sales, Management and Administration				
Controllers	0013	X	4	4
Finance Managers	0122	4	8	12
Fixed Operations Managers	0621	X	6	6
Sales Manager	0621	0	16	16
Service Managers	0651	X	16	16
Parts Managers	1215	X	13	13
Business Office	1411	13	69	82
Warranty Clerks	1411	0	4	4
Customer Service Representatives	1414	1	43	44
Tow Operators/ Dispatchers	1525	X	10	10
Leasing Agents	6421	1	5	5
Licensed Automotive Sales People	6421	17	32	49
Service Advisors	6552	X	22	22
Estimators	7321/7322	X	5	5

X – too unreliable to publish.

APPENDIX H – WAGE RATES AND EARNINGS

This Appendix reports the wage and earnings information that was collected from a survey of Automotive Sector Employers.

The table below shows the estimated hourly wage rates for Skilled Trades and Apprentices. Median wages for New Car Dealers are reported separately from median wages for the other sub-sectors as New Car Dealers reported higher wage rates for Skilled Trades and employers interviewed by MNP suggested that wage rates at New Car Dealers were higher.

Wage Rates for Skilled Trade Occupations and Apprentices

Occupation	NOC Code	Median Hourly Wage		Minimum Hourly Wage	Maximum Hourly Wage
		New Car Dealers	Other Sub-sectors		
Skilled Trades					
Partsperson	1522	\$17.50	\$25.50	\$15.00	\$35.50
Automotive Service Technician	7321	\$37.50	\$27.50	\$22.50	\$42.50
Collision Repair Technician	7322	X	\$27.50	\$22.50	\$37.50
Automotive Glass Technician	7322	X	\$25.00	\$22.50	\$32.50
Automotive Painter	7322	X	\$27.50	\$17.50	\$37.50
Automotive Refinishing Prep Technician	7322	X	\$17.50	\$15.00	\$32.50
Motorcycle Mechanics**	7334	X	X	X	X
Apprentices*					
Partsperson Apprentice	1522	\$16.25	X	\$15.00	\$17.50
Automotive Service Technician Apprentice	7321	\$17.50	\$17.50	\$15.00	\$27.50
Collision Repair Technician Apprentice	7322	X	\$17.50	\$15.00	\$27.50
Automotive Glass Technician Apprentice	7322	X	\$17.50	\$15.00	\$22.50
Automotive Painter Apprentice	7322	X	\$17.50	\$15.00	\$27.50
Motorcycle Mechanic** Apprentice	7334	X	X	X	X

Source: Survey of Automotive Sector Employers

X – sample was less than five so estimates are not reported.

*Includes all apprentices. A first year apprentice may be expected to be paid at the low end of the range and a fourth year apprentice near the top of the range.

The table below reports wage rates for Other Trades and Technical occupations and Sales, Management and Administration occupations. There were no reported differences in wage rates between the sub-sectors for these occupations.

Wage Rates Other Trades and Technical Occupations and Sales Management and Administration Occupations

Occupation	NOC Code	Median Hourly Wage	Minimum Hourly Wage	Maximum Hourly Wage
Other Trades and Technical				
Inventory / Warehouse Person	1522	\$22.50	\$17.50	\$27.50
Lot Person	6742	\$15.00	\$15.00	\$17.50
Auto Dismantlers	7445	\$22.50	\$17.50	\$17.50
Tow Truck Operators	7511	\$20.00	\$17.50	\$22.50
Parts Delivery Drivers	7514	\$16.25	\$15.00	\$22.50
Detailers	7612	\$17.50	\$15.00	\$22.50
Shop Helpers	7612	\$15.00	\$15.00	\$27.50
Sales, Management and Administration				
Controllers	0013	\$27.50	\$17.50	\$42.50
Finance Managers	0122	\$22.50	\$20.00	\$25.00
Fixed Operations Managers	0621	\$32.50	\$27.50	\$37.50
Sales Manager	0621	\$22.50	\$15.00	\$37.50
Service Managers	0651	\$27.50	\$22.50	\$32.50
Parts Managers	1215	\$22.50	\$17.50	\$27.50
Business Office	1411	\$22.50	\$15.00	\$37.50
Warranty Clerks	1411	\$17.50	\$15.00	\$22.50
Customer Service Representatives	1414	\$17.50	\$15.00	\$27.50
Tow Dispatchers	1525	\$17.50	\$15.00	\$27.50
Leasing Agents	6421	X	X	X
Licensed Automotive Sales People*	6421	X	X	X
Service Advisors	6552	\$22.50	\$15.00	\$37.50
Estimators	7321/7322	\$27.50	\$22.50	\$37.50

Source: Survey of Automotive Sector Employers

* This position is typically paid on commission.

X – sample was less than five so estimates are not reported.

The table below shows the estimated annual earnings for Skilled Trades and Apprentices. Median earnings for New Car Dealers are reported separately from median earnings for the other sub-sectors as New Car Dealers reported higher earnings for Skilled Trades and employers interviewed by MNP suggested that earnings at New Car Dealers were higher.

Annual Earnings for Skilled Trade Occupations and Apprentices

Occupation	NOC Code	Median Annual Earnings		Minimum Annual Earnings	Maximum Annual Earnings
		New Car Dealers	Other Sub-sectors		
Skilled Trades					
Partsperson	1522	\$50,000	X	\$35,000	\$75,000
Automotive Service Technician	7321	\$75,000	\$65,000	\$35,000	\$100,000
Collision Repair Technician	7322	X	\$75,000	\$45,000	\$100,000
Automotive Glass Technician	7322	X	\$55,000	\$35,000	\$65,000
Automotive Painter	7322	X	\$75,000	\$20,000	\$100,000
Automotive Refinishing Prep Technician	7322	X	\$45,000	\$25,000	\$65,000
Motorcycle Mechanics**	7334	X	X	X	X
Apprentices*					
Partsperson Apprentice	1522	\$30,000	X	\$25,000	\$35,000
Automotive Service Technician Apprentice	7321	\$35,000	\$35,000	\$20,000	\$45,000
Collision Repair Technician Apprentice	7322	X	\$35,000	\$20,000	\$65,000
Automotive Glass Technician Apprentice	7322	X	\$35,000	\$20,000	\$45,000
Automotive Painter Apprentice	7322	X	\$35,000	\$25,000	\$45,000
Motorcycle Mechanic** Apprentice	7334	X	X	X	X

Source: Survey of Automotive Sector Employers

X – sample was less than five so estimates are not reported.

*Includes all apprentices. A first year apprentice may be expected to be paid at the low end of the range and a fourth year apprentice near the top of the range.

The table below reports annual earnings for Other Trades and Technical occupations and Sales, Management and Administration occupations. There were no reported differences in annual earnings between the sub-sectors for these occupations.

Annual Earnings Other Trades and Technical Occupations and Sales Management and Administration Occupations

Occupation	NOC Code	Median Annual Earnings	Minimum Annual Earnings	Maximum Annual Earnings
Other Trades and Technical				
Inventory / Warehouse Person	1522	\$45,000	\$20,000	\$55,000
Lot Person	6742	\$25,000	\$20,000	\$45,000
Auto Dismantlers	7445	\$35,000	\$30,000	\$55,000
Tow Truck Operators	7511	\$45,000	\$20,000	\$65,000
Parts Delivery Drivers	7514	\$25,000	\$20,000	\$35,000
Detailers	7612	\$35,000	\$25,000	\$45,000
Shop Helpers	7612	\$25,000	\$20,000	\$45,000
Sales, Management and Administration				
Controllers	0013	\$75,000	\$45,000	\$100,000
Finance Managers	0122	\$95,000	\$55,000	\$100,000
Fixed Operations Managers	0621	\$95,000	\$55,000	\$100,000
Sales Manager	0621	\$95,000	\$65,000	\$100,000
Service Managers	0651	\$75,000	\$45,000	\$100,000
Parts Managers	1215	\$55,000	\$45,000	\$85,000
Business Office	1411	\$45,000	\$20,000	\$100,000
Warranty Clerks	1411	\$45,000	\$35,000	\$55,000
Customer Service Representatives	1414	\$35,000	\$25,000	\$55,000
Tow Dispatchers	1525	\$35,000	\$20,000	\$55,000
Leasing Agents	6421	\$85,000	\$35,000	\$100,000
Licensed Automotive Sales People*	6421	\$65,000	\$25,000	\$100,000
Service Advisors	6552	\$55,000	\$35,000	\$85,000
Estimators	7321/7322	\$65,000	\$45,000	\$85,000

Source: Survey of Automotive Sector Employers

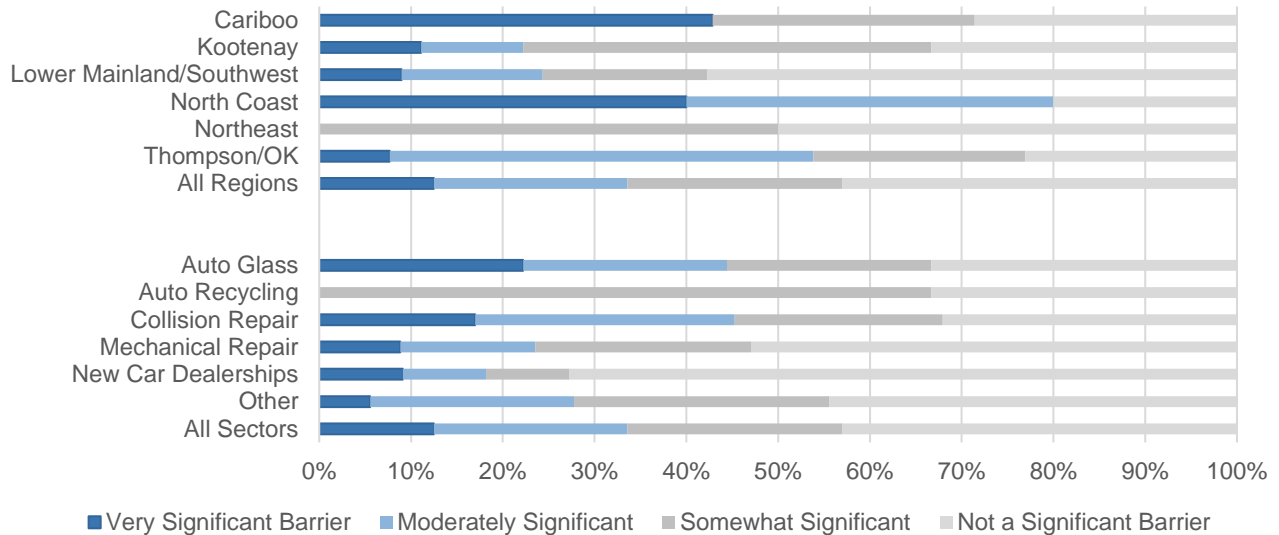
* This position is typically paid on commission.

APPENDIX I - BARRIERS TO RECRUITMENT

This Appendix contains additional employer perceptions of barriers to recruitment from a survey of Automotive Sector employers.

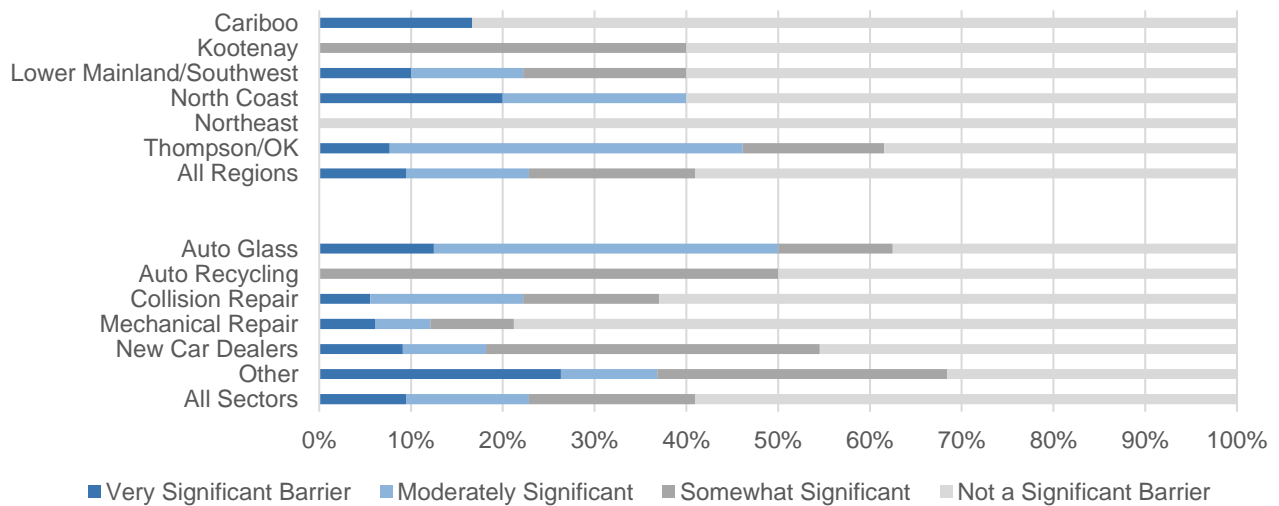
Question: Please indicate how significant a barrier to recruiting employees for your business each of following is?

Barriers to Entry: Benefits, by Sector and Region (N=128)



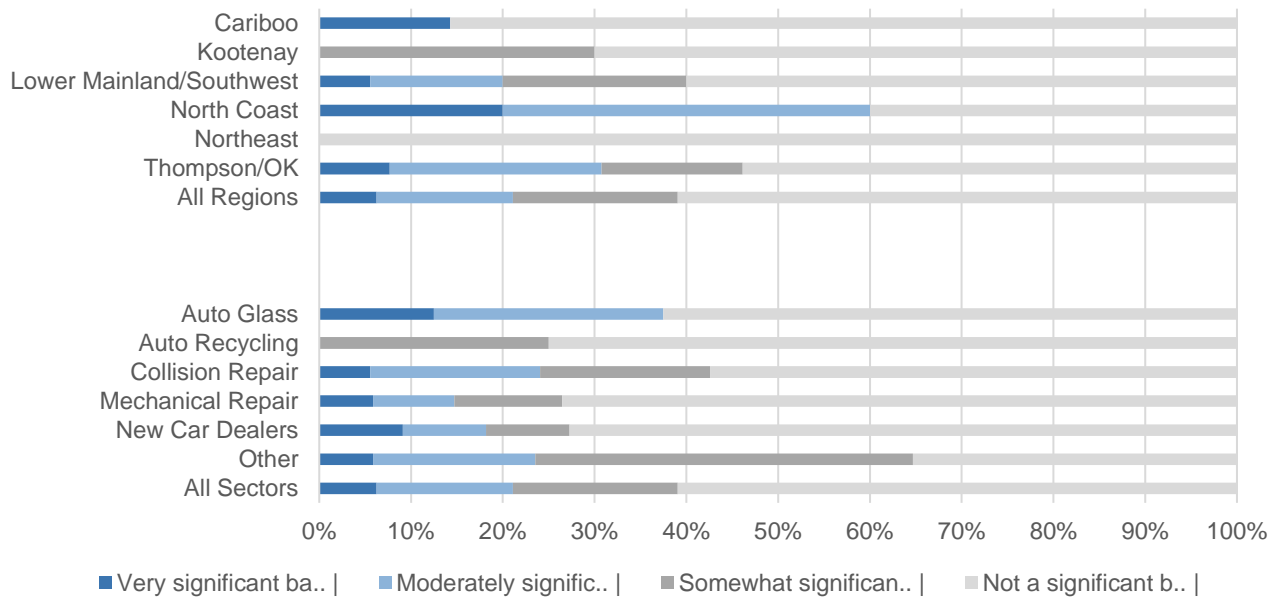
Source: Survey of Automotive Sector Employers

Barriers to Entry: Hours of Work, by Sector and Region (N=127)



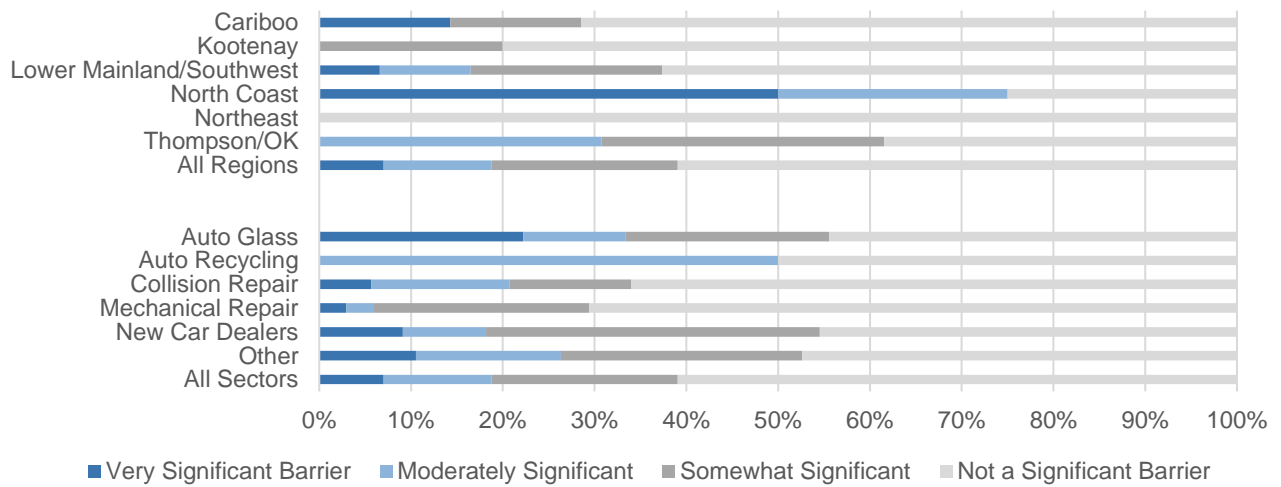
Source: Survey of Automotive Sector Employers

Barriers to Entry: Working Conditions, by Sector and Region (N=128)



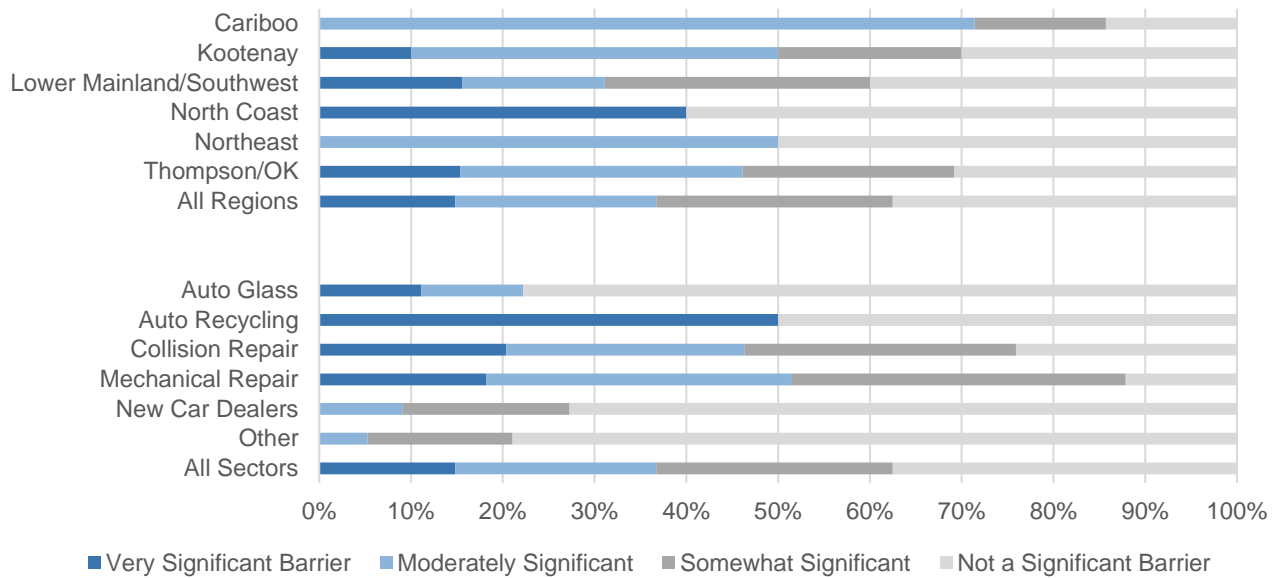
Source: Survey of Automotive Sector Employers

Barriers to Entry: Job Security, by Sector and Region (N=128)



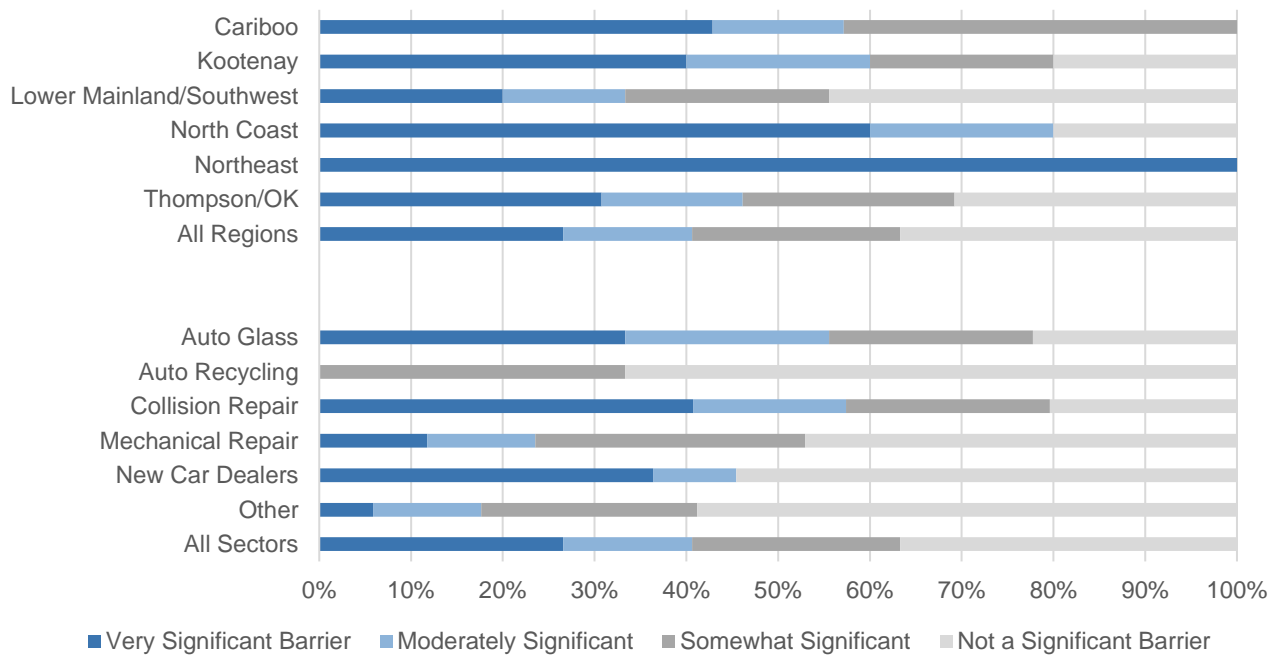
Source: Survey of Automotive Sector Employers

Barriers to Entry: Cost of Tools, by Sector and Region (N=128)



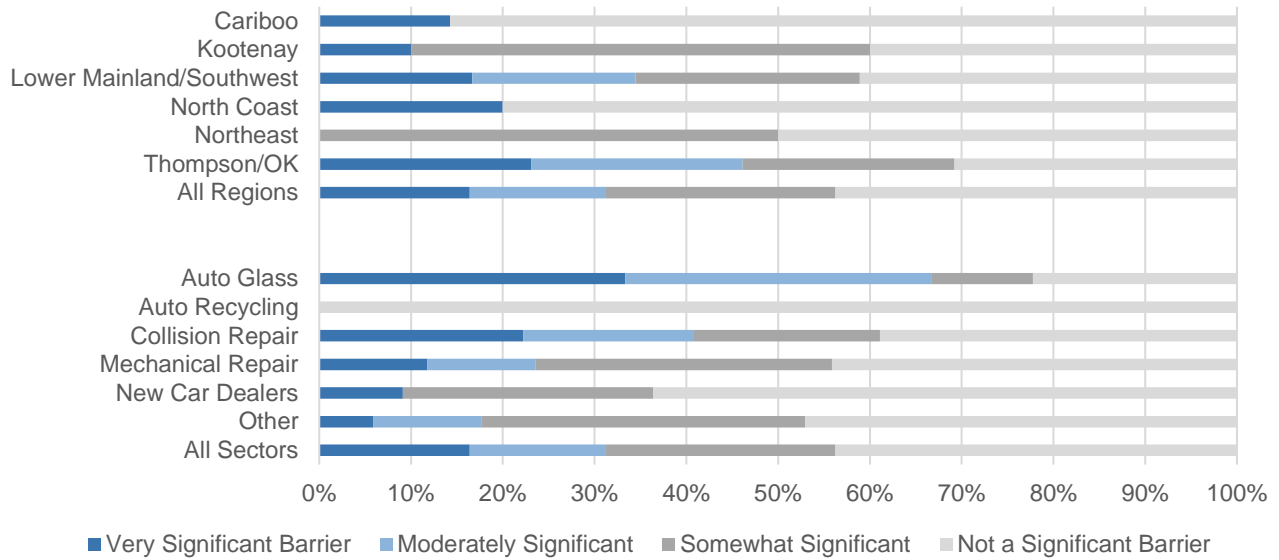
Source: Survey of Automotive Sector Employers

Barriers to Entry: Unwillingness to Move, by Sector and Region (N=128)



Source: Survey of Automotive Sector Employers

Barriers to Entry: Unwillingness to Commute, by Sector and Region (N=128)



Source: Survey of Automotive Sector Employers

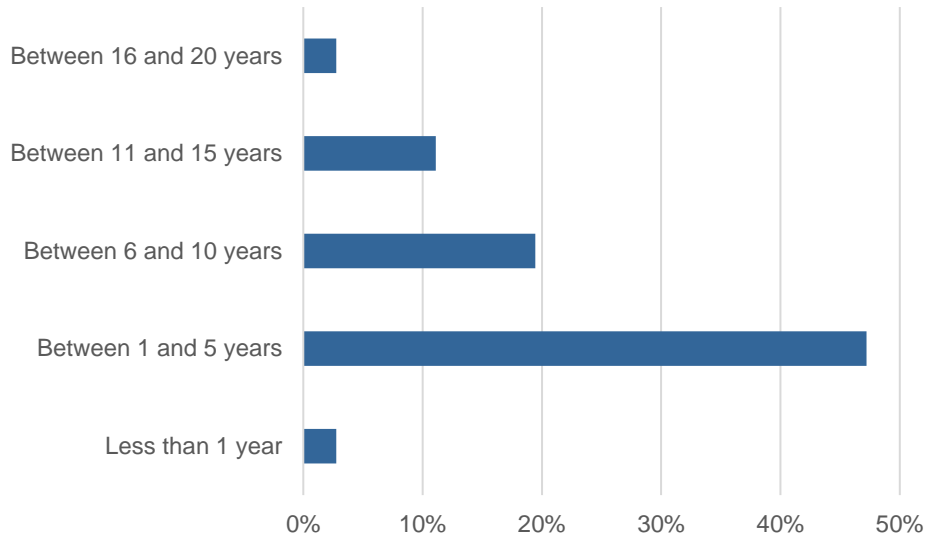
Other barriers that were reported by survey respondents were:

- “The apprenticeship program is so sparse, not only with training, compensation for training and the competition from other sectors that cost less to train, less for tools and more "quick money" has and is killing us!”
- Commonly hear the trade is “stressful”
- No new trades people entering the industry, currently the average age of apprentice is in their 30's.
- Rapidly changing vehicle technology has stressed out our training routine and caused constant learning activities on a daily bases. This is creating a training cost per job that was not present as little as five years ago and is getting more costly by the month.

APPENDIX J - EMPLOYEE TENURE

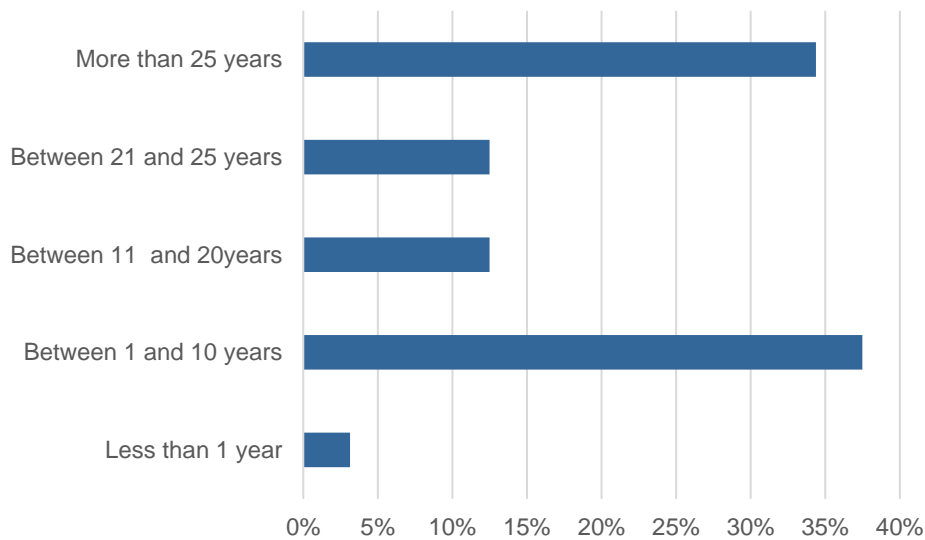
Skilled Trades

Average Employee Tenure- Partsperson (NOC 1522)



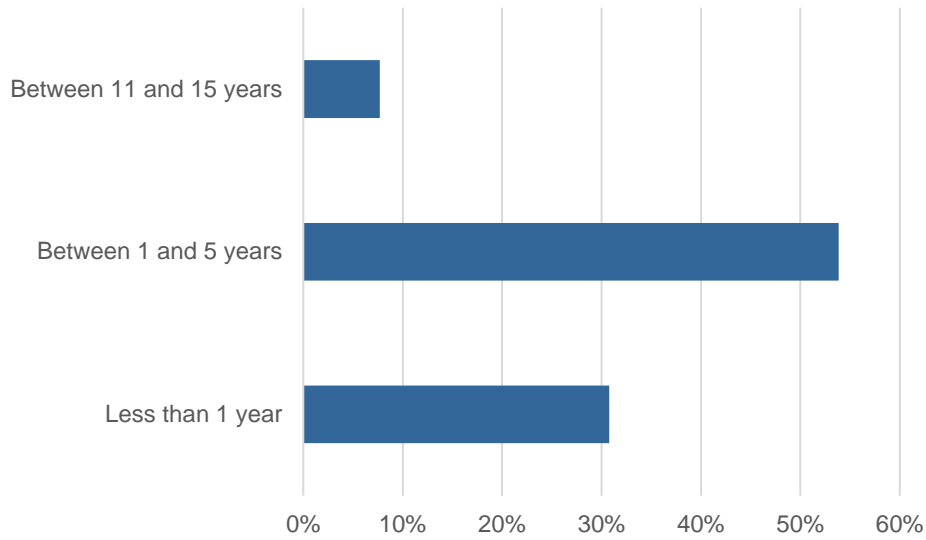
Source: Survey of Automotive Sector Employers

Longest Employee Tenure- Partsperson (NOC 1522)



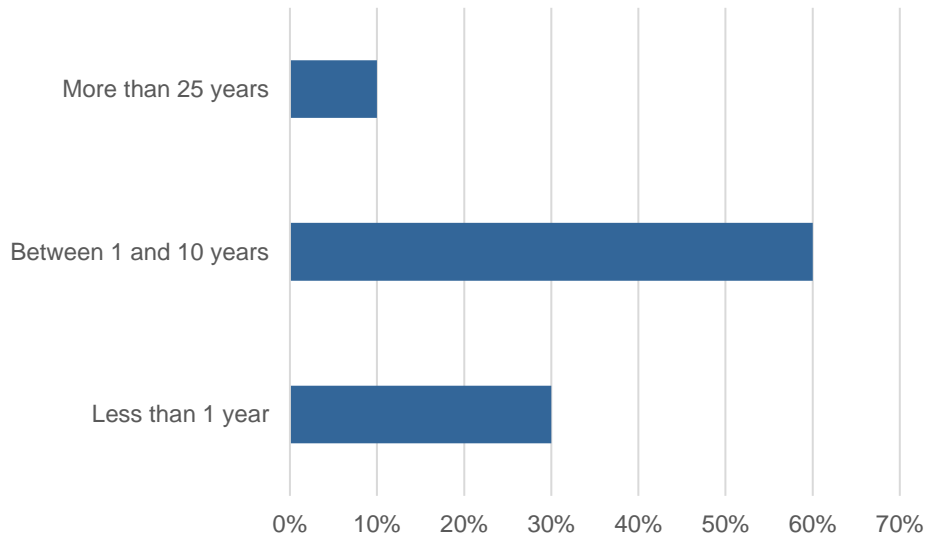
Source: Survey of Automotive Sector Employers

Average Employee Tenure- Partsperson Apprentice (NOC 1522)



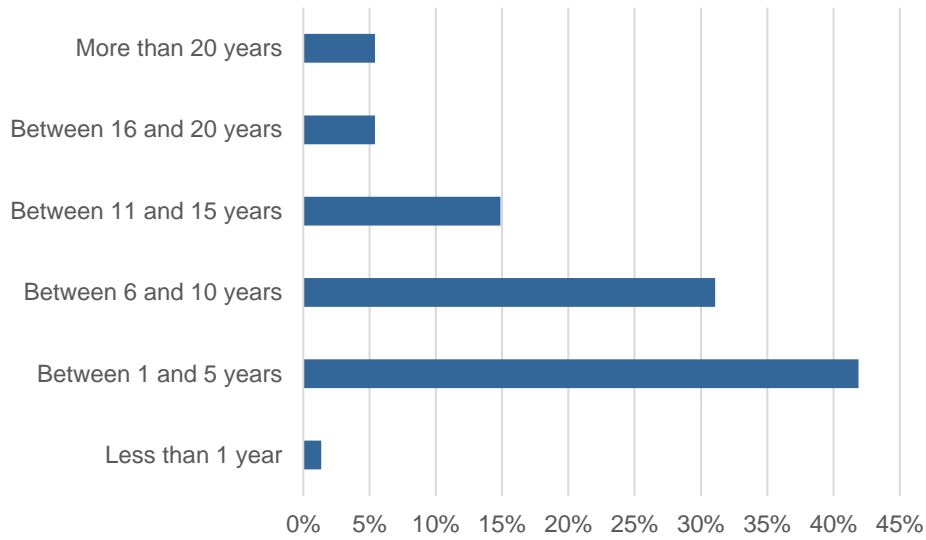
Source: Survey of Automotive Sector Employers

Average Employee Tenure- Partsperson Apprentice (NOC 1522)



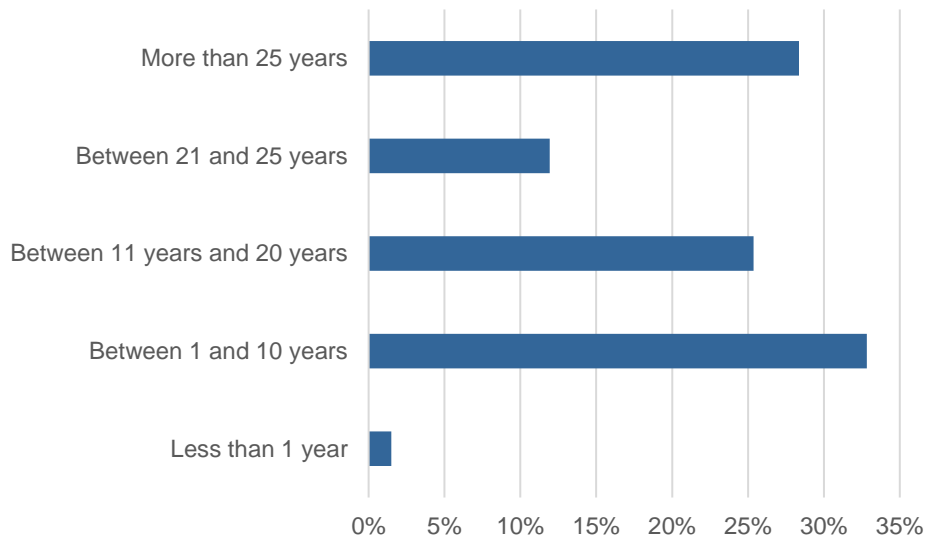
Source: Survey of Automotive Sector Employers

Average Employee Tenure- Automotive Service Technician (NOC 7321)



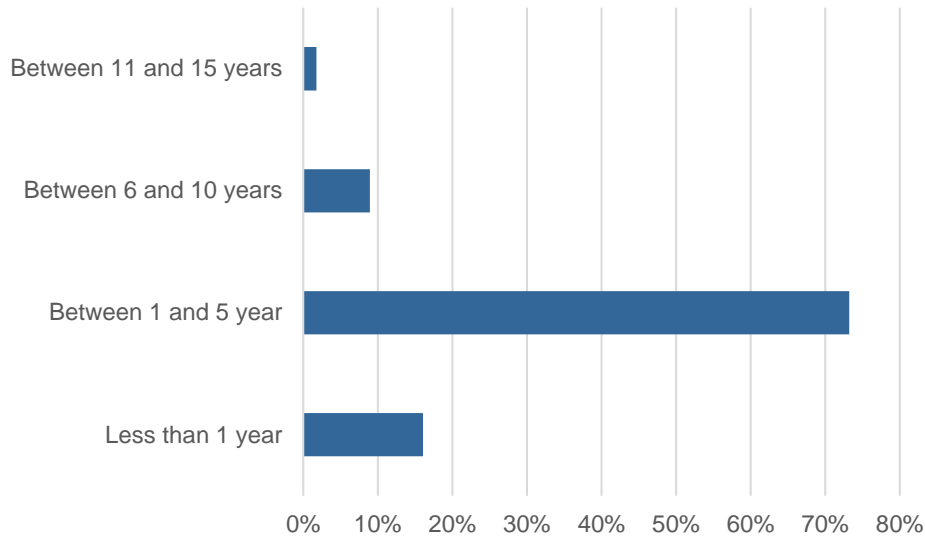
Source: Survey of Automotive Sector Employers

Longest Employee Tenure- Automotive Service Technician (NOC 7321)



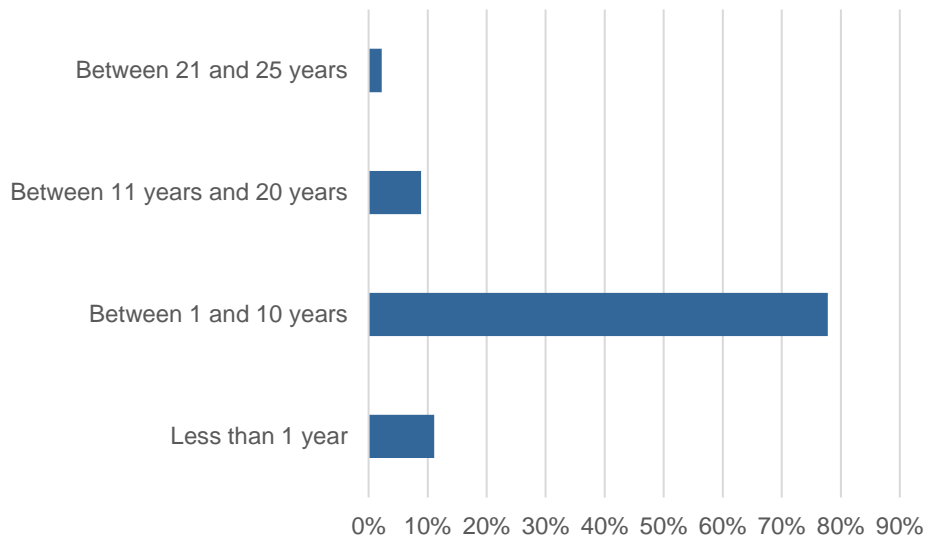
Source: Survey of Automotive Sector Employers

Average Employee Tenure: Automotive Service Technician Apprentice (NOC 7321)



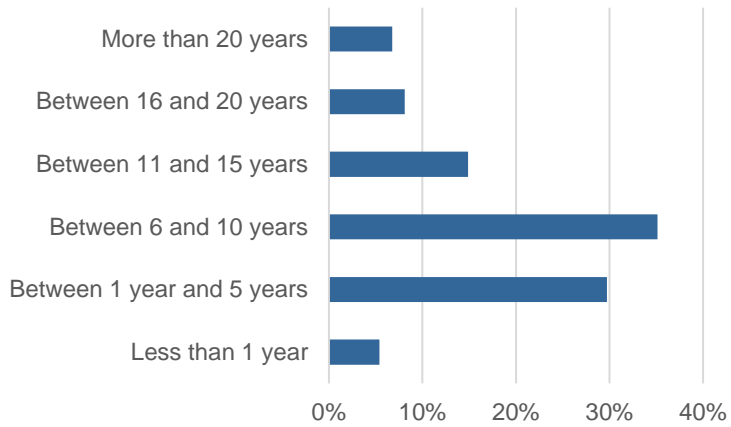
Source: Survey of Automotive Sector Employers

Longest Employee Tenure- Automotive Service Technician Apprentice (NOC 7321)



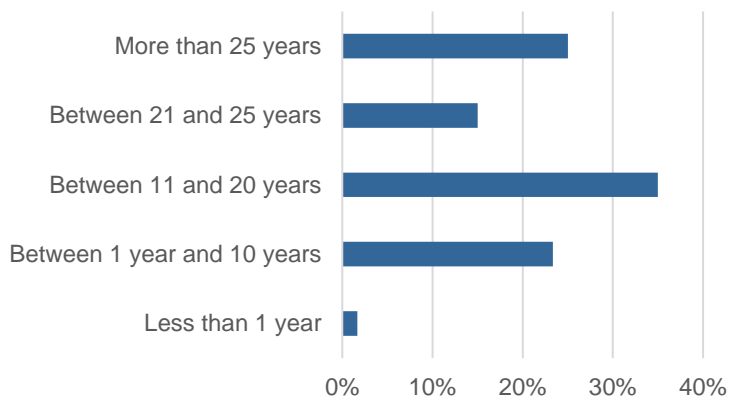
Source: Survey of Automotive Sector Employers

Average Employee Tenure- Collision Repair Technician (NOC 7322)



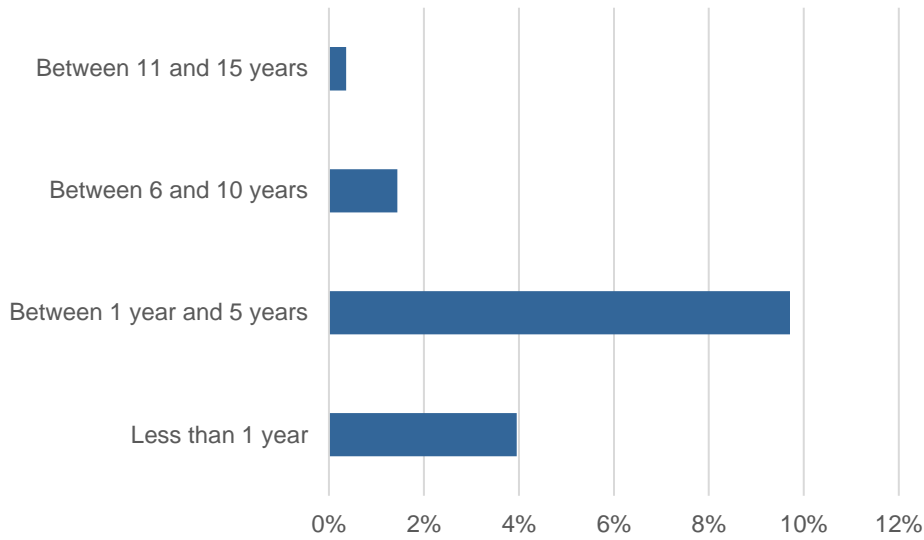
Source: Survey of Automotive Sector Employers

Longest Employee Tenure- Collision Repair Technician (NOC 7322)



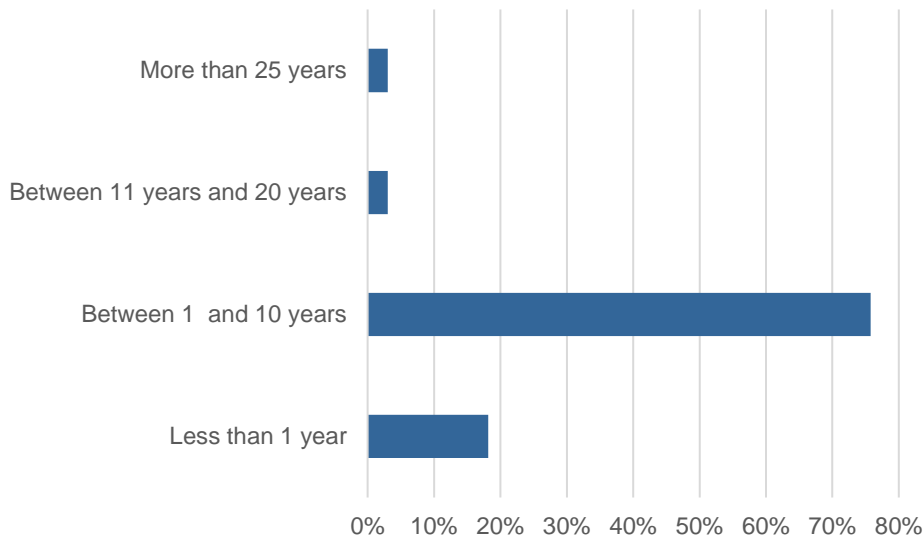
Source: Survey of Automotive Sector Employers

Average Employee Tenure- Collision Repair Technician Apprentice (NOC 7322)



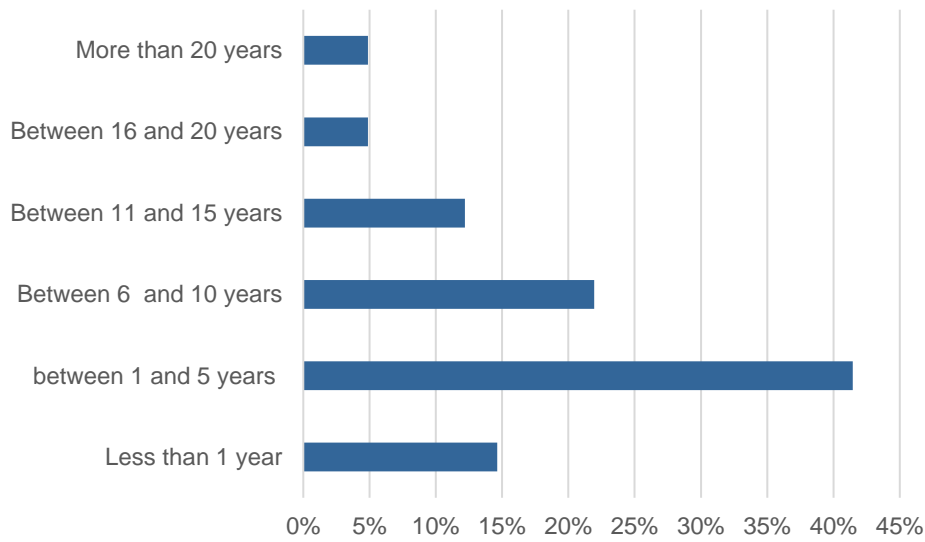
Source: Survey of Automotive Sector Employers

Longest Employee Tenure- Collision Repair Technician Apprentice (NOC 7322)



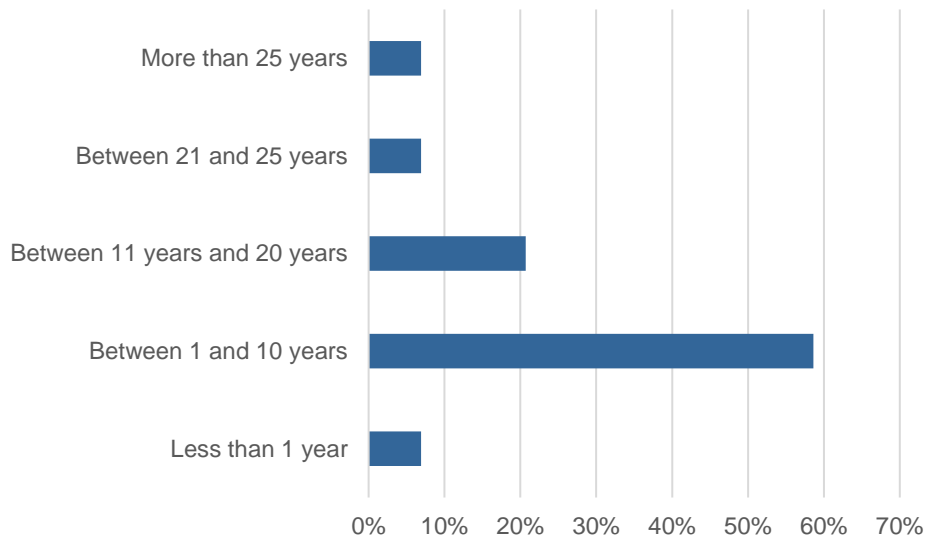
Source: Survey of Automotive Sector Employers

Average Employee Tenure- Auto Glass Technician (NOC 7322)



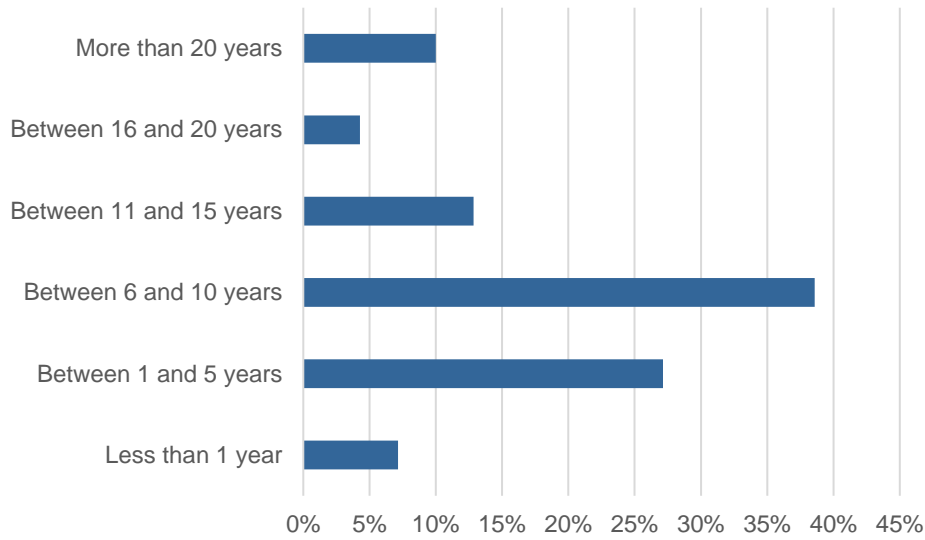
Source: Survey of Automotive Sector Employers

Longest Employee Tenure- Auto Glass Technician (NOC 7322)



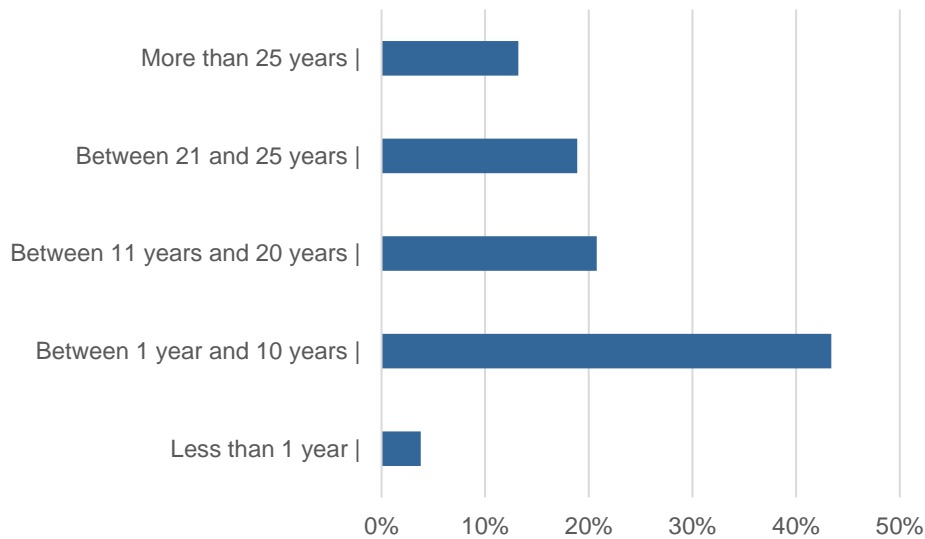
Source: Survey of Automotive Sector Employers

Average Employee Tenure- Automotive Painter (NOC 7322)



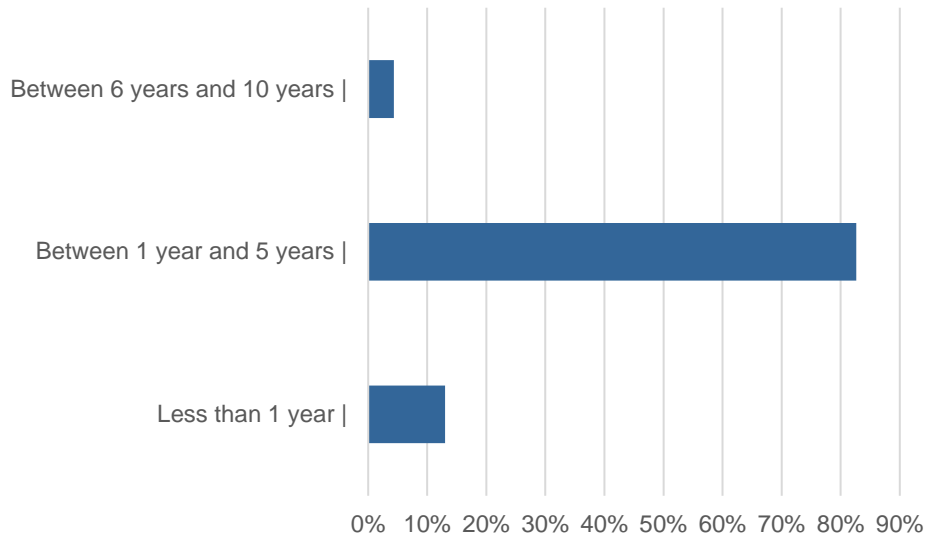
Source: Survey of Automotive Sector Employers

Longest Employee Tenure- Automotive Painter (NOC 7322)



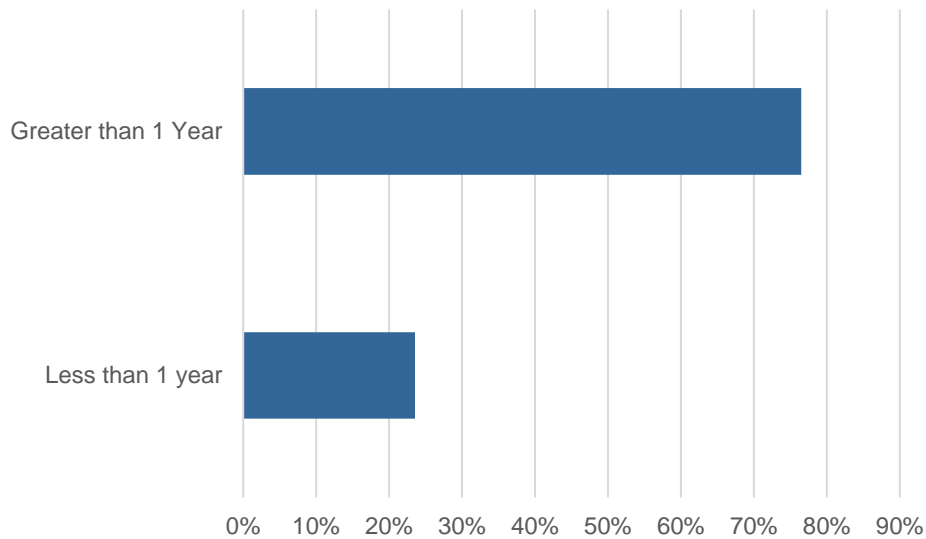
Source: Survey of Automotive Sector Employers

Average Employee Tenure- Automotive Painter Apprentice (NOC 7322)



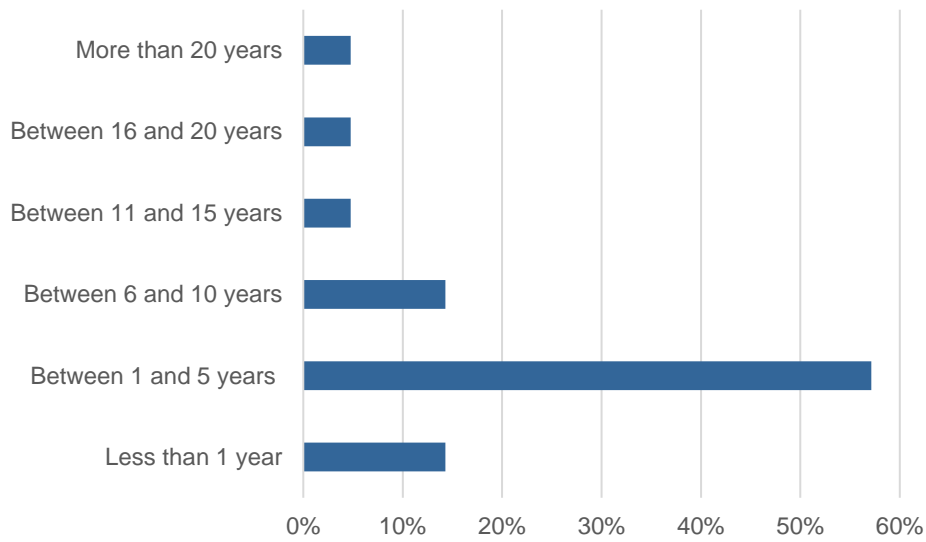
Source: Survey of Automotive Sector Employers

Longest Employee Tenure- Automotive Painter Apprentice (NOC 7322)



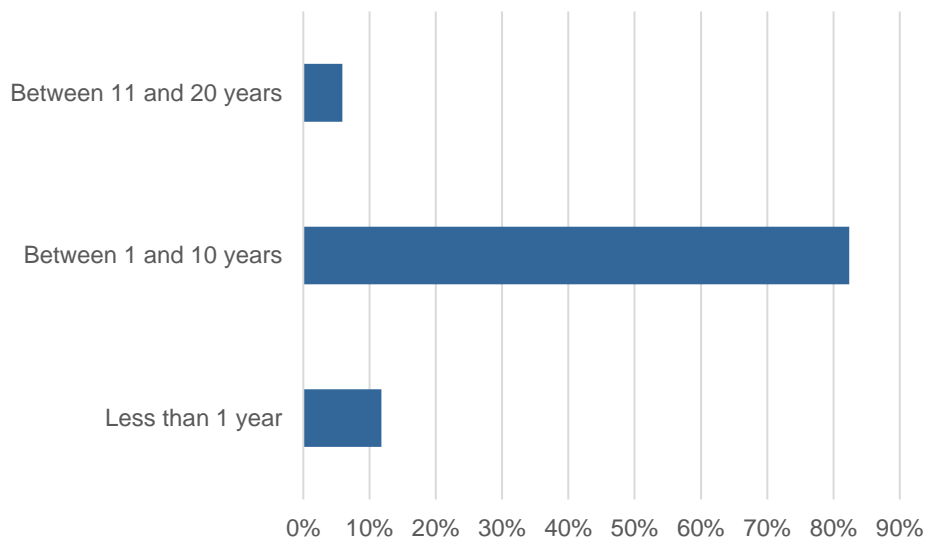
Source: Survey of Automotive Sector Employers

Average Employee Tenure- Automotive Refinishing Prep Technician (NOC 7322)



Source: Survey of Automotive Sector Employers

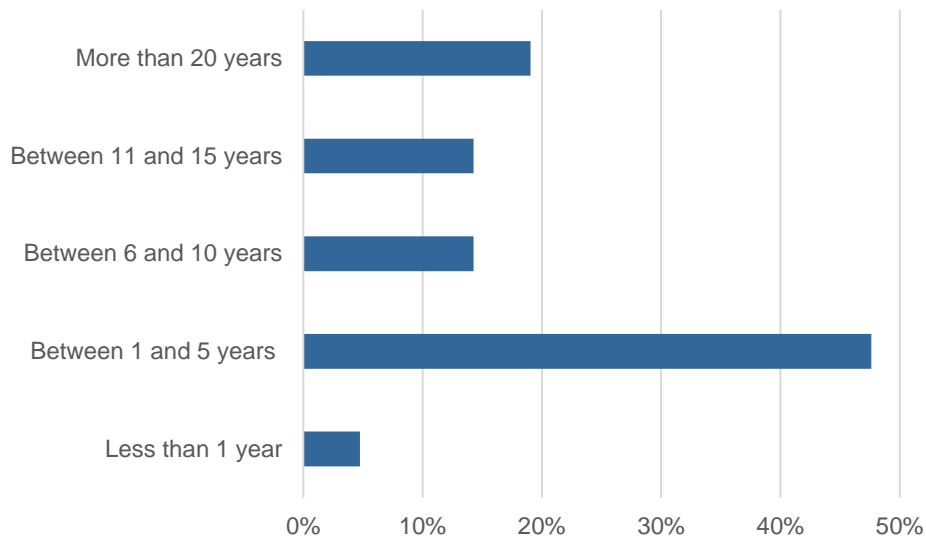
Longest Employee Tenure- Automotive Refinishing Prep Technician (NOC 7322)



Source: Survey of Automotive Sector Employers

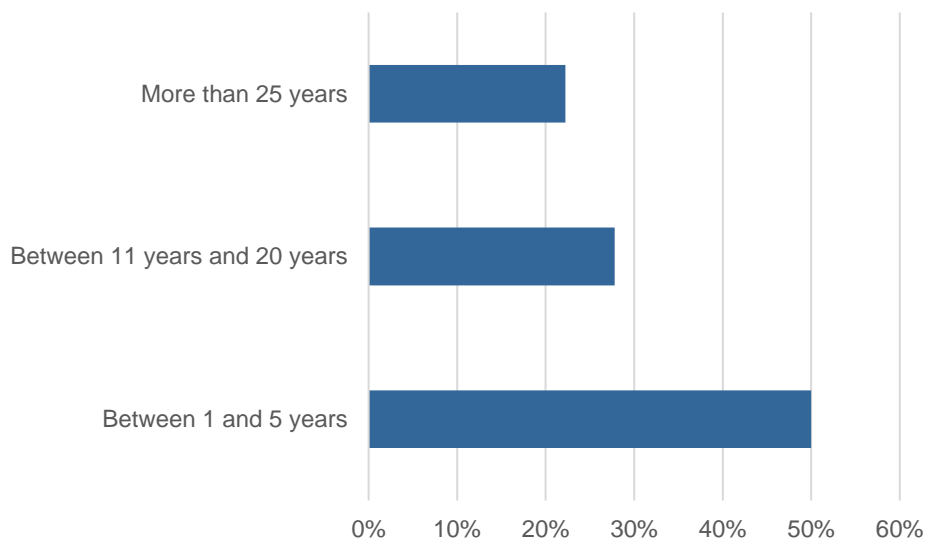
Other Trades/ Technical

Average Employee Tenure- Inventory/Warehouse Person (NOC 1522)



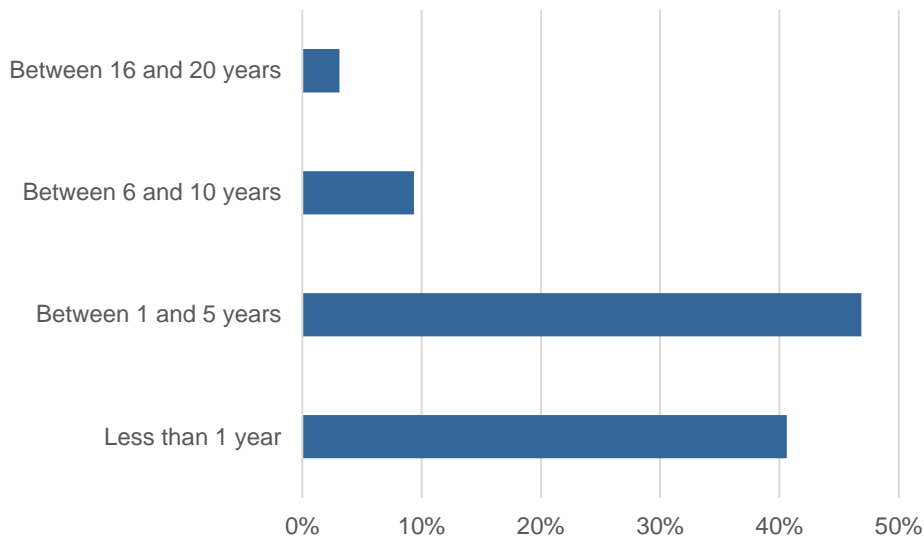
Source: Survey of Automotive Sector Employers

Longest Employee Tenure- Inventory/Warehouse Person (NOC 1522)



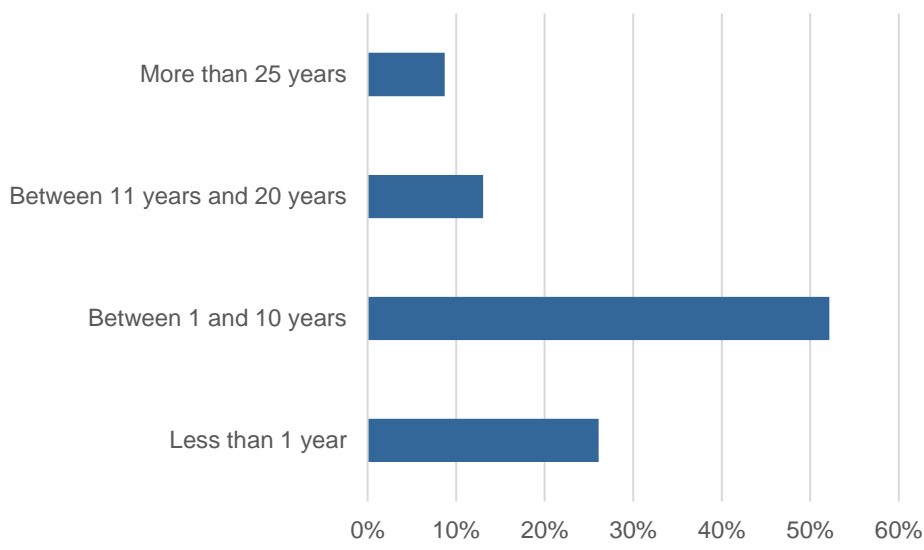
Source: Survey of Automotive Sector Employers

Average Employee Tenure- Lot Person (NOC 6742)



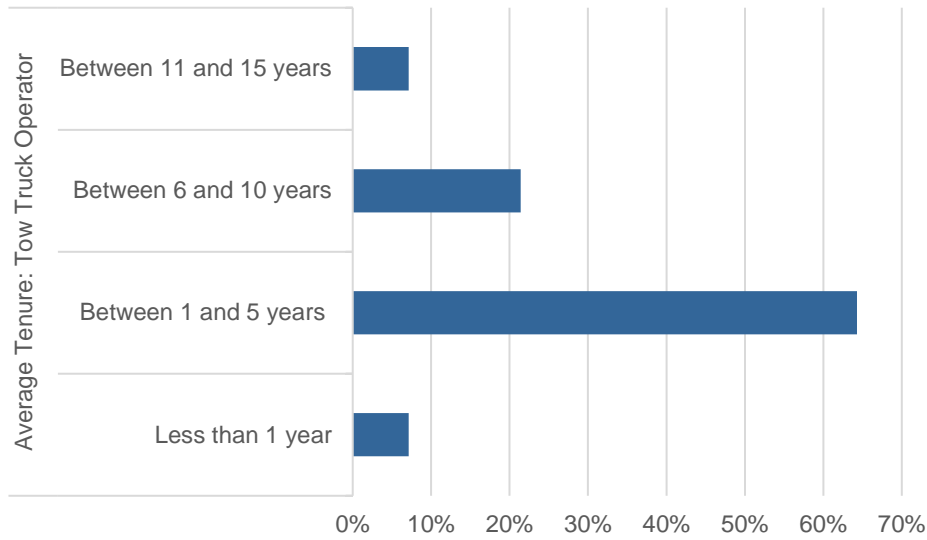
Source: Survey of Automotive Sector Employers

Longest Employee Tenure- Lot Person (NOC 6742)



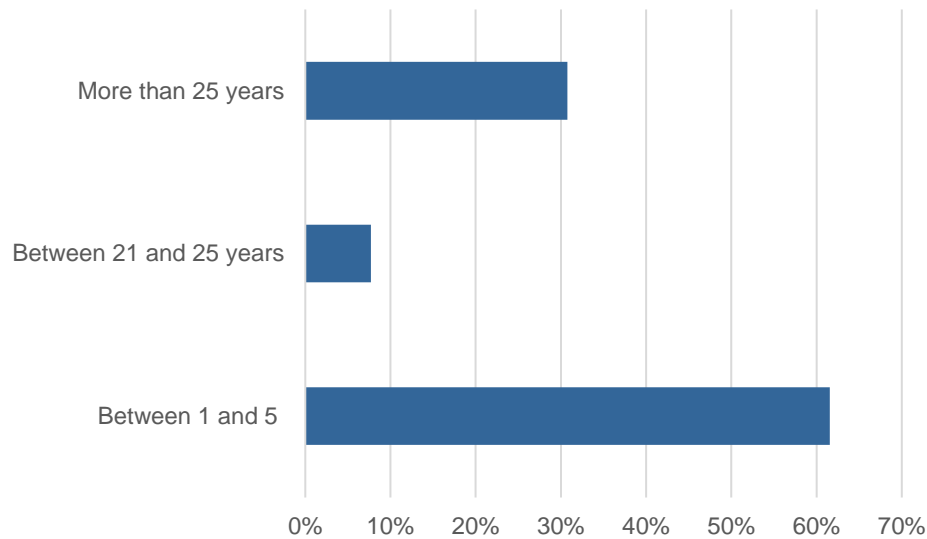
Source: Survey of Automotive Sector Employers

Average Employee Tenure- Tow Truck Operator (NOC 7511)



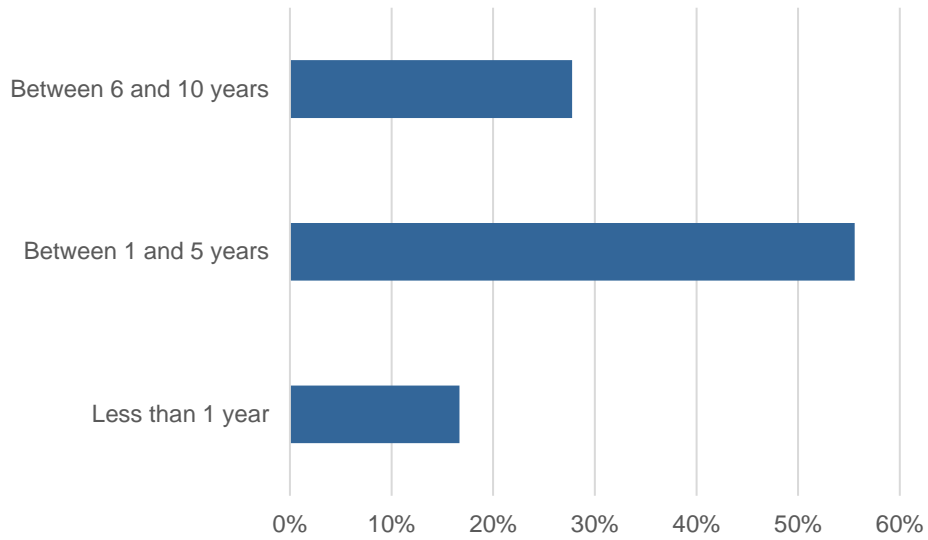
Source: Survey of Automotive Sector Employers

Longest Employee Tenure- Tow Truck Operator (NOC 7511)



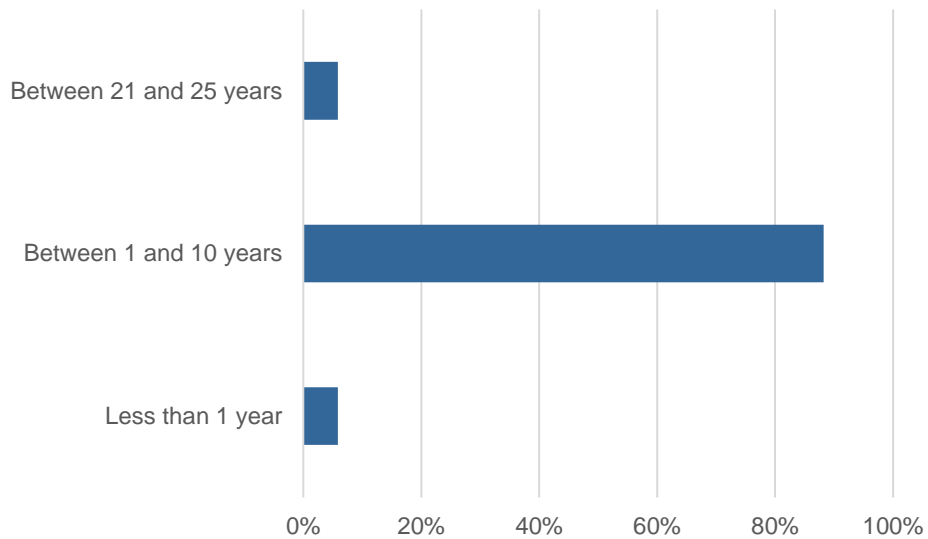
Source: Survey of Automotive Sector Employers

Average Employee Tenure- Parts Delivery Driver (NOC 7514)



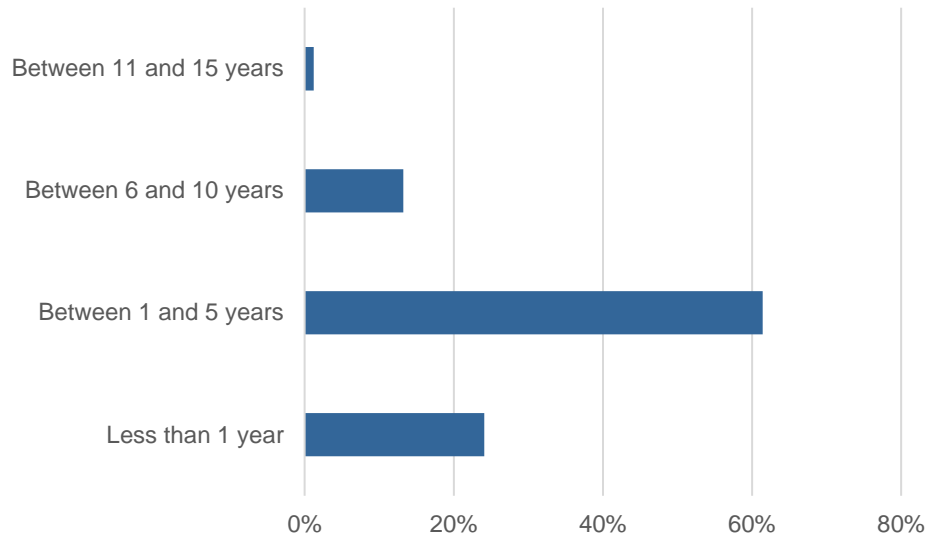
Source: Survey of Automotive Sector Employers

Longest Employee Tenure- Parts Delivery Driver (NOC 7514)



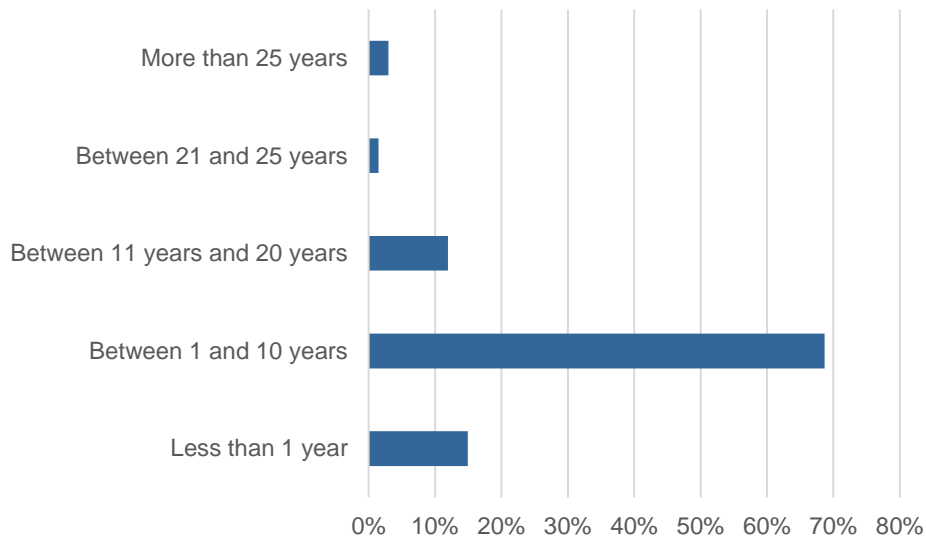
Source: Survey of Automotive Sector Employers

Average Employee Tenure- Detailer (NOC 7612)



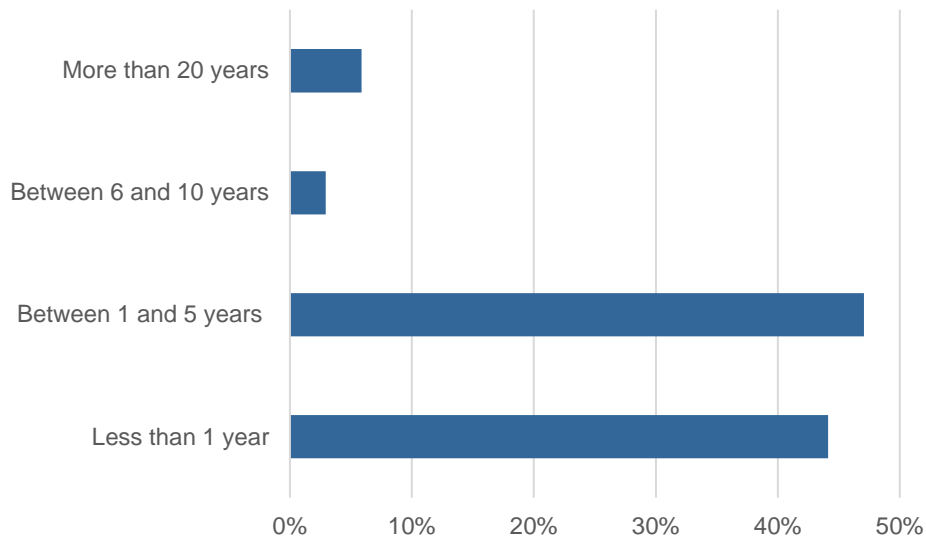
Source: Survey of Automotive Sector Employers

Longest Employee Tenure- Detailer (NOC 7612)



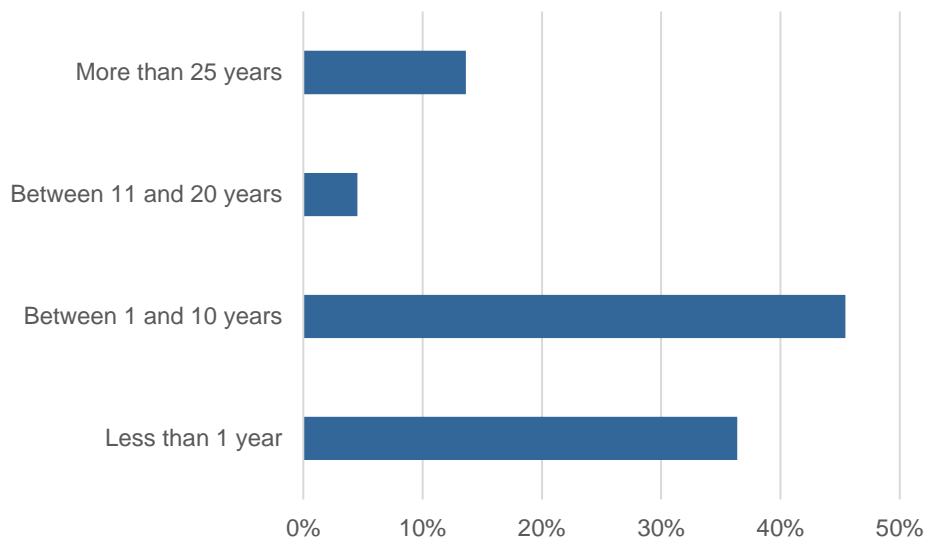
Source: Survey of Automotive Sector Employers

Average Employee Tenure- Shop Helper (NOC 7612)



Source: Survey of Automotive Sector Employers

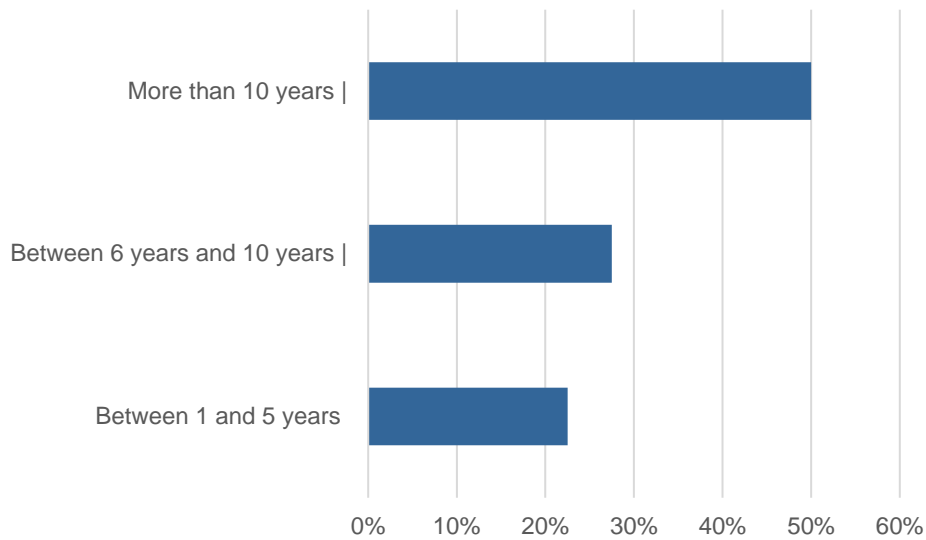
Longest Employee Tenure- Shop Helper (NOC 7612)



Source: Survey of Automotive Sector Employers

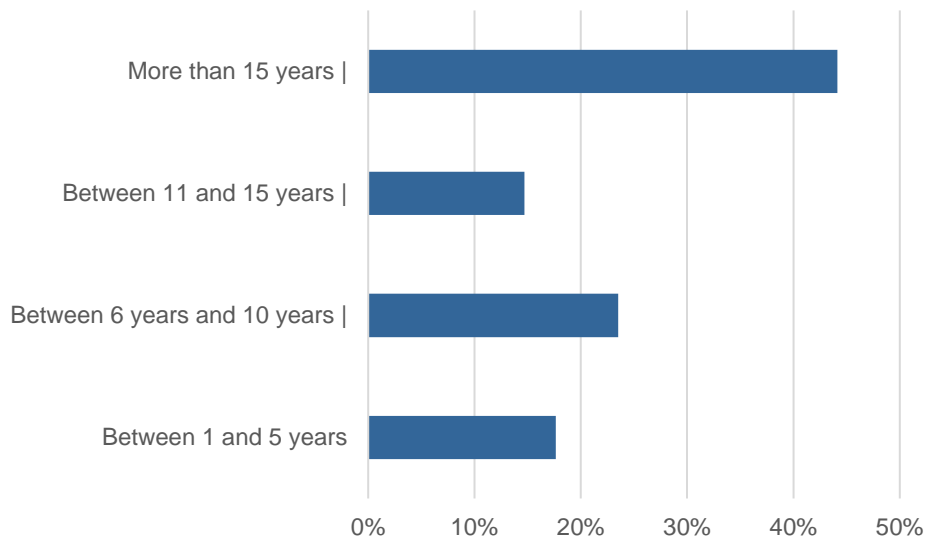
Sales, Management, and Administration

Average Employee Tenure- Controller (NOC 0013)



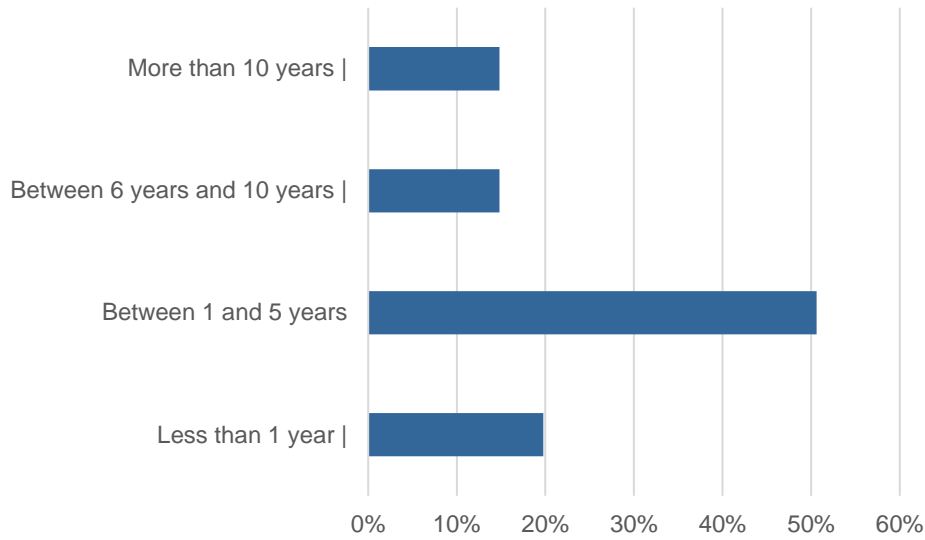
Source: Survey of Automotive Sector Employers

Longest Employee Tenure- Controller (NOC 0013)



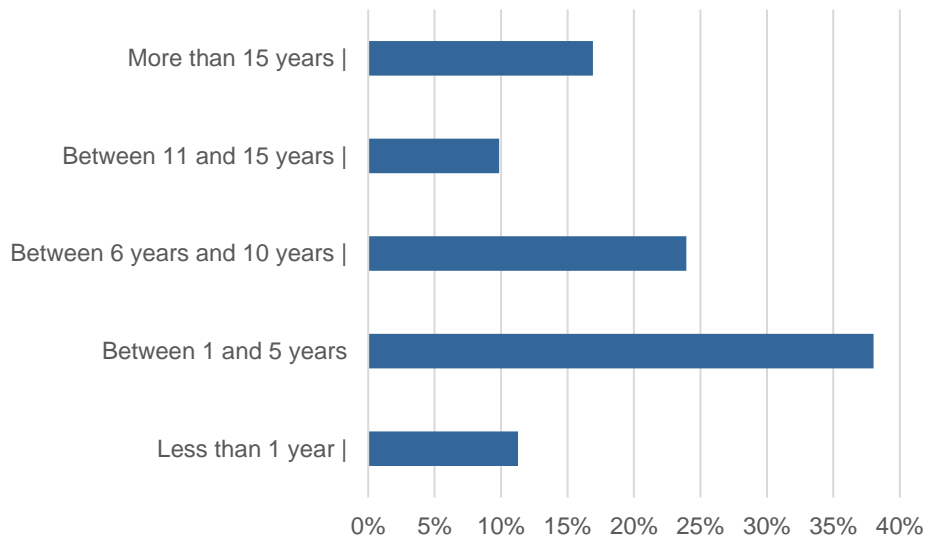
Source: Survey of Automotive Sector Employers

Average Employee Tenure- Customer Service Representative (NOC 1414)



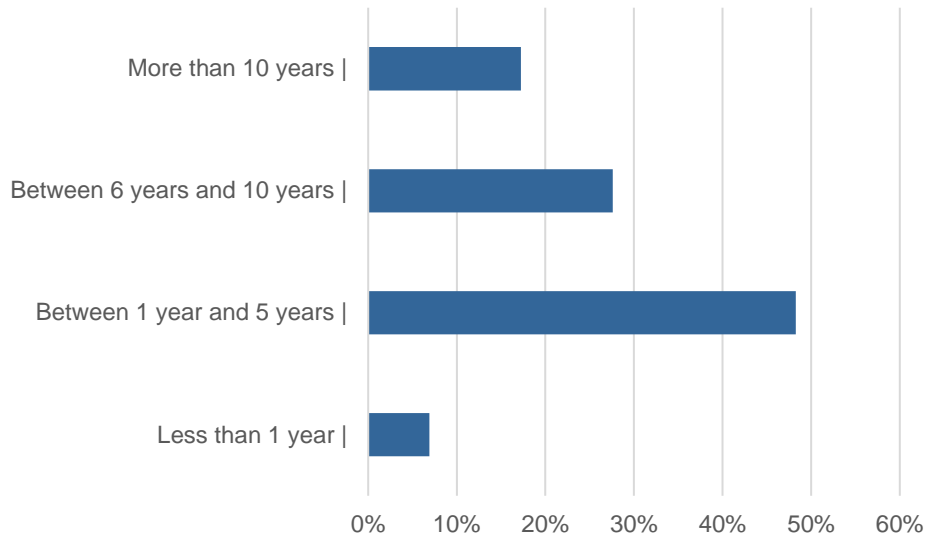
Source: Survey of Automotive Sector Employers

Longest Employee Tenure- Customer Service Representative (NOC 1414)



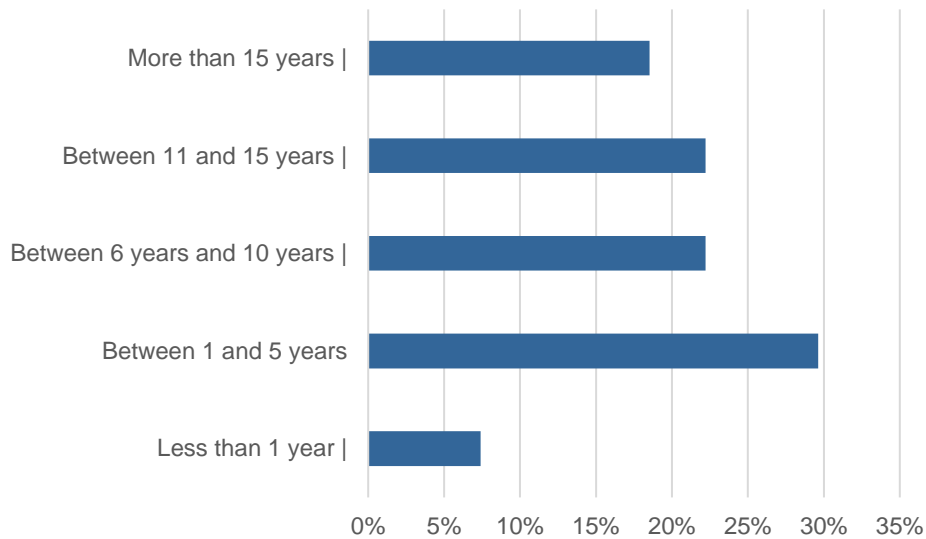
Source: Survey of Automotive Sector Employers

Average Employee Tenure- Finance Manager (NOC 0122)



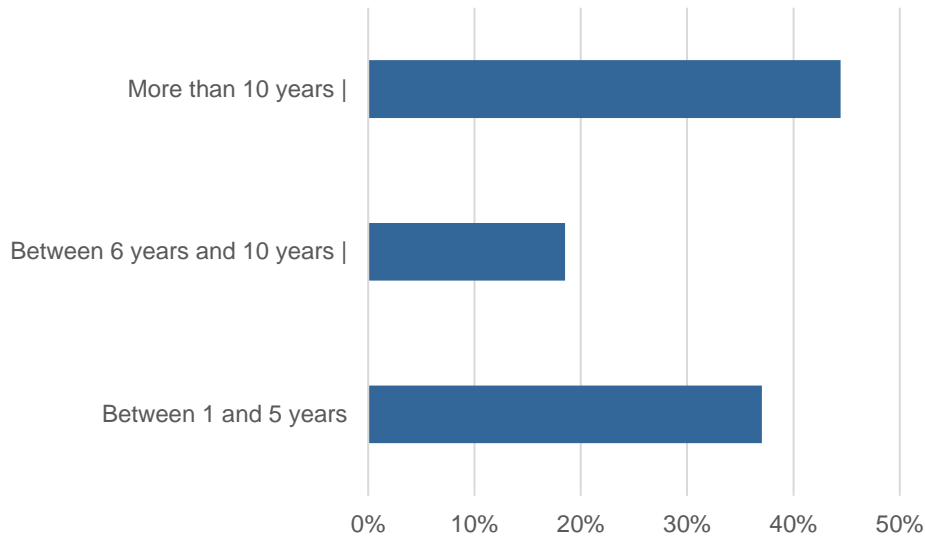
Source: Survey of Automotive Sector Employers

Longest Employee Tenure- Finance Manager (NOC 0122)



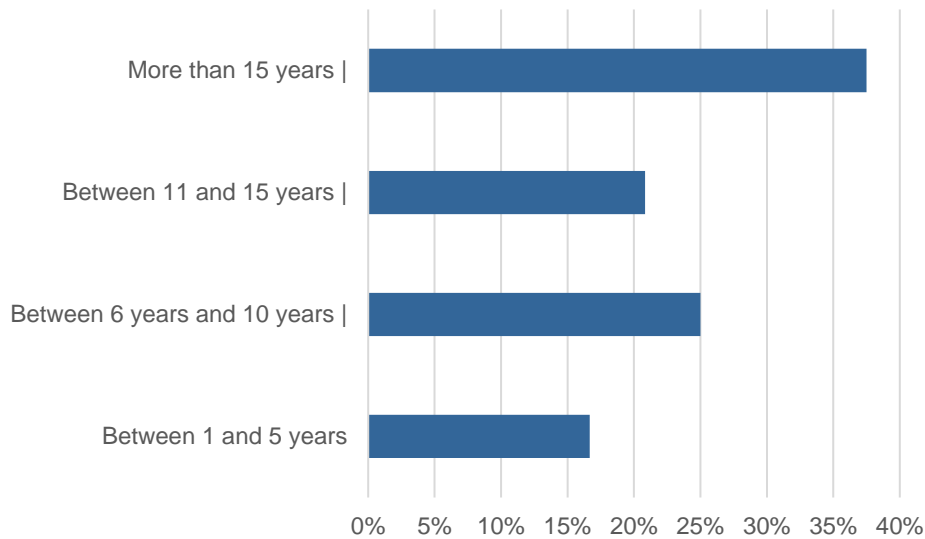
Source: Survey of Automotive Sector Employers

Average Employee Tenure- Fixed Operations Manager (NOC 0621)



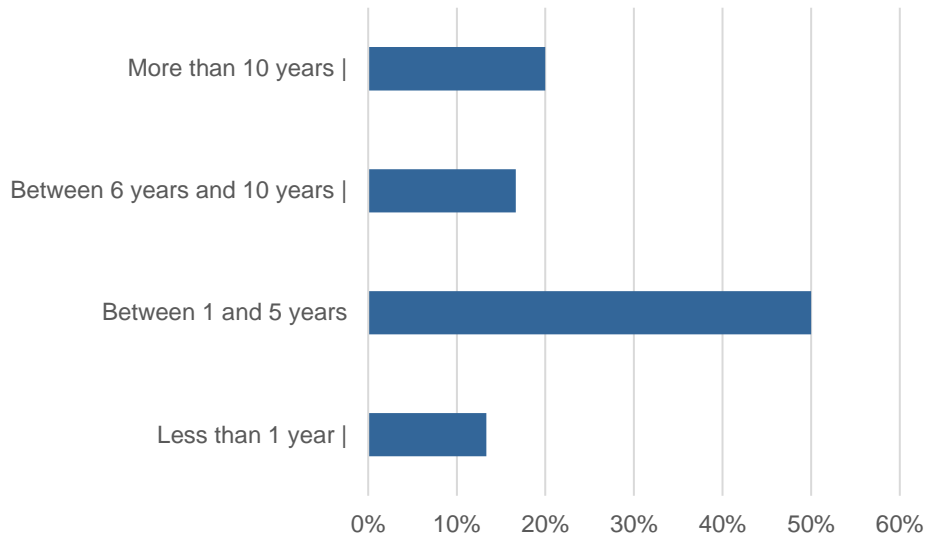
Source: Survey of Automotive Sector Employers

Longest Employee Tenure- Fixed Operations Manager (NOC 0621)



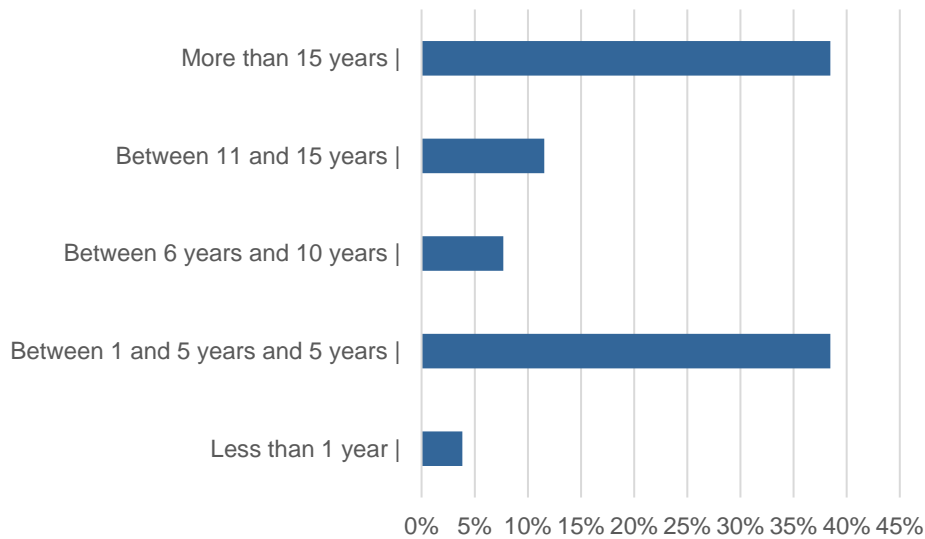
Source: Survey of Automotive Sector Employers

Average Employee Tenure- Sales Manager (NOC 0621)



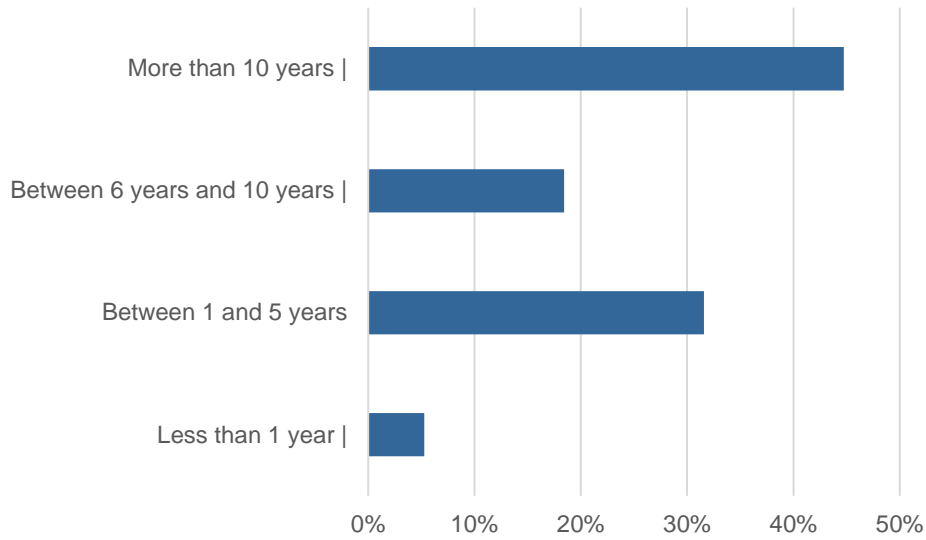
Source: Survey of Automotive Sector Employers

Longest Employee Tenure- Sales Manager (NOC 0621)



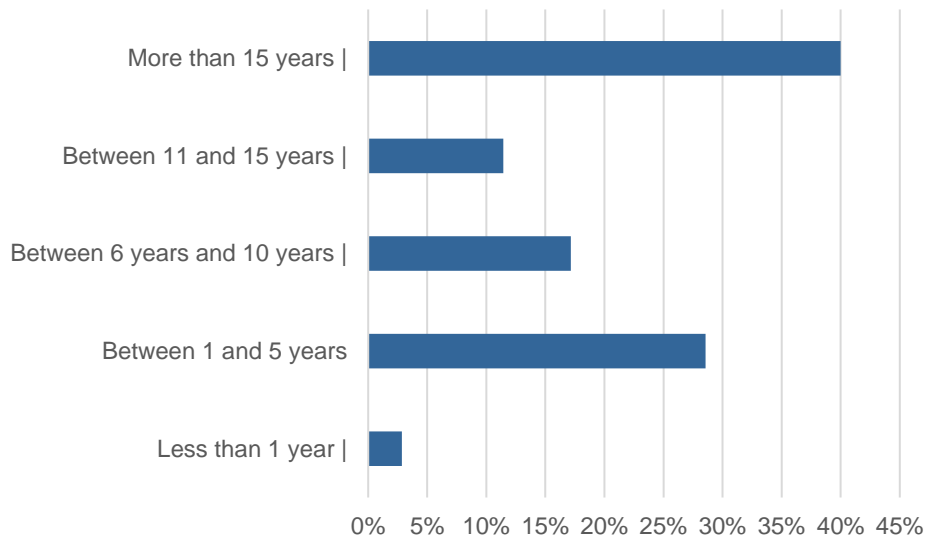
Source: Survey of Automotive Sector Employers

Average Employee Tenure- Service Manager (NOC 0651)



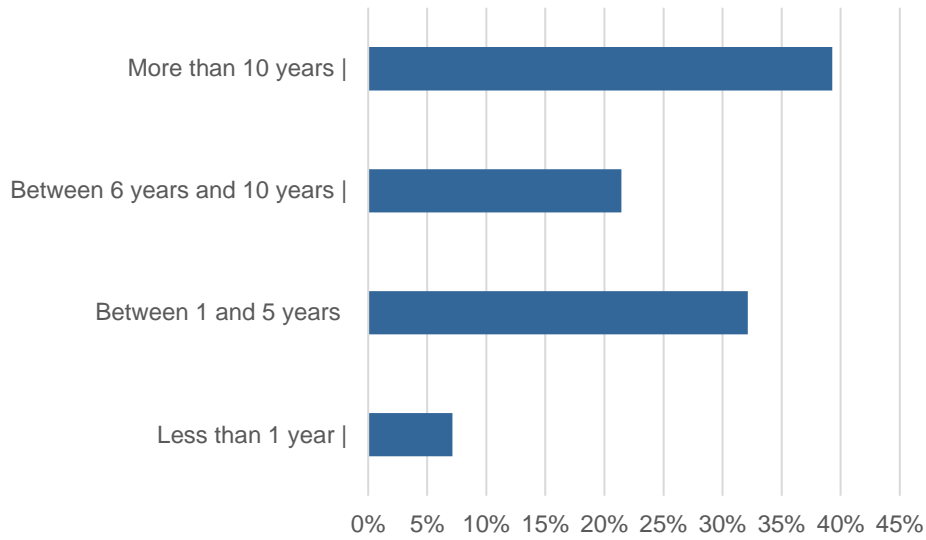
Source: Survey of Automotive Sector Employers

Longest Employee Tenure- Service Manager (NOC 0651)



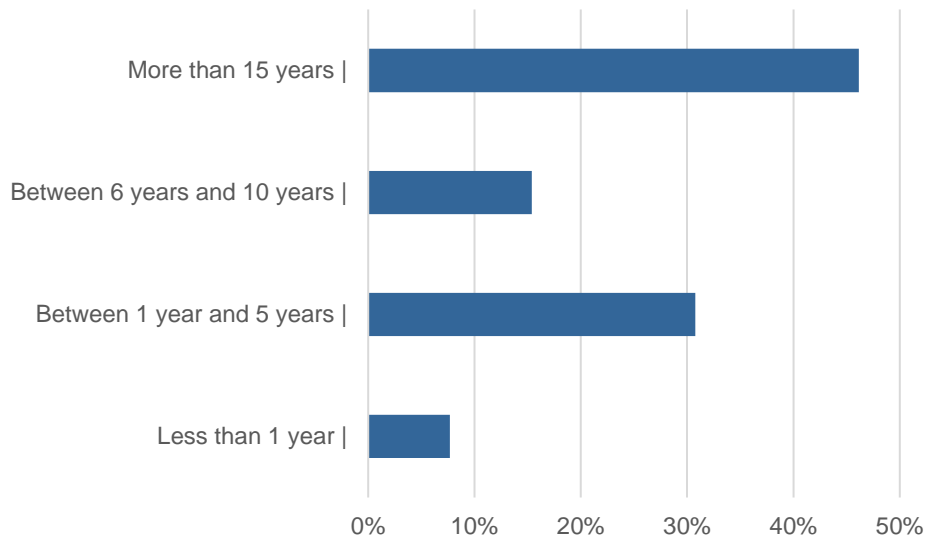
Source: Survey of Automotive Sector Employers

Average Employee Tenure- Parts Manager (NOC 1215)



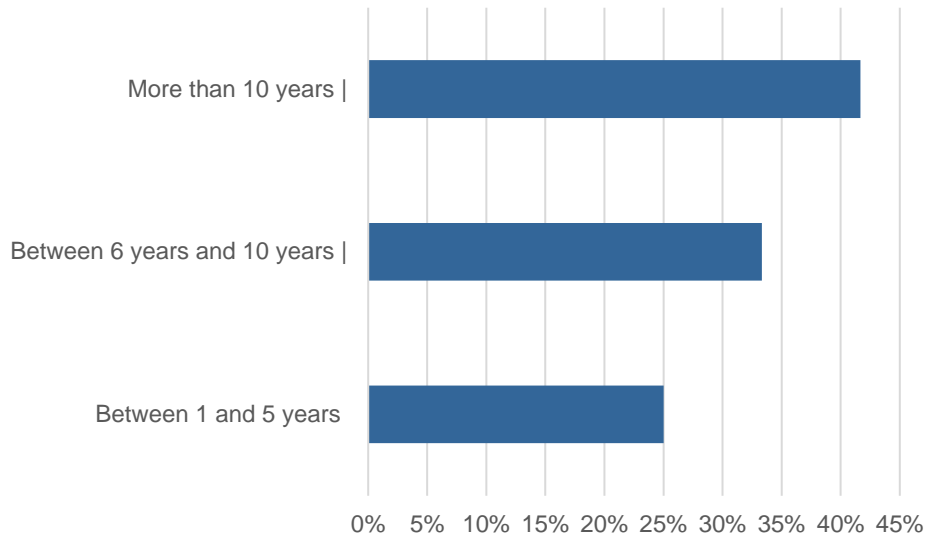
Source: Survey of Automotive Sector Employers

Longest Employee Tenure- Parts Manager (NOC 1215)



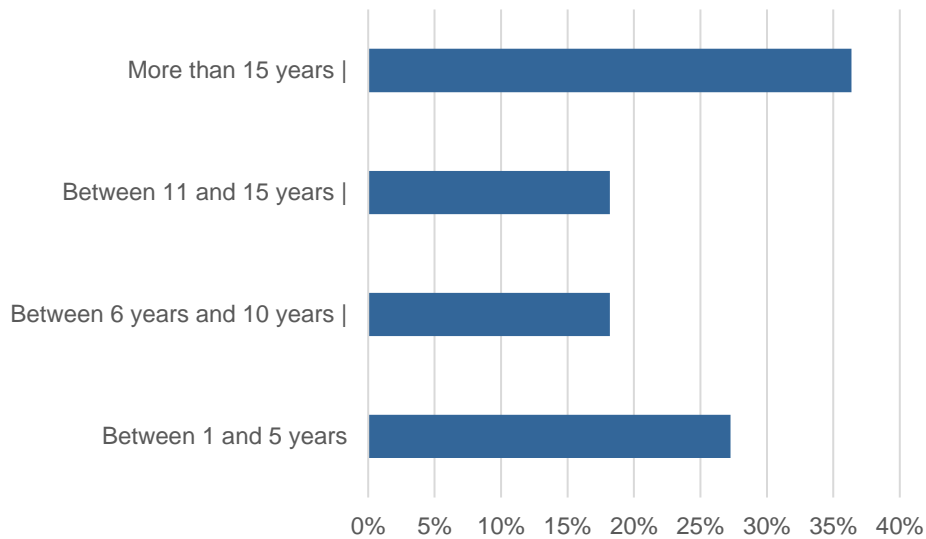
Source: Survey of Automotive Sector Employers

Average Employee Tenure- Warranty Clerk (NOC 1411)



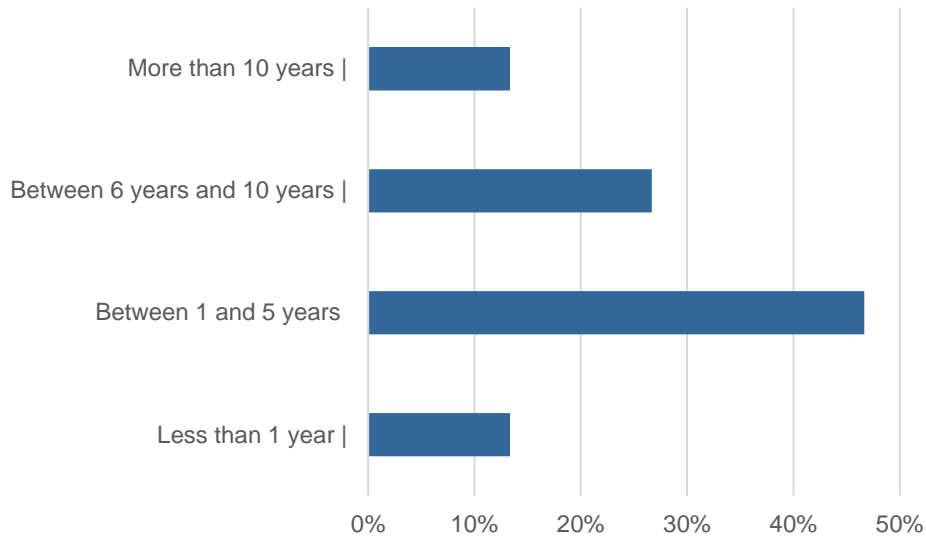
Source: Survey of Automotive Sector Employers

Longest Employee Tenure- Warranty Clerk (NOC 1411)



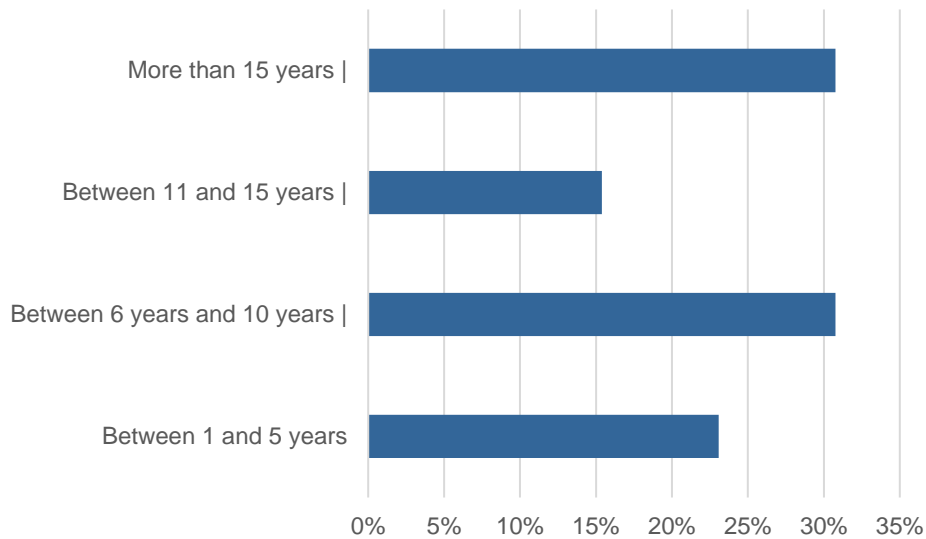
Source: Survey of Automotive Sector Employers

Average Employee Tenure- Tow Dispatcher (NOC 1525)



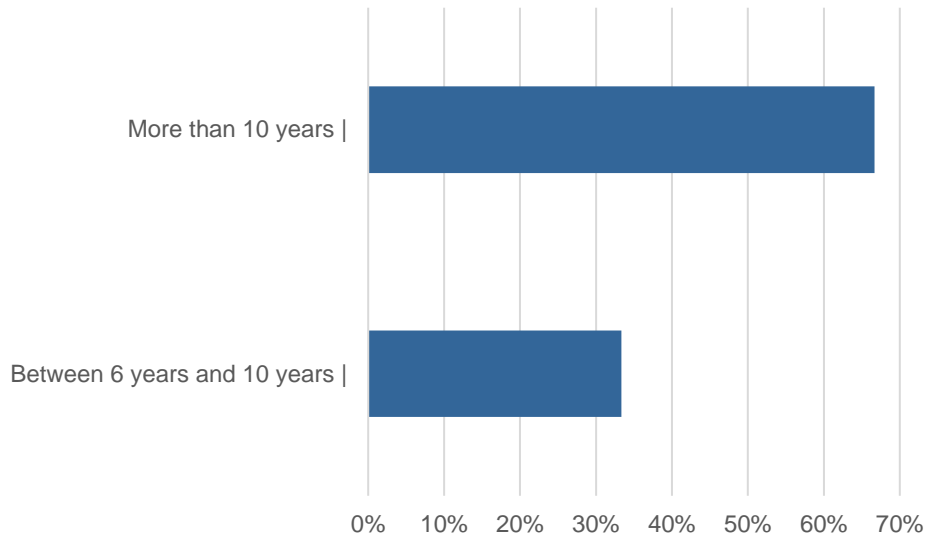
Source: Survey of Automotive Sector Employers

Longest Employee Tenure- Tow Dispatcher (NOC 1525)



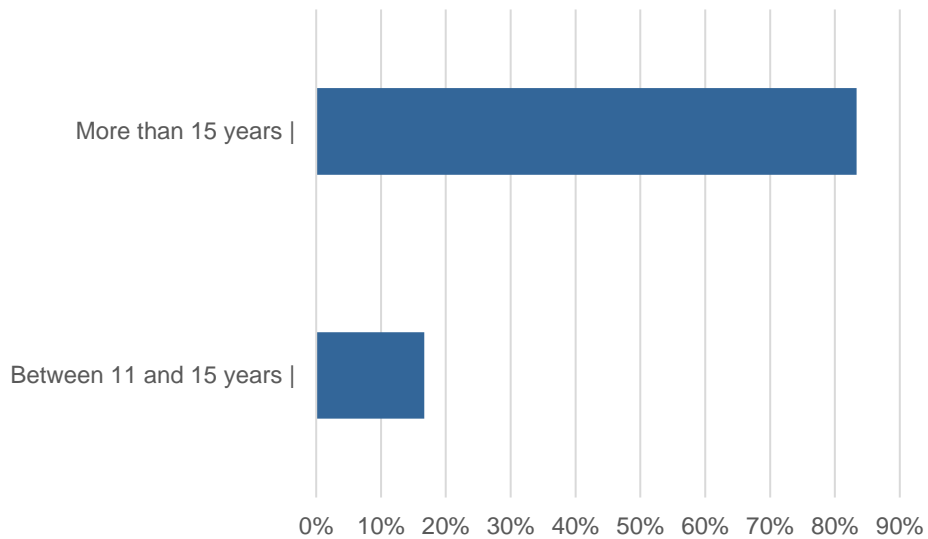
Source: Survey of Automotive Sector Employers

Average Employee Tenure- Leasing Agent (NOC 6421)



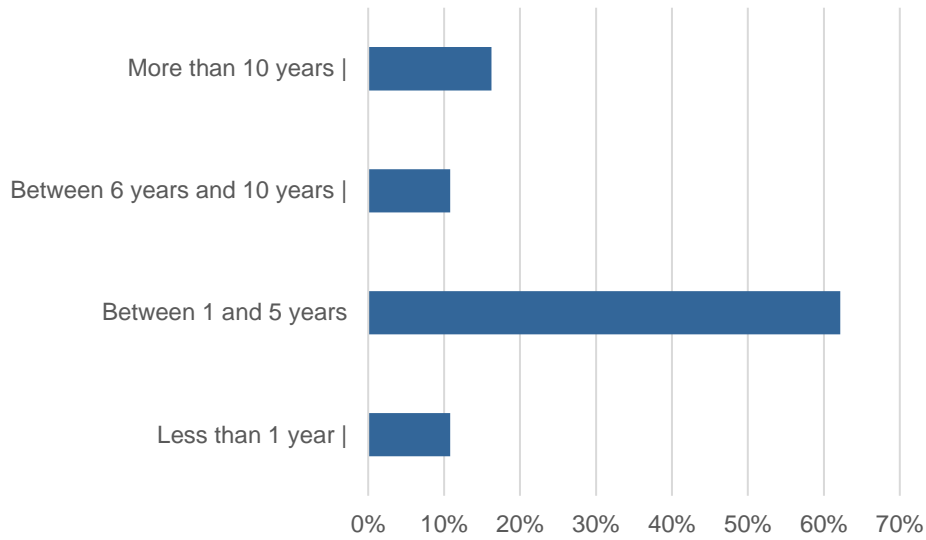
Source: Survey of Automotive Sector Employers

Longest Employee Tenure- Leasing Agent (NOC 6421)



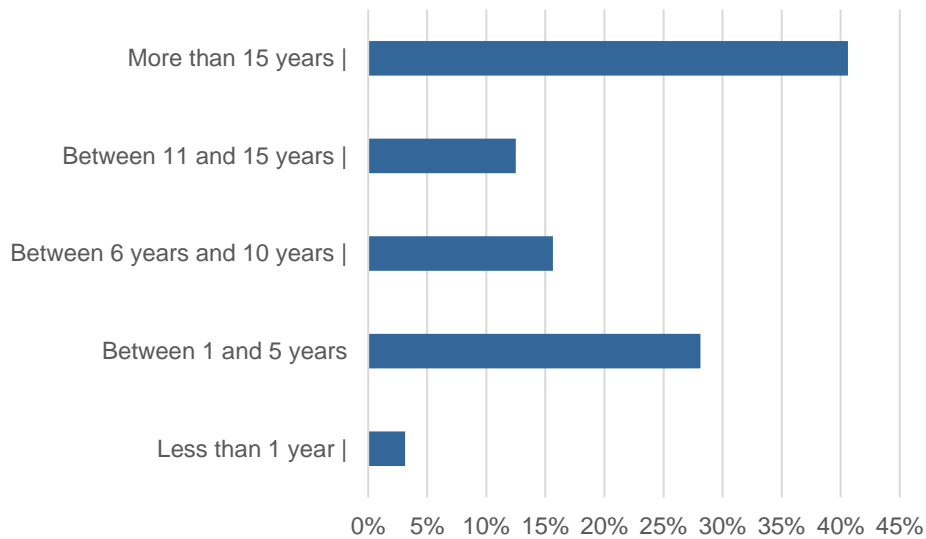
Source: Survey of Automotive Sector Employers

Average Employee Tenure- Licensed Automotive Salesperson (NOC 6421)



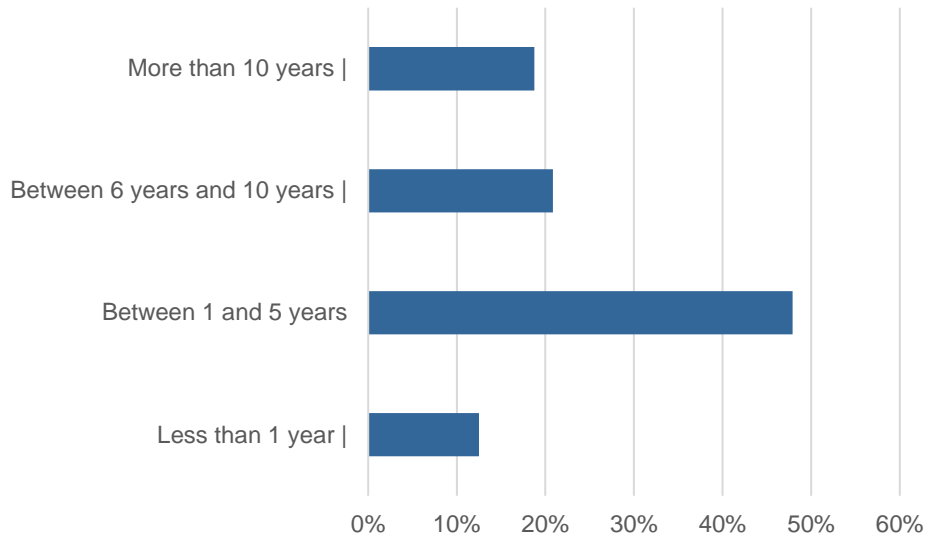
Source: Survey of Automotive Sector Employers

Longest Employee Tenure- Licensed Automotive Salesperson (NOC 6421)



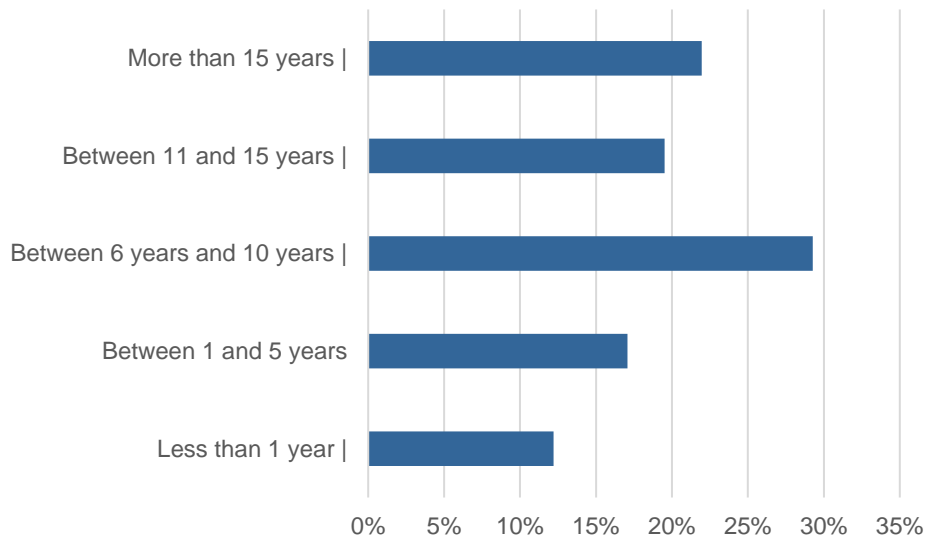
Source: Survey of Automotive Sector Employers

Average Employee Tenure- Service Advisor (NOC 6552)



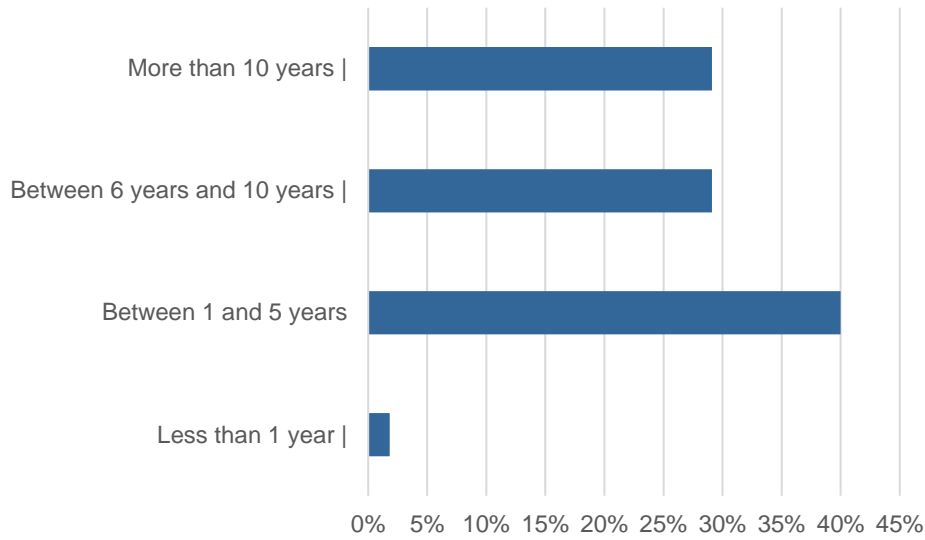
Source: Survey of Automotive Sector Employers

Longest Employee Tenure- Service Advisor (NOC 6552)



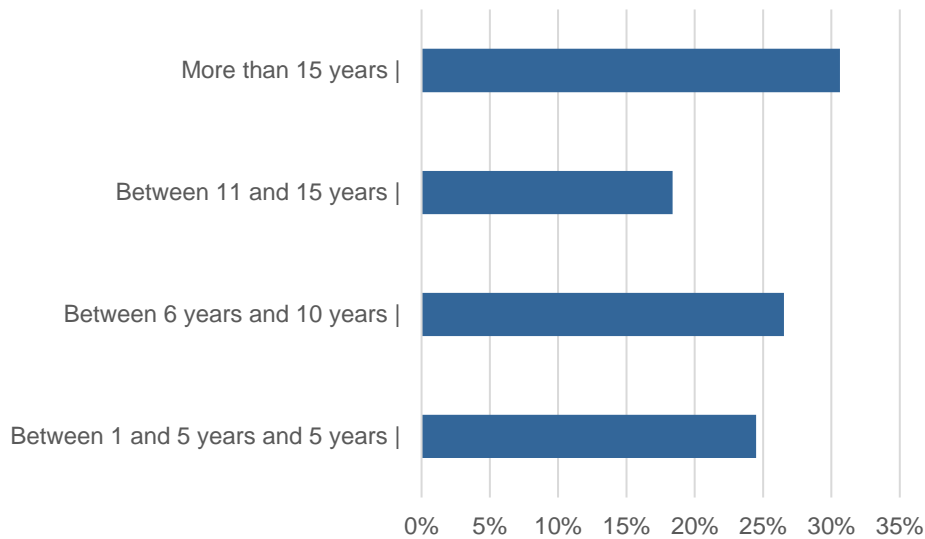
Source: Survey of Automotive Sector Employers

Average Employee Tenure- Estimator (NOC 7321/7322)



Source: Survey of Automotive Sector Employers

Longest Employee Tenure- Estimator (NOC 7321/7322)



Source: Survey of Automotive Sector Employers

APPENDIX K – STEERING COMMITTEE

Organization	Title	Sector Advisory Group Member
The Garage, Vancouver	Shop Owner	X
Napa Autopro, Prince George	Shop Owner	X
Belron Canada	Regional Director of Franchising for Western Canada	X
Elite Auto Body, North Vancouver	Shop Owner	X
Precision Auto Service, Langley	Shop Owner	X
Kelowna Honda Powerhouse, Kelowna	Shop Foreman and Lead Service Technician	X
Craftsman Collision, HQ	General Manager of Operations	X
Harbourview VW, Nanaimo		X
Automotive Retailers	President & CEO	X
Automotive Retailers	Industry Relations Advisor, Auto Recyclers, Licensed Motor Dealers, Towing	X
Automotive Retailers	Industry Relations Advisor, Auto Glass, PowerSports, Auto Rental	X
Automotive Retailers	Industry Relations Advisor, Collision Repair, Mechanical Repair	X
Automotive Retailers	Industry Relations	X
New Car Dealers Association of BC	President & CEO	X
MacPherson Savage Consulting	Principal	
Ministry of Jobs, Tourism & Skills Training and Responsible for Labour	Program Manager, Sector Programs	

APPENDIX L – ABOUT MNP

MNP is the fastest growing major chartered accountancy and business advisory firm in Canada. Founded in 1945, MNP has grown to more than 70 offices and 3,000 team members across Canada. In British Columbia, MNP has more than 700 staff located in 17 offices throughout the province. The map below shows our office locations.

MNP provides a wide range of accounting, finance and business advisory services to clients. These include:

- Assurance
- Taxation
- Corporate Finance
- Mergers and Acquisitions
- Enterprise Risk Services
- Forensic Accounting
- Consulting
- Insolvency and Corporate Recovery
- Succession
- Valuations and Litigation Support



About MNP's Economics and Research Practice

Economic and industry studies are carried out by MNP's Economics and Research practice. Based in Vancouver, the Economics and Research practice consists of a team of professionals that has a successful track record of assisting clients with a wide variety of financial and economic impact studies. Our work has encompassed a wide range of programs, industries, company operations and policy initiatives, and has helped clients with decision-making, communication of economic and financial contributions, documentation of the value of initiatives and activities, and development of public policy.