



Diversity  
Task Force

# EDI Research

Driving Towards Inclusion:  
An Analysis of Diversity Metrics in the UK Automotive Sector



# Driving Towards Inclusion: An Analysis of Diversity Metrics in the UK Automotive Sector

## Headline findings

### Gender

The current proportion of females in automotive retail in 2021/22 was 18%, this remains statistically significantly lower when comparing to the working age population which is 47.3%. The proportion of females in the sector has fallen from 19.7% previous year, however this fall is not considered to be statistically significant. Manufacturing has experienced an even greater fall, decreasing from 19.3% to 16.5%. The current proportion of females in senior roles within in automotive retail is 13%, this remains significantly lower when comparing to the working age population. It has fallen from 17.6% in the previous year however, this fall is not considered statistically significant.

One explanation for the fall in women in the sector and working population could be the detrimental effect of the COVID pandemic. Women saw significantly bigger increases in unemployment early in the pandemic, plus there were also more women on furlough than men until May 2021. It is possible that these adverse effects may have taken longer to reverse and as such could go some way to explain the decreasing proportions.

### Disabilities

The proportion of those with a disability has increased from 13.8% in the previous year to 16.7%, and this increase is statistically significant. The current proportion of those with a disability in senior roles in automotive is 11.6%, this is like the working age population. It has fallen from 15.1% in the previous year; however, this fall is not considered statistically significant. At the same point the proportion of those with disabilities in senior roles in the working age population has increased.

There may be several explanations for the increase in the proportion of those with disabilities in automotive retail. The removal of barriers for some, as a result of changing working arrangements such as the shift to flexible and home working as a result of the Covid pandemic. Another reason may be due to increase in those being open to discuss and declare their disability as well as well those who may receive a diagnosis later in life. This is supported by anecdotal evidence from BEN (automotive charity) that they have seen a significant increase in the number support calls requesting assistance with a disability diagnosis.

### Ethnicity

The current proportion of non-white British in Automotive Retail is 9.5%. This remains significantly lower when comparing to the working age population (19%). Positively the proportion of non-white British within automotive retail has increased from 7.8% to 9.5%, but this increase is not considered statistically

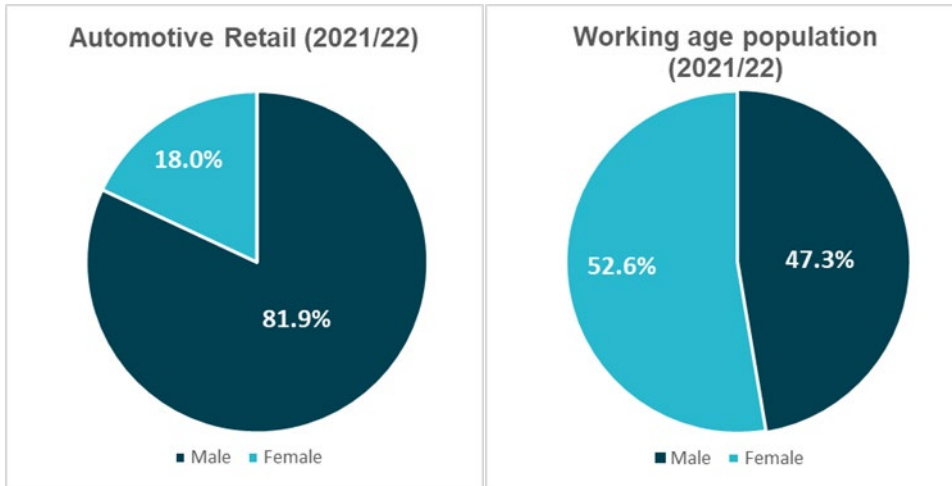
significant. The proportion of non-white British in senior roles within automotive retail has increased in the past year - increasing from 4% to 10% and this increase is statistically significant. However, comparing current proportions to the working age population there are still statistically significant fewer non-white British in automotive retail than those in the working population.

Possible reasons for the positive increase in the proportion of non-white British in senior roles, is the Black Lives Matter (BLM) movement from 2020, which has caused a significant positive shift in the quality of conversations about organisational approaches to race and ethnic diversity.

*This work was produced using statistical data from ONS. The use of the ONS statistical data in this work does not imply the endorsement of the ONS in relation to the interpretation or analysis of the statistical data. This work uses research datasets which may not exactly reproduce National Statistics aggregates.*

## Proportion of females

### Automotive



The current proportion of females in automotive retail in 2021/22 was 18%, this remains statistically significantly lower when comparing to the working age population 47.3%.

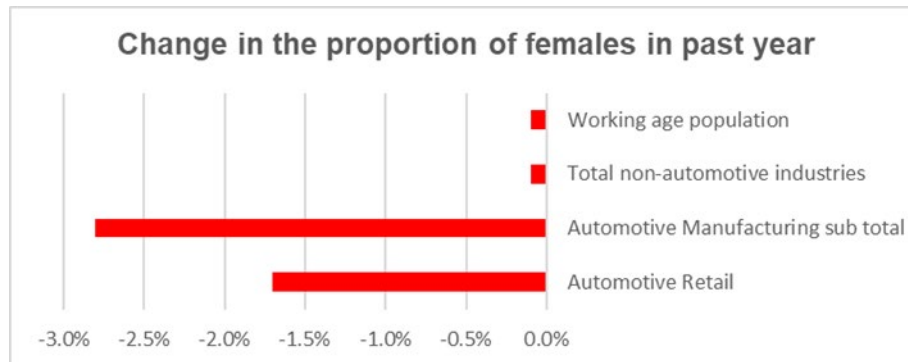
### Proportion of males & females by automotive industry code Oct 2021 to Sept 2022

SIC (Industry)	Sex of respondent	
	Male	Female
4511 Sale of cars & light motor vehles	79.1%	20.8%
4519 Sale of other motor vehicles	75.4%	24.5%
4520 Maintenance & repair motor vehles	86.5%	13.4%
4531 Wsale trade motor veh parts & acc	72.6%	27.3%
4532 Ret trade of motor veh parts & acc	72.4%	27.5%
4540 Sale, main, rep mtrcycle & rel prt	83.3%	16.6%
4677 Wholesale of waste and scrap	83.5%	16.4%
7711 Rent & lease cars & light motr veh	73.1%	26.8%
7712 Renting and leasing of trucks	81.8%	18.1%
<b>Automotive Retail sub total</b>	<b>81.9%</b>	<b>18.0%</b>
2910 Manufacture of motor vehicles	80.9%	19.0%
2920 Man bodies for motor veh & trailer	88.1%	11.8%
2931 Man of electric eqmt for motor veh	67.5%	32.5%
2932 Man othr parts & acc for motor veh	87.7%	12.2%
3091 Manufacture of motorcycles	90%*	-
<b>Automotive Manufacturing sub total</b>	<b>83.4%</b>	<b>16.5%</b>
<b>Total non-automotive industries</b>	<b>49.3%</b>	<b>50.6%</b>
<b>Working age population</b>	<b>47.3%</b>	<b>52.6%</b>
- <i>supressed due to low counts</i>		
* Rounded to nearest 5% to avoid possible identification		

The current proportion of females (18%) in automotive retail equates to approximately 104,200 individuals.



In terms of sub sectors the highest proportion of females is within the rental & leasing of cars & light motor vehicles, (26.8%), the smallest proportion of females is within maintenance & repair motor vehicles (13.4%).

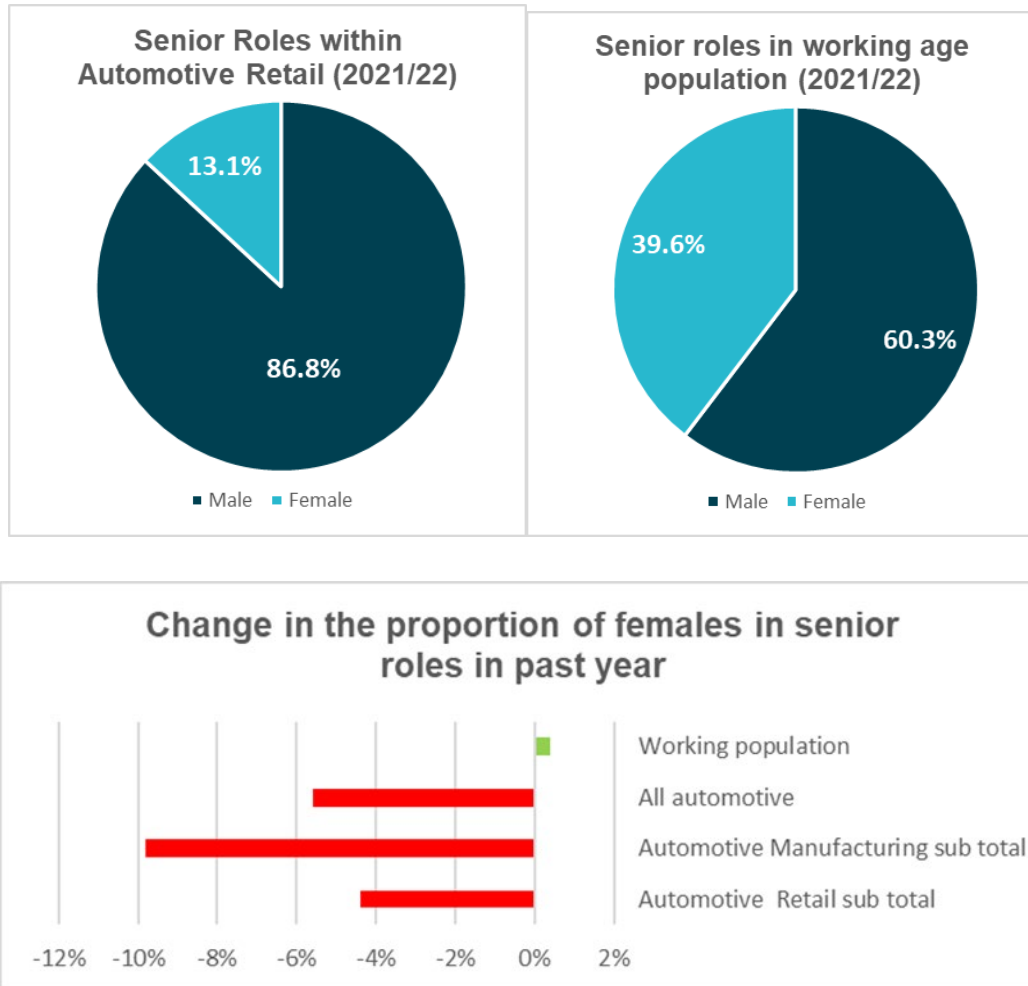


The proportion of females in the sector has fallen from 19.7% in the previous year to 18%, however this fall is not considered statistically significant. Manufacturing has experienced an even greater fall, decreasing from 19.3% to 16.5%. In terms of subsectors, the largest fall in females has been in renting and leasing of trucks following from 24.1% to 18.1% - please see appendix for data table.

It is interesting to note that the proportion of females in the working age population has fallen, albeit by a very small amount. This could be due to the detrimental effect of the COVID pandemic. House of Commons paper August 2022 Coronavirus: Impact on the labour market<sup>1</sup> notes that women saw significantly bigger increases in unemployment early in the pandemic, with levels rising by 23.8% in the year to January-March 2021, compared to a rise of 19.9% for men. There were also more women on furlough than men until May 2021. This is partly because women were more likely to be employed in industries that were particularly affected by the pandemic, such as retail and accommodation and food services, but economists also found that women were more likely to be furloughed than men doing a similar role. It is possible that these adverse effects may have taken longer to reverse and as such could go some way to explain the fall in women in the working population and automotive retail.

<sup>1</sup> /<https://researchbriefings.files.parliament.uk/documents/CBP-8898/CBP-8898.pdf>

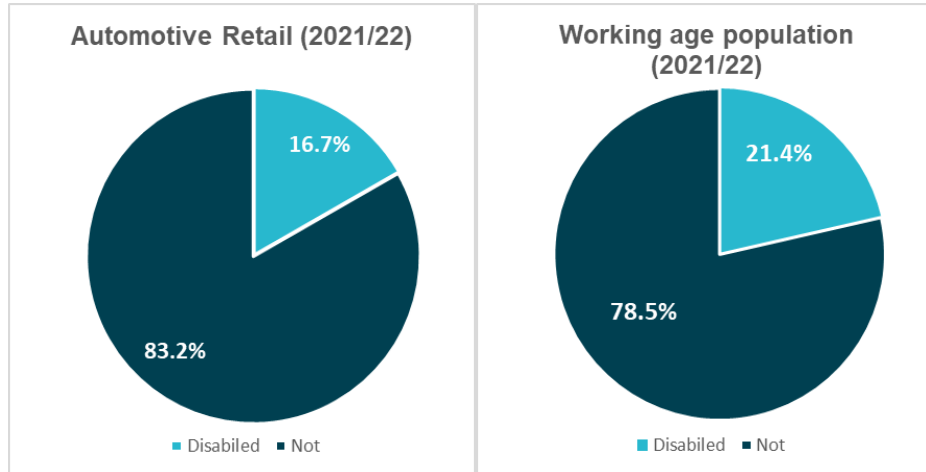
## Senior Roles



The current proportion of females in senior roles within automotive retail is 13%, this remains significantly lower when comparing to the working age population. It has fallen from 17.6% in the previous year however, this fall is not statistically significant.

## Proportion of those with a disability

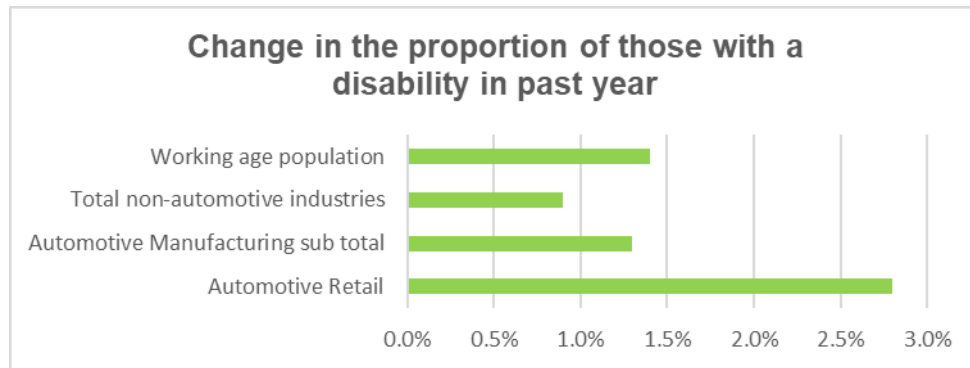
### Automotive retail



The current proportion of those with a disability in automotive retail is 16.7%, this remains lower when comparing to the working age population, although this is not statistically significant.

### Proportion with and without disabilities by automotive industry code Oct 2021 to Sept 2022

SIC (Industry)	current disability	
	Equality Act Disabled	Not Equality Act Disabled
4511 Sale of cars & light motor vehles	12.7%	87.2%
4519 Sale of other motor vehicles	-	95%*
4520 Maintenance & repair motor vehles	16.8%	83.1%
4531 Wsale trade motor veh parts & acc	16.9%	83.0%
4532 Ret trade of motor veh parts & acc	22.7%	77.2%
4540 Sale, main, rep mtrcycle & rel prt	31.8%	68.1%
4677 Wholesale of waste and scrap	12.9%	87.0%
7711 Rent & lease cars & light motr veh	16.1%	83.8%
7712 Renting and leasing of trucks	16.6%	83.3%
<b>Automotive Retail sub total</b>	<b>16.7%</b>	<b>83.2%</b>
2910 Manufacture of motor vehicles	12.6%	87.3%
2920 Man bodies for motor veh & trailer	14.2%	85.7%
2931 Man of electric eqmt for motor veh	-	95%*
2932 Man othr parts & acc for motor veh	14.6%	85.3%
3091 Manufacture of motorcycles	-	75%*
<b>Automotive Manufacturing sub total</b>	<b>13.3%</b>	<b>86.6%</b>
<b>Total non-automotive industries</b>	<b>15.7%</b>	<b>84.2%</b>
<b>Working age population</b>	<b>21.4%</b>	<b>78.5%</b>
- <i>supressed due to low counts</i>		
* Rounded to nearest 5% to avoid possible identification		



The current proportion of those with a disability (16.7%) in automotive retail equates to approximately 96,700 individuals.

The proportion of those with a disability working in the automotive retail sector has increased from 13.8% in the previous year to 16.7% and this **increase is statistically** significant. There are increases across the 4 areas measured, however automotive retail has seen the largest proportional increase. There may be a number of explanations for this. One, which will be investigated later, is the increased opportunities for those with disabilities as a result of changing working arrangements i.e., the shift to flexible and home working as a result of the Covid pandemic.

Another reason maybe due to an increase in those being open to discuss and declare their disability as well as well those who may receive a diagnosis later in life. Anecdotal evidence from BEN (the UK automotive charity) that they have seen a significant increase in the number support calls requesting assistance with a disability diagnose.

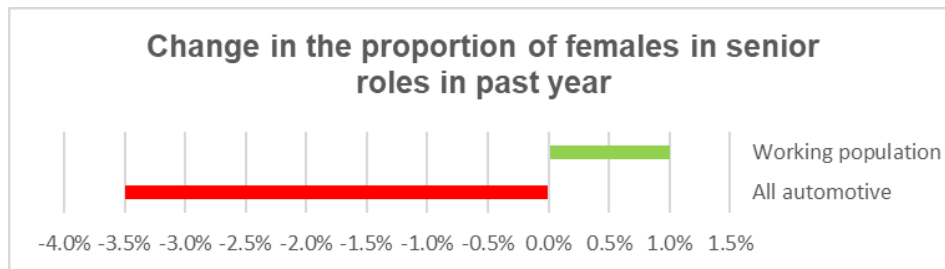
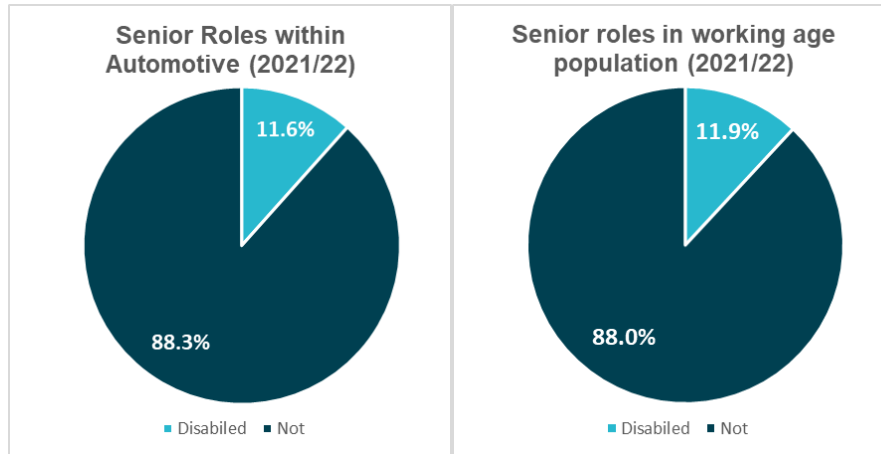
**Proportion with and without a disability automotive occupation code comparison 2020/21 & 2021/22**

	Equality Act Disabled		Equality Act Disabled	
	Yes	No	Yes	No
Garage managers and proprietors	24%	76%	13%	87%
Vehicle technicians, mechanics and electricians	11%	89%	14%	86%
Vehicle body builders and repairers	14%	86%	20%	80%
Vehicle paint technicians	-	-	-	-
Vehicle and parts salespersons and advisers	21%	79%	12%	88%
Assemblers (vehicles and metal goods)	12%	88%	14%	86%
Tyre, exhaust and windscreen fitters	-	-	-	-

From an occupation viewpoint, Vehicle body builders and repairers has seen the largest increase in the proportion of those with disabilities, increasing from 14% to 20%.



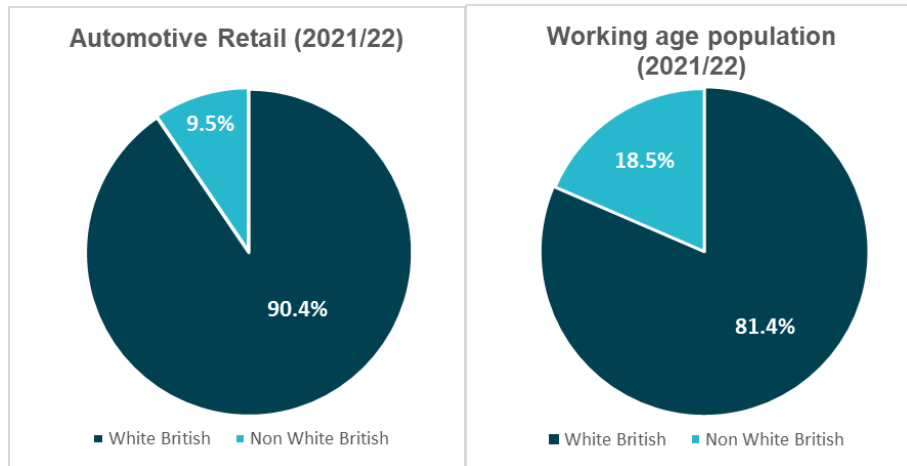
## Senior Roles



The current proportion of those with a disability in senior roles in automotive is 11.6%, this at similar levels when comparing to the working age population. It has fallen from 15.1% in the previous year however, this fall is not statistically significant. At the same point the proportion of those with disabilities in senior roles in the working age population has increased. It's not initially clear at this point the reason for the fall in automotive, given the increase of those with a disability within automotive.

## Proportion of non-white British

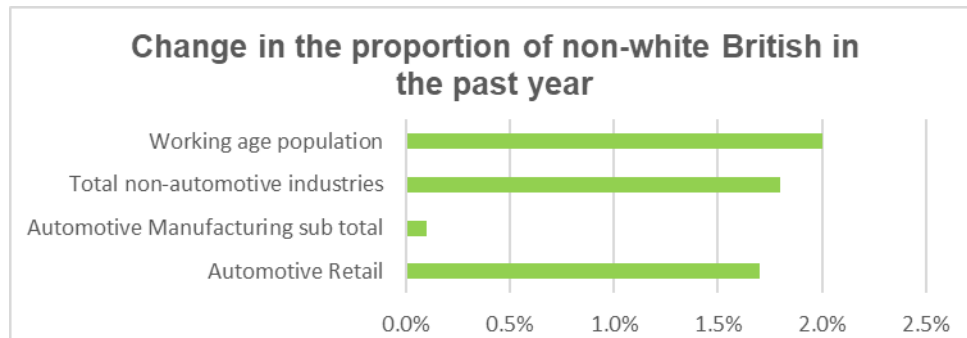
### Automotive



The current proportion of non-White British in Automotive Retail is 9.5%. This remains significantly lower when comparing to the working age population (19%).

### Proportion of White British and non-White British by automotive industry code Oct 2021 to Sept 2022

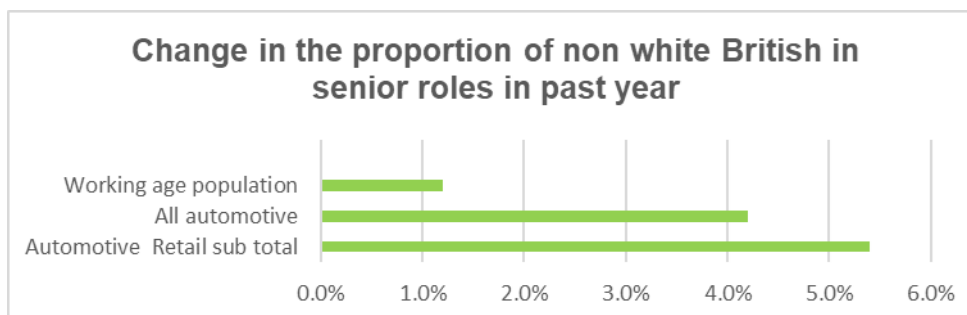
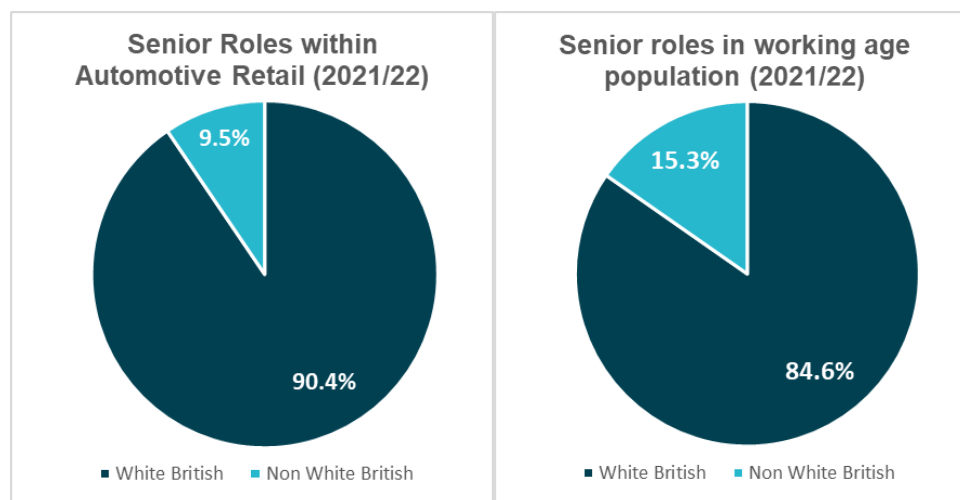
SIC (Industry)	White British	Non White British
4511 Sale of cars & light motor vehles	91.2%	8.7%
4519 Sale of other motor vehicles	-	-
4520 Maintenance & repair motor vehles	91.6%	8.3%
4531 Wsale trade motor veh parts & acc	85.1%	14.8%
4532 Ret trade of motor veh parts & acc	91.5%	8.4%
4540 Sale, main, rep mtrcycle & rel prt	91.2%	8.7%
4677 Wholesale of waste and scrap	-	-
7711 Rent & lease cars & light motr veh	82.7%	17.2%
7712 Renting and leasing of trucks	-	-
<b>Automotive Retail sub total</b>	<b>90.4%</b>	<b>9.5%</b>
2910 Manufacture of motor vehicles	80%	20%
2920 Man bodies for motor veh & trailer	-	-
2931 Man of electric eqmt for motor veh	-	-
2932 Man othr parts & acc for motor veh	72%	28%
3091 Manufacture of motorcycles	-	-
<b>Automotive Manufacturing sub total</b>	<b>78%</b>	<b>22%</b>
<b>Total non-automotive industries</b>	<b>83%</b>	<b>17%</b>
<b>Working age population</b>	<b>81%</b>	<b>19%</b>
- <i>supressed due to low counts</i>		



The current proportion of non-white British (9.5%) in automotive retail equates to approximately 55,000 individuals.

Positively the proportion of non-white British has increased from 7.8% to 9.5%, but this increase is not considered statistically significant.

### Senior Roles



The proportion of non-white British in senior roles within automotive retail has increased in the past year - increasing from 4% to 10% and this increase is statistically significant.

However, comparing current proportions to the working age population there are still statistically significant fewer non-white British in automotive retail than those in the working population.

To summarise, there has been a significant increase in the past year of non-white British in senior roles within automotive retail however there is still work to do in order to meet the same (or exceed) proportions as the working age population.

Possible reasons for the increase are that the Black Lives Matter (BLM) movement from 2020 had caused a significant positive shift in the quality of conversations about organisational approaches to race and ethnic diversity. This is not unique to automotive retail, NHS England are reporting that black and minority ethnic (BME) representation in senior positions in the NHS are at their highest ever level according to an annual report into race equality across the NHS.<sup>2</sup>

## Data & Methods

This analysis uses ONS data specifically Labour Force Survey data.

Office for National Statistics, released 19 December 2022, ONS SRS Metadata Catalogue, dataset, Labour Force Survey Person - UK, 10.57906/ns1n-5z243

The Labour Force Survey (LFS) is a survey of households living at private addresses in the UK. Its purpose is to provide information on the UK labour market which can then be used to develop, manage, evaluate, and report on labour market policies. The survey is managed by the Social Surveys division of the Office for National Statistics (ONS). The LFS is conducted on a quarterly basis, but the ONS produce three month estimates monthly.

For this study, we accessed data for the following time periods (Oct\_Dec 2021, Jan\_Mar 2022, Apr\_Jun 2022, Jul\_Sept 2022) combined to form a 2021/2022 data set, and (Oct\_Dec 2020, Jan\_Mar 2021, Apr\_Jun 2021, Jul\_Sept 2021) combined to form a 2020/21 data set.

Data was then viewed from a government office region perspective examining 3 core diversity measures:

- Gender (Male / Female)
- Disabilities (With a disability / without a disability)
- Ethnicity (White British / Non- White British)

Variables outlined above were used as an indicator for diversity, these were examined as proportions within automotive industries (SIC) and by automotive occupations (SOC). Data are basic descriptive statistics examining proportions with industry sectors and occupations. The 2 years were then compared and tested to see if any change has occurred.

<sup>2</sup> <https://www.england.nhs.uk/2022/04/top-jobs-in-nhs-more-diverse-than-any-point-in-history/>

<sup>3</sup> <https://doi.org/10.57906/ns1n-5z24>

## Testing for significance

To test if any differences were classified as statistically significant, Chi Square tests were performed.

In a chi-square test, the statistical significance is determined by comparing the calculated test statistic to a critical value from a chi-square distribution with a certain degree of freedom. The degree of freedom is typically determined by the number of categories or levels in the variables being compared. A larger sample size, or a smaller degree of freedom, can increase the power of the test, making it easier to detect statistically significant differences. Therefore, it's possible for example that a variable with the 2% change upwards had a larger sample size or a smaller degree of freedom, making it easier to detect a statistically significant difference and another variable with a 2% downward trend may have had a smaller sample size and therefore not statistically significant.

It's important to note that statistical significance does not always imply practical significance or importance. In other words, just because a result is statistically significant does not necessarily mean that it's meaningful or relevant in real-world terms. It's important to consider the context and practical implications of the results in addition to their statistical significance.



## Appendix

### Proportion of males & females by automotive industry code comparison 2020/21 & 2021/22

	2020/21		2021/22	
	Sex of respondent		Sex of respondent	
	Male	Female	Male	Female
4511 Sale of cars & light motor vehles	76.5%	23.4%	79.1%	20.8%
4519 Sale of other motor vehicles	-	-	-	-
4520 Maintenance & repair motor vehles	82.7%	17.2%	86.5%	13.4%
4531 Wsale trade motor veh parts & acc	69.2%	30.7%	72.6%	27.3%
4532 Ret trade of motor veh parts & acc	78.2%	21.7%	72.4%	27.5%
4540 Sale, main, rep mtrcycle & rel prt	87.0%	12.9%	83.3%	16.6%
4677 Wholesale of waste and scrap	83.1%	16.8%	83.5%	16.4%
7711 Rent & lease cars & light motr veh	71.1%	28.8%	73.1%	26.8%
7712 Renting and leasing of trucks	75.8%	24.1%	81.8%	18.1%
<b>Automotive Retail sub total</b>	<b>80.2%</b>	<b>19.7%</b>	<b>81.9%</b>	<b>18.0%</b>
2910 Manufacture of motor vehicles	79.1%	20.8%	80.9%	19.0%
2920 Man bodies for motor veh & trailer	84.9%	15.0%	88.1%	11.8%
2931 Man of electric eqmt for motor veh	-	-	-	-
2932 Man othr parts & acc for motor veh	81.7%	18.2%	87.7%	12.2%
3091 Manufacture of motorcycles	-	-	-	-
<b>Automotive Manufacturing sub total</b>	<b>80.6%</b>	<b>19.3%</b>	<b>83.4%</b>	<b>16.5%</b>
<b>Total non-automotive industries</b>	<b>49.1%</b>	<b>50.8%</b>	<b>49.3%</b>	<b>50.6%</b>
<b>Working age population</b>	<b>47.2%</b>	<b>52.7%</b>	<b>47.3%</b>	<b>52.6%</b>

### Proportion of males & females in senior roles comparison 2020/21 & 2021/22

	2020/21		2021/22	
	Sex of respondent		Sex of respondent	
	Male	Female	Male	Female
Automotive Retail sub total	82.3%	17.6%	86.8%	13.1%
Automotive Manufacturing sub total	63.5%	36.4%	73.3%	26.6%
All automotive	77.3%	22.6%	82.9%	17.0%
Working population	60.8%	39.1%	60.3%	39.6%

**Proportion of those with and without disability by automotive industry code comparison 2020/21 & 2021/22**

SIC (Industry)	2020/21		2021/22	
	Equality Act Disabled		Equality Act Disabled	
	Yes	No	Yes	No
4511 Sale of cars & light motor vehles	15%	85%	13%	87%
4519 Sale of other motor vehicles	-	-	-	-
4520 Maintenance & repair motor vehles	13%	87%	17%	83%
4531 Wsale trade motor veh parts & acc	-	-	-	-
4532 Ret trade of motor veh parts & acc	23%	77%	23%	77%
4540 Sale, main, rep mtrcycle & rel prt	16%	84%	32%	68%
4677 Wholesale of waste and scrap	11%	89%	13%	87%
7711 Rent & lease cars & light motr veh	-	-	-	-
7712 Renting and leasing of trucks	-	-	-	-
<b>Automotive Retail sub total</b>	<b>14%</b>	<b>86%</b>	<b>17%</b>	<b>83%</b>
	-	-	-	-
2910 Manufacture of motor vehicles	11%	89%	13%	87%
2920 Man bodies for motor veh & trailer	9%	91%	14%	86%
2931 Man of electric eqmt for motor veh	-	-	-	-
2932 Man othr parts & acc for motor veh	14%	86%	15%	85%
3091 Manufacture of motorcycles	-	-	-	-
<b>Automotive Manufacturing sub total</b>	<b>12%</b>	<b>88%</b>	<b>13%</b>	<b>87%</b>
<b>Total non-automotive industries</b>	<b>15%</b>	<b>85%</b>	<b>16%</b>	<b>84%</b>
<b>Working age population</b>	<b>20%</b>	<b>80%</b>	<b>21%</b>	<b>79%</b>

**Proportion of those with a disability in senior roles Comparison 2020/21 & 2021/22**

	2020/21		2021/22	
	Equality Act Disabled		Equality Act Disabled	
	Yes	No	Yes	No
All automotive	15.1%	85%	11.6%	88.3%
Working age population	11%	89%	11.9%	88.0%

### Proportion of white and non-white British by automotive industry code comparison 2020/21 & 2021/22

SIC (Industry)	2020/21		2021/22	
	Ethnicity (18 categories) England and Wales level		Ethnicity (18 categories) England and Wales level	
	White British	Non White British	White British	Non White British
4511 Sale of cars & light motor vehles	90.8%	9.1%	91.2%	8.7%
4519 Sale of other motor vehicles	-	-	-	-
4520 Maintenance & repair motor vehles	92.2%	7.7%	91.6%	8.3%
4531 Wsale trade motor veh parts & acc	-	-	-	-
4532 Ret trade of motor veh parts & acc	93.7%	6.2%	91.5%	8.4%
4540 Sale, main, rep mtrcycle & rel prt	-	-	-	-
4677 Wholesale of waste and scrap	-	-	-	-
7711 Rent & lease cars & light motr veh	-	-	-	-
7712 Renting and leasing of trucks	-	-	-	-
<b>Automotive Retail sub total</b>	<b>92.1%</b>	<b>7.8%</b>	<b>90.4%</b>	<b>9.5%</b>
2910 Manufacture of motor vehicles	76.1%	23.8%	79.6%	20.3%
2920 Man bodies for motor veh & trailer	-	-	-	-
2931 Man of electric eqmt for motor veh	-	-	-	-
2932 Man othr parts & acc for motor veh	75.8%	24.1%	72.0%	28.0%
3091 Manufacture of motorcycles	-	-	-	-
<b>Automotive Manufacturing sub total</b>	<b>78.5%</b>	<b>21.4%</b>	<b>78.4%</b>	<b>21.5%</b>
<b>Total non-automotive industries</b>	<b>84.3%</b>	<b>15.6%</b>	<b>82.5%</b>	<b>17.4%</b>
<b>Working age population</b>	<b>83.5%</b>	<b>16.4%</b>	<b>81.4%</b>	<b>18.5%</b>

### Proportion of White and Non-White British in senior roles year comparison

	2020/21		2021/22	
	White British	Non White British	White British	Non White British
<b>Automotive Retail sub total</b>	95.8%	4.1%	90.4%	9.5%
<b>All automotive</b>	94.8%	5.1%	90.6%	9.3%
<b>Working population</b>	85.9%	14.0%	84.6%	15.3%