Motorcycle and Car Driving Licence Holders

AGE DEMOGRAPHIC AND GB REGIONAL COMPARISON

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Introduction

This report examines the age demographic of licence holders for cars and motorcycles along with any regional variation within GB. The analysis draws on Government-published data sets and data obtained from the Driver and Vehicle Licensing Agency (DVLA) through Freedom of Information (FOI) requests.

The primary interest of the analysis is to establish any differences in demographic that may suggest entry to motorcycling is suppressed, what potential there may be for encouraging modal shift from cars to motorcycles, and whether there are any potential entry or safety implications resulting from differences in the licensing regimes for the two vehicle classes.

Routes to licensed status in the UK

There is a significant difference for the prospective licence holder between the pathways for obtaining a car and a motorcycle licence in the UK.

For a car driving licence the process is straightforward, linear and consistent for all. In basic terms, apply for a provisional licence, theory test, practical test, drive any car. Leaving aside variable training costs, the licence process has a cost of £119 - £141. The higher cost applies if applying for a provisional licence on a paper form as opposed to online and/or taking the practical test at a weekend or evening, as opposed to a weekday.

Motorcycle licences come in a variety of formats depending on the type of motorcycle/moped, and the route to achieving those licences varies dependent on both age and the applicant's car licence status. The complexity of approach is clearly demonstrated in the Department for Transport (DfT) five-page document containing flow charts for five different scenarios (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1056066/how-to-get-a-motorcycle-licence.pdf).

The costs for obtaining a motorcycle licence varies in each of the five scenarios but, for example, for a 17-year-old to get an A1 licence, again leaving aside any variable training costs (but including the mandatory Compulsory Basic Training (CBT)) is £373 - £461. The CBT is mandatory but does not have a fixed price. It must be delivered by a registered training body, but the price is set by the individual training body.

Licence Holders by age and region

We obtained data for numbers of car and motorcycle licence holders by age bands and postcode area by FOI request from the DVLA. This data was sorted by region. The data covers Great Britain.

Figure 1: Car licence holders

Region	16-24	25-34	35-44	45-54	55-64	65-70	Over 70	Total
East Midlands	192,762 6.36%	465,133 15.35%	521,665 17.21%	569,102 18.78%	592,008 19.54%	270,166 8.92%	419,581 13.85%	3,030,417 100.00%
East of England	269,510 6.18%	648,287 14.88%	771,193 17.70%	830,196 19.05%	840,220 19.28%	381,349 8.75%	616,929 14.16%	4,357,684 100.00%
London	213,484 4.32%	858,665 17.36%	1,122,929 22.70%	1,072,995 21.69%	952,694 19.26%	366,244 7.40%	359,062 7.26%	4,946,073 100.00%
North East	98,848 6.13%	240,927 14.95%	273,562 16.98%	294,327 18.26%	329,935 20.47%	157,404 9.77%	216,507 13.44%	1,611,510 100.00%
North West	269,955 5.92%	706,472 15.49%	809,819 17.76%	858,992 18.83%	907,509 19.90%	411,910 9.03%	596,199 13.07%	4,560,856 100.00%
Scotland	210,456 6.07%	501,152 14.46%	592,625 17.10%	659,207 19.02%	727,188 20.99%	337,148 9.73%	437,443 12.62%	3,465,219 100.00%
South East	381,927 6.03%	903,051 14.26%	1,128,585 17.82%	1,240,018 19.58%	1,246,247 19.68%	556,290 8.78%	876,155 13.84%	6,332,273 100.00%
South West	233,610 5.96%	548,538 14.00%	629,150 16.06%	704,454 17.98%	781,744 19.95%	378,490 9.66%	641,561 16.38%	3,917,547 100.00%
Wales	145,016 6.70%	320,876 14.82%	348,009 16.07%	386,804 17.86%	429,736 19.85%	207,381 9.58%	327,552 15.13%	2,165,374 100.00%
West Midlands	223,089 6.30%	560,370 15.83%	630,223 17.81%	667,075 18.85%	670,827 18.96%	306,869 8.67%	480,519 13.58%	3,538,972 100.00%
Yorkshire & the Humber	210,512 6.31%	521,413 15.62%	582,908 17.46%	626,014 18.76%	651,676 19.53%	300,000 8.99%	445,075 13.34%	3,337,598 100.00%

Figure 2: Motorcycle licence holders

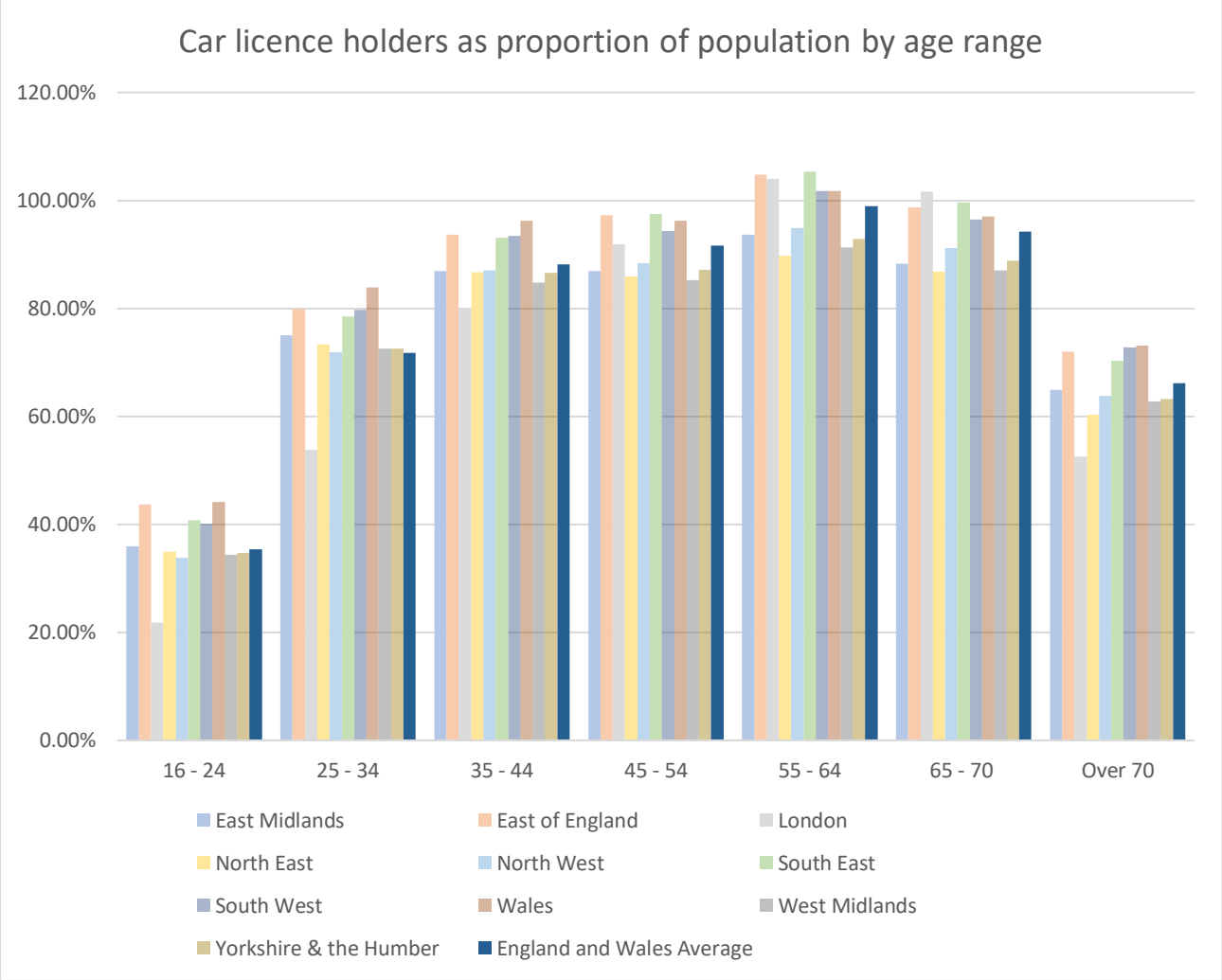
Region	16-24	25-34	35-44	45-54	55-64	65-70	Over 70	Total
East Midlands	1,466 0.49%	16,268 5.47%	28,734 9.66%	56,171 18.87%	85,005 28.56%	32,379 10.88%	77,576 26.07%	297,599 100.00%
East of England	2,212 0.53%	23,551 5.59%	44,359 10.53%	79,153 18.79%	112,247 26.65%	43,141 10.24%	116,527 27.67%	421,190 100.00%
London	1,676 0.55%	24,435 8.07%	52,925 17.49%	74,878 24.74%	78,692 26.00%	25,895 8.56%	44,179 14.60%	302,680 100.00%
North East	424 0.35%	6,439 5.32%	12,753 10.54%	23,604 19.51%	29,305 24.22%	15,270 12.62%	33,207 27.44%	121,002 100.00%
North West	1,411 0.41%	18,366 5.27%	33,579 9.64%	63,977 18.37%	101,319 29.09%	40,023 11.49%	89,650 25.74%	348,325 100.00%
Scotland	955 0.40%	13,774 5.84%	27,599 11.70%	51,255 21.72%	72,104 30.56%	24,360 10.32%	45,931 19.46%	235,978 100.00%
South East	3,546 0.56%	34,562 5.43%	65,137 10.23%	119,361 18.75%	174,364 27.39%	68,100 10.70%	171,637 26.96%	636,707 100.00%
South West	2,295 0.49%	23,829 5.13%	41,305 8.89%	80,441 17.32%	127,906 27.53%	53,541 11.53%	135,243 29.11%	464,560 100.00%
Wales	798 0.42%	9,917 5.20%	18,290 9.58%	36,178 18.96%	54,863 28.75%	21,867 11.46%	48,910 25.63%	190,823 100.00%
West Midlands	1,247 0.43%	15,669 5.38%	27,493 9.44%	53,810 18.48%	80,587 27.68%	30,991 10.64%	81,360 27.94%	291,157 100.00%
Yorkshire & the Humber	1,239 0.43%	14,375 4.93%	26,632 9.14%	52,811 18.13%	83,567 28.69%	35,117 12.05%	77,568 26.63%	291,309 100.00%

The number of licence holders will naturally be influenced by eligible population size. We therefore calculated the number of licence holders per head of population in each age range. For this analysis we used 2021 census data which applies to England and Wales.

(https://www.ons.gov.uk/file?uri=/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/populationandhouseholdestimatesenglandandwalescensus2021/census2021/census2021firstresultsenglandwales1.xlsx)

We were thus unable to calculate these figures for Scotland.

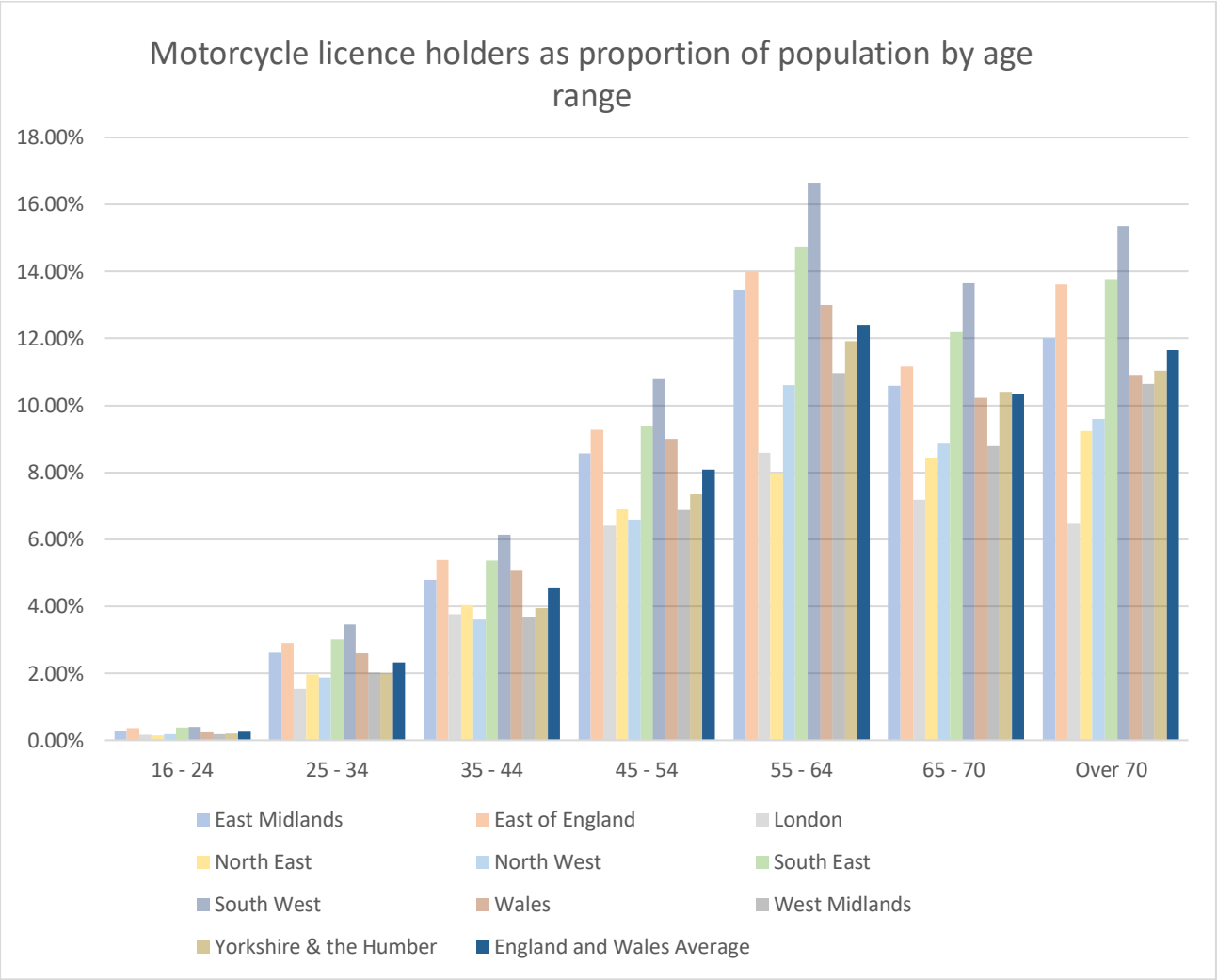
Figure 3: Car licence holders as a proportion of population by age range



Note that for some regions and age bands the number of licence holders exceeds the estimated population. We have been unable to ascertain the reason for this, but possible explanations are underestimations of the population, or licences being registered to incorrect addresses. The total number of licence holders for all of

England and Wales does remain within the total population estimate for all age bands.

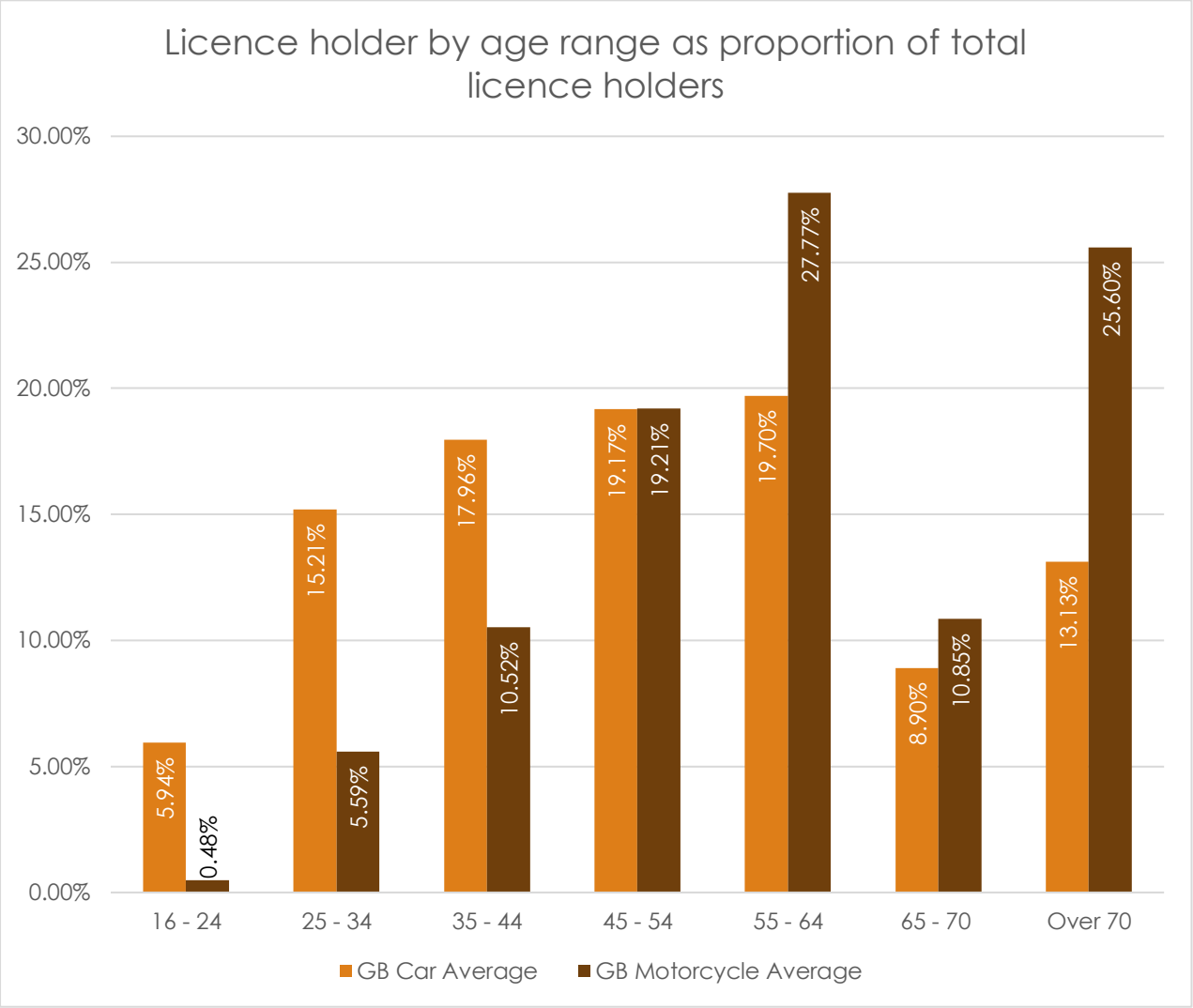
Figure 4: Motorcycle licence holders as a proportion of population by age range



It should be noted that there is a significant difference in the overall percentage of the population that hold car and motorcycle licences. Car licences are held by 77.83% of all eligible members of the population. Motorcycle licences are held by just 6.93% of the eligible members of the population.

For a direct comparison between car and motorcycle licence holder age profile, we calculated the number of car and motorcycle licence holders in each age band as a proportion of the total number of car and motorcycle licence holders:

Figure 5: Licence holders by age range as proportion of total licence holders



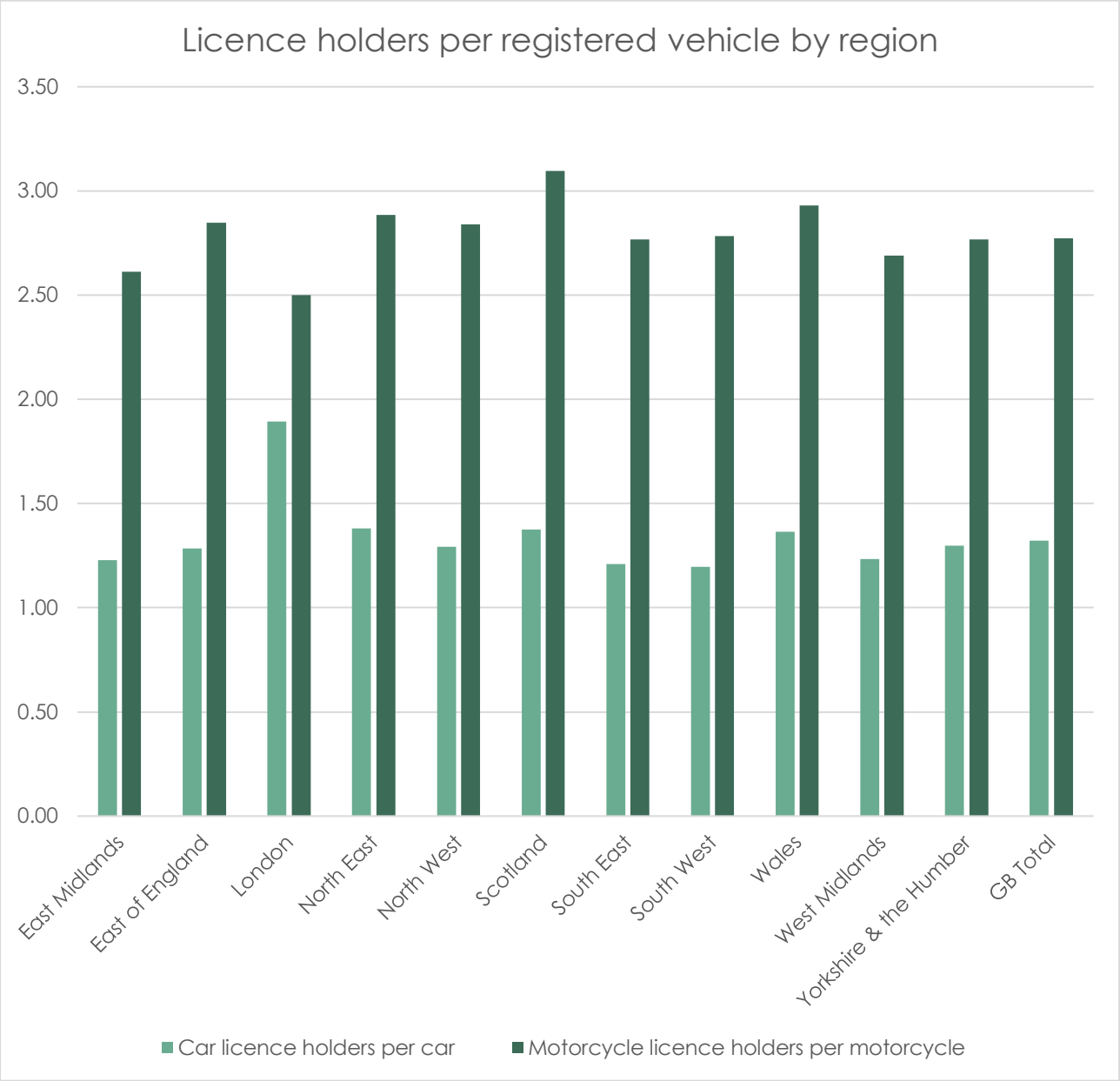
It should be noted that the age span for the age bands is not consistent, thus comparisons between age bands should be made with care.

Licence holders and registered vehicles

We next looked at the number of licence holders in relation to the number of registered vehicles. The registered vehicle data used was the Q4 2021 figure from the DfT Table VEH0105

(https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1105261/veh0105.ods)

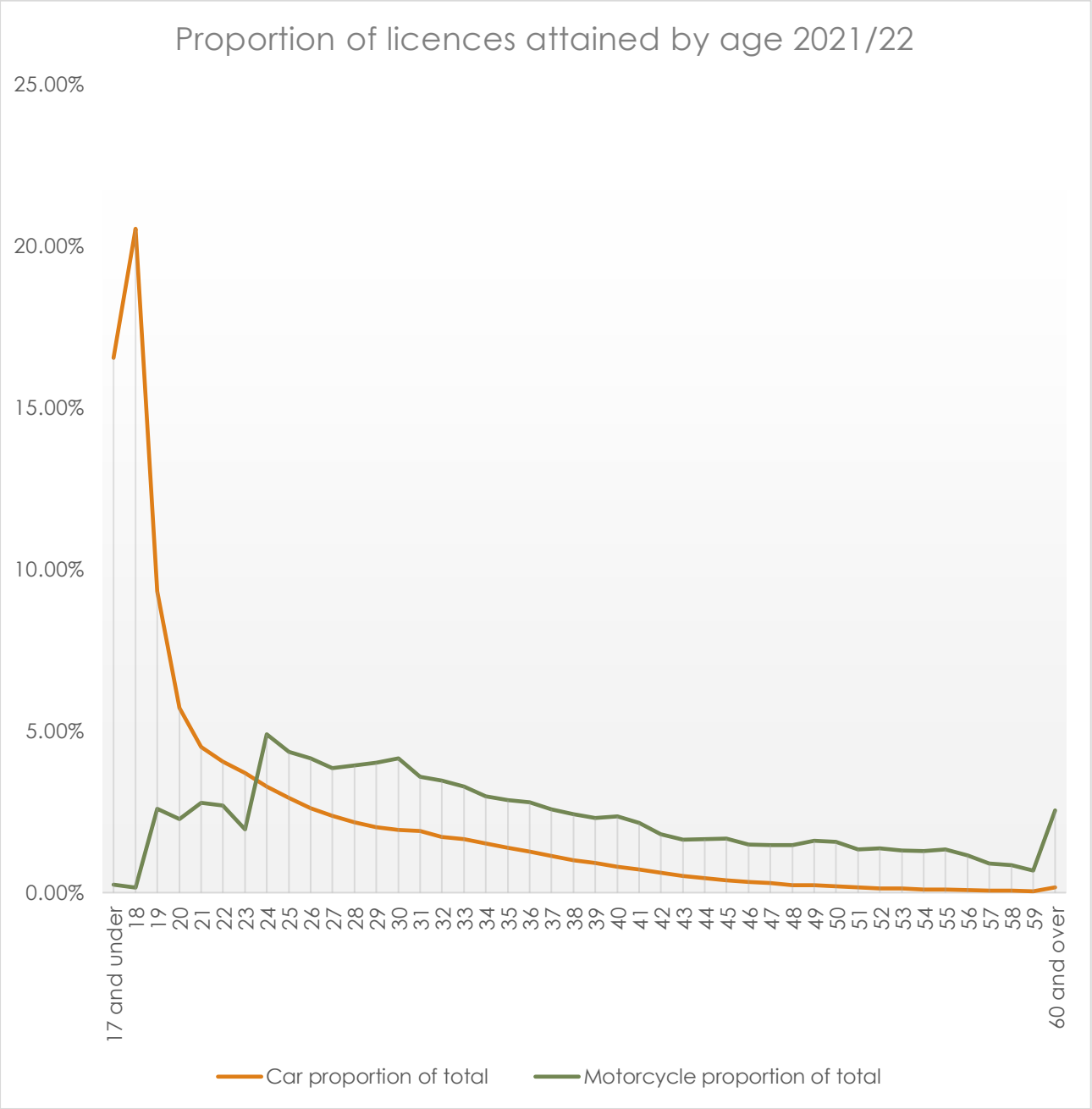
Figure 6: Licence holders per registered vehicle, by region



Age at achieving licence

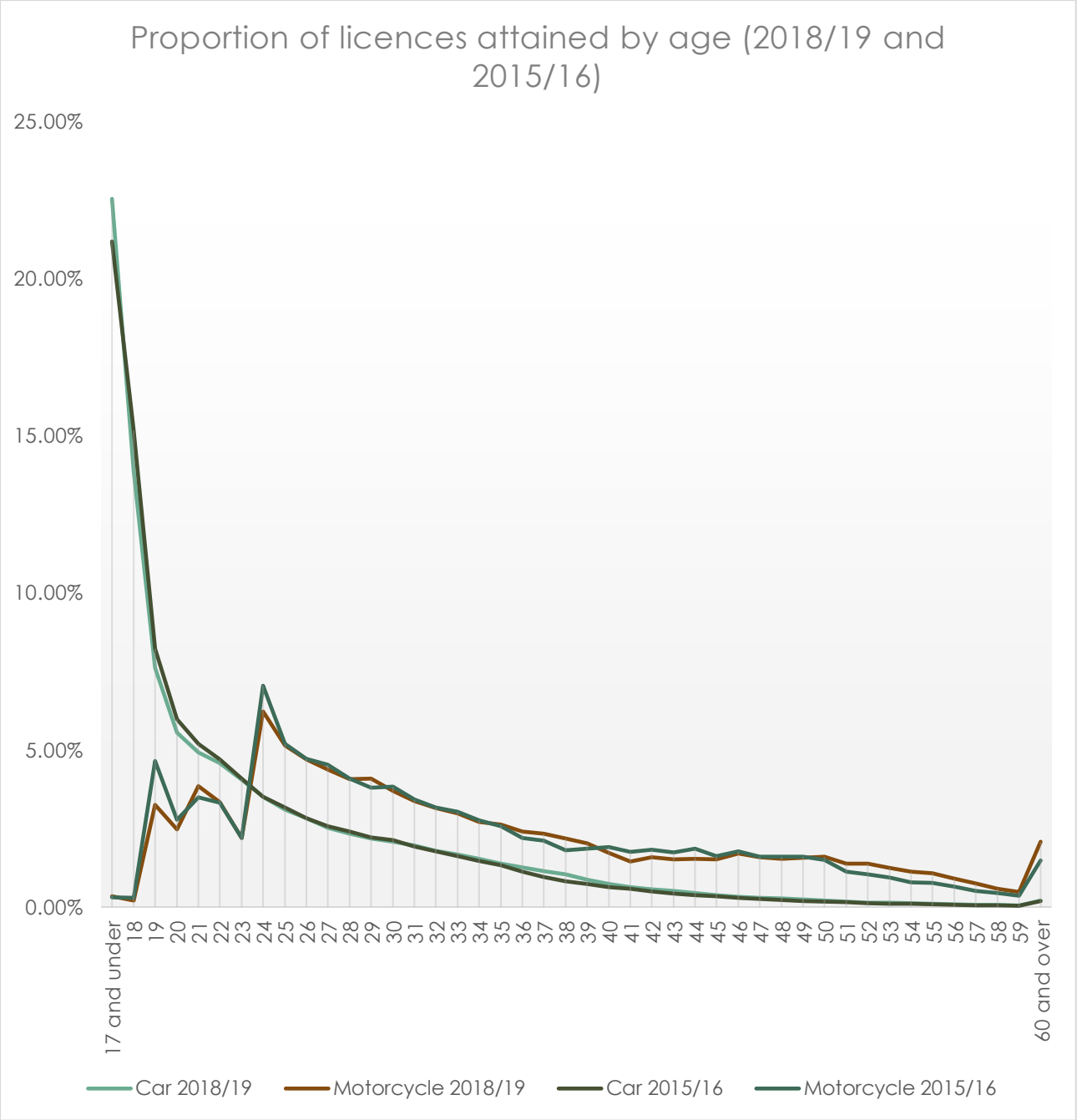
The age of individuals achieving test passes is published by the Driver and Vehicle Standards Agency (DVSA). Data for our analysis was drawn from Table DRT0203 for car licences, and table Table DRT0423 for motorcycle licences. Figures for motorcycles are for Module 2 test passes which is the final test for full licence status. All figures are for 2021/22.

Figure 7: Proportion of licences attained by age 2021/22



There is some question over whether pandemic effects have fully ended, so we ran comparison figures for the 2018/19 data

Figure 8: Proportion of licences attained by age (2018/19 and 2015/16)

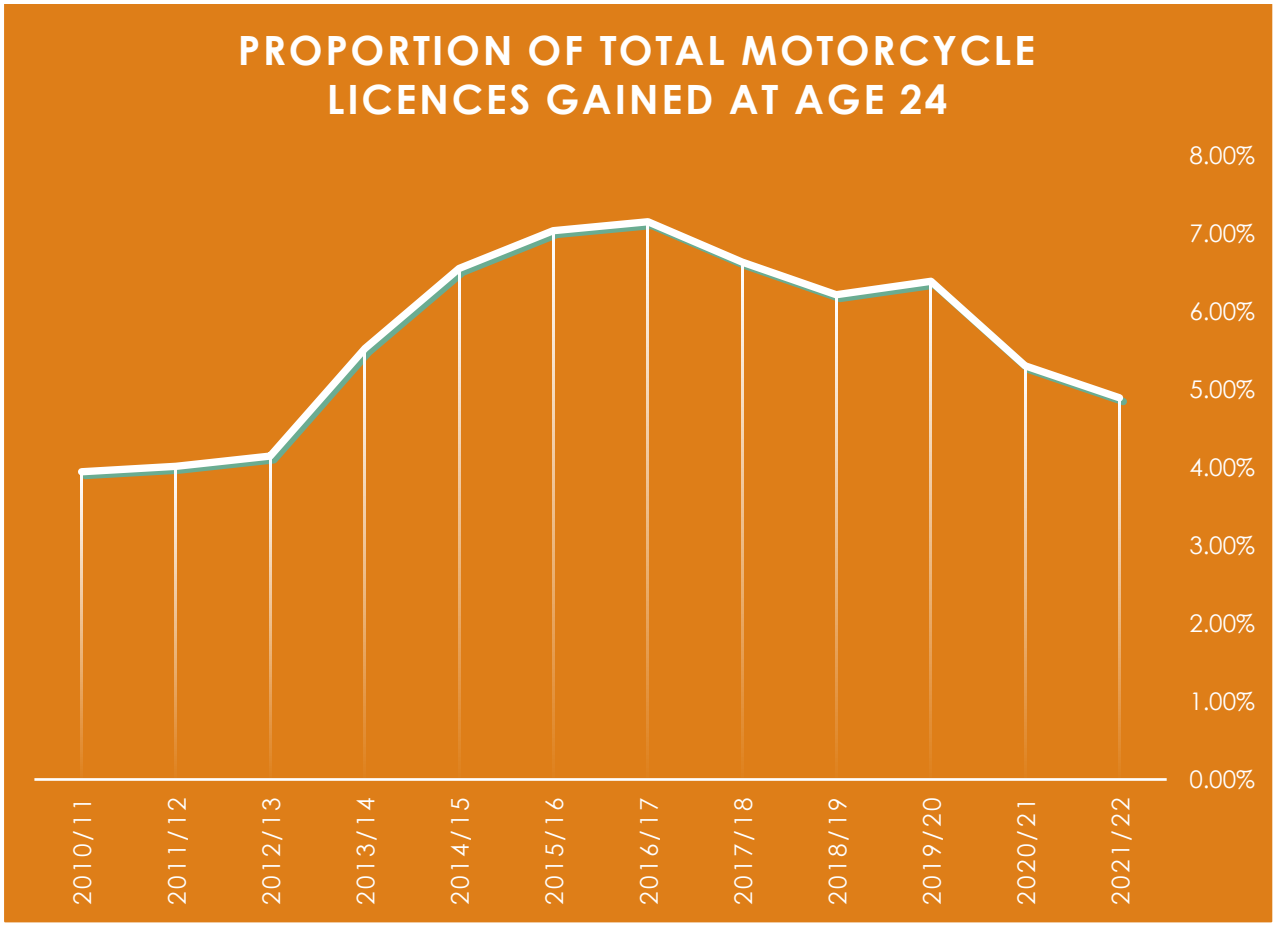


Direct Access

The direct access route allows riders of 24+ years of age to progress from CBT to a full A licence allowing the rider to ride any size of motorcycle. The Direct Access Scheme (DAS) route was introduced in 2013. The peak age for achieving a motorcycle licence is 24.

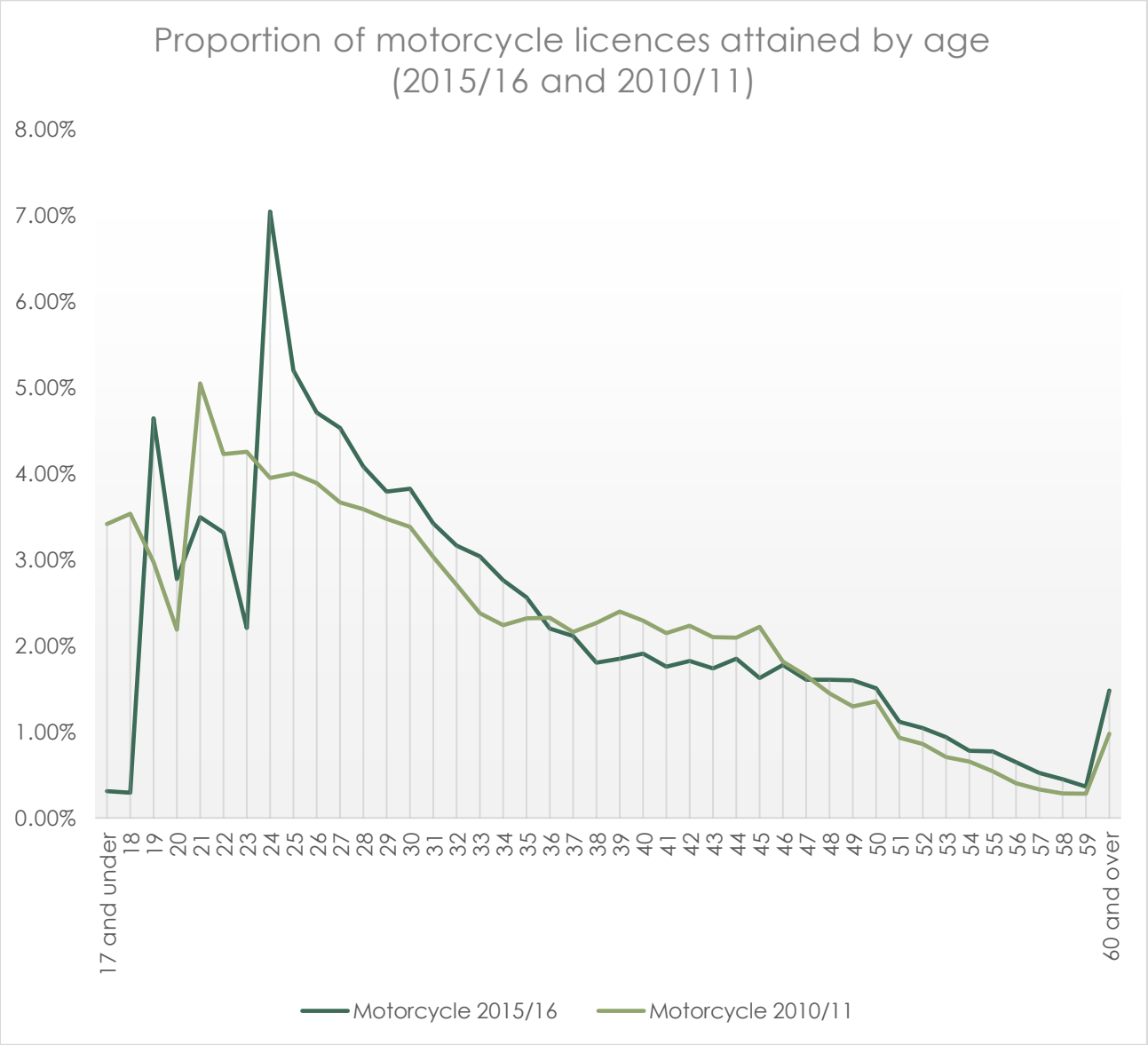
We looked at the proportion of licences obtained at the peak age of 24 across the timeline from 2011/12 to 2021/22.

Figure 9: Proportion of total motorcycle licences gained at age 24



Prior to the introduction of DAS, the peak age for achieving a motorcycle licence was 21. The below results compare the age at test pre- and post-introduction of the DAS using figures from 2010/11 and 2015/16.

Figure 10: Proportion of motorcycle licences attained by age (2015/16 and 2010/11)



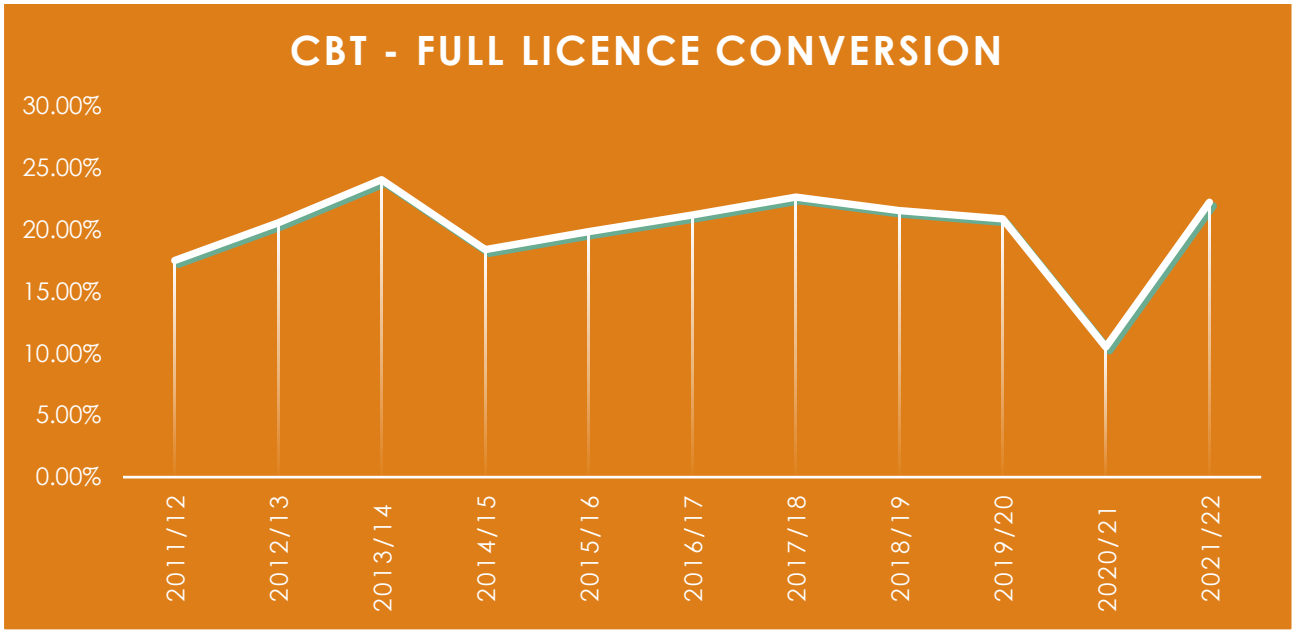
Motorcycle Compulsory Basic Training

Compulsory Basic Training (CBT) was introduced in 1990. Data for test passes is not available back to 1990. CBT is also administered on a paper-based system meaning the only published data available is the number of CBT certificates sold to training schools. It is reasonable to assume that sales of certificates closely represent numbers of CBTs completed, but there is no demographic detail for the students.

We accessed DVSA data for the number of certificates issued, combined with the number of full licences attained to calculate a conversion rate from CBT to full licence holder.

(https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1097582/ins0503.ods)

Figure 11: CBT to full licence conversion



On average for every five CBT's taken, only one full motorcycle licence is obtained.

We asked the DVSA for any age demographic data that they could supply. They were able to provide the following data:

Figure 12: CBT certificates by age range (April 2021 to March 2022)

Current Age (groups)	Count of CERTIFICATE_ NUMBER	% of CBT by age
A -16 & 17	10,681	6.1%
B - 18 to 23	36,240	20.8%
C - 24 & Over	127,043	72.9%
Other	241	0.1%
	174,205	

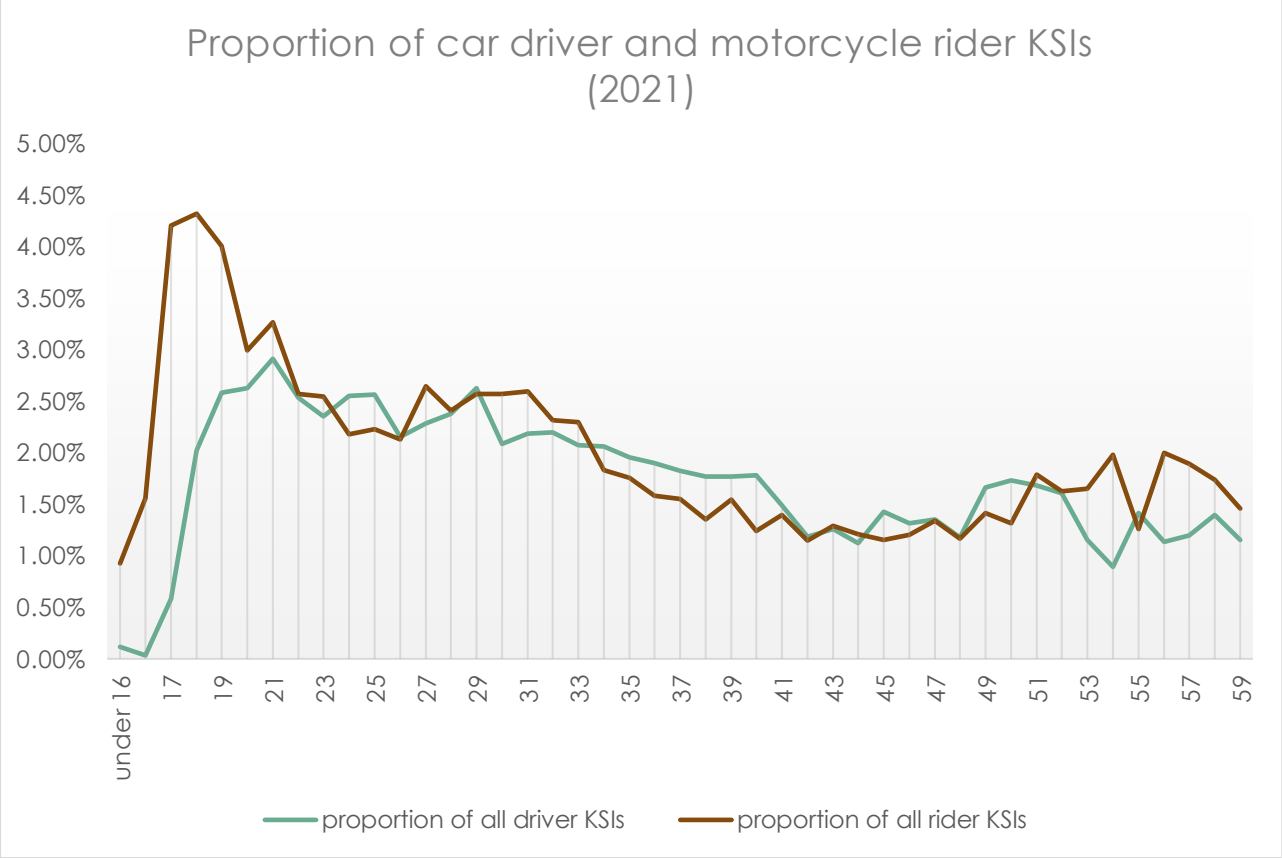
Casualties

It is a recognised fact that young drivers and riders are statistically higher risk groups. The need to attain a minimum standard is self-evident. We have therefore looked to compare any possible safety impacts of the differing licensing regimes.

We extracted data for car driver and motorcycle rider casualties including numbers for killed or seriously injured (KSIs). We restricted the data to drivers and riders, excluding passengers and pillions in order to give a closer relationship to the licence status of the vehicle operator rather than the number of people in or on the vehicle. The serious injuries are the adjusted figures which compensate for reporting differences between police forces. The data covers 2021 and was downloaded from the interactive STATS 19 data at https://roadtraffic.dft.gov.uk/custom-downloads/road-accidents

We compared the proportion of all KSIs for each group as opposed to the finite numbers to account for the difference in terms of riding and driving populations.

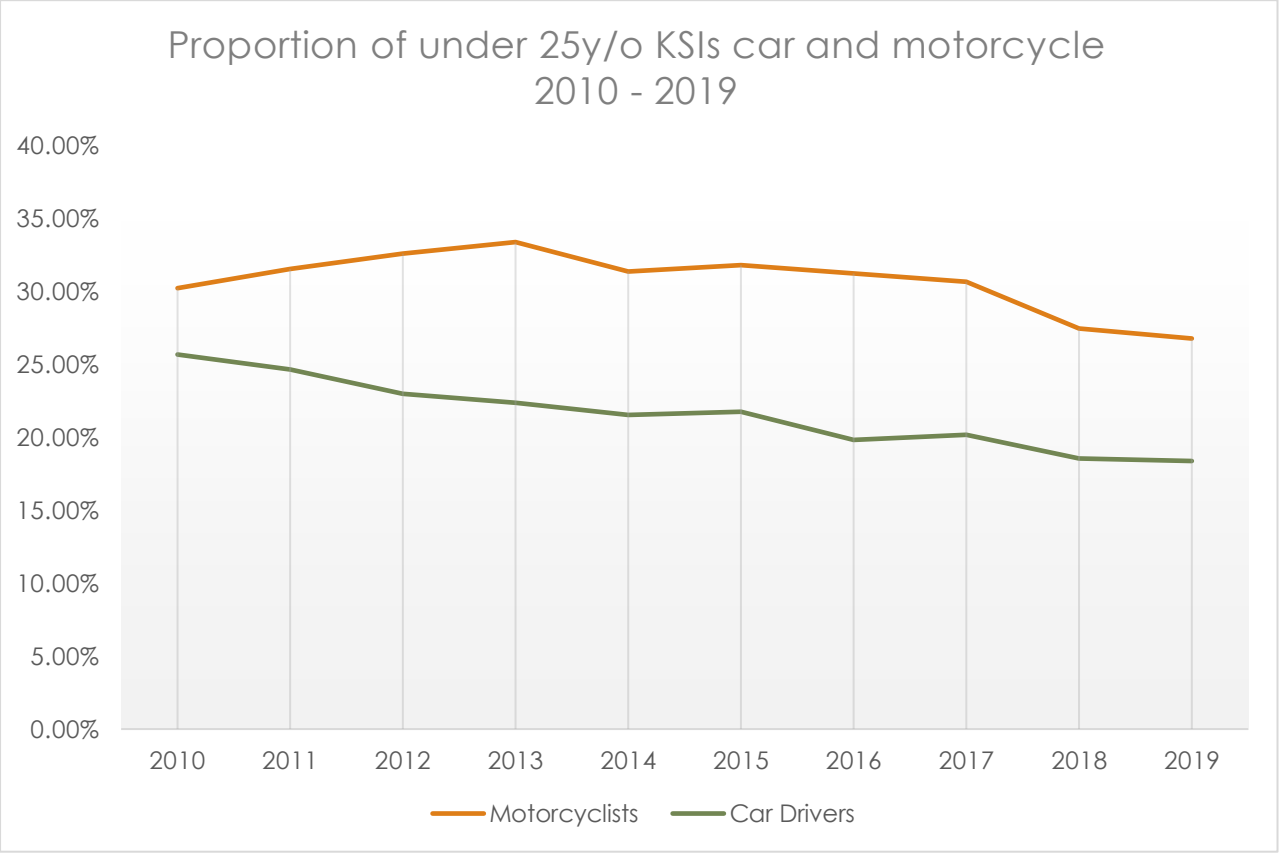
Figure 13: Proportion of car driver and motorcycle KSIs by age (2021)



Young drivers and riders are generally categorised as up to and including 24 years of age. The young driver demographic accounts for 18.30% of all driver KSIs. For motorcycling, young riders account for 28.55% of all rider KSIs.

Finally, we analysed the trends over time for the proportion of young rider/driver KSIs. The analysis covers 2010 to 2019 to avoid any pandemic impacts.

Figure 14: Proportion of under 25y/o KSIs 210 - 2019



Discussion

There is no question that the process for achieving a full motorcycle licence is costlier and more complex than the same process for achieving a full car driving licence. It would appear that this difference results in a significantly different age demographic profile of licence holders between the two modes. Motorcyclists generally appear to obtain a full licence at a later age than car drivers. Indeed, there is a noticeable lift in the numbers obtaining a full motorcycle licence over the age of 60, a phenomenon that is not apparent for car licences. We shall refer to this phenomenon as a bucket list effect.

The fact that it is legally permissible to ride a motorcycle unsupervised indefinitely after taking a CBT does, however, raise questions about the numbers of riders that are riding without obtaining a full motorcycle licence. Despite the fact that a CBT certificate expires after 2 years it is entirely legitimate to renew a CBT any number of times and potentially for an entire riding career. Given that there are no digital records allowing data to be gathered on the number and age of riders riding on CBTs there remains a significant hole in our analysis. The fact that there are on average five times as many CBT certificates issued as full motorcycle licences obtained in any given year is shocking. This may represent high numbers of riders renewing CBTs after two years riding, but we suspect that it is more likely that a far higher proportion of these riders are simply taking up driving cars rather than continuing on to obtain full motorcycle licences. The phenomenon of riders returning to riding in later years (often referred to as 'born again bikers') is widely recognised, and would seem to back our assumption.

It would seem reasonable to assume, therefore, that the licensing regime is suppressing to some extent the number of riders sticking with powered two-wheel transport choices. In all likelihood these potential riders will largely be choosing cars for their trips. If true, this effect would be counterproductive in terms of Government ambitions to minimise single occupancy car trips.

We would suggest that the 'bucket list' effect may also be partly due to suppression of entry to riding. It seems reasonable to suggest that riders in later stages of their lives have harboured the desire to ride but been put off. There will no doubt be a number of factors creating the drag, but the licensing regime is likely to be one of them.

Geographically there seems to be little evidence for regional differences to the age demographic profiles of licence holders. The London region is a possible outlier, showing both the highest car licence holder to vehicle ratio and lowest motorcycle licence holder to motorcycle ratio. This is likely to be due to the overall youth of the

London population which amplifies the difference in licence acquisition against the population age profile.

With respect to road safety it is a commonly ignored fact that the number of young rider fatalities is higher than the number of young driver fatalities, despite the vast difference in the proportion of riders to drivers. In 2021 there were 1,289 driver KSIs amongst drivers below 25 years of age. In the same year there were 1,540 motorcyclist KSIs amongst riders below 25. We could convert these figures into fatality rates using numbers of licence holders, but given the lack of data for CBT riders this would create an overexaggerated result.

Whilst it is clear that motorcycling fatality rates are far higher than those for car drivers, regardless of age, our analysis of the proportion of fatalities by age normalises the severity element of the risk equation. The analysis clearly shows that the probability of fatality is far higher for riders below the age of 25 than it is for drivers in that age range.

We believe it is axiomatic that drivers and riders holding full licences are less likely to be involved in collisions than unqualified drivers and riders. This natural assumption is amplified when considering that unqualified drivers are required to be supervised at all times, whereas unqualified riders on CBT certificates are not.

On this basis the 20% conversion rate of CBT to full licence must be viewed as a significant safety concern.

Beyond the self-evident safety argument, there is little if any incentive for a rider to obtain a full motorcycle licence unless the rider has a desire to ride a machine larger than 125cc capacity. Equally, it is accepted that young peoples' attitude to risk is challenging (and particularly so for males, who make up the vast majority of young riders). Any testing regime encouraging riding unsupervised for up to two years on a CBT must be seen as far riskier than one promoting progress to a full licence in a timely manner.

The Direct Access Scheme route appears to have actively delayed the age at which young riders progress from CBT to a full motorcycle licence. It is unlikely, however, that there is an equivalent delay in taking the initial CBT. The effect of DAS is likely to be increased numbers of CBT renewals and thus extended periods of unqualified and unsupervised riding.

The limited data that we have from the DVLA on CBT student age profiles suggests that significant numbers of young riders are starting their riding careers with no intention of obtaining a full licence, or simply facing changes in their circumstances before progressing to fully licensed status. It is equally clear that they are paying a

heavy price for avoiding or delaying vital training to achieve a basic standard of competence.

Conclusions

The lack of data on CBT students age demography makes definitive conclusions less certain, but the authors do believe that there is significant evidence that:

1) the current licensing regime is suppressing the numbers of individuals riding motorcycles, and
2) the current licensing regime is having an adverse impact on young rider safety.

Recommendations

The logical recommendations that follow from our analysis are:

1) Urgent research should be carried out to provide a robust estimate of the age demographic of CBT students and the number of riders currently riding on CBT without a full licence.
2) A full review of the entire motorcycle licensing regime should be conducted to identify changes that would promote the achievement of a specific target to increasing the conversion rate from CBT to full motorcycle licence holders.