



# TyreSafe<sup>®</sup> TREAD DEPTH SURVEY 2023

TyreSafe Tread Depth  
at the Point of  
Replacement Survey:  
2016 vs 2023



In partnership with  
 **national  
highways**

In association with

**Imperial College  
London**

## Executive summary

### Background

This report compares the findings of the first tread depth survey at the point of tyre replacement conducted between October 2015 and April 2016 and the results from data compiled between April 2022 and March 2023.

2016 results were based on data compiled over six months, whereas 2023 data has been compiled over 12 months providing an increased sample size and greater insight. 2016 results include those drawn from across England, Northern Ireland, Scotland and Wales; 2023 includes data from those countries with the exception of Northern Ireland.

This data has been supplied by TyreSafe's tyre retail supporters, from both national franchise chains, such as National Tyres and independent networks, such as Protyre, and individual retailers. Additional data has been included as an addendum from vehicle manufacturers' franchised service centres, such as Ford, which provides a significantly different set of results.

### The TyreSafe tread depth survey 2023

The number of outlets participating decreased by 6% but the relative number of tyres surveyed increased by 65% across 428 outlets, surveying 549,558 car & LCV tyres. Tread depth categories: 1.6mm & below (illegal); >1.6mm to <2mm (borderline); and Over 2mm.

### Headline results 2023 vs 2016 (combined car & LCV)

Across England:	16.7% of replaced tyres were illegal (<1.6mm), A reduction of 10.1% in illegal tyres at the point of replacement 56.5% of replaced tyres were illegal or borderline (<2mm) A reduction of 12.9% in borderline tyres at the point of replacement
Across Scotland:	16.4% of replaced tyres were illegal (<1.6mm), A reduction of 11% in illegal tyres at the point of replacement 61.8% of replaced tyres were illegal or borderline (<2mm) A reduction of 11.1% in borderline tyres at the point of replacement
Across Wales:	21.5% of replaced tyres were illegal (<1.6mm), A reduction of 7.6% in illegal tyres at the point of replacement 63.8% of replaced tyres were illegal or borderline (<2mm) A reduction of 12.9% in borderline tyres at the point of replacement
Across Britain: (excl NI)	17.1% of replaced tyres were illegal (<1.6mm), A reduction of 9.9% in illegal tyres at the point of replacement 57.5% of replaced tyres were illegal or borderline (<2mm) A reduction of 12.7% in borderline tyres at the point of replacement

## **TyreSafe's conclusions**

The conclusions of this report take into account the findings of those of 2016, as neither can be considered in isolation of the other.

- The 2023 findings show an overall reduction in the number of illegal and borderline tyres at the point of replacement.
- Success can partially be attributed to TyreSafe activity and partner and stakeholder work, communications and activities.
- The 2023 findings are, however, to be put in context and 16.7% of tyres being below the legal limit when replaced remain a concerning high proportion.
- The 2023 findings confirm the number of illegal tyres on Britain's roads annually is potentially as many as nearly one-in-four vehicles – at just over 6.1 million per annum (see Methodology section for calculations).
- The greatest proportions of illegal tyres at 25.4% and 22.3% were in NH areas 13 and 1.
- The proportion of tyres changed below 2mm but above 1.6mm remained relatively similar (2016: 42.6%; 2023 39.8%).
- Across England, 16.6% of car tyres were found to be illegal, while 40% were between 1.6mm and 2mm. Across England, 17.2% of LCV tyres were found to be illegal, while 38.9% were between 1.6mm and 2mm.
- Lack of sufficient awareness among consumers of the need to carry out systematic and regular checks of their tyres is the most likely cause of so many tyres being illegal at the point of replacement.
- Vehicle manufacturers' franchised service centres reported significantly fewer illegal (0.9% illegal on average across England) and borderline (1.4% on average across England) tyres.
- The dramatic difference in data from vehicle manufacturers' franchised service centres is suggested as being due to the vehicle owner's attitude to maintenance. Such centres are more expensive in terms of hourly labour rate, but the more conscientious owner may well consciously prefer to use this type of service. It is worth noting, most of these service centres recommend changing tyres at 3mm.

### **TyreSafe's recommendations**

1. A further study in 2025 is recommended to see if the positive trend in reduction of illegal tyres has continued.
2. It is possible the number of illegal tyres reported in 2023 is due to an increase in the need for replacement by other factors. Anecdotally, TyreSafe retailers and consumers contacting the charity have reported more 'ageing related' defects, such as cracking. This is possibly due to the reduced mileage of vehicles during the COVID Lockdowns. This is due to the ageing process of tyre on vehicles left stationary over prolonged periods of time accelerating due to non-use. This is a theory which a subsequent survey might seek to address.
3. The variance in regional findings can be used to better target local activities and it is recommended NH and other road safety and road risk management stakeholders have access to this report help them plan interventions.
4. Increased support for Tyre Safety month across all road safety organisations
5. Stricter enforcement of the existing laws and more publicity for prosecutions
6. Further examine the influence tyre retailers have on motorists' decision-making.
7. There is a strong case for leveraging communication from employers to employees to raise awareness of road and tyre safety through road risk management policies.

## TyreSafe survey in detail

### Background

The aim of this study was to acquire data and trends relating to the tread depth of vehicles at the point of replacement.

### TyreSafe's tasks

- Data to be collected from TyreSafe members and non-members across national franchises and independent tyre dealers.
- Data gathered from at least ten retailers per NH region.
- Criteria for data: Below 1.6mm (illegal); >1.6mm to <2mm (borderline); and over 2mm.
- Produce full report including:
  - i. geographical location
  - ii. number of tyres changed
  - iii. % of tyres/category
  - iv. vehicle type

## Notes on the survey

### Agreed aim

Provide empirical evidence which can be utilised to raise public awareness of the importance of tyre safety.

### Methodology

- TyreSafe provided participants with a template (as below) to be completed and submitted at the end of each calendar month.
- Data was anonymised and supplied to Imperial College London for analysis.
- This data was then incorporated into the same format as the 2016 survey.
- To compare 'like-for-like' with the 2016 report, tyres were grouped into categories of '1.6mm & below'; 'Borderline' (2mm or below but greater than 1.6mm); 'Over 2mm'
- These data sets were then re-examined for accuracy by Imperial College London.
- Where required, the analysis team accommodated data in formats which did not adhere to the template on the basis that the requisite data could be accurately extracted and reformatted.
- London has been incorporated nominally as 'NH area 5'

Outlet name			
Geographic location			
Time period of tyres surveyed (eg 1st to 31st March, or w/c 2nd March)			
Tyre tread depth	Between 1.6mm & 2mm	Car	LCV
	Over 2mm		
	Illegal (under 1.6mm)		



### **Participants**

- Data was sourced from tyre replacement & multi-service outlets (providing maintenance repairs for exhaust, brake and other components, including tyre replacement) from across Great Britain.
- The majority of data was supplied by national franchise operations with multiple outlets per region.

### **Data collated**

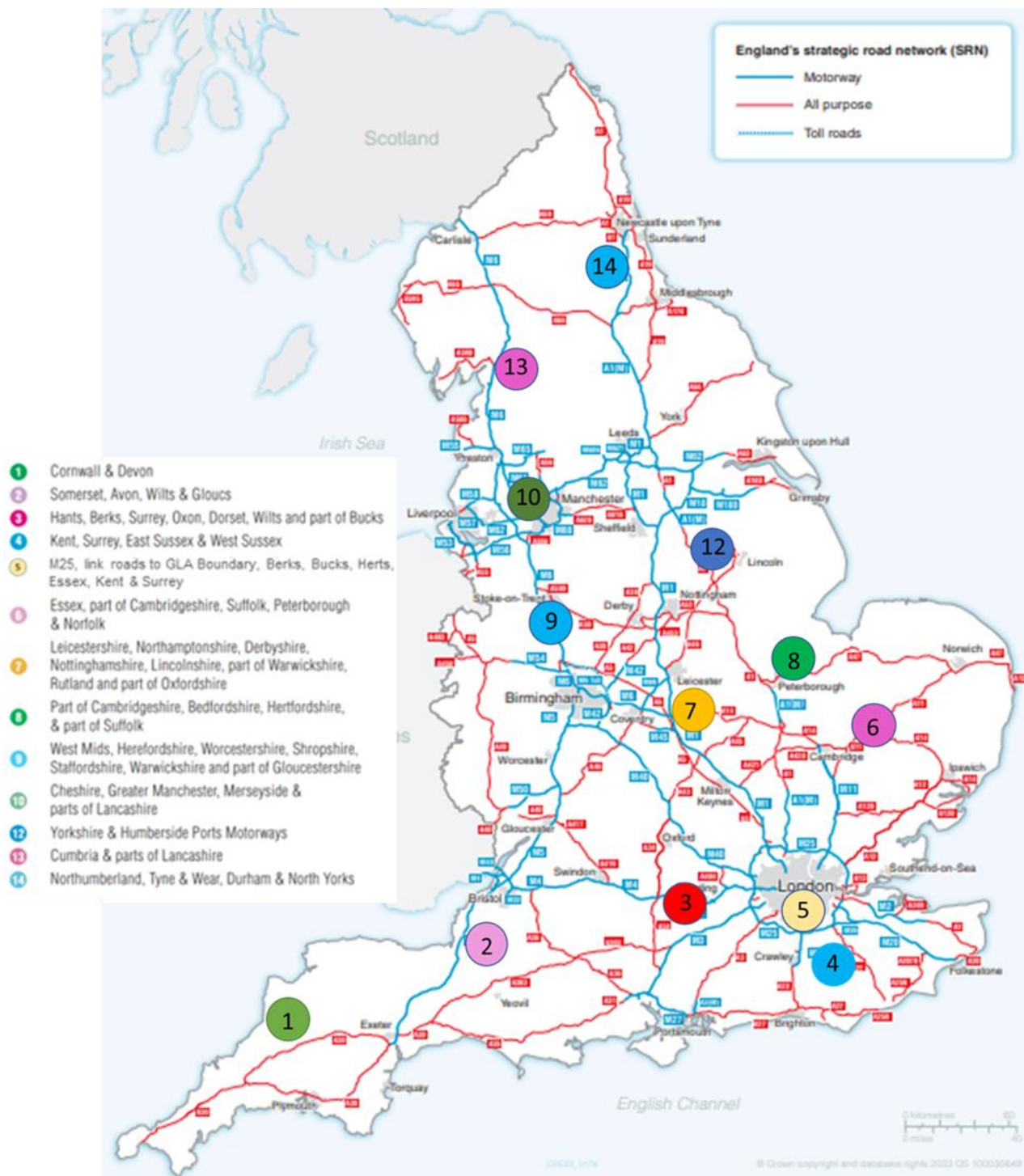
- Tyres were surveyed at the point of replacement
- The survey is split by: vehicle type (car & LCV); and region
- The data was compiled from 1<sup>st</sup> April 2022 to 31<sup>st</sup> March 2023
- Tyres surveyed 549,558; approx. 15% of all tyres replaced in that period
- HGV/LGV tyre data was not included as this is a separate, specialist category
- Submitted supporting data anonymised

### **Data source – unbiased**

- Data has been supplied by TyreSafe members & non-members on the understanding it is anonymous and confidential.
- Only TyreSafe's steering committee has been updated on results on a monthly basis.
- The data has been gathered as part of the daily operations of all participants, not retrospectively, ensuring accuracy.
- No indication of expected outcomes has been passed between TyreSafe, its representative and the participants of the survey.

### **NH geographical area results**

Attributing data to NH areas area has been completed as accurately as possible by corroborating a visual check of a large scale NH areas area map with tyre outlets' addresses. Without precise boundary definitions of postcodes, it is not possible to guarantee all data has been allocated exactly to the correct NH area.



### Extrapolating the number of illegal tyres on the road

Exact data on the number of tyres replaced each year is not recorded so there are two key assumptions in extrapolating the number of illegal tyres on the roads from the data collated:

1. It is accepted across the tyre industry that approximately one tyre per vehicle is changed each year.
2. The vast majority (if not all) of the vehicles must have driven to the tyre replacement outlets and as such must have been on the public roads to arrive at that destination.

So, based on the number of cars & LCVs on the road (known as the 'car parc' or 'vehicle parc') 35,938,900 (data provided by ONS, rounded up to 36 million for the purposes of extrapolation):

- Approx. 36 million tyres changed each year
- Approx. 3,000,000 tyres changed per month on average
- Approx. 100,000 tyres changed per day on average
- Our survey period is 12 months, so estimate approx. 36,000,000 tyres were changed in that period
- 549,558 tyres surveyed – which equates to 15.2% of all tyres replaced in Britain in that period approx.

The same extrapolation was applied to car & LCV data to provide individual figures

Country	Cars and Vans on the road (as of Sep 2022, National Statistics Great Britain)	Total tyres (4 per vehicle)	% of Illegal at replacement	Illegal tyres replaced annually
England	31,205,200	124,820,800	16.7	5,211,268
Wales	1,854,600	7,418,400	21.48	398,368
Scotland	2,879,100	11,516,400	16.41	472,460
<b>Total across three countries</b>	<b>35,938,900</b>	<b>143,755,600</b>	<b>17.1</b>	<b>6,145,552</b>

Country	Illegal tyres replaced daily	Illegal tyres replaced daily as proportion of total tyres on the road	Sample size (tyres)	Sample size as a percentage of car parc
England	14,277	0.0114%	466,363	1.49%
Wales	1,091	0.0147%	47,852	2.58%
Scotland	1,294	0.0112%	35,343	1.23%
<b>Total across three countries</b>	<b>16,837</b>	<b>0.0117%</b>	<b>549,558</b>	<b>1.53%</b>

ONS data, supplied Dec2022



## National summaries 2016 vs 2023

Of the three nations included in this survey, Wales reported the highest number of tyres at 1.6mm or below at the point of replacement. This is consistent with the findings of the 2016 survey. England and Scotland once again reported similar proportions of tyres at 1.6mm or below at the point of replacement.

Car & LCV combined	Area	Brit 2016 (Excl NI)	Brit 2023 (Excl NI)	Variance 2016 vs 2023
	Illegal	90,014 27.0%	93,966 17.1%	3,952 -9.9%
	Under 2mm	143,786 43.2%	222,079 40.4%	78,293 -2.8%
	Over 2mm	99,252 29.8%	233,513 42.5%	134,261 12.7%
	Total Tyres	333,052	549,558	216,506
	Illegal/borderline combined	70.2%	57.5%	-12.7%
Car	Area	Brit 2016 (Excl NI)	Brit 2023 results	Variance 2016 vs 2023
	Illegal	82,098 27.6%	80,055 17.0%	-2,043 -10.6%
	Under 2mm	127,942 43.0%	190,284 40.5%	62,342 -2.5%
	Over 2mm	87,444 29.4%	199,839 42.5%	112,395 13.1%
	Total Tyres	297,484	470,178	172,694
	Illegal/borderline combined	70.6%	57.5%	-13.1%
LCV	Area	Brit 2016 (Excl NI)	Brit 2023 results	Variance 2016 vs 2023
	Illegal	7,916 22.3%	13,911 17.5%	5,995 -4.7%
	Under 2mm	15,844 44.5%	31,795 40.1%	15,951 -4.5%
	Over 2mm	11,808 33.2%	33,674 42.4%	21,866 9.2%
	Total Tyres	35,568	79,380	43,812
	Illegal/borderline combined	66.8%	57.6%	-9.2%

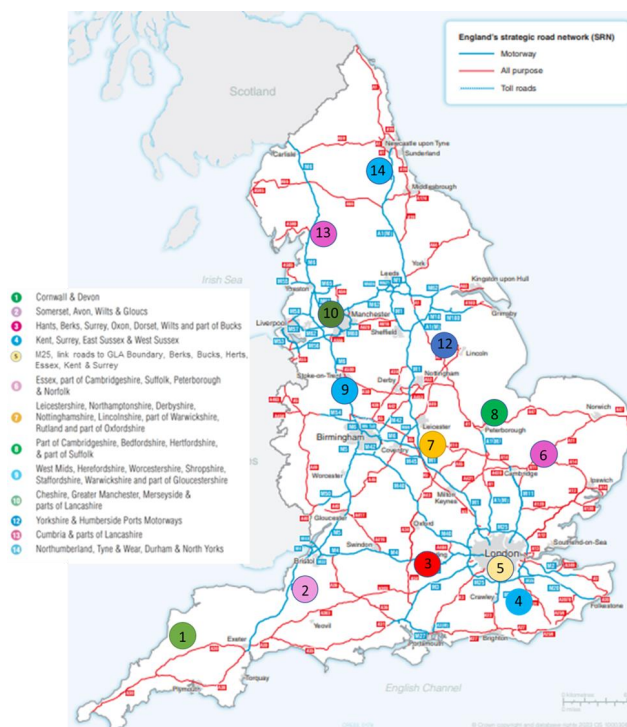
	Area	Eng 2016 results	Eng 2023 results	Eng Variance 2016 vs 2023
Car & LCV combined	1.6mm and below	76,995	77,886	891
		26.8%	16.7%	-10.1%
	Between 2mm and 1.6mm	122,346	185,822	63,476
		42.6%	39.8%	-2.8%
	Over 2mm	87,722	202,655	114,933
		30.6%	43.5%	12.9%
	Total Tyres	287,063	466,363	179,300
	Illegal + borderline	69.4%	56.5%	-12.9%
	Area	Eng 2016 results	Eng 2023 results	Variance 2016 vs 2023
Car	1.6mm and below	70,563	66,595	-3,968
		27.4%	16.6%	-10.8%
	Between 2mm and 1.6mm	109,488	160,278	50,790
		42.5%	40.0%	-2.5%
	Over 2mm	77,613	173,851	96,238
		30.1%	43.4%	13.3%
	Total Tyres	257,664	400,724	143,060
	Illegal + borderline	69.9%	56.6%	-13.3%
	Area	Eng 2016 results	Eng 2023 results	Variance 2016 vs 2023
LCV	1.6mm and below	6,432	11,291	4,859
		21.9%	17.2%	-4.7%
	Between 2mm and 1.6mm	12,858	25,544	12,686
		43.7%	38.9%	-4.8%
	Over 2mm	10,109	28,804	18,695
		34.4%	43.9%	9.5%
	Total Tyres	29,399	65,639	36,240
	Illegal + borderline	65.6%	56.1%	-9.5%

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Car & LCV combined	Area	Scot 2016 results	Scotland 2023 results	Scot Variance 2016 vs 2023
	1.6mm and below	5,729	5,799	70
		27.4%	16.4%	-11.0%
	Between 2mm and 1.6mm	9,524	16,032	6,508
		45.5%	45.4%	-0.2%
	Over 2mm	5,665	13,512	7,847
		27.1%	38.2%	11.1%
	Total Tyres	20,918	35,343	14,425
	Illegal + borderline	72.9%	61.8%	-11.1%
Car	Area	Scot 2016 results	Scotland 2023 results	Variance 2016 vs 2023
	1.6mm and below	5,034	4,551	-483
		27.7%	16.1%	-11.6%
	Between 2mm and 1.6mm	8,251	12,687	4,436
		45.3%	44.8%	-0.5%
	Over 2mm	4,921	11,065	6,144
		27.0%	39.1%	12.1%
	Total Tyres	18,206	28,303	10,097
	Illegal + borderline	73.0%	60.9%	-12.1%
LCV	Area	Scot 2016 results	Scotland 2023 results	Variance 2016 vs 2023
	1.6mm and below	695	1,248	553
		25.6%	17.7%	-7.9%
	Between 2mm and 1.6mm	1,273	3,345	2,072
		46.9%	47.5%	0.6%
	Over 2mm	744	2,447	1,703
		27.4%	34.8%	7.3%
	Total Tyres	2,712	7,040	4,328
	Illegal + borderline	72.6%	65.2%	-7.3%

Car & LCV combined	Area	Wales 2016 results	Wales 2023 results	Wales Variance 2016 vs 2023
	1.6mm and below	7,290	10,281	2,991
		29.1%	21.5%	-7.6%
	Between 2mm and 1.6mm	11,916	20,225	8,309
		47.5%	42.3%	-5.3%
	Over 2mm	5,865	17,346	11,481
		23.4%	36.2%	12.9%
	Total Tyres	25,071	47,852	22,781
	Illegal + borderline	76.6%	63.8%	-12.9%
Car	Area	Wales 2016 results	Wales 2023 results	Variance 2016 vs 2023
	1.6mm and below	6,501	8,909	2,408
		30.1%	21.6%	-8.4%
	Between 2mm and 1.6mm	10,203	17,319	7,116
		47.2%	42.1%	-5.1%
	Over 2mm	4,910	14,923	10,013
		22.7%	36.3%	13.5%
	Total Tyres	21,614	41,151	19,537
	Illegal + borderline	77.3%	63.7%	-13.5%
LCV	Area	Wales 2016 results	Wales 2023 results	Variance 2016 vs 2023
	1.6mm and below	789	1,372	583
		22.8%	20.5%	-2.3%
	Between 2mm and 1.6mm	1,713	2,906	1,193
		49.6%	43.4%	-6.2%
	Over 2mm	955	2,423	1,468
		27.6%	36.2%	8.5%
	Total Tyres	3,457	6,701	3,244
	Illegal + borderline	72.4%	63.8%	-8.5%

## NH areas summaries 2016 vs 2023

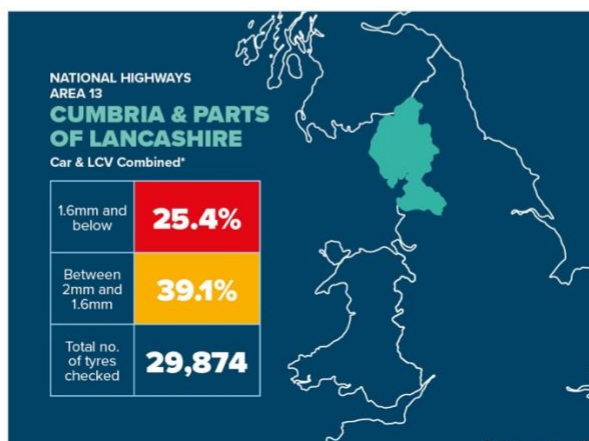
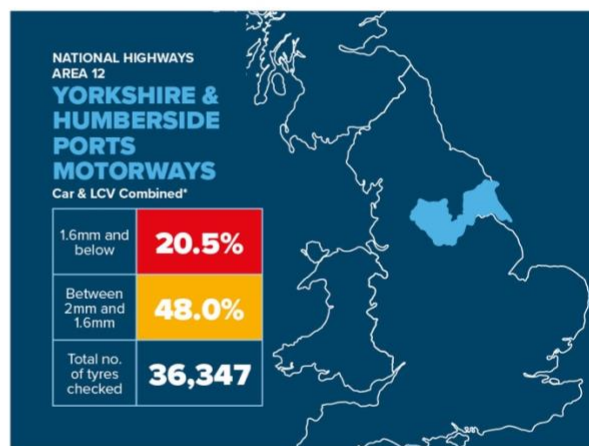
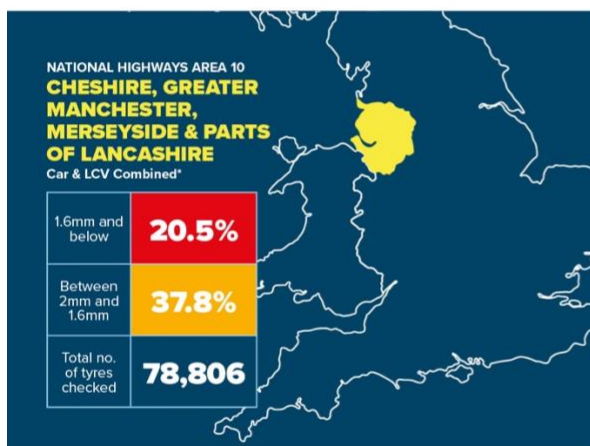
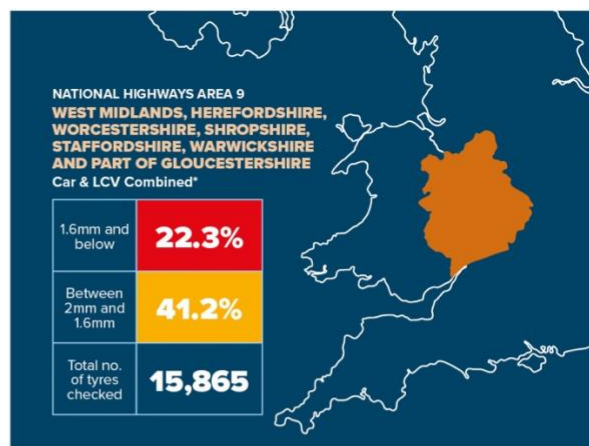
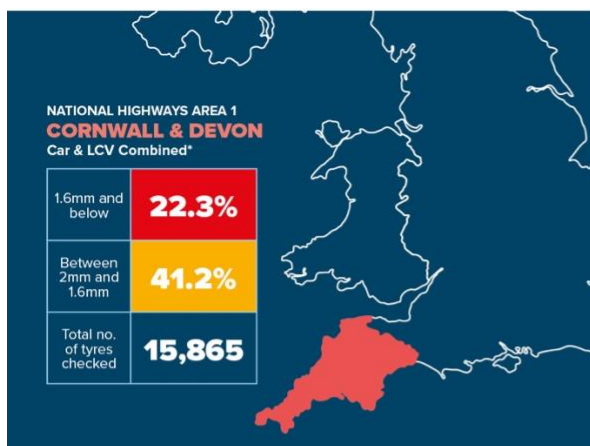


### National Highways Areas

1. Cornwall & Devon
2. Somerset, Avon, Wilts & Gloucs
3. Hants, Berks, Surrey, Oxon, Dorset, Wilts and part of Bucks
4. Kent, Surrey, East Sussex & West Sussex
5. DBFO (AREA) - M25 (including associated link roads, Dartford Tunnel and stubs & tails from M25 to GLA boundary), Berks, Bucks, Herts, Essex, Kent & Surrey
6. Essex, part of Cambridgeshire, Suffolk, Peterborough & Norfolk
7. Leicestershire, Northamptonshire, Derbyshire, Nottinghamshire, Lincolnshire, part of Warwickshire, Rutland and part of Oxfordshire
8. Part of Cambridgeshire, Bedfordshire, Hertfordshire, & part of Suffolk
9. West Mids, Herefordshire, Worcestershire, Shropshire, Staffordshire, Warwickshire and part of Gloucestershire
10. Cheshire, Greater Manchester, Merseyside & parts of Lancashire
11. Yorkshire & Humberside Ports Motorways
12. Cumbria & parts of Lancashire
13. Northumberland, Tyne & Wear, Durham & North Yorks

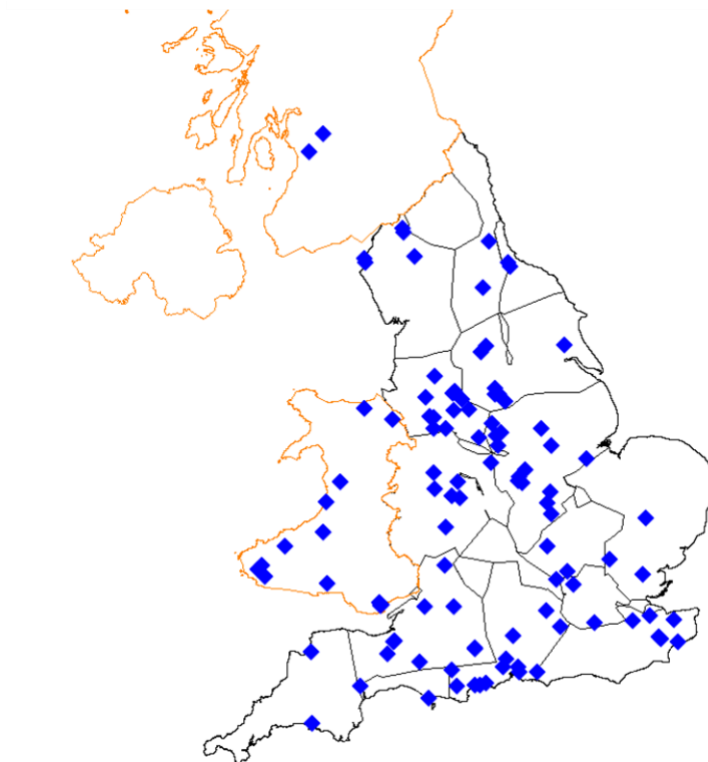
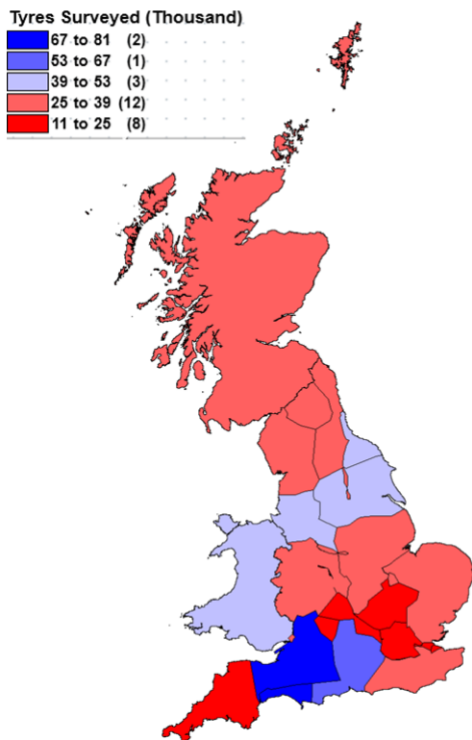
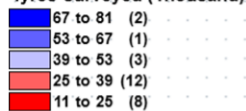
**Areas 1, 9, 10, 12 & 13** consistently recorded the highest levels of tyres at or below 16mm at the point of replacement across cars and LCVs.





## Spatial Distribution of the sample (tyres surveyed)

Tyres Surveyed (Thousand)



Cars & LCV combined National Highways: Area	1.6mm and below	Between 2mm and 1.6mm	Over 2mm	Sample size (n)
Area 13	25.4%	39.1%	35.5%	29,874
Area 1	22.3%	41.2%	36.5%	15,865
Area 12	20.5%	48.0%	31.5%	36,347
Area 10	20.5%	37.8%	41.7%	78,806
Area 9	20.3%	40.5%	39.1%	38,571
Area 2	16.7%	37.9%	45.4%	49,587
Area 14	15.9%	44.4%	39.7%	15,303
Area 7	14.9%	41.6%	43.5%	38,881
Area 8	13.5%	30.9%	55.6%	15,826
Area 4	12.9%	42.6%	44.5%	27,975
Area 3	12.4%	37.4%	50.2%	65,407
Area 5	9.6%	38.1%	52.3%	30,081
Area 6	9.0%	42.9%	48.1%	23,840

<b>Cars - National Highways: Area</b>	<b>1.6mm and below</b>	<b>Between 2mm and 1.6mm</b>	<b>Over 2mm</b>	<b>Sample size (n)</b>
Area 13	25.9%	39.1%	35.0%	26,772
Area 1	21.9%	41.9%	36.2%	12,858
Area 12	20.8%	48.1%	31.0%	31,157
Area 9	20.7%	40.3%	39.0%	32,728
Area 10	20.3%	38.2%	41.5%	67,789
Area 2	16.4%	37.4%	46.1%	43,908
Area 14	15.8%	45.3%	39.0%	12,599
Area 7	14.8%	41.5%	43.7%	33,879
Area 8	13.1%	31.1%	55.7%	13,006
Area 4	12.5%	43.0%	44.5%	24,020
Area 3	12.0%	37.8%	50.2%	58,791
Area 5	9.1%	38.9%	52.0%	24,018
Area 6	8.6%	42.9%	48.5%	19,199

<b>LCV - National Highways: Area</b>	<b>1.6mm and below</b>	<b>Between 2mm and 1.6mm</b>	<b>Over 2mm</b>	<b>Sample size (n)</b>
Area 1	23.9%	38.5%	37.6%	3,007
Area 10	21.5%	35.7%	42.8%	11,017
Area 13	21.1%	38.7%	40.2%	3,102
Area 2	18.7%	41.1%	40.2%	5,679
Area 12	18.2%	47.5%	34.4%	5,190
Area 9	17.9%	42.1%	40.0%	5,843
Area 14	16.6%	40.2%	43.2%	2,704
Area 3	16.0%	34.2%	49.8%	6,616
Area 7	15.8%	41.9%	42.3%	5,002
Area 8	15.1%	29.7%	55.2%	2,820
Area 4	14.9%	40.7%	44.5%	3,955
Area 5	11.5%	35.0%	53.5%	6,063
Area 6	10.7%	42.7%	46.7%	4,641

Car & LCV combined	Area	1 2016 results	1 2023 results	1 Variance 2016 vs 2023	2 2016 results	2 2023 results	2 Variance 2016 vs 2023
	1.6mm and below	4,281	3,532	-749	15,074	8,283	-6,791
		25.3%	22.3%	-3.1%	31.3%	16.7%	-14.6%
	Between 2mm and 1.6mm	6,666	6,544	-122	16,656	18,769	2,113
		39.4%	41.2%	1.8%	34.6%	37.9%	3.2%
	Over 2mm	5,964	5,789	-175	16,375	22,535	6,160
		35.3%	36.5%	1.2%	34.0%	45.4%	11.4%
	Total Tyres	16,911	15,865	-1,046	48,105	49,587	1,482
	Illegal + borderline	64.7%	63.5%	-1.2%	66.0%	54.6%	-11.4%
Car	Area	1 2016 results	1 2023 results	Variance 2016 vs 2023	2 2016 results	2 2023 results	Variance 2016 vs 2023
	1.6mm and below	4,128	2,814	-1,314	14,152	7,221	-6,931
		25.2%	21.9%	-3.4%	32.2%	16.4%	-15.8%
	Between 2mm and 1.6mm	6,423	5,386	-1,037	15,012	16,436	1,424
		39.3%	41.9%	2.6%	34.2%	37.4%	3.2%
	Over 2mm	5,799	4,658	-1,141	14,730	20,251	5,521
		35.5%	36.2%	0.8%	33.6%	46.1%	12.6%
	Total Tyres	16,350	12,858	-3,492	43,894	43,908	14
	Illegal + borderline	64.5%	63.8%	-0.8%	66.4%	53.9%	-12.6%
LCV	Area	1 2016 results	1 2023 results	Variance 2016 vs 2023	2 2016 results	2 2023 results	Variance 2016 vs 2023
	1.6mm and below	153	718	565	922	1,062	140
		27.3%	23.9%	-3.4%	21.9%	18.7%	-3.2%
	Between 2mm and 1.6mm	243	1,158	915	1,644	2,333	689
		43.3%	38.5%	-4.8%	39.0%	41.1%	2.0%
	Over 2mm	165	1,131	966	1,645	2,284	639
		29.4%	37.6%	8.2%	39.1%	40.2%	1.2%
	Total Tyres	561	3,007	2,446	4,211	5,679	1,468
	Illegal + borderline	70.6%	62.4%	-8.2%	60.9%	59.8%	-1.2%

Car & LCV combined	Area	3 2016 results	3 2023 results	3 Variance 2016 vs 2023	4 2016 results	4 2023 results	4 Variance 2016 vs 2023
	1.6mm and below	10,700	8,108	-2,592	3,831	3,598	-233
		31.5%	12.4%	-19.1%	19.9%	12.9%	-7.0%
	Between 2mm and 1.6mm	12,493	24,467	11,974	8,991	11,930	2,939
		36.7%	37.4%	0.7%	46.6%	42.6%	-4.0%
	Over 2mm	10,818	32,832	22,014	6,469	12,447	5,978
		31.8%	50.2%	18.4%	33.5%	44.5%	11.0%
	Total Tyres	34,011	65,407	31,396	19,291	27,975	8,684
	Illegal + borderline	68.2%	49.8%	-18.4%	66.5%	55.5%	-11.0%

Car	Area	3 2016 results	3 2023 results	Variance 2016 vs 2023	4 2016 results	4 2023 results	Variance 2016 vs 2023
	1.6mm and below	10,226	7,050	-3,176	3,427	3,009	-418
		32.1%	12.0%	-20.1%	19.8%	12.5%	-7.2%
	Between 2mm and 1.6mm	11,568	22,203	10,635	8,159	10,322	2,163
		36.3%	37.8%	1.4%	47.1%	43.0%	-4.1%
	Over 2mm	10,046	29,538	19,492	5,747	10,689	4,942
		31.6%	50.2%	18.7%	33.2%	44.5%	11.3%
	Total Tyres	31,840	58,791	26,951	17,333	24,020	6,687
	Illegal + borderline	68.4%	49.8%	-18.7%	66.8%	55.5%	-11.3%

LCV	Area	3 2016 results	3 2023 results	Variance 2016 vs 2023	4 2016 results	4 2023 results	Variance 2016 vs 2023
	1.6mm and below	474	1,058	584	404	589	185
		21.8%	16.0%	-5.8%	20.6%	14.9%	-5.7%
	Between 2mm and 1.6mm	925	2,264	1,339	832	1,608	776
		42.6%	34.2%	-8.4%	42.5%	40.7%	-1.8%
	Over 2mm	772	3,294	2,522	722	1,758	1,036
		35.6%	49.8%	14.2%	36.9%	44.5%	7.6%
	Total Tyres	2,171	6,616	4,445	1,958	3,955	1,997
	Illegal + borderline	64.4%	50.2%	-14.2%	63.1%	55.5%	-7.6%



Car & LCV combined	Area	5 2016 results	5 2023 results	5 Variance 2016 vs 2023	6 2016 results	6 2023 results	6 Variance 2016 vs 2023
	1.6mm and below	1,248	2,877	1,629	2,405	2,150	-255
		13.8%	9.6%	-4.3%	13.0%	9.0%	-3.9%
	Between 2mm and 1.6mm	4,612	11,459	6,847	10,793	10,218	-575
		51.1%	38.1%	-13.0%	58.1%	42.9%	-15.3%
	Over 2mm	3,163	15,745	12,582	5,364	11,472	6,108
		35.1%	52.3%	17.3%	28.9%	48.1%	19.2%
	Total Tyres	9,023	30,081	21,058	18,562	23,840	5,278
	Illegal + borderline	64.9%	47.7%	-17.3%	71.1%	51.9%	-19.2%
Car	Area	5 2016 results	5 2023 results	Variance 2016 vs 2023	6 2016 results	6 2023 results	Variance 2016 vs 2023
	1.6mm and below	1,116	2,182	1,066	2,226	1,655	-571
		13.9%	9.1%	-4.8%	13.3%	8.6%	-4.7%
	Between 2mm and 1.6mm	4,106	9,337	5,231	9,729	8,238	-1,491
		51.2%	38.9%	-12.3%	58.3%	42.9%	-15.4%
	Over 2mm	2,801	12,499	9,698	4,730	9,306	4,576
		34.9%	52.0%	17.1%	28.3%	48.5%	20.1%
	Total Tyres	8,023	24,018	15,995	16,685	19,199	2,514
	Illegal + borderline	65.1%	63.5%	-1.6%	71.7%	51.5%	-20.1%
LCV	Area	5 2016 results	5 2023 results	Variance 2016 vs 2023	6 2016 results	6 2023 results	Variance 2016 vs 2023
	1.6mm and below	132	695	563	179	495	316
		13.2%	11.5%	-1.7%	9.5%	10.7%	1.1%
	Between 2mm and 1.6mm	506	2,122	1,616	1,064	1,980	916
		50.6%	35.0%	-15.6%	56.7%	42.7%	-14.0%
	Over 2mm	362	3,246	2,884	634	2,166	1,532
		36.2%	53.5%	17.3%	33.8%	46.7%	12.9%
	Total Tyres	1,000	6,063	5,063	1,877	4,641	2,764
	Illegal + borderline	63.8%	46.5%	-17.3%	66.2%	53.3%	-12.9%

Car & LCV combined	Area	7 2016 results	7 2023 results	7 Variance 2016 vs 2023	8 2016 results	8 2023 results	8 Variance 2016 vs 2023
	1.6mm and below	2,908	5,791	2,883	1,430	2,136	706
		22.6%	14.9%	-7.7%	17.8%	13.5%	-4.3%
	Between 2mm and 1.6mm	6,984	16,162	9,178	3,779	4,886	1,107
		54.4%	41.6%	-12.8%	47.0%	30.9%	-16.1%
	Over 2mm	2,958	16,928	13,970	2,828	8,804	5,976
		23.0%	43.5%	20.5%	35.2%	55.6%	20.4%
	Total Tyres	12,850	38,881	26,031	8,037	15,826	7,789
	Illegal + borderline	77.0%	56.5%	-20.5%	64.8%	44.4%	-20.4%

Car	Area	7 2016 results	7 2023 results	Variance 2016 vs 2023	8 2016 results	8 2023 results	Variance 2016 vs 2023
	1.6mm and below	2,516	5,002	2,486	1,237	1,710	473
		22.7%	14.8%	-7.9%	17.8%	13.1%	-4.6%
	Between 2mm and 1.6mm	6,055	14,067	8,012	3,259	4,048	789
		54.6%	41.5%	-13.0%	46.8%	31.1%	-15.7%
	Over 2mm	2,528	14,810	12,282	2,471	7,248	4,777
		22.8%	43.7%	20.9%	35.5%	55.7%	20.3%
	Total Tyres	11,099	33,879	22,780	6,967	13,006	6,039
	Illegal + borderline	77.2%	56.3%	-20.9%	64.5%	44.3%	-20.3%

LCV	Area	7 2016 results	7 2023 results	Variance 2016 vs 2023	8 2016 results	8 2023 results	Variance 2016 vs 2023
	1.6mm and below	392	789	397	193	426	233
		22.4%	15.8%	-6.6%	18.0%	15.1%	-2.9%
	Between 2mm and 1.6mm	929	2,095	1,166	520	838	318
		53.1%	41.9%	-11.2%	48.6%	29.7%	-18.9%
	Over 2mm	430	2,118	1,688	357	1,556	1,199
		24.6%	42.3%	17.8%	33.4%	55.2%	21.8%
	Total Tyres	1,751	5,002	3,251	1,070	2,820	1,750
	Illegal + borderline	75.4%	57.7%	-17.8%	66.6%	44.8%	-21.8%

Car & LCV combined	Area	9 2016 results	9 2023 results	9 Variance 2016 vs 2023	10 2016 results	10 2023 results	10 Variance 2016 vs 2023
	1.6mm and below	6,949	7,832	883	17,885	16,117	-1,768
		29.2%	20.3%	-8.9%	31.8%	20.5%	-11.3%
	Between 2mm and 1.6mm	11,279	15,640	4,361	22,020	29,827	7,807
		47.3%	40.5%	-6.8%	39.1%	37.8%	-1.3%
	Over 2mm	5,606	15,099	9,493	16,350	32,862	16,512
		23.5%	39.1%	15.6%	29.1%	41.7%	12.6%
	Total Tyres	23,834	38,571	14,737	56,255	78,806	22,551
	Illegal + borderline	76.5%	60.9%	-15.6%	70.9%	58.3%	-12.6%

Car	Area	9 2016 results	9 2023 results	Variance 2016 vs 2023	10 2016 results	10 2023 results	Variance 2016 vs 2023
	1.6mm and below	6,101	6,786	685	16,614	13,749	-2,865
		30.4%	20.7%	-9.6%	32.3%	20.3%	-12.0%
	Between 2mm and 1.6mm	9,486	13,178	3,692	20,224	25,893	5,669
		47.2%	40.3%	-7.0%	39.3%	38.2%	-1.1%
	Over 2mm	4,500	12,764	8,264	14,635	28,147	13,512
		22.4%	39.0%	16.6%	28.4%	41.5%	13.1%
	Total Tyres	20,087	32,728	12,641	51,473	67,789	16,316
	Illegal + borderline	77.6%	61.0%	-16.6%	71.6%	58.5%	-13.1%

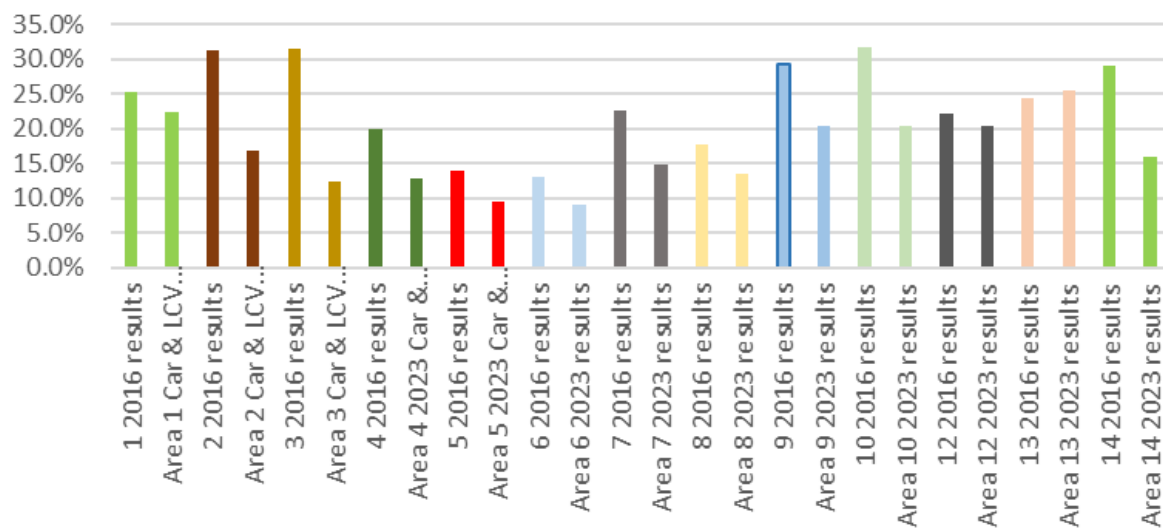
LCV	Area	9 2016 results	9 2023 results	Variance 2016 vs 2023	10 2016 results	10 2023 results	Variance 2016 vs 2023
	1.6mm and below	848	1,046	198	1,271	2,368	1,097
		22.6%	17.9%	-4.7%	26.6%	21.5%	-5.1%
	Between 2mm and 1.6mm	1,793	2,462	669	1,796	3,934	2,138
		47.9%	42.1%	-5.7%	37.6%	35.7%	-1.8%
	Over 2mm	1,106	2,335	1,229	1,715	4,715	3,000
		29.5%	40.0%	10.4%	35.9%	42.8%	6.9%
	Total Tyres	3,747	5,843	2,096	4,782	11,017	6,235
	Illegal + borderline	70.5%	60.0%	-10.4%	64.1%	57.2%	-6.9%

22

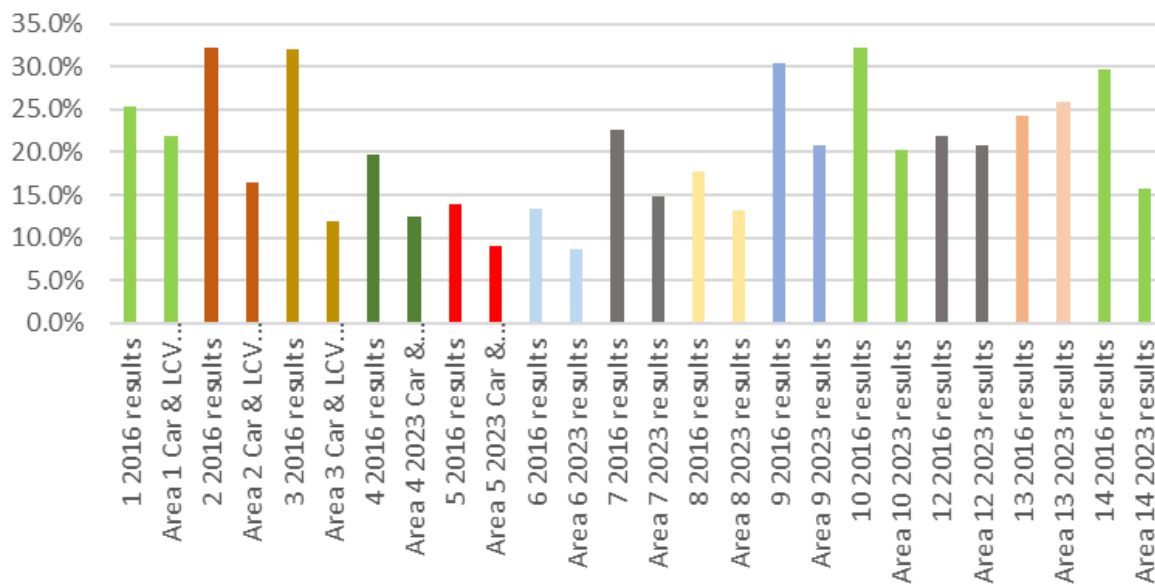
Car & LCV combined	Area	14 2016 results	14 2023 results	14 Variance 2016 vs 2023
	1.6mm and below	5,478	2,435	-3,043
		28.9%	15.9%	-13.0%
	Between 2mm and 1.6mm	7,675	6,789	-886
		40.5%	44.4%	3.8%
	Over 2mm	5,775	6,079	304
		30.5%	39.7%	9.2%
	Total Tyres	18,928	15,303	-3,625
	Illegal + borderline	69.5%	60.3%	-9.2%
Car	Area	14 2016 results	14 2023 results	Variance 2016 vs 2023
	1.6mm and below	4,858	1,987	-2,871
		29.7%	15.8%	-13.9%
	Between 2mm and 1.6mm	6,654	5,702	-952
		40.7%	45.3%	4.6%
	Over 2mm	4,843	4,910	67
		29.6%	39.0%	9.4%
	Total Tyres	16,355	12,599	-3,756
	Illegal + borderline	70.4%	61.0%	-9.4%
LCV	Area	14 2016 results	14 2023 results	Variance 2016 vs 2023
	1.6mm and below	620	448	-172
		24.1%	16.6%	-7.5%
	Between 2mm and 1.6mm	1,021	1,087	66
		39.7%	40.2%	0.5%
	Over 2mm	932	1,169	237
		36.2%	43.2%	7.0%
	Total Tyres	2,573	2,704	131
	Illegal + borderline	63.8%	56.8%	-7.0%



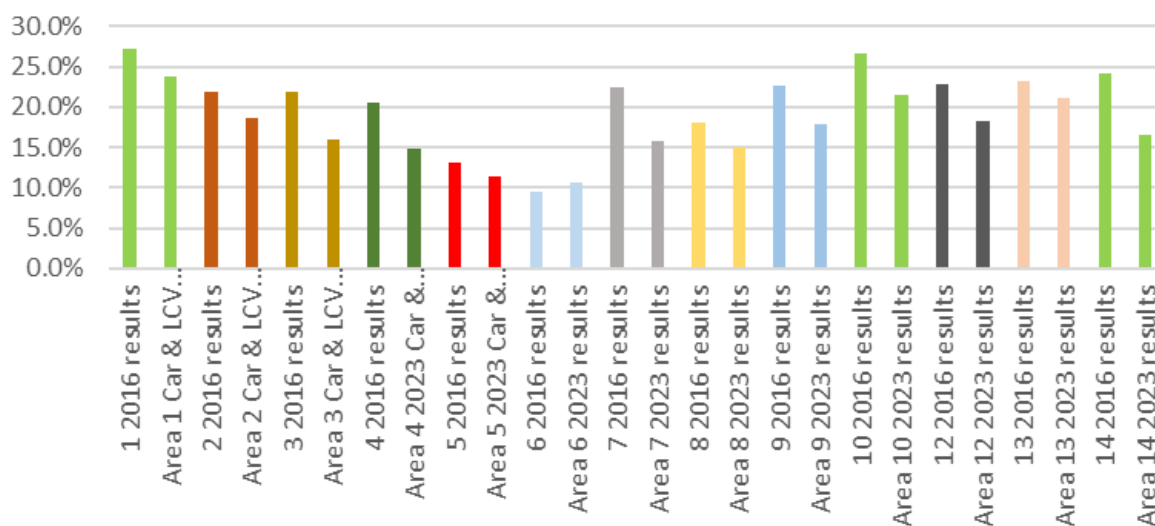
### Tyres with 1.6mm tread and below NH regions car & LCV combined



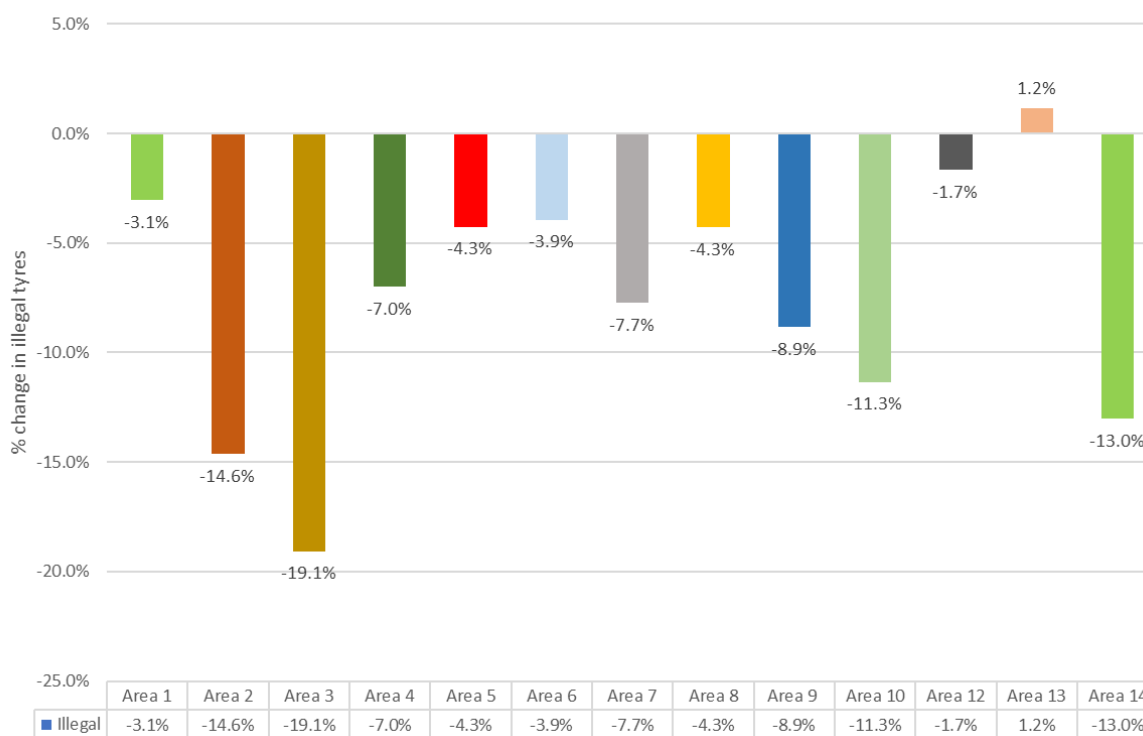
### Tyres with 1.6mm tread and below NH regions car



## Tyres with 1.6mm tread and below NH regions LCV

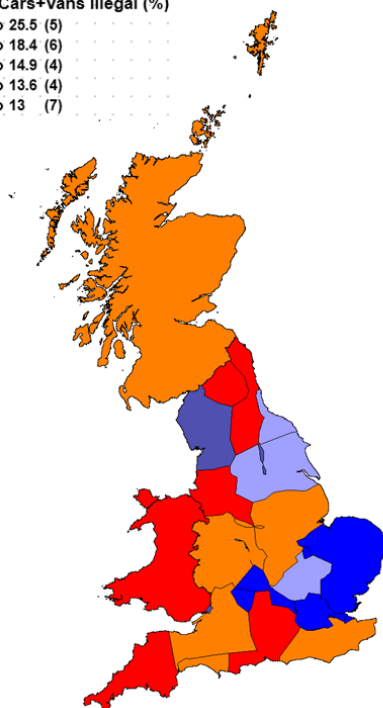
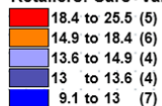


## Variance 2016 vs 2023 car & LCV combined with tread of 1.6mm or below

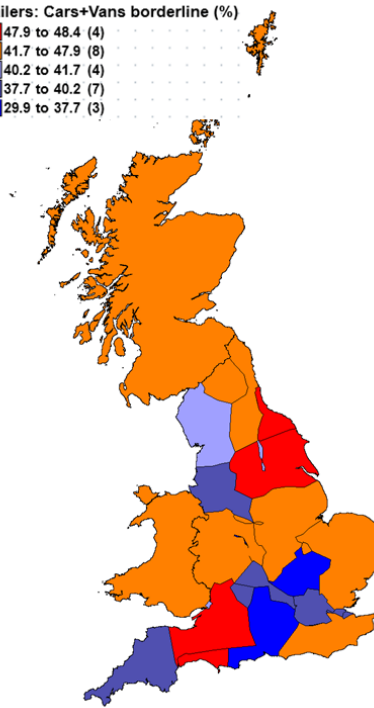
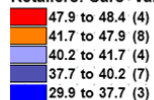


## Spatial Distribution of the sample (tyres surveyed)

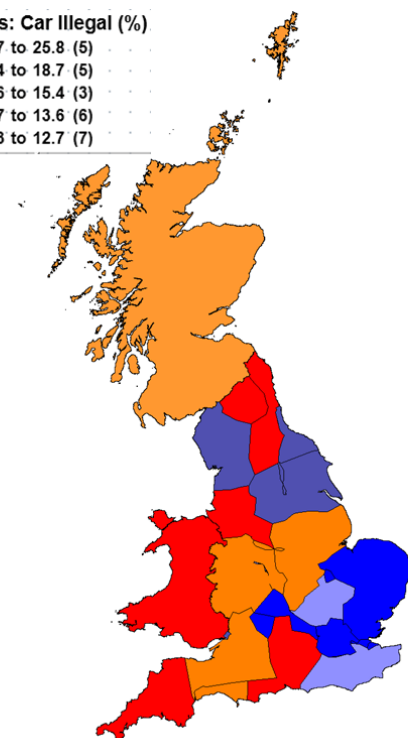
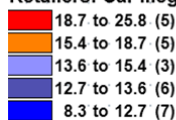
Retailers: Cars+Vans Illegal (%)



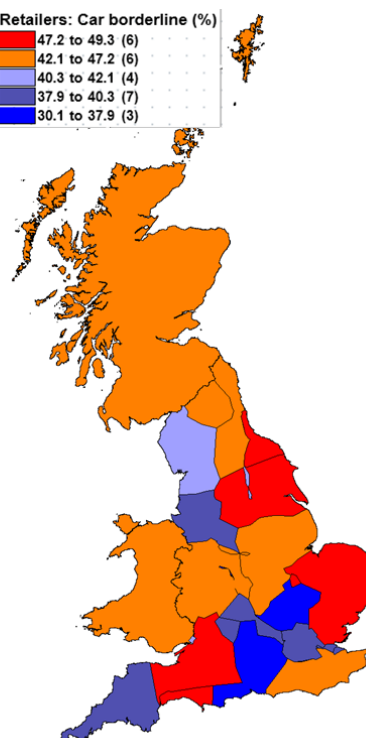
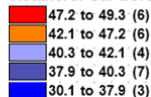
Retailers: Cars+Vans borderline (%)



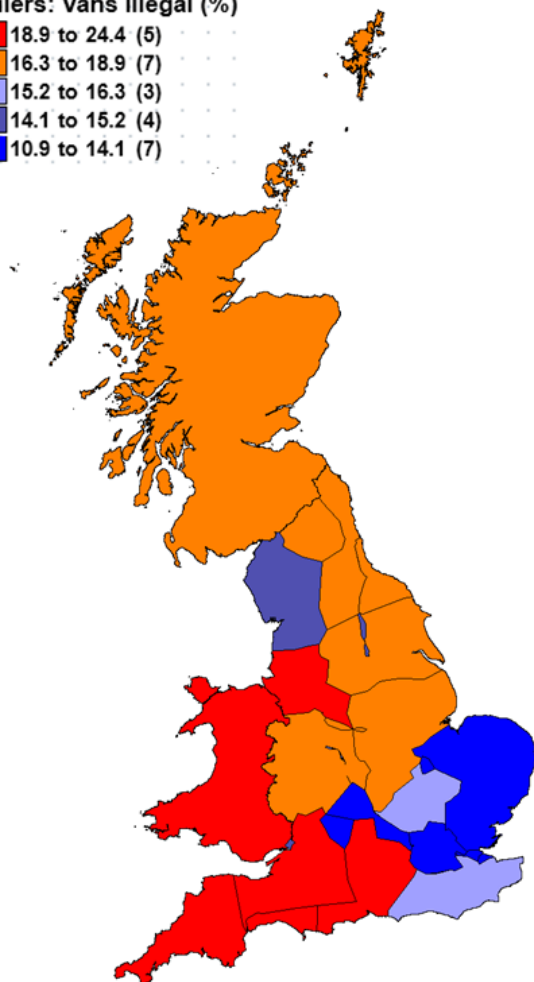
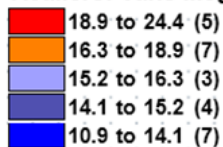
Retailers: Car Illegal (%)



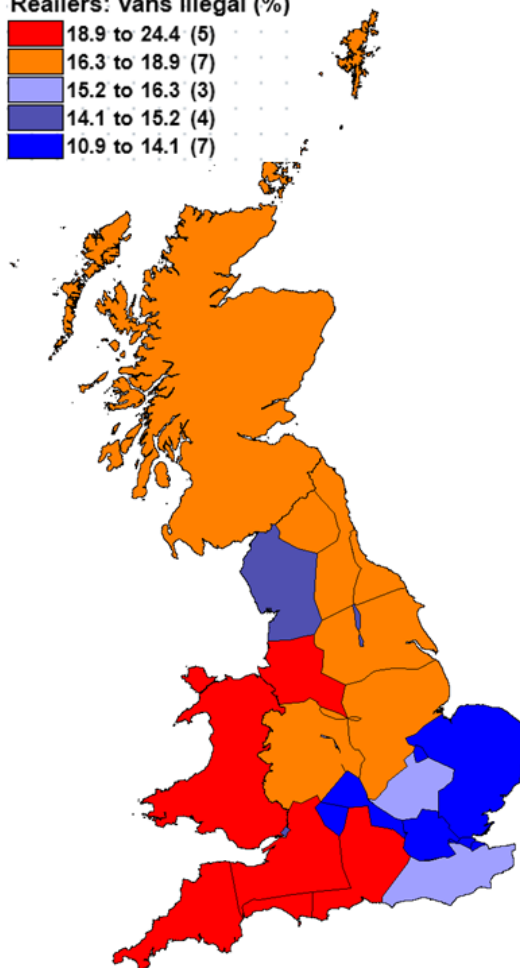
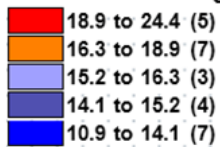
Retailers: Car borderline (%)



**Reailers: Vans Illegal (%)**



**Reailers: Vans Illegal (%)**



## ADDENDUM: Results from Vehicle Manufacturers' Service Centres

These outlets are the service centres of vehicle manufacturers, such as Ford, in other words franchised main dealers.

Car & LCV Combined			
National Highways: Area	FVM Less than 1.6mm	FVM Below 2mm	Sample size FVW
Area 1: Cornwall & Devon			
Area 2: Somerset, Avon, Wiltshire & Gloucestershire	3.5%	3.8%	3,116
Area 3: Hants, Berks, Surrey, Oxon, Dorset			
Area 4: Kent, Surrey, East Sussex & West Sussex	0.3%	0.8%	4,386
Area 5: Greater London	0.7%	1.1%	4,233
Area 6: Essex, Part of Cambridgeshire, Bedfordshire, Hertfordshire	0.3%	0.5%	3,832
Area 7: Leicestershire, Northamptonshire, Derbyshire, Nottinghamshire, Lincolnshire, part of Warwickshire, Rutland and part of Oxfordshire			
Area 8: Part of Cambridgeshire, Bedfordshire, Hertfordshire, & part of Suffolk			
Area 9: West Midlands, Hertfordshire, Worcestershire, Shropshire, Staffordshire, Warwickshire, & part of Gloucestershire (M5 & M6, M65, M55, M61)	0.8%	1.1%	3,772
Area 10: Cheshire, Greater Manchester and Merseyside	0.3%	0.7%	2,805
Area 12: Yorkshire & Humberside	1.0%	1.7%	10,506
Area 13: Lancashire and Cumbria			
Area 14: Northumberland, Tyne & wear, Durham & North Yorks			
Average England	0.9%	1.4%	16,223



Cars			
National Highways: Area	FVM Less than	FVM Below	Sample size
Area 1: Cornwall & Devon			
Area 2: Somerset, Avon, Wiltshire & Gloucestershire	4.2%	4.5%	2,313
Area 3: Hants, Berks, Surrey, Oxon, Dorset			
Area 4: Kent, Surrey, East Sussex & West Sussex	0.3%	0.8%	3,596
Area 5: Greater London	0.8%	1.2%	2,897
Area 6: Essex, Part of Cambridgeshire, Bedfordshire, Hertfordshire	0.3%	0.6%	3,086
Area 8: Part of Cambridgeshire, Bedfordshire,			
Area 7: Leicestershire, Northamptonshire, Derbyshire, Nottinghamshire, Lincolnshire, part of Warwickshire, Rutland and part of Oxfordshire			
Area 9: West Midlands, Hertfordshire, Worcestershire, Shropshire, Staffordshire, Warwickshire, & part of Gloucestershire (M5 & M6, M65, M55, M61)	0.7%	1.1%	3,281
Area 10: Cheshire, Greater Manchester and Merseyside	0.2%	0.6%	2,627
Area 12: Yorkshire & Humberside	1.3%	1.9%	6,958
Area 13: Lancashire and Cumbria			
Area 14: Northumberland, Tyne & wear, Durham & North Yorks			
<b>Average England</b>	<b>1.1%</b>	<b>1.5%</b>	<b>24,758</b>

LCVs			
National Highways: Area	FVM Less than	FVM Below	Sample size
Area 1: Cornwall & Devon			
Area 2: Somerset, Avon, Wiltshire & Gloucestershire	1.2%	1.9%	3,116
Area 3: Hants, Berks, Surrey, Oxon, Dorset			
Area 4: Kent, Surrey, East Sussex & West Sussex	0.5%	0.6%	4,386
Area 5: Greater London	0.6%	1.0%	4,233
Area 6: Essex, Part of Cambridgeshire, Bedfordshire, Hertfordshire	0.1%	0.1%	3,832
Area 8: Part of Cambridgeshire, Bedfordshire, Hertfordshire, & part of Suffolk			
Area 7: Leicestershire, Northamptonshire, Derbyshire, Nottinghamshire, Lincolnshire, part of Warwickshire, Rutland and part of Oxfordshire			
Area 9: West Midlands, Hertfordshire, Worcestershire, Shropshire, Staffordshire, Warwickshire, & part of Gloucestershire (M5 & M6, M65, M55, M61)	1.0%	1.0%	3,772
Area 10: Cheshire, Greater Manchester and Merseyside	1.7%	1.7%	2,805
Area 12: Yorkshire & Humberside	0.5%	1.4%	10,506
Area 13: Lancashire and Cumbria			
Area 14: Northumberland, Tyne & wear, Durham & North Yorks			
<b>Average England</b>	<b>0.8%</b>	<b>1.1%</b>	<b>32,650</b>

**# ENDS #**

For further information, please contact [theteam@tyresafe.org](mailto:theteam@tyresafe.org)