

PROOF OF EVIDENCE

OF

Simon Turl

Chief Executive Officer

On behalf of Roadchef Limited

7th February 2017

1 INTRODUCTION

1.1 My name is Simon Turl and I have been the Chief Executive Officer of Roadchef Limited since 2007. I hold a Masters Degree in Business Administration. I have 38 years' experience in travel hub hospitality businesses with 32 years specifically spent in the Motorway Service Area industry. I joined Granada Motorway Services in 1978 and spent 23 years working for the company in various roles, joining the main Board as Commercial Director in 1997. I was appointed Managing Director of Travelodge in 2001 and moved to become CEO of the SSP UK Airports concession business in 2004. The Roadchef business was acquired by Antin Infrastructure Partners in September 2014 and I am ultimately responsible for all aspects of the Roadchef business.

- This proof of evidence explains the crucial role that the provision of MSAs by specialised operators plays in maintaining the safety of motorway users
- The adverse safety implications of Welsh Government's proposed access arrangements for the Magor Motorway Service Area from the planned Newport bypass section of the M4
- Roadchef's objections to the proposed access arrangements
- The impact and safety implications for M4 road users in Wales
- The comparative commercial impact for Roadchef of the WG Scheme, the RC Schemes and a WG/RC compromise scheme
- The negative impact for employees of the Magor MSA
- The negative impact for the Welsh economy.

2 ROADCHEF LIMITED

2.1 Roadchef Limited is the third largest MSA company in Great Britain after Moto Hospitality Limited and Welcome Break Limited. Roadchef was incorporated in 1973 and now operates 30 service areas at 21 locations employing over 3,500 people and serving over 50 million visitors each year.

- 2.2 Roadchef is one of the largest UK franchisees of both the McDonald's and Costa brands.
- 2.3 In 2015/16 the Company invested over £37m in improving its service areas including a major upgrade of its Pont Abraham site in Wales in Autumn 2015.
- 2.4 Roadchef acquired the Magor MSA in 2011 and since then has invested £2.5m in upgrading the site's facilities.
- 2.5 A further budget of £1.7m had been set aside for development at Magor in 2016 but this has been placed on hold due to the proposed access arrangements from the new M4 route.
- 2.6 The planned 2016 development works for Magor included:
- A major building extension adding some 30% of additional seating
 - A new catering offer "The Fresh Food Café" to be introduced
 - Male and female toilets fully refurbished
 - A major HGV parking extension adding 30 further spaces
 - An additional 50 car parking spaces
- The investments and additional sales were expected to create at least 25 permanent new jobs at the site.

3. THE MAGOR MSA ACCESS ISSUE

- 3.1 The statutory purpose of an MSA is to increase road safety by providing motorway users with designated, easily accessible rest points in their journeys.
- 3.2 The Magor service area has operated successfully at Junction 23a of the M4 in Wales for 24 years, having been approved as a motorway service area by the local Welsh government in 1991. The site currently provides rest and refreshment facilities for over 1.8 million visitors each year.
- To gain greater insight into the views of Magor's customers and to better inform this Public Inquiry, Roadchef commissioned Harris Interactive UK Ltd to undertake nearly 1,000 face-to-face interviews at Magor in two waves

during August and September 2016. The separate waves allowed us to gain views from customers during the holiday period as well as the more normal business trading period. (See Harris Research at Appendix 1)

- 3.4 Customers were asked a total of 25 questions by trained interviewers and the results have been collated, verified and the reports produced for Roadchef by Harris Interactive UK Ltd.
- 3.5 The site is accessed in each direction of the M4 via a direct motorway slip road and a simple grade separated junction. **81%** (See Harris Page 34) of the current users of Magor services questioned in the Harris Research project cited ease of access as a key feature they liked about the site.
- 3.6 The proposed access arrangements for M4 road users contained within the WG Scheme, involving a diversion of at least 4.2 miles to use the Magor MSA, are impractical and dangerously at odds with good practice in safe motorway design. **82%** of the current users of Magor services questioned in the Harris research project said that, faced with the proposed new route to access Magor services, they would be less likely to visit, with **67%** saying they would definitely avoid stopping altogether. (See Harris Page 44 Q21b)
- 3.7 **Roadchef objects in the strongest possible terms to the effective removal of the Magor motorway service area from the road it was built to serve. The absence of a properly accessible rest area for 49 miles between Leigh Delamere and Cardiff Gate will greatly inconvenience users of the M4 in Wales and will significantly increase the risk of major accidents due to driver fatigue.**

4. THE CORE PURPOSE OF A MOTORWAY SERVICE AREA

- 4.1 Motorway service areas are an integral component of the UK motorway network, providing drivers and passengers with the opportunity to take critically important rest and refreshment breaks from their journeys, without the need for long detours away from their motorway route.

- 4.2 Since the opening of the first motorway, the M1 in 1959, the provision of motorway service areas has been managed in parallel to ensure that road users are able to take a recommended 15-minute break in every 2 hours of driving. (See Highway Code Rule 91 bullet 3)



The Highway Code

From: **Department for Transport**
Updated: **5 December 2016, see all updates**

Rules for drivers and motorcyclists (89 to 102)

The Highway Code rules for drivers and motorcyclists, including vehicle condition, fitness to drive, alcohol and drugs, what to do before setting off, vehicle towing and loading and seat belts and child restraints.

Rule 91

Driving when you are tired greatly increases your risk of collision. To minimise this risk

- make sure you are fit to drive. Do not begin a journey if you are tired. Get a good night's sleep before embarking on a long journey
- avoid undertaking long journeys between midnight and 6 am, when natural alertness is at a minimum
- plan your journey to take sufficient breaks. A minimum break of at least 15 minutes after every two hours of driving is recommended
- if you feel at all sleepy, stop in a safe place. Do not stop on the hard shoulder of a motorway
- the most effective ways to counter sleepiness are to drink, for example, two cups of caffeinated coffee and to take a short nap (at least 15 minutes)

- 4.3 The Magor service area was built to serve the needs of drivers using the M4 motorway in Wales in 1992, a role that was approved by government through the issuing of a MSA planning consent which subsequently allowed for the services to have the site-specific “blue” motorway signage to inform M4 drivers of its location.
- 4.4 In the Harris Research survey over **75%** (See Harris Page 27 Q13) of respondents gave as their primary reason for stopping at Magor services the “Need for a break” from their journey.

5. THE IMPACT FOR M4 ROAD USERS IN WALES

5.1 Over 1.8m M4 road users in Wales visited the Magor service area main amenity building in 2016 and based on the Harris Research survey sample we know the following key facts:

- 85% travel by car (See Harris Page 6)
- 65% are drivers rather than passengers (See Harris Page 6)
- 53% are travelling in a westerly direction into Wales (See Harris Page 6)
- 34% have a home in Wales (See Harris Page 9)
- 77% are travelling for leisure (See Harris Page 25)
- Only 4% are on a regular work commute journey (See Harris Page 25)
- 56% are on a journey of over 150 miles with 21% travelling over 250 miles (See Harris Page 25 Q11)
- **75% said they stopped at Magor because they needed a break. (See Harris Page 27 Q13)**
- **82% said that, faced with the proposed new route to access Magor services, they would be less likely to visit, with 67% saying they would definitely avoid stopping. (See Harris Page 44 Q21b)**

5.2 Based on our entrance and exit Automatic Number Plate Recognition (ANPR) cameras at Magor (See table below) we know the following key facts:

- A little over 1.7m vehicles entered and exited the Magor service area in 2016. This data includes vehicles that only visit the filling station and site employees and delivery vehicles etc.
- The ANPR systems identified 732,348 individual registration numbers accounting for all of the visits to the Magor service area in 2016
- Almost 70% of the vehicle registration numbers recorded visited Magor just once in the year indicating the high proportion of leisure journeys undertaken by visitors to the site
- This infrequent use of the Magor MSA is typical of the industry and proves that the local traffic which may continue to use the de-regulated road past Magor for Newport etc does not and will not use the MSA.
- The ANPR evidence also shows the relative fragility of the sites customer base, which will be decimated by the proposed convoluted WG access arrangements from the new motorway. Use once and never again.

Magor						
Visits During 2016	Vehicle Reg Count	%	Cum %	Visits	%	Cum %
TOTAL	732,348			1,719,033		
1	494,258	67.5%	67.5%	494,258	28.8%	28.8%
2	117,631	16.1%	83.6%	235,262	13.7%	42.4%
3	41,449	5.7%	89.2%	124,347	7.2%	49.7%
4	21,168	2.9%	92.1%	84,672	4.9%	54.6%
5	12,593	1.7%	93.8%	62,965	3.7%	58.3%
6	8,347	1.1%	95.0%	50,082	2.9%	61.2%
7	5,825	0.8%	95.8%	40,775	2.4%	63.5%
8	4,521	0.6%	96.4%	36,168	2.1%	65.6%
9	3,423	0.5%	96.8%	30,807	1.8%	67.4%
10	2,787	0.4%	97.2%	27,870	1.6%	69.1%
11	2,224	0.3%	97.5%	24,464	1.4%	70.5%
12	1,914	0.3%	97.8%	22,968	1.3%	71.8%
Total 12 or less	716,140	97.8%		1,234,638	71.8%	
More than 12	16,208	2.2%		16,208	0.9%	

- 5.3 From our extensive knowledge of the MSA industry we know that, the more difficult or convoluted the access to a motorway service area is, the less inclined road users are to take a rest break.
- 5.4 Failure to provide proper access to the Magor service area from the new Newport Bypass section of the M4 will add significantly to the risk of serious road accidents. It will also seriously inconvenience all road users and especially the elderly, the disabled and families with children by removing access to toilet facilities for 49 miles. The actions of WG in this matter raises the very serious prospect of road users having to relieve themselves on the hard shoulder of the country's brand new motorway.
- 5.5 Dr Ian McKay has presented clear evidence to this inquiry (See IM Appendix 1) which shows the relative turn-in rates achieved by MSAs in Roadchef's portfolio comparing those "On-Line" sites with direct access and egress from the motorway and those where access is more complex. It will be no surprise to learn in these time-pressured days that, the more direct and efficient the access to an MSA, the more willing drivers are to take a rest break.
- 5.6 In 2015 Welsh Government communicated a fundamental change to the proposed access arrangements to the Magor MSA under the WG scheme, which produced the proposed access arrangement that we are now objecting to.

- 5.7 Had the original proposed access via a simple additional roundabout connecting to junction 23a of the current motorway been retained, then Roadchef would not have been an objector to the WG scheme.
- 5.8 At no time before this major change to planned MSA provision and access to our site was made did the Welsh Government consult with Roadchef with regards to the implications of their decision.
- 5.9 As soon as Roadchef was made aware of the major changes that Welsh Government had decided to make to their scheme at a meeting on 21st August 2015, the implications of the effective removal of the Magor MSA from the motorway network were communicated in letters from Dr Ian McKay dated 25th August 2015 and 26th January 2016 (at Appendix 2 to this proof) and in subsequent communications with Welsh Government.
- 5.10 Welsh Government have at all times defended their proposed access arrangements for the Magor MSA as being reasonable. Various communications have been received from Welsh Government to that effect.
- 5.11 Welsh Government have suggested that a large proportion of the traffic currently using the M4 passing the Magor Service Area would continue to use the de-regulated road once the new Newport Bypass section of the M4 is opened. Whilst this will be true for local Newport residents and commuters travelling on business our Harris Research and ANPR data shows clearly that these drivers are not users of the Magor service area. Drivers use MSAs when they are driving a long distance and these drivers will use the new Newport Bypass section of the M4 and will not take the proposed diversion to visit the Magor MSA.
- 5.12 If implemented, the access and egress arrangements proposed by Welsh Government for Magor from the new M4 route would be without doubt the longest and most complex ever in the UK. Indeed, I would argue that if Roadchef were to propose such access arrangements for a new MSA our project would be rejected by Government as being completely impractical.
- 5.13 As part of our Harris Research survey we asked existing users of the Magor MSA whether they would continue to use the site if the access involved a round trip of 4.5 miles from the motorway and the need to negotiate two junctions was required. A total of 82% (See Harris Page 44 Q21b) of those questioned said they would be less likely to stop which raises major concerns for road safety.
- 5.14 Based on our knowledge and our Harris research survey we believe that, of over 1.8m travellers currently using the Magor MSA each year, around 1.4m or 80% will no longer use the site due to the proposed access arrangements.

- 5.15 This assessment is further supported within our Harris research work where 73% (See Harris Page 32 Q15) of visitors noted convenience as their key reason for stopping at Magor and 81% (See Harris Page 34 Q22) noted that they liked the ease of access that the Magor site offers.
- 5.16 Travellers using the M4 in and out of Wales under the new proposals will be faced with a 49 mile gap between Leigh Delamere and Cardiff Gate service areas making this one of the longest sections of motorway in the UK without proper access to a motorway service area.
- 5.17 The Cardiff Gate service area is significantly smaller than Magor and will not be able to cope with the traffic that is no longer served by Magor. The site is not capable of expansion and as such M4 road users in Wales will be further impacted by a lack of proper MSA facilities.
- 5.18 Removing proper access to adequate rest area provision from the M4 in this way is in our opinion, and in the opinion of leading road user and road safety organisations, a major error and will undoubtedly lead to a significant risk of additional road accidents due to driver fatigue. Motorway design should encourage and not actively discourage road users from taking regular rest breaks when undertaking long journeys on the motorway network. I set out the relevant advice/commentary from the RAC Foundation, the Royal Society for the Prevention of Accidents, the Road Haulage Association and the Automobile Association below.

5.19 The RAC Foundation

The RAC Foundation is a transport policy and research organisation that explores the economic, mobility, safety and environmental issues relating to roads and their users. It publishes independent and authoritative research with which it promotes informed debate and advocates policy in the interests of the responsible motorist.

“The provision of Motorway Service Areas is not just about convenience for people on the move, they play an important road safety role. Drivers need to be encouraged to take rest breaks, rather than risk driving tired - driver fatigue is a significant concern. Second, the incidence of motorists running out of fuel on motorways is also worryingly high, and, in turn a road safety risk when vehicles break down. Third, toilet facilities are important for families with young children who might otherwise be tempted to stop on the hard shoulder. Motorists would expect a Motorway Service area to be next to the main carriageway - no more than a couple of minutes travel time. Effectively creating a 49 mile - 45 minute - gap between service areas is asking for trouble.”

Steve Gooding, Director of the RAC Foundation

5.20 **Royal Society for the Prevention of Accidents**

The Royal Society for the Prevention of Accidents (RoSPA) is a British charity that aims to save lives and prevent life-changing injuries which occur as a result of accidents. In the past, it has successfully campaigned on issues of road safety, including playing an integral role in the introduction of drink-drive legislation, the compulsory wearing of seatbelts and the ban on handheld mobile phones while driving, as well as on issues of occupational health and safety.

The Rospa website includes specific road safety information around the dangers of driving when tired, especially on motorways and the importance of taking regular rest breaks:

<http://www.rosipa.com/road-safety/advice/drivers/fatigue/road-accidents/>
(see Appendix 3)

5.21 **Road Haulage Association**

The Road Haulage Association Ltd (RHA) is a British trade association, which represents members of the road haulage industry, together with allied businesses. The RHA has been in existence for more than fifty years. As a trade association, the RHA provides campaigning, advice, information and business services for its members within the UK haulage industry, including audits, risk assessments and contracts of employment. It also offers training, from Digital Tachograph training to Safe Loading.

“Road haulage is vital to the whole economy and the motorway network is its major place of work. The Road Haulage Association has stressed that lorry parking facilities are an essential element of the network, and that it is the responsibility of infrastructure providers to ensure that they are provided in the interests of road safety and of driver welfare. The RHA and our members would be extremely concerned about any plans to reduce access to, or completely to remove any MSA facilities from the UK motorway network.”

Jack Semple, Director of Policy

5.22 **The Automobile Association**

The Automobile Association (The AA) is a British motoring association founded in 1905, which currently provides car insurance, driving lessons, breakdown cover, loans, motoring advice, road maps and other services.

As recently as the 31st January 2017 the AA published updated guidance on the dangers of driving tired and the need to take regular 15 minute breaks especially on long journeys:

<https://www.theaa.com/driving-advice/safety/tired-driver>

(see Appendix 4)

6. THE COMMERCIAL IMPACT FOR ROADCHEF

6.1 In order to assess the financial impact of the proposed new access arrangements Roadchef has produced modelling to show the sales and EBITDA (profit) impact of a reduction in business in three different scenarios using 2016 as a base:

- The effect of the WG scheme, which Roadchef knowledge and Harris Research data shows will lead to an **80%** reduction in visitor numbers
- The effect of the Roadchef schemes ("the RC Schemes" being Options 1, 2 and 3 as referred to in Mike Axon's Proof), which Roadchef estimates will lead to a **10%** reduction in visitor numbers
- The effect of a compromise scheme ("the Compromise Scheme" as referred to in Mike Axon's Proof), where the Roadchef scheme is achieved in all aspects other than the proposed amendments to the convoluted new junction 23 with its impractical "Hamburger" turn for Eastbound MSA visitors re-joining the WG Scheme route to London. Roadchef estimates this compromise scheme would lead to a **25%** reduction in visitor numbers.

Business Area	2016		WG Scheme 80% Decline		RC Schemes 10% Decline		Compromise Scheme 25% Decline	
	Transactions	Sales £000s	Trans	Sales £000s	Trans	Sales £000s	Trans	Sales £000s
McDonald's	483,730	£2,384	96,746	£477	435,357	£2,146	362,798	£1,788
Costa Coffee	233,186	£1,217	46,637	£243	209,867	£1,095	174,890	£913
Restbite	49,940	£348	9,988	£70	44,946	£313	37,455	£261
Chozen Noodle	28,664	£206	5,733	£41	25,798	£185	21,498	£155
Total Catering	795,520	£4,155	159,104	£831	715,968	£3,740	596,640	£3,116
Hotel		£277		£55		£249		£208
Other		£639		£128		£575		£479
Retail		£1,249		£250		£1,124		£937
Total Sales		£6,320		£1,264		£5,688		£4,740
Ebitda		£1,462k		(£637k)		£1,288k		£876k

- 6.2 The impact of the WG scheme on the Magor MSA business would be nothing short of catastrophic. The MSA cannot operate at the business levels shown above and would have to close with the associated loss of employment for all 126 people who work at the site.
- 6.3 Under each of the RC schemes the MSA business would be impacted but at a level that would maintain a viable business. At these levels Roadchef would also be able to continue with its investment plans and new job creation as outlined in 2.6 above.
- 6.4 Under the Compromise Scheme Roadchef estimates that the site would remain profitable, however the negative impact of the scheme would rule out any substantial investment in the MSA and associated jobs growth for the foreseeable future.

7. THE IMPACT FOR EMPLOYEES OF THE MAGOR MSA

- 7.1 Roadchef employs 126 people at the Magor service area making it one of the largest employers in the area. The average length of service at the site is 3.2 years and we have two employees that have been with the business since the site opened in 1992. In addition Rontec have a team of employees to operate the filling station.
- 7.2 56% of the Roadchef workforce are female and the business currently has 85 full-time and 41 part-time employees working across the site.
- 7.3 The opportunities for re-employment in the area are limited and as such the closure of the Magor service area and the loss of the 126 jobs would have a devastating impact on those employed at the site.

8. THE NEGATIVE IMPACT FOR THE WELSH ECONOMY

- 8.1 In addition to the very negative impact that the closure of the Magor service area would have on employment, there would also be a direct impact to the State overall with lost tax revenues totalling approximately £1.7m per annum. Whilst tax receipts are not currently retained in Wales the loss of this income should be a concern for Government.
- 8.2 Whilst it may be anticipated that users of the M4 in Wales would simply switch to using other existing service areas on their route it should be noted that Cardiff Gate, the next service area in a westerly direction, is too far and too small to satisfy the safety needs of M4 travellers in the absence of the Magor MSA. The site is around 50% smaller than Magor, is already heavily used and has no space for expansion

9. IN SUMMARY

- 9.1 Roadchef supports the need to resolve the traffic congestion issues around the Brynglas Tunnels and Newport and would indeed be one of the businesses to benefit from a free-flowing M4 motorway in the area.
- 9.2 However the proposed access arrangements for users of the new road to visit the Magor MSA under the Welsh Government scheme are impractical and will result in its effective removal from the motorway it was constructed to serve. The safety implications of such an error by the Welsh Government would be huge.
- 9.3 The absence of proper toilet and rest facilities for travellers using the newly built main motorway access route into Wales should and would raise serious questions for all of those responsible for its construction. The spectre of desperate road users relieving themselves along the hard shoulder of the newest motorway in the UK would be highly embarrassing and extremely dangerous.
- 9.4 We believe we have proposed a viable solution to this issue and would urge the Inquiry to rule that the current access arrangements are not safe or acceptable and should be replaced with one of the RC schemes.

APPENDIX 1

The Harris Research



Magor Services

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Project background and business objectives

- Roadchef operates 30 motorway service areas in 21 locations in the UK. It is the third largest motorway service operator behind Moto and Welcome Break.
- At the M4 Junction 23A, Roadchef operates its Magor service station, which is used by traffic travelling in both directions.
- Currently, there is a proposed plan for construction work on the M4 that would limit access to this services site. A potential diversion could result in travellers having to travel an extra 2 or 4.5 miles to access the site.
- Roadchef seek to understand the potential impact that this could have on the number of travellers stopping at the Magor site.
- Along with this, Roadchef wish to better understand the types of customers who currently stop at the site, the types of journeys these travellers make and how often they use Magor services.

Research objectives

○ The key business **objectives** underlying this project were:

1. Understand the impact that a 2 or 4.5 mile diversion would have on the number of visitors to Magor services
2. Understand the types of journeys customers visiting Magor make and how often they visit

○ Therefore, the key research **objectives** were the following:

1. Discover the main reasons Magor customers travel and why they stop at Major specifically
2. Ascertain how far customers are travelling and from which destinations to which end points
3. Measure the potential barrier that any inconvenience accessing the site could have on customers choosing to visit

Methodology and target audience

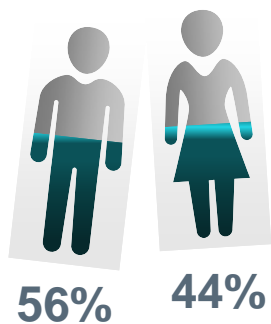
- This is a study comprising of 2 waves, with the 1st wave taking place in August and the 2nd in September.
 - This is to capture a mixture of respondents from during holiday time for schools and during school term time.
- The total sample size for both waves is N=943
 - Wave 1 collected a sample of N=518
 - Wave 2 collected a sample of N=425
- This report is based on both the 1st wave (collected between Monday 8th August and Thursday 18th August) and 2nd wave data (collected between Friday 16th September and Sunday 26th September).
 - The research was conducted via short, face-to-face interviews taking place on the Magor services site.
 - Interviews took place each day in morning and afternoon shifts between 8am and 8pm.
 - No specific sampling criteria was used, respondents only had to be aged 18+.

Research Findings

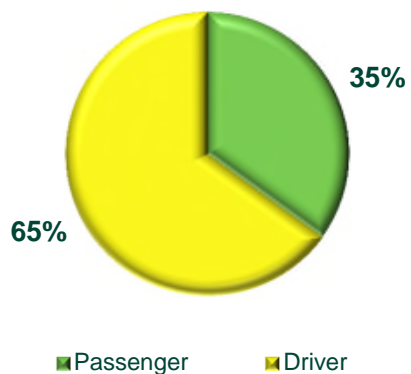


DEMOGRAPHIC PROFILE

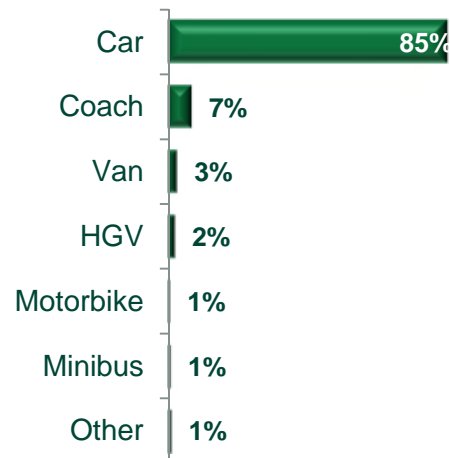
Total



Passenger or Driver?



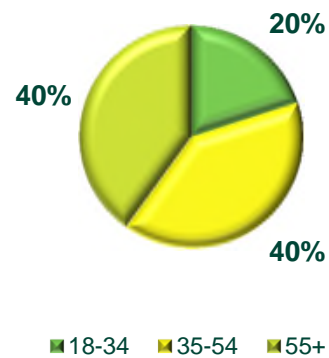
Vehicle type



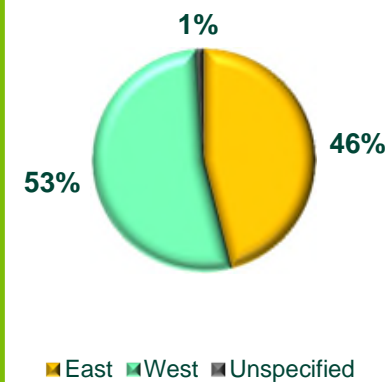
Miles driven (per year)



Age

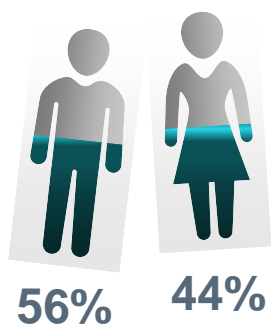


Direction travelling in

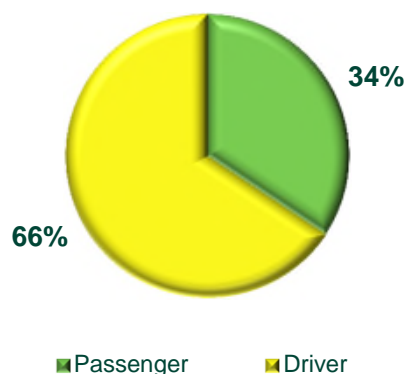


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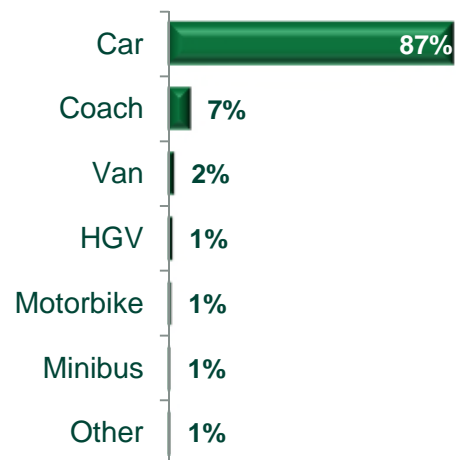
Wave 1



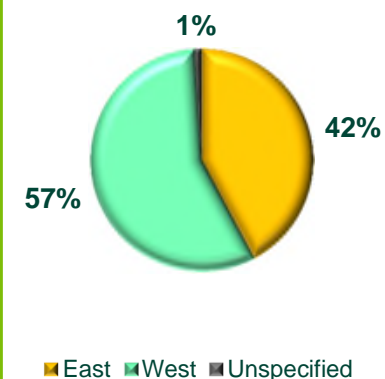
Passenger or Driver?



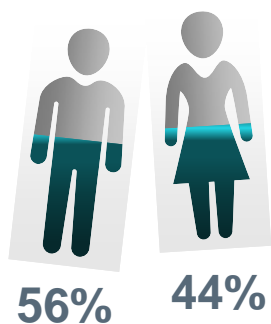
Vehicle type



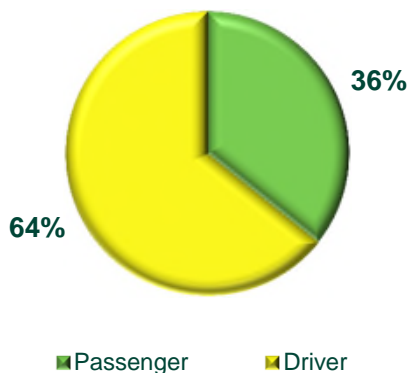
Direction travelling in



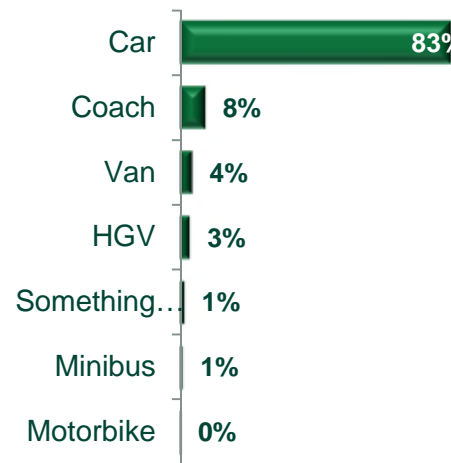
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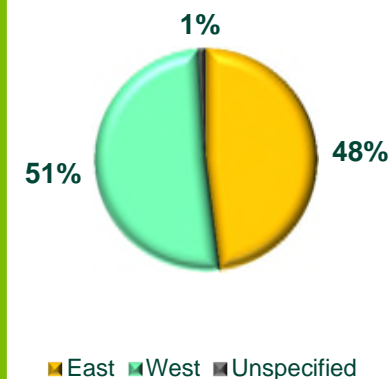
Passenger or Driver?



Vehicle type



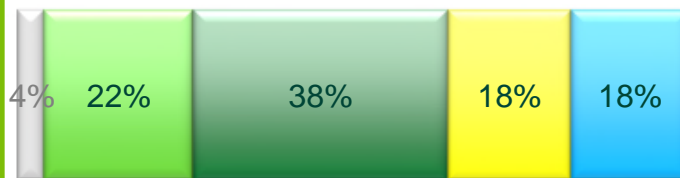
Direction travelling in



DEMOGRAPHIC PROFILE

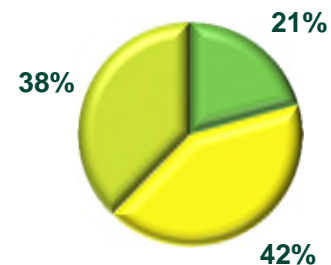
Wave 1

Miles driven (per year)



☐ Don't know ☐ < 6,000 miles
☐ 6,000 - 12,000 miles ☐ 12,000 - 20,000 miles
☐ > 20,000 miles

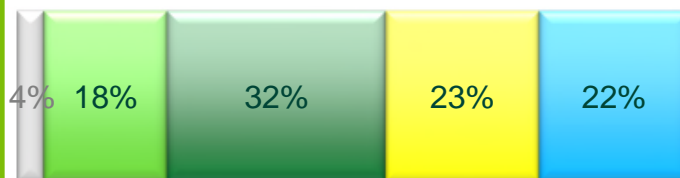
Age



☐ 18-34 ☐ 35-54 ☐ 55+

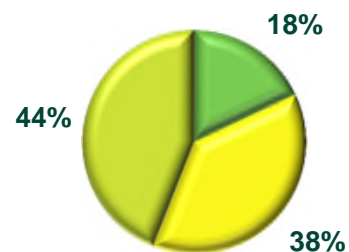
Wave 2

Miles driven (per year)



☐ Don't know ☐ < 6,000 miles
☐ 6,000 - 12,000 miles ☐ 12,000 - 20,000 miles
☐ > 20,000 miles

Age

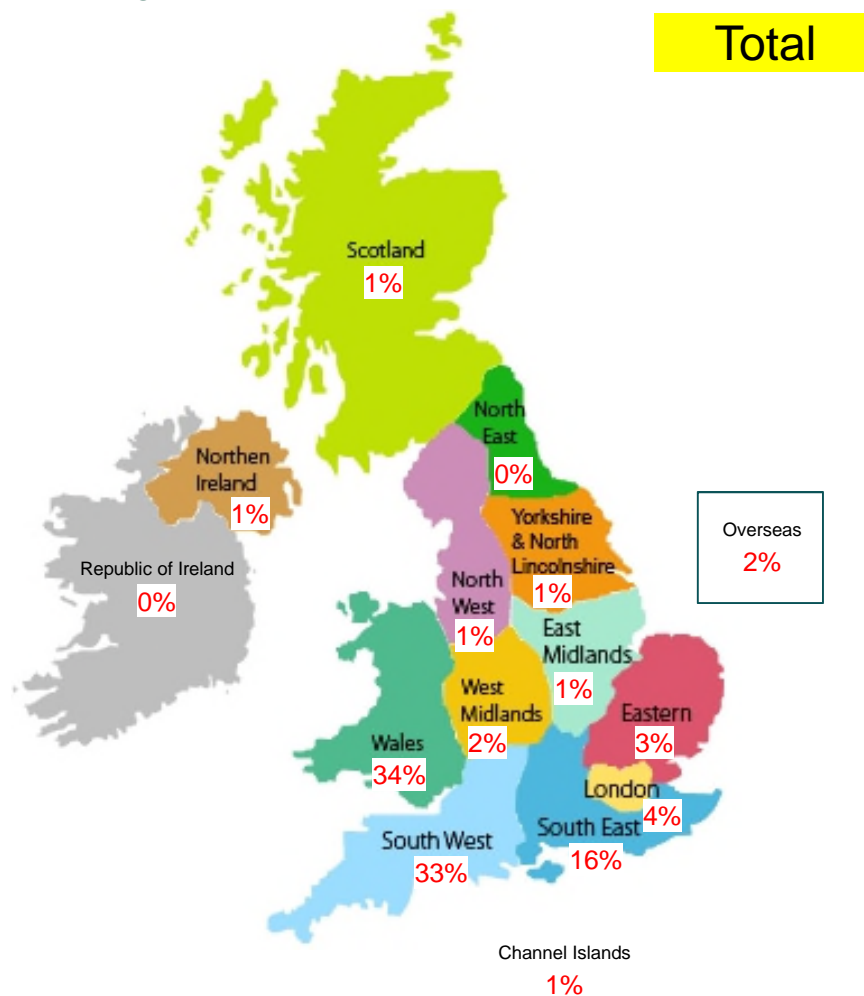


☐ 18-34 ☐ 35-54 ☐ 55+

○ = significantly higher than Wave 1
○ = significantly higher than Wave 2

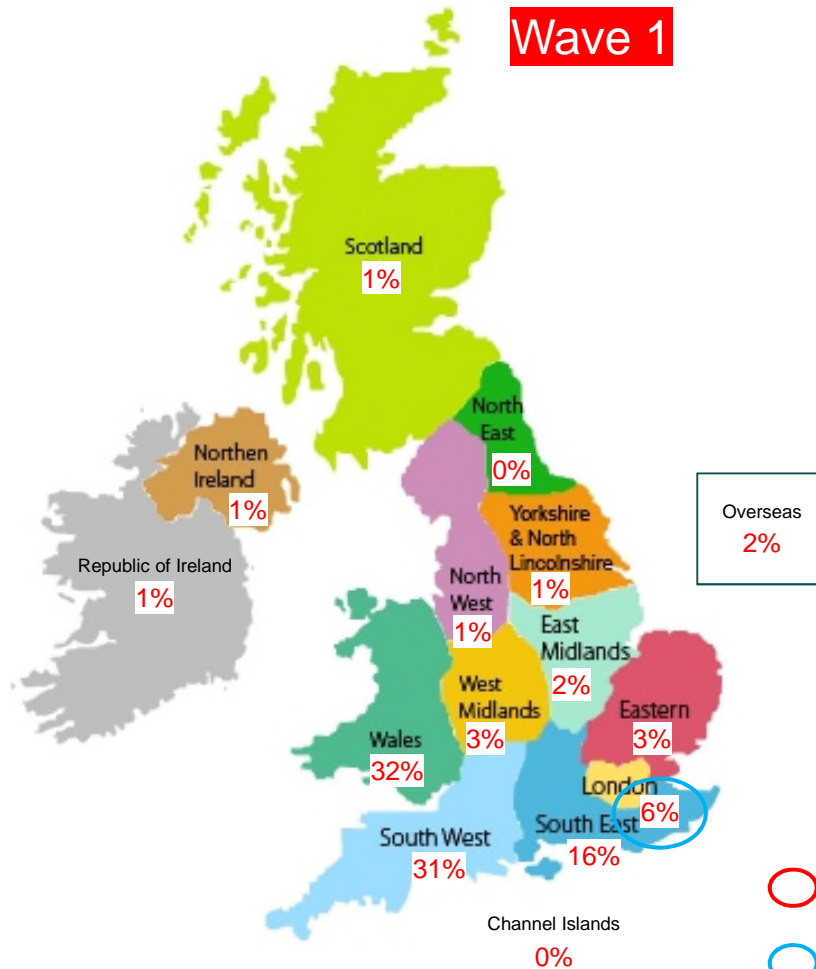
The majority of customers come from either Wales or the South West. There are 1 in 5 people who are from the South East/London. A small proportion come from the Midlands and East Anglia. A very small minority come from the North or Scotland.

Regions where customers live

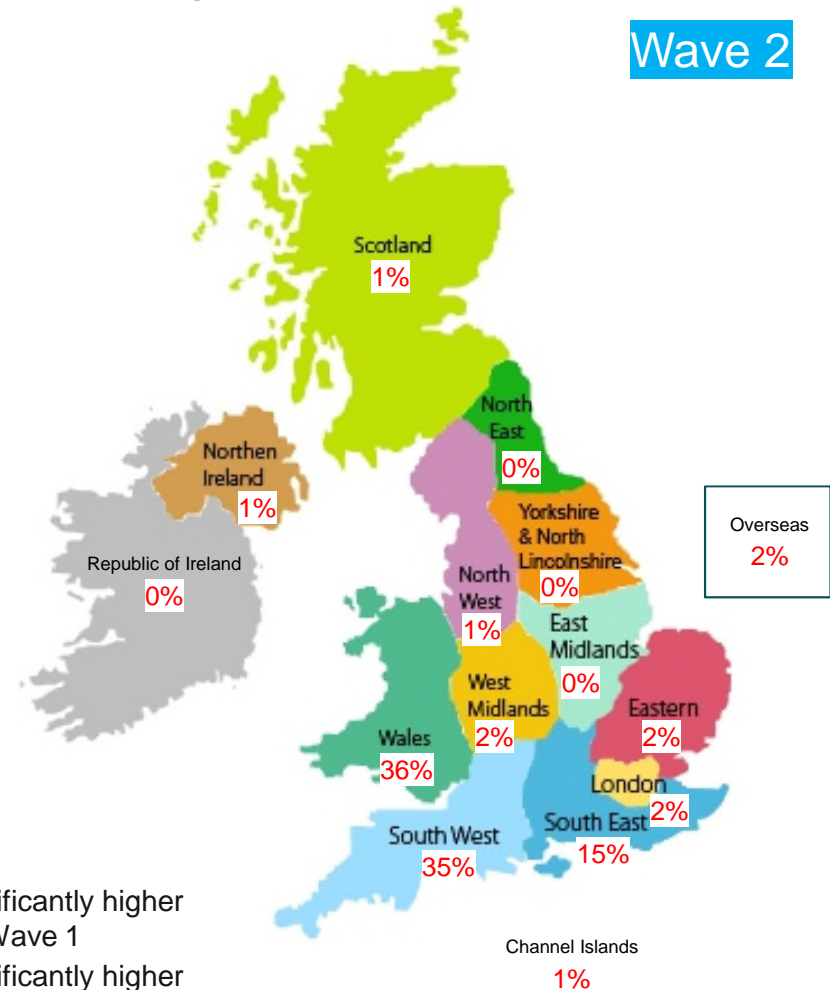


The places where people live were similar between waves. A significantly larger proportion who visited during August were from London. Also in August more travellers came from the Midlands.

Regions where customers live



Regions where customers live



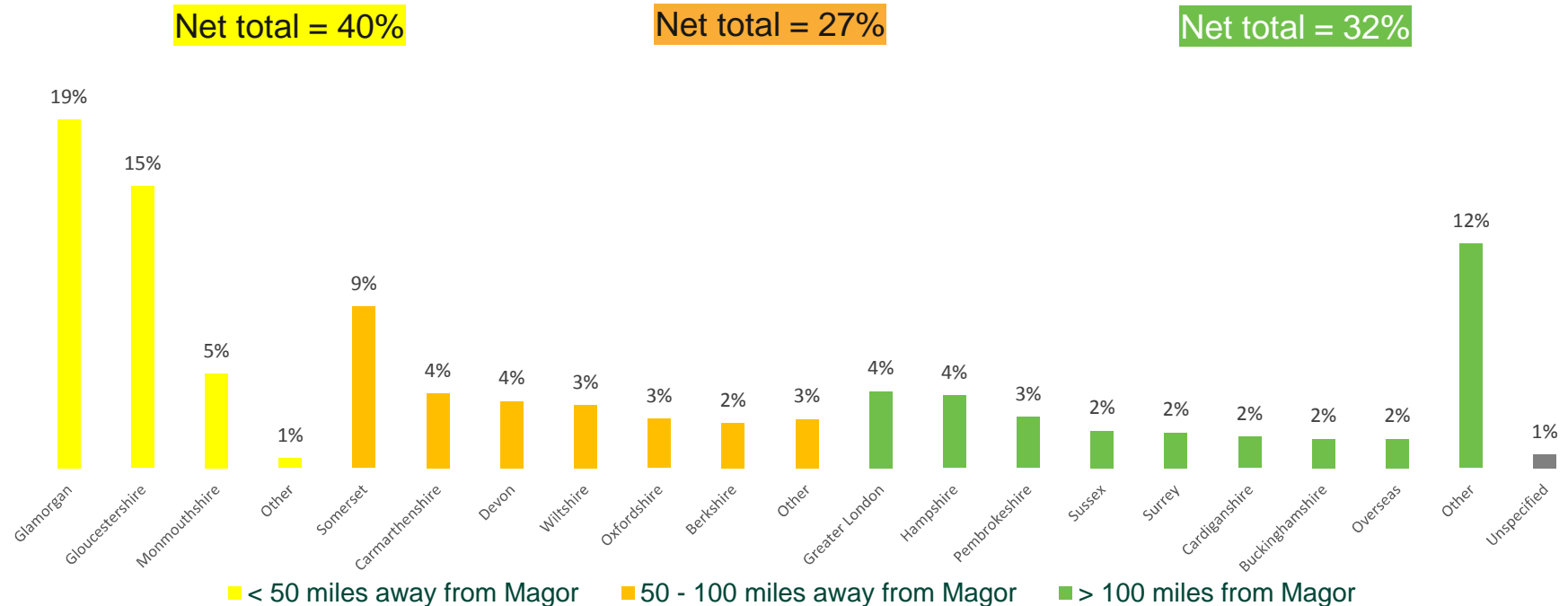
○ = significantly higher than Wave 1
 ○ = significantly higher than Wave 2

The majority of Magor services customers live within 100 miles of the site. Around 1/3rd come from either Glamorgan or Gloucestershire, whilst the majority of other customers come from either other parts of Wales or the South of England.

Regions where customers live

Total

Note: Graph shows all regions that are 2% or greater



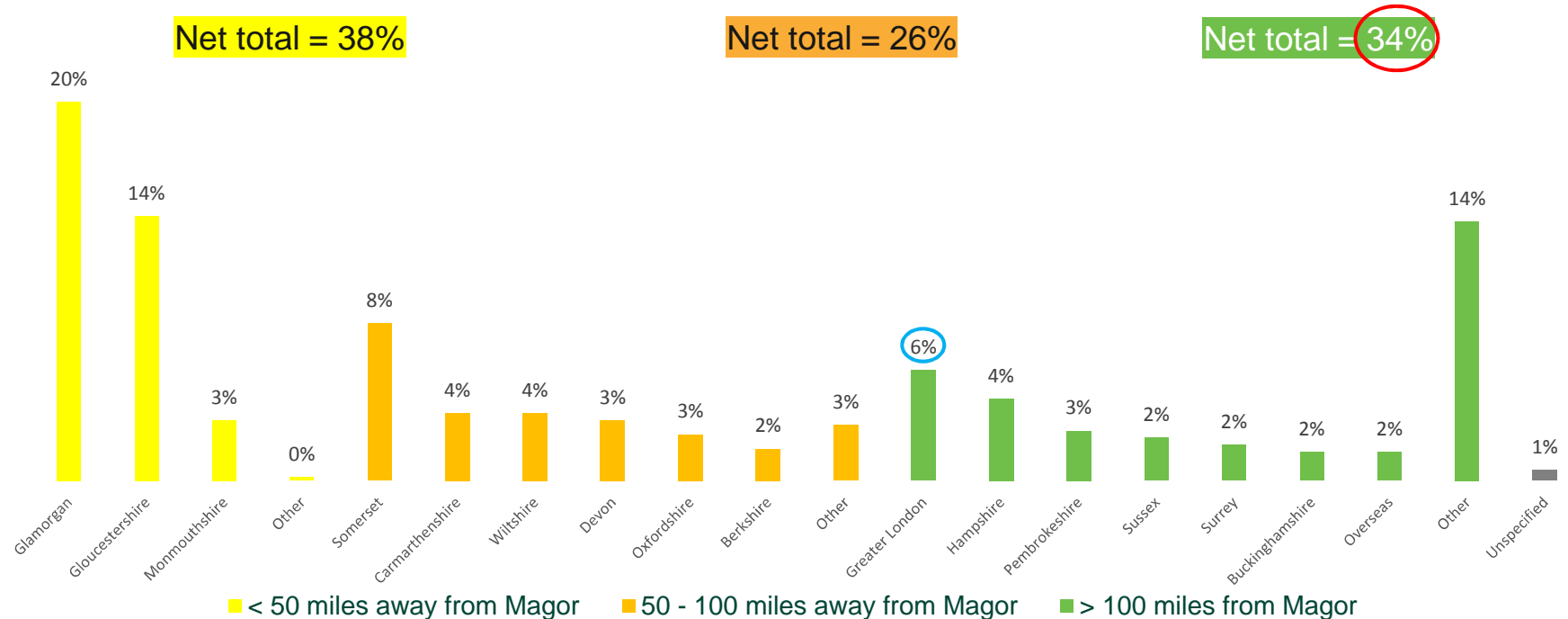
Note: distances have been approximately calculated by using Google maps to roughly measure the distance by car journey from Magor

During August, a significantly greater proportion came from London. Moreover, customers were more likely to come from further away than September travellers, with over 1/3rd living beyond 100 miles from Magor.

Regions where customers live

Wave 1

Note: Graph shows all regions that are 2% or greater



Note: distances have been approximately calculated by using Google maps to roughly measure the distance by car journey from Magor

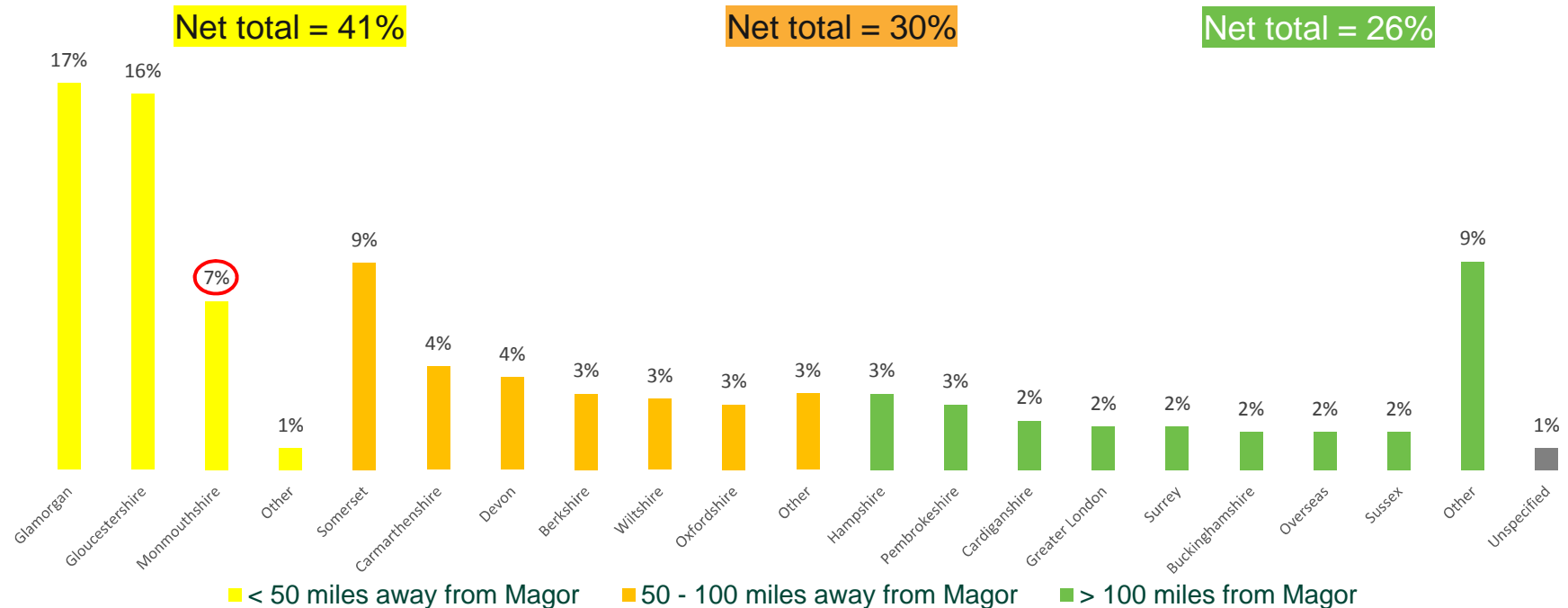
○ = significantly higher than Wave 1
○ = significantly higher than Wave 2

More September travellers came from Monmouthshire, however this was the only significantly larger group of customers compared to the first wave.

Regions where customers live

Wave 2

Note: Graph shows all regions that are 2% or greater



Note: distances have been approximately calculated by using Google maps to roughly measure the distance by car journey from Magor



- = significantly higher than Wave 1
- = significantly higher than Wave 2

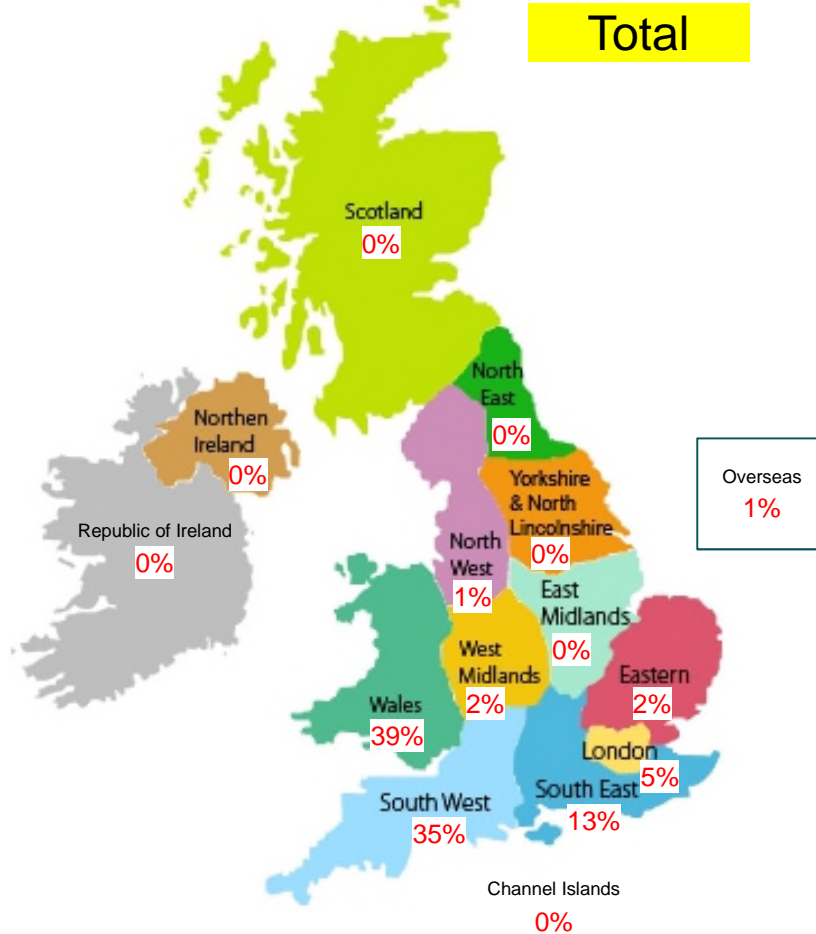
Q3. Where do you live in? (If you live in a rural area, please name the nearest town)
Base: Wave 2 (425)

Setting the scene

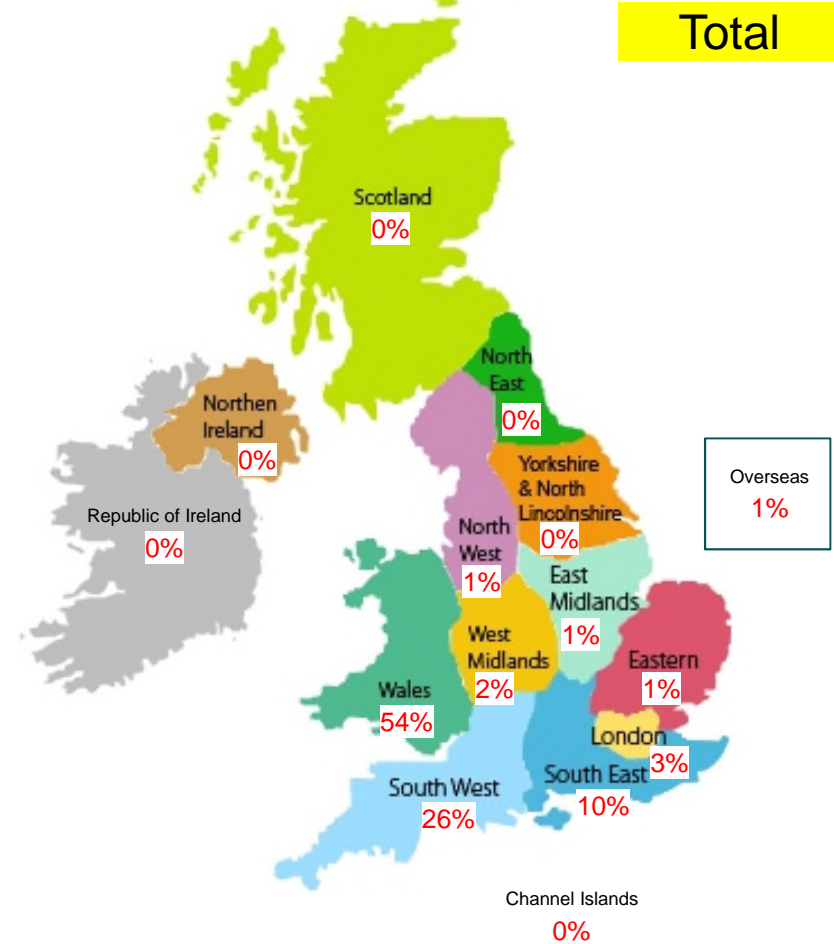


For the majority their journey started from Wales or the South West, whilst a smaller number came from the South East/London. Over half of customer journeys ended in Wales and a substantial number ended in locations across the south of England.

Regions where customers started their journey



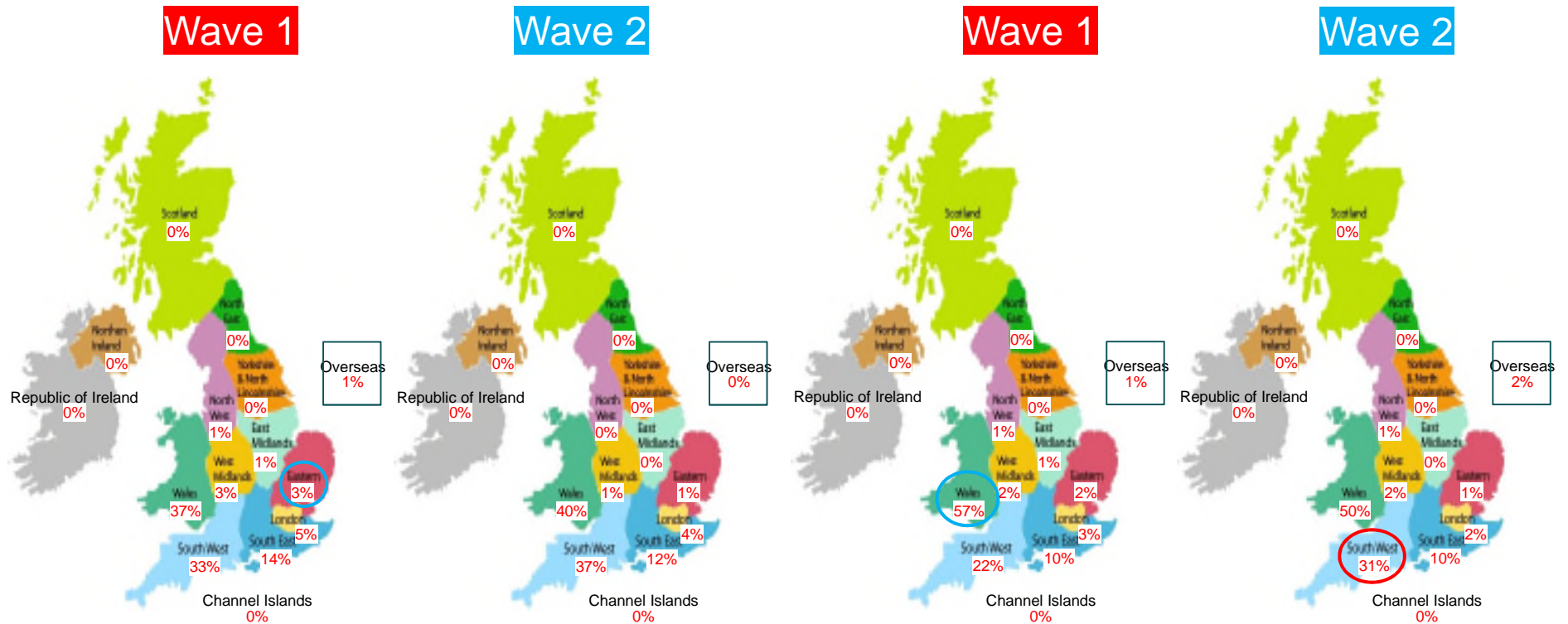
Regions where customers will end their journey



The locations journeys started from were similar across waves, with slightly fewer making the journey from East Anglia in September. In August, significantly more journeys ended in Wales whilst fewer journeys ended in the South West of England.

Regions where customers started their journey

Regions where customers will end their journey



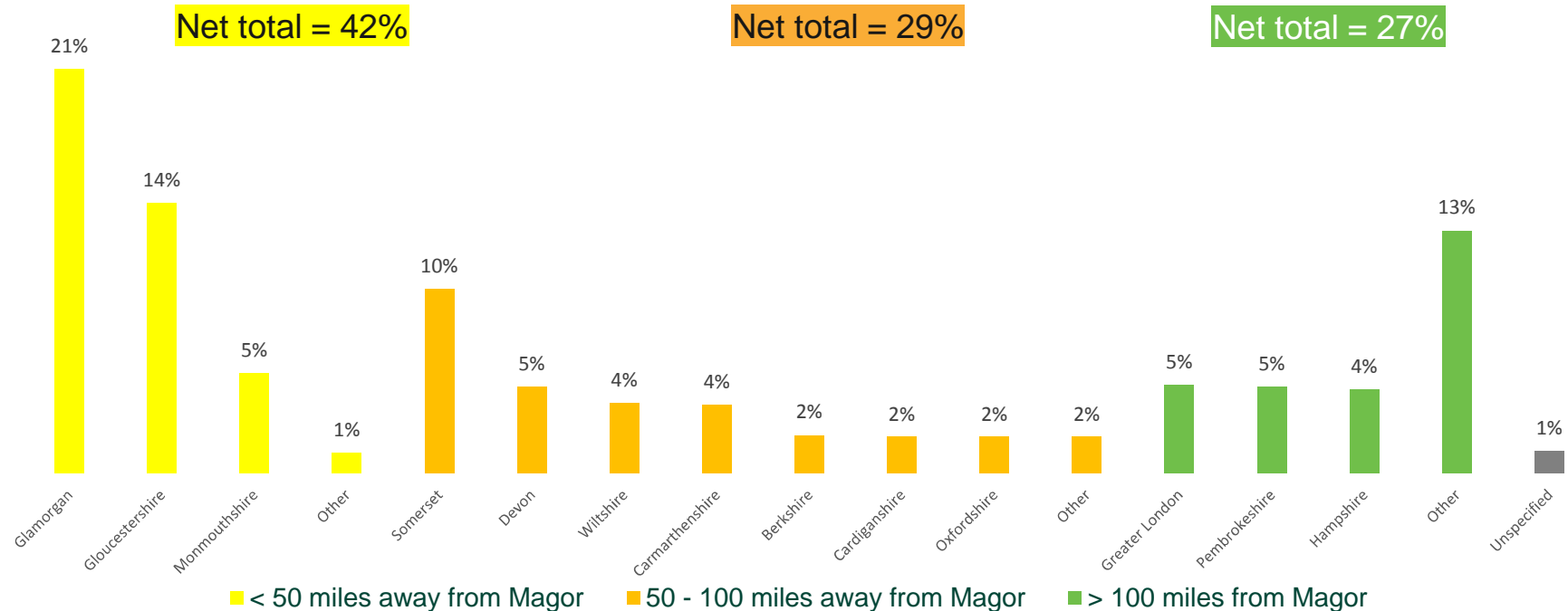
○ = significantly higher than Wave 1
 ○ = significantly higher than Wave 2

The majority of Magor services customers began their journey within 100 miles of the site, with many travellers coming from Glamorgan or Gloucestershire. Of those who began their journey beyond 100 miles of Magor, the most common locations were, Greater London, Pembrokeshire and Hampshire.

Regions where customers started their journey

Note: Graph shows all regions that are 2% or greater

Total



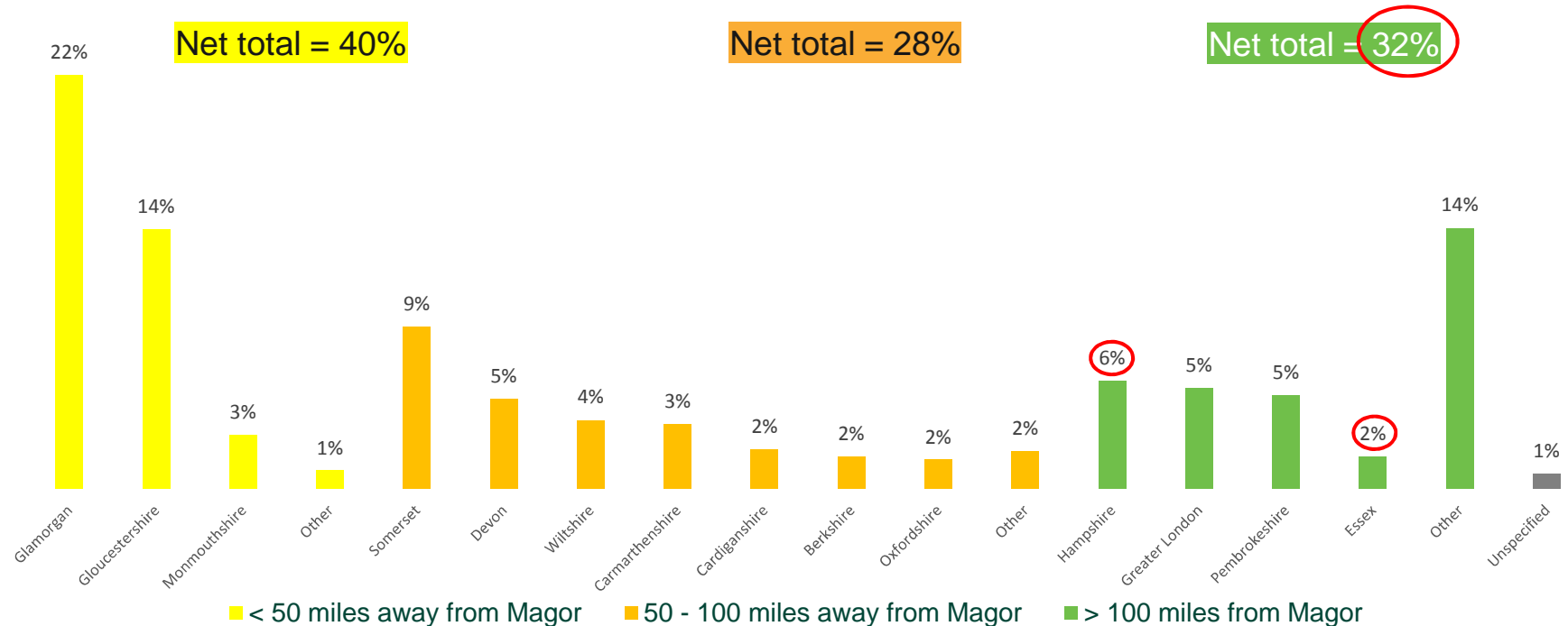
Note: distances have been approximately calculated by using Google maps to roughly measure the distance by car journey from Magor

Significantly more August travellers began their journeys from Hampshire and Essex, both of which are over 100 miles away from Magor.

Regions where customers started their journey

Wave 1

Note: Graph shows all regions that are 2% or greater



Note: distances have been approximately calculated by using Google maps to roughly measure the distance by car journey from Magor

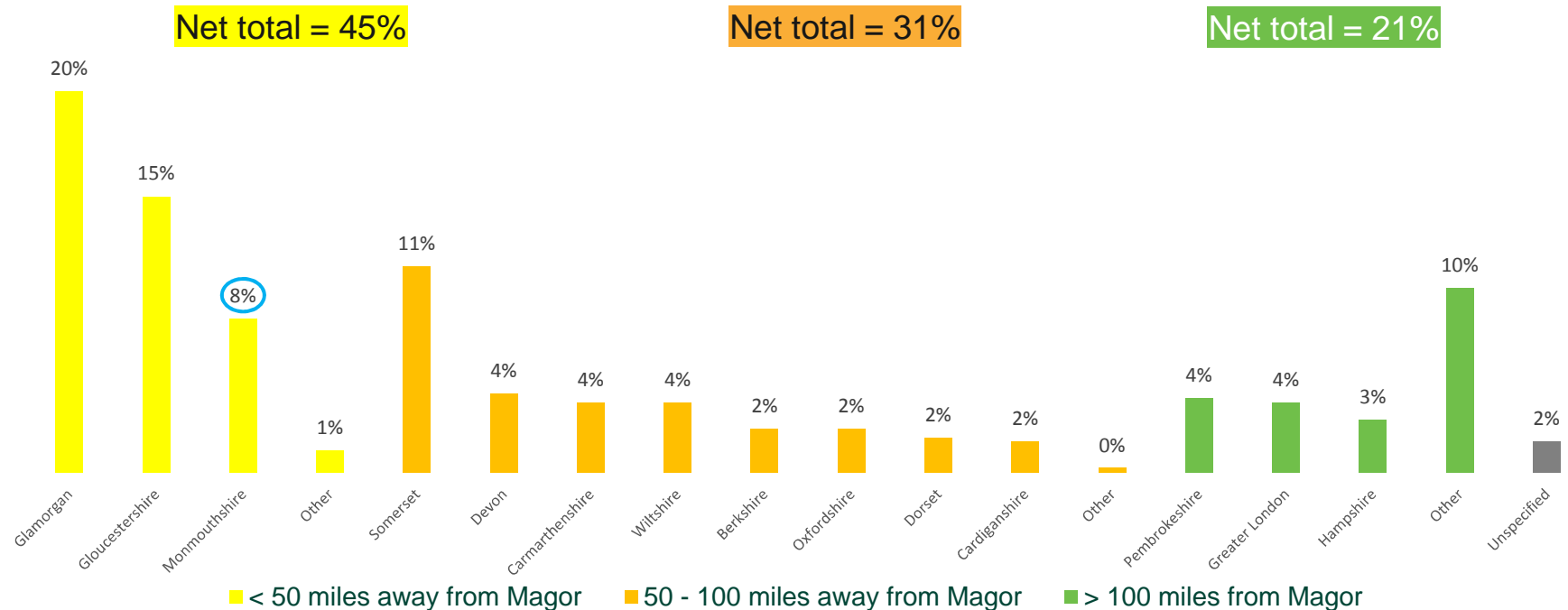
○ = significantly higher than Wave 1
○ = significantly higher than Wave 2

Notably more travellers in September began their journey from Monmouthshire compared to those who travelled in August.

Regions where customers started their journey

Wave 2

Note: Graph shows all regions that are 2% or greater



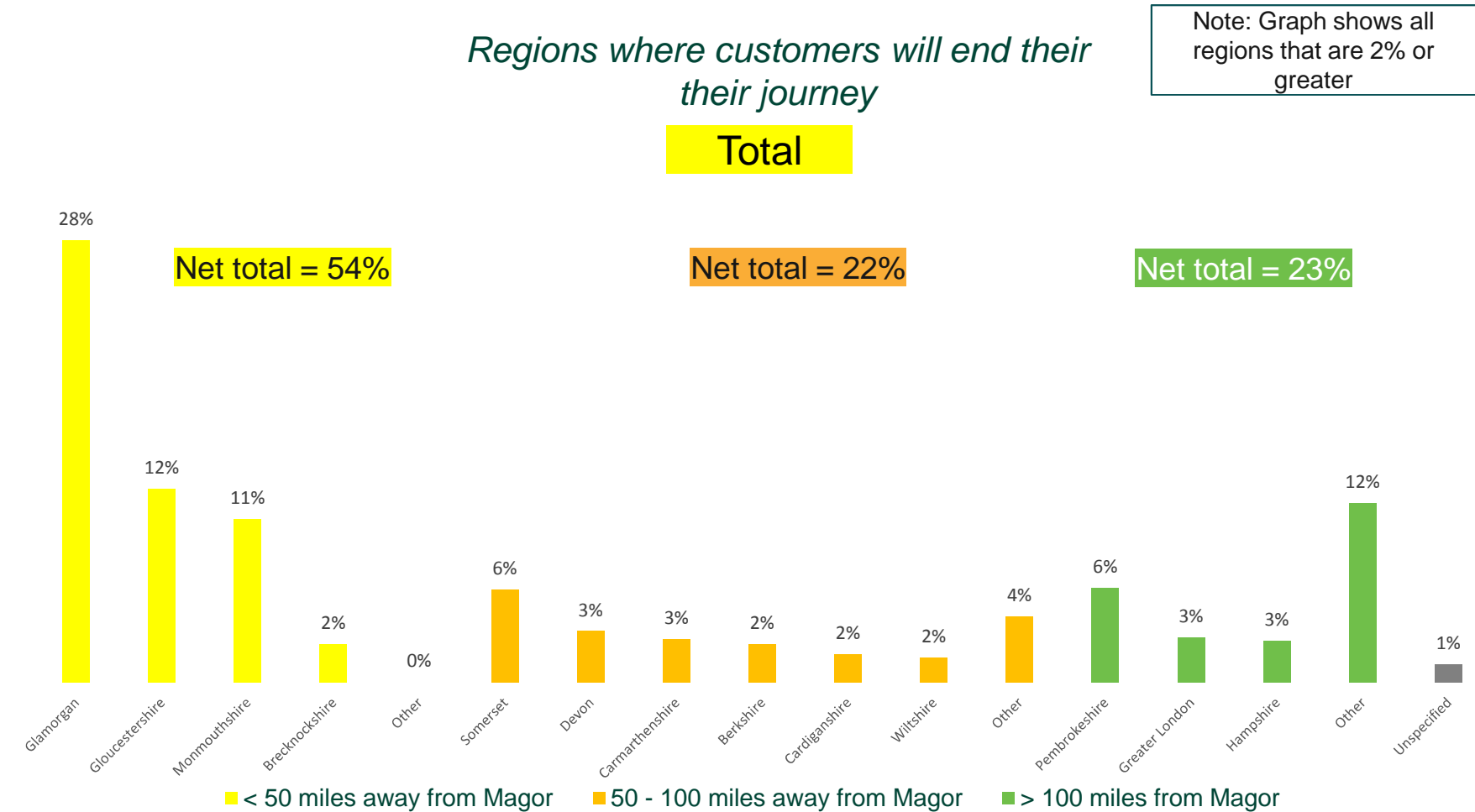
Note: distances have been approximately calculated by using Google maps to roughly measure the distance by car journey from Magor



○ = significantly higher than Wave 1
○ = significantly higher than Wave 2

Q4. Where did you start your journey from? (If it was in a rural area, please name the nearest town)
Base: Wave 2 (425)

Over half of journeys end within 50 miles of Magor. Many customers' journeys end at Glamorgan and quite a few end in Gloucestershire or Monmouthshire. Popular destinations beyond 50 miles from Magor include Somerset and Pembrokeshire.



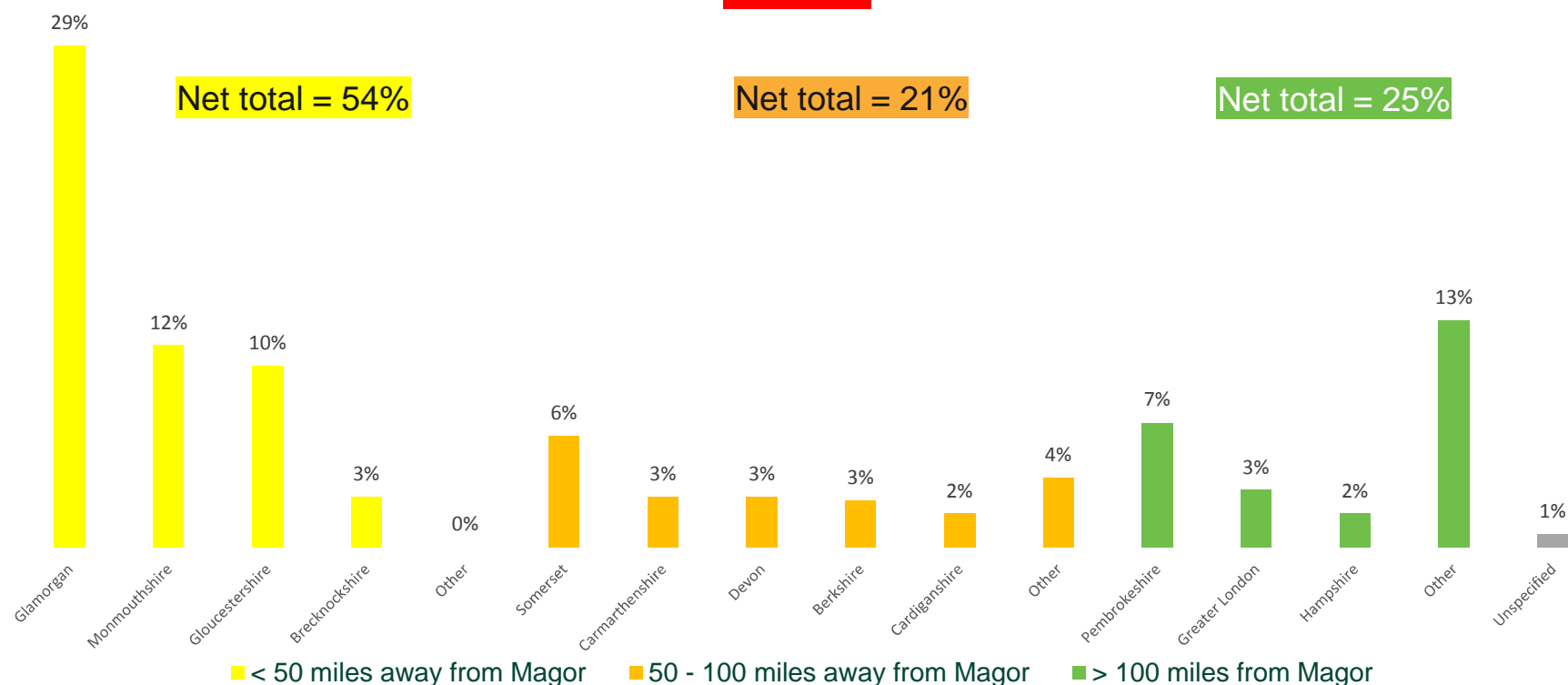
Note: distances have been approximately calculated by using Google maps to roughly measure the distance by car journey from Magor

There were no instances where a significantly greater proportion of August travellers ended their journey in any region.

Regions where customers will end their journey

Note: Graph shows all regions that are 2% or greater

Wave 1



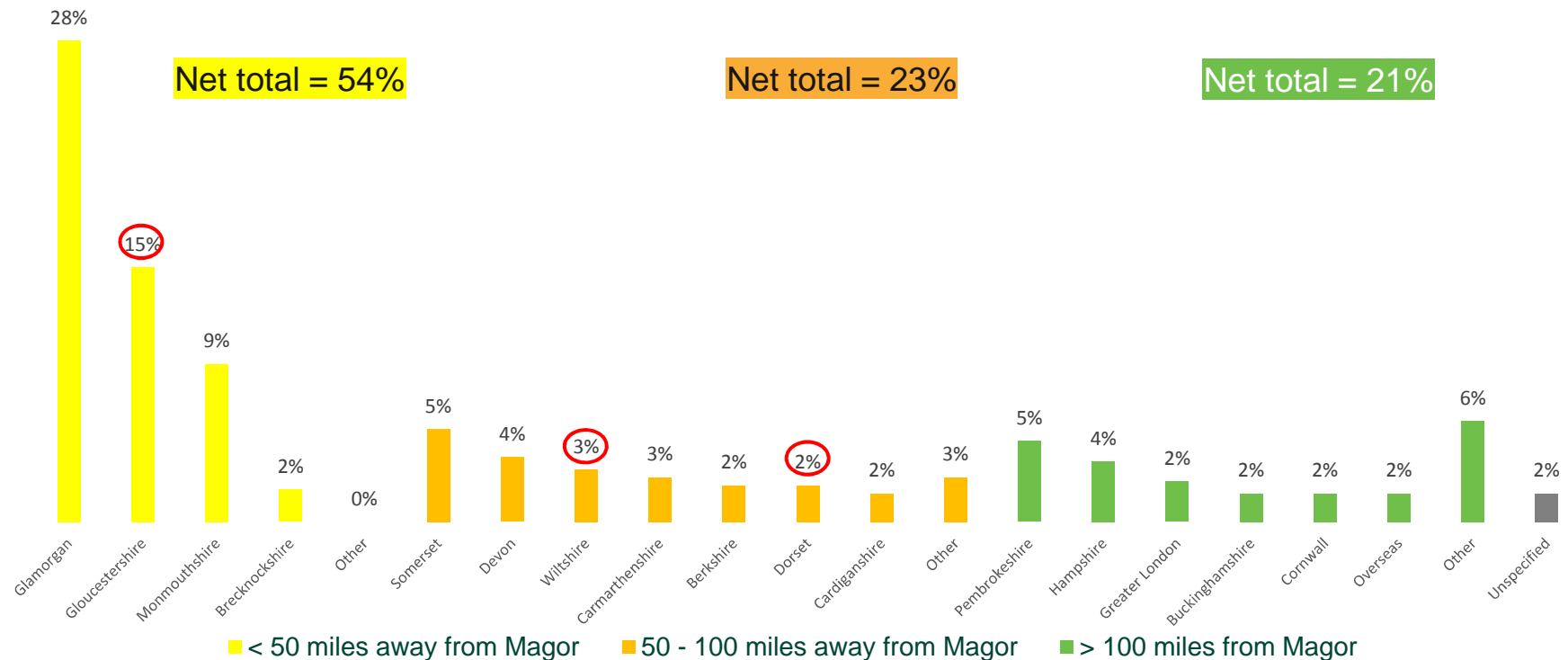
Note: distances have been approximately calculated by using Google maps to roughly measure the distance by car journey from Magor

In September there was a significantly greater proportion of customers who ended their journey in Gloucestershire, making it clearly the second most popular end destination. A greater proportion also ended their journey in Wiltshire and Dorset but this is still a relatively small amount compared to other destinations.

Regions where customers will end their journey

Note: Graph shows all regions that are 2% or greater

Wave 2



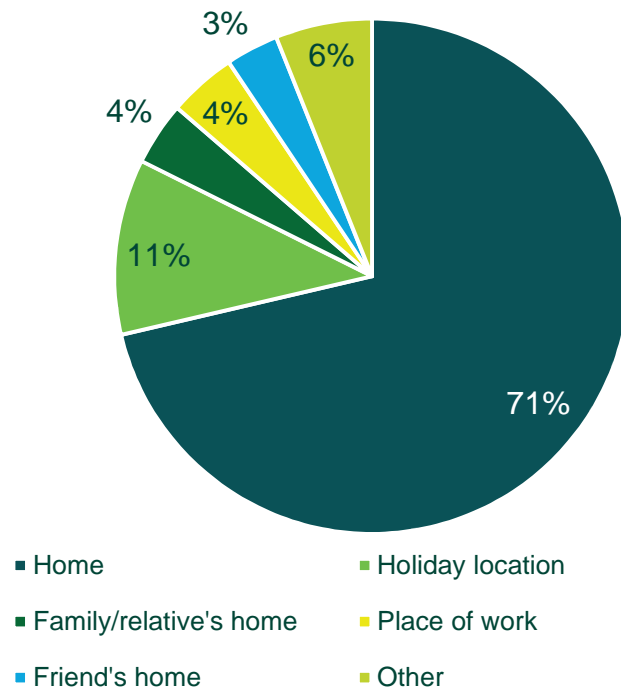
Note: distances have been approximately calculated by using Google maps to roughly measure the distance by car journey from Magor

- = significantly higher than Wave 1
- = significantly higher than Wave 2

The majority of customers started their journey from their home, whilst just over a quarter finish their journey at home. Many customers end their journey at a holiday location or friend's house and 14% end their journey at a location due to work/business.

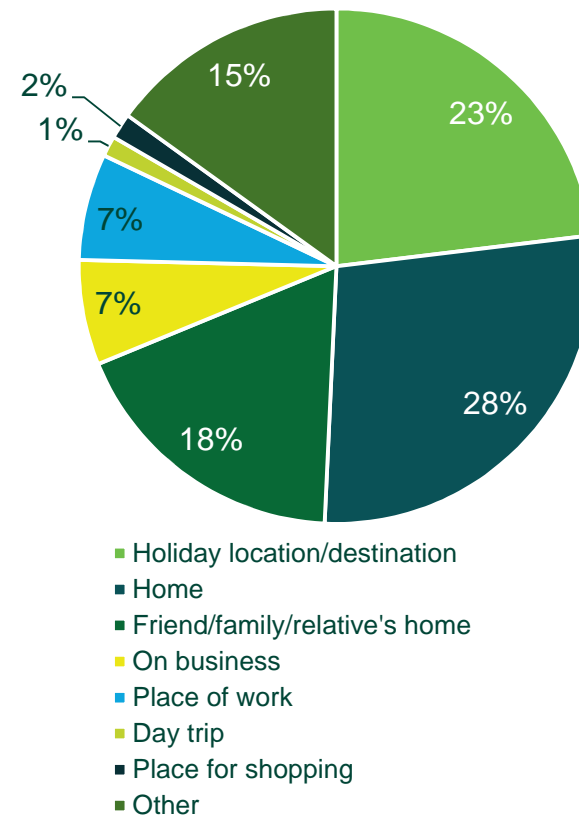
Location customers start their journey

Total



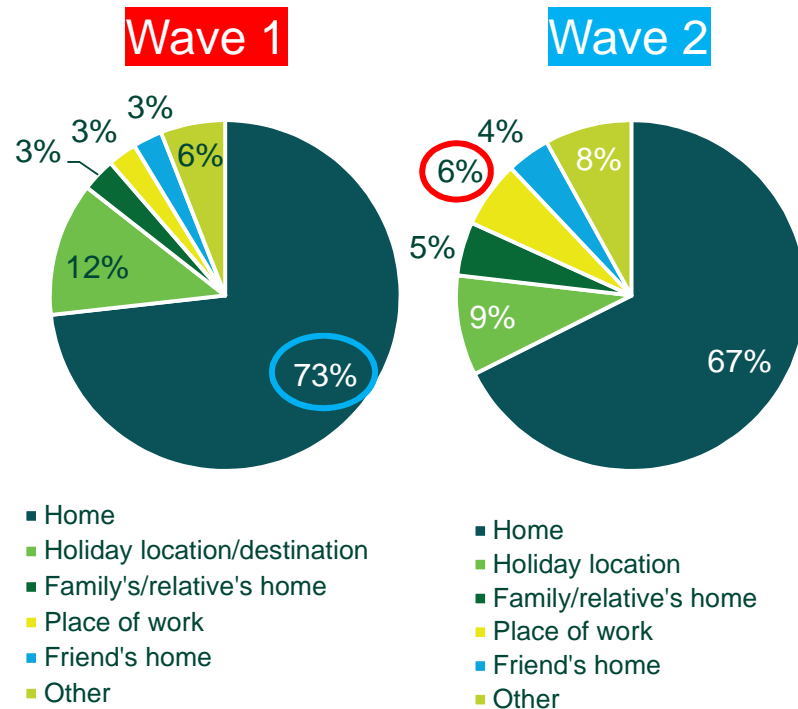
Location customers end their journey

Total

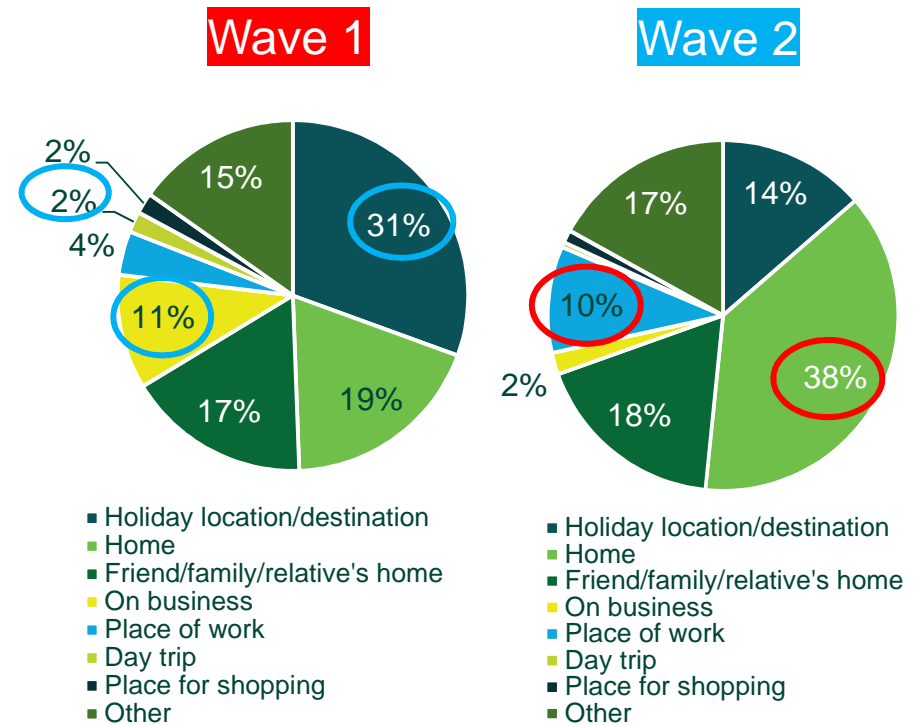


During August, significantly more customers began their journey from home than those travelling in September. Also, relatively fewer ended their journey at their place of work. Significantly more customers ended their journey at home in September than in August, whilst fewer ended at a holiday location.

Location customers start their journey



Location customers end their journey



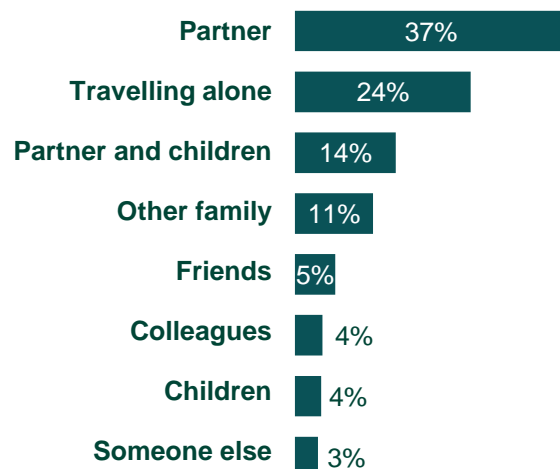
○ = significantly higher than Wave 1

○ = significantly higher than Wave 2

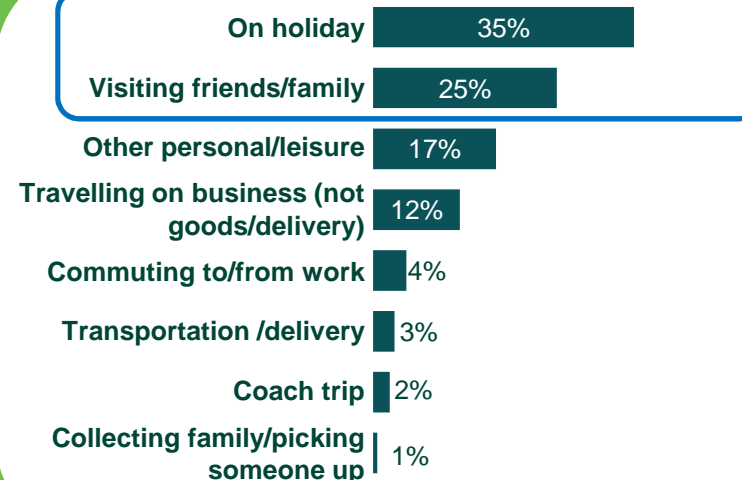
Q5. Is [INSERT RESPONSE TO Q4]...?
Q7. Is [INSERT RESPONSE TO Q6]...?
Base: Wave 1 (518), Wave 2 (425)

The majority of customers are travelling with a family members. The journey purpose for the majority is either a holiday or visiting friends/family. The majority of journeys are between 50 – 250 miles.

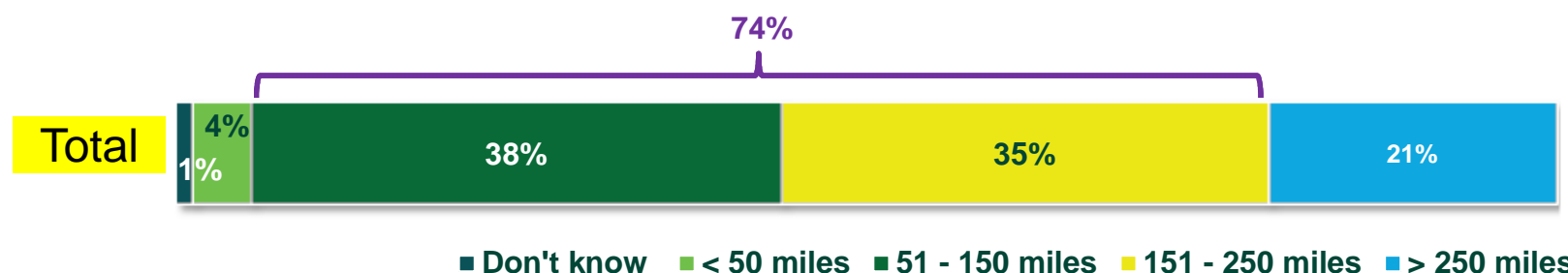
Total Travelling with



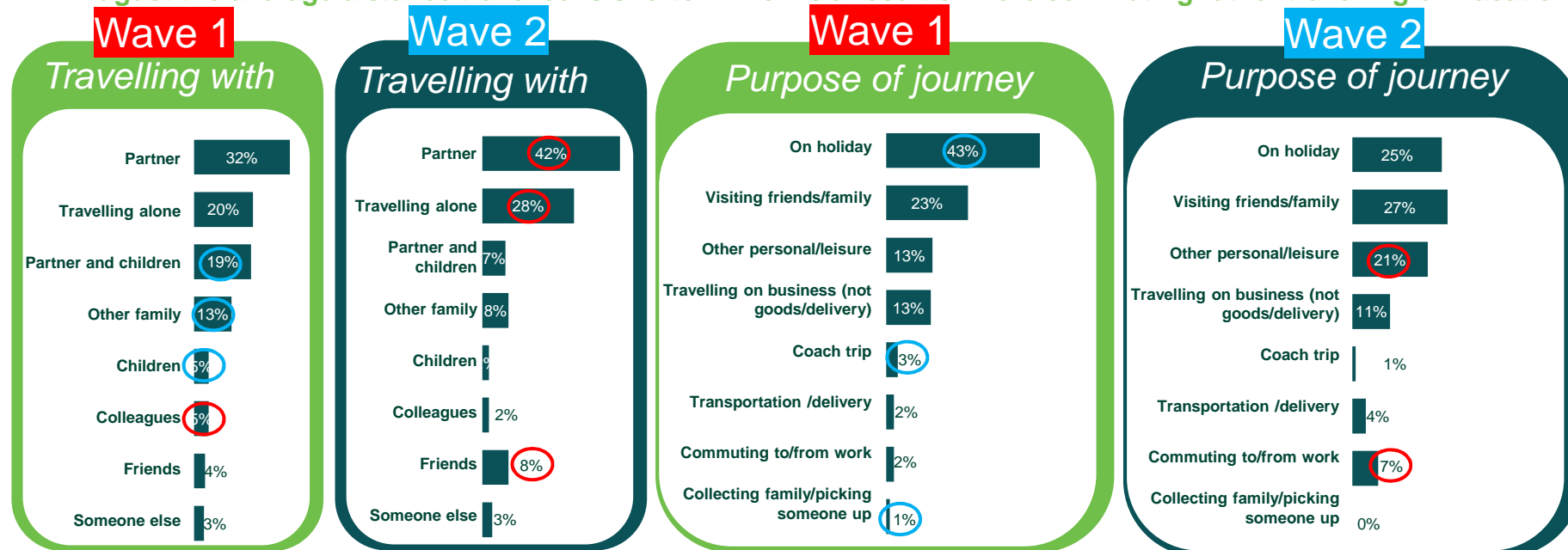
Total Purpose of journey



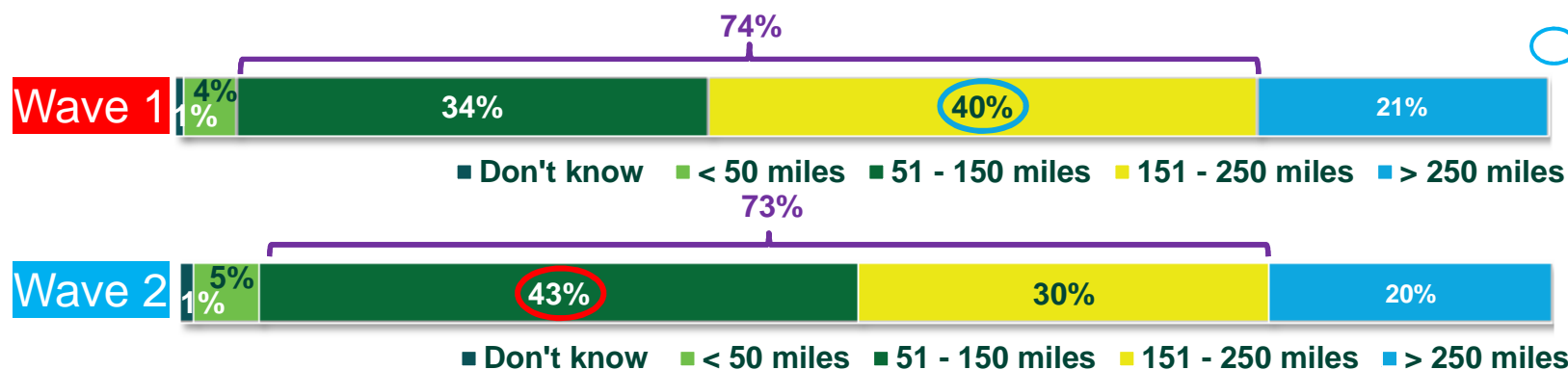
Approx. distance travelled on day of interview



Unsurprisingly, a significantly greater amount of customers travelling in August were on holiday. More customers travelling in September were commuting to work or on other personal/leisure excursions. In September, the majority travelled with their partner or alone, significantly fewer travelled with children compared to August. In August the average distance travelled is shorter which is a result of more commuting rather travelling on vacation

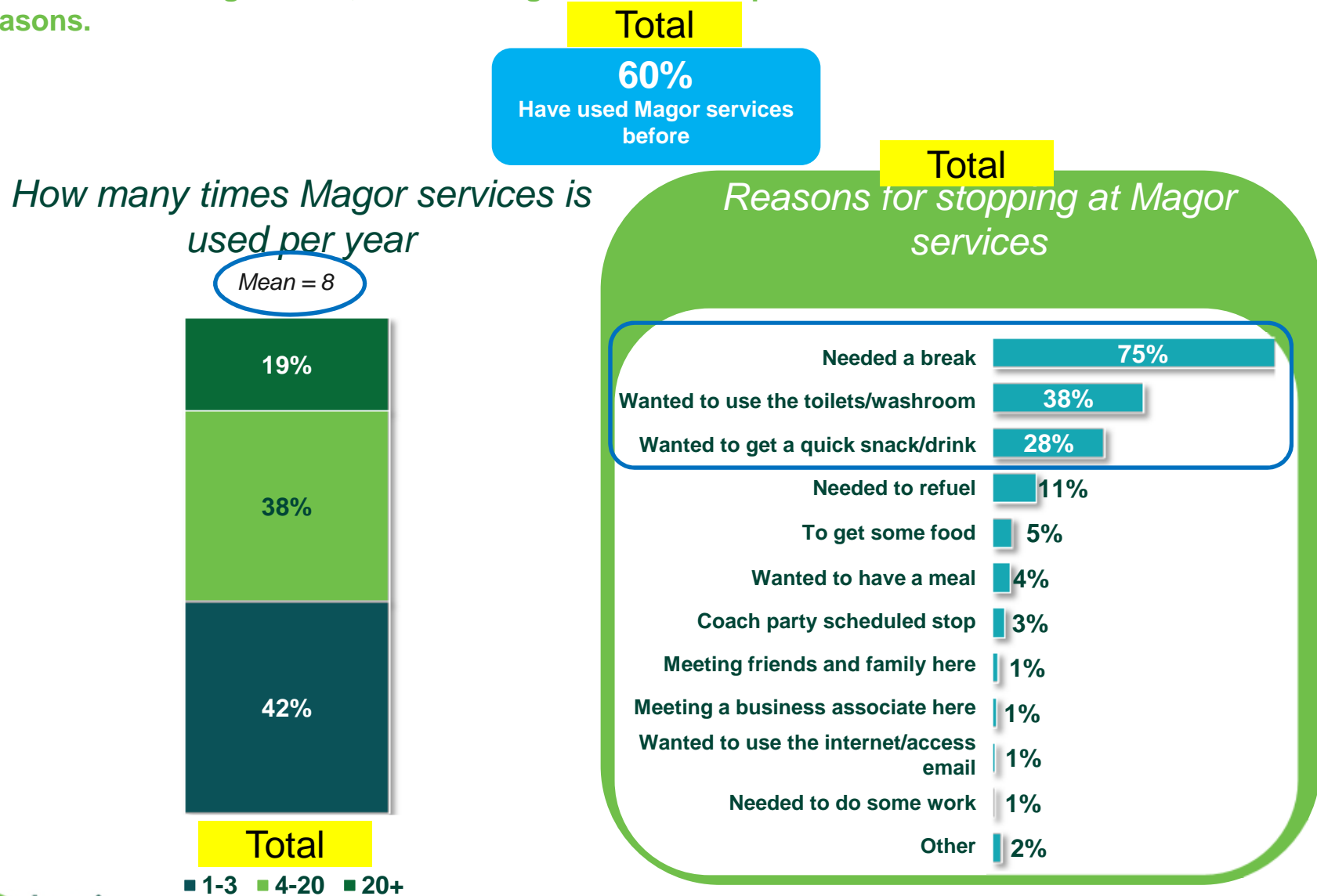


Approx. distance travelled on day of interview

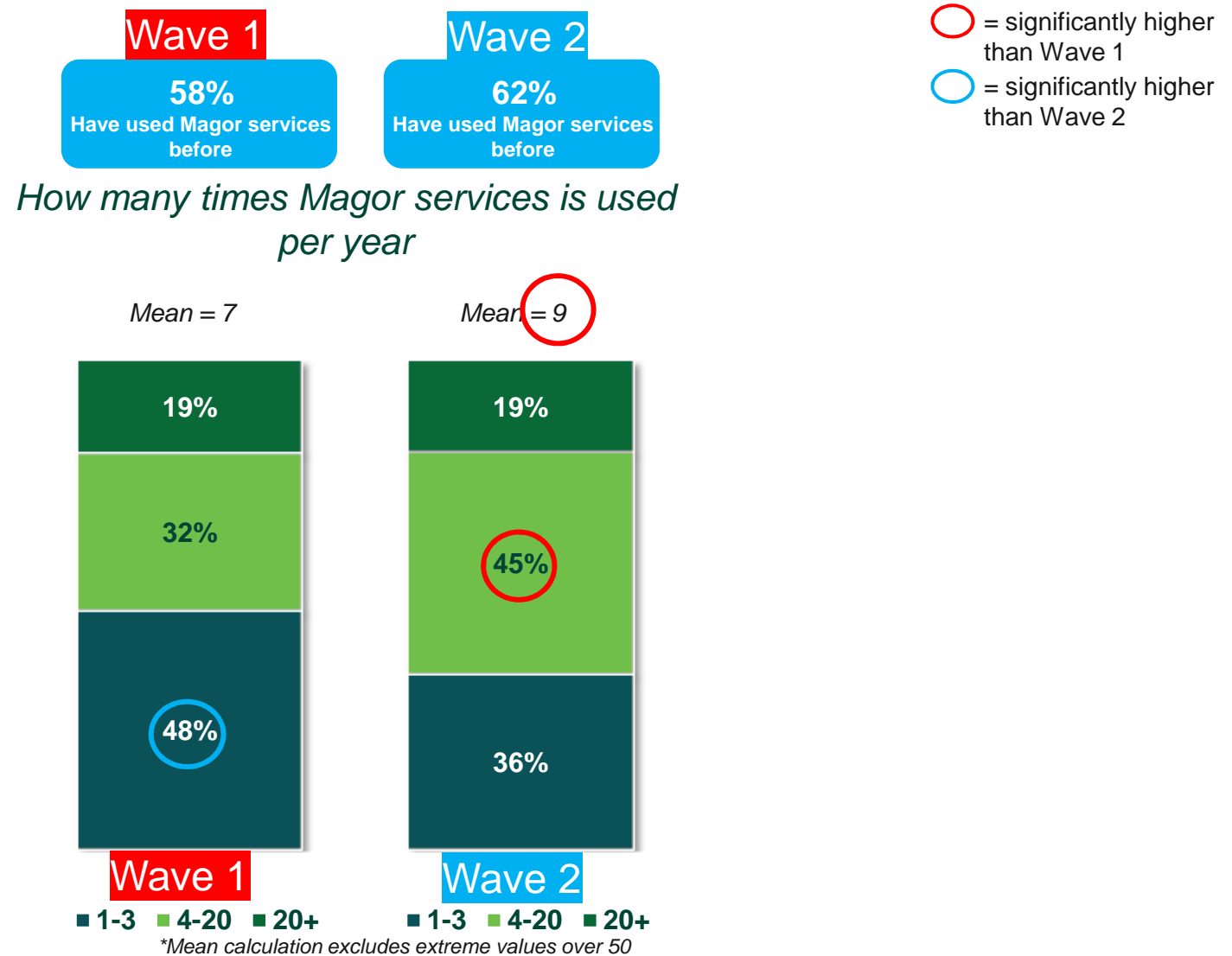


○ = significantly higher than Wave 1
○ = significantly higher than Wave 2

6 in 10 Magor customers have previously visited Magor services and of these people, the average number of visits is around 8 times a year. The most common reason for stopping at Magor services is needing a break, with wanting the toilet or a quick snack/drink as other common reasons.



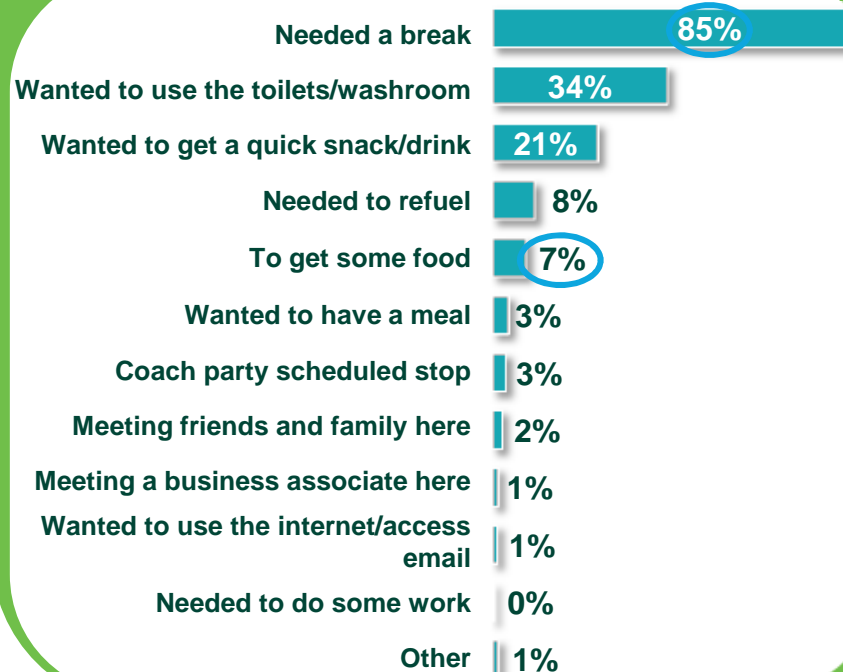
Those who visited Magor services in September visit significantly more frequently than those travelling in August, with an average of 9 visits a year – as a result of a higher share of regular commuters.



The top 3 reasons for stopping at Magor are the same between waves, however those travelling in September were significantly less likely to need a brake compared to those in August – most likely due to a shorter distance travelled. They were also more likely to need to use the toilets, get a snack/drink or refuel.

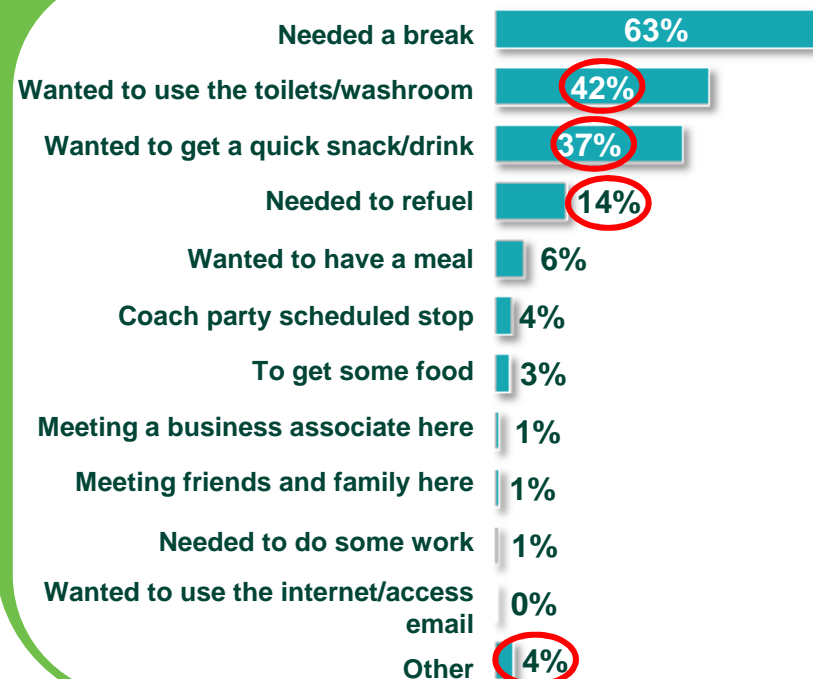
Wave 1

Reasons for stopping at Magor services



Wave 2

Reasons for stopping at Magor services



○ = significantly higher than Wave 1

○ = significantly higher than Wave 2

Overall, the need to take a break is the main reason for people to stop of Magor, regardless of the purpose of their journey. Those travelling on business are relatively more likely to need a break or to grab a snack/drink, whilst those visiting friends or family are relatively more likely to need to refuel.

Total	Visiting friends or family	On holiday	For other personal/leisure reasons	Travelling on business (but not goods/delivery)
Sig differences	A	B	C	D
Base size	N=233	N=331	N=152	N=110
Needed a break	72%	82% ^{AC}	66%	81% ^C
Wanted to use the toilets/washroom	37%	38%	36%	36%
Wanted to get a quick snack/drink	26%	23%	33% ^B	32% ^B
Needed to refuel	19% ^{BD}	5%	16% ^{BD}	7%
To get some food	4%	6%	3%	4%
Meeting friends and family here	4% ^D	1%	2%	0%
Wanted to have a meal	3%	5%	5%	2%
Meeting a business associate here	0%	0%	1%	4% ^{AB}
Needed to do some work	0%	0%	0%	3% ^{ABC}
Coach party scheduled stop	0%	4% ^{AC}	1%	2%
Wanted to use the internet/access email	0%	0%	0%	4% ^{ABC}

Note: other journey purposes excluded due to low base size

Those travelling for leisure/holiday reasons in August were much more likely to stop at Magor to take a break, whilst September travellers were significantly more likely to want to grab a snack or drink. A greater proportion of holiday travellers in September also stopped because they were on a coach trip.

Note: other journey purposes excluded due to low base size

Wave 1	Visiting friends or family	On holiday	For other personal/leisure reasons	Travelling on business (but not goods/delivery)
Sig differences	A	B	C	D
Base size	N=119	N=224	N=62	N=65
Needed a break	80%	88% ^A	81%	94% ^{AC}
Wanted to use the toilets/washroom	32%	35%	35%	45%
Wanted to get a quick snack/drink	14%	18%	26% ^A	38% ^{ABC}
Needed to refuel	16% ^B	3%	11% ^B	8%
To get some food	6%	8%	6%	3%
Wanted to have a meal	2%	6%	2%	2%
Coach party scheduled stop	0%	2%	2%	3%
Meeting friends and family here	6% ^{BD}	1%	2%	0%
Meeting a business associate here	0%	0%	2%	5% ^{AB}
Wanted to use the internet/access email	1%	0%	0%	5% ^B
Needed to do some work	0%	0%	0%	2%

Wave 2

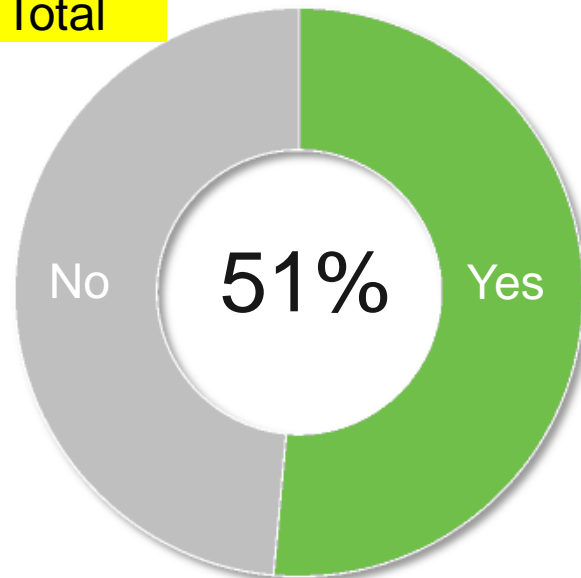
Visiting friends or family	On holiday	For other personal/leisure reasons
A	B	C
N=114	N=107	N=90
64%	69%	57%
43%	44%	37%
38%	34%	38%
22% ^B	9%	20% ^B
2%	3%	1%
4%	5%	7%
0%	9% ^{AC}	0%
2%	0%	2%
0%	0%	0%
0%	0%	0%
0%	0%	0%

○ = significantly higher than Wave 1
○ = significantly higher than Wave 2

Around half had specifically planned to stop at Magor services before starting their journey. The most common reason for stopping by far is the convenience of the site. It is followed from a far distance by habit and having a preferred restaurant or shop.

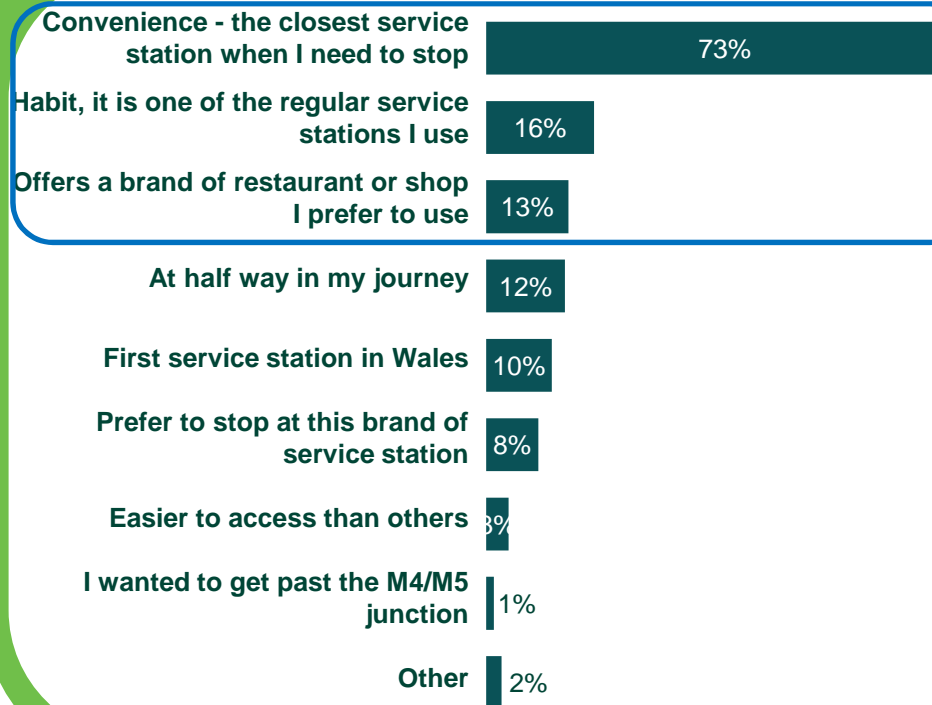
Planned to stop at Magor before set out of journey

Total



Total

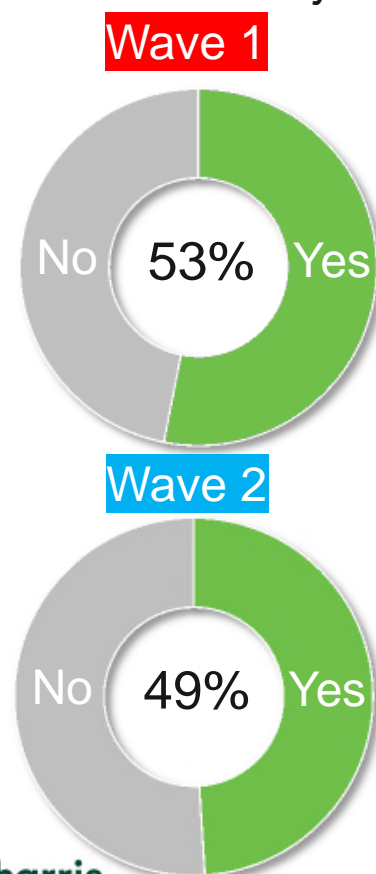
Reasons for stopping at Magor services



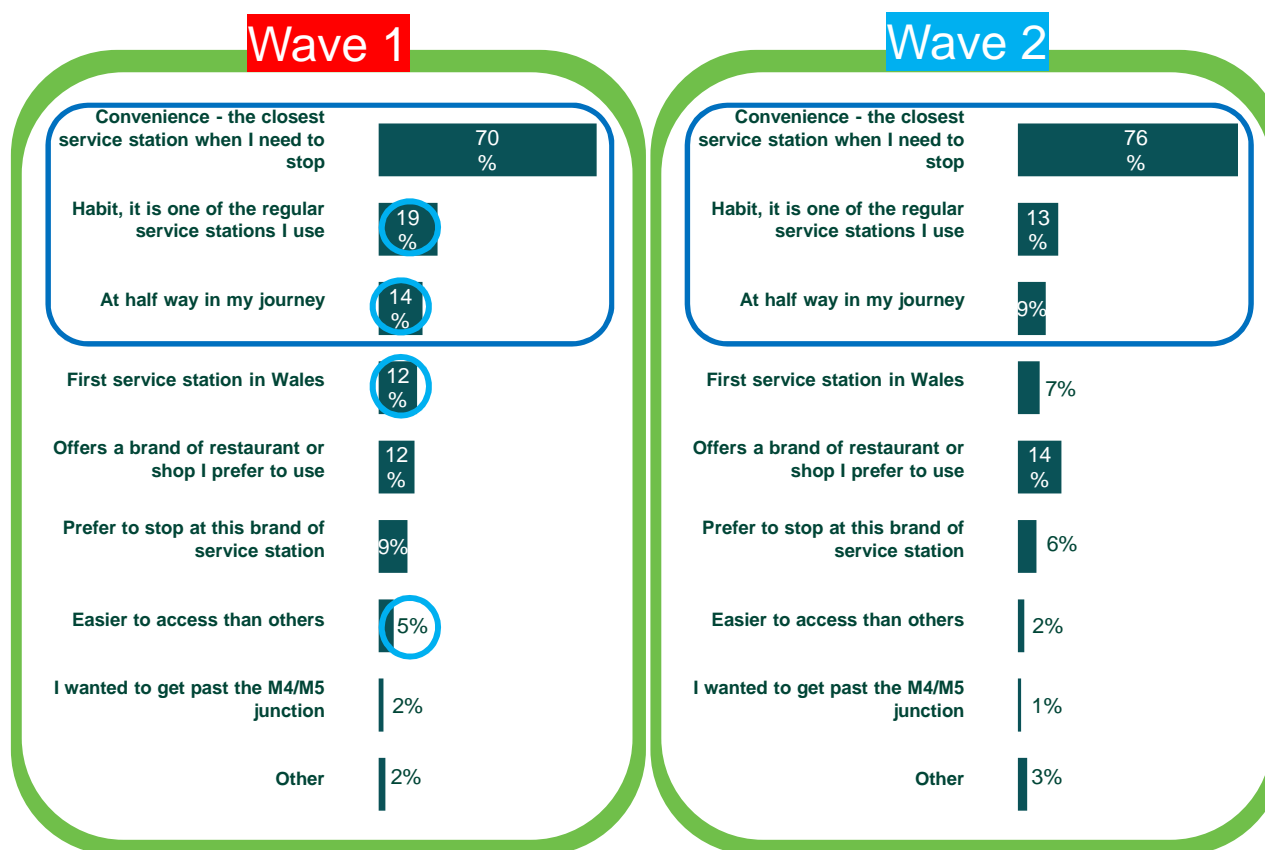
A similar amount of people planned to stop at Magor regardless of which month they were travelling. Significantly more August travellers stopped due to habit or it being the first service station in Wales. However convenience still stood out as the main reason for stopping for both waves.

○ = significantly higher than Wave 1
○ = significantly higher than Wave 2

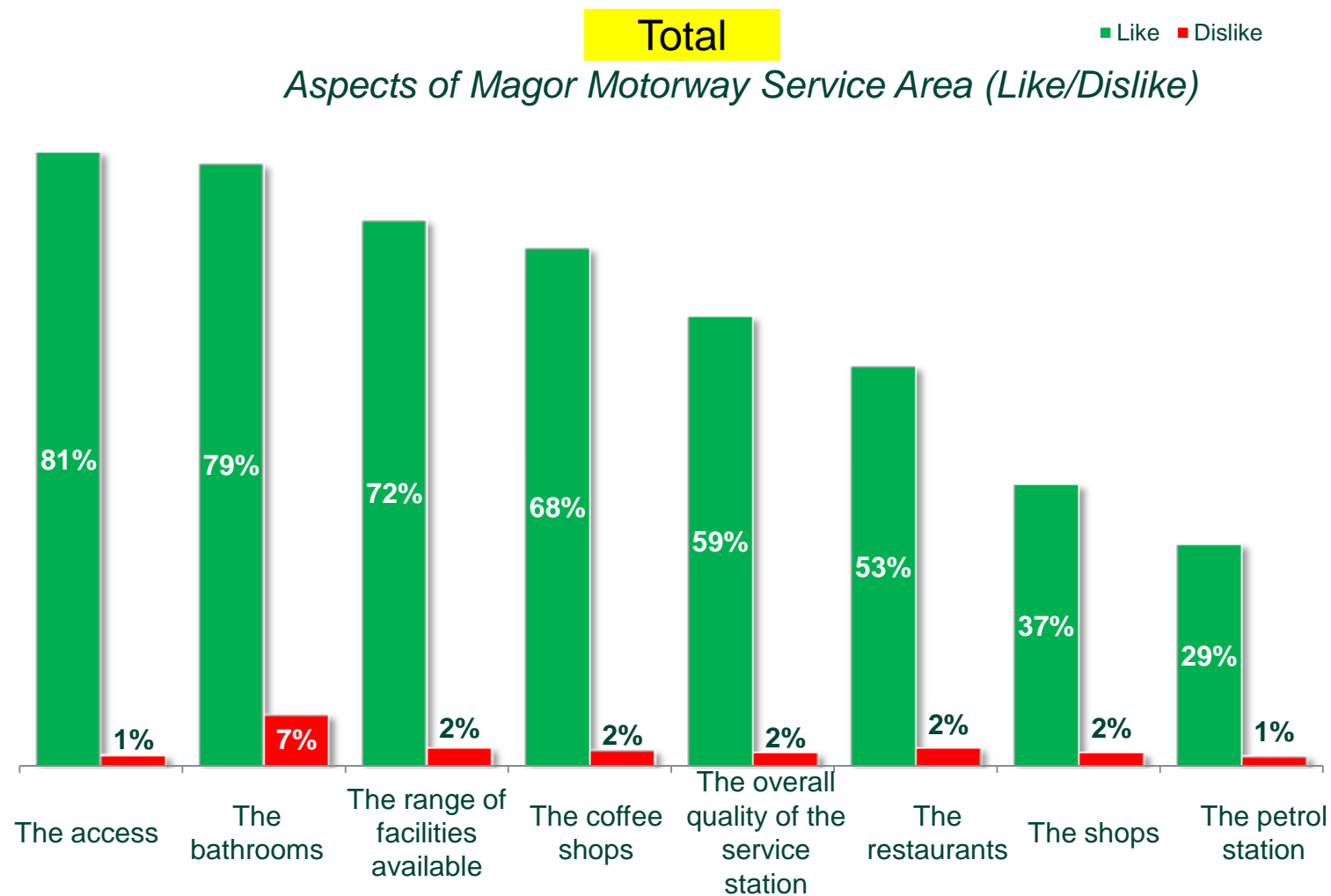
Planned to stop at Magor before set out of journey



Reasons for stopping at Magor services



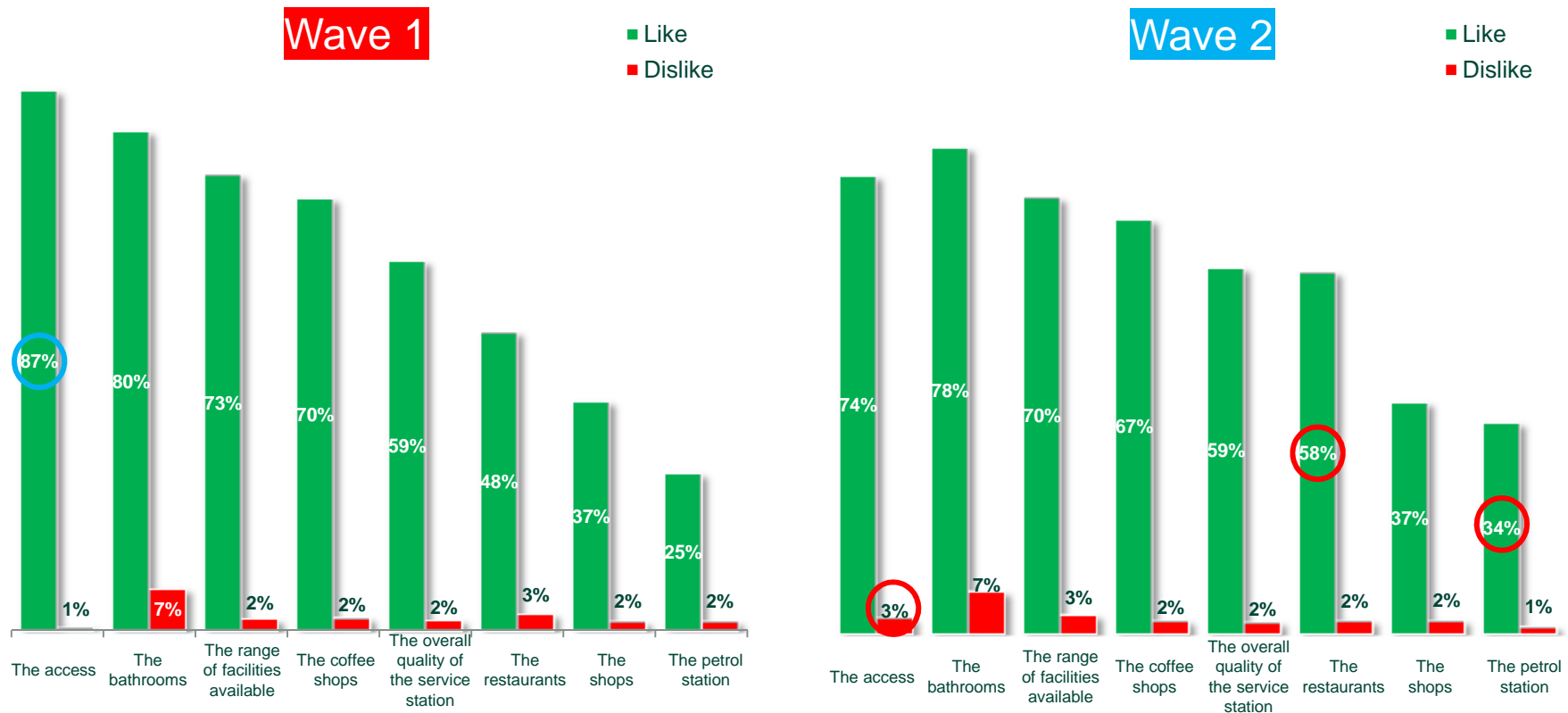
Many aspects of Magor services are well-liked by travellers, particularly the accessibility and the bathrooms. Very few aspects are disliked, with the most discontentment arising from the bathrooms, making it somewhat polarising.



The access to Magor was significantly less well-liked by September travellers, though it was still the second most liked aspect. The restaurants and petrol station were more liked than by those travelling in August, however these aspects still rank in the bottom three.

○ = significantly higher than Wave 1
○ = significantly higher than Wave 2

Aspects of Magor Motorway Service Area (Like/Dislike)

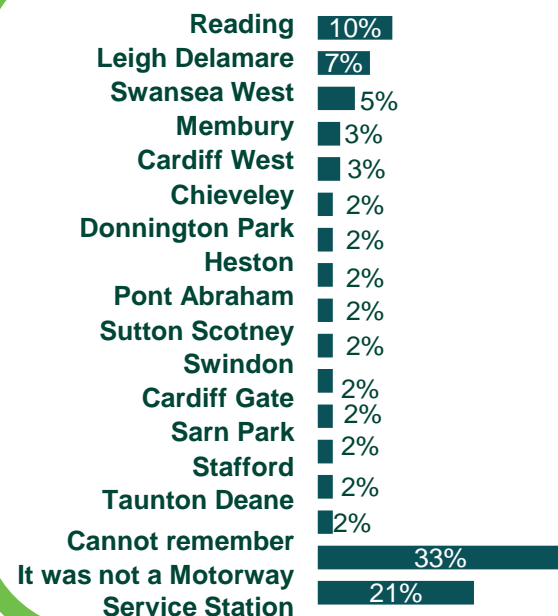


Very few travellers had stopped somewhere else before reaching Magor, usually at another service station. For the majority, the main reason for stopping was to take a break from travelling.

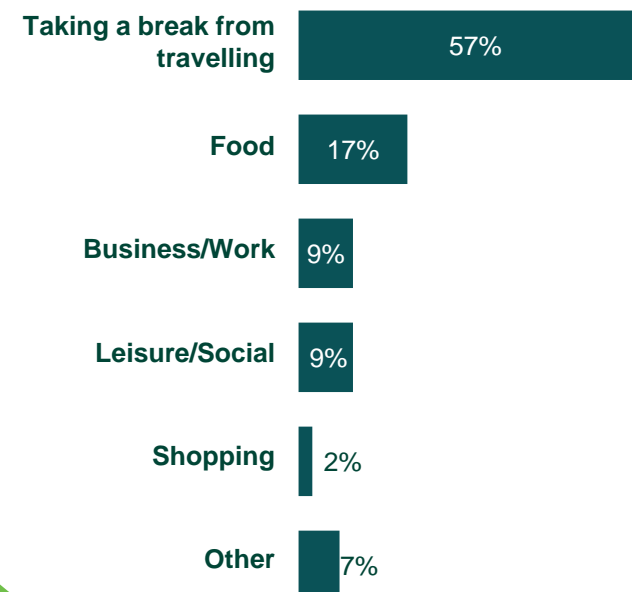
Total
6%

Stopped somewhere else
before stopping at Magor

Motoway Service Station stopped at



Reasons for stopping



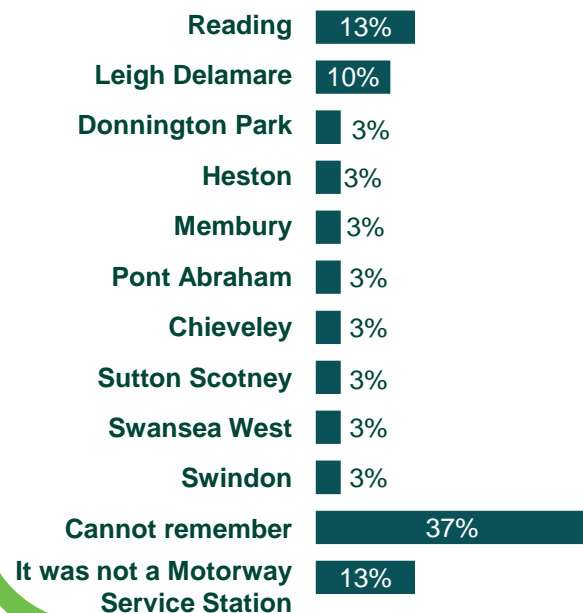
There were no significant differences in the August wave, due to the low base which is because of the lack of people who had stopped somewhere else before reaching Magor.

Wave 1

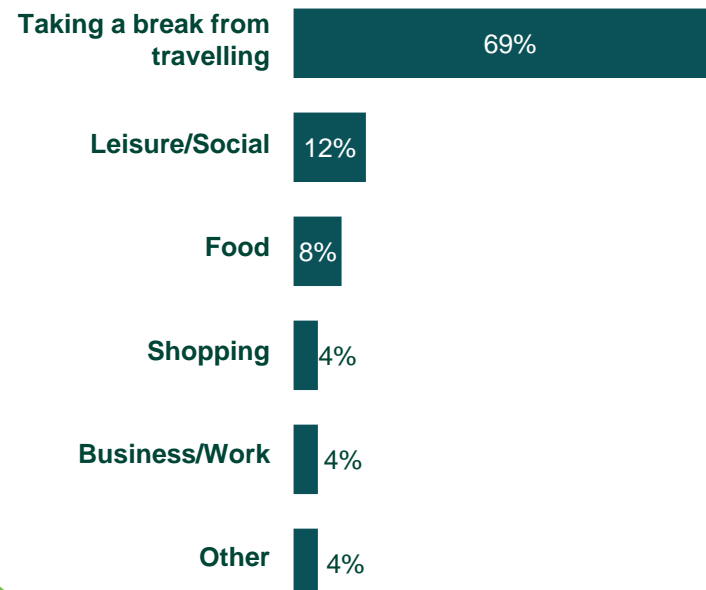
6%

Stopped somewhere else
before stopping at Magor

Motoway Service Station stopped at



Reasons for stopping



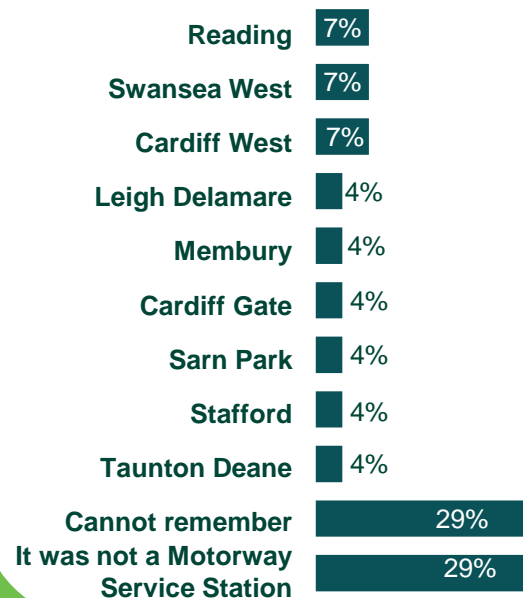
There were no significant differences in the August wave, due to the low base which is because of the lack of people who had stopped somewhere else before reaching Magor.

Wave 2

7%

Stopped somewhere else
before stopping at Magor

Motorway Service Station stopped at



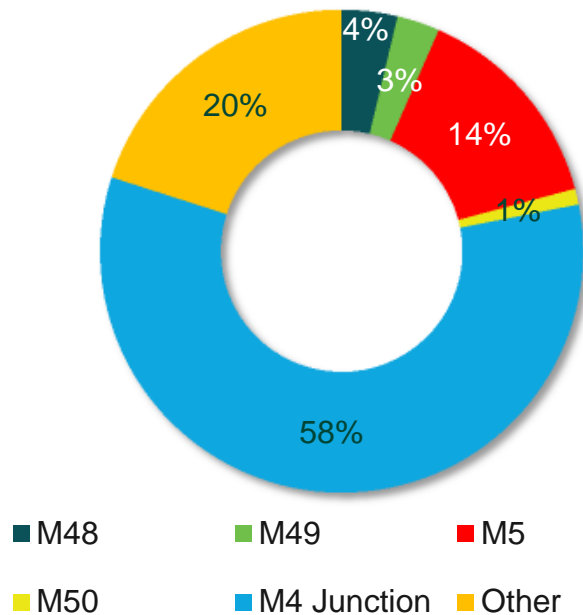
Reasons for stopping



The majority of travellers joined the M4 at the M4 Junction. Only 16% are likely to visit another motorway service station and the majority do not know which one this will be yet.

Total

Where did you join the M4?



16%

Likely to visit another Motorway service station on journey



Motorway Service Stations most likely to be visited

Other

20%

Cannot remember the name

9%

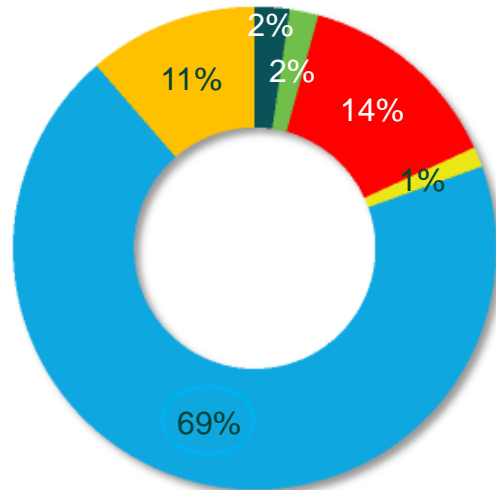
Don't know yet

70%

Those travelling in August were significantly more likely to have joined the M4 at the M4 junction and they were also less likely to know which service station they would next visit.

Wave 1

Where did you join the M4?



■ M48 ■ M49 ■ M5
 ■ M50 ■ M4 Junction ■ Other

○ = significantly higher than Wave 1

○ = significantly higher than Wave 2

16%
Likely to visit another Motorway service station on journey



Motorway Service Stations most likely to be visited

Other 16%

Cannot remember the name 11%

Don't know yet

73%

Q17 Where did you join the M4? Base: (518)

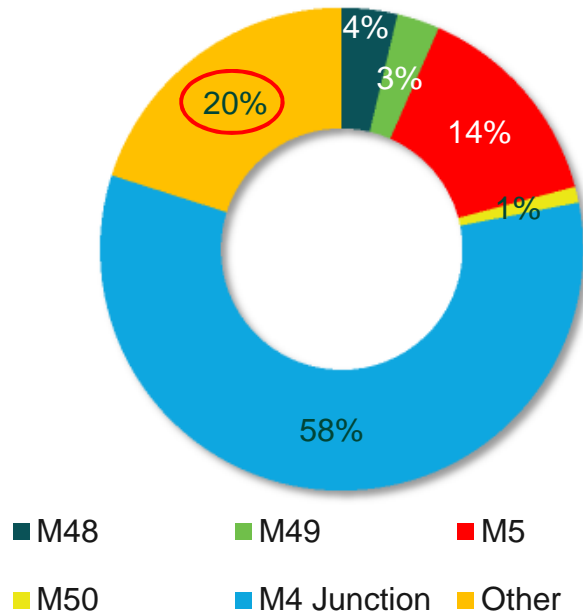
Q18 How likely or unlikely are you visit another Motorway Service Area on this journey? Base: (518)

Q18a You said that you were likely to visit another Motorway Service Area on your journey, which one might be that be? Base: (81)

There are significantly more September travellers who joined the M4 from a location other from the list of possible locations. Of those who were likely to visit another service station significantly more knew which one they would visit.

Wave 2

Where did you join the M4?



○ = significantly higher than Wave 1
○ = significantly higher than Wave 2

16%
Likely to visit another Motorway service station on journey



Motorway Service Stations most likely to be visited

Other

25%

Cannot remember the name

7%

Don't know yet

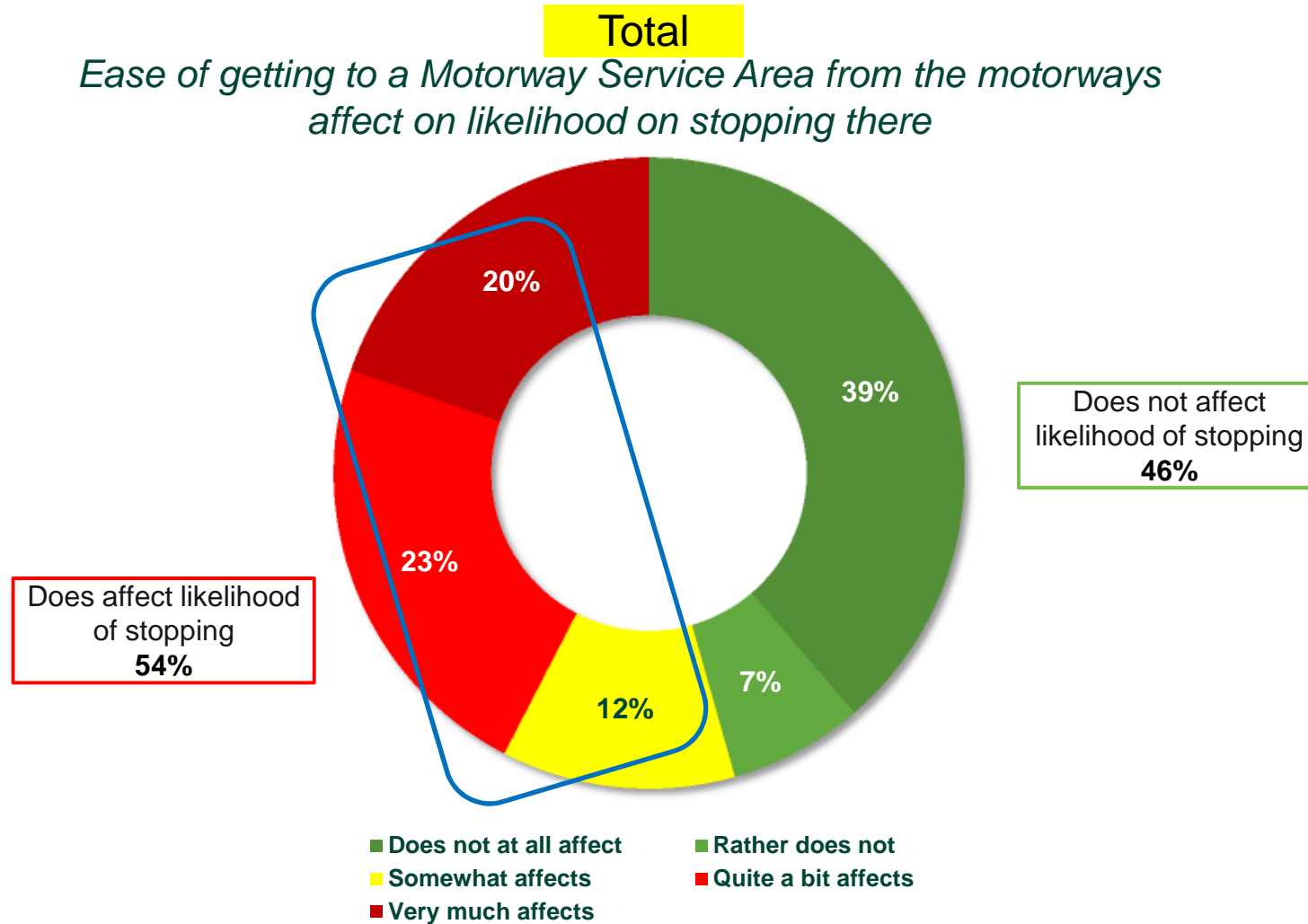
67%

Q17 Where did you join the M4? Base: (425)

Q18 How likely or unlikely are you visit another Motorway Service Area on this journey? Base: (425)

Q18a You said that you were likely to visit another Motorway Service Area on your journey, which one might be that be? Base: (67)

Over half state that the ease of getting to a motorway service area affects their likelihood of stopping.



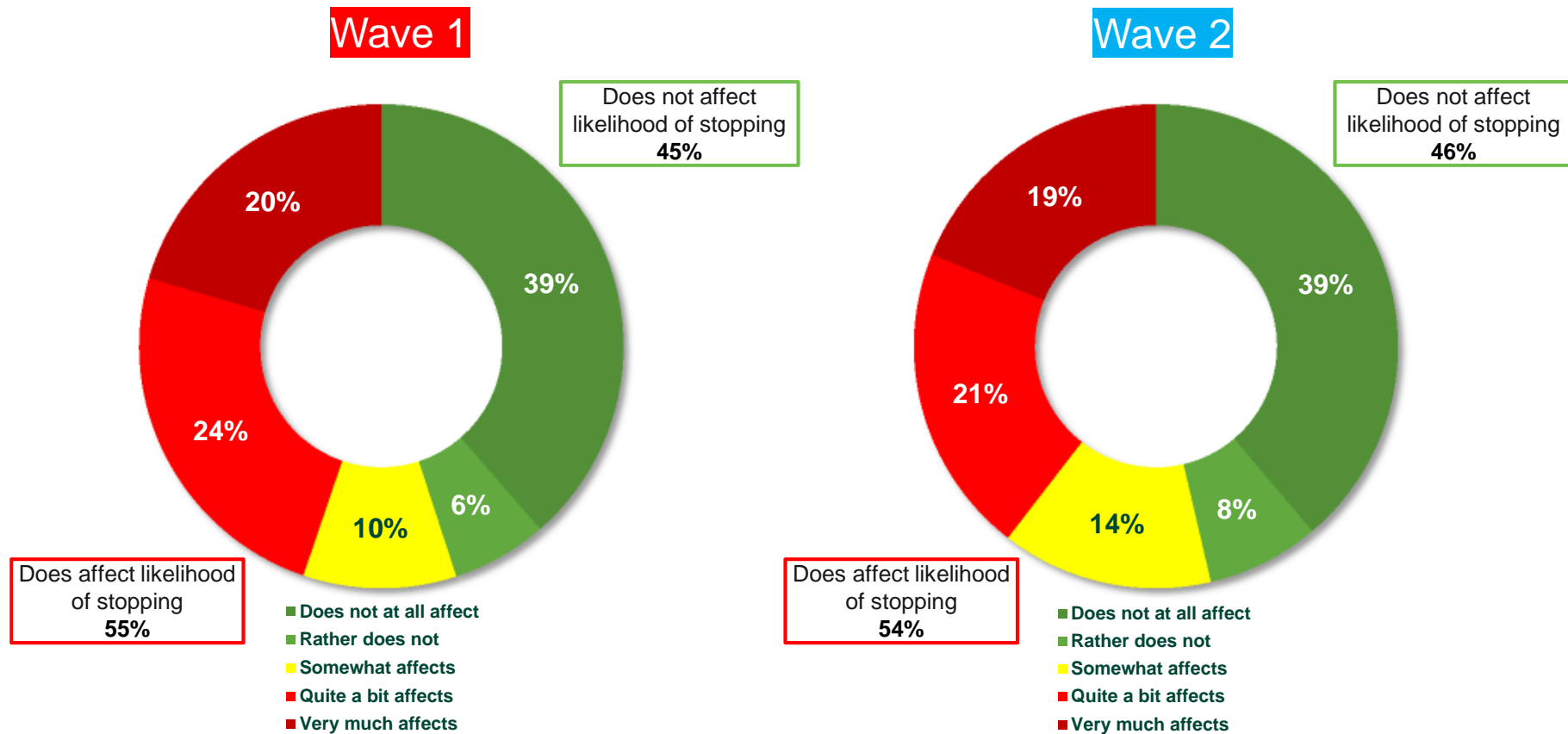
There are no significant differences between waves in terms of the ease of access affecting their likelihood of stopping.

*Ease of getting to a Motorway Service Area from the motorways
affect on likelihood on stopping there*

○ = significantly higher
than Wave 1
○ = significantly higher
than Wave 2

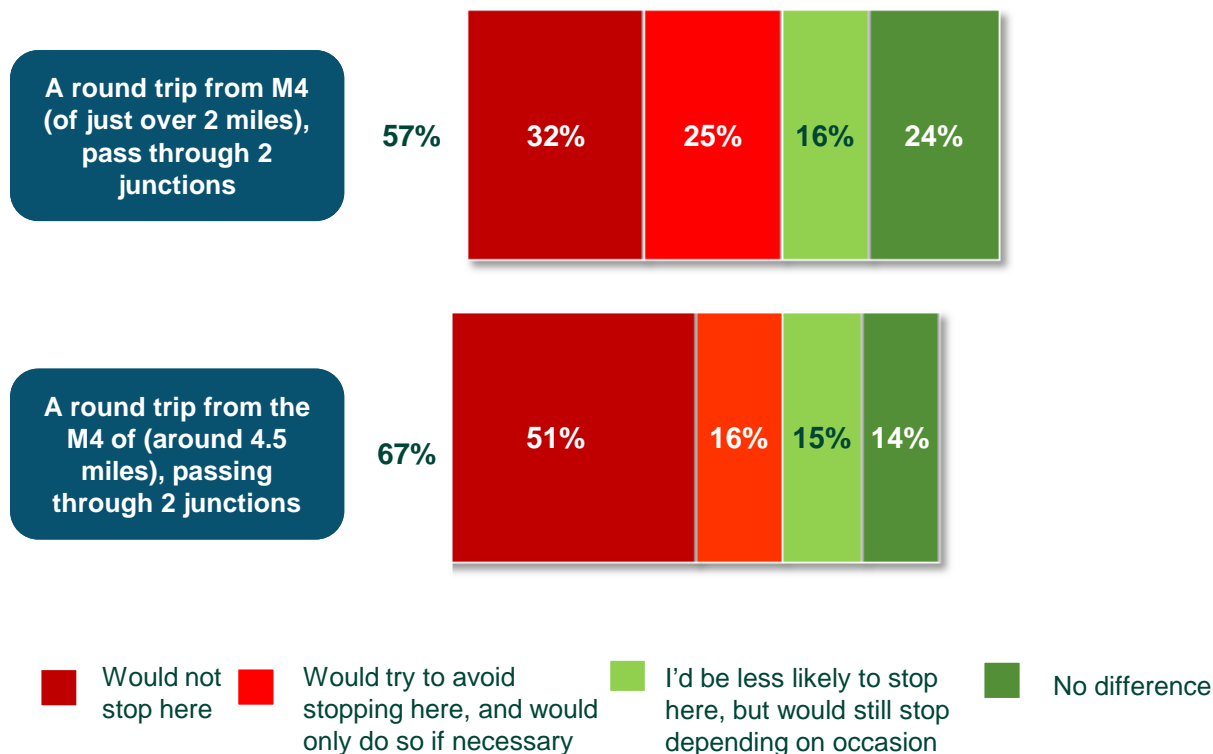
Wave 1

Wave 2



A round trip of 2 miles would cause over half of travellers to not stop or try to avoid stopping at Magor. A longer round trip of 4.5 miles would lead to over 2/3^{rds} who would not wish to stop at Magor.

Total
If stopping at this Motorway Service Area in future required...



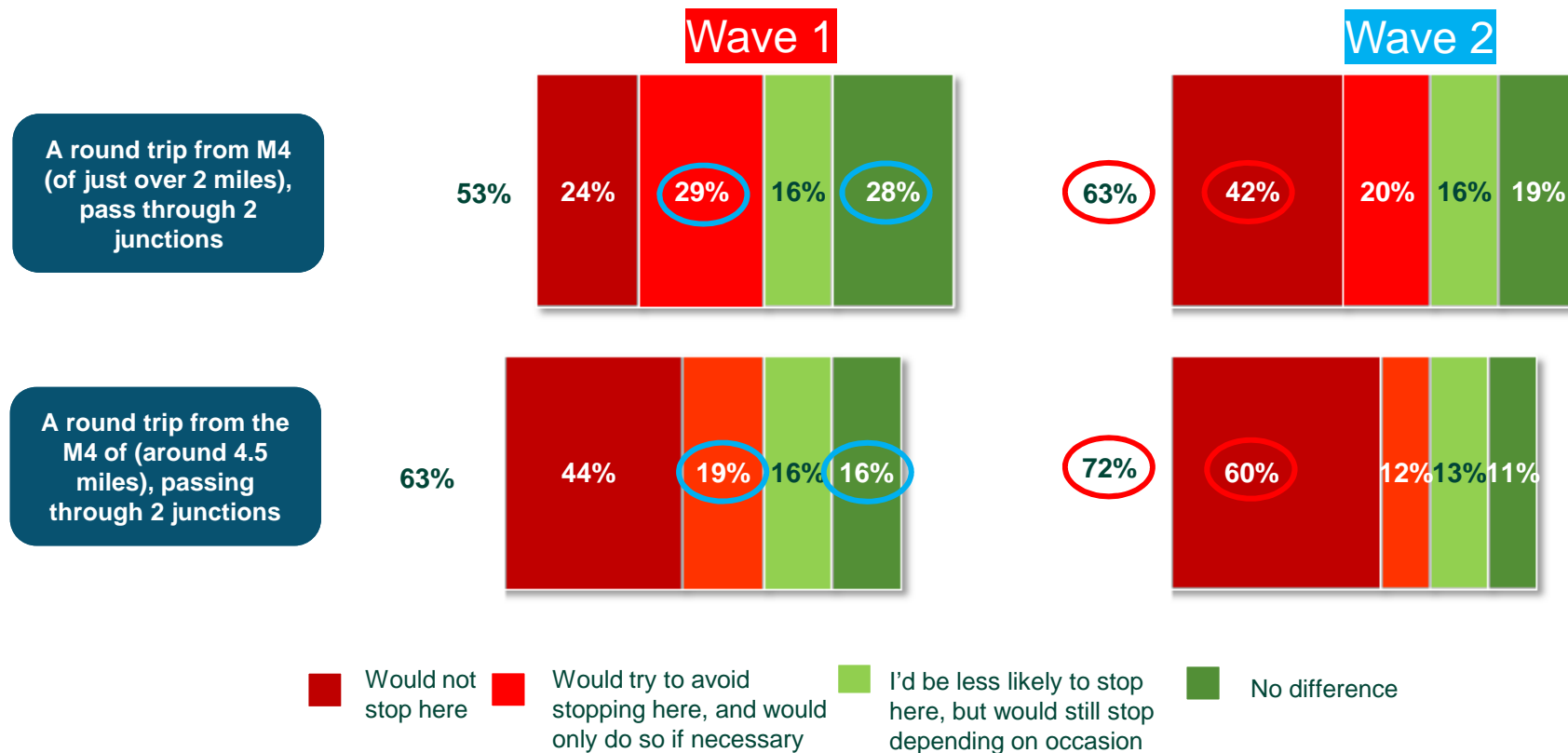
Q21a If stopping at this Motorway Service in future required a round trip from the M4 of just over 2 miles passing through two junctions, how likely would you be stopping here? Base: (943)

Q21b If stopping at this Motorway service area in future required a round trip from the M4 of around 4.5 miles passing through two junctions, how likely would you be stopping here? Base: (943)

September travellers are significantly more likely to be affected by an additional round trip, with nearly 2/3^{rds} who wish to avoid the site based on a 2 mile round trip and a majority who would avoid a 4.5 mile round trip.

○ = significantly higher than Wave 1
○ = significantly higher than Wave 2

If stopping at this Motorway Service Area in future required...



Q21a If stopping at this Motorway Service in future required a round trip from the M4 of just over 2 miles passing through two junctions, how likely would you be stopping here?
Base: Wave 1 (518) Wave 2 (425)

Q21b If stopping at this Motorway service area in future required a round trip from the M4 of around 4.5 miles passing through two junctions, how likely would you be stopping here?
Base: Wave 1 (518) Wave 2 (425)

Summary



Summary (1/2)

Type of journeys

- The majority of customers are travelling on holiday or to visit family/friends. Just around 16% are travelling on business or commuting to work.
 - These are still the two most common reasons for September travellers.
 - September travellers are also more likely to travel for other personal/leisure reasons.
- The majority of journeys are between 50 – 250 miles long, whilst 1 in 5 journeys are longer than 250 miles.
 - Those travelling in August are significantly more likely to make longer journeys of 151 - 250 miles compared to September travellers, the latter of which are relatively more likely to travel 51 – 150 miles.
- Over half of customers have visited Magor services before. These customers visit the site 8 times a year on average.
 - Those who visit in September visit Magor significantly more frequently than August travellers (9 visits a years vs. 7 visits)

Summary (2/2)

Impact of a diversion

- There are many aspects that would infer that a diversion would negatively impact the number of travellers stopping at Magor services:
 - In total 57% of customers would not stop at Magor if there was a diversion of over 2 miles.
 - 67% of customers would not stop if there was a 4.5 mile diversion.
 - 54% state that the ease of getting to a motorway service area affects their likelihood of stopping.
 - The main reason the majority of travellers stop at Magor services is the convenience.
 - The most liked feature at Magor services is the access.
- More importantly, those travelling in September are significantly more likely to be affected any diversion.
 - As these customers visit Magor more frequently this implies an even greater impact on number of visitors if there is a diversion.



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ahead of what's next

APPENDIX 2

Roadchef's letters dated 25th August 2015 and 26th January 2016



Matt Jones
Department of Economy, Science and Transport
Welsh Government
Cathays Park, Cardiff
CF10 3NQ

25th August 2015

Dear Matthew

Re: Proposed M4 Newport By-Pass – Magor MSA

Thank you for our meeting on 21 August 2015 at which you outlined the legal process and the current thinking regarding the design of the proposed M4 Newport By-Pass. This was most helpful, in particular with regard to the issue of accessibility to Magor MSA. I write to you on behalf of Roadchef which leases and operates all of the MSA with the exception of the fuel forecourt (currently branded Esso) which is owned and operated by Rontec.

The planned scheme, as currently detailed in Arup drawing number M4-OA-00-00-Dr-C-XX-000 (Issue PO), will, if implemented, be an unmitigated disaster in terms of road safety due to a lack of viable rest facilities for drivers. It will also impact the commercial viability of the MSA itself placing at risk the jobs of over 190 employees who currently work at the site. Urgent consideration must be given to providing viable access to the Magor MSA as part of the final plan.

As currently proposed, eastbound M4 traffic will have to travel some 1.74 miles past Magor MSA before exiting the M4 by a grade-separated junction. Traffic will then have to take a link road to the proposed M48 junction and then re-trace its steps by heading back west along existing de-classified M4 carriageways for a further 1.74 miles. Having utilised the MSA, eastbound traffic will then undertake the same convoluted exercise to re-join the M4.

For westbound traffic, the access arrangements are the mirror image as for eastbound traffic, necessitating the same convoluted return journey for MSA users in excess of 3.73 miles. Such lengthy and convoluted access arrangements will, in effect, render Magor MSA a by-passed MSA. This will have significant negative road safety implications as the distance between MSAs will increase from the current 16 miles between Cardiff Gate and Magor and 33 miles between Magor and Leigh Delamere to 49 miles between Cardiff Gate and Leigh Delamere.

Industry experience shows that MSAs with convoluted access discourage drivers from taking a much needed rest break from their journey.

The expected massive drop-off in business at Magor MSA will certainly bring into question the financial viability of the MSA. Currently it employs some 190 people directly and no doubt a significant number indirectly. Roadchef has invested some £2m in recent years upgrading the catering and retail facilities at Magor. Roadchef was planning to undertake future investment over the next two years including further upgrading the catering offers, extending the retail facilities, increasing the seating capacity of the amenity building (through an extension), as well as significantly increasing the capacity of the car, coach and HGV

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parking areas. All these projects have now been put on indefinite hold. The proposed projects would have involved increasing the number of jobs at Magor MSA. Instead the MSA now faces a situation whereby a significant proportion of the Magor MSA jobs will be at risk and no doubt eventually lost as trade volumes drop massively.

A further point, not directly related to the Magor MSA, which appears both unusual and very wasteful in terms of capital cost is the proposal to run the new M4 carriageways parallel to the existing M4 motorway in effect making a 12 lane motorway (albeit 6 of the lanes will be de-classified as motorway) for some 1.74 miles!

Returning to the future of Magor MSA, the proposed M4 By-Pass needs re-designing with a reconfigured J23A which will allow short, direct access to the MSA and allow it to continue its important road safety function as the services for this busy stretch of the M4. We believe that, left unchanged, the absence of any proper service area provision on the 49 mile stretch entering Wales from Leigh Delamere to Cardiff Gate will significantly add to the accident rate on this important Welsh motorway.

I intend to visit one of the public information exhibitions later this month and thereafter would welcome a follow-up meeting, sooner rather than later, to address the issue of accessibility to Magor MSA. In the meantime I look forward to hearing from you as to how you propose to address this important issue.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Ian McKay', with a long horizontal line extending to the right.

Dr Ian McKay
Business Development Director



Matthew Jones
Department of Economy, Science and Transport
Welsh Government
Cathays Park, Cardiff
CF10 3NQ

26th January 2016

Dear Matthew

Re: Proposed M4 Newport By-Pass – Magor MSA

Thank you for our meeting on 25th January 2016 with Paul Snook (Costain/Vinci JV) which was interesting and helpful. Roadchef's view on the proposed Draft Orders has not changed from that detailed in my letter to you dated 25th August 2015 (attached) in that the planned scheme will,

“...be an unmitigated disaster in terms of Road Safety due to a lack of viable rest facilities for drivers”.

The proposed Eastbound access arrangement requiring traffic to access Magor MSA either by a) on a junction some 4 miles to the west of the MSA and a local distributor road past Llanwern steel works or b) a grade separated junction on the M48 some 1.74 miles to the east of the MSA is convoluted in the extreme and will not be undertaken by motorists.

The proposed Westbound access arrangement involving a fly over from the new M4 to existing M48 again some 1.74 miles to the east of the MSA again is going to be convoluted and is going to be a major disincentive to MSA users. This will be compounded further by the fact that the few westbound users of the MSA will only be able to gain access back to the M4 either by retracing their steps some 1.74 miles to the east or by taking the 4 mile trip along the local distributor road to the new junction adjacent to Llanwern steel works.

As discussed Roadchef believes that the proposed access arrangements will be almost impossible to sign safely bearing in mind the configuration and distances involved in relation to length of journey on non-motorway roads, proximity to Toll booths and safe decision making distances for MSA users.

The revised proposal you tabled showing an eastbound off slip would undoubtedly improve access for eastbound motorists albeit they would still have to negotiate an additional roundabout compared to the current access arrangements. You did not however table any proposals to address the issues of access for westbound traffic.

Roadchef believes that to ensure that Magor MSA continues to operate and meets its role in Road Safety access arrangements for the MSA need to be simple for users and as short as possible from the main motorway carriageway. To achieve this would involve the construction of a full grade separated junction adjacent to the existing M4 J23A which could be joined by a short link road. At yesterday's meeting it was stated that such a proposal had been abandoned due to capacity issues. However Roadchef would like to see this proposal resurrected as the new M4 / M48 junction to the east of Magor village should have resolved any capacity issues.

For the avoidance of doubt unless such an access arrangement is proposed Roadchef will have no alternative but to formally object to the Draft Orders. I trust this fully clarifies Roadchef's position however should you have any queries please do not hesitate to contact me.

I look forward to hearing for you in the very near future bearing in mind the tight timescales in relation to the publication of Draft Orders.

Yours sincerely

A handwritten signature in black ink, appearing to read 'P. P. McKay', with a stylized flourish at the end.

Dr Ian McKay
Business Development Director

APPENDIX 3
RoSPA Advice

June 2011

DRIVER FATIGUE AND ROAD ACCIDENTS

Introduction

Driver fatigue is a serious problem resulting in many thousands of road accidents each year. It is not possible to calculate the exact number of sleep related accidents but research shows that driver fatigue may be a contributory factor in up to 20% of road accidents, and up to one quarter of fatal and serious accidents.

These types of crashes are about 50% more likely to result in death or serious injury as they tend to be high speed impacts because a driver who has fallen asleep cannot brake or swerve to avoid or reduce the impact.

Sleepiness reduces reaction time (a critical element of safe driving). It also reduces vigilance, alertness and concentration so that the ability to perform attention-based activities (such as driving) is impaired. The speed at which information is processed is also reduced by sleepiness. The quality of decision-making may also be affected.

It is clear that drivers are aware when they are feeling sleepy, and so make a conscious decision about whether to continue driving or to stop for a rest. It may be that those who persist in driving underestimate the risk of actually falling asleep while driving. Or it may be that some drivers choose to ignore the risks (in the way that drink drivers do).

Crashes caused by tired drivers are most likely to happen:

- on long journeys on monotonous roads, such as motorways
- between 2am and 6am
- between 2pm and 4pm (especially after eating, or taking even one alcoholic drink)
- after having less sleep than normal
- after drinking alcohol
- if taking medicines that cause drowsiness
- after long working hours or on journeys home after long shifts, especially night shifts

Drivers most at risk

Young male drivers, truck drivers, company car drivers and shift workers are most at risk of falling asleep while driving. However, any driver travelling long distances or when they are tired, is at risk of a sleep related accident.

Young male drivers are most commonly involved in sleep-related road accidents, but this may be because they are more likely to drive in situations which are likely to lead to fatigue rather than because they are more susceptible to falling asleep at the wheel. Similarly, shift workers and commercial vehicle drivers may have a higher risk of sleep-related crashes due to work-related factors.



Road Safety..... **Information**

Many professional drivers, especially HGV drivers report increased levels of sleepiness and are involved in a disproportionately high number of fatigue-related accidents. However, two thirds of drivers who fall asleep at the wheel are car drivers. Most (85%) of the drivers causing sleep-related crashes are men, and over one third are aged 30 or under.

Sleep Disorders

Anyone who suffers from a sleep disorder that prevents them from getting sufficient sleep is likely to be excessively tired during their waking hours, and so to be at higher risk of falling asleep when driving. Those most at risk of suffering from a sleep disorder, such as sleep apnoea, include professional drivers. It has been estimated that such drivers are between 6 and 15 times more likely to have a road traffic accident than those without the condition.

This type of medical condition is often undiagnosed, and some drivers may be unwilling to seek help because they fear losing their driving licence. However, there are established treatments for sleep apnoea which allow drivers to retain their licence, and therefore, their livelihood. Anyone suspecting that they have a sleep disorder is strongly advised to contact their GP.

How To Avoid Falling Asleep at the Wheel

The Highway Code (Rule 91) gives the following advice:-

Driving when you are tired greatly increases your accident risk. To minimise this risk

- Make sure you are fit to drive. Do not begin a journey if you are tired. Get a good night's sleep before embarking on a long journey.
- Avoid undertaking long journeys between midnight and 6am, when natural alertness is at a minimum
- Plan your journey to take sufficient breaks. A minimum break of at least 15 minutes after every two hours of driving is recommended
- If you feel sleepy, stop in a safe place. Do not stop on the hard shoulder of a motorway
- The most effective ways to counter sleepiness are to drink, for example, two cups of caffeinated coffee and to take a short nap (up to 15 minutes).

Most of the things that drivers do to try to keep themselves awake and alert when driving are ineffective, and should only be regarded as emergency measures to allow the driver time to find somewhere safe to stop. Drinking at least 150 mg of caffeine and taking a nap of around 15 minutes are the only measures that help to reduce sleepiness. But even these are temporary measures; sleepiness will return if the driver does not stop driving within a fairly short period of time.

The safest option is for drivers to avoid driving when sleepy, when they would normally be sleeping or when they are ill or taking medication which contra-indicates driving or using machinery. It is crucial that drivers plan journeys, especially long ones involving driving on motorways or other monotonous roads.



Road Safety..... **Information**

Drivers should:

- Try to ensure they are well rested, and feeling fit and healthy (and not taking medication which contra-indicates using machinery), before starting long journeys
- Plan the journey to include regular rest breaks (at least 15 minutes at least every two hours)
- If necessary, plan an overnight stop
- Avoid setting out on a long drive after having worked a full day
- Avoid driving into the period when they would normally be falling asleep
- Avoid driving in the small hours (between 2am and 6am)
- Be extra careful when driving between 2pm and 4pm (especially after having eaten a meal or drunk any alcohol)
- If feeling sleepy during a journey, stop somewhere safe, take drinks containing caffeine and take a short nap.

RoSPA produces a free guide, "[Safer Journey Planner](#)" (PDF 535kb) which gives advice to drivers on how to avoid the risk of falling asleep at the wheel.

Alcohol and Medicines

Even small amounts of alcohol, well below the legal drink drive limit, will exacerbate driver sleepiness, so that a tired driver who has had some alcohol will be even more impaired and likely to crash.

Many over-the-counter medicines, including remedies for coughs, colds, flu and hay fever, cause unwanted drowsiness which might impair driving. Warnings about drowsiness are not always clear so, for example, if the label says "may cause drowsiness", assume that it will do so.

Fatigue Detection and Warning Devices

There are devices to detect when drivers are feeling sleepy and to warn them. However, RoSPA is concerned that would rely on them, and may even be tempted to drive when they are tired, believing that the device will prevent an accident. It is far better for drivers to avoid driving when too tired, to plan their journeys safely and follow the advice in the Highway Code and RoSPA's guides.



Road Safety..... Information

Employers

Driving is the most dangerous work activity that most people do. It is estimated that around 150 people are killed or seriously injured every week in crashes involving someone who was driving, riding or otherwise using the road for work purposes. The majority of these tragedies can be prevented. HSE Guidelines, "Driving at Work", state that *"health and safety law applies to on-the-road work activities as to all work activities and the risks should be effectively managed within a health and safety system"*. Therefore, employers must assess the risks involved in their staff's use of the road for work and put in place all 'reasonably practicable' measures to manage those risks.

One of the most important things employers must do is ensure that their drivers are not at risk of falling asleep at the wheel.

RoSPA's free guide, "[Driving for Work: Safer Journey Planner](#)" gives advice to employers on how they can do this.

Holiday and Travel Companies

One of the times when individual drivers may drive in the early hours of the morning is when they are catching, or returning from, an early flight or ship/ferry journey. Drivers returning from long haul flights, or coming off ships and ferries also often drive home after having had very little sleep in the previous 24 hours. Holiday companies, airlines and shipping lines should consider what advice and information they could offer to their customers, particularly as they sell alcohol to their passengers, which exacerbates the risk.

REFERENCES

"Fatigue and Road Safety: A Critical Analysis of Recent Evidence", Road Safety Web Publication No. 21, Department for Transport, 2011

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"Sleep-Related Crashes on Sections of Different Road Types in the UK (1995–2001) Road Safety", Research Report No. 52 Department for Transport, 2004

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APPENDIX 4

AA Guidance

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**AA**

DON'T DRIVE TIRED

Don't drive tired

1 in 5 accidents on major roads are caused by tiredness

Drunk, drugged and ill drivers pose a danger to themselves and others that's fairly well understood, but tired drivers, though often ignored as a risk, are every bit as dangerous.

The traditional image is of someone driving late at night, possibly on the way to or from a holiday, but these days, tiredness is often an issue with people driving for work – more often because of hours driven rather than the time of day.

If you spend the week working away from home or have just flown back into the country, you might also be susceptible to sleep related accidents.

Related
links

According to official, police recorded accident data, fatigue's a factor in 2% of all injury accidents, but some studies have suggested that 20% of accidents on major roads can be attributed to tiredness.



If you're driving a long distance:

Don't drive for more than 8 hours in a day.

Take regular fifteen minute breaks in journeys over three hours.

Aim to stop every two hours or so, especially if you're not used to driving long distances.

If you feel at all sleepy, stop in a safe place. Don't stop on a motorway hard shoulder.

The best way to counter sleepiness is to drink two cups of caffeinated coffee and to take a short nap of at least 15 minutes - check for parking restrictions before you do so.

Plan journeys so that you can take breaks, allowing for an overnight stay if necessary. Even experienced HGV drivers are prevented from driving more than 9 hours in a day or working for over 13 hours in a day.

Most car drivers are nowhere near as used to driving for this long.

Don't start a long journey if you're tired.

Heavy meals can make you sleepy.

Driving at times when you would normally be asleep brings extra risk, particularly the early morning. Strenuous exercise before driving can also have a bad effect - especially for older people.

Driving for work

If you're a company driver you'll know how you can feel pressured into breaking guidelines to meet deadlines.

Most employers will have a road safety policy which should lay down rules to help prevent fatigue-related accidents.

31 January 2017

More driving advice

Hungry for more hints and tips?

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