

Christmas Day travel:
potential for travel by
bus

TfL number: 15033

FT number: 1828

future
thinking





Introduction and methodology



To explore travel behaviour and the potential demand for buses on Christmas Day, 3,890 adult Londoners were interviewed using an online survey between 7th and 27th August 2015

Survey data are weighted to be representative of the London population based on 2011 census data in terms of age, gender, ethnicity, inner/outer London boroughs and working status (working/not working)

Key findings (1)

The research is designed to examine potential demand for bus travel on Christmas Day

- There would be demand for buses on Christmas Day in London
 - Over three quarters were in London last Christmas
 - Of these, four in ten would have used buses, had they been running
 - Average number of trips actually made by those in London last Christmas was 1.1 (2.0 amongst those who made at least one trip)
- Grossing up to the London population, we estimate that **2.5 million bus trips** would be made on Christmas Day by Londoners, if a bus service were running+
- A recent DfT report gives total number of bus trips in London for 2014 at 2.4 billion*, which translates to 6.6 million a day
- The forecast in this study is over double that obtained in a telephone survey conducted in January. The current survey has a more comprehensive set of questions that covered additional scenarios where Londoners might have used buses, which weren't included in the January survey and this accounts for most of the difference

The survey covered off all potential bus usage streams this time:-

- Londoners who travelled switching mode to bus
- Londoners who travelled making more trips if buses running (not covered in January)
- Londoners who didn't travel making trips if buses running
- Londoners changing their travel plans in the light of a bus service (staying in London instead of going away, travelling to Christmas Day destination on the day instead of beforehand and returning home on the day instead of afterwards (not covered in January)

+The estimate uses down-weights built in to compensate for over-claiming in surveys, a common practise with demand forecasting - Definitely x 0.8 / probably x 0.2

*https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/412858/quarterly-bus-statistics-oct-to-dec-2014.pdf

Key findings (2) - Calculating demand

2,543,697 bus journeys would be taken if operating on Christmas Day
 DfT bus usage data gives average daily bus journey in London at **6.6 million**

All adult Londoners (100%) 6,657,000 (includes fare-paying and non-fare-paying Londoners)

Christmas Day travellers

Non Christmas Day travellers

Change of travel plans

In London on Christmas Day (77%) 5,125,890

Not in London on Christmas Day (23%) 1,531,110

Stayed overnight away from home on Christmas Eve (9%) 599,130

Stayed overnight away from home on Christmas Night (13%) 865,410

Switching to bus

Making more trips

Making trips

Stay in London

Travel there in the morning

Go home in the evening

Made trips on Christmas Day (54%) 2,767,981

Made trips on Christmas Day (54%) 2,767,981

No trips made on Christmas Day (46%) 2,357,909

Would have stayed in London if PT running (9%) 137,800

Total number of trips (average 2.01) 5,563,641

Total potential bus trips (derived conversion 21.8%) 1,212,874

Would have made additional trips by bus (derived conversion 16.2%) 448,413

Would have made bus trips (derived conversion 12%) 282,942

Would have made bus trips (derived conversion 25.4%) 35,001

Would have travelled there by bus instead (derived conversion 24%) 143,791

Would have travelled home by bus instead (derived conversion 20.4%) 176,544

Trips would have converted to bus (66%) **800,497**

Total additional bus trips (Mean 1.9) **851,984**

Total bus trips by non travellers (Mean 1.79) **506,479**

Bus trips made if buses running (Mean 1.84) **64,402**

Bus trips made if buses running (Mean 1.0) **143,791**

Bus trips made if buses running (Mean 1.0) **176,544**

Key findings (3)

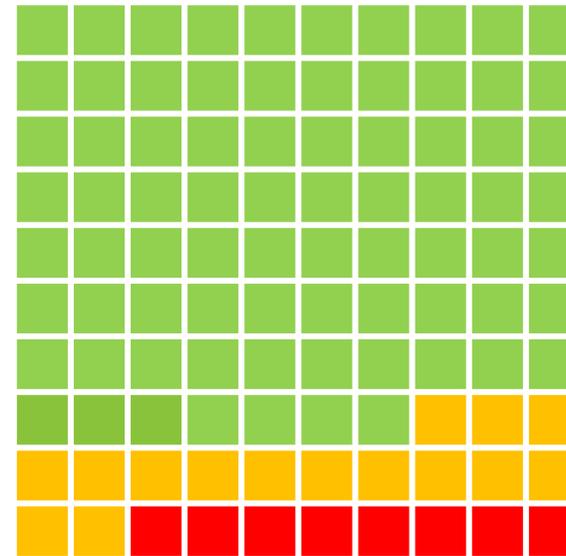
- Just over half (54%) of those in London on Christmas Day made at least one trip within the M25 on the day, mostly by car and to visit relatives or friends or return home
 - Two thirds of trips took up to 30 minutes
 - Few trips started before 4.30 am on Christmas Day or after midnight on Boxing Day morning
- Over four in ten of those making trips on Christmas Day would have definitely or probably used a bus, if a service had been running (43%)
- Four in ten of trips made on Christmas Day would have been switched to bus (two thirds among those who would definitely or probably have used buses)
 - Trips made by car are the least likely to be switched to bus
- 36% of those making trips would have made more trips if a bus service had been running (again the most frequently mentioned reasons are to visit relatives and friends and return home)
- A quarter of those not making any trips, would have made trips if a bus service had been running
- One in six of those away from London last Christmas might have been persuaded to stay in London, had a bus service been running
- Around one in ten were away from home at the start and end of Christmas Day – significant proportions of these would have travelled to and/ or from their Christmas Day destination by bus on the day itself, instead

Key findings (4)

- The demand forecast (number of trips) splits evenly (49: 51) between inner and outer London, the propensity to use being higher among inner Londoners who make up only 40% of London's population. By region the forecast is largely in line with the population but with Central London over-represented (16% of trips but 11% of the population)
- Boroughs showing the highest demand are:-
 - Westminster
 - Ealing
 - Newham
 - Wandsworth
 - Hammersmith & Fulham
 - Barnet
 - Greenwich
 - Southwark

Caution should be applied due to the base sizes achieved at borough level
- Half of Londoners would expect a reduced Sunday service to run on Christmas Day
 - Those likely to have used buses on Christmas Day have expectations of a more frequent service – 32% would expect a full day service and 37%, a Sunday service
- By demographics, there is little difference in the profile of those likely to use buses on Christmas Day in terms of gender and social class, but users would be younger than the average Londoner (51% 16-34 compared with 40% of the total population)
- Comparing interest in buses operating on Christmas Day across frequent users of different transport types, we see (not surprisingly) greater interest among weekly bus users but also among weekly users of motorcycles/ mopeds, bicycles, black cabs/ minicabs and Overground trains

Three quarters of Londoners spent Christmas Day in the Capital last year



77%
in London

15%
Elsewhere in the UK

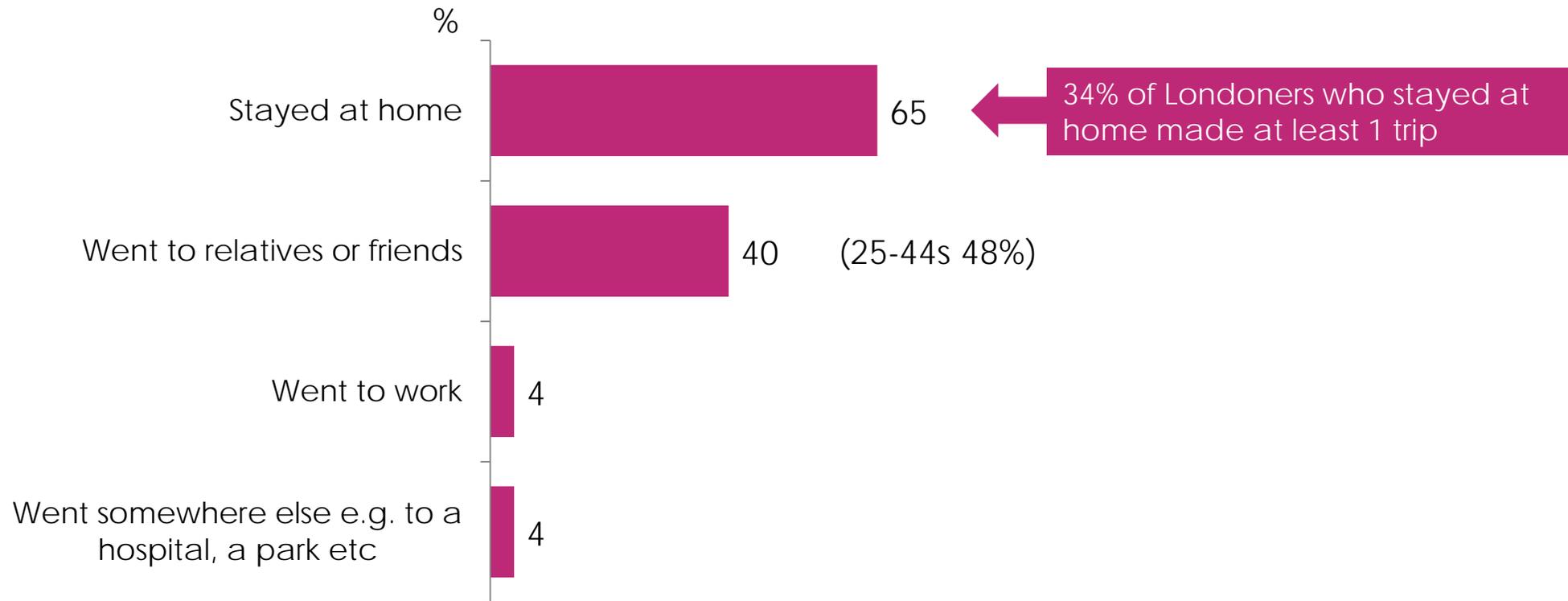
8%
Overseas

Of the 23% who were out of London last Christmas, 18% say they would definitely or probably have stayed in London had public transport been running (4% of all Londoners)

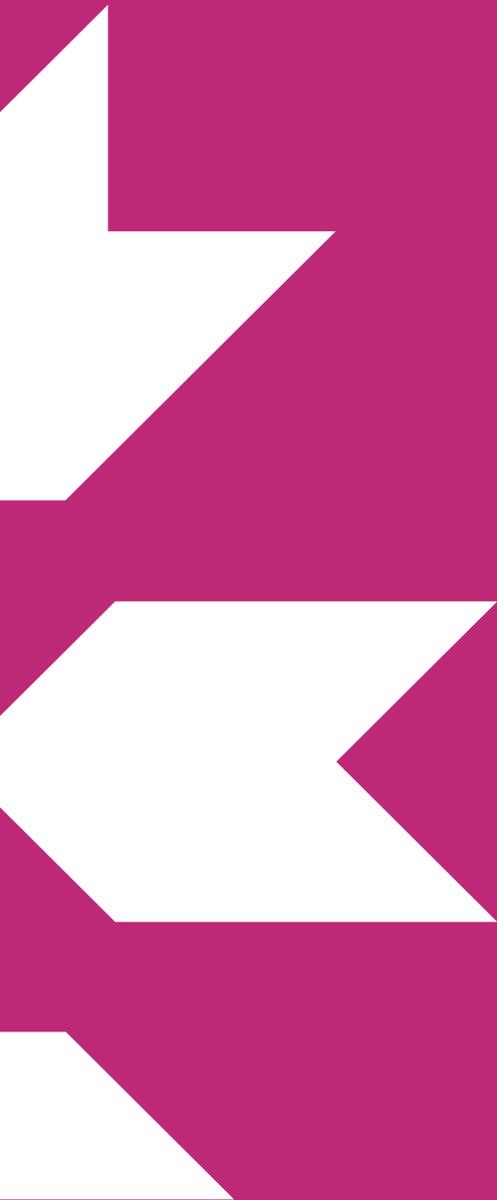
Q1: Where did you spend Christmas last year (2014)?
Base: All (3,890)

Two thirds of those in London stayed at home last Christmas and four in ten visited relatives or friends

Very few differences by demographic sub groups except 25-44 year olds more likely to go and visit relatives and friends



Q7: Which of the following things did you do on Christmas Day last year? Did you stay at home, did you go to relatives or friends, did you go to work or did you go somewhere else?
Base: All in London on Christmas Day (2,980)



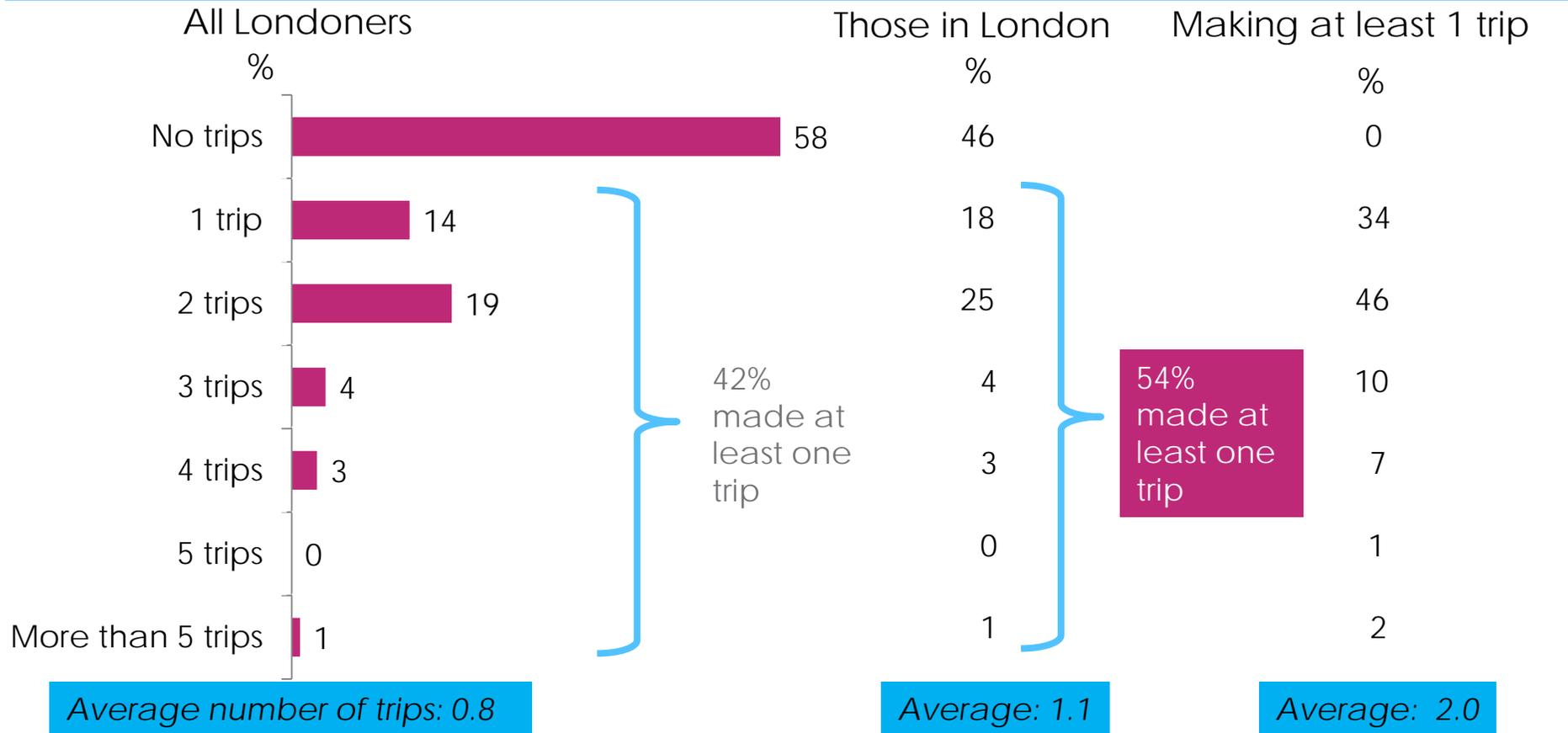
Christmas Day travellers

- switching to bus
- making extra trips

Just over half of those in London last Christmas made one or more trips on Christmas Day

Number of trips made on Christmas Day 2014

Think of a trip as a one way movement from one place to another i.e. from home to a relative's house would be one trip, from a relative's house to work, another trip and from work back home, would be a third trip. If you went somewhere and came back, count these as two trips.

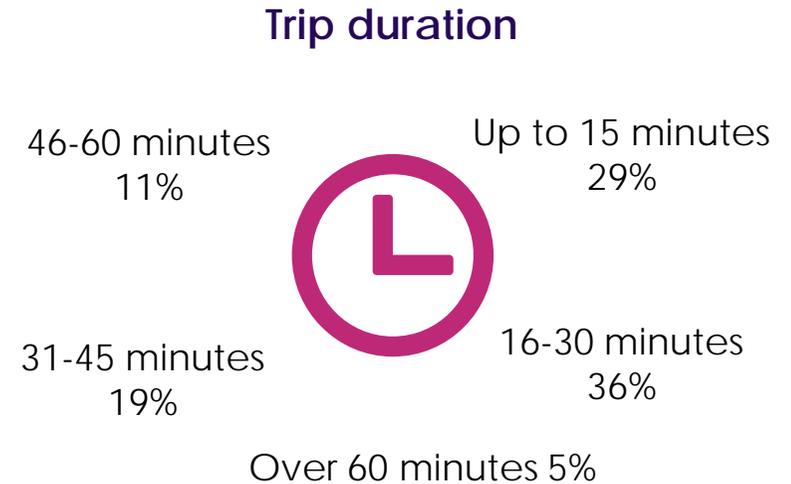


Q8: How many trips did you make on Christmas Day last year within London? By London, we mean anywhere within the M25 orbital motorway. Please also count any trip or trips you made in the early hours of Boxing Day morning (i.e. you may have returned home from somewhere)
 Base: All Londoners (3,890)/ in London on Christmas Day (2,980)/ making at least 1 trip (1,553)

Most Londoners making Christmas Day trips did so by car and most trips were to visit relatives/ friends or return home

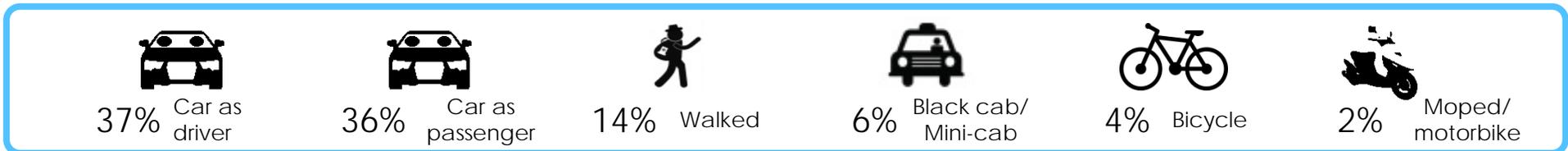
Two thirds of trips took up to 30 minutes. Only a few trips were started before 4.30am on Christmas Day or after midnight on Boxing Day morning

Journey purpose	% of trips made
Visiting relatives or friends	44%
To return home	28%
Dropping someone off/ picking someone up	8%
For entertainment, sport or leisure	6%
For shopping or personal business	5%
To go to a place of worship	3%
For work	3%
Other	2%



Time set-out	Before 04:30	04:30-12:00	12:00-18:00	18:00-24:00	After midnight
% of trips made	4%	27%	39%	25%	5%

Three quarters of trips were made by car

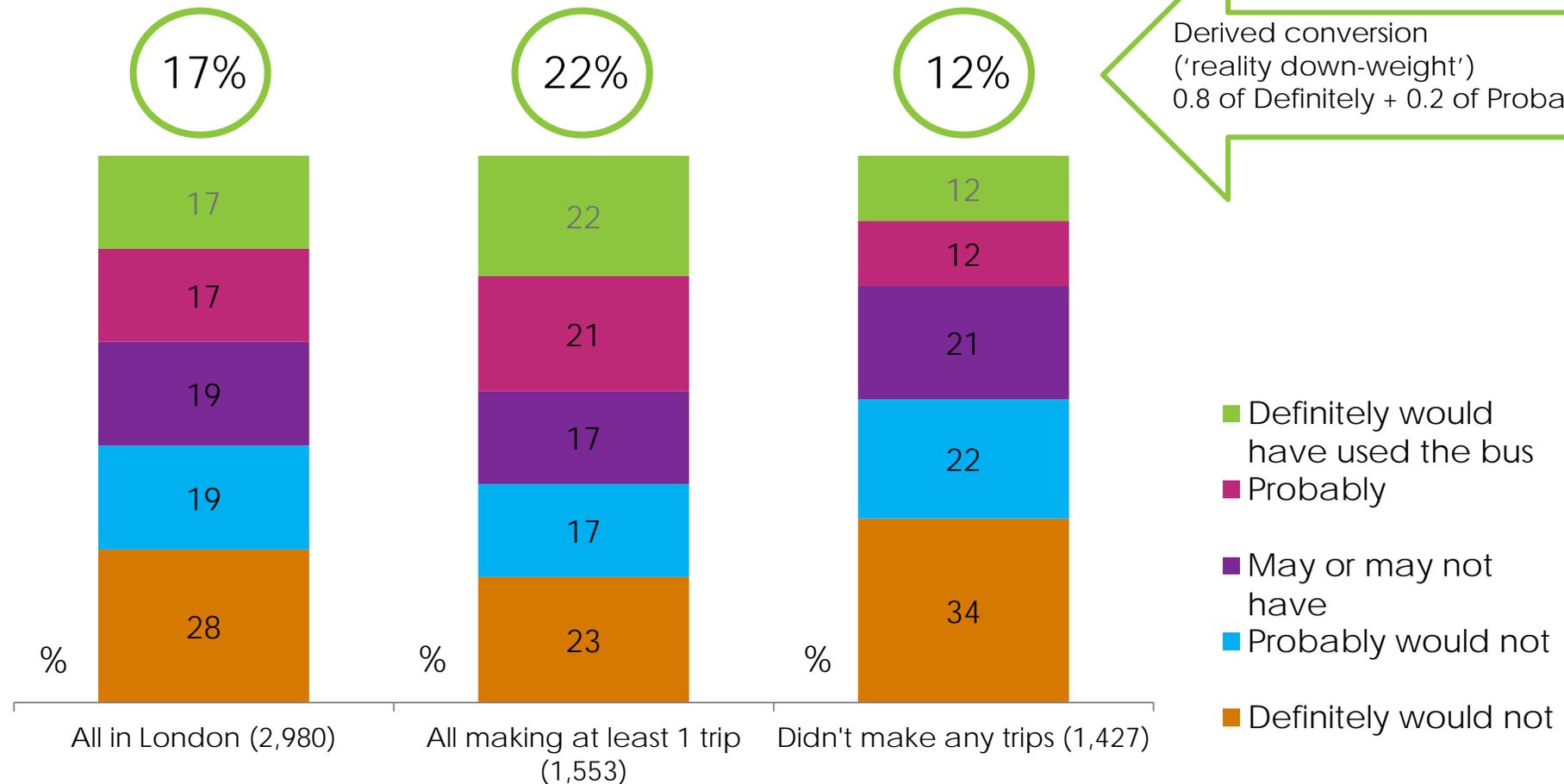


Q9b: Reason for journey
 Q9c: Journey length
 Q9d: Type of transport used
 Q9e: Time of day of travel

Base: All trips made in London on Christmas Day (3100)

A third of those in London on Christmas Day would have definitely or probably used a bus, if there had been a service

Bus consideration is higher among those who made trips than among those who did not



Derived conversion ('reality down-weight')
0.8 of Definitely + 0.2 of Probably

- Definitely would have used the bus
- Probably
- May or may not have
- Probably would not
- Definitely would not

Q10: IF MADE TRIPS You said you travelled in London on Christmas Day last year by your own private means of travel. How likely would you have been to travel by bus instead if a bus service had been running? Base: All in London on Christmas Day
IF DIDN'T MAKE TRIPS You said you didn't make any trips in London on Christmas Day last year. How likely would you have been to make a trip or trips on Christmas Day by bus if a bus service had been running? Base: All in London on Christmas Day

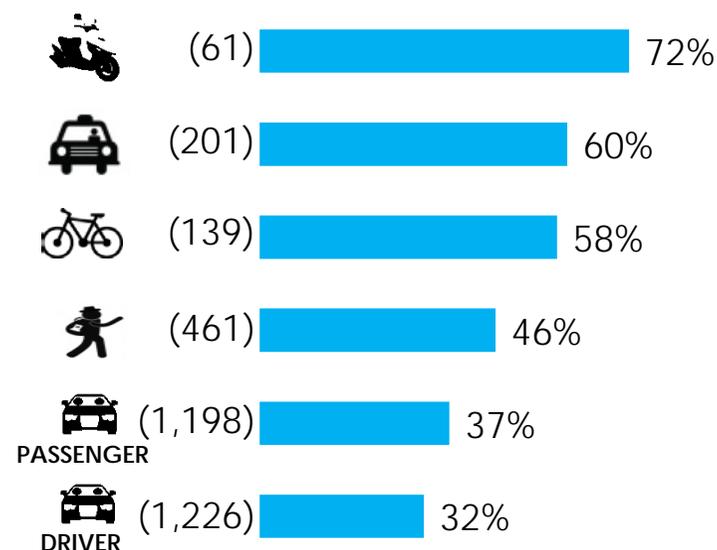
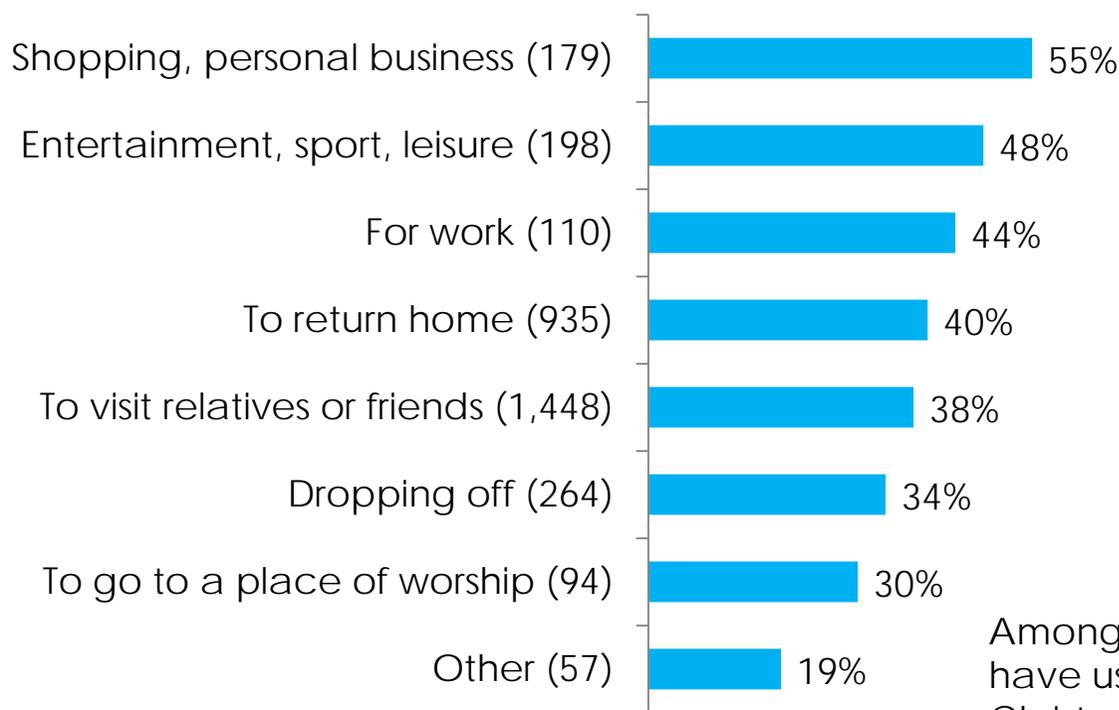
39% of trips made on Christmas Day would have been switched to bus had buses been running (66% of trips made by those likely to have used buses)

Shopping trips, trips for entertainment, sports and leisure, trips made by motorbike or moped, taxi or bicycle are all more likely to be converted to bus

Would convert to bus (all trips average)  39%

By journey purpose

By mode used



Amongst those likely to have used buses on Christmas Day  66%

Q11: These were the trips you made on Christmas Day last year. Which one(s) would you have switched to bus if buses had been running?
 Base: All trips made by those travelling in London on Christmas Day and likely to use buses

36% of those making trips would have made more trips if a bus service had been running

Likelihood of making further trips, if a bus service had been running



16%

Derived conversion ('reality down-weight')
0.8 of Definitely + 0.2 of Probably



- Definitely
- Probably
- May or may not have
- Probably would not
- Definitely would not

Those likely to make more trips would make on average 1.9 extra trips by bus

Extra trips would mainly be for:

- Visiting relatives and friends 57%
- Returning home 40%

Q13: How likely would you have been to make any further trips on top of the ones you did make, if a bus service had been running?
Q14: How many more trips would you have made?
Q15: And for what reason(s) would you have made this (these) trips?
Base: All who made trips in London on Christmas Day last year (1,553)

Number of trips by switchers and additional trips by those in London making trips

All adult Londoners (100%) 6,657,000 (includes fare-paying and non-fare-paying Londoners)

Christmas Day travellers

In London on Christmas Day (77%) 5,125,890

Switching to bus

Making more trips

Made trips on Christmas Day (54%) 2,767,981

Made trips on Christmas Day (54%) 2,767,981

Total number of trips (Average 2.01) 5,563,641

Total potential bus trips (derived conversion 21.8%) 1,212,874

Would have made additional trips by bus (derived conversion 16.2%) 448,413

Trips would have converted to bus (66%) **800,497**

Total additional bus trips (Average 1.9) **851,984**

1,652,481 bus journeys would have been made by travellers in London on Christmas Day switching mode to bus and/ or making additional trips by bus, had a bus service been operating

An abstract graphic on the right side of the slide, featuring several overlapping geometric shapes. A large white shape with a pointed left side is partially covered by a smaller orange shape. The background is a solid orange color.

Christmas Day non-travellers

- making trips

24% of those not making trips would have made trips if a bus service had been running

Likelihood of making trips (among non travellers), if a bus service had been running



12%

Derived conversion ('reality down-weight')
0.8 of Definitely + 0.2 of Probably



- Definitely
- Probably
- May or may not have
- Probably would not
- Definitely would not

Those likely to have used buses on Christmas Day would make on average 1.79 trips by bus

As with travellers making more trips, these would mainly be for:

- Visiting relatives and friends 72%
- Returning home 35%

Q10: You said you didn't make any trips in London on Christmas Day last year. How likely would you have been to make a trip or trips on Christmas Day, if a bus service had been running?
Q16: How many trips would you have made on Christmas Day in London if a bus service had been running?
Q17: And for what reason(s) would you have made this (these) trips?
Base: All in London who didn't make any trips on Christmas Day last year (1,427)

Number of trips by those not making trips on Christmas Day, who would have done so, had buses been running

All adult Londoners (100%) 6,657,000 (includes fare-paying and non-fare-paying Londoners)

Non Christmas Day travellers

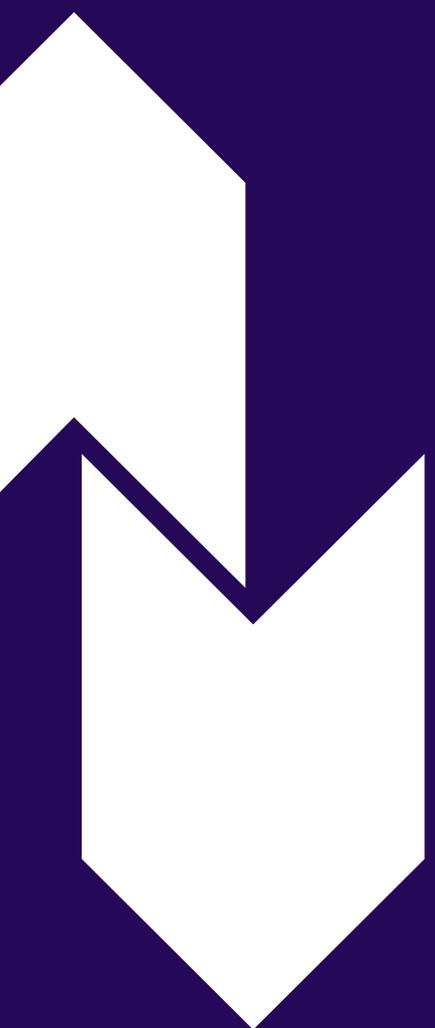
In London on Christmas Day (77%) 5,125,890

No trips made on Christmas Day (46%)
2,357,909

Would have made bus trips (derived conversion 12%)
282,942

Total bus trips by non travellers (Average 1.79) **506,479**

506,479 bus journeys would have been made by those not travelling on Christmas Day last year, had a bus service been operating

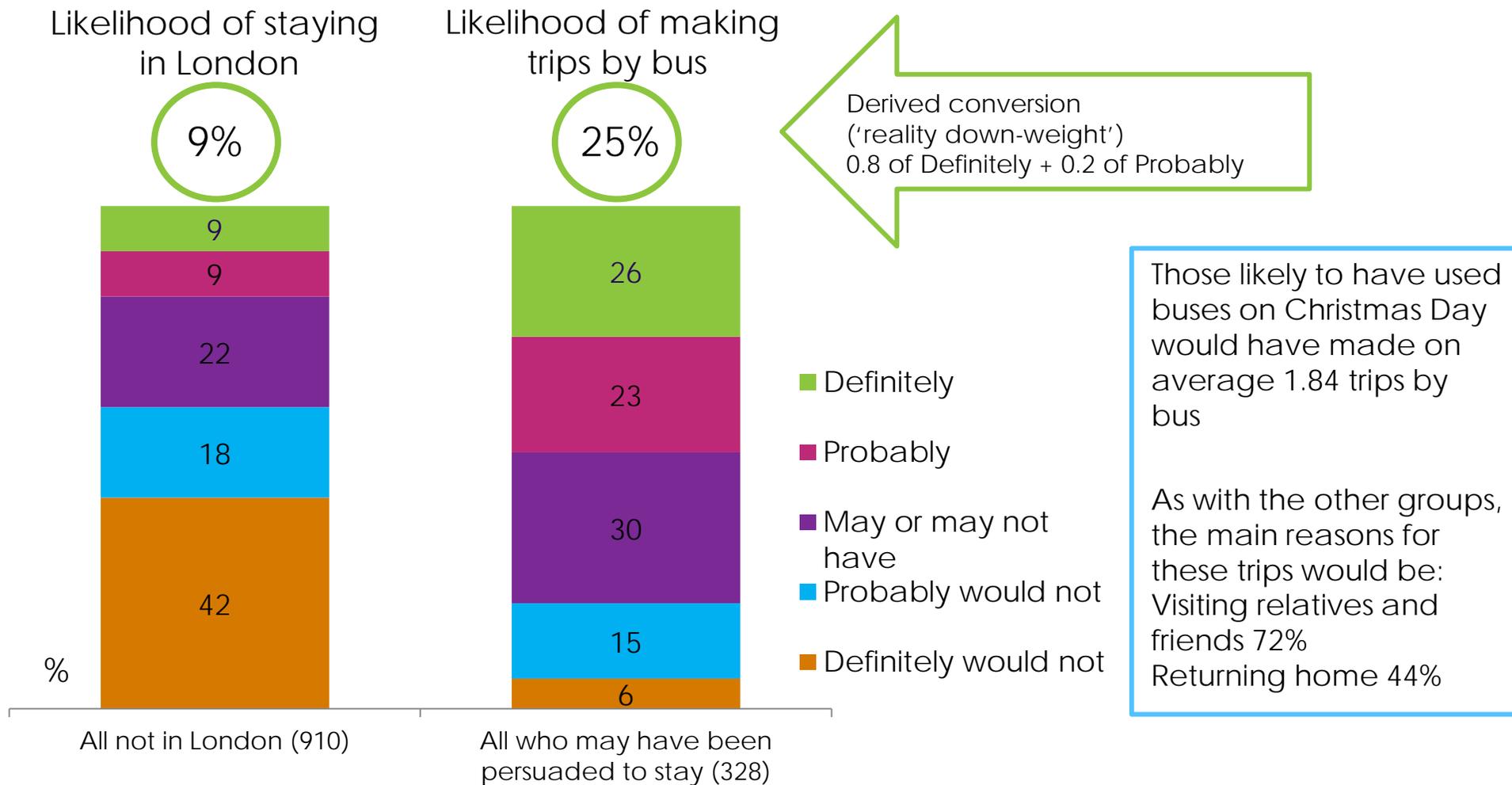


Christmas Day change of travel plans

- staying in London instead of going away
- travelling to/ from Christmas Day destination by bus on Christmas Day itself instead of before or after

18% of those not in London last Christmas may have been persuaded to stay had public transport been running

Half of these would definitely or probably make trips by bus on Christmas Day

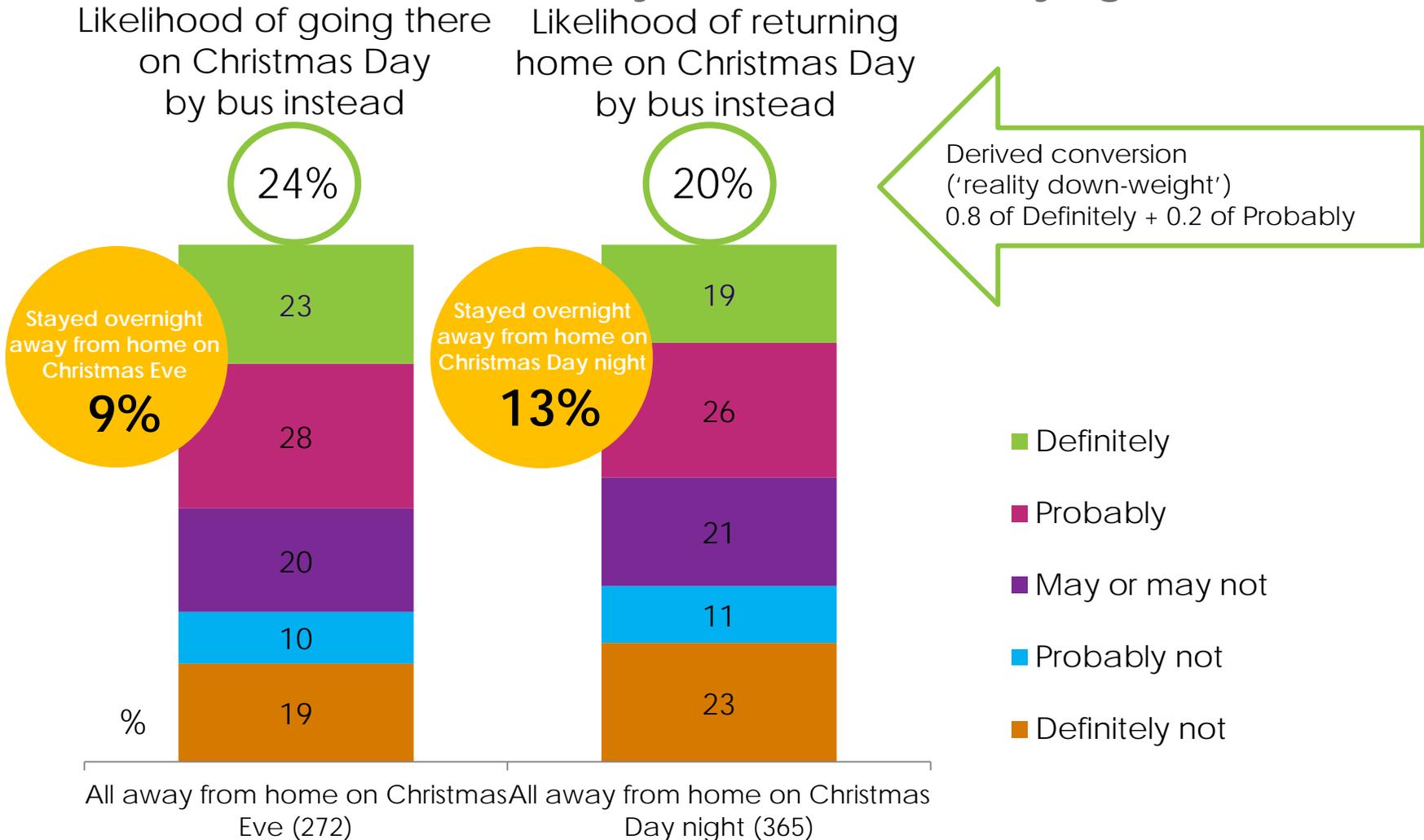


Q6: If public transport had been running in London on Christmas Day last year, how likely would you have been to change your plans and stay in London instead?

Q10: How likely would you have been to make a trip or trips on Christmas Day by bus if a bus service had been running?

Base: All in London on Christmas Day/ who may have been persuaded to stay in London had public transport been running

Half of those away from home on Christmas Eve would have opted to travel to their Christmas Day destination by bus on Christmas Day instead. 45% would have returned home by bus instead of staying over



Q18: At the start of Christmas Day, were you at home or did you stay overnight somewhere else on Christmas Eve?
 Q19: If a bus service had been running on Christmas Day last year, how likely would you have been to make your way to where you wanted to be on Christmas Day by bus instead?
 Q19: At the end of Christmas Day, were you at home or did you stay overnight somewhere else?
 Q21: If a bus service had been running, how likely would you have been to make your way back home on Christmas Day by bus instead?
 Base: All/ all away from home at the start/ end of Christmas Day

Number of trips by those who would have changed their travel plans, had buses been running

All adult Londoners (100%) 6,657,000 (includes fare-paying and non-fare-paying Londoners)

Change of travel plans

Not in London on Christmas Day (23%)
1,531,110

Stayed overnight away from home on Christmas Eve (9%)
599,130

Stayed overnight away from home on Christmas Night (13%)
865,410

Stay in London

Travel there in the morning

Go home in the evening

Would have stayed in London if PT running (9%)
137,800

Would have made bus trips (derived conversion 25.4%)
35,001

Would have travelled there by bus instead (derived conversion 24%)
143,791

Would have travelled home by bus instead (derived conversion 20.4%)
176,544

Bus trips made if buses running (Mean 1.84)
64,402

Bus trips made if buses running (Mean 1.0)
143,791

Bus trips made if buses running (Mean 1.0)
176,544

384,737 bus journeys would have been made by those who would have changed their travel plans, had a bus service been running

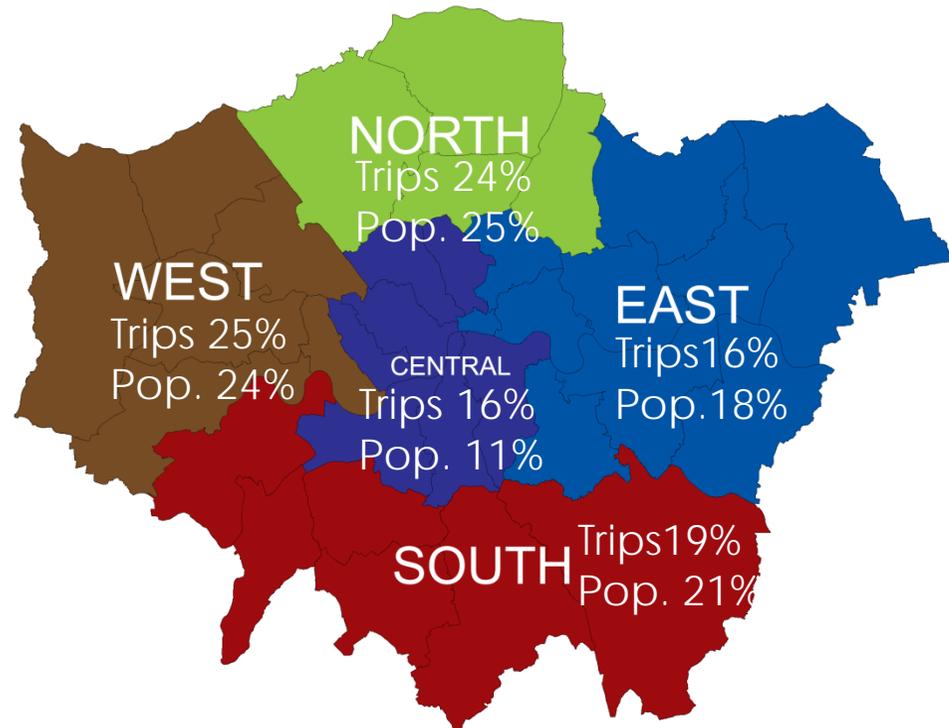


Bus demand (trips) by region and borough

Bus demand by London region

Christmas Day bus demand forecast (number of trips) splits evenly between inner and outer London while the population share is skewed towards outer. Share by region is largely in line with population except the Central region has higher demand

Inner/outer	Trips	Population
Inner	49%	40%
Outer	51%	60%

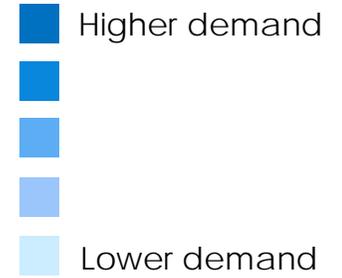
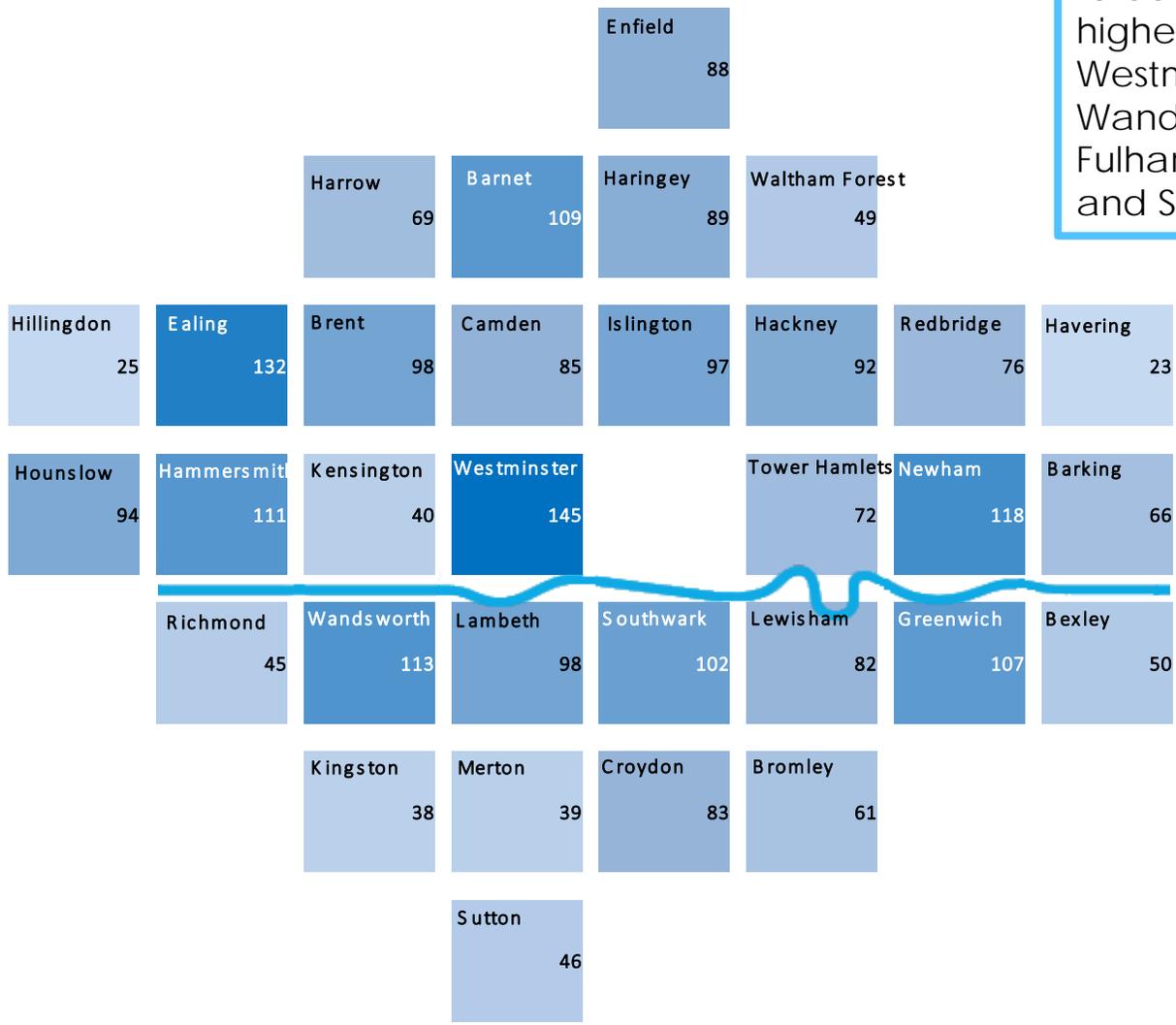




Bus demand by borough of residence

Christmas Day bus demand forecast (number of trips) is highest for the boroughs of Westminster, Ealing, Newham, Wandsworth, Hammersmith & Fulham, Barnet, Greenwich and Southwark

Demand in 000s of bus trips



GROSSED UP BUS TRIP VOLUME ESTIMATE





Comparisons with January
telephone survey

Comparing results with earlier telephone study

We have observed some differences between the results from this survey and those from a telephone survey conducted in January 2015 and set out reasons for the differences on the next slide

		January 2015 telephone study	August 2015 online study
Christmas Day travellers	Switching to bus	452,676	800,497
	Making more trips	Not covered	851,984
Non Christmas Day travellers	Making trips	695,311	506,479
Change of travel plans	Stay in London, travel there in the morning, go home in the evening	Not covered	384,737
Total		1,147,987	2,543,697

Reasons for differences in estimates between the two studies

- January' 15 was a telephone survey bolt on to the Safety & Security tracking survey
 - Questions were asked at the end of an already long survey. Therefore we may be seeing some respondent fatigue causing an under-claiming for those in London on Christmas Day
- The questions determining the location of the respondent on Christmas Day were worded differently in the two surveys which may be affecting the results
- The question determining number of trips on Christmas Day was more explicit in the August study, clearly instructing respondents to count there and back as two trips (average 2.0). This may have resulted in an under-estimation of the mean number of trips in the January study (average 1.7)
- In January' 15 we did not include questions to quantify the number of bus trips which would be made by people who made trips on Christmas Day
 - To find out whether they would have made additional trips had buses been running (+851,984)
- In January' 15 we did not include questions to identify the number of bus trips that would be made by people changing where they were on Christmas Day had buses been running
 - Might have stayed in London rather than going away (+64,402)
 - Might have travelled to and/ or from their Christmas Day location on the day itself rather than getting there before hand or travelling home afterwards (+320,335)
- Based on desk research we believe that figure from this study (August 2015) appears to be more realistic. A recent DfT report gives total number of bus trips in London for 2014 at 2.4 billion*, which translates to 6.6 million a day. The August 2015 results show demand at 36% of the average daily demand

*https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/412858/quarterly-bus-statistics-oct-to-dec-2014.pdf



Likely Christmas Day bus users

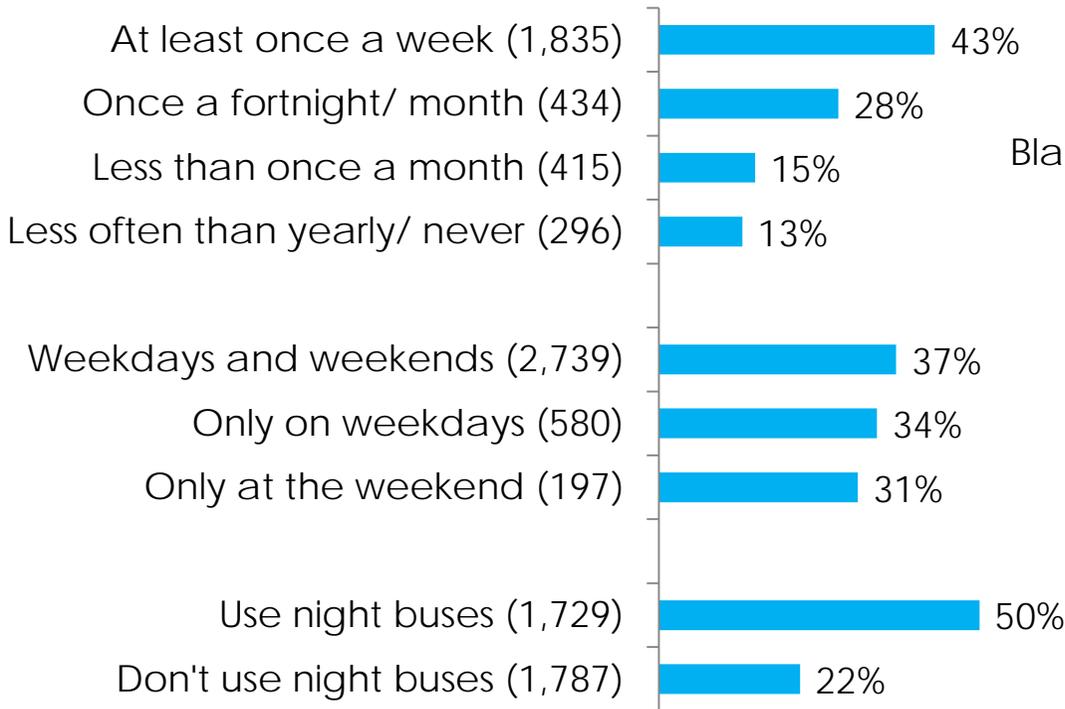
- by general bus usage
- amongst frequent users of other modes
- gender, age and social class

34% of Londoners would definitely or probably have used buses on Christmas Day last Christmas

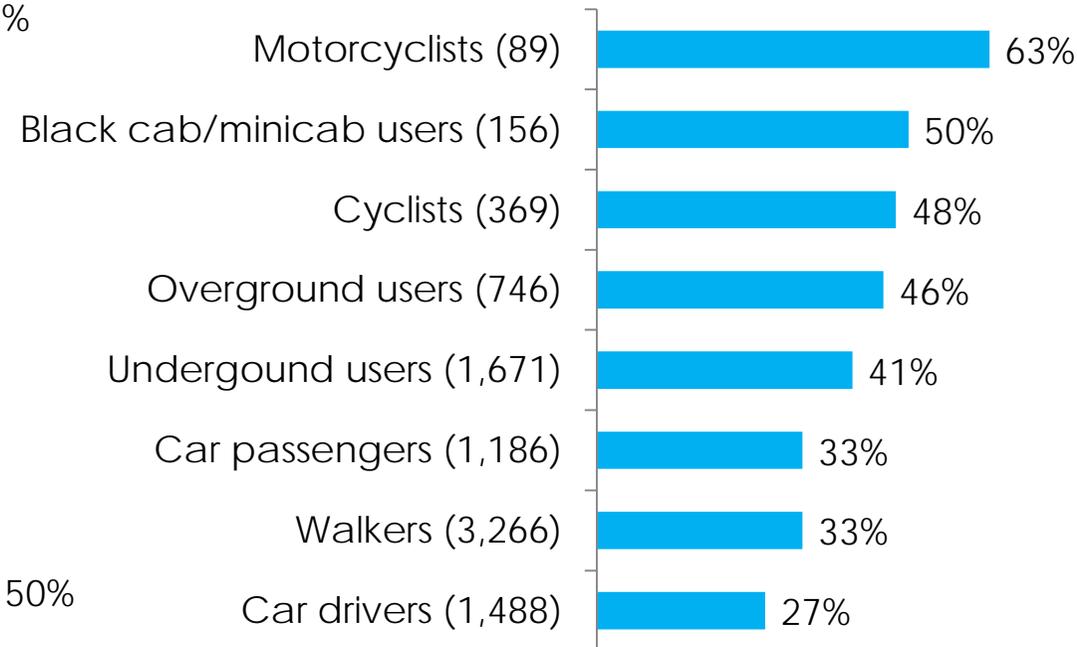
Weekly bus users are not surprising more likely to have used buses on Christmas Day. Half of night bus users would have used buses on Christmas Day. Weekly back cab and minicab users, cyclists, motorcyclists and Overground users are also more likely to have used buses

All Londoners (3,890)  34%

By bus usage

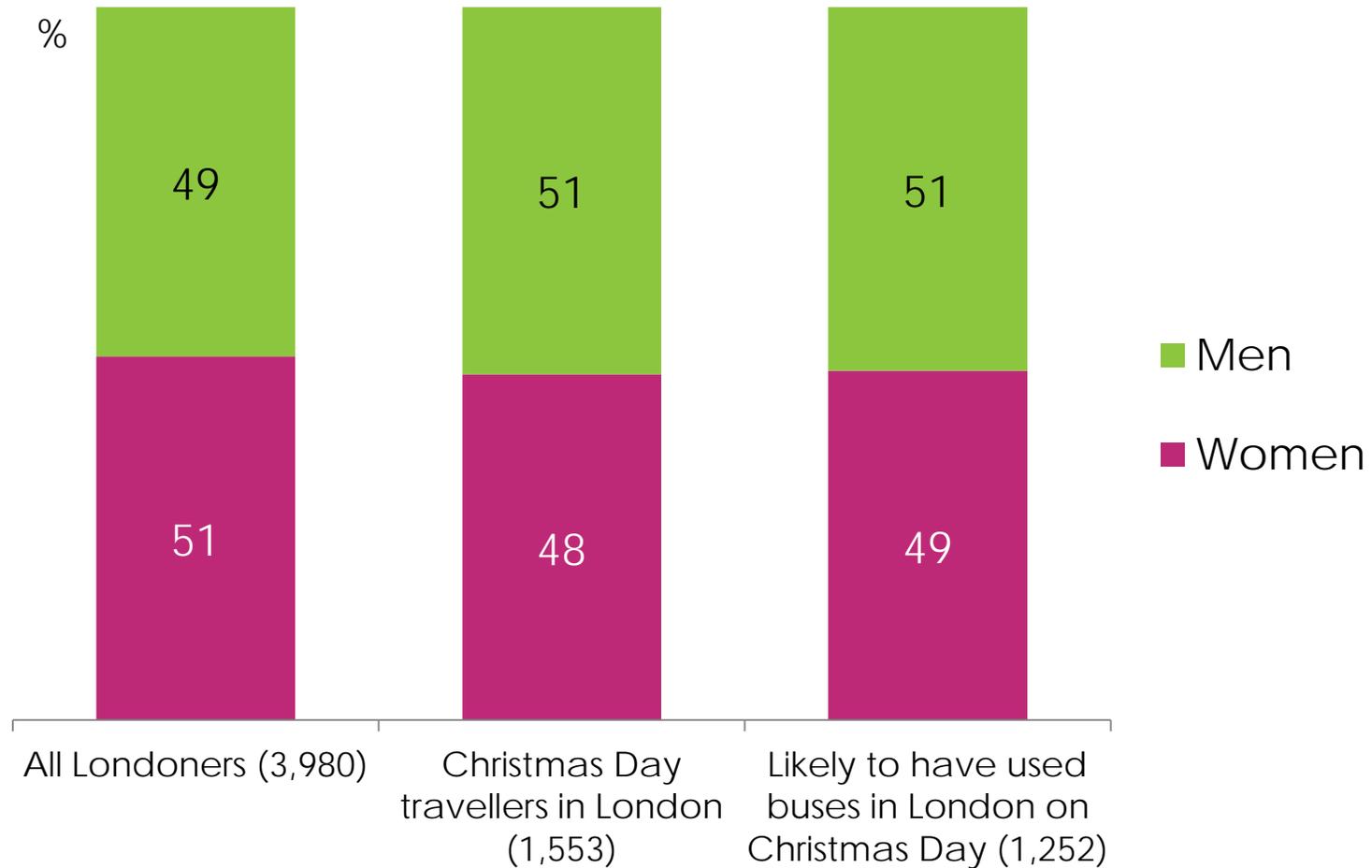


By weekly users of other modes

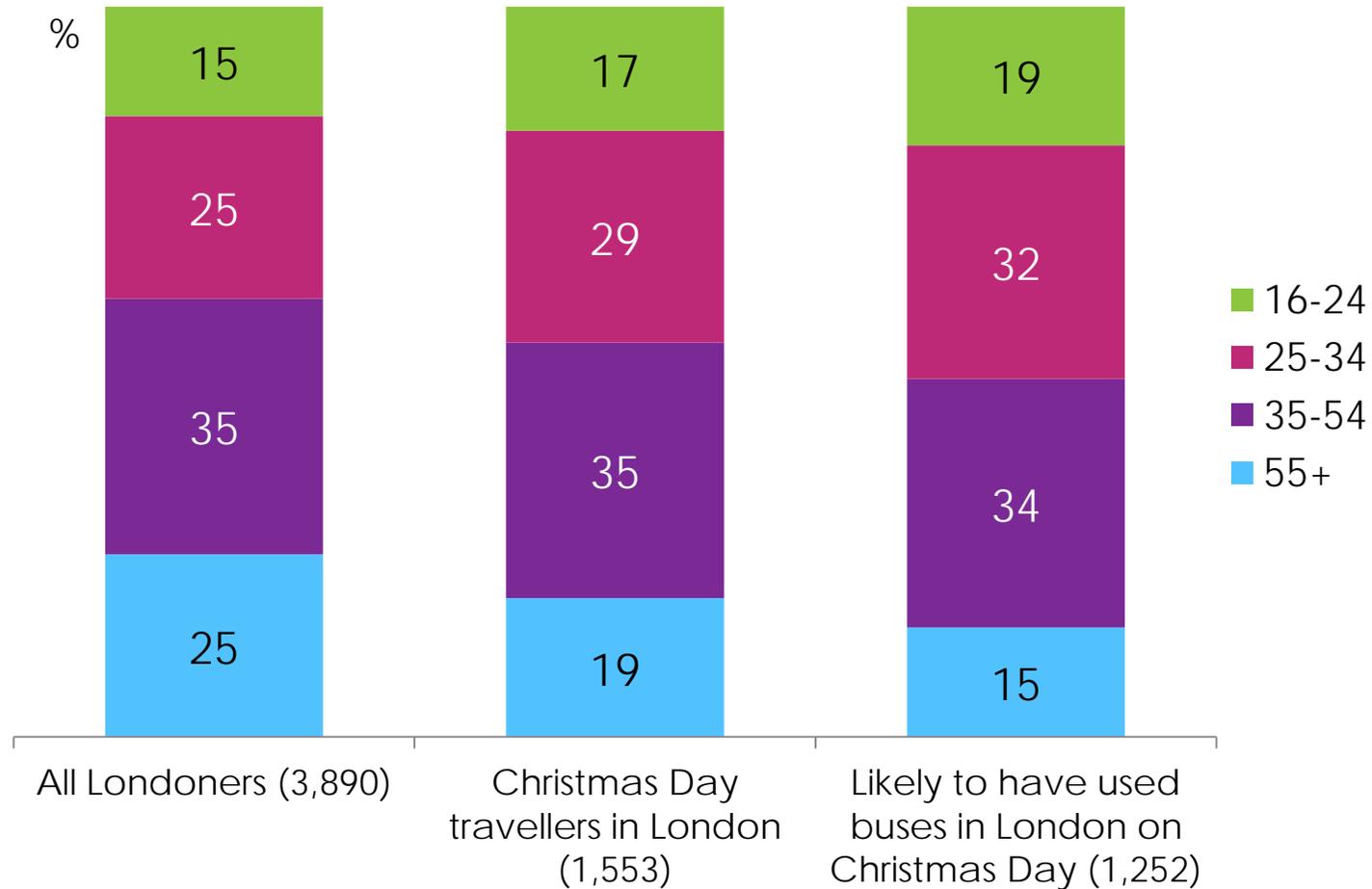


LIKELY TO HAVE USED BUSES HAD BUSES BEEN RUNNING (DEFINITELY OR PROBABLY AT Q10, Q13, Q19 or Q21)

No difference in gender profile of Christmas Day travellers and likely bus users when compared to the total population profile



Bus considerers are younger than the general population - half are 16-34



No difference in the profiles of Christmas Day travellers and likely bus users by social class



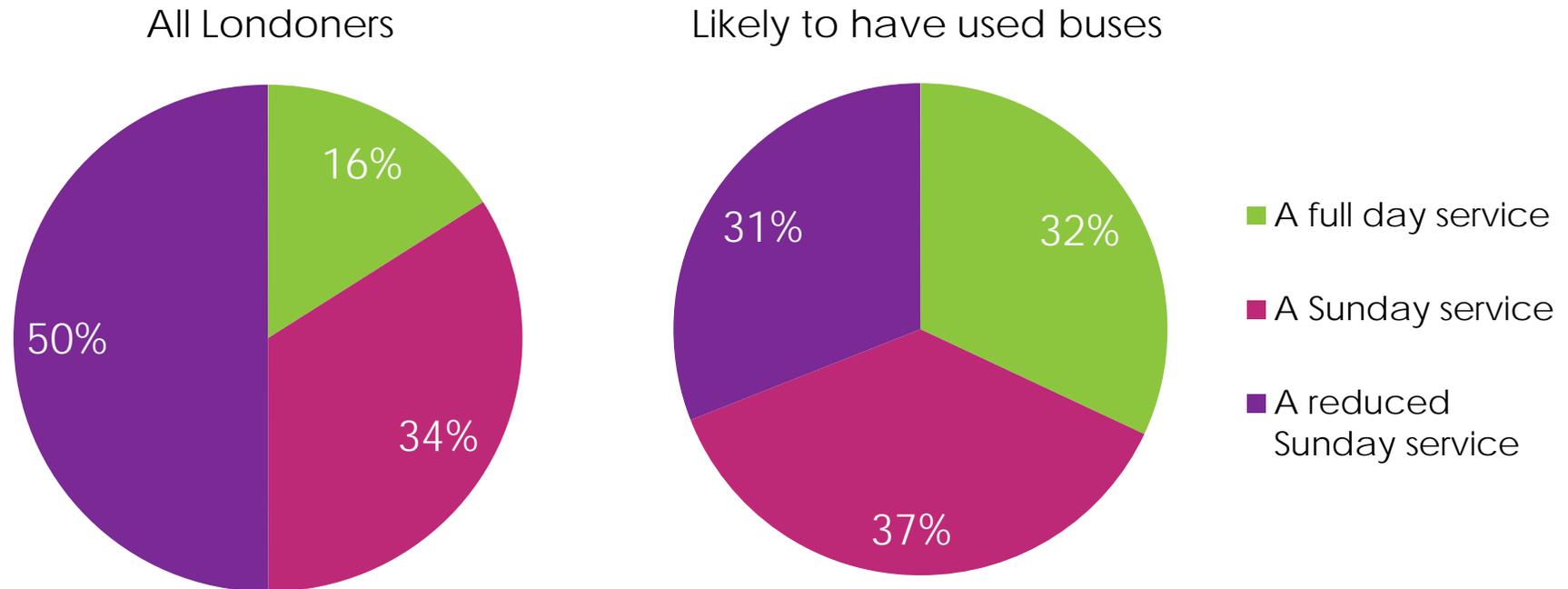
Recalculated excluding those refusing occupation



Service expectations

Half of all Londoners would expect a reduced Sunday service to run on Christmas Day

Those likely to have used buses last Christmas have expectations of a more frequent service than Londoners in general – 32% would expect a full day service and 37%, a Sunday service

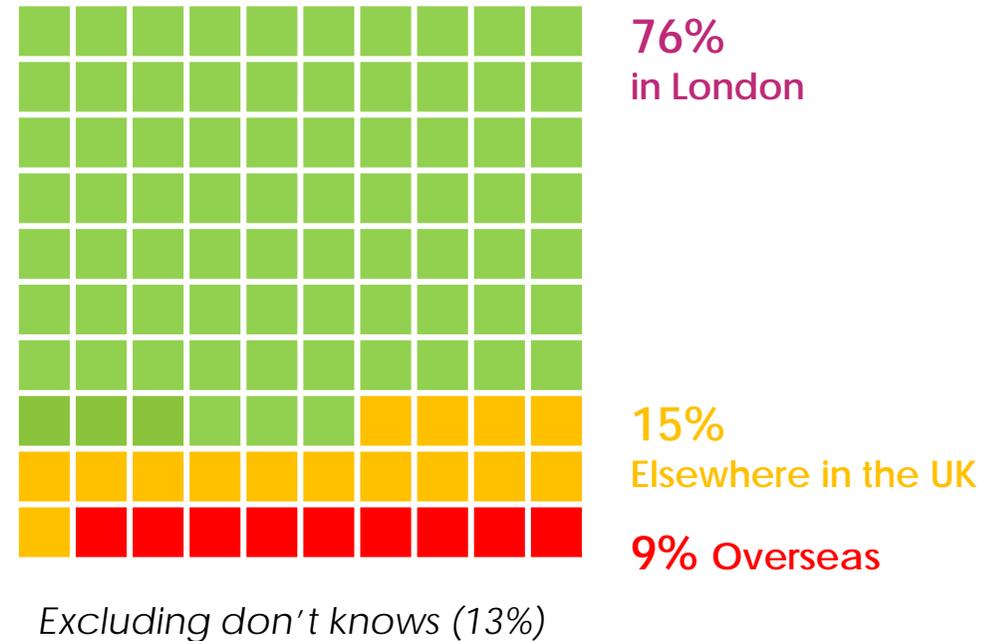


Q37: If a bus service were to run on Christmas Day, which of the following services would you expect?
Base: All Londoners (3,890)/ Likely to have used buses on Christmas Day (1252)

The image features a solid teal background. At the top, there are white geometric shapes: a triangle pointing right on the left, and a larger shape on the right that resembles a stylized 'X' or a diamond with a horizontal bar through its center.

Next Christmas (2015)

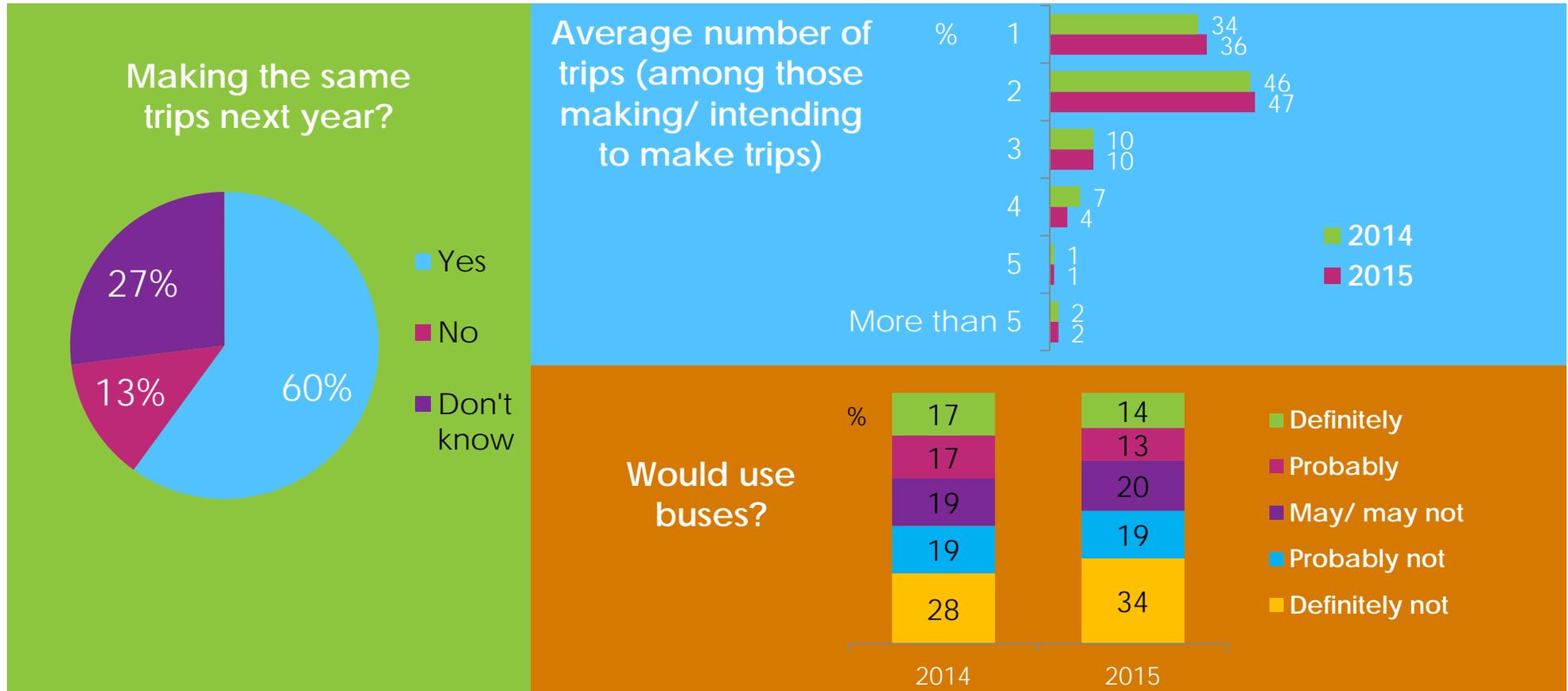
Three quarters of Londoners will spend Christmas Day in the Capital this year – same result as for last year (77%)



Q2: Where will you spend Christmas this year (2015)?
Base: All (3,890)

Most of those making trips last Christmas envisage making the same trips in 2015 and making the same choices regarding buses if buses are running

Key metrics for 2015 i.e. number of trips, likelihood of using buses are similar when comparing between the two years



Q23: Will you be making the same trips in London and using the same type(s) of transport, this coming Christmas (2015) as you did last Christmas (2014)? Base: All who will be in London next Christmas (2015) who made one or more trips in London last Christmas (2014) (1,230)

Q8/ Q25: How many trips did you make/ are you likely to make on Christmas Day last year within London? Base: All travelling in London last year (1,553)/ intending to next year (430)

Q10: How likely would you have been/ will you be to travel by bus if a bus service had been/ is running? Base: All in London last year (2,980)/ All who will be in London this year (1,531)