



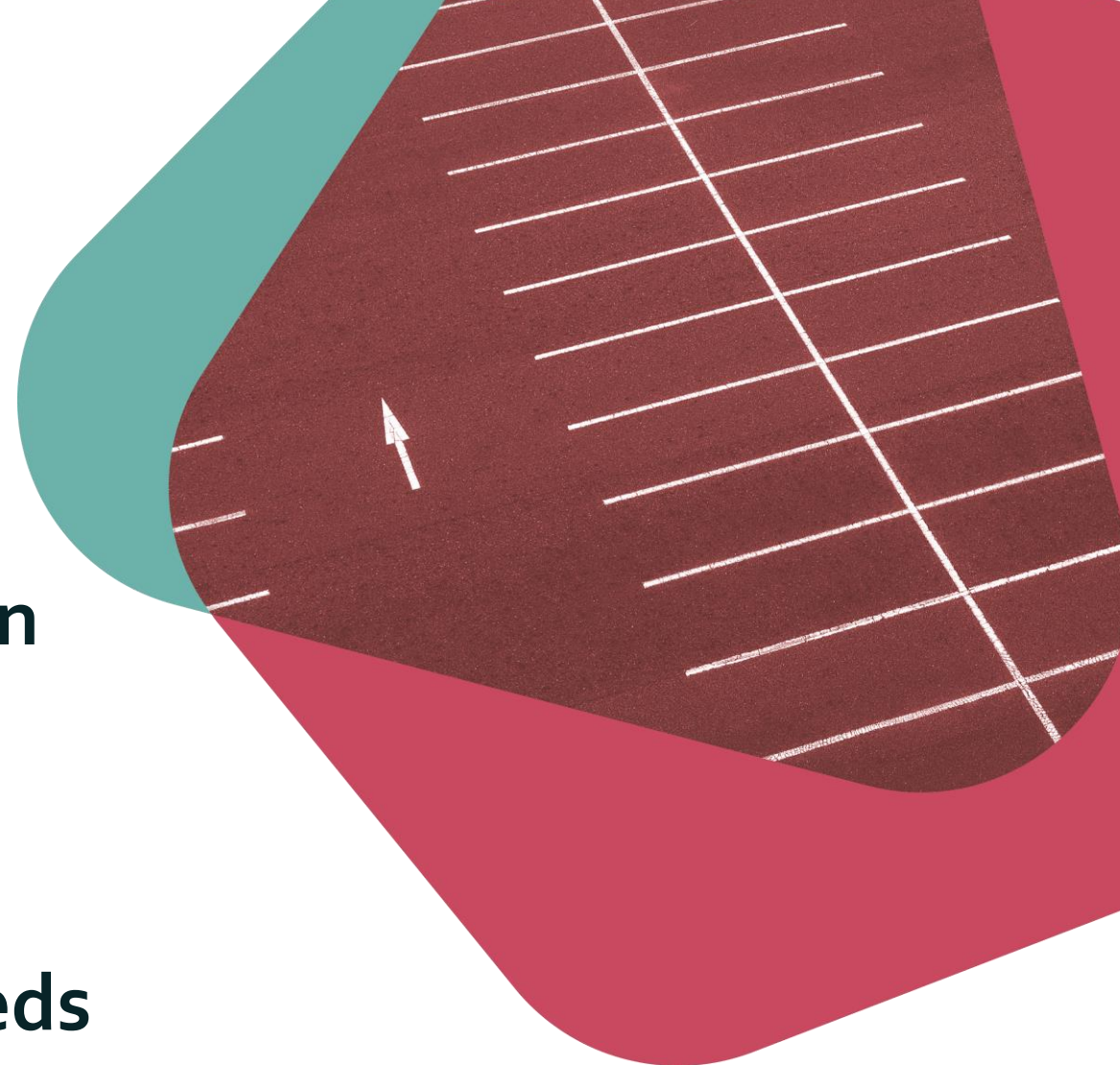
CENTRE FOR RESEARCH INTO  
ENERGY DEMAND SOLUTIONS

# UK Transport and Travel Adaptation Study (TRANSAS)

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**Institute for Transport Studies, Leeds**

7th June 2022

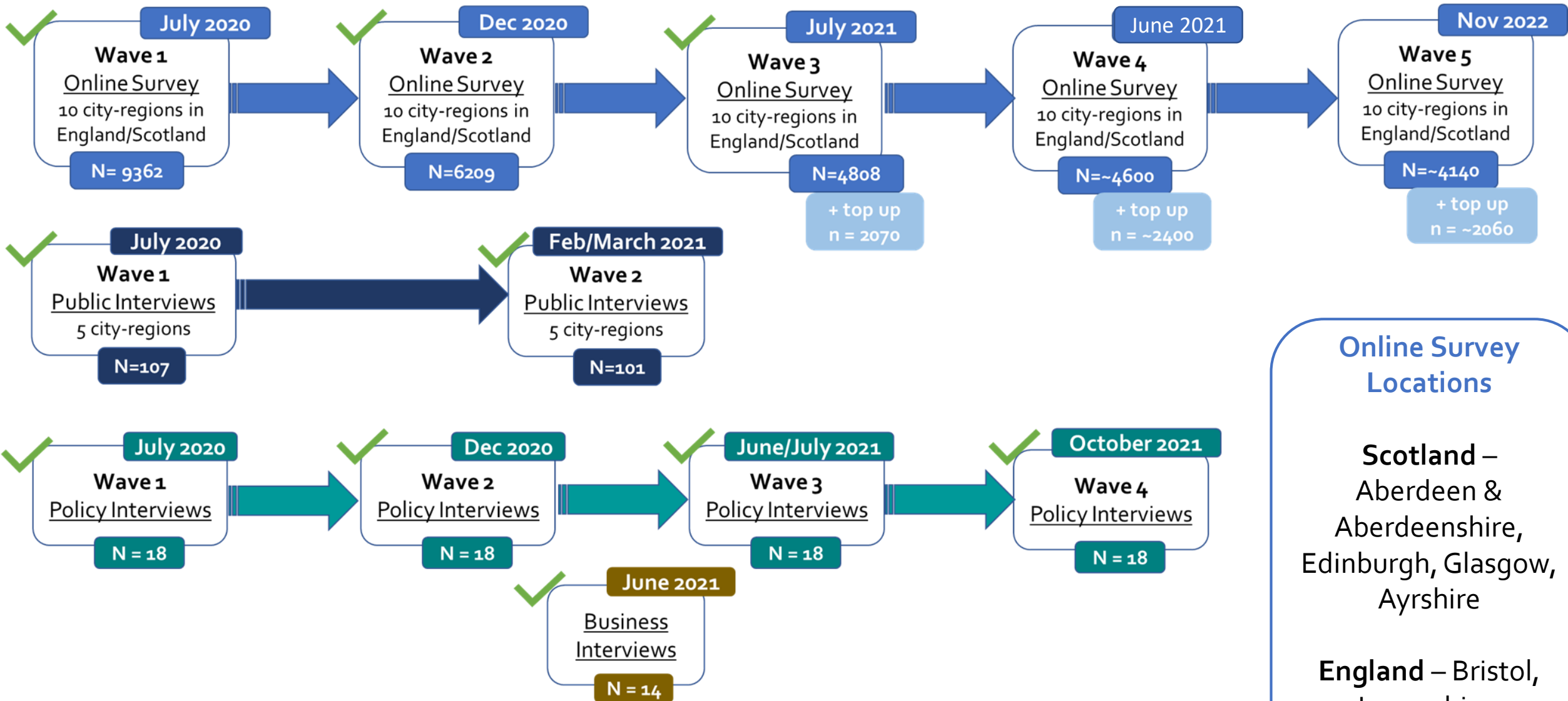
International Transport Forum Roundtable “Shaping Post-Covid Mobility in Cities”



UK Research  
and Innovation

<https://covid19transas.org/>

[www.creds.ac.uk](http://www.creds.ac.uk)



**Online Survey Locations**

**Scotland** – Aberdeen & Aberdeenshire, Edinburgh, Glasgow, Ayrshire

**England** – Bristol, Lancashire, Liverpool, London, Manchester, Newcastle

# TRANSAS – Methodology

# Presentation Outline

1. *WHAT* has changed?
2. *WHO* and *WHERE* have changed?
3. What does this mean for the future blend of modes and activities?



March 2021



Sept 2021



March 2022

<https://covid19transas.org/>

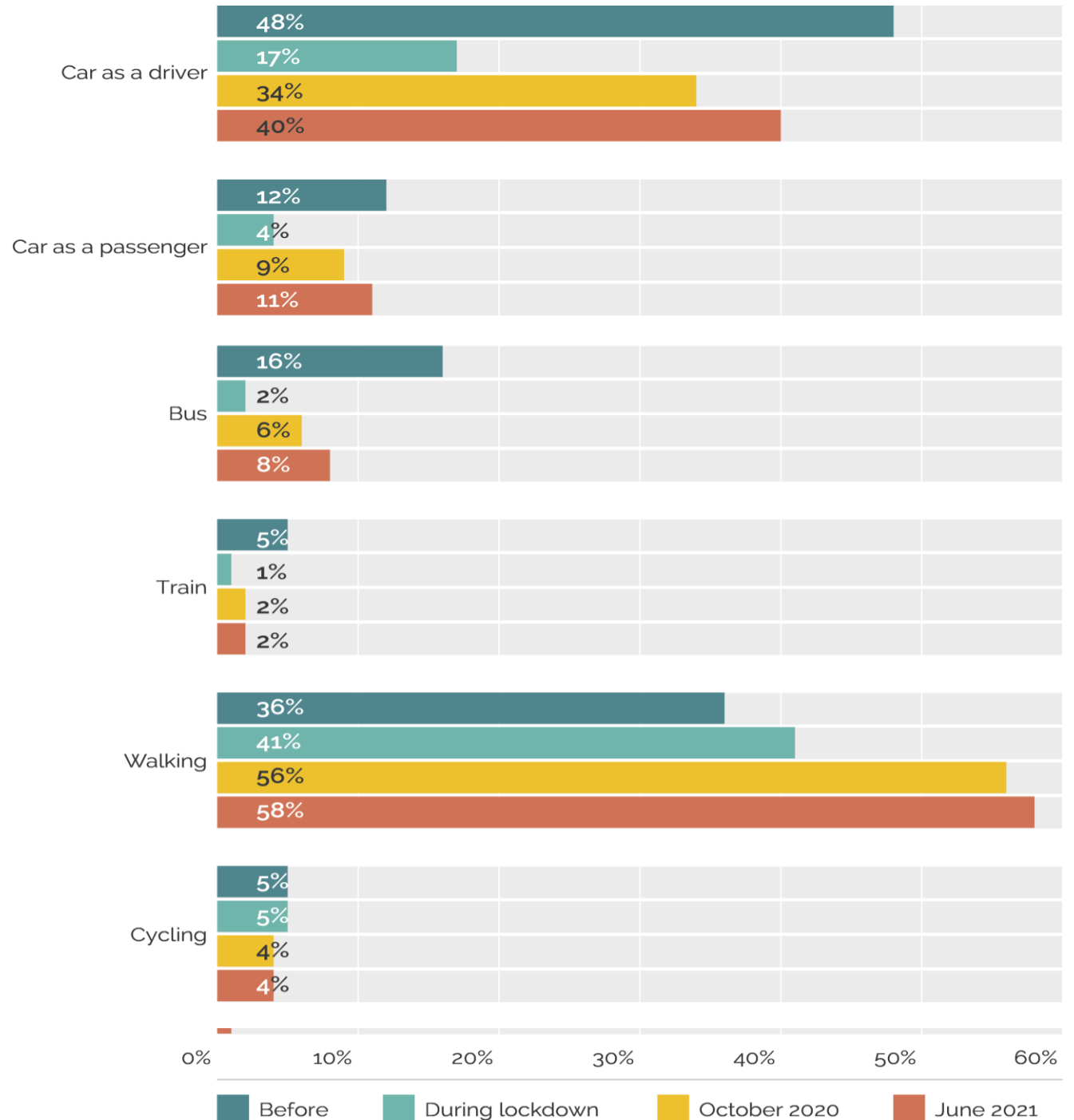
TRANSAS – Key reports to-date

# 1. *WHAT* has changed?

- Absolute and relative usage of different modes
- Destinations, frequencies, timings of journeys
- Balance of time spent on activities
- Car ownership levels
- Choice and aspiration of where to live
- Attitudes to travel and travel modes

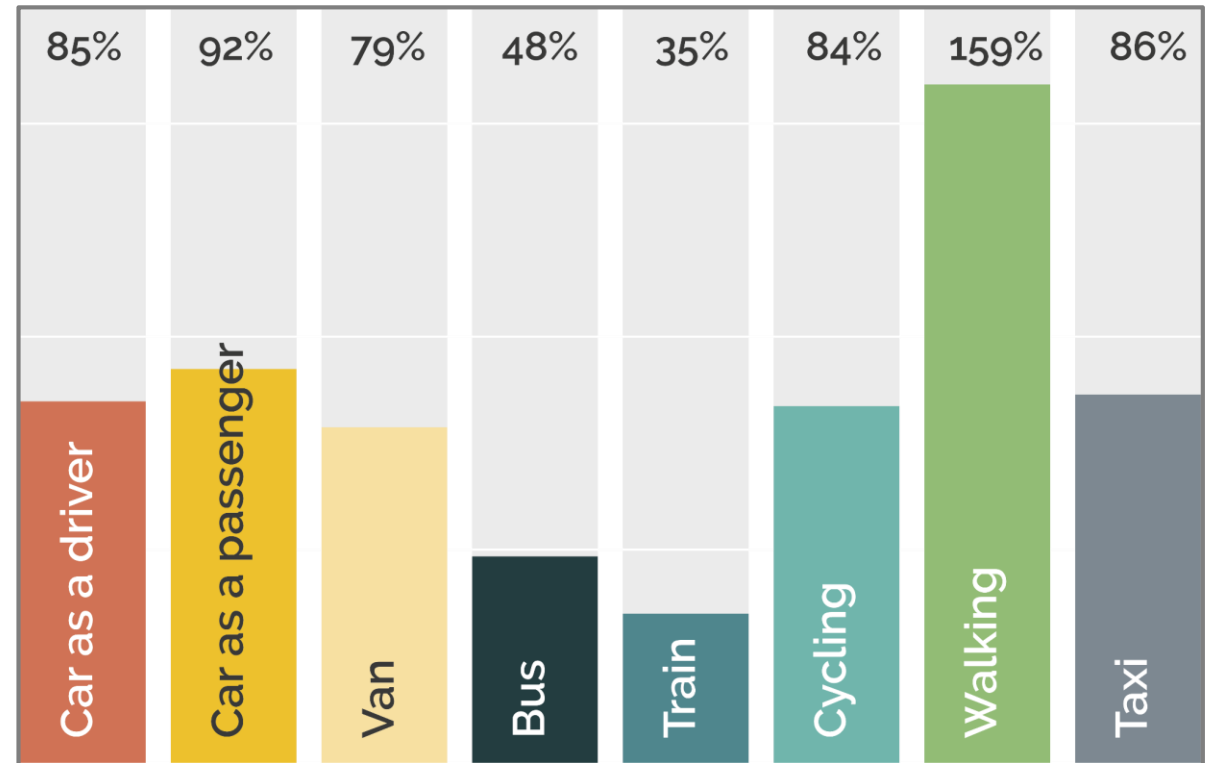
# Mode use at least 3 days a week (W1-W4)

Weighted. Before N=9362; during lockdown N=9362; October 2020 N=6209; June 2021 N=6878



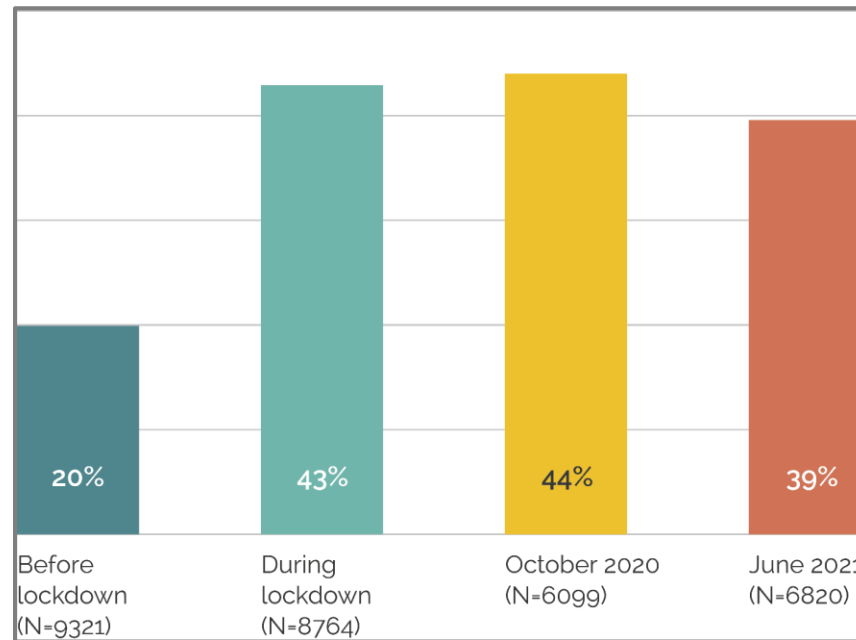
*All modes -  
except for  
walking - are  
used less  
frequently  
than pre-  
pandemic  
levels*

Weighted. Before N=9362;  
June 2021 N=6878.



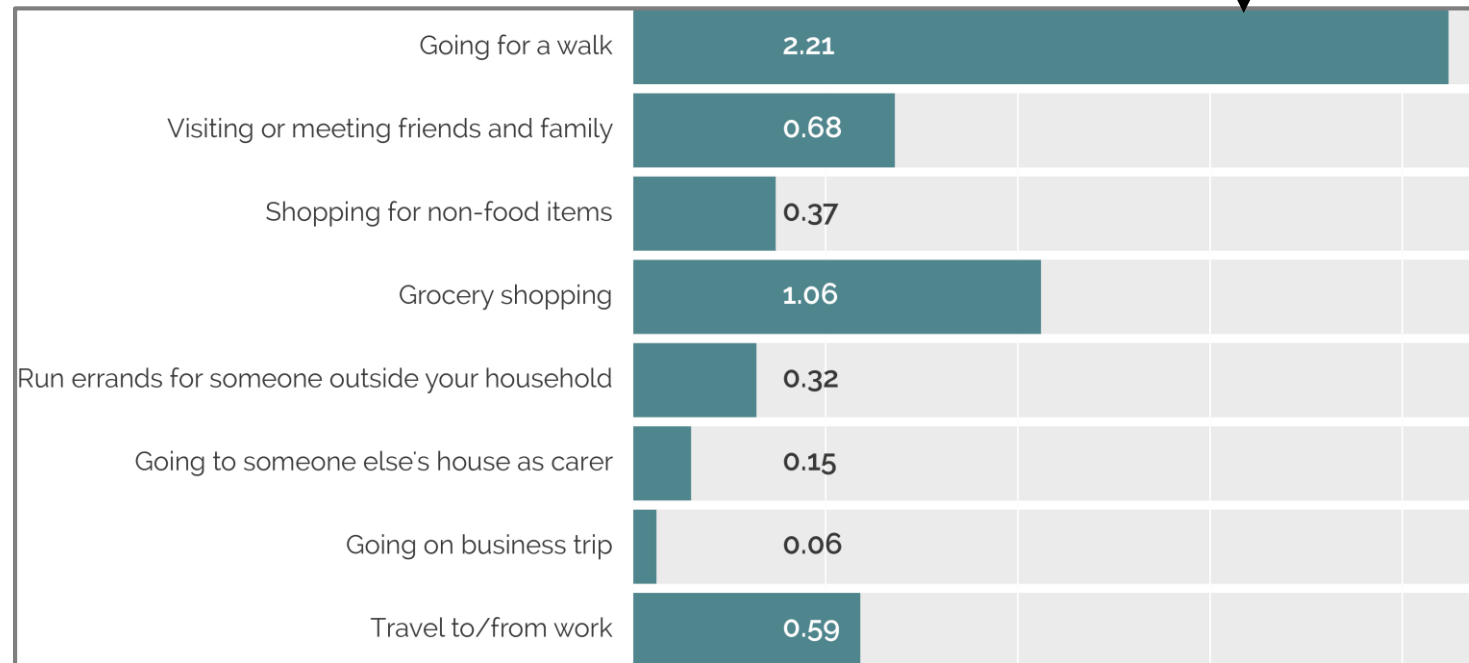
Mode use at least three days a week in June 2021 as a proportion of pre-Covid levels (N=6,878)

*Walking levels are higher for more than just leisure, and they have stayed up*

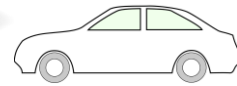
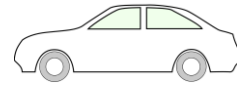


Average % journeys involving walking (N=4,808)

Mean days per week for each journey purpose in June '21 (N=6,878)

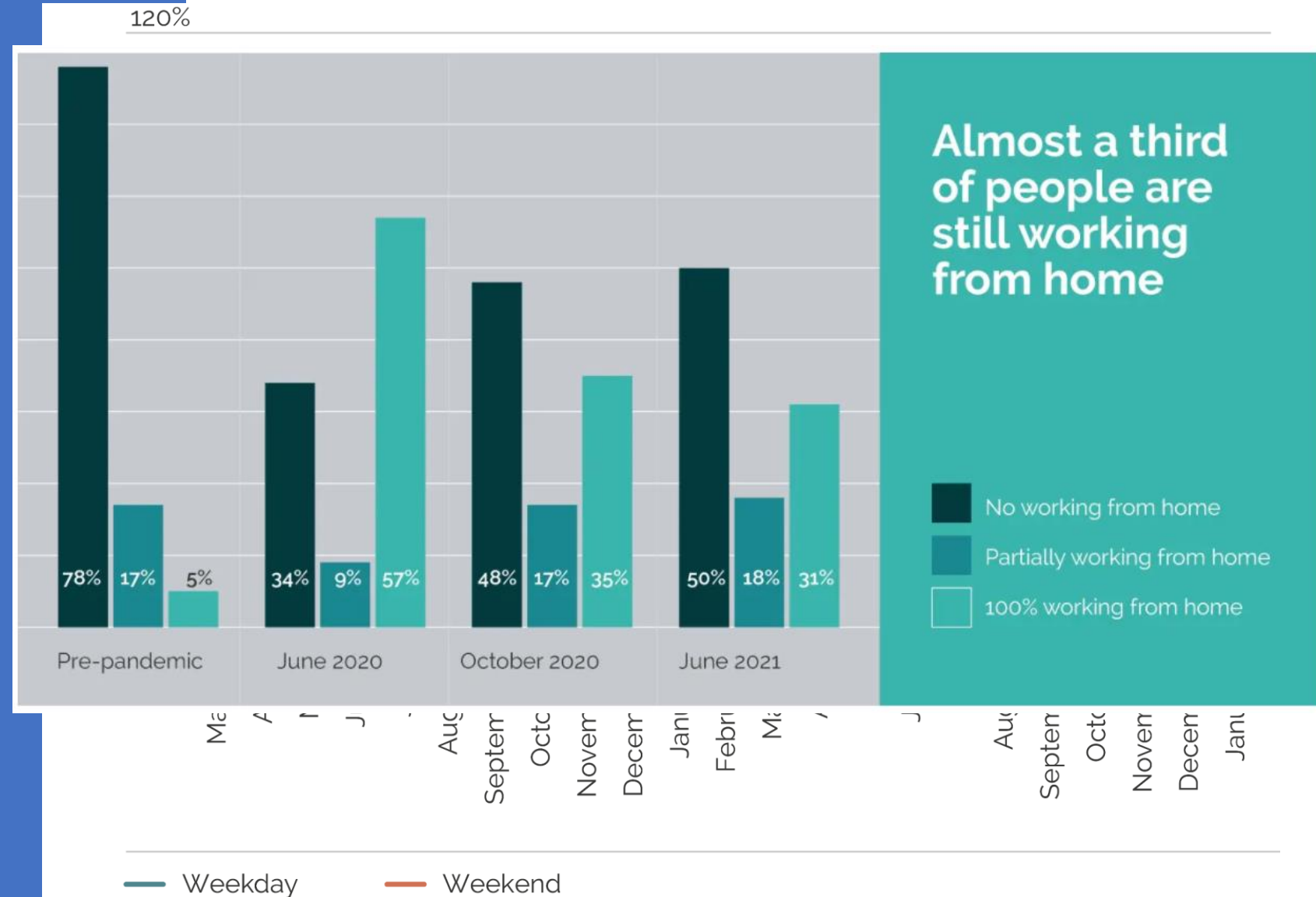


# Where are people spending their time?

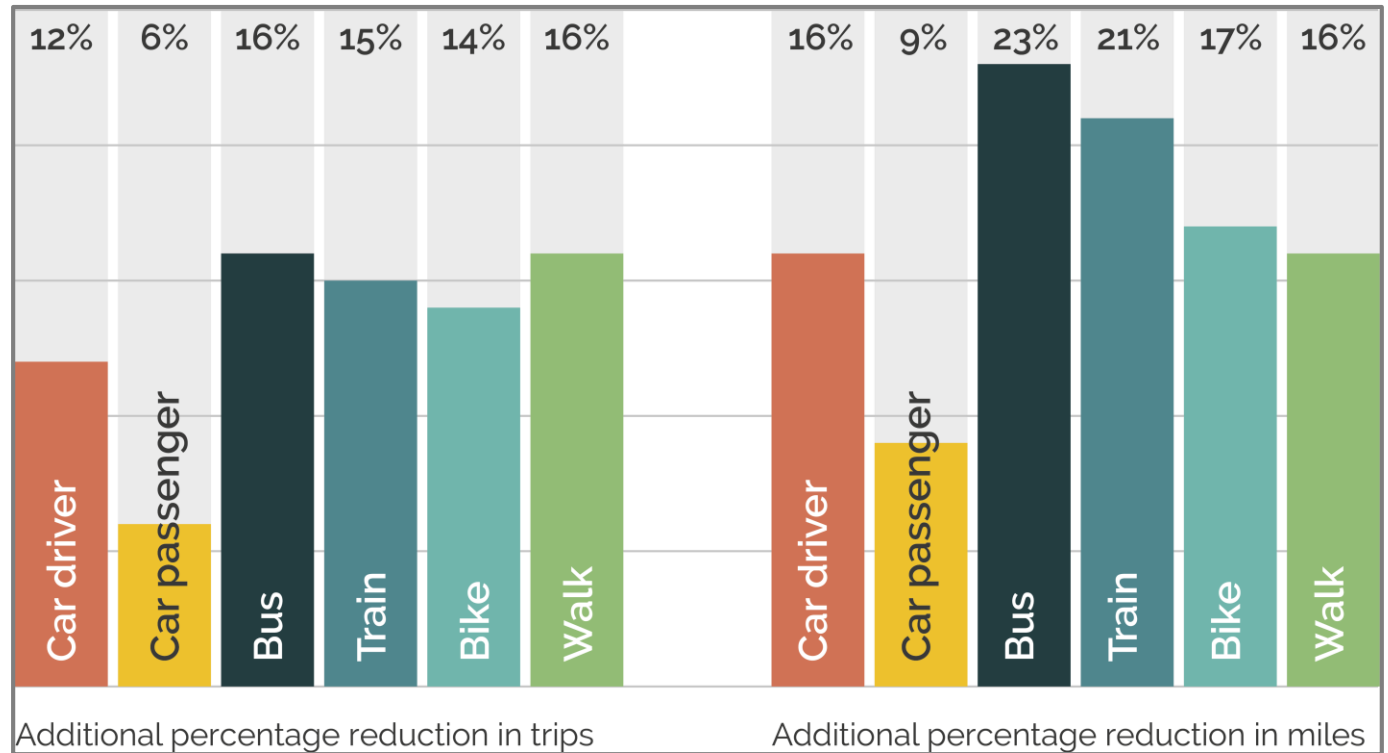




*Working from home (WFH) continues to be a key factor*



*With 50% of June 2021's levels of WFH, car commuting will fall by ~16%*



**% reduction in commute trips and miles saved per mode over and above pre-Covid levels if 50% of June '21's levels were maintained (N=6,878)**

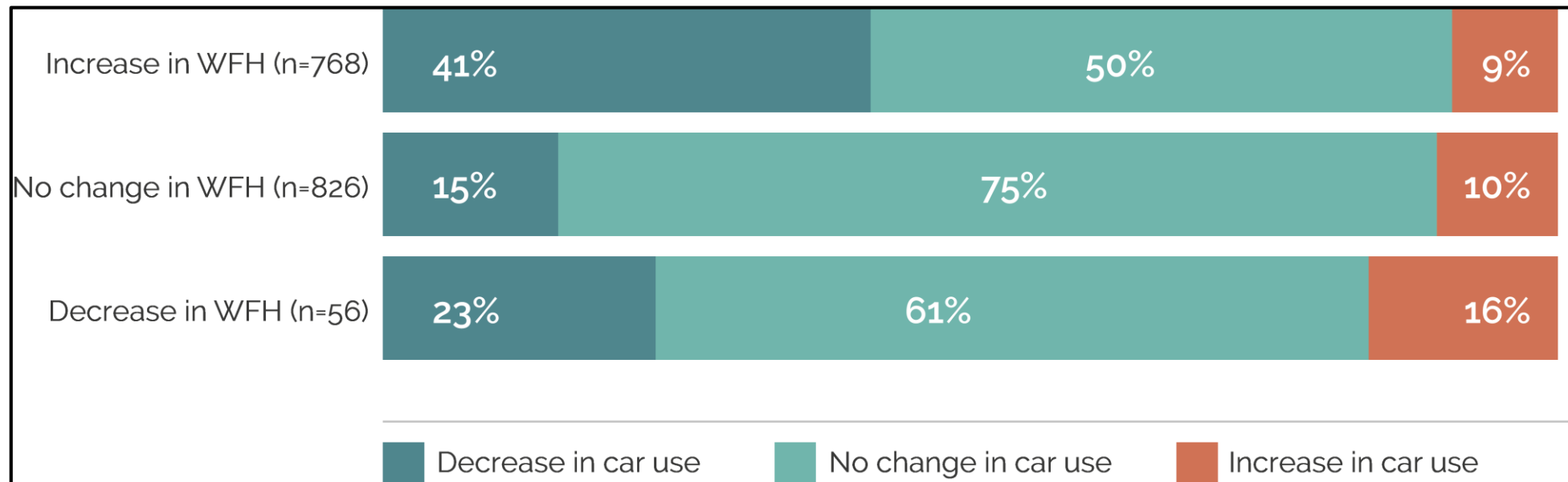
Plus our data shows that WFH leads to reductions in the use of the car for other journey purposes. (see next slide)

# Those who increased their WFH also reduced their car use the most (for all purposes)

Ave. days per week driven vs. amount worked from home. June 2021 (N=3495, W3 weighted, P ≤0.001)

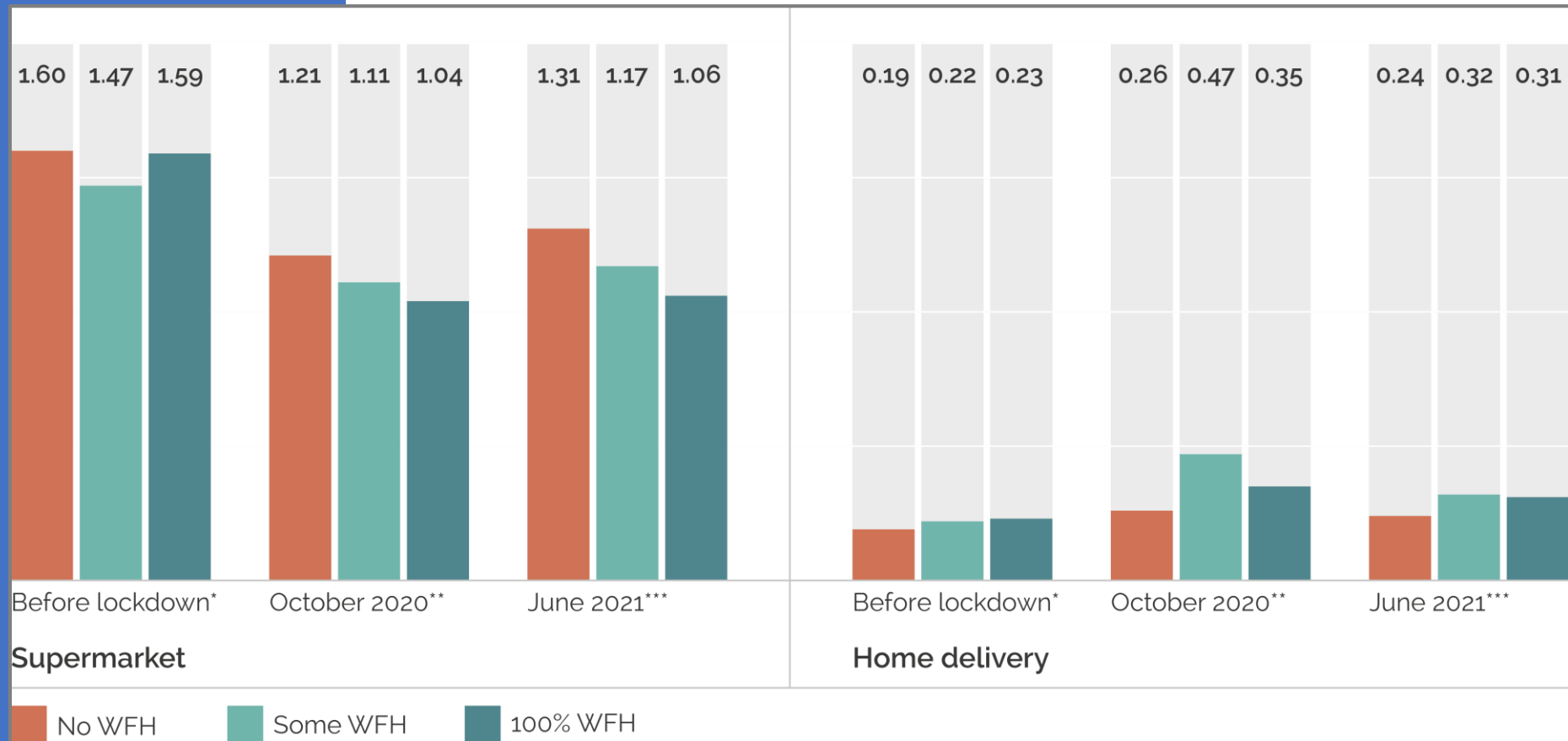
	No WFH	Some WFH	100% WFH
Ave days per week on which a car is driven	2.83	2.47	1.65

Proportion of people in each working from home change segment split by change in car use, for the time period pre-Covid-19 (February/early March 2020) to June 2021 (N=1650 P ≤0.001)



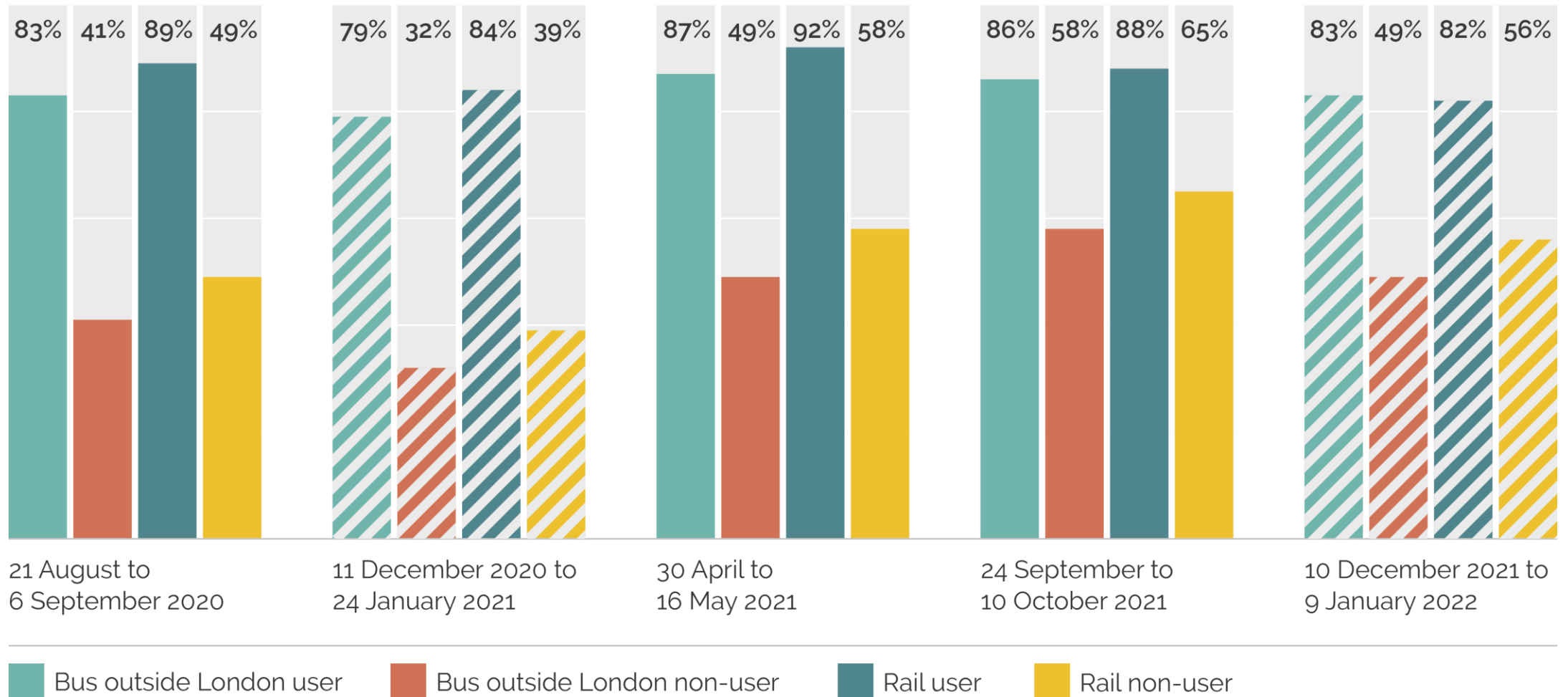
*The same retail spend has been achieved*

*with less physical mobility*

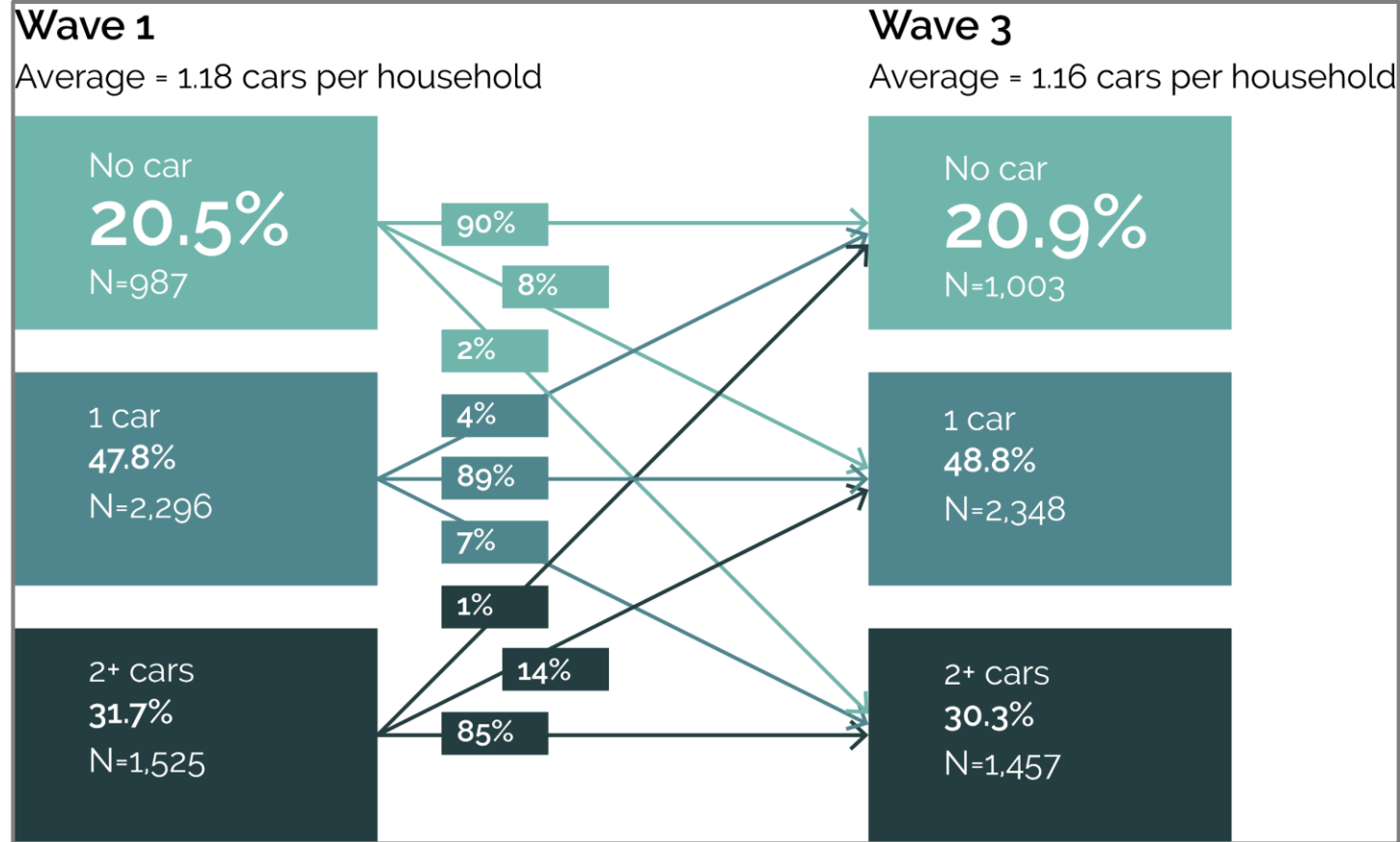


**Average (mean) days per week visiting supermarket or receiving a home grocery delivery at each time point split by level of WFH at that timepoint. Before lockdown N=2406; October 2020 N=2052; June 2021 N=2112. \* not significant; \*\*p <0.01; \*\*\*p<0.001.**

# The implications for public transport will be significant



# Average car ownership has fallen



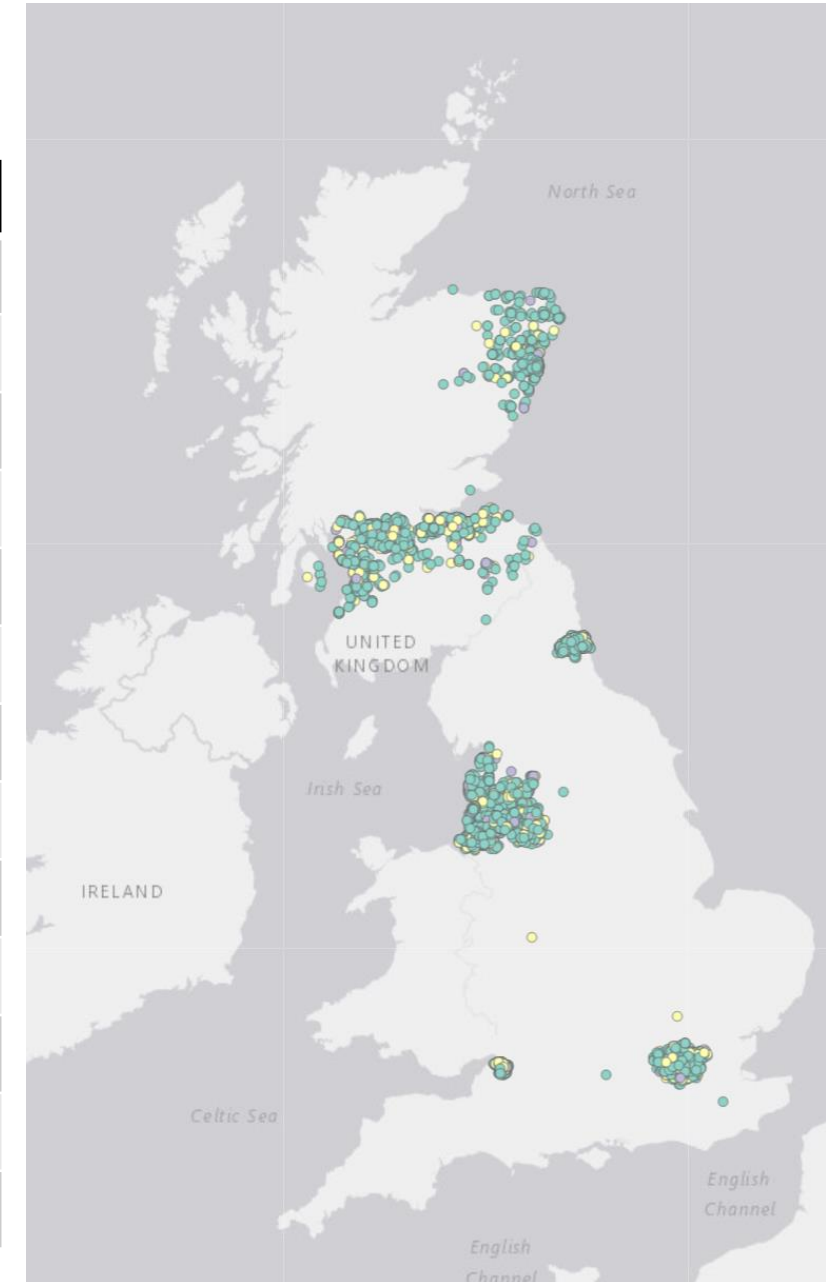
Changing patterns of household car ownership June '20 – July '21  
(N=4,808)

## *WHO & WHERE* has changed?

- Different responses in different places according to: demographics; labour market, public transport infrastructure; social norms
- Differences across demographic segments
- Differences according to individual health risk but not local pandemic restrictions
- Inequalities in ability/ capacity to change and adapt
- **Therefore policy responses will need to be different from place to place and investments need to be tailored to population segments**

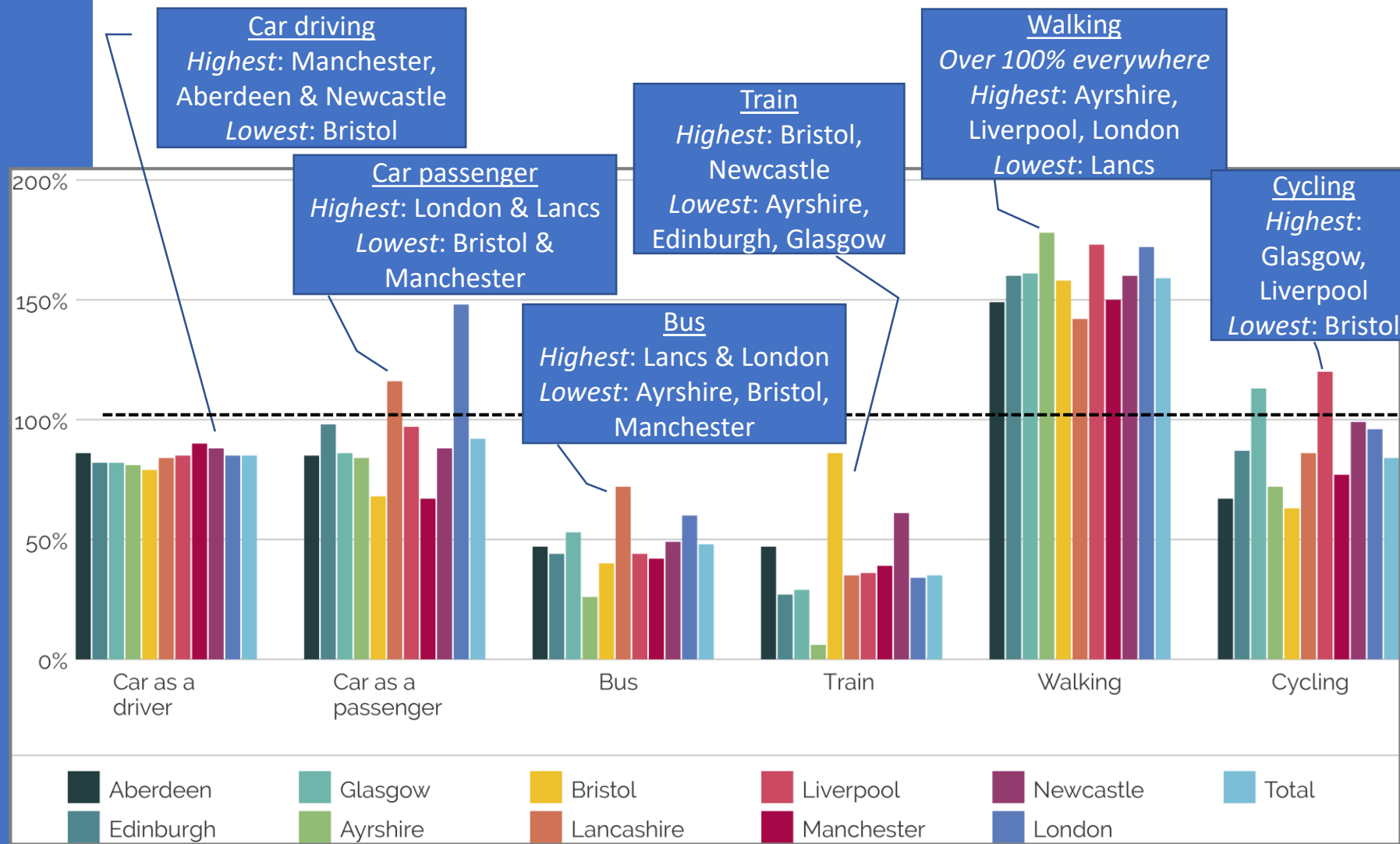
# 10 locations - sample sizes

	<b>W1</b>	<b>W2</b>	<b>W3</b>
Aberdeen	968	622	688
Edinburgh	973	655	711
Glasgow	982	665	697
Ayrshire	659	492	506
Bristol	966	604	664
Lancashire	960	647	722
Liverpool	968	659	730
Manchester	959	624	759
Newcastle	977	656	733
London	950	585	668
<b>Total</b>	<b>9362</b>	<b>6209</b>	<b>6878</b>
<b>Scotland</b>	<b>3582</b>	<b>2434</b>	<b>2602</b>
<b>England</b>	<b>5780</b>	<b>3775</b>	<b>4276</b>





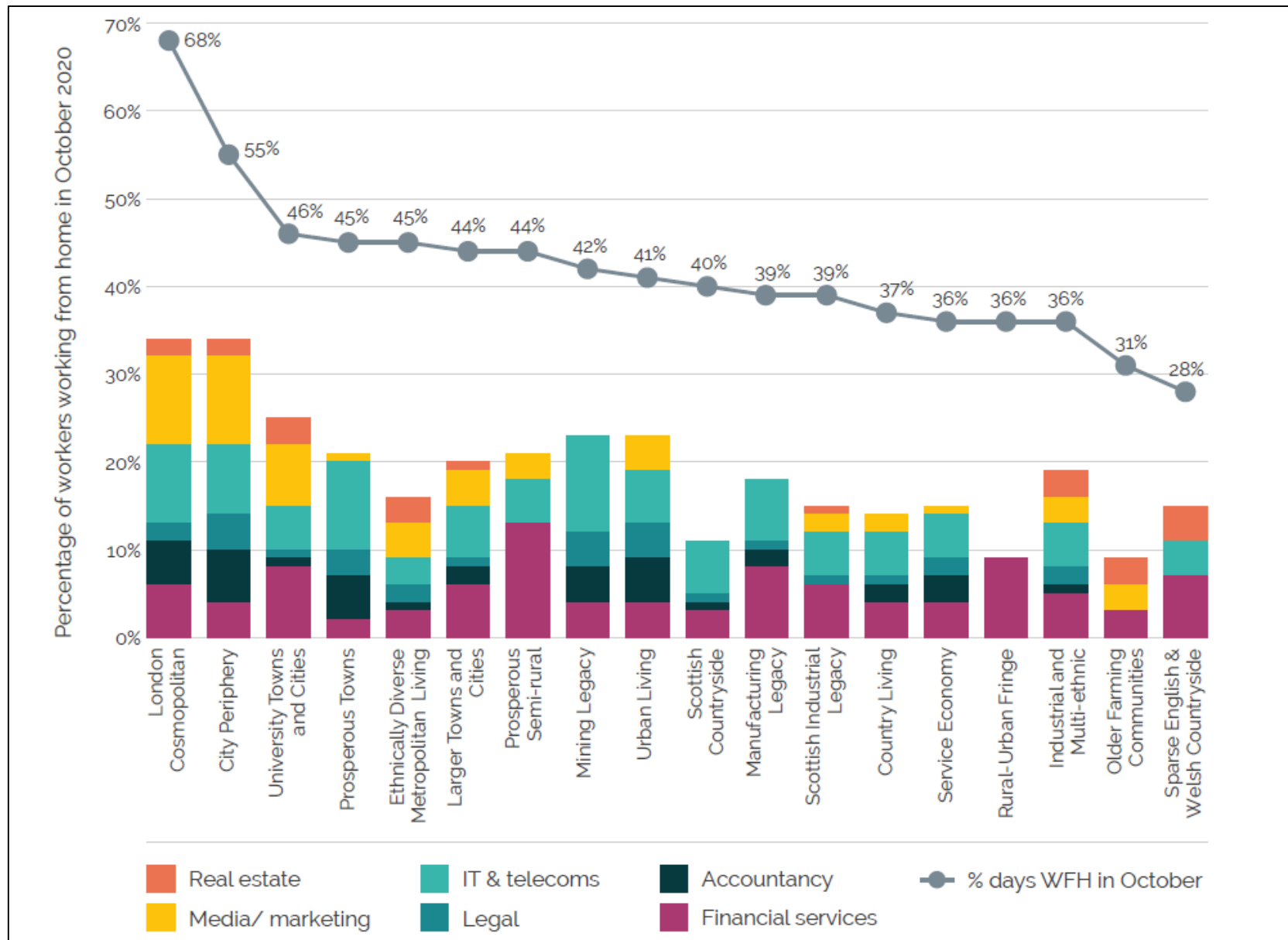
*Car traffic is not back to pre-pandemic levels - anywhere*



**Mode use at least three days a week in June 2021 as a proportion of pre-Covid levels (N=6,878)**

*Levels of WFH between locations were uneven before + during Covid*

*Rates of workplace return have also been variable*

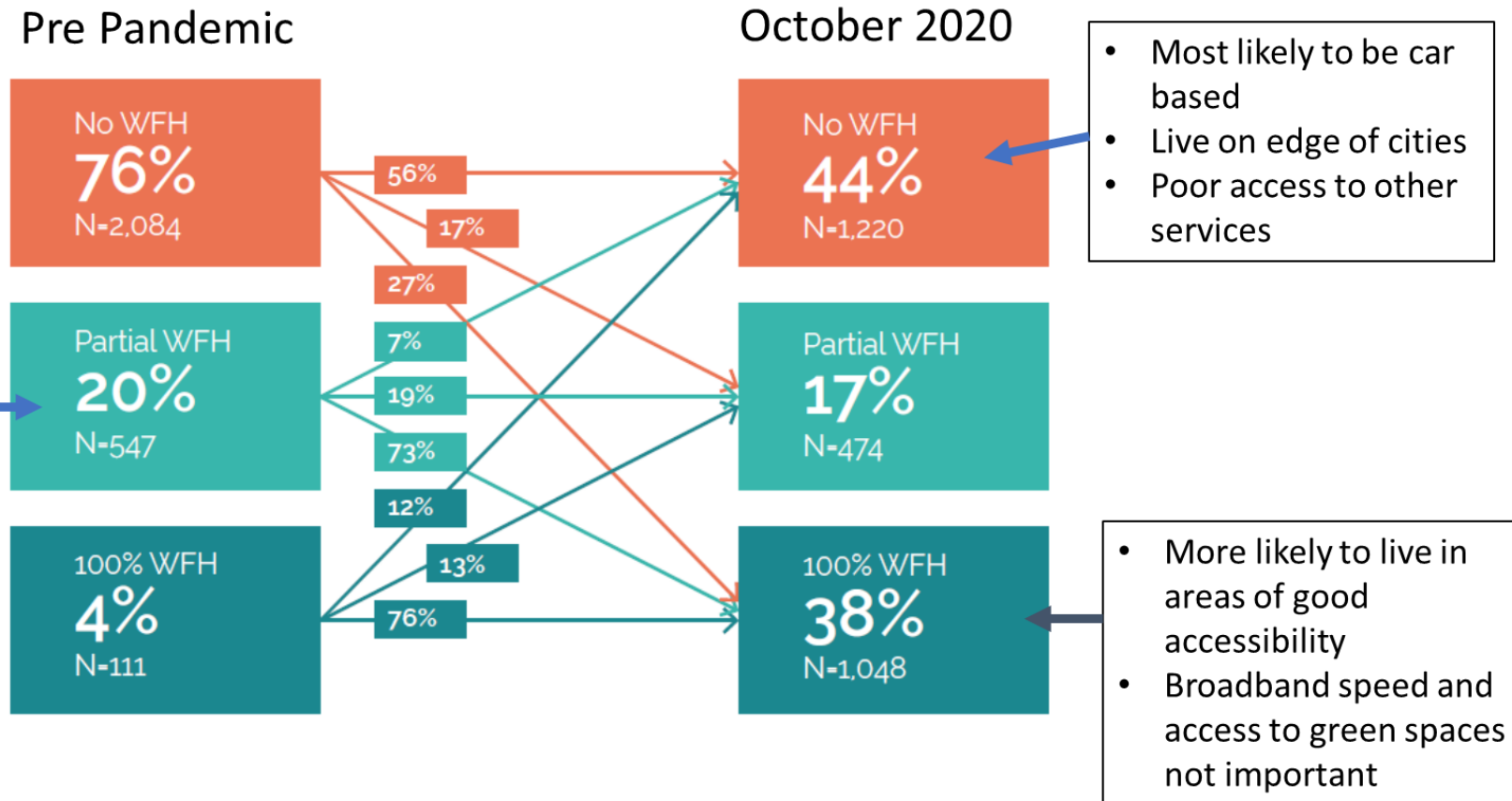


**Percentage of workers in each of the top six job sectors responsible for the most working from home in each Local Authority Subgroup. N=3,236**

# WFH increased among the least car dependent commuters and those already living in areas with accessible local services

the impact on car

Change in levels of WFH for those working in both W1 and W2 (N=2, 742)



• More likely to be train or cycling commuters pre-pandemic

• Most likely to be car based  
 • Live on edge of cities  
 • Poor access to other services

• More likely to live in areas of good accessibility  
 • Broadband speed and access to green spaces not important

n  
 >>  
 Travel poverty could be exacerbated by

## Large differences among demographic characteristics including health risk:

- ❖ Shielding households were twice as likely to start online grocery shopping
- ❖ Ethnic minorities were most likely to continue using buses
- ❖ Males were still more likely to cycle than females
- ❖ Walking became something that everyone did

# Concluding thoughts: What will the future blend be?

- The pandemic cannot be ‘unlearnt’ – avoid false dichotomies
- New working arrangements being established
  - Where people are based
  - What the yearly, monthly, weekly pattern is
  - What the flexibility of start and finish times is
- This is part of the employer-employee package
- Business travel is also part of these shifts
- People have also adapted – e.g. childcare routines, space in houses, boomerang children, pets, caring responsibilities
- Retail companies have adapted even further their on-line offer
- Service providers have developed new on-line markets

# Acknowledgements

- **The wider project team** – Dr Llinos Brown and Professor Iain Docherty
- **Funders**
- UKRI: Covid emergency funding + CREDS + DecarboN8 + Productivity Insights Network
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- Strathclyde Partnership for Transport
- Liverpool City Region Combined Authority
- Transport for the North
- Department for Transport



Scotland's centre of expertise connecting climate change research and policy



Department  
for Transport

