UK Transport and Travel Adaptation Study (TRANSAS)

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Institute for Transport Studies, Leeds

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

https://covid19transas.org/
TRANSAS – Methodology

Online Survey Locations

Scotland – Aberdeen & Aberdeenshire, Edinburgh, Glasgow, Ayrshire

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

July 2020
Wave 1
Online Survey
10 city-regions in England/Scotland
N = 9362

Dec 2020
Wave 2
Online Survey
10 city-regions in England/Scotland
N = 6209

July 2021
Wave 3
Online Survey
10 city-regions in England/Scotland
N = 4808

June 2021
Wave 4
Online Survey
10 city-regions in England/Scotland
N = ~4600

Nov 2022
Wave 5
Online Survey
10 city-regions in England/Scotland
N = ~4140

Feb/March 2021
Wave 2
Public Interviews
5 city-regions
N = 101

+ top up n = 2070

+ top up n = ~2400

+ top up n = ~2060

July 2020
Wave 1
Public Interviews
5 city-regions
N = 107

Dec 2020
Wave 2
Policy Interviews
5 city-regions
N = 18

June 2021
Wave 3
Policy Interviews
5 city-regions
N = 18

June 2021
Business Interviews
N = 14

December 2021
Wave 4
Policy Interviews
5 city-regions
N = 18
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

https://covid19transas.org/

Sept 2021

TRANSAS – Key reports to-date

March 2022
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

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

Weighted. Before N=9362; June 2021 N=6878.
Walking levels are higher for more than just leisure, and they have stayed up.
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)

<table>
<thead>
<tr>
<th></th>
<th>No WFH</th>
<th>Some WFH</th>
<th>100% WFH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ave days per week on which a car is driven</td>
<td>2.83</td>
<td>2.47</td>
<td>165</td>
</tr>
</tbody>
</table>

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)

<table>
<thead>
<tr>
<th>Change in WFH</th>
<th>Decrease in car use</th>
<th>No change in car use</th>
<th>Increase in car use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in WFH (n=768)</td>
<td>41%</td>
<td>50%</td>
<td>9%</td>
</tr>
<tr>
<td>No change in WFH (n=826)</td>
<td>15%</td>
<td>75%</td>
<td>10%</td>
</tr>
<tr>
<td>Decrease in WFH (n=56)</td>
<td>23%</td>
<td>61%</td>
<td>16%</td>
</tr>
</tbody>
</table>
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.
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

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

- Car driving: Manchester, Aberdeen & Newcastle (Highest), Bristol (Lowest)
- Car passenger: London & Lancs (Highest), Ayrshire (Lowest)
- Train: Bristol, Newcastle (Highest), Ayrshire, Edinburgh, Glasgow (Lowest)
- Bus: Lancashire & London (Highest), Ayrshire, Bristol, Manchester (Lowest)
- Walking: Ayrshire, Liverpol, London, Bristol (Over 100% everywhere)
- Cycling: Glasgow, Liverpool, Manchester (Highest), Bristol (Lowest)
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 traffic is uncertain. Travel poverty could be exacerbated by more WFH if not...
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

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  - Strathclyde Partnership for Transport
  - Liverpool City Region Combined Authority
  - Transport for the North
  - Department for Transport