

TRANSAS disclaimer

- The analysis presented in this slide pack is preliminary and subject to peer review
- If you wish to use or cite any of the findings, please first contact Dr. Llinos Brown L.V.Brown@leeds.ac.uk and/or Prof. Jillian Anable J.L.Anable@leeds.ac.uk for the latest results and citation
- Outputs are regularly uploaded on our project website <https://covid19transas.leeds.ac.uk/>

Working from home, and the impact on transport, travel and lifestyles since the Covid-19 pandemic

UTSG June 2025
University College Dublin &
Trinity College Dublin

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Overview

- What do we know about post-pandemic travel
- Research Questions
- TRANSAS (Transport, Travel and Social Adaption Study)
- Results
- Future TRANSAS work – Wave 7

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UNIVERSITY OF LEEDS

What do we know about travel post-pandemic?

- 4% drop in trips since 2019 (NTS) (DfT, 2019)
- All transport modes reduced
 - Except for walking and motorcycle trips
- Train travel (DfT, 2025)
 - Peak travel 18% less
But off-peak 8% higher than pre-pandemic
- Transport for London (TfL, 2025)
 - Travelling during peak hours on Monday and Friday has reduced

Travel has changed, and the commute has changed

Things are not back to normal!

Wider Project: What impact is the increase in working from home having on transport

Research Question

To what extent are changes in working from home patterns associated with changes in:

- Frequency of using different transport modes
- Undertaking shopping activities
- Participating in leisure and social activities?

Wider Project: What impact is the increase in working from home having on transport

Research Question

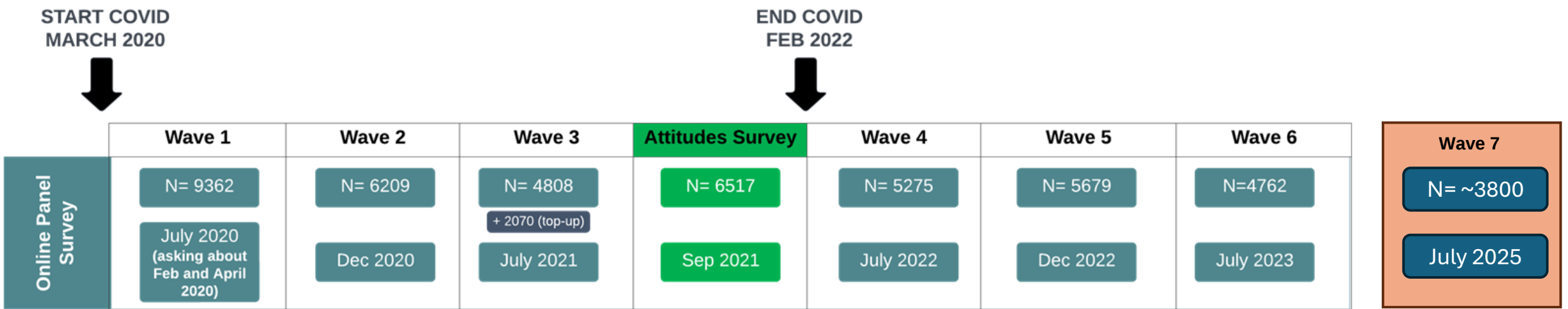
To what extent are changes in working from home patterns associated with changes in:

- Frequency of using different transport modes
- Undertaking shopping activities
- Participating in leisure and social activities?

Important to remember:

- **The pandemic forced many people to work from home**
- **People have continued to work from home –**
 - **This may not have been an option before**

TRANSAS panel questionnaire



- 30 min questionnaire survey administered by YouGov across 10 city-regions
- Panel survey: 6 waves to the same respondents each time
- W1 measured 2 time points: (i) in Feb 2020 (before pandemic) (ii) during lockdown in June 2020
- Additional 'deep dive' attitudes survey in Sept 2021

W1 & W6 only	All 6 waves	All 6 waves + Attitudes
3,760	2,361	2277

10 City-regions of England and Scotland

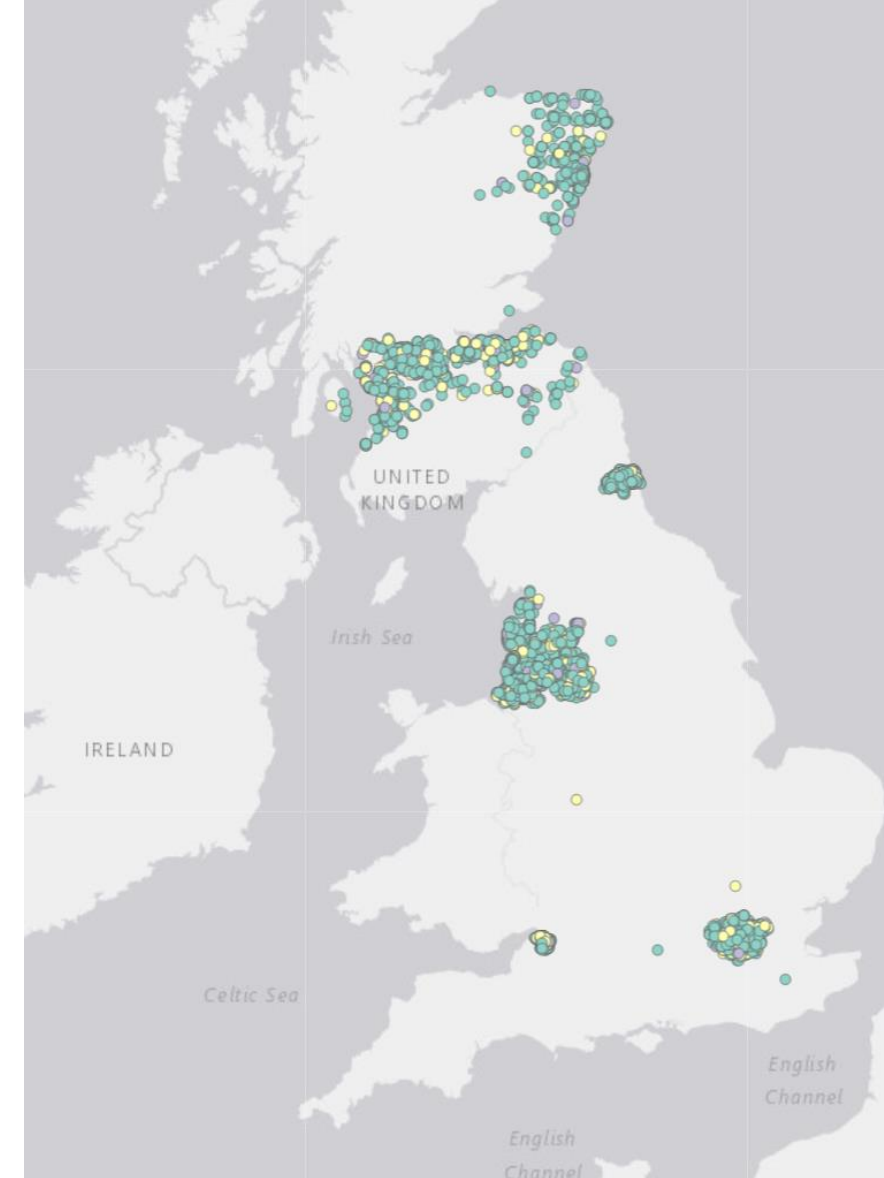
England

- Bristol
- Lancashire
- Liverpool
- London
- Manchester
- Newcastle

Scotland

- Aberdeen & Aberdeenshire
- Edinburgh
- Glasgow
- Ayrshire

**Sample locations:
10 x Large urban areas and their
regional hinterlands**



Approx. 50 Core Questions

Household

No. of people in HH, work status, household characteristics, no. of people with driving licence

School

School mode split by different nursery/primary/secondary

Work

Job type, distance to work, commute time and mode, frequency of meetings, satisfaction

Driving Licence/ Car Ownership

Driving licence, attitudes, car ownership

General Transport

Frequency of using different modes, Frequency of plane use, Travel attitudes

Shopping

Frequency of grocery shopping for different types of shops (including online and food banks), distance and mode use\

Lifestyles

Frequency of social, leisure and exercise activities, neighbourhood attitudes,

Each survey:

- approx. 120 questions
- 25-30 minutes to complete
- Frequency questions scale format e.g.
 - 5 days a week or more
 - 3-4 days a week
 - 1-2 days a week
 - At least once a month
 - Less often
 - Never

Additional Survey themes

- Moving house - Wave 2 onwards
- Mode purpose - Wave 2 onwards
- Public Transport Attitudes - Wave 2 onwards
- Change in car ownership - Wave 2 onwards
- Concern about COVID-19
- Cost of living crisis – Wave 4 onwards- current and future energy saving actions in home and related to driving, concerns

Methodology

Wave 1 = pre-pandemic
Wave 6 = June 2023

Created 32 change variables (Difference in frequency between W1 and W6):

- WFH (Independent variable) (Decrease, No Change, Increase)
- Each transport mode (10 different variables)
- Various shopping options (6 different variables)
- Leisure activities (3 variables)
- Social activities (4 variables)
- Exercise (7 variables)

Wave 6 – Wave 1 = change variable

- Positive value = increase
- 0 = no change
- Negative value = decrease

Sample size n=3760
Wave 1 and Wave 6

General Travel	Mean	Median	Std. Deviation	Range	Min	Max	
Car as a Driver	-0.17	0	1.28	10	-5	5	↓
Car as a Passenger	-0.11	0	1.28	10	-5	5	↓
Van/Lorry	-0.06	0	0.77	10	-5	5	↓
Motorbike/Moped	-0.02	0	0.38	10	-5	5	↓
Bus	-0.32	0	1.23	10	-5	5	↓
Train	-0.31	0	1.02	10	-5	5	↓
Tram/Underground	-0.20	0	0.94	10	-5	5	↓
Cycling	-0.17	0	0.92	10	-5	5	↓
Taxi	-0.33	0	0.86	9	-4	5	↓
Walking	1.08	0	2.37	10	-5	5	↑
Shopping							
Large Supermarket	-0.35	0	1.11	10	-5	5	↓
Smaller Food Shop	-0.32	0	1.24	9	-5	4	↓
Home Delivery	0.09	0	0.97	10	-5	5	↑
Click and Collect	-0.01	0	0.58	9	-4	5	↓
Delivery from friends/family/neighbourhood	0.00	0	0.59	10	-5	5	→
Foodbank	0.03	0	0.39	9	-4	5	↑

Value of 0 = no change
Positive value = increase
Negative value = decrease



Descriptive Statistics

People are travelling less than they were pre-pandemic.

This supports NTS data which shows a 4% reduction in trips since 2019

But we can see an increase in:

- Home Deliveries
- Visits to Foodbanks

Table 1: Change values (difference between Pre-pandemic and July 2023.

Negative figure highlights a reduction, positive figures highlight a increase. Shaded rows highlight decreases

Sample size n=3760
Wave 1 and Wave 6

General Travel	Mean	Median	Std. Deviation	Range	Min	Max	
Outdoor Sport (other than running/jogging/cycling)	0.30	1	1.35	10	-5	5	↑
Indoor Sport	0.23	1	1.36	10	-5	5	↑
Exercise at home	0.42	1	1.46	10	-5	5	↑
Ran/jogged outside	0.66	1	0.91	10	-5	5	↑
Cycled for pleasure/exercise	0.67	1	0.89	10	-5	5	↑
Walked for pleasure/exercise	-0.13	0	1.67	10	-5	5	↓
Visited a local park	-0.25	0	1.43	10	-5	5	↓
Leisure and Social Frequency							
Visited Friends and Family at their homes	-0.59	0	1.31	10	-5	5	↓
Friends/family visited you at home	-0.58	0	1.30	10	-5	5	↓
By Phone	-0.37	0	1.44	9	-5	4	↓
Videocalling	0.46	1	1.32	10	-5	5	↑
Voluntary work outside of the home	-0.37	0	1.20	10	-5	5	↓
Went to a pub or café or eating out	-1.22	-1	1.22	9	-5	4	↓
Cinema/concert/theatre	-1.01	-1	1.09	8	-5	3	↓

Overall

Generally, people are doing the following more frequently
 - Being active (with the exceptions of walking for pleasure/exercise and visiting a local park)

- Videocalling

People are doing the following less often:

- Socialising by seeing friends and family, and conducting phone calls
- Volunteering
- Going to hospitality and entertainment venues

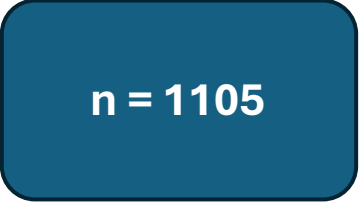
Table Change values (difference between Pre-pandemic and July 2023).

Negative figure highlights a reduction, positive figures highlight a increase. Shaded rows highlight decreases

Let's see how things split by WFH change (Increase, No Change, Decrease)

Limit the sample to those:

- Answered Wave 1 and Wave 6
- Working in both Wave 1 and Wave 6
- Had the same employer
- Primary job location had not changed (irrespective of amount WFH)



n = 1105

Conduct Kruskal-Wallis test, with Dunn's (1963) post-hoc analysis on the 31 change variables, to compare the distribution of the data between each WFH group.

	Working from Home Change					
	Decrease (n=78)		No Change (n=694)		Increase (n=333)	
General Travel	Mean	Median	Mean	Median	Mean	Median
Car as a driver	** -0.05	0	*-0.04	0	* ** -0.39	0
Car as a passenger	-0.08	0	-0.14	0	-0.12	0
van/lorry	** -0.38	0	-0.12	0	** -0.03	0
motorbike/moped	-0.01	0	-0.01	0	-0.01	0
Bus	-0.23	0	*-0.24	0	*-0.51	0
Train	-0.10	0	*- 0.28	0	* -0.60	-1
Tram/underground/	-0.08	0	* -0.19	0	* -0.35	0
Cycling	-0.05	0	-0.17	0	-0.25	0
Taxi	-0.47	0	-0.35	0	-0.38	0
Walking	1.01	0	1.16	0	1.24	0
Shopping Frequency						
Large Supermarket	-0.18	0	-0.28	0	-0.33	0
Smaller Food Shop	-0.22	0	-0.32	0	-0.33	0
Home Delivery	0.03	0	0.02	0	0.09	0
Click and Collect	-0.03	0	*-0.04	0	*0.04	0
Delivery from friends/family/neighbourhood	0.06	0	-0.02	0	0.04	0
Foodbank	0.06	0	0.04	0	0.05	0

Working from Home Change

- The majority of employees have not changed the amount the WFH (62.8% No Change)
- But 30% have INCREASED the amount they WFH
- 7% have DECREASED the amount they WFH

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van/lorry	** -0.38	0	-0.12	0	** -0.03	0
motorbike/moped	-0.01	0	-0.01	0	-0.01	0
Bus	-0.23	0	*-0.24	0	*-0.51	0
Train	-0.10	0	*- 0.28	0	* -0.60	-1
Tram/underground/	-0.08	0	* -0.19	0	* -0.35	0
Cycling	-0.05	0	-0.17	0	-0.25	0
Taxi	-0.47	0	-0.35	0	-0.38	0
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Large Supermarket	-0.18	0	-0.28	0	-0.33	0
Smaller Food Shop	-0.22	0	-0.32	0	-0.33	0
Home Delivery	0.03	0	0.02	0	0.09	0
Click and Collect	-0.03	0	*-0.04	0	*0.04	0
Delivery from friends/family/neighbourhood	0.06	0	-0.02	0	0.04	0
Foodbank	0.06	0	0.04	0	0.05	0

Working from Home Change

- The majority of employees have not changed the amount the WFH (62.8% No Change)
- But 30% have INCREASED the amount they WFH
- 7% have DECREASED the amount they WFH

Those who have increased the amount they WFH:

- Have reduced their travel, more than those who have not changed, or those who have reduced the amount they WFH
- Conduct more click and collect than no change group

Mean and median **change** values, split by **change** in the amount of WFH. Shaded rows highlight where there is a statistically significant difference between the three WFH categories. Asterix highlight which categories are statistically different :

*No change and Increase ** Decrease and Increase *** Decrease and No Change

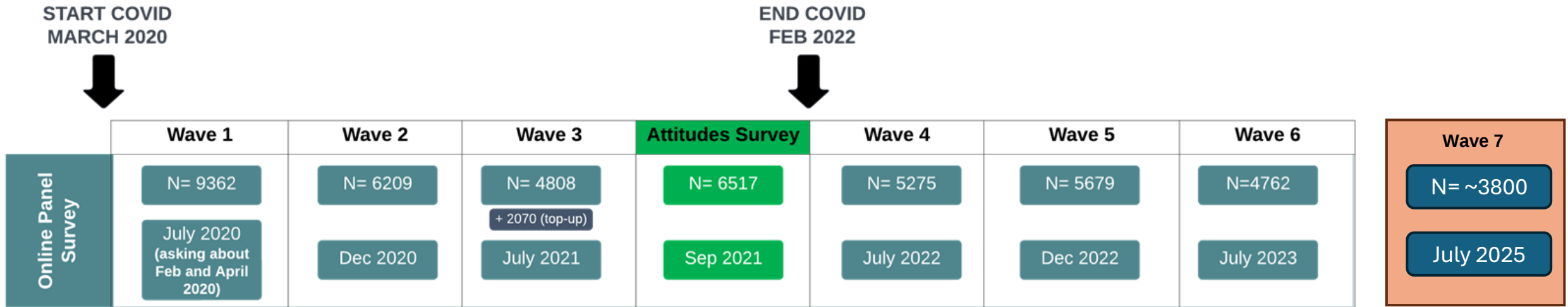
	Working from Home Change					
	Decrease (n=78)		No Change (n=694)		Increase (n=333)	
	Mean	Median	Mean	Median	Mean	Median
Exercise Frequency						
Outdoor Sport (other than running/jogging/cycling)	** ***-0.19	0	*** 0.23	1	** 0.26	1
Indoor Sport	0.01	0	0.11	1	0.01	0
Exercise at home	0.31	1	0.38	1	0.43	1
Ran/jogged outside	0.42	1	0.54	1	0.48	1
Cycled for pleasure/exercise	0.55	1	0.59	1	0.62	1
Walked for pleasure/exercise	-0.09	0	-0.09	0	0.10	0
Visited a local park	-0.08	0	-0.22	0	-0.07	0
Leisure and Social Frequency						
Visited Friends/Family at their homes	-0.64	-1	* -0.64	-1	* -0.38	0
Friends/family visited you at home	-0.46	0	-0.58	-0.5	-0.47	0
By phone	-0.55	-0.5	-0.38	0	-0.41	0
Videocalling	0.60	1	0.56	1	0.44	1
Voluntary work outside of the home	** *** -0.68	0	*** -0.32	0	** -0.25	0
Went to a pub or café or eating out	** *** -0.88	-1	*** -1.33	-1	** -1.23	-1
Visiting Cinema/Concert/Theatre	-1.04	-1	-1.06	-1	-1.18	-1

Those who have increased the amount they WFH:
- Less change in the amount they visited their friends and family

Mean and median **change** values, split by **change** in the amount of WFH. Shaded rows highlight where there is a statistically significant difference between the three WFH categories. Asterix highlight which categories are statistically different :

*No change and Increase ** Decrease and Increase *** Decrease and No Change

Future Work – Wave 7



- Wave 7 is being funded by RAC Foundation
- Anticipate:
 - approx. 3800 people to complete it
 - approx. 33% (N=3036) will have completed Wave 1
- Include core batch questions to enable comparisons across waves

FUTURE WORK

- Spotlight on WFH, 5 years post-pandemic what has changed
- Segmentation of travel attitudes

Archiving dataset with UK Data Service this year:

- Phase 1 – Waves 1, 2 and 3 (by Sept '25)
- Phase 2 – Wave 4, 5 and 6 (by Dec '25)

Conclusions

- The magnitude of change for mode frequency is greatest for those who work from home
- Those who work from home are travelling less than those who have not changed and those that have reduced the amount they work from home
 - Conducting shopping, leisure, exercise and social activities differently
 - Click and Collect – more

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