

Transport and Technology: Public Attitudes Tracker

Waves 1 and 2 Appendices

October 2018

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Appendix A

This appendix provides details of the processes involved in the delivery of this research, and technical notes.

Overview of survey methodology

Survey fieldwork was conducted on the Kantar TNS face-to-face omnibus, a weekly omnibus survey. The omnibus survey is conducted through random location sampling, a high-quality form of quota sampling in which sampling points are allocated through a random selection. Respondents in each interviewer assignment are drawn from a small set of homogenous streets, thus giving interviewers very little choice in the selection of respondents. Quotas are set on characteristics which are known to have a bearing on individuals' probabilities of being at home and so available for interview. This minimises any selection bias introduced because of interviewers focusing on groups that are more likely to be at home. Rules are also in place which govern the spacing between addresses and the timing of interviews.

Census small area statistics and the Postcode Address File (PAF) are used to define sampling points. Sampling points are areas of similar population sizes formed by the combination of wards, with the constraint that each point must be contained with a single Government Office Region (GOR).

The addresses are issued to achieve an adult sample of between 13 and 18 interviews in provincial areas and 12 and 15 in London. Assignments are conducted over two days of fieldwork and carried out on weekdays between 2pm and 8pm and at the weekend. Interviews are conducted by computer assisted personal interviewing (CAPI). Approximately 2,000 UK interviews are conducted with adults aged 16+ on the omnibus each week. To achieve the required sample size in England, fieldwork for this research was conducted during two weeks of the omnibus survey for each wave. Wave 2 fieldwork took place between 13 and 24 June 2018, while Wave 1 fieldwork took place between 6 and 17 December 2017.

Overview of Questionnaire Development

Prior to Wave 1, DfT and Kantar Public jointly designed the questionnaire. This process involved multiple stages including:

- an initial qualitative research phase to test broad understanding of concepts to be covered in the questionnaire.
- a formal desk review of proposed questions using Kantar Public's Questionnaire Appraisal
 Framework (QAF), to review questions asked on other surveys for relevance and applicability to this
 research and to inform the development of new questions.
- Cognitive testing of the draft questionnaire, which provided an in-depth test of the survey questions
 prior to main stage fieldwork.

Qualitative Research

The first stage of the questionnaire development process was to conduct qualitative research in late October and early November 2017. This consisted of four focus groups with members of the public in England. Groups took place in London, Manchester, Birmingham and Exeter. Screening recruitment quotas were set on gender, age and ethnicity to ensure a broad mix of participants for each group. Two of the groups

comprised participants in social grades ABC1 and two groups comprised participants from social grades C2DE.

The focus groups tested the broad concepts intended to be covered in the Wave 1 questionnaire. The topic guide was designed collaboratively between Kantar Public and DfT and included presenting the concepts to participants with stimulus materials (for example images of the various modes of travel).

Desk Review

Following the qualitative research, Kantar Public conducted a desk review to inform the drafting of the questionnaire. This involved a systematic review of existing survey questions and the development of new questions on the technologies to be covered in the questionnaire.

Cognitive Testing

Prior to finalising the Wave 1 questionnaire, the draft questionnaire was tested through two rounds of cognitive testing with members of the public. Testing took place in London and Birmingham and was conducted by Kantar Public researchers. All candidate questions for potential inclusion in the Wave 1 questionnaire were tested in this process. A focus of the cognitive interviewing was to thoroughly test and develop the newly devised questions. The two rounds of cognitive testing took place in November 2017 and comprised 23 interviews in total (12 interviews in round 1 and 11 interviews in round 2) across the two venues. Quotas were set on key demographic variables including gender, age, level of educational attainment, working status, presence of children aged under 16 in the household, and household urbanity (whether located in a city, town/urban/suburban, or rural setting).

Achieved sample profile and weighting

A total sample of 3,538 interviews was collected at Wave 2 and a total sample of 3,499 interviews was collected at Wave 1. The achieved sample at each wave is representative of individuals aged 16 or over living in England. Data were also weighted to match the profile of the population in terms of age, gender, region, ONS rural/urban classification, working status, ethnicity, number of cars/vans in household, whether individual has a driving licence, housing tenure and highest qualification (for those aged 18-69).

The achieved sample profile at each wave is outlined in the following tables.

Fig A.1. Wave 2 sample profile

Category	Sub-category	Achieved sample	Unweighted %	Weighted %	Difference
Gender	Male	1,704	48.0	49.0	+1.0
	Female	1,834	52.0	51.0	-1.0
Age	16.24	412	11.6	13.5	+1.9
	25.34	533	15.1	16.9	+1.8
	35-44	472	13.3	15.7	+2.4
	45-54	486	13.7	17.2	+3.5
	55-64	496	14.0	14.4	+0.4
	65+	1,139	32.2	22.3	-9.9
Region (GOR)	North East	174	4.9	4.8	-0.1
	North West	474	13.4	13.1	-0.3

	Yorkshire and the Humber	367	10.4	9.8	-0.6
	East Midlands	307	8.7	8.6	-0.1
	West Midlands	360	10.2	10.5	+0.3
	East of England	398	11.2	11.1	-0.1
	London	507	14.3	15.6	+1.3
	South East	596	16.8	16.3	-0.5
	South West	355	10.0	10.2	+0.2
Urbanity (ONS	Urban	3,094	87.5	82.3	-5.2
classification)	Rural	428	12.1	17.2	+5.1
Working	Full time	1,207	34.1	44.7	+10.6
status	Part time	417	11.8	15.2	+3.4
	Retired	1,202	34.0	20.9	-13.1
	In education	211	5.9	4.6	-1.3
	Not working	501	14.1	14.7	+0.6
Ethnicity	White	3,076	86.9	85.9	-1.0
	Minority ethnic	443	12.5	13.6	+1.1
Number of	0	964	27.2	18.0	-9.2
cars/vans in household	1	1,594	45.1	39.0	-6.1
nousenoiu	2	758	21.4	31.0	+9.6
	3+	222	6.3	12.0	+5.7
Whether	No licence	1,025	18.9	9.6	-9.3
individual has	Provisional licence	137	3.9	8.1	+4.2
a driving licence	Full licence	2,346	66.3	72.2	+5.9

Fig A.2. Wave 1 sample profile

Category	Sub-category	Achieved sample	Unweighted %	Weighted %	Difference
Gender	Male	1,736	49.6	49.0	-0.6
	Female	1,763	50.4	51.0	+0.6
Age	16.24	440	12.6	13.7	+1.1
	25.34	555	15.9	16.9	+1.0
	35-44	433	12.4	15.9	+3.5

	45-54	505	14.4	17.3	+2.9
	55-64	497	14.2	14.1	-0.1
	65+	1,069	30.6	22.1	-8.5
Region (GOR)	North East	191	5.5	4.8	-0.7
	North West	458	13.1	13.1	0
	Yorkshire and the Humber	358	10.2	9.8	-0.4
	East Midlands	312	8.9	8.6	-0.3
	West Midlands	355	10.1	10.4	+0.3
	East of England	403	11.5	11.1	-0.4
	London	502	14.3	15.6	+1.3
	South East	574	16.4	16.3	-0.1
	South West	346	9.9	10.2	+0.3
Urbanity	Urban	2,935	85.0	82.5	-2.5
	Rural	517	15.0	17.5	+2.5
Working	Full time	1,144	32.7	44.7	+12.0
status	Part time	438	12.5	15.0	+2.5
	Retired	1,174	33.6	20.9	-12.7
	In education	193	5.5	4.6	-0.9
	Not working	550	15.7	14.9	-0.8
Ethnicity	White	3,058	87.4	85.8	-1.6
	Minority ethnic	420	12.0	13.6	+1.6
Number of	0	952	27.2	17.9	-9.3
cars/vans in household	1	1,517	43.4	39.0	-4.4
nousenoiu	2	809	23.1	31.0	+7.9
	3+	221	6.0	12.0	+6.0
Whether	No licence	988	28.2	18.9	-9.3
individual has	Provisional licence	186	5.3	8.1	+2.8
a driving licence	Full licence	2,300	65.7	72.2	+6.5

Appendix B: Questionnaire

The full questionnaires from Wave 1 and Wave 2 are provided below. Filters, scripting notes and interviewer instructions are included.

The key questions asked at both waves are as follows:

- Q.25 (EVKnow) awareness of electric vehicles
- Q.28 (AVKnow) awareness of automated vehicles
- Q.29 (AVBen) perceptions of advantages of automated vehicles (spontaneous)
- Q.30 (AVConcern) perceptions of disadvantages of automated vehicles (spontaneous)
- **Q.31 (AVFeat) –** awareness of driver assistance features (prompted)
- Q.32 (AVUsed) use of driver assistance features
- Q.34 (Droneknow) awareness of drones
- Q.35 (Droneown) use of drones
- **Q.36 (DroneAwar)** awareness of uses of drones (prompted)
- Q.37 (DroneSup) support for the uses of drones
- **Q.38 (Droneconc)** concerns about the use of drones (spontaneous)

Wave 1 Questionnaire

Questionnaire Filters

- F1: All adults 16+ in England
- F2: All who use a smartphone (Q2\1)
- F3: All with cars\vans in household or have use of them (Q5\1,2,3)
- F4: All who personally own\continuously use car\van (Q7\1)
- F5: All with a valid UK driving licence (Q4\1, 2, 3)
- F6: All who will buy\replace car or van (Q16\ 1, 2, 3, 4, 5)
- F7: All who access the internet at least twice a year or personally own\continuously use car\van (Q1\1-9 or Q7\1)
- F8: All who travel by car\van at least one a year (Q11\1-6)
- F9: All who travel by public transport at least once a year (Q9\1-6)
- F10: All who use a bicycle at least once a year (Q10\1-6)

F11: All who travel by car or public transport at least once a year (Q11\1-6 OR Q9\1-6)

F12: All who have heard of specified travel services (Q23\1-5)

F13: All who have heard of self driving features and hold a valid UK driving licence (Q31\1-7 AND Q4\1-3)

F14: All who know something about drones (Q34\2-5)

F15: All who do not personally own\continuously use car\van (Q5\4 OR Q7\2)

F16: All who are employees or self-employed with employees (Q53\1,2)

F17: All who are an employee (Q53\1)

F18: All who access the internet at least twice a year (Q1\1-9)

F19: All who are self-employed with employees (Q53\2)

F20: All adults 17+ in England

F21: All who work\worked (Q53\1-3)

F1: All adults 16+ in England

SHOW SCREEN - READ OUT

Now we are going to ask you some questions to understand your general transport behaviours and attitudes. The questions are being asked on behalf of the Department for Transport, but please remember that none of your answers will be personally identifiable to you.

F1: All adults 16+ in England

SHOW SCREEN

Q.1 (Internet). How often do you access the internet? Please include internet access from any device including smartphones.

SCRIPTERS: DO NOT INVERT

- 1. More than once a day
- 2. Once a day
- 3. 4-6 times per week
- 4. 2-3 times per week
- 5. About once a week
- 6. About once a fortnight
- 7. About once a month
- 8. About once every 2-3 months

- 9. About once every six months
- 10. Less often\Never

F1: All adults 16+ in England

SHOW SCREEN

Q.2 (Smartphone). Do you personally use a smartphone?

INTERVIEWER ADD IF NECESSARY - A smartphone is a phone on which you can access emails, use apps, and view websites. Popular brands of smartphone include iPhone and Android phones such as the Samsung Galaxy S7.

- 1. Yes
- 2. No

Don't know

F2: All who use a smartphone (Q2\1)

SHOW SCREEN - MULTI CHOICE

Q.3 (SmartTrans). Do you typically use your smartphone to go online for any of these purposes?

SCRIPTERS: DO NOT INVERT

- 1. Route planning\route planning apps
- 2. Maps\navigation\satnavs
- 3. Checking live travel times (e.g. bus, train, tram, flights etc.)
- 4. Buying flight tickets online
- 5. Buying train\bus\other public transport tickets online
- 6. Checking traffic updates
- 7. Booking a taxi or minicab using Uber
- 8. Booking a taxi or minicab using another app (not Uber)
- 9. Finding out about services available in the area (e.g. restaurants, cafes, shops, garages)

None of these - FIX AND MUTUALLY EXCLUSIVE

Don't know- FIX AND MUTUALLY EXCLUSIVE

F20: All adults 17+ in England

SHOW SCREEN

Q.4 (Licence). Do you hold a valid UK driving licence?

ADD IF NECESSARY: Include international permits or other foreign licences valid in the UK.

PROBE TO CODES IF NECESSARY

- 1. Yes, full licence for car
- 2. Yes, provisional licence for car
- 3. Currently disqualified
- 4. No

Don't know

F1: All adults 16+ in England

SHOW SCREEN

Q.5 (Numcar). How many cars or vans does your household own or have continuous use of at present?

INTERVIEWER NOTE: INCLUDE COMPANY CARS, IF AVAILABLE FOR PRIVATE USE. INCLUDE ANY BROKEN DOWN VEHICLES WHICH MAY BE IN USE WITHIN THE NEXT MONTH.

SCRIPTERS: DO NOT INVERT

4: None

1: 1

2: 2

3: 3 or more

F3: All with cars\vans in household or have use of them (Q5\1,2,3)

SHOW SCREEN - MULTI CHOICE

Q.6 (Fuel). [IF Q5 = 2: What type of fuel does this car or van use \ IF Q5 = 3 or 4: Thinking of all cars and vans in your household, what types of fuel do they use?]

SCRIPTERS: SET TO BE SINGLE CODED WHERE Q.5 = 1

- 1. Petrol
- 2. Diesel
- 3. Electric\battery only
- 4. Hybrid (petrol\electric)
- 5. Other PEN WRITE IN

Don't know - MUTUALLY EXCLUSIVE

F3: All with cars\vans in household or have use of them (Q5\1,2,3)

SHOW SCREEN

Q.7 (CarOwn). Just to check, do you personally own or have continuous use of a car or van?

INTERVIEWER NOTE: INCLUDE COMPANY CARS, IF AVAILABLE FOR PRIVATE USE. INCLUDE ANY BROKEN DOWN VEHICLES WHICH MAY BE IN USE WITHIN THE NEXT MONTH

- 1. Yes
- 2. No

F4: All who personally own\continuously use car\van (Q7\1)

SHOW SCREEN

Q.8 (B19). Looking at the following list, approximately how many miles a year do you personally drive in the cars and vans owned or used by your household? If you are unsure, please give your best estimate.

SCRIPTERS: DO NOT INVERT

- 1. 0 miles
- 2. 1-499 miles
- 3. 500-999 miles
- 4. 1,000-1,999 miles
- 5. 2,000-2,999 miles
- 6. 3,000-3,999 miles
- 7. 4,000-4,999 miles
- 8. 5,000-6,999 miles
- 9. 7,000-8,999 miles
- 10. 9,000-11,999 miles
- 11. 12,000-14,999 miles
- 12. 15,000-17,999 miles13. 18,000-20,999 miles
- 14. 21,000-29,999 miles
- 15. 30,000 miles and over

Don't know

F1: All adults 16+ in England

SHOW SCREEN

Q.9 (PTFreq). About how frequently do you travel by public transport in the UK, including buses, trains, trams, underground, metro and light rail?

SCRIPTERS: DO NOT INVERT

- 1. Every day (7 days a week)
- 2. Most days (4-6 days a week)
- 3. 1-3 days a week
- 4. 1-3 times a month
- 5. 3-4 times a year
- 6. Once or twice a year
- 7. Less often\not at all

Don't know

F1: All adults 16+ in England

SHOW SCREEN

Q.10 (BikeFreq). About how frequently do you use a bicycle?

INTERVIEWER: EXCLUDE EXERCISE BIKES

SCRIPTERS: DO NOT INVERT

- 1. Every day (7 days a week)
- 2. Most days (4-6 times a week)
- 3. 1-3 days a week
- 4. 1-3 times a month
- 5. 3-4 times a year
- 6. Once or twice a year
- 7. Less often\not at all

Don't know

F1: All adults 16+ in England

SHOW SCREEN

Q.11 (CarFreq). Excluding taxi journeys, about how frequently do you travel by car or van, whether as a driver or passenger?

SCRIPTERS: DO NOT INVERT

- 1. Every day (7 days a week)
- 2. Most days (4-6 times a week)
- 3. 1-3 days a week
- 4. 1-3 times a month
- 5. 3-4 times a year
- 6. Once or twice a year
- 7. Less often\not at all

Don't know

F1: All adults 16+ in England

SHOW SCREEN

Q.12 (B50). Looking at this list, how many short-haul flights starting from the UK did you make to Europe during the last 12 months? If you don't know the exact number please give your best guess. Flights should start in the UK.

SCRIPTERS: DO NOT INVERT

- 4: None
- 1: 1
- 2: 2
- 3: 3 or more

F1: All adults 16+ in England

SHOW SCREEN

Q.13 (B51). And how many long-haul flights starting from the UK did you make during the last 12 months? If you do not know the exact number please give your best guess. Flights should start in the UK.

SCRIPTERS: DO NOT INVERT

- 4: None
- 1: 1
- 2: 2
- 3: 3 or more

F1: All adults 16+ in England

Q.14 (B42_31). How much do you agree or disagree with the following statement(s)?

SHOW SCREEN AND READ OUT STATEMENT

I would cycle (more) if there were more dedicated cycle paths - IF F4 (Q7 = 1)

I am willing to cycle on the roads (e.g. to work \ school \ the shops) - IF F15 (Q5 = 4 OR Q7 = 2)

In general, I think that successful people tend to travel by car rather than by bus – IF F15 (Q5 = 4 OR Q7 = 2)

- 1. Definitely agree
- 2. Tend to agree
- 3. Neither agree nor disagree
- 4. Tend to disagree
- 5. Definitely disagree

Don't know

F4: All who personally own\continuously use car\van (Q7\1)

SHOW SCREEN - MULTI CHOICE

Q.15 (B17). Looking at this list, which of these things are important to you when buying a car or van?

SCRIPTERS: RANDOMISE LIST ORDER

SCRIPTERS: MAKE CODES 3 AND 4 MUTUALLY EXCLUSIVE

- 1. Comfort
- 2. Costs purchase\running\resale value\tax\insurance
- 3. Small engine
- 4. Large engine
- 5. Environmentally friendly\low CO2 emissions
- 6. Image of brand\brand preference
- 7. Image of model\model preference
- 8. Interior space\functionality\boot size
- 9. Reliability
- 10. Safety
- 11. Speed\performance
- 12. Style\design
- 13. Features Satnav; CD player; music system; power steering, etc.
- 14. Something else PEN WRITE IN

F5: All with a valid UK driving licence (Q4\1, 2, 3)

SHOW SCREEN

Q.16 (CarWhen). When, if at all, do you think you will next buy or replace a car or van, either new or second-hand?

SCRIPTERS: DO NOT INVERT

- 1. Within the next year
- 2. In more than 1 year, but up to 2 years
- 3. In more than 2 years, but up to 3 years
- 4. In more than 3 years, but up to 5 years
- 5. More than 5 years
- 6. I don't intend to ever buy or replace a car\van

Don't know

F6: All who will buy\replace car or van (Q16\ 1, 2, 3, 4, 5)

SHOW SCREEN

Q.17 (CarNext). What type of car or van do you think you will most likely purchase or lease next time?

IF WOULD BUY MORE THAN ONE TYPE, ASK WHICH THEY WOULD USE FOR THEIR MAIN VEHICLE

- 1. Petrol
- 2. Diesel
- 3. Electric\battery only
- 4. Hybrid (petrol\electric)
- 5. Other PEN WRITE IN

Don't know

F7: All who access the internet at least twice a year or personally own\continuously use car\van (Q1\1-9 or Q7\1)

Q.18 (Attit1). How much do you agree or disagree with the following statement(s)?

SHOW SCREEN AND READ OUT STATEMENT

Having Wi-fi or mobile internet connectivity everywhere I go is important to me - IF F18 (Q1\1-9)

My current lifestyle means I need to own a car or van - IF F4 (Q7\1)

I enjoy the freedom and independence I get from my car or van - IF F4 (Q7\1)

- 1. Agree strongly
- 2. Agree slightly
- 3. Neither agree nor disagree
- 4. Disagree slightly
- 5. Disagree strongly

Don't know

F8: All who travel by car\van at least once a year (Q11\1-6)

SHOW SCREEN -MULTI CHOICE

Q.19 (CarPlan). When travelling by car or van in the UK, what methods do you typically use to help you plan your route either before setting out or while on route?

Please read through the full list and choose the methods you use most often. You can choose up to three.

IF SOMEONE ELSE PLANS\MONITORS THE ROUTE, ASK WHICH METHODS THEY USE

CODE UP TO 3 ANSWERS

SET TO 3 MAX CODES CHOSEN

- 1. SatNav (Inbuilt or portable)
- 2. Google maps
- 3. Other online mapping tools (e.g. AA route planner, Apple maps, Waze)
- 4. Road map\road atlas
- 5. Ask a friend\family\ask directions
- 6. Contact the destination\check their website
- 7. Road signs
- 8. Electronic message signs on roads
- 9. Radio\Internet travel alerts
- 10. Something else PEN WRITE IN

I never plan my journeys - MUTUALLY EXCLUSIVE

Not applicable - I don't do this type of journey regularly - MUTUALLY EXCLUSIVE

Don't know - MUTUALLY EXCLUSIVE

F9: All who travel by public transport at least once a year (Q9\1-6)

SHOW SCREEN - MULTI CHOICE

Q.20 (PTPlan). When travelling by public transport in the UK, what methods do you typically use to help plan your route either before setting out or while on route?

Please read through the full list and choose the methods you use most often. You can choose up to three.

IF SOMEONE ELSE PLANS\MONITORS THE ROUTE, ASK WHICH METHODS THEY USE

CODE UP TO 3 ANSWERS

SET TO 3 MAX CODES CHOSEN

- 1. Online mapping tools such as Google maps, Apple maps
- 2. Other internet or app-based journey planner (e.g. Citymapper, Moovit, Traveline, TFL)
- 3. Rail app or online rail planner (e.g. Trainline, National Rail, Raileasy)
- 4. Coach app or online coach planner (e.g. National Express, Megabus)
- 5. Other train\bus\tram\tube app or online journey planner
- 6. General internet searching (e.g. google)
- 7. Electronic display at the station\stop
- 8. Use maps\routes\timetables displayed at station\stop
- 9. Phone bus\train\tram company
- 10. Printed or online timetables
- 11. Ask directions (transport staff, other travellers)
- 12. Something else PEN WRITE IN

I never plan my journeys - MUTUALLY EXCLUSIVE

Not applicable - I don't do this type of journey regularly - MUTUALLY EXCLUSIVE

Don't know - MUTUALLY EXCLUSIVE

F10: All who use a bicycle at least once a year (Q10\1-6)

SHOW SCREEN - MULTI CHOICE

Q.21 (BikePlan). Now thinking about unfamiliar journeys you have made within the last 12 months by bicycle in the UK.

What methods do you use to help plan your route either before setting out or while on route?

Please read through the full list and choose the methods you use most often. You can choose up to three.

CODE UP TO 3 ANSWERS

SET TO 3 MAX CODES CHOSEN

- 1. SatNav (Inbuilt or portable)
- 2. Google maps
- 3. Other online mapping tools not specifically for cyclists (e.g. AA route planner, Apple maps, Waze)
- 4. Online mapping tools specifically for cyclists (e.g. CycleStreets, Strava, Ride With GPS)
- 5. Road map\road atlas
- 6. Ask a friend\family\ask directions
- 7. Contact the destination\check their website
- 8. Road signs
- 9. Something else (specify)

I never plan my journeys - MUTUALLY EXCLUSIVE

Not applicable - I don't do this type of journey regularly - MUTUALLY EXCLUSIVE

Don't know - MUTUALLY EXCLUSIVE

F11: All who travel by car or public transport at least once a year (Q11\1-6 OR Q9\1-6)

Q.22 (Jplansat). Thinking now about making a journey that you are not familiar with, how easy or difficult would you find it to plan

SHOW SCREEN AND READ OUT STATEMENT

SCRIPTERS: AT EACH SCREEN INCLUDE THE FOLLOWING: How easy or difficult would you find it to plan...

SCRIPTERS: DO NOT RANDOMISE ORDER OF STATEMENTS

- ...an unfamiliar car or van journey? IF F8 (Q11\1-6)
- ...an unfamiliar train journey IF F9 (Q9\1-6)
- ...an unfamiliar bus journey IF F9 (Q9\1-6)
- ...an unfamiliar journey that involves other public transport (eg tube, metro, tram)? IF F9 (Q9\1-6)
- ...an unfamiliar journey that involves a mixture of different transport methods? IF F9 (Q9\1-6)
 - 1. Very easy
 - 2. Fairly easy

- 3. Neither easy nor difficult
- 4. Fairly difficult
- 5. Very difficult
- 6. Not applicable I don't plan these journeys

F1: All adults 16+ in England

SHOW SCREEN - MULTI CHOICE

Q.23 (Mobheard). Which of the following types of travel services have you heard of?

SCRIPTERS: DO NOT INVERT

- 1. App-based minicab services such as Uber
- 2. Car rental services
- 3. Car club, which you can become a member of, and which allows access to locally parked cars that can be used on demand. Examples include ZipCar, Co-wheels, Drivenow
- 4. Internet-arranged or app-based ride sharing, where you can arrange lift shares with people you don't know, for example liftshare.com, blablacar.com
- 5. Public bike share schemes. This is where you can pick up a locally parked bike, usually parked on the street or other public place, and use it for short periods, returning to the same or a different location.

None of these - MUTUALLY EXCLUSIVE

F12: All who have heard of specified travel services (Q23\1-5)

SHOW SCREEN - MULTI CHOICE

Q.24 (Mobuse). You mentioned you have heard of:

SCRIPTERS ALL OF THIS APPEARS ON ONE SCREEN

App-based minicab services such as Uber (show if Q23\1 mentioned)

Car rental services (show if Q23\2 mentioned)

Car club (show if Q23\3 mentioned)

Internet-arranged or app-based ride sharing (show if Q23\4 mentioned)

Public bike share schemes (show if Q23\5 mentioned)

Do you personally use any of these travel services nowadays?

CODE ALL THAT APPLY

SCRIPTERS: DO NOT INVERT

- 1. App-based minicab services such as Uber (show if Q23\1 mentioned)
- 2. Car rental services (show if Q23\2 mentioned)
- 3. Car club, which you can become a member of, and which allows access to locally parked cars that can be used on demand. Examples include ZipCar, Co-wheels, Drivenow (show if Q23\3 mentioned)
- 4. Internet-arranged or app-based ride sharing, where you can arrange lift shares with people you don't know, for example liftshare.com, blablacar.com (show if Q23\4 mentioned)
- 5. Public bike share schemes. This is where you can pick up a locally parked bike, usually parked on the street or other public place, and use it for short periods, returning to the same or a different location. (show if Q23\5 mentioned)

None of these - MUTUALLY EXCLUSIVE

F1: All adults 16+ in England

SHOW SCREEN

Q.25 (EVknow). How much, if anything, would you say you know about electric vehicles?

SCRIPTERS: DO NOT INVERT

- 1. Hadn't heard about them before now
- 2. Hardly anything but I've heard of them
- 3. A little
- 4. A fair amount
- 5. A lot

Don't know

F1: All adults 16+ in England

DO NOT SHOW SCREEN UNTIL TOLD TO DO SO

F1: All adults 16+ in England

DO NOT SHOW SCREEN - MULTI CHOICE

Q.26 (EVEnc). What do you think are the advantages, if any, of electric over petrol or diesel vehicles?

DO NOT PROMPT. PROBE FOR ANY OTHER ADVANTAGES. CODE ALL THAT APPLY.

- 1. Cheaper to run or maintain\ more economical
- 2. Cheap(er) to buy
- 3. Environmental benefits e.g. reduced pollution
- 4. Reduced road tax\insurance costs

- 5. Quieter\less noisy
- 6. Good battery life\ distance travelled on charge
- 7. Recharging is easier\more convenient than re-fuelling (eg location of charging points, ease\time taken to recharge)
- 8. Hold their value better (resale\residual)
- 9. Safer\good safety record
- 10. Vehicle performance e.g. speed\handling, size\practicality, looks
- 11. Technology: reliable\proven\longer lifespan
- 12. Other PEN WRITE IN

No advantages – SINGLE CODE

Don't know - MUTUALLY EXCLUSIVE

F1: All adults 16+ in England

DO NOT SHOW SCREEN - MULTI CHOICE

Q.27 (EVProb). What do you think are the disadvantages, if any, of electric vehicles over petrol or diesel cars?

DO NOT PROMPT. PROBE FOR ANY OTHER DISADVANTAGES. CODE ALL THAT APPLY.

- 1. Cost to run\maintain\fix faults
- 2. Cost to buy
- 3. Cost in general
- 4. Battery: distance travelled on charge
- 5. Recharging where\how to charge (eg at home, elsewhere)
- 6. Not enough charging points
- 7. Time taken to recharge
- 8. Value: resale\residual
- 9. Safety features\record
- 10. Poorer vehicle performance (e.g. speed\handling, size\practicality, style\looks)
- 11. Technology: doesn't work\not proven \needs more testing
- 12. Lack of availability\ choice
- 13. Disposal of batteries impact on environment
- 14. Not enough information\knowledge (self or public generally)
- 15. Other PEN WRITE IN

No disadvantages - MUTUALLY EXCLUSIVE

Don't know - MUTUALLY EXCLUSIVE

F1: All adults 16+ in England

(Intro1). Now a few questions about autonomous vehicles, commonly referred to as driverless or self-driving vehicles. By this we refer to vehicles that can drive themselves on roads with little or no input from a human driver.

F1: All adults 16+ in England

SHOW SCREEN

Q.28 (AVKnow). Fully driverless or self-driving vehicles are not yet available for everyday use. How much, if anything, would you say you know about these types of vehicle?

SCRIPTERS: DO NOT INVERT

- 1. Hadn't heard about them before now
- 2. Hardly anything but I've heard of them
- 3. A little
- 4. A fair amount
- 5. A lot

Don't know

F1: All adults 16+ in England

DO NOT SHOW SCREEN UNTIL TOLD TO DO SO

F1: All adults 16+ in England

DO NOT SHOW SCREEN - MULTI CHOICE

Q.29 (AVBen). What do you think are the advantages, if any, of fully driverless or self-driving vehicles?

DO NOT PROMPT. PROBE FOR ANY OTHER ADVANTAGES. CODE ALL THAT APPLY.

- 1. Safer\Less chance of driver error\fewer bad or drunk drivers
- 2. Convenience\can do other things while driving
- 3. Less stressful\don't have to worry about driving
- 4. Better traffic flow \less congestion
- 5. Reduced travel time
- 6. Better for environment
- 7. Better fuel economy \cheaper to run
- 8. Lower insurance\car tax
- 9. Easier for elderly\disabled people to travel

- 10. Better for economy e.g. improved productivity
- 11. Anyone can drive\don't need a driving licence
- 12. Other PEN WRITE IN

No advantages - MUTUALLY EXCLUSIVE

Don't know - MUTUALLY EXCLUSIVE

F1: All adults 16+ in England

DO NOT SHOW SCREEN - MULTI CHOICE

Q.30 (AVConcern). And what do you think are the disadvantages, if any, of fully driverless or self-driving vehicles?

DO NOT PROMPT. PROBE FOR ANY OTHER DISADVANTAGES. CODE ALL THAT APPLY.

- 1. Safety: Equipment failure or system failure
- 2. Safety: Car fails to react to unexpected situations
- 3. Safety: Interacting with other human drivers
- 4. Safety: Interacting with pedestrians and cyclists
- 5. Drivers will become lazy\pay less attention
- 6. Loss of driver control
- 7. Concerns about whether a driving test would apply
- 8. Legal liability \knowing who is at fault
- 9. Security concerns (eg hackers, terrorists, insurance fraudsters)
- 10. Data privacy (location tracking)
- 11. Increased congestion\more cars on the road
- 12. I enjoy driving\would take away pleasure of driving.
- 13. Impact on jobs\drivers losing their job
- 14. Reduced investment in public transport
- 15. Other PEN WRITE IN

No concerns - MUTUALLY EXCLUSIVE

Don't know - MUTUALLY EXCLUSIVE

F1: All adults 16+ in England

SHOW SCREEN - MULTI CHOICE

Q.31 (AVFeat). Although fully driverless or self-driving vehicles are not yet available for everyday use, some cars available today have self-driving features. Which of these have you heard of?

SCRIPTERS: DO NOT INVERT

1. Lane assist, detects if the driver unintentionally leaves their lane and adjusts the steering accordingly

2. Automated parking, where the car parks itself without driver involvement

3. Automatic Emergency braking that detects if impact is imminent and applies brakes automatically

4. Adaptive cruise control where the car automatically adjusts the speed based on the traffic ahead

5. In-car Wi-Fi connection

6. Remote control drive or remote control parking. This is when driving is controlled remotely using a

mobile device outside the car

7. Traffic Jam assistant for use in slow-moving traffic. The vehicle automatically drives within its lane,

keeping safe distance from the vehicle in front.

None of these - MUTUALLY EXCLUSIVE

F13: All who have heard of self driving features and hold a valid UK driving licence (Q31\1-7 AND Q4\1-3)

SHOW SCREEN - MULTI CHOICE

Q.32 (AVUsed). And which, if any of these, have you used yourself?

SCRIPTING: ONLY SHOW RESPONSES CODED AT Q31

SCRIPTERS: DO NOT INVERT

1. Lane assist, detects if the driver unintentionally leaves their lane and adjusts the steering accordingly

2. Automated parking, where the car parks itself without driver involvement

3. Automatic Emergency braking that detects if impact is imminent and applies brakes automatically

4. Adaptive cruise control where the car automatically adjusts the speed based on the traffic ahead

5. In-car Wi-Fi connection

6. Remote control drive or remote control parking. This when driving is controlled remotely using a mobile device outside the car

7. Traffic Jam assistant for use in slow-moving traffic. The vehicle automatically drives within its lane,

keeping safe distance from the vehicle in front.

None of these-MUTUALLY EXCLUSIVE

F1: All adults 16+ in England

(Intro2): The next question is about HGV platoons. By this we mean wirelessly connected lorries travelling in convoy close together, with acceleration, braking and potentially steering controlled by the lead vehicle.

F1: All adults 16+ in England

SHOW SCREEN

Q.33 (HGVKnow). How much, if anything, would you say you know about HGV platoons?

SCRIPTERS: DO NOT INVERT

- 1. Hadn't heard about them before now
- 2. Hardly anything but I've heard of them
- 3. A little
- 4. A fair amount
- 5. A lot

Don't know

F1: All adults 16+ in England

(Intro3): The next few questions are about drones. A drone is an unmanned aerial vehicle guided by remote control or on-board computers.

F1: All adults 16+ in England

SHOW SCREEN

Q.34 (Droneknow). How much, if anything, would you say you know about drones?

SCRIPTERS: DO NOT INVERT

- 1. Hadn't heard about them before now
- 2. Hardly anything but I've heard of them
- 3. A little
- 4. A fair amount
- 5. A lot

Don't know

F14: All who know something about drones (Q34\2-5)

SHOW SCREEN - MULTI CHOICE

Q.35 (DroneOwn). Have you ever personally used a drone?

INTERVIEWER PROMPT AS NECESSARY: Is that for personal use or for commercial or work-related use?

SELECT ALL THAT APPLY

SCRIPTERS: DO NOT INVERT

- 1. Yes, used one personally
- 2. Yes, used one for commercial or work-related reasons
- 3. No MUTUALLY EXCLUSIVE

F1: All adults 16+ in England

SHOW SCREEN - MULTI CODE

Q.36 (DroneAwar). Which of these uses of drones have you heard of?

SCRIPTING: KEEP LIST TO THIS ORDER. DO NO INTVERT

- 1. Armed forces\military use (e.g. surveillance, airstrikes)
- 2. Police use (e.g. monitoring borders, surveillance)
- 3. Emergency Response (e.g. search and rescue)
- 4. Infrastructure management (e.g. building\bridge inspection, monitoring crops)
- 5. Retail use (e.g. package delivery, stock checking)
- 6. Professional photography, filming and journalism
- 7. Leisure use (e.g. flying drones for fun, to take pictures & video)

None of these - MUTUALLY EXCLUSIVE

F1: All adults 16+ in England

Q.37 (DroneSup). I am going to read out some situations and I would like you to tell me whether you support or oppose drones being used in each one.

SHOW SCREEN AND READ OUT STATEMENT

To what extent do you support or oppose drones being used in this situation?

SCRIPTING: RANDOMISE ORDER OF STATEMENTS

Police use such as monitoring borders, surveillance

Emergency response such as search and rescue

Infrastructure management such as building or bridge inspection, monitoring crops

Retail use such as package delivery, stock checking

Professional photography, filming and journalism

Leisure use such as flying drones for fun, taking pictures & video

- 1. Strongly support
- 2. Tend to support
- 3. Neither support nor oppose
- 4. Tend to oppose
- 5. Strongly oppose

F1: All adults 16+ in England

DO NOT SHOW SCREEN UNTIL TOLD TO DO SO

F1: All adults 16+ in England

DO NOT SHOW SCREEN - MULTI CHOICE

Q.38 (Droneconc). What concerns, if any, do you have about the use of drones?

DO NOT PROMPT. PROBE FULLY. CODE ALL THAT APPLY.

- 1. Privacy\intrusion
- 2. Drones malfunctioning
- 3. Whether owners use them safely\safety of device
- 4. Concerns about use of airspace\collisions with aircraft
- 5. Misuse of drones (e.g. hacking, terrorism, used by criminals)
- 6. Noise
- 7. Difficulty of tracing drone owners\operators (e.g. in case of accidents)
- 8. Impact on jobs e.g. if drones take over human job roles
- 9. Commercial sensitivity (e.g. businesses being spied on)
- 10. The use of drones in the military\if used as a weapon
- 11. Other PEN WRITE IN

No concerns - MUTUALLY EXCLUSIVE

Don't know- MUTUALLY EXCLUSIVE

F1: All adults 16+ in England

Intro 4: And now thinking about your views on a different subject

SCRIPTING INTSTRUCTION: Rotate Q39 and Q40

F1: All adults 16+ in England

SHOW SCREEN

Q.39 (AQWorry). How concerned, if at all, are you about air quality in your local area? Please think of the area within 15-20 minutes walking distance from your home.

- 1. Very concerned
- 2. Fairly concerned
- 3. Not very concerned
- 4. Not at all concerned

Don't know

F1: All adults 16+ in England

SHOW SCREEN

Q.40 (CCWorry). How concerned, if at all, are you about climate change?

- 1. Very concerned
- 2. Fairly concerned
- 3. Not very concerned
- 4. Not at all concerned

Don't know

F1: All adults 16+ in England

(Intro 5): Developments in science and technology mean that there are some new and innovative ways of travelling that are being developed.

I'll ask you about some of these over the next few questions.

F1: All adults 16+ in England

SHOW SCREEN

Q.41 (Space1): **Space tourism** will allow members of the public to buy tickets to travel to space and back.

How much, if anything, would you say you know about space tourism?

SCRIPTERS: DO NOT INVERT

- 1. Hadn't heard about this before now
- 2. Hardly anything but I've heard of this
- 3. A little
- 4. A fair amount

5. A lot

Don't know

F1: All adults 16+ in England

SHOW SCREEN

Q.42 (Hyper1): **Hyperloops** are a proposal to travel at speeds of up to 800 miles per hour between cities using small high speed vehicles inside tubes.

How much, if anything, would you say you know about hyperloops?

SCRIPTERS: DO NOT INVERT

- 1. Hadn't heard about this before now
- 2. Hardly anything but I've heard of this
- 3. A little
- 4. A fair amount
- 5. A lot

Don't know

F1: All adults 16+ in England

SHOW SCREEN

Q.43 (FlyTaxi1): **Flying taxis** are drones that can fly passengers on short journeys within cities, without the need for a pilot.

How much, if anything, would you say you know about flying taxis?

SCRIPTERS: DO NOT INVERT

- 1. Hadn't heard about this before now
- 2. Hardly anything but I've heard of this
- 3. A little
- 4. A fair amount
- 5. A lot

Don't know

F15: All who do not personally own\continuously use car\van (Q5\4 OR Q7\2)

SHOW SCREEN

Q.44 (B46a): Thinking now about personal safety, that is the risk of being a victim of crime, please rate these forms of transport in order of safety from the most safe to the least safe. So which one would you say is most safe?

- 1. Bus
- 2. Overground train (NOT including underground\tube\metro systems)
- 3. Car
- 4. Bicycle

F15: All who do not personally own\continuously use car\van (Q5\4 OR Q7\2)

SHOW SCREEN

Q.45 (B46b): And which one would you say is the second most safe?

SCRIPTING: EXCLUDE RESPONSE SELECTED AT Q44

- 1. Bus
- 2. Overground train (NOT including underground\tube\metro systems)
- 3. Car
- 4. Bicycle

F15: All who do not personally own\continuously use car\van (Q5\4 OR Q7\2)

SHOW SCREEN

Q.46 (B46c): And which one would you say is the third most safe?

SCRIPTING: EXCLUDE RESPONSES SELECTED AT Q44 AND Q45

- 1. Bus
- 2. Overground train (NOT including underground\tube\metro systems)
- 3. Car
- 4. Bicycle

F1: All adults 16+ in England

Now a few questions about you...

F4: All who personally own\continuously use car\van (Q7\1)

SHOW SCREEN

Q.47 (A1): How long have you lived in your current home?

SCRIPTERS: DO NOT PROMPT

- 1. Up to 1 year
- 2. More than 1 year, up to 2 years
- 3. More than 2 years, up to 5 years
- 4. More than 5 years, up to 10 years
- 5. More than 10 years, up to 20 years
- 6. More than 20 years

Don't know

Refused

F15: All who do not personally own\continuously use car\van (Q5\4 OR Q7\2)

SHOW SCREEN

Q.48 (CN76): How often nowadays, if at all, do you use home delivery (e.g. internet shopping \ telephone ordering) for any non-food shopping, such as for buying books, CDs, clothes, holidays, or insurance?

- 1. Regularly
- 2. Sometimes
- 3. Have only done this once or twice
- 4. Never

Don't know

F1: All adults 16+ in England

SHOW SCREEN

Q.49 (F12): Please look at this screen and tell me whether you have any of the educational or school qualifications listed. Start at the top of the list and tell me the first one you come to that you have.

SCRIPTERS: DO NOT INVERT

- 1. University Higher Degree (e.g. MSc; PhD)
- 2. First degree level qualification (e.g. BA; BSc) including foundation degrees; PGCE
- 3. Diploma in higher education; HNC; HND; Nursing or Teaching qualification (excluding PGCE)
- 4. A level; AS level; NVQ level 3; GNVQ Advanced; or equivalent 5
- 5. GCSE grade A* -C; O level; CSE grade 1; NVQ level 2; GNVQ intermediate; or equivalent
- 6. GCSE grade D -G; CSE below grade 1; NVQ level 1; GNVQ Foundation level; or equivalent

None of these

Refused

F1: All adults 16+ in England

SHOW SCREEN-MULTI CHOICE

Q.50 (B2): Do you have any disability or other long standing health problem that makes it difficult for you to do any of the following...

READ OUT AND SELECT ALL THAT APLPLY

- 1. Go out on foot
- 2. Use local buses
- 3. Get in or out of a car

None of these - MUTUALLY EXCLUSIVE

F1: All adults 16+ in England

SHOW SCREEN

Q.51 (B39b): Do you have any disability or other long standing health problem that makes it, or would make it, difficult or impossible for you to ride a bicycle?

SCRIPTERS: DO NOT INVERT

- 1. Yes impossible
- 2. Yes difficult
- 3. No
- 4. Don't know

F15: All who do not personally own\continuously use car\van (Q5\4 OR Q7\2)

SHOW SCREEN

Q.52 (F15_HIncome). From this list, which of these phrases comes closest to describing your feeling about your household income these days?

- 1. Living comfortably on present income
- 2. Coping on present income
- 3. Finding it difficult on present income
- 4. Finding it very difficult on present income

Refused

F1: All adults 16+ in England

(IntroNS): Now some questions about your job. If you are currently working, please answer about your current job. If you are not working, please answer about your most recent job.

F1: All adults 16+ in England

SHOW SCREEN

Q.53 (NS1). Do (did) you work as an employee or are (were) you self-employed?

- 1. Employee
- 2. Self-employed with employees
- 3. Self-employed\freelance without employees
- 4. Never worked

F16: All who are employees or self-employed with employees (Q53\1,2)

SHOW SCREEN

Q.54 (NS2). **IF F17 (Q53\1)**: How many people work (worked) for your employer at the place where you work (worked)?]

IF F19 (Q53\2): How many people do (did) you employ?]

- 1. 1-24
- 2. 25 or more

F17: All who are an employee (Q53\1)

SHOW SCREEN

Q.55 (NS3). Do (did) you supervise any other employees?

IF NECESSARY: A supervisor or foreman is responsible for overseeing the work of other employees on a day-to-day basis.

- 1. Yes
- 2. No

F21: All who work\worked (Q53\1-3)

SHOW SCREEN

Q.56 (NS4). Which of these best describes the sort of work you do (did)?

SCRIPTERS: DO NOT INVERT

- 1. Modern professional occupations such as: teacher, nurse, physiotherapist, social worker, welfare officer. Artist, musician, police officer (sergeant or above), software designer
- 2. Clerical and intermediate occupations such as: secretary, personal assistant, clerical worker, office clerk, call centre agent, nursing auxiliary, nursery nurse
- 3. Senior managers or administrators (usually responsible for planning, organising and co-ordinating work, and for finance) such as: finance manager, chief executive
- 4. Technical and craft occupations such as: motor mechanic, fitter, inspector, plumber, printer, tool maker, electrician, gardener, train driver
- 5. Semi-routine manual and service occupations such as: postal worker, machine operative, security guard, caretaker, farm worker, catering assistance, receptionist, sales assistant
- 6. Routine manual and service occupations such as: HGV driver, van driver, cleaner, porter, packer, sewing machinist, messenger, labourer, waiter\waitress bar staff
- 7. Middle or junior managers such as: office manager, retail manager, bank manager, restaurant manager, warehouse manager, publican
- 8. Traditional professional occupations such as: accountant, solicitor, medical practitioner, scientist, civil/mechanical engineer

F1: All adults 16+ in England

SHOW SCREEN

Q.57 (HHIncome). Please could you look at this screen and tell me which of these represents your household's total income, before tax and any other deductions. This includes earnings from employment or self-employment, income from benefits and pensions, and income from other sources such as interest from savings.

SCRIPTERS: DO NOT INVERT

Please just tell me the letter that applies to your household.

Annual	Weekly	Monthly
E) Under £2,500	Under £50	Under £200
J) 2,500 - £4,999	£50 - £99	£200 - £399
C) £5,000 - £9,999	£100 - £199	£400 - £829
G) 10,000 - £15,999	£200 - £309	£830 - £1329
K) 16,000 - £19,999	£310 - £389	£1,330 - £1,649
A) £20,000 - £24,999	£390 - £489	£1,650 - £2,099

D) 25,000 - £29,999	£490 - £579	£2,100 - £2,499
M) 30,000 - £34,999	£580 - £679	£2,500 - £2,899
B) £35,000 - £39,999	£680 - £769	£2,900 - £3,349
H) 40,000 - £44,999	£770 - £869	£3,350 - £3,749
L) 45,000 - £49,999	£870 - £969	£3,750 - £4,149
F) £50,000 or more	£970 or more	£4,150 or more

Refused

Wave 2 Questionnaire

Questionnaire Filters

F1: All adults 16+ in England

F3: All with cars\vans in household or have use of them (Q5\1,2,3)

F13: All who have heard of self driving features and hold a valid UK driving licence (Q31\1-7 AND Q4\1-3)

F14: All who know something about drones (Q34\2-5)

F16: All who are employees or self-employed with employees (Q53\1,2)

F17: All who are an employee (Q53\1)

F19: All who are self-employed with employees (Q53\2)

F20: All adults 17+ in England

F21: All who work\worked (Q53\1-3)

F20: All adults 17+ in England

SHOW SCREEN

Q.4 (Licence). Do you hold a valid UK driving licence?

ADD IF NECESSARY: Include international permits or other foreign licences valid in the UK.

PROBE TO CODES IF NECESSARY

- 1. Yes, full licence for car
- 2. Yes, provisional licence for car

- 3. Currently disqualified
- 4. No

F1: All adults 16+ in England

SHOW SCREEN

Q.5 (Numcar). How many cars or vans does your household own or have continuous use of at present?

INTERVIEWER NOTE: INCLUDE COMPANY CARS, IF AVAILABLE FOR PRIVATE USE. INCLUDE ANY BROKEN DOWN VEHICLES WHICH MAY BE IN USE WITHIN THE NEXT MONTH.

SCRIPTERS: DO NOT INVERT

- 4: None
- 1:1
- 2:2
- 3: 3 or more

F3: All with cars\vans in household or have use of them (Q5\1,2,3)

SHOW SCREEN

Q.7 (CarOwn). Just to check, do you personally own or have continuous use of a car or van?

INTERVIEWER NOTE: INCLUDE COMPANY CARS, IF AVAILABLE FOR PRIVATE USE. INCLUDE ANY BROKEN DOWN VEHICLES WHICH MAY BE IN USE WITHIN THE NEXT MONTH

- 1. Yes
- 2. No

F1: All adults 16+ in England

SHOW SCREEN

Q.25 (EVknow). How much, if anything, would you say you know about electric vehicles?

SCRIPTERS: DO NOT INVERT

- 1. Hadn't heard about them before now
- 2. Hardly anything but I've heard of them
- 3. A little

- 4. A fair amount
- 5. A lot

F1: All adults 16+ in England

(Intro1). Now a few questions about autonomous vehicles, commonly referred to as driverless or self-driving vehicles. By this we refer to vehicles that can drive themselves on roads with little or no input from a human driver.

F1: All adults 16+ in England

SHOW SCREEN

Q.28 (AVKnow). Fully driverless or self-driving vehicles are not yet available for everyday use. How much, if anything, would you say you know about these types of vehicle?

SCRIPTERS: DO NOT INVERT

- 1. Hadn't heard about them before now
- 2. Hardly anything but I've heard of them
- 3. A little
- 4. A fair amount
- 5. A lot

Don't know

F1: All adults 16+ in England

DO NOT SHOW SCREEN UNTIL TOLD TO DO SO

F1: All adults 16+ in England

DO NOT SHOW SCREEN - MULTI CHOICE

Q.29 (AVBen). What do you think are the advantages, if any, of fully driverless or self-driving vehicles?

DO NOT PROMPT, PROBE FOR ANY OTHER ADVANTAGES, CODE ALL THAT APPLY.

- 13. Safer\Less chance of driver error\fewer bad or drunk drivers
- 14. Convenience\can do other things while driving
- 15. Less stressful\don't have to worry about driving
- 16. Better traffic flow \less congestion
- 17. Reduced travel time
- 18. Better for environment

- 19. Better fuel economy \cheaper to run
- 20. Lower insurance\car tax
- 21. Easier for elderly\disabled people to travel
- 22. Better for economy e.g. improved productivity
- 23. Anyone can drive\don't need a driving licence
- 24. Other PEN WRITE IN

No advantages - MUTUALLY EXCLUSIVE

Don't know - MUTUALLY EXCLUSIVE

F1: All adults 16+ in England

DO NOT SHOW SCREEN - MULTI CHOICE

Q.30 (AVConcern). And what do you think are the disadvantages, if any, of fully driverless or self-driving vehicles?

DO NOT PROMPT. PROBE FOR ANY OTHER DISADVANTAGES. CODE ALL THAT APPLY.

- 16. Safety: Equipment failure or system failure
- 17. Safety: Car fails to react to unexpected situations
- 18. Safety: Interacting with other human drivers
- 19. Safety: Interacting with pedestrians and cyclists
- 20. Drivers will become lazy\pay less attention
- 21. Loss of driver control
- 22. Concerns about whether a driving test would apply
- 23. Legal liability \knowing who is at fault
- 24. Security concerns (eg hackers, terrorists, insurance fraudsters)
- 25. Data privacy (location tracking)
- 26. Increased congestion\more cars on the road
- 27. I enjoy driving\would take away pleasure of driving.
- 28. Impact on jobs\drivers losing their job
- 29. Reduced investment in public transport
- 30. Other PEN WRITE IN

No concerns - MUTUALLY EXCLUSIVE

Don't know - MUTUALLY EXCLUSIVE

F1: All adults 16+ in England

SHOW SCREEN - MULTI CHOICE

Q.31 (AVFeat). Although fully driverless or self-driving vehicles are not yet available for everyday use, some cars available today have self-driving features. Which of these have you heard of?

SCRIPTERS: DO NOT INVERT

- 8. Lane assist, detects if the driver unintentionally leaves their lane and adjusts the steering accordingly
- 9. Automated parking, where the car parks itself without driver involvement
- 10. Automatic Emergency braking that detects if impact is imminent and applies brakes automatically
- 11. Adaptive cruise control where the car automatically adjusts the speed based on the traffic ahead
- 12. In-car Wi-Fi connection
- Remote control drive or remote control parking. This is when driving is controlled remotely using a mobile device outside the car
- 14. Traffic Jam assistant for use in slow-moving traffic. The vehicle automatically drives within its lane, keeping safe distance from the vehicle in front.

None of these - MUTUALLY EXCLUSIVE

F13: All who have heard of self driving features and hold a valid UK driving licence (Q31\1-7 AND Q4\1-3)

SHOW SCREEN - MULTI CHOICE

Q.32 (AVUsed). And which, if any of these, have you used yourself?

SCRIPTING: ONLY SHOW RESPONSES CODED AT Q31

SCRIPTERS: DO NOT INVERT

- 8. Lane assist, detects if the driver unintentionally leaves their lane and adjusts the steering accordingly
- 9. Automated parking, where the car parks itself without driver involvement
- 10. Automatic Emergency braking that detects if impact is imminent and applies brakes automatically
- 11. Adaptive cruise control where the car automatically adjusts the speed based on the traffic ahead
- 12. In-car Wi-Fi connection
- 13. Remote control drive or remote control parking. This when driving is controlled remotely using a mobile device outside the car
- 14. Traffic Jam assistant for use in slow-moving traffic. The vehicle automatically drives within its lane, keeping safe distance from the vehicle in front.

None of these-MUTUALLY EXCLUSIVE

F1: All adults 16+ in England

SHOW SCREEN

Q.34 (Droneknow). How much, if anything, would you say you know about drones?

SCRIPTERS: DO NOT INVERT

- 1. Hadn't heard about them before now
- 2. Hardly anything but I've heard of them
- 3. A little
- 4. A fair amount
- 5. A lot

Don't know

F14: All who know something about drones (Q34\2-5)

SHOW SCREEN - MULTI CHOICE

Q.35 (DroneOwn). Have you ever personally used a drone?

INTERVIEWER PROMPT AS NECESSARY: Is that for personal use or for commercial or work-related use?

SELECT ALL THAT APPLY

SCRIPTERS: DO NOT INVERT

- 1. Yes, used one personally
- 2. Yes, used one for commercial or work-related reasons
- 3. No MUTUALLY EXCLUSIVE

Don't know

F1: All adults 16+ in England

SHOW SCREEN - MULTI CODE

Q.36 (DroneAwar). Which of these uses of drones have you heard of?

SCRIPTING: KEEP LIST TO THIS ORDER. DO NO INTVERT

- 1. Armed forces\military use (e.g. surveillance, airstrikes)
- 2. Police use (e.g. monitoring borders, surveillance)
- 3. Emergency Response (e.g. search and rescue)
- 4. Infrastructure management (e.g. building\bridge inspection, monitoring crops)
- 5. Retail use (e.g. package delivery, stock checking)
- 6. Professional photography, filming and journalism
- 7. Leisure use (e.g. flying drones for fun, to take pictures & video)

None of these - MUTUALLY EXCLUSIVE

F1: All adults 16+ in England

Q.37 (DroneSup). I am going to read out some situations and I would like you to tell me whether you support or oppose drones being used in each one.

SHOW SCREEN AND READ OUT STATEMENT

To what extent do you support or oppose drones being used in this situation?

SCRIPTING: RANDOMISE ORDER OF STATEMENTS

Police use such as monitoring borders, surveillance

Emergency response such as search and rescue

Infrastructure management such as building or bridge inspection, monitoring crops

Retail use such as package delivery, stock checking

Professional photography, filming and journalism

Leisure use such as flying drones for fun, taking pictures & video

- 1. Strongly support
- 2. Tend to support
- 3. Neither support nor oppose
- 4. Tend to oppose
- 5. Strongly oppose

Don't know

F1: All adults 16+ in England

DO NOT SHOW SCREEN UNTIL TOLD TO DO SO

F1: All adults 16+ in England

DO NOT SHOW SCREEN - MULTI CHOICE

Q.38 (Droneconc). What concerns, if any, do you have about the use of drones?

DO NOT PROMPT. PROBE FULLY. CODE ALL THAT APPLY.

1. Privacy\intrusion

- 2. Drones malfunctioning
- 3. Whether owners use them safely\safety of device
- 4. Concerns about use of airspace\collisions with aircraft
- 5. Misuse of drones (e.g. hacking, terrorism, used by criminals)
- 6. Noise
- 7. Difficulty of tracing drone owners\operators (e.g. in case of accidents)
- 8. Impact on jobs e.g. if drones take over human job roles
- 9. Commercial sensitivity (e.g. businesses being spied on)
- 10. The use of drones in the military\if used as a weapon
- 11. Other PEN WRITE IN

No concerns - MUTUALLY EXCLUSIVE

Don't know- MUTUALLY EXCLUSIVE

F1: All adults 16+ in England

SHOW SCREEN

Q.53 (NS1). Do (did) you work as an employee or are (were) you self-employed?

- 1. Employee
- 2. Self-employed with employees
- 3. Self-employed\freelance without employees
- 4. Never worked

F16: All who are employees or self-employed with employees (Q53\1,2)

SHOW SCREEN

Q.54 (NS2). **IF F17 (Q53\1)**: How many people work (worked) for your employer at the place where you work (worked)?]

IF F19 (Q53\2): How many people do (did) you employ?]

- 1. 1-24
- 2. 25 or more

F17: All who are an employee (Q53\1)

SHOW SCREEN

Q.55 (NS3). Do (did) you supervise any other employees?

IF NECESSARY: A supervisor or foreman is responsible for overseeing the work of other employees on a day-to-day basis.

- 1. Yes
- 2. No

F21: All who work\worked (Q53\1-3)

SHOW SCREEN

Q.56 (NS4). Which of these best describes the sort of work you do (did)?

SCRIPTERS: DO NOT INVERT

- 1. Modern professional occupations such as: teacher, nurse, physiotherapist, social worker, welfare officer. Artist, musician, police officer (sergeant or above), software designer
- 2. Clerical and intermediate occupations such as: secretary, personal assistant, clerical worker, office clerk, call centre agent, nursing auxiliary, nursery nurse
- 3. Senior managers or administrators (usually responsible for planning, organising and co-ordinating work, and for finance) such as: finance manager, chief executive
- 4. Technical and craft occupations such as: motor mechanic, fitter, inspector, plumber, printer, tool maker, electrician, gardener, train driver
- 5. Semi-routine manual and service occupations such as: postal worker, machine operative, security guard, caretaker, farm worker, catering assistance, receptionist, sales assistant
- 6. Routine manual and service occupations such as: HGV driver, van driver, cleaner, porter, packer, sewing machinist, messenger, labourer, waiter\waitress bar staff
- 7. Middle or junior managers such as: office manager, retail manager, bank manager, restaurant manager, warehouse manager, publican
- 8. Traditional professional occupations such as: accountant, solicitor, medical practitioner, scientist, civil/mechanical engineer

F1: All adults 16+ in England

SHOW SCREEN

Q.49 (F12): Please look at this screen and tell me whether you have any of the educational or school qualifications listed. Start at the top of the list and tell me the first one you come to that you have.

SCRIPTERS: DO NOT INVERT

- 1. University Higher Degree (e.g. MSc; PhD)
- 2. First degree level qualification (e.g. BA; BSc) including foundation degrees; PGCE
- 3. Diploma in higher education; HNC; HND; Nursing or Teaching qualification (excluding PGCE)

- 4. A level; AS level; NVQ level 3; GNVQ Advanced; or equivalent 5
- 5. GCSE grade A* -C; O level; CSE grade 1; NVQ level 2; GNVQ intermediate; or equivalent
- 6. GCSE grade D -G; CSE below grade 1; NVQ level 1; GNVQ Foundation level; or equivalent

None of these

Refused

F1: All adults 16+ in England

SHOW SCREEN

Q.57 (HHIncome). Please could you look at this screen and tell me which of these represents your household's total income, before tax and any other deductions. This includes earnings from employment or self-employment, income from benefits and pensions, and income from other sources such as interest from savings.

SCRIPTERS: DO NOT INVERT

Please just tell me the letter that applies to your household.

Annual	Weekly	Monthly
E) Under £2,500	Under £50	Under £200
J) 2,500 - £4,999	£50 - £99	£200 - £399
C) £5,000 - £9,999	£100 - £199	£400 - £829
G) 10,000 - £15,999	£200 - £309	£830 - £1329
K) 16,000 - £19,999	£310 - £389	£1,330 - £1,649
A) £20,000 - £24,999	£390 - £489	£1,650 - £2,099
D) 25,000 - £29,999	£490 - £579	£2,100 - £2,499
M) 30,000 - £34,999	£580 - £679	£2,500 - £2,899
B) £35,000 - £39,999	£680 - £769	£2,900 - £3,349
H) 40,000 - £44,999	£770 - £869	£3,350 - £3,749
L) 45,000 - £49,999	£870 - £969	£3,750 - £4,149
F) £50,000 or more	£970 or more	£4,150 or more

Don't know

Refused

Appendix C

Glossary of terms

Adaptive cruise control	This controls and maintains a vehicle's speed automatically.
Automated parking	When a car parks itself without driver involvement.
Automated vehicles	These were referred to as 'driverless or self-driving vehicles' in the original survey question wording. These are vehicles that can drive themselves with little or no input from a human driver.
Automatic emergency braking	Braking that detects if impact is imminent and applies brakes automatically.
Driver assistance	A feature which automates an aspect of a vehicle's operations, such as automated parking or lane assist (see below).
Drone	An unmanned aerial vehicle guided by remote control or onboard computers.
Electric vehicles	A vehicle that is powered solely by electricity, rather than petrol or diesel.
Flying taxis	Drones that can fly passengers on short journeys within cities, without the need for a pilot.
HGV platoons	Wirelessly connected lorries that travel in convoy close together, with acceleration, braking and potentially steering controlled by the lead vehicle.
Hyperloops	A proposal to travel at speeds of up to 800 miles per hour between cities using small high-speed vehicles inside tubes
Lane assist	A feature that detects if the driver is unintentionally leaving their lane and adjusts the steering accordingly.
Remote control drive or remote-control parking	Driving that is controlled remotely using a mobile device outside the vehicle.
Space tourism	This allows members of the public to buy tickets to travel to space and back.
Traffic jam assist	In congested traffic, the vehicle automatically drives within its own lane and keeps safe distance from the vehicle in front.