Department for Infrastructure
An Roinn Bonneagair
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Road Safety Issues in Northern Ireland, 2020/21

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NISRA
Northern Ireland Statistics and Research Agency
Gníomhaireacht Thuaisceart Éireann um Staitisticí agus Taighde

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Findings from the NI Continuous Household Survey

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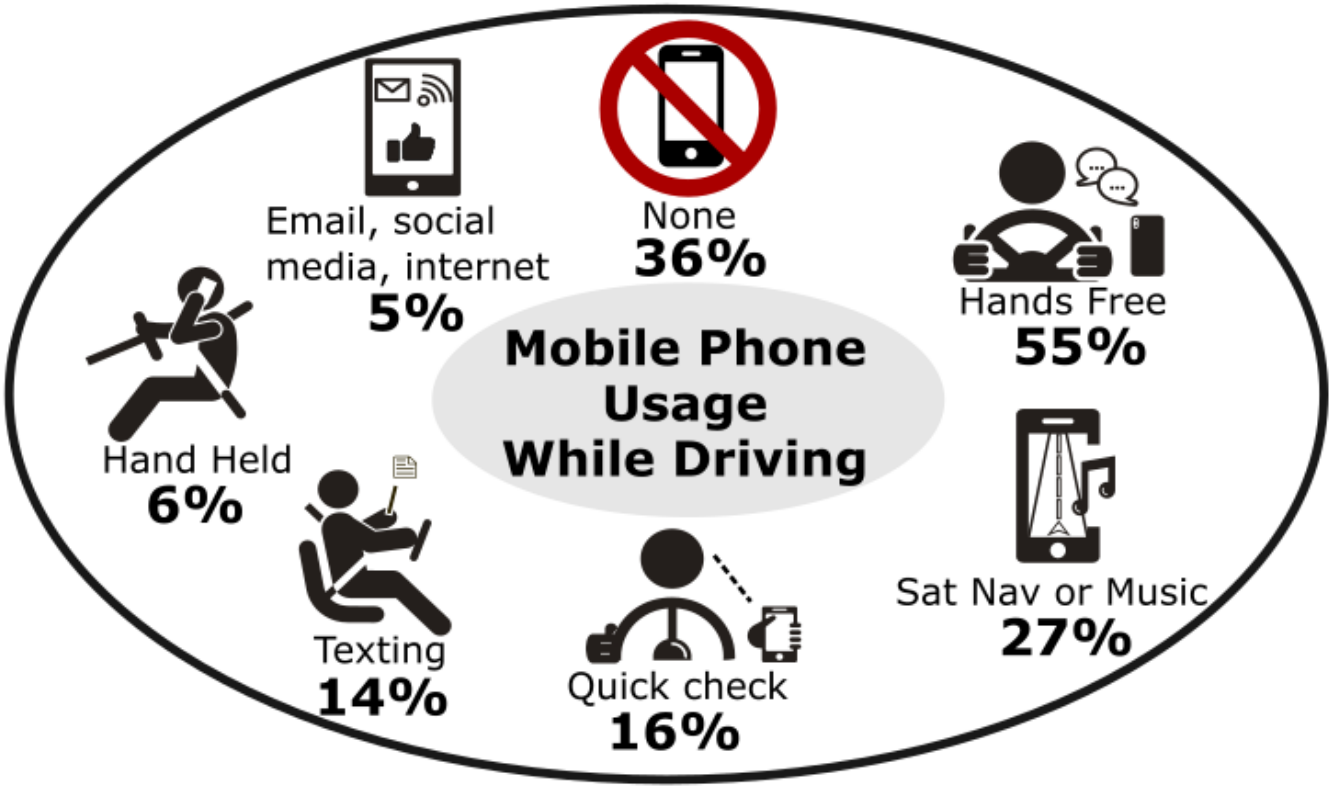
64% of drivers used their phone in some capacity while driving over the last year

Males were more likely to use their phones in both a moving and stationary vehicle

Older drivers (65+) were much less likely to use their phones while driving

Proportion of drivers who used their phone while driving by use type:



48% of respondents believed they were likely to be **caught by police** if using a hand-held mobile phone whilst driving

For further information, please contact Philip Ward (Analysis, Statistics and Research Branch - asrb@nisra.gov.uk)

Introduction

This report presents information from the 2020/21 Continuous Household Survey (CHS) in relation to the attitudes, awareness and behaviour of respondents to specific road safety issues. Due to the coronavirus (COVID-19) pandemic, data collection for the 2020/21 survey moved from face-to-face interviewing to telephone mode with a reduction in the number of questions.
Please note that the results from the CHS 2020/21 are not directly comparable to previous years due to the significant changes to the survey in terms of methodology. For further information please refer to the Continuous Household Survey 2020/21 Technical Report.

Also due to constraints in survey content the following questions were not asked in 2020/21:

- *In general, the presence of street lights means that the speed limit **(in miles per hour)** on that road is…?*
- *What do you think are the risks, if any, associated with using a hand-held mobile phone while driving?*

The final dataset contains the records for 1,855 adults with these people being asked questions relating to their mobile phone usage while driving and the likelihood of being caught by police with 1,841 providing responses to at least one of these questions.

The Department for Infrastructure (DfI) and its Road Safety Partners are committed to promoting improved road safety and delivering better regulation of the transport sector. An annual programme of research and statistical investigations into road safety problems in NI continues to be developed and implemented in collaboration with Road Safety Partner organisations. The results from this report form part of that research programme.

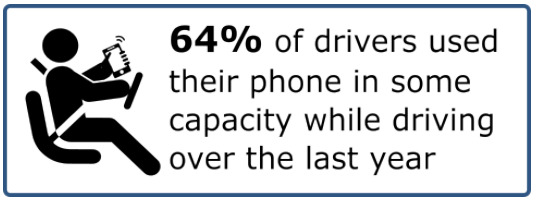
Key Findings from 2020/21 CHS

- Almost two thirds of all drivers (64%) reported that they used their phone in some capacity while driving a car.
- Making a hands free call accounted for the highest usage in a moving (53%) or stationary vehicle (49%)
- Just over one in twenty of all drivers (6%) admitted to making a hand held call while driving.
- Older drivers were identified as the group who were least likely to use their phone while driving with just over a third (34%) of those aged 65 or over admitting to have done so in the last 12 months.
- Less than half (48%) of respondents believe that drivers were likely to be stopped by police for using their mobile phone while driving.

Attitudes to Mobile phone usage while driving

Respondents were asked in the last 12 months whether or not they have used their mobile phone in any of the following ways while driving:

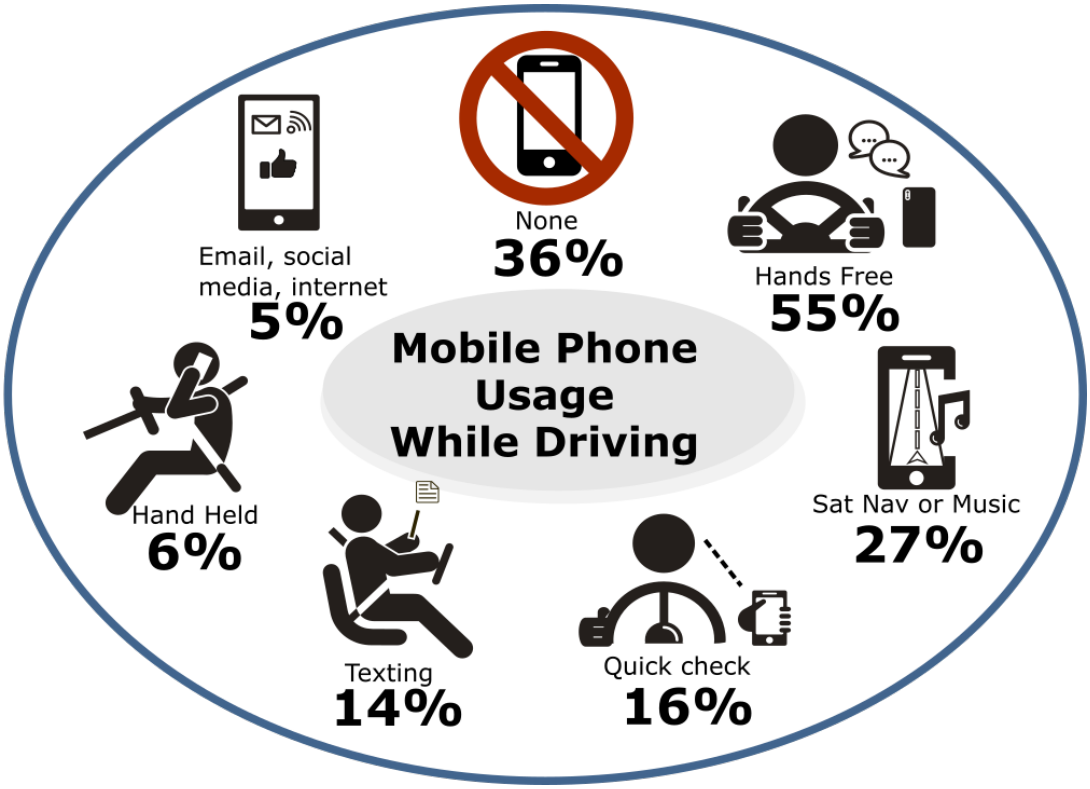
- Made or received a phone call (hand-held or hands free)
- Used their phone to send or read a text message
- Used their phone for email, social media or internet
- Used their phone for sat nav or music
- Quickly checked their phone (for example, to check notifications)
- None of the above



Almost two thirds of drivers (64%) surveyed carried out at least one action on their mobile phone while driving (moving or stationary) within the last 12 months, while (36%) stated they had not accessed their phone while driving.

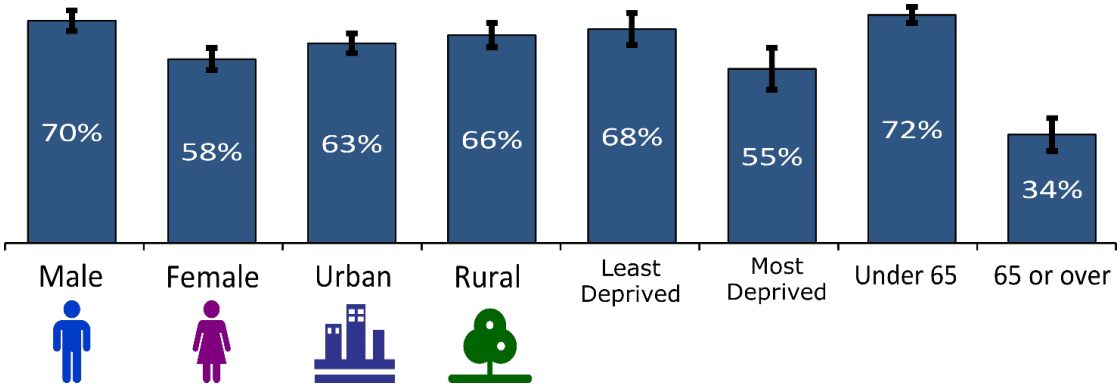
The infographic below shows that making a hands free call was the most frequent, with over half (55%) of drivers responding having done so within the last year. The next highest usage was using sat nav or music (27%), followed by making a quick check of the phone (16%), texting (14%), making a hand held call (6%) and finally using the phone for e-mail, social media or internet which was reported by 5% of drivers.

Figure 1: Phone usage overall by use type while driving[1] within last 12 months 2020/21



[1] regardless of while moving or stationary

Figure 2: Proportion of phone usage overall within last 12 months while driving by category 2020/21



There were no differences in responses by urban/rural location. However, females, respondents living in the most deprived areas and those aged 65 or over were less likely to have used a phone while driving in the last 12 months.

Further to above, responses have been analysed to determine if respondent's usage of a mobile phone while driving differ if they are driving a moving vehicle compared with driving a vehicle that is stationary, but still on the road (e.g. as part of a queue of traffic).

Using mobile phone in a moving vehicle 2020/21

Over half of all drivers stated that they had made a hands free call (53%) while **driving a moving vehicle** in the last 12 months; this is in comparison with 4% of drivers who had made a hand held call in the same time period. Aside from making a call, the next highest action when in a moving vehicle reported by respondents was to use their phone for sat nav or music (24%), with having a quick check of the phone (7%), texting (5%) and checking e-mail, social media or internet (1%) making up the rest of the other responses. Over two-fifths of all respondents (41%) reported that they had never used their phone in the last 12 months while driving in a moving vehicle.

Using mobile phone in a stationary vehicle 2020/21

A higher proportion of drivers reported that they texted (13%), used e-mail, social media or internet (4%) or quickly checked their phone (15%) when the vehicle was **stationary in traffic than those in a moving vehicle.** In contrast, fewer respondents reported making a hands free call (49%) in a stationary vehicle than a moving vehicle (53%) while using satnav or music showed no real change in usage regardless of whether the vehicle was moving or stationary. Over two-fifths of all drivers stated that they didn't interact with their phone while stuck in traffic or waiting at traffic lights (41%), similar to the proportion observed in moving vehicles.

Figure 3: Mobile Phone Usage in a Moving Vehicle and Stationary Vehicle 2020/21

	Hands Free	Sat nav/ Music	Quick Check	Hand Held	Texting	Email, social media & internet	None
Moving Vehicle	53%	24%	7%	4%	5%	1%	41%
Stationary Vehicle	49%	22%	15%	5%	13%	4%	41%
Trend Assessment	Reported phone usage in a moving vehicle is lower than in a stationary vehicle for 'text messages', 'quick check' and 'email,social media & internet'						

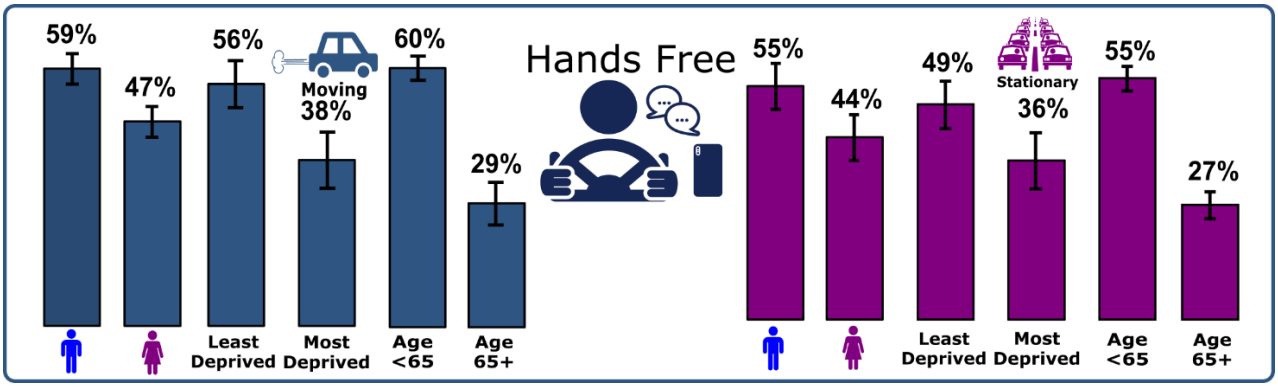
Phone usage while driving - Further Breakdown

Responses to the question of mobile phone usage while driving was further analysed to see if there were any differences apparent by gender, age, location, or deprivation area. Only those responses that show a significant difference are displayed below. In general, there were no differences between the age groups younger than 65, so these have been grouped, and analysis therefore focuses on those aged under 65 compared with those aged 65+.

Figure 4: Proportion of respondents who made or received a hand held call while driving 2020/21

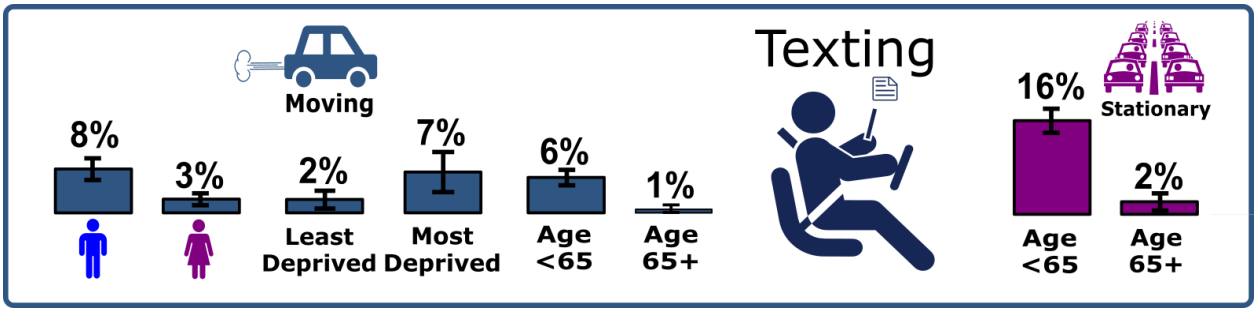
Male drivers and drivers under the age of 65 were more likely to use a hand held phone in both a moving and stationary vehicle than females and drivers aged 65 and over.

Figure 5: Proportion of respondents who made or received a hands free call while driving 2020/21



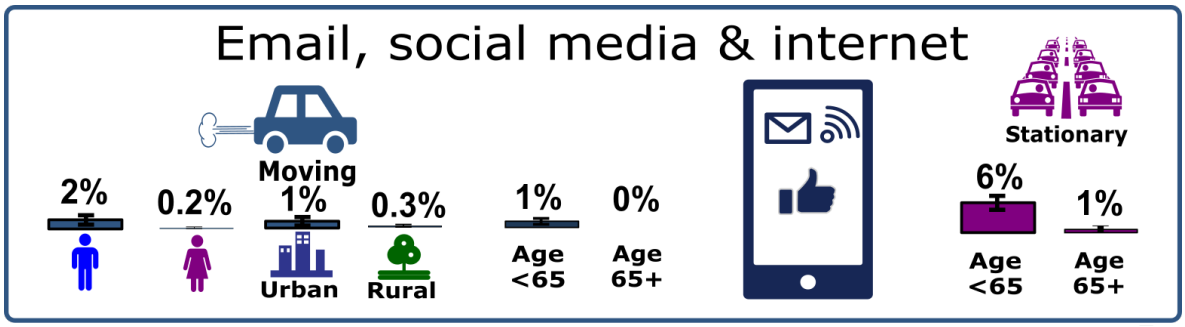
Male drivers, drivers from the least deprived areas and drivers under the age of 65 were more likely to make a hands free call in both moving and stationary vehicles than female drivers, drivers from the most deprived areas and drivers aged 65 and over.

Figure 6: Proportion of respondents who used phone to send or read a text message while driving 2020/21



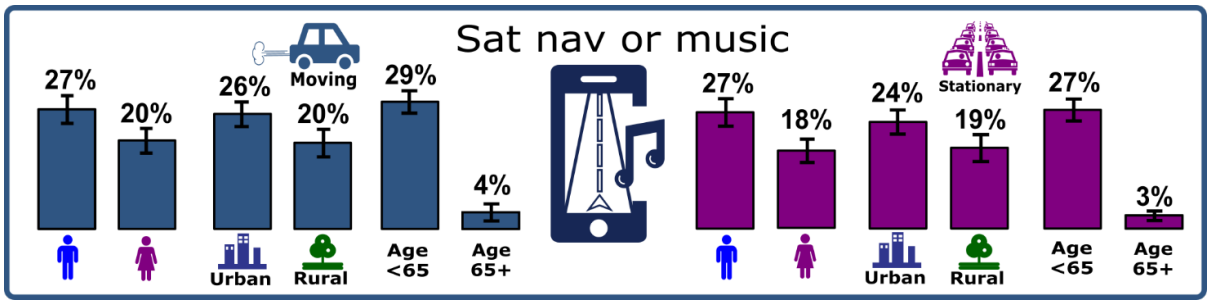
Drivers under the age of 65 were more likely to send or read a text message in both moving and stationary vehicles than drivers aged 65 and over. Males and drivers from the most deprived areas were more likely to send or read a text in a moving vehicle than female drivers and drivers from the least deprived areas.

Figure 7: Proportion of respondents who used phone for any other purpose while driving (email, social media, and internet) 2020/21



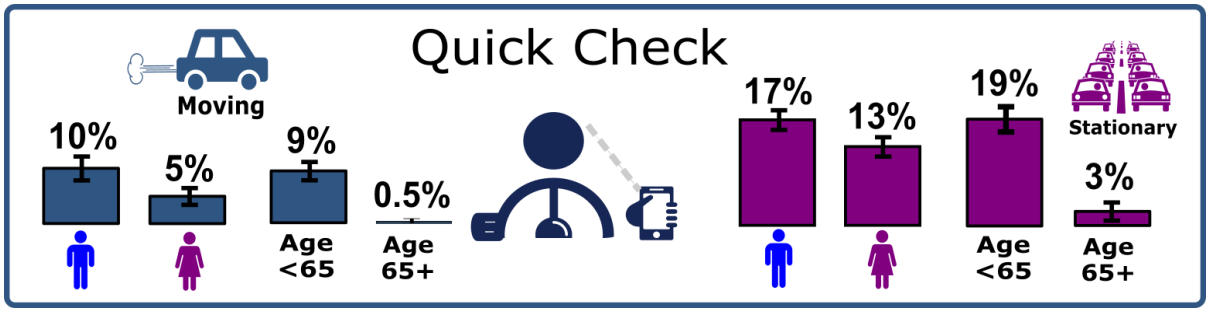
Drivers under the age of 65 were more likely to access their phone for email, social media or internet in both moving and stationary vehicles than drivers aged 65 and over. Male drivers and drivers from urban areas were more likely to access their phone for email, social media or internet in a moving vehicle than female drivers and drivers from rural areas.

Figure 8: Proportion of respondents who used phone for sat nav or music while driving 2020/21



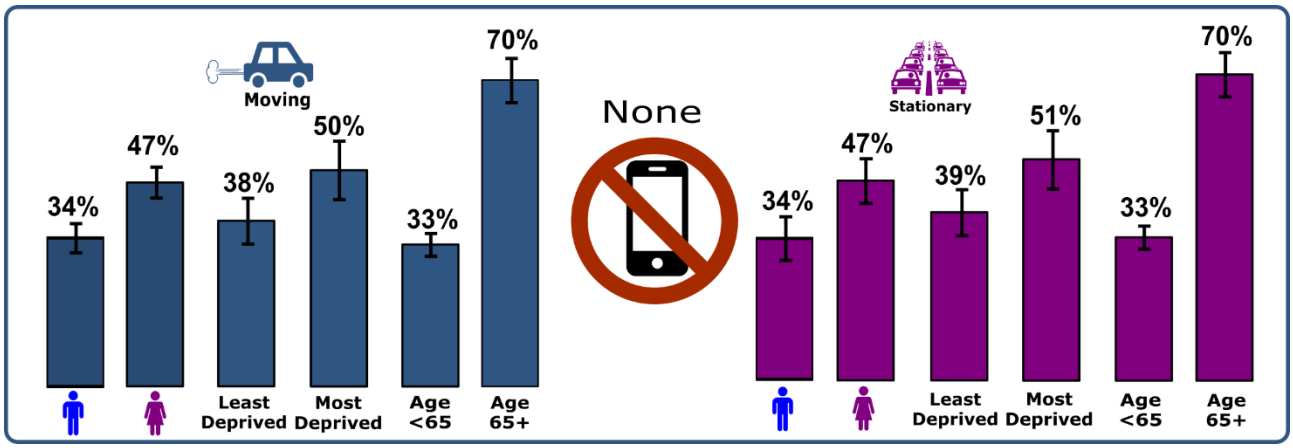
Male drivers, drivers from urban areas and drivers under the age of 65 were more likely to use sat nav or music in both moving and stationary vehicles than female drivers, drivers from rural areas and drivers aged 65 and over.

Figure 9: Proportion of respondents who quickly checked phone while driving 2020/21



Male drivers and drivers under the age of 65 were more likely to perform a quick check of their phones while driving in both moving and stationary vehicles than female drivers and drivers aged 65 and over.

Figure 10: Proportion of respondents who did not use phone at all while driving 2020/21



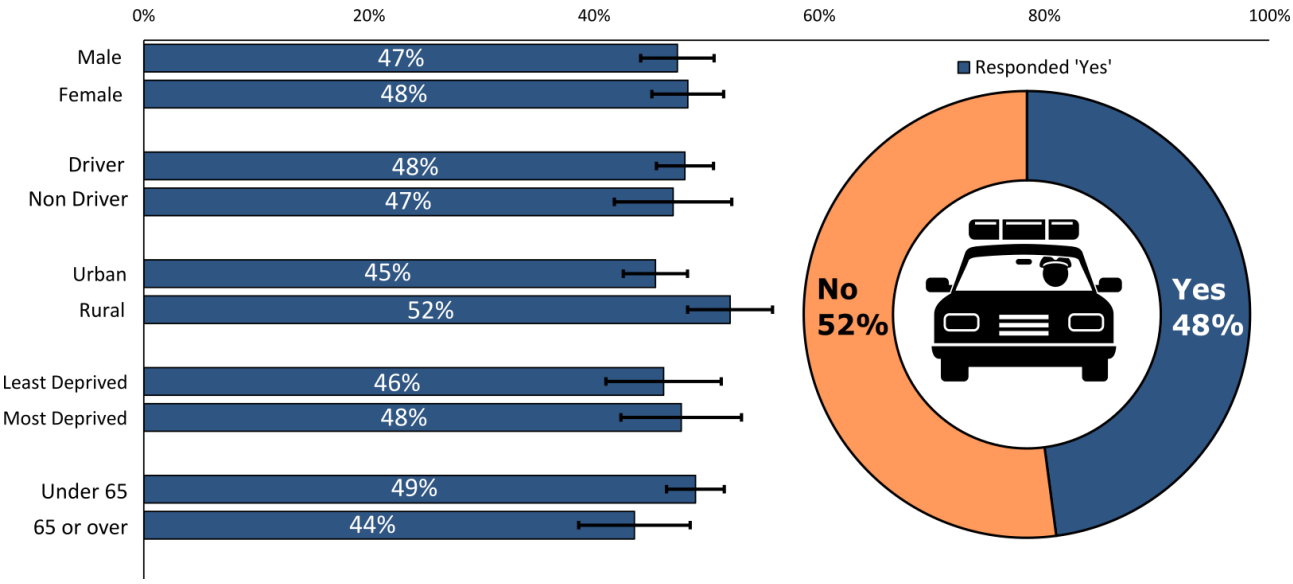
Female drivers, drivers from the most deprived areas and drivers aged 65 and over were less likely to use their phones in both moving and stationary vehicles than male drivers, drivers from the least deprived areas and drivers aged under 65.

Mobile phone use – likely to be stopped by police

Respondents were then asked 'Do you think that it is likely that drivers using a hand-held mobile phone whilst driving will be caught by the police?' The responses were split down the middle with 52% responding 'No' and 48% responding 'Yes'.

Respondents from a rural area (52%) and those under the age of 65 (49%) were more likely to think that drivers would be stopped by police for using a hand-held mobile phone at the wheel of a car than urban respondents (45%) and those aged 65 or over (44%) respectively. However, there was no difference in opinion on this question between males and females, drivers and non-drivers or the least and most deprived.

Figure 11: Proportion of respondents who believe that drivers were more likely to be stopped by police whilst driving when using a mobile phone 2020/21



Annex A – Additional Tables

Table 1a: In the last 12 months, have you used your mobile phone in any of the ways listed while you were driving a moving vehicle?
(Base N=1,577)

Road type	Proportion	Total
Made or received a phone call (hand-held)	4%	**60**
Made or received a phone call (hands-free)	53%	**804**
Used your phone to send or read a text message	5%	**76**
Used your phone for any other purpose (email, social media, internet)	1%	**15**
Used your phone for sat nav or music	24%	**361**
Quickly checked your phone	7%	**111**
None of the above	41%	**614**
Used phone at all	59%	**901**
Total	**-**	**1,577**

Table 1b: In the last 12 months, have you used your mobile phone in any of the ways listed while you were driving a stationary vehicle?
(Base N=1,577)

Road type	Proportion	Total
Made or received a phone call (hand-held)	5%	**69**
Made or received a phone call (hands-free)	49%	**747**
Used your phone to send or read a text message	13%	**200**
Used your phone for any other purpose (email, social media, internet)	4%	**68**
Used your phone for sat nav or music	22%	**336**
Quickly checked your phone	15%	**232**
None of the above	41%	**618**
Used phone at all	59%	**897**
Total	**-**	**1,577**

Table 1c: In the last 12 months, have you used your mobile phone in any of the ways listed while you were driving?
(Base N=1,577)

Road type	Proportion	Total
Made or received a phone call (hand-held)	6%	**89**
Made or received a phone call (hands-free)	55%	**836**
Used your phone to send or read a text message	14%	**213**
Used your phone for any other purpose (email, social media, internet)	5%	**71**
Used your phone for sat nav or music	27%	**402**
Quickly checked your phone	16%	**240**
None of the above	36%	**541**
Used phone at all	64%	**974**
Total	**-**	**1,577**

Table 1d: In the last 12 months, have you used your mobile phone in any of the ways listed while you were driving a moving vehicle? By category
(Base N=1.577)

Category	Hand Held	Hands Free	Text	Other purpose	Sat nav music	Quick Check	None	Use	Total
Male	6%	59%	8%	2%	27%	10%	34%	66%	**725**
Female	2%	47%	3%	0.2%	20%	5%	47%	53%	**852**
SOA Urban	3%	51%	5%	1%	26%	8%	42%	58%	**984**
SOA Rural	5%	56%	5%	0.3%	20%	7%	38%	62%	**593**
Least deprived quintile	4%	56%	2%	1%	26%	9%	38%	62%	**480**
Most deprived quintile	6%	38%	7%	0.7%	23%	7%	50%	50%	**149**
Under 65	5%	60%	6%	1%	29%	9%	33%	67%	**1,124**
65 or over	1%	29%	0.7%	0%	4%	0.5%	70%	30%	**453**
Proportion	***4%***	***53%***	***5%***	***1%***	***24%***	***7%***	***41%***	***59%***	**-**
Total	**60**	**804**	**76**	**15**	**361**	**111**	**614**	**901**	**1,577**

Table 1e: In the last 12 months, have you used your mobile phone in any of the ways listed while you were driving a stationary vehicle? By category
(Base N=1,577)

Category	Hand Held	Hands Free	Text	Other purpose	Sat nav music	Quick Check	None	Use	Total
Male	6%	55%	15%	5%	27%	17%	34%	66%	**725**
Female	3%	44%	12%	4%	18%	13%	47%	53%	**852**
SOA Urban	5%	48%	14%	5%	24%	16%	42%	58%	**984**
SOA Rural	4%	52%	12%	4%	19%	14%	39%	61%	**593**
Least deprived quintile	5%	49%	14%	5%	26%	19%	39%	61%	**480**
Most deprived quintile	5%	36%	14%	7%	20%	15%	51%	49%	**149**
Under 65	5%	55%	16%	6%	27%	19%	33%	67%	**1,124**
65 or over	2%	27%	2%	0.6%	3%	3%	70%	30%	**453**
Proportion	***5%***	***49%***	***13%***	***4%***	***22%***	***15%***	***41%***	***59%***	**-**
Total	**69**	**747**	**200**	**68**	**336**	**232**	**618**	**897**	**1,577**

Table 1f: In the last 12 months, have you used your mobile phone in any of the ways listed while you were driving? By category
(Base N=1,577)

Category	Hand Held	Hands Free	Text	Other purpose	Sat nav music	Quick Check	None	Use	Total
Male	7%	61%	16%	5%	30%	18%	30%	70%	**725**
Female	4%	49%	12%	4%	23%	14%	42%	58%	**852**
SOA Urban	6%	54%	15%	5%	29%	17%	37%	63%	**984**
SOA Rural	6%	57%	13%	4%	23%	15%	34%	66%	**593**
Least deprived quintile	6%	58%	14%	5%	30%	19%	32%	68%	**480**
Most deprived quintile	7%	40%	14%	7%	23%	15%	45%	55%	**149**
Under 65	7%	62%	17%	6%	32%	19%	28%	72%	**1,124**
65 or over	3%	31%	3%	0.6%	5%	3%	66%	34%	**453**
Proportion	***6%***	***55%***	***14%***	***5%***	***27%***	***16%***	***36%***	***64%***	**-**
Total	**89**	**836**	**213**	**71**	**402**	**240**	**541**	**974**	**1,577**

Table 2a: Do you think that it is likely that drivers using a hand-held mobile phone whilst driving will be caught by the police? By category
(Base N=1,841)

Category	Yes	No	Total
Driver	48%	52%	**1,550**
Non diver	47%	53%	**291**
Male	47%	53%	**818**
Female	48%	52%	**1,023**
SOA Urban	45%	55%	**1,194**
SOA Rural	52%	48%	**647**
Least deprived quintile	46%	54%	**528**
Most deprived quintile	48%	52%	**222**
Under 65	49%	51%	**1,310**
65 or over	44%	56%	**531**
Total	**48%**	**52%**	**1,841**

Annex B - Technical Notes

Background

The information presented in this publication derives from the Northern Ireland Continuous Household Survey (CHS), a Northern Ireland wide household survey administered by the Central Survey Unit (CSU) of the Northern Ireland Statistics and Research Agency (NISRA). CSU is one of the main business areas of NISRA and has a long track record and a wealth of experience in the design, management and analysis of behavioural and attitude surveys in the context of a wide range of social policy issues. CSU procedures are consistent with the Official Statistics Code of Practice[1].
The survey is based on a sample of the general population resident in private households and has been running since 1983 and is designed to provide a regular source of information on a wide range of social and economic issues relevant to Northern Ireland.

Data Collection

DFI commissioned these questions on road safety issues in the 2020/2021 CHS. The questions are presented in Annex C on page 15 of this publication. Data were collected by CSU based on a random sample of 9,000 domestic addresses drawn from the NISRA Address register. This is maintained by Census Branch and is created by merging the POINTER database with additional records, and removing duplicates and communal establishments and various validation checks were carried out as part of the processing.

Survey Methodology

Due to the Coronavirus (COVID-19) pandemic, NISRA suspended all face-to-face household interviews in the middle of March 2020 and as a result all interviews carried out on the Continuous Household Survey in 2020/21 were conducted with adults aged 16 and over by telephone.

Respondents

The final dataset contains 1,855 records and 1,841 adults provided a response to at least one of the road safety questions. The number of respondents who answered each question, i.e. the base number, is stated in the tables. The base number is the unweighted count. The base number may also vary between questions due to some respondents not answering certain questions. For example, some questions are only asked of those respondents who can drive.

Data Quality

There are a number of factors, which users should take into consideration when interpreting the 2020/21 results, and care should be taken when comparing these to previously published findings from the survey.

1. While survey methodology changed, the impact of the Coronavirus (COVID-19) pandemic and the resultant introduction of new public health regulations, guidance and advice may have also fundamentally changed peoples' behaviour and attitudes. It is difficult to separate out change caused by the methodological adjustments and actual behavioural change at this point in time.

2. The change in data collection mode from face-to-face to telephone may have altered how people responded to the survey.

[1] Statistics authority Code of Practice (opens in a new window)

3. The change in data collection mode also necessitated some streamlining of the questionnaire and changes to how some questions were asked or presented as well as the response categories associated with them. This may also have implications for how people responded to the survey.

4. The achieved response rate on the survey in telephone mode was 16% and this is a lower response compared to the normal achieved response rate of 55% in face-to-face mode. This has reduced the number of cases at the household and individual levels. The precision of the survey estimates in the 2020/21 year is also reduced compared to previous findings.

5. The demographic profile of the achieved sample has changed in comparison with previous years in terms. Some of the changes include:

- There is more of an under-representation of people aged 16-44 compared to previous years.
- There are also fewer households from the most deprived areas and more households from the least deprived areas.

Any changes within the 2020/21 data compared to previous years have to be considered in the context of all of the above. Care should be taken in reaching any conclusions based on 2020/21 data and comparisons to previous years. It would be advisable to look at changes in behaviour or attitudes contained in the 2020/21 results over the next couple of years, particularly when data collection on the survey returns to face-to-face mode and society returns to normal, to see if they are part of a permanent changing trend.

Weighting

Analysis of the Raod Safety module of the CHS has been weighted for non-response.
A chi square goodness-of-fit test showed that the CHS sample was not representative of the population by age, sex and deprivation quintiles when compared with the 2020 Mid Year Population Estimates for Northern Ireland NISRA 25 June 2021. As a result, separate weights were produced for age, sex, deprivation quintile and combinations of these variables. It should be noted that this is the first year that weights for deprivation quintiles have been produced.
Non-response weighting sometimes increases standard errors, although the impact tends to be fairly small, i.e. the adjustment may be less or greater than 1, but will generally be reasonably close to 1. In the case of the road safety module of the CHS, the values of the adjustment for all three weighting systems are so close to one, it is not necessary to take account of this in the calculation of standard error and confidence intervals.
While weighting for non-response (also called post-stratification) should reduce bias, it must be acknowledged that it will not eliminate bias. The reasons individuals choose to take part in surveys are complex and depend on lots of factors specific to the individual. As a result, the non-response biases in surveys are likely to be complex. Post-stratification works on the assumption that, by aligning the survey to the population along a small number of dimensions such as age, gender and MDM, many of these complex biases will reduce. However, it would be misleading to suggest that they will be eliminated.

Multiple Response Questions

Multiple response questions are those for which respondents can give more than one response if they wish. In such questions, when individual percentages are summed they may add to more than 100%.

Rounding Conventions

Percentages have been rounded to whole numbers and as a consequence some percentages may not sum to 100. Values under 0.5% have been rounded to one decimal place.

Significant difference

Any statements in this report regarding differences between groups such as males and females, different age groups, urban/rural, etc., are statistically significant at the 95% confidence level. This means that we can be 95% confident that the differences between groups are actual differences and have not just arisen by chance. Both the base numbers and the sizes of the percentages have an effect on statistical significance. Therefore on occasion, a difference between two groups may be statistically significant while the same difference in percentage points between two other groups may not be statistically significant. The reason for this is because the larger the base numbers or the closer the percentages are to 0 or 100, the smaller the standard errors. This leads to increased precision of the estimates which increases the likelihood that the difference between the proportions is actually significant and did not just arise by chance.

The following respondent groups were considered; driver/non-driver, gender, urban/rural location, deprivation area and age group. See definitions below:

Driver and non-driver

Respondents were assigned as drivers or non-drivers based on their response to the 'May I check, do you drive?' question. Options were either 'Yes' (Drivers with less/Drivers with more than 2 years of experience) or 'No' (Currently learning to drive, expired licence, never learned).

Gender

Gender of respondent is defined as whether the respondent is male or female.

Urban and Rural Areas

Urban and Rural areas have been classified using the statistical classification of settlements defined by the Inter-Departmental Urban-Rural Definition Group.

- Bands A to E are classified as Urban. This includes Belfast Metropolitan Urban Area (Band A), Derry Urban Area (Band B) and large, medium and small towns (Bands C-E) with populations greater than or equal to 5,000 people.
- Bands F to H are classified as rural. This includes intermediate settlements (Band F), villages (Band G) and small villages, hamlets and open countryside (Band H) with populations of less than 5,000 people and including open countryside.

Deprivation quintile

Each respondent was assigned a deprivation quintile based on the Northern Ireland Multiple Deprivation Measure 2017 (NIMDM2017); these are the official measures of deprivation in Northern Ireland and replace the NIMDM2010. These measures were informed through public consultation and Steering Group agreement and provide a mechanism for ranking the 890 Super Output areas (SOAs) in Northern Ireland from the most deprived (rank 1 to the least deprived (rank 890). They include ranks of the areas for each of the 7 distinct types (or domains) of deprivation, which have been combined to produce an overall multiple deprivation measure (MDM) rank of the areas.

Age group

Respondents are grouped into the following age categories; 16-24, 25-34, 35-44, 45-54, 55-64, 65 or over. For the purpose of this report the age groups 16-24, 25-34, 35-44, 45-54 and 55-64 were grouped together to compare against those aged 65 or over.

Sampling error

No sample is likely to precisely mirror the characteristics of the population it is drawn from due to both sampling and non-sampling errors. An estimate of the amount of error due to the sampling process can be calculated. For a simple random sample design, the sampling error (s.e.) of any percentage, p, can be calculated by the formula: ***s.e. (p)*** **=** $\sqrt{(\boldsymbol{p}*(\boldsymbol{100}-\boldsymbol{p})/\boldsymbol{n})}$ where n is the number of respondents on which the percentage is based.

Confidence Interval

A 95% confidence interval for the population percentage can be calculated using the formula: **95% confidence interval = p +/- 1.96 * s.e. (p)** This means that if 100 similar, independent samples were chosen from the same population, 95 of them would yield an estimate for the percentage, p, within this range of values. The absence of design effects in the survey means that standard statistical tests of significance can be applied directly to the data.

Annex C: Questionnaire

ROAD SAFETY

[**DDINT**] I am now going to ask you some questions on road safety. (Continue)

[**MODE**] May I check, do you have a valid driving license?

1. Yes – driver with less than 2 years experience
2. Yes – driver with more than 2 years experience
3. No – Currently learning to drive
4. No – Driving license has expired
5. No – never learned to drive

[DRIVE2] Have you driven a vehicle on a public road in the last 12 months?

1. Yes – I have driven a vehicle I own
2. Yes – I have driven a vehicle I have access to
3. No

ASKED IF [DRIVE2] = 1 or 2
[MOB1a]
In the last 12 months, have you used your mobile phone in any of the ways listed while you were driving a moving vehicle?

1. made or received a phone call (hand-held)
2. made or received a phone call (hands free)
3. used your phone to send or read a text message
4. used your phone for email, social media or internet
5. used your phone for sat nav or music
6. quickly checked your phone (for example, to see your notifications)
7. None of the above

ASKED IF [DRIVE] = 1 YES
[MOB2a]
In the last 12 months, have you used your mobile phone in any of the ways listed while you were driving and the vehicle was stationary but still on the road e.g. stuck in traffic or at traffic lights?

1. made or received a phone call (hand-held)
2. made or received a phone call (hands free)
3. used your phone to send or read a text message
4. used your phone for any other purpose (email, social media, internet)
5. used your phone for sat nav or music
6. quickly checked your phone (for example, to see your notifications)
7. None of the above

[MOB4] Do you think that it is likely that drivers using a hand-held mobile phone whilst driving will be caught by the police?

1. Yes
2. No