Annual Statistical Bulletin: Usage of online channels to access public services in Northern Ireland 2019/20

Contents

Background

The Northern Ireland Continuous Household Survey (CHS) is designed to provide a regular source of information on a wide range of issues relevant to Northern Ireland. It has been running since 1983, with recent results covering housing characteristics, changing population, tourism, participation in sports, arts and culture and attitudes towards the environment. It takes a snapshot of a range of societal issues of persons aged 16 or over. The CHS carries a number of different questions for various clients. The issues covered within the survey differ each year depending on interest.

The 2019/20 version includes an 'Internet Access & Usage' suite of questions. This bulletin explores two of those questions, in relation to the measurement of usage of online channels to access public services by individuals in the previous 12 months. Responses are collated to report proportions who 'used online channels to access public services' and those who did not. The methodology has been scrutinised by a technical assessment panel, and deemed acceptable for use as a Programme for Government (PfG) indicator.

This bulletin provides data for population indicator 46, 'Usage of online channels to access public services', included in the outcomes framework underpinning the draft Programme for Government and the Northern Ireland Civil Service Outcomes Delivery Plan. This population indicator contributes to reporting against Outcome 11 'We connect people and opportunities through our infrastructure'.

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Introduction

To measure usage of online channels to access public services the survey asked respondents the following questions:

- *In the past 12 months have you used the internet to look up information on any of the following?*
- *In the past 12 months have you used the internet for any of these public services?*

Respondents were shown a list of options for each question and asked if they had used any of the services through an online channel in the previous 12 months. The full questions and list of responses are in Appendix D. Responses were classified in to two categories, 'Yes', those who have used online channels to access public services and 'No', those who have not used online channels to access public.

In this publication **differences between groups are only reported on where they are found to be statistically significant**, unless stated otherwise. **Statistical significance was determined using 95% confidence intervals.** Statistically significant (using 95% confidence intervals) means that we can be 95% confident that the differences seen in our sampled respondents reflect the population of Northern Ireland.

For trend analysis the baseline year for PfG Indicator 46 data is 2018. This publication relates to data for the 2019/20 financial year. The baseline year data was derived from the Northern Ireland Omnibus Survey. As the Omnibus Survey was suspended the CHS has been used subsequently. More information is detailed in Appendix A.

Key Findings

1. Overall Usage of online channels to access public services

In 2019/20, almost three quarters (71.7%) of individuals aged 16 and over in Northern Ireland have used online channels to access public services in the previous 12 months. This is a similar proportion to 2018 (73.4%) and whilst slightly lower there is not a statistically significant difference.

Figure 1: Usage of online channels to access public services in NI 2019/20 (%)

■ Yes - Used online   ■ No - Did not use

28%

72%
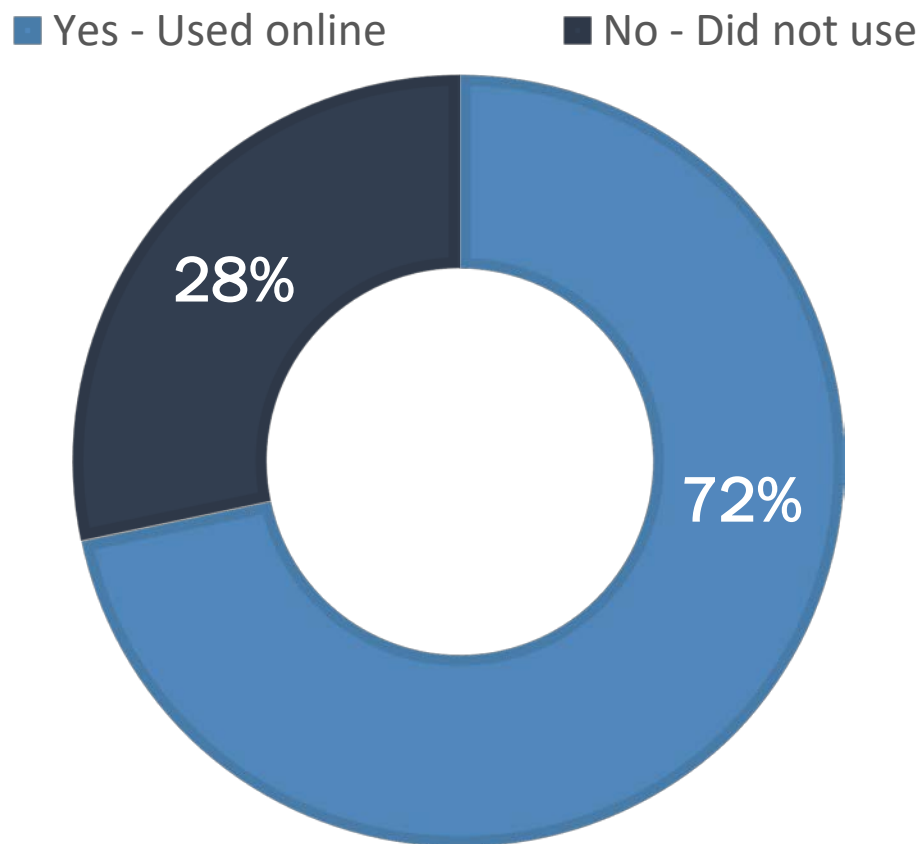
2. Gender

Female respondents (74%) are statistically more likely to have used online channels to access public services than male respondents (70%). This has changed from 2018, when both genders were broadly similar in terms of online usage of public services (Female 73%, Male 74%).

Figure 2: Usage of online channels to access public services in NI 2019/20 by Gender

Female: 74% Yes - Used online, 27% No - Did not use
Male: 70% Yes - Used online, 30% No - Did not use

■ Yes - Used online   ■ No - Did not use
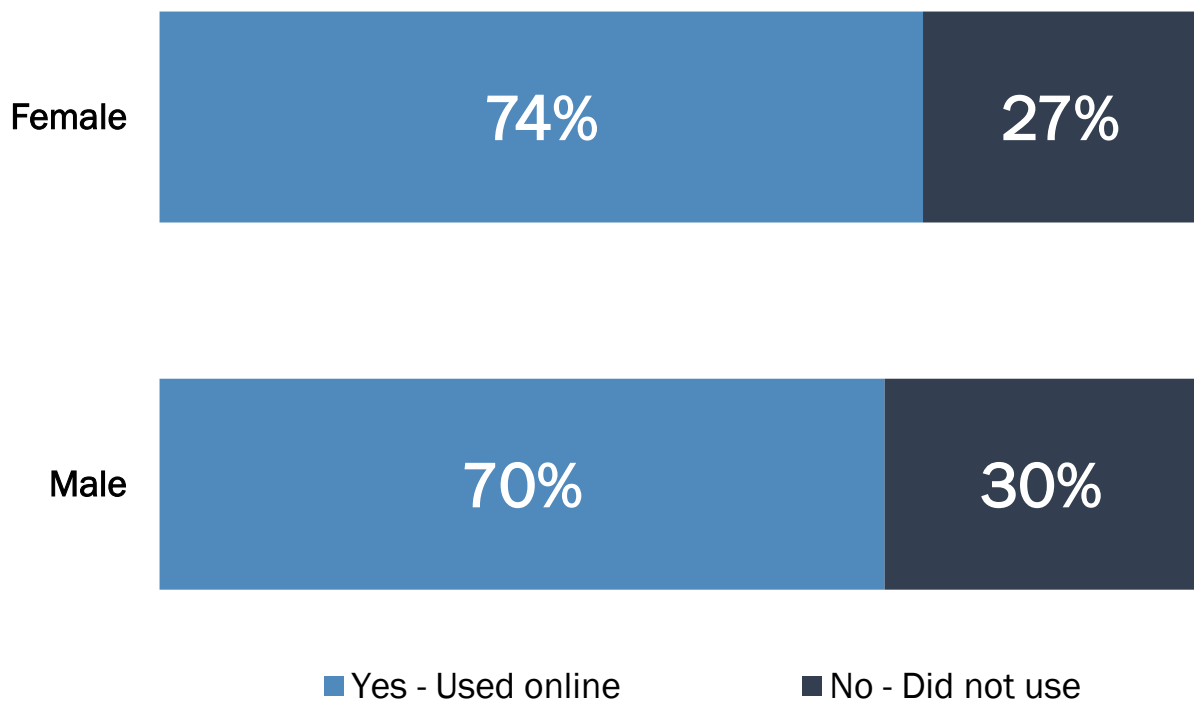
3. Age Group

In 2019/20 the age group with the lowest proportion using online channels to access public services is 65 years+ (40%). Similar to in 2018 this was significantly lower than all other age groups. People aged 50-64 (71%) and 18-24 year olds (80%) are also less likely to have accessed public services online showing a significant difference from the other groups. A similar proportion of, 25-34 year olds (86%) and 35-49 year olds (86%) have accessed public services online.

Figure 3: Usage of online channels to access public services in NI 2019/20 by Age Group
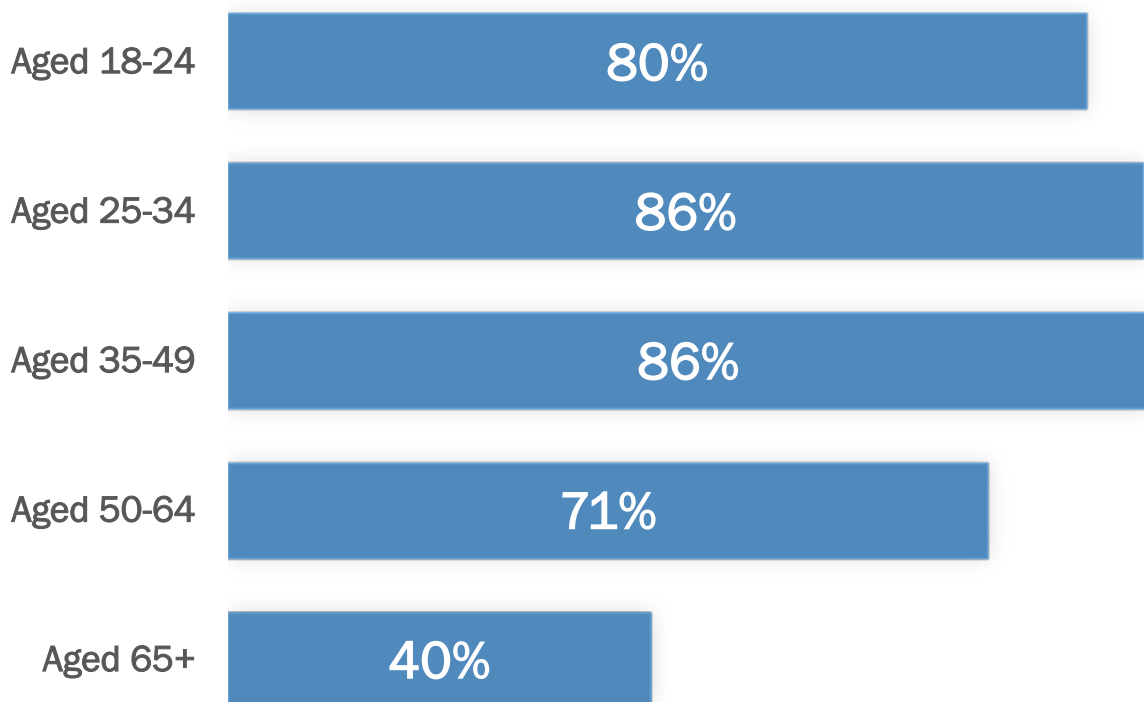
4. Disability Status

Respondents who identified as having a disability were significantly less likely to have used online channels to access public services, with 58% reporting having done so, compared with those with no disability (77%). Compared with the previous year, respondents with a disability reporting usage of online channels was 10 percentage points higher than in 2018 when it had been just 48%. This difference was statistically significant. See the technical notes in Appendix B for the definition of disability used in the Continuous Household Survey.

Figure 4: Usage of online channels to access public services in NI 2019/20 by Disability

Has Disability: 58%, 42%
No Disability: 77%, 23%

■ Yes - Used online   ■ No - Did not use
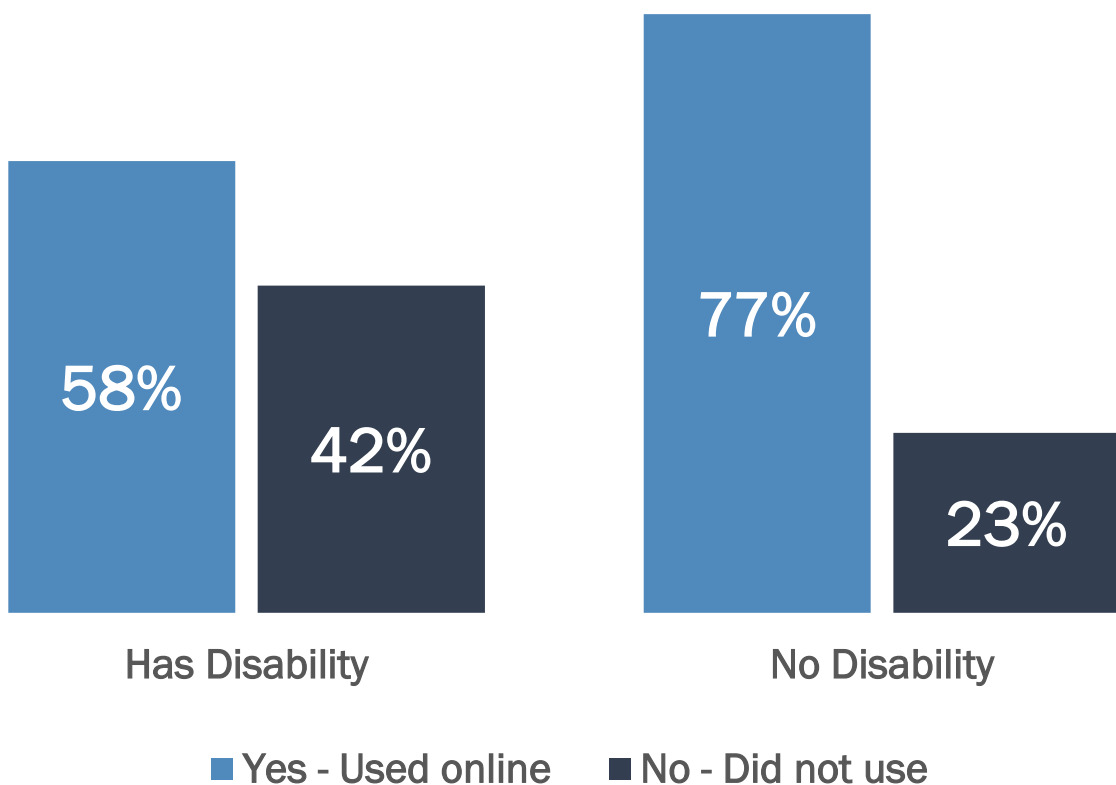
5. Economic Activity

Respondents within the population aged 16 years and over who are economically inactive are significantly less likely to have used online channels to access public services (52%), compared with 85% of respondents who are economically active. These figures are similar to that reported in 2018, where economically inactive was 50% and economically active was 86%.

Figure 5: Usage of online channels to access public services in NI 2019/20 by Economic Activity

Economically active: 85% Yes - Used online, 15% No - Did not use

Economically inactive: 52% Yes - Used online, 48% No - Did not use

■ Yes - Used online   ■ No - Did not use
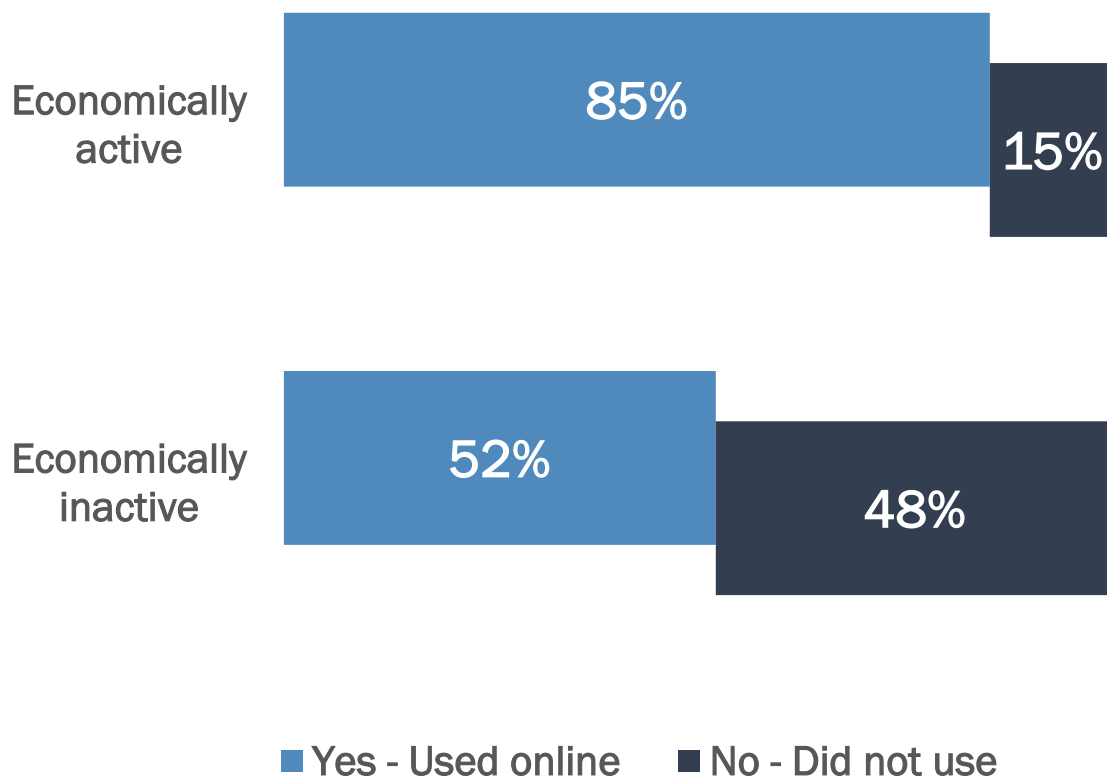
Appendix A: Methodology and Quality Information

1. New Data Collection Method and NI Omnibus Suspension

Data collection for analysis in this publication has come from questions asked within the Continuous Household Survey 2019/20. Data for the previous bulletin (2018) was collected through questions asked in the NI Omnibus Survey Spring 2018. The NI Omnibus Survey was suspended after the 2018 run and so therefore could not be used to collect data on 'Usage of online channels to access public services in NI' from 2019 onwards. In light of this suspension it was decided to commission similar questions in the Continuous Household Survey (CHS) 2019/20 to enable continued collection of data on the subject. Whilst the questions are not exactly the same they are broadly similar and attempt to ascertain the same information from the respondent. An exercise was carried out to map the Omnibus list of responses to the CHS list of responses to ensure that the data would be comparable. The list of potential responses given to respondents is largely the same across both surveys. In some cases the wording has been changed slightly to better explain a service. In any event it is envisaged that the list of potential responses will change from year to year as new public services go online and current services are updated or stopped.

The CHS uses a larger sample than the NI Omnibus Survey (approximately 3 times larger for the achieved sample for these questions) so the quality of data should remain robust and fit for purpose. As the sample is larger it takes longer to collect and the fieldwork is carried out over a financial year (2019/20). In comparison the NI Omnibus Survey data was collected over 3 months in 2018. Therefore going forward it is the intention to use the data collected from the CHS to enable future reporting of the indicator. This data will be on a financial year basis. As it stands this indicator will use 2018 data as the baseline year for measurement of

change and trend analysis in the future but is dependent on future policy decisions and PfG review. If required further methodological information will be available in subsequent reports to explain any differences, data issues or problems.

2. Data Collection and Quality

The information presented in this publication derives from the Continuous Household Survey (CHS) 2019/20 which was conducted by the Central Survey Unit (CSU) of the Northern Ireland Statistics and Research Agency (NISRA). For further information please refer to the Continuous Household Survey website. The Individual Internet Access & Usage questions in relation to the usage of online channels to access public services which were commissioned are included in Appendix D of this publication.

Data were collected by CSU and various validation checks were carried out as part of the processing. CSU is the leading social survey research organisation in Northern Ireland and is one of the main business areas of NISRA, an Agency within the Department of Finance (DoF). CSU 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.

The CHS sample was assessed and considered to be a representative sample of the Northern Ireland population (aged 16 and over).

Whilst data quality is considered to be very good, note that all survey estimates are subject to a degree of error and this must be taken account of when considering results (see notes below on sampling error). This error will be reasonably small for the majority of Northern

Ireland level results but care should be taken when looking at results based on smaller breakdowns.

3. The Sample

The sample for the survey consisted of a systematic random sample of addresses selected from the Northern Ireland Statistics and Research Agency (NISRA) Address Register. The NISRA Address Register is maintained by Census Branch and is created by merging the POINTER database with additional records, and removing duplicates and communal establishments. The survey samples 9,000 addresses throughout the survey year (April – March). The NISRA Address Register provides a good sampling frame of addresses, but contains no information about the number of people living at an address.

Interviewers are instructed to call at each address issued in their assignments. Each interview begins with the interviewer listing all members of the household. Anyone aged 16 or over is eligible to take part in the survey and there can be multiple respondents at each household.

4. The Questionnaire

The questionnaire has two distinct parts; a household schedule and an individual schedule. The household schedule is answered by one person on behalf of the entire household, while the individual schedule is answered by all participating adults in the household.
Each section of the questionnaire contains a number of core questions but then there are two different versions of the questionnaire, determined by the serial number for each particular household. This allows NISRA Central Survey Unit (CSU) to include as many questions as possible on behalf of its customers without placing excessive burden on

respondents. Odd serial numbers will therefore get one version of the survey, whilst even serial numbers will get another, with a number of core questions contained in both versions.

5. The Fieldwork

Fieldwork starts on 1 April and ends on the 31 March. Addresses are split across the 12 months, with approximately a 10% reduction in allocations in July, August and December to allow for reduced interviewer availability in these months. The full schedule for fieldwork in 2019/20 is detailed in Table 1:

Table 1: Fieldwork Schedule

Month	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
Number of addresses sampled	750	785	785	650	670	785	785	785	650	785	785	785

In 2019/20, 4,557 households took part in the survey. When ineligible addresses are discounted from the sampling frame this gives a survey response rate of 56%. Within those 4,557 households, a total of 5,918 individuals took part in the survey (1.3 individuals per household).

6. Representativeness of the Sample

In any survey there is a possibility of non-response bias. Non-response bias arises if the characteristics of non-respondents differ from those of respondents in such a way that they are reflected in the responses given in the survey. Accurate estimates of non-response bias can be obtained by comparing characteristics of the achieved sample with the distribution of

the same characteristics in the population at the time of sampling. Such comparisons are usually made to the current Census of Population data.

To assess how accurately the Continuous Household Survey sample reflects the population of Northern Ireland the sample has been compared with characteristics of the Northern Ireland population from Mid-Year Population Estimates (Table 2).

Table 2: Representativeness of the Sample

Population Category	Mid-Year Population Estimates 2019	CHS 2019/20 (all respondents)
Age Group - 16-24	14%	5%
Age Group - 25-34	17%	14%
Age Group - 35-44	16%	16%
Age Group - 45-54	17%	17%
Age Group - 54-64	15%	19%
Age Group - 65 and over	21%	29%
Gender - Male	49%	45%
Gender - Female	51%	55%
Base=100%	*1,497,742*	*5,918*

7. Weighting for age and gender

As the CHS is a sample survey, there is a certain level of sampling error, i.e. the characteristics of the group sampled may differ slightly from the population as a whole. To account for this sampling error, the data has been weighted in order to produce estimates that better represent the population.

8. Sampling Error

No sample is likely to reflect precisely the characteristics of the population it is drawn from because of 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, in which every member of the sampled population has an equal and independent chance of inclusion in the sample, the sampling error of any percentage, p, can be calculated by the formula:

$$s.e. (p) = \sqrt{p*(100 - p)/n}$$

where n is the number of respondents on which the percentage is based. The sample for the Continuous Household Survey is drawn as a random sample, and thus this formula can be used to calculate the sampling error of any percentage estimate from the survey.

9. Confidence Interval

A confidence interval for the population percentage can be calculated by the formula

$$95 \text{ per cent confidence interval} = p +/- 1.96 * s.e. (p)$$

If 100 similar, independent samples were chosen from the same population, 95 of them would be expected to yield an estimate for the percentage, p, within this confidence interval. The absence of design effects in the survey, and therefore of the need to calculate complex standard errors, means that standard statistical tests of significance (which assume random sampling) can be applied directly to the data.

Appendix B: Technical Notes & Definitions

1. Respondents

5,918 respondents took part in the Continuous Household Survey 2019/20. All respondents were aged 16 and over. Some questions were only asked if the respondent had answered 'yes' to a previous question. People living in institutions (though not in private households in such institutions) are excluded from the survey.

2. Rounding Conventions and Notation

The percentages quoted in data tables and charts have been rounded. Where percentages have been rounded to whole numbers some percentages may not sum to 100. The figures shown in the body of the table are weighted as are the base numbers shown in data tables. 0% may reflect rounding down of values under 0.5.

3. Significant difference

Significance tests were carried out to determine if there were differences in responses given by various respondent groups. The significance tests were carried out at 5% significance level (range = -1.96 to +1.96) and only differences which were statistically significant ($p < 0.05$) are included in this report. This means that there is at least a 95% probability that there is a genuine difference between responses given by, for example, males and females and the difference between the two genders is not simply explained by random chance or sample error. When a significant difference is noted among survey respondents, it is likely that this

same difference applies to the Northern Ireland adult population (persons aged 16 and over).

The following respondent groups were considered:

4. Gender

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

5. Age group

The age of the respondent is grouped into the following age bands; 16-24, 25-34, 35-49, 50-64, 65 and over.

6. Disability status

Disability status is defined as whether the respondent has a disability or not. The definition of disability is those answering yes to both of the following questions:

'Do you have any physical or mental health conditions or illnesses lasting or expected to last for 12 months or more?'

> *Yes/No*

'Does your condition or illness/ (do any of your conditions or illnesses) reduce your ability to carry out day-to-day activities?'

> *Yes, a lot/ Yes, a little/ Not at all*

7. Economic Activity

The economically inactive population is defined as people aged over 16 years, who are not in employment and are not unemployed on the ILO definition.

8. Urban/Rural

Urban/Rural breakdown is computed using the Central Postcode Directory (CPD) and using settlements as defined in the Report of the Inter-Departmental Urban-Rural Definition Group. It uses the 2015 classification. More information can be found on the NISRA Urban - Rural Classification page.

9. Dependants

For this respondent group, 'has dependants' includes individuals who have responsibility for the care of: a child(ren); a person with a disability; and/or a dependant elderly person.

10. Northern Ireland Multiple Deprivation Measure 2017 (NIMDM 2017)

The analysis presented within the NIMDM section of Table 3 in Appendix C utilises five groups (quintiles) of Super Output Areas (SOAs) across NI. These five groups are determined based on level of deprivation using the NIMDM 2017.

Following consultation, NIMDM 2017 replaced NIMDM 2010 as the official measure of deprivation in NI.

SOAs ranked 1 to 178 are the most deprived quintiles relative to all other SOAs. Those ranked 713 to 890 are the most affluent relative to all other SOAs.

NIMDM 2017 is a weighted combination of the seven domains of deprivation. The Income and Employment Deprivation domains account for nearly 50% of the multiple deprivation measure. The Health Deprivation and Disability Domain and Education, Skills and Training Deprivation Domain account for a further 30%, and the remainder is made up of the Access to Services, Living Environment and Crime and Disorder Domains.

Further details on deprivation measurement in NI can be found at Northern Ireland Multiple Deprivation Measure 2017.

11. Religion

Respondents were asked what religious category they belonged to from the options below:

1 Catholic

2 Protestant

3 Other

4 None/missing/refused, etc

For the data provided in Table 3 in Appendix C, respondents to category 3 and 4 were aggregated into one group to create the 'Other/None/Refused/Don't Know' group.

12. Marital Status

The marital status respondents were grouped into was as follows:

- Single, that is never married

- Married and living with husband/wife

- Married and separated from husband/wife

- Divorced

- Widowed.

Civil partnerships were included into the 'married' groupings as appropriate.

13. Sexual Orientation

The Sexual Orientation of the respondent was grouped in to the following groups:

- Heterosexual/Straight

- Gay/Lesbian/Bisexual/Other

14. Racial Group

The Racial Group of the respondent was grouped in to the following groups:

- White

- Other

15. Parliamentary Constituency

The analysis in this grouping uses the 18 NI Parliamentary Constituencies.

16. Local Government District

The analysis in this grouping uses the 11 NI Local Government Districts.

Appendix C: Data Table

Table 3: Usage of online channels to access public services in Northern Ireland 2019/20 (% of population who used online channels to access public services in the previous 12 months)

Population Category	Yes - Used online %	No - Did not use %	n
All	72	28	2937
Gender - Male	70	30	1425
Gender - Female	74	27	1512
Age Group - Aged 18-24	80	20	404
Age Group - Aged 25-34	86	15	491
Age Group - Aged 35-49	86	14	708
Age Group - Aged 50-64	71	29	714
Age Group - Aged 65+	40	61	620
Disability - Yes	58	42	818
Disability - No	77	23	2119
Economic Activity - Economically active	85	15	1724
Economic Activity - Economically inactive	52	48	1213
Urban/Rural - Urban	70	30	1802
Urban/Rural - Rural	74	26	1135
Dependants - Has Dependants	82	18	1140
Dependants - No Dependants	65	35	1793
NIMDM 2017 - Deprivation Quintile - Q1 (Most Deprived)	66	35	518
NIMDM 2017 - Deprivation Quintile - Q2	68	32	650

Population Category	Yes - Used online %	No - Did not use %	n
NIMDM 2017 - Deprivation Quintile - Q3	73	27	604
NIMDM 2017 - Deprivation Quintile - Q4	76	24	607
NIMDM 2017 - Deprivation Quintile - Q5 (Least Deprived)	76	24	558
Religion - Catholic	73	27	1214
Religion - Protestant	68	32	1287
Religion - Other/None/Refused/Don't Know	79	21	436
Marital Status - Single, that is never married	75	25	1000
Marital Status - Married and living with husband/wife	76	24	1429
Marital Status - Married and separated from husband/wife	75	25	134
Marital Status - Divorced	63	37	171
Marital Status - Widowed	32	69	203
Sexual Orientation - Heterosexual/Straight	71	29	2851
Sexual Orientation - Gay/Lesbian/Bisexual/Other	83	17	73
Racial Group - White	72	29	2872
Racial Group - Other	78	22	65
Parliamentary Constituency - Belfast East	73	27	140
Parliamentary Constituency - Belfast North	68	32	159
Parliamentary Constituency - Belfast South	74	26	190
Parliamentary Constituency - Belfast West	66	34	127
Parliamentary Constituency - East Antrim	63	37	133
Parliamentary Constituency - East Londonderry	62	38	146
Parliamentary Constituency - Fermanagh and South Tyrone	79	21	256

Population Category	Yes - Used online %	No - Did not use %	n
Parliamentary Constituency - Foyle	78	22	146
Parliamentary Constituency - Lagan Valley	80	21	213
Parliamentary Constituency - Mid Ulster	61	39	137
Parliamentary Constituency - Newry and Armagh	69	31	191
Parliamentary Constituency - North Antrim	75	25	188
Parliamentary Constituency - North Down	71	29	127
Parliamentary Constituency - South Antrim	80	20	137
Parliamentary Constituency - South Down	72	28	194
Parliamentary Constituency - Strangford	64	36	118
Parliamentary Constituency - Upper Bann	72	28	208
Parliamentary Constituency - West Tyrone	68	32	127
Local Government District - Antrim and Newtownabbey	72	28	172
Local Government District - Armagh, Banbridge and Craigavon	73	28	390
Local Government District - Belfast	69	31	512
Local Government District - Causeway Coast and Glens	66	34	226
Local Government District - Derry and Strabane	77	23	222
Local Government District - Fermanagh and Omagh	72	28	236
Local Government District - Lisburn and Castlereagh	82	18	272
Local Government District - Mid and East Antrim	71	29	221
Local Government District - Mid Ulster	71	29	216
Local Government District - Newry, Mourne and Down	69	31	258
Local Government District - North Down and Ards	69	31	213

Appendix D: Questionnaire

The questions asked and the list of potential responses within the Continuous Household Survey 2019/20 to ascertain information on the usage of online channels to access public services are detailed below:

In the past 12 months have you used the internet to look up information on any of the following?

1. Obtain information on viewing health record

2. Obtain health information (e.g. using NI Direct A-Z health conditions page)

3. View information on registering a birth, death or marriage

4. Find/search for a local public service

5. Look up careers and employment information/opportunities

6. Look up and/or comment on public consultation papers

7. Look up school/education information

8. Find out about benefits

9. Find out about pensions

10. Find out about taxes

11. Look up information on Courts and tribunal processes

12. Search land registry

13. Other – please specify

14. None

In the past 12 months have you used the internet for any of these public services?"

1. Register to vote

2. Apply for/renew passport

3. Apply for a benefit

4. Pay a fine (e.g. parking fine, driving offence fine etc.)

5. Book MOT test/re-test

6. Apply for/renew a driving license

7. Renew car tax

8. Obtain certificates (e.g. birth, death, marriage etc.)

9. Environmental and agriculture services (e.g. apply for a fishing rod licence, area based schemes)

10. Report a fault (e.g. pothole, electricity outage etc.)

11. Pay rates

12. Apply for Preschool place

13. Complete an income tax return

14. Apply for Access NI check

15. Book a GP appointment

16. Order repeat prescription

17. Other – please specify

18. None