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Public Transport Journey Planning in Northern Ireland 2019/2020

Findings from the Continuous Household Survey 2019/2020



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CONTENTS

Section	Page
Infographic	4
Key Points	5
Introduction	6
Part 1: Use of Public Transport	7
Part 2: Awareness of Journey Planning Resources	8
Part 3: Planning a Journey	11
Appendix 1 – Technical Notes	15
Appendix 2 – Confidence Intervals	18
Appendix 3 – Questionnaire	19



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This publication and associated data tables are also available on the [Public Transport Journey Planning Research webpage \(opens in a new window\)](#)

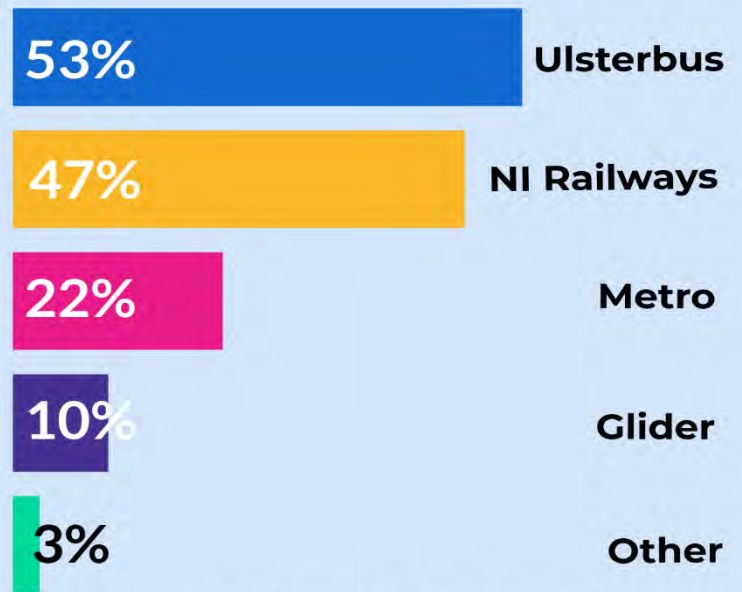
Public Transport

How often do you use public transport?*



*categories grouped

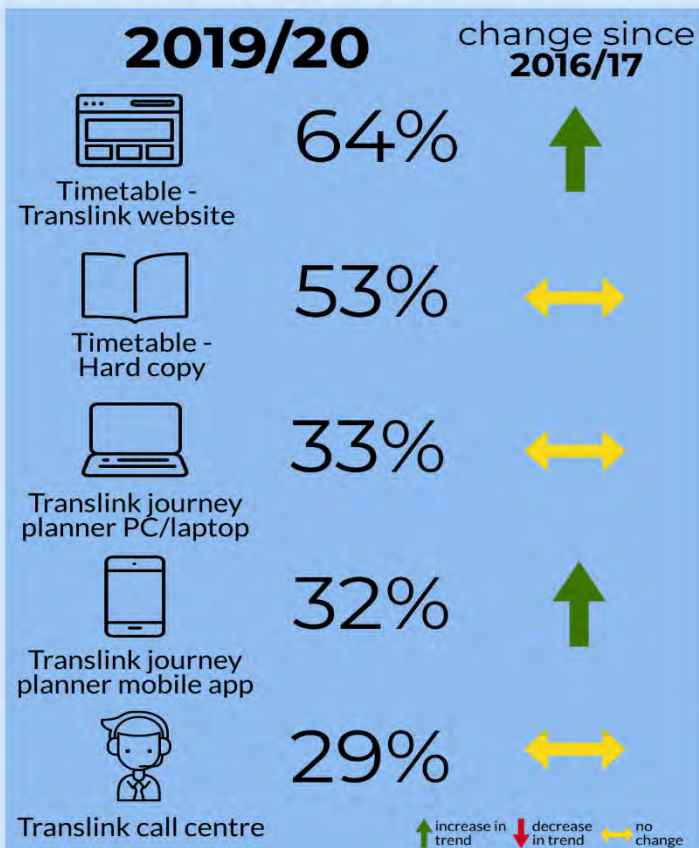
Which public transport services do you use?*



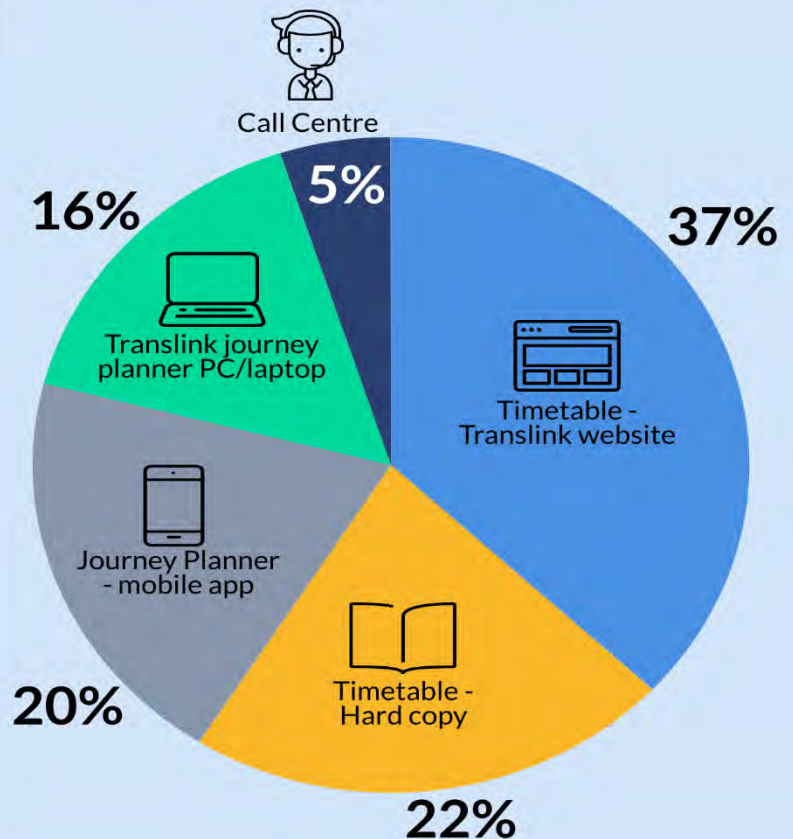
*respondents could choose more than one

Journey Planning Resources

Which resources are you aware of?



Which resource do you use most often? (2019/20)



KEY POINTS

Use of Public Transport

- In 2019/20, almost 3 in ten (29%) respondents said they 'never' travel on public transport, while a small proportion (6%) said they travelled using public transport 'everyday'.
- More than half of those who stated they used public transport (53%) used Ulsterbus services, and 47% said they use NI Railways.

Awareness of Journey Planning Resources

- In 2019/20, the resource most respondents were aware of for accessing information on public transport journey planning in Northern Ireland was timetables, either on the Translink website (64%) up from 55% in 2016/17, or via hard copy (53%) around the same as in 2016/17 (54%).
- Those aged 16-24 are more aware of all journey planning resources than those aged 65 and over, except in the case of 'hard copy timetables'. For 'hard copy timetables', those aged 65 and over are more likely to be aware of these than all other age groups.

Planning a Journey

- Of the respondents who used journey planning resources, 55% used a timetable on the Translink website and 29% used a hard copy timetable. Almost a quarter (23%) of respondents said they use the journey planner mobile app.
- Considering the longer term trend since 2016/17, use of the journey planner mobile app has increased from 20% to 23% in 2019/20 while use of all other journey planning resources has decreased.
- In 2019/20, the journey planning resource used by respondents most often was timetables on the Translink website (37%), although this has seen a decrease in popularity since 2016/17 (when 46% of respondents said they used this most often).

INTRODUCTION

The Department for Infrastructure (DfI) leads on public transport policy and provides funding to support and improve public transport through its service agreement with Translink (the Northern Ireland Transport Holding Company).

The Department also provides grants to fund a range of passenger transport services with the aim of reducing rural and social isolation and also has responsibility for managing the Commercial Bus Service Permit system for licensed operators applying to run public passenger transport services within Northern Ireland.

Uses of the data

DfI has commissioned questions in the Continuous Household Survey since 2016/17 to ascertain how people plan their journeys to travel on public transport. This information can be used to assist transport providers in identifying improvements to passenger information, including how technology can best be utilised to promote awareness of and access to public transport services.

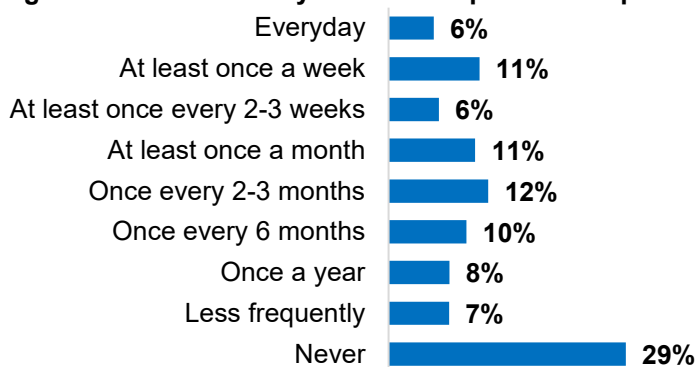
This report contains the latest findings for 2019/20 and provides trend information where possible. Statistics are presented on the frequency of public transport use, public transport services used, awareness of journey planning resources and the methods used to plan a journey. The Public Transport Journey Planning questions, commissioned by DfI are included in Appendix 3 of this report.

Part 1: Use of Public Transport

Respondents to the Continuous Household Survey (CHS) were asked to indicate how often they travelled using public transport. This is the first time respondents to the CHS were asked about frequency of use, and public transport services used.

In 2019/20, almost 3 in ten (29%) respondents said they 'never' travel on public transport, while a small proportion (6%) said they travelled using public transport 'everyday', and more than 1 in ten (11%) said they travel on public transport 'at least once a week'. 10% of respondents said they use public transport 'once every 6 months' and a similar proportion said they did so 'at least once a month' (11%).

Figure 1: How often do you travel on public transport?

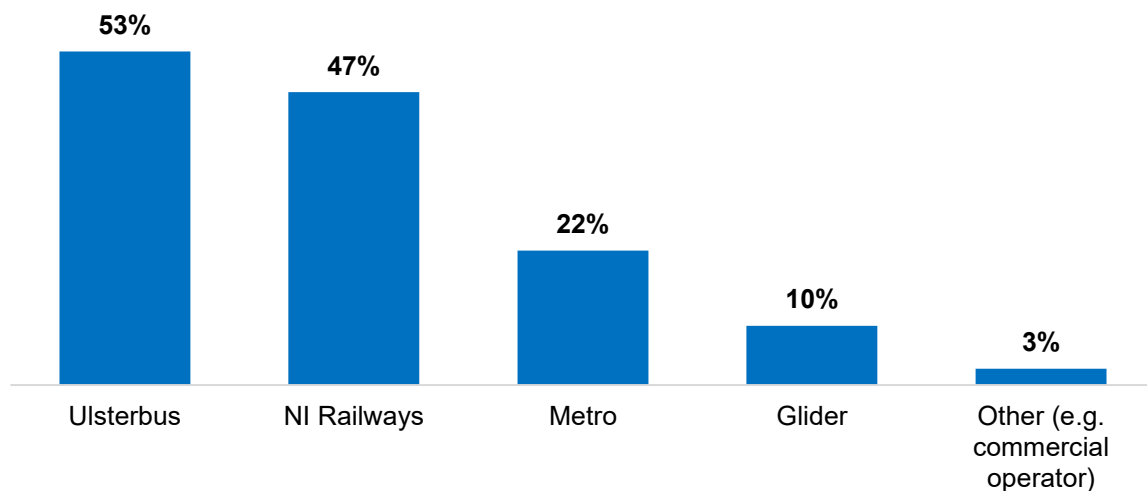


Base: 2,954

Respondents who said they used public transport were asked which services they used.

More than half (53%) used Ulsterbus services, and 47% said they use NI Railways. More than one-fifth (22%) said they use Metro and one in ten (10%) said they use Glider services. A small proportion (3%) said they use other public transport services (e.g. commercial operator).

Figure 2: Which public transport services do you use?*



*respondents could choose more than one option

Base: 2,079

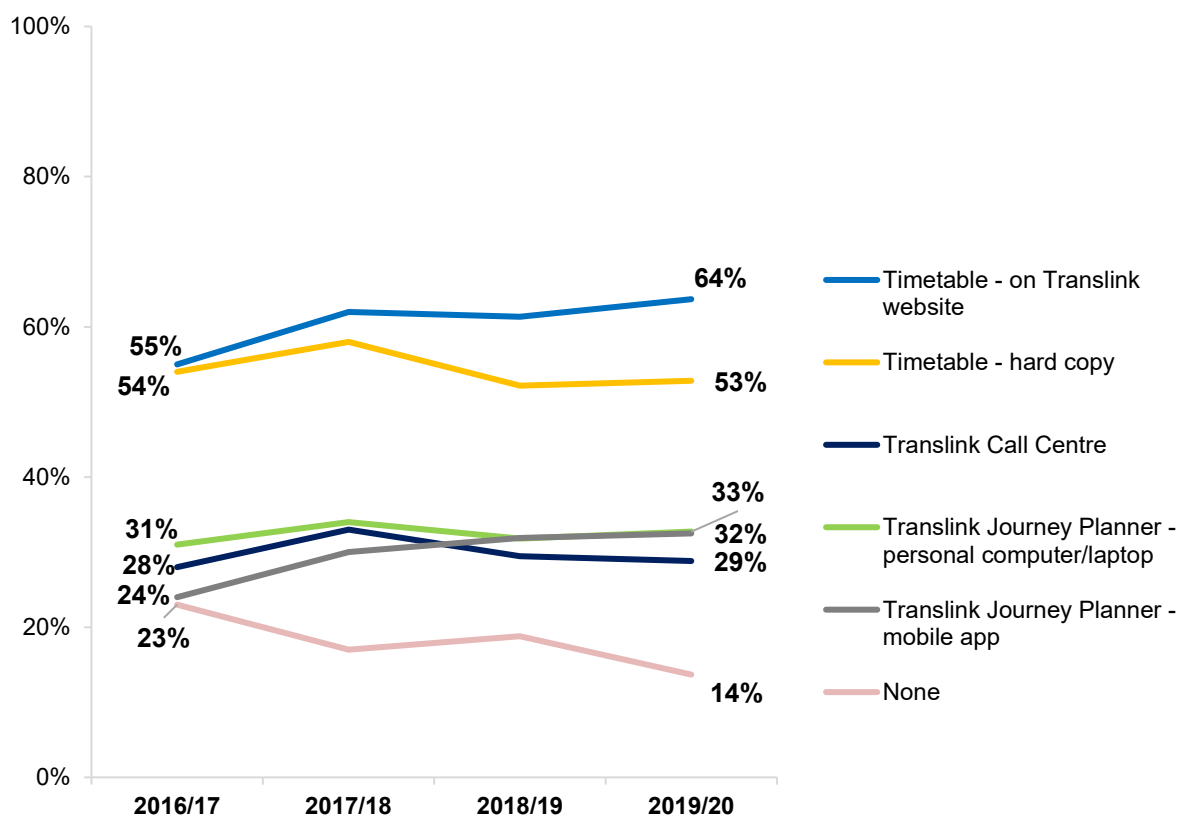
Part 2: Awareness of Journey Planning Resources

Awareness of journey planning resources: 2016/17 – 2019/20

Respondents were asked to indicate all of the methods of public transport journey planning of which they were aware. Respondents could select more than one option.

In 2019/20, the resource most respondents were aware of for accessing information on public transport journey planning in Northern Ireland was a timetable, either on the Translink website (64%) up from 55% in 2016/17, or via hard copy (53%) around the same as in 2016/17 (54%).

Figure 3: Which of the following methods that can be used to plan journeys by public transport are you aware of?* 2016/17-2019/20



*respondents could choose more than one

Base: 2019/20 = 2,925

Awareness of the Journey Planner mobile app has increased from under a quarter (24%) in 2016/17 to almost two-thirds (32%) in 2019/20. There was no real change in the proportion of respondents who were aware of the Translink Call Centre (29% in 2019/20 and 28% in 2017/18).

The proportion of respondents who were not aware of journey planning methods has decreased from 23% in 2016/17 to 14% in 2019/20.

Awareness of journey planning resources: by respondent group

As might be expected, awareness of journey planning resources varies by age of respondent. Those aged 16-24 (50%) are more aware of newer forms of technology such as the journey planner mobile app than those aged 65 and over (12%). In fact, those aged 16-24 are more aware of all journey planning resources than those aged 65 and over, except in the case of 'hard copy timetables'.

Figure 4: Awareness of journey planning resource by age: 2019/20

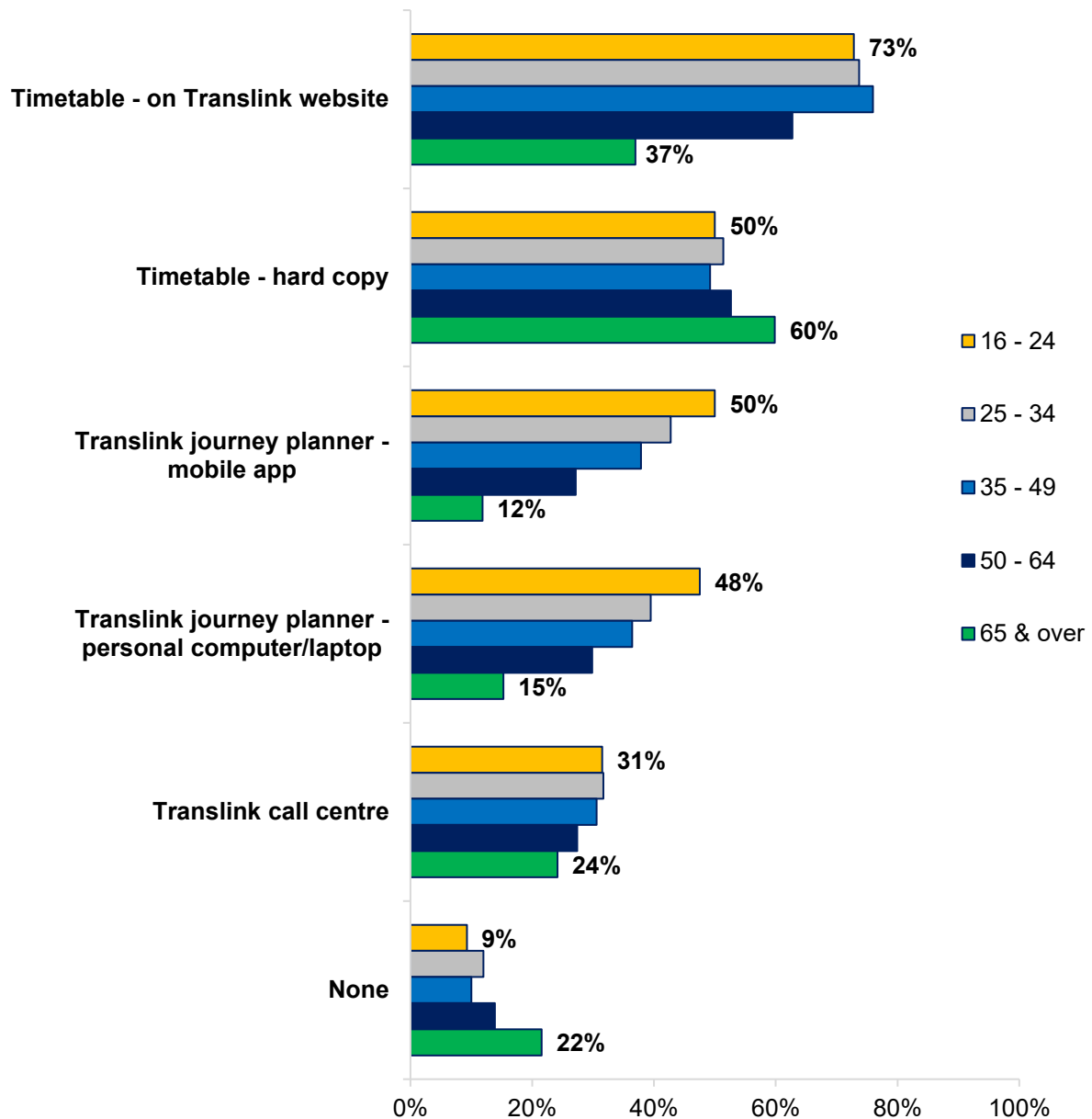
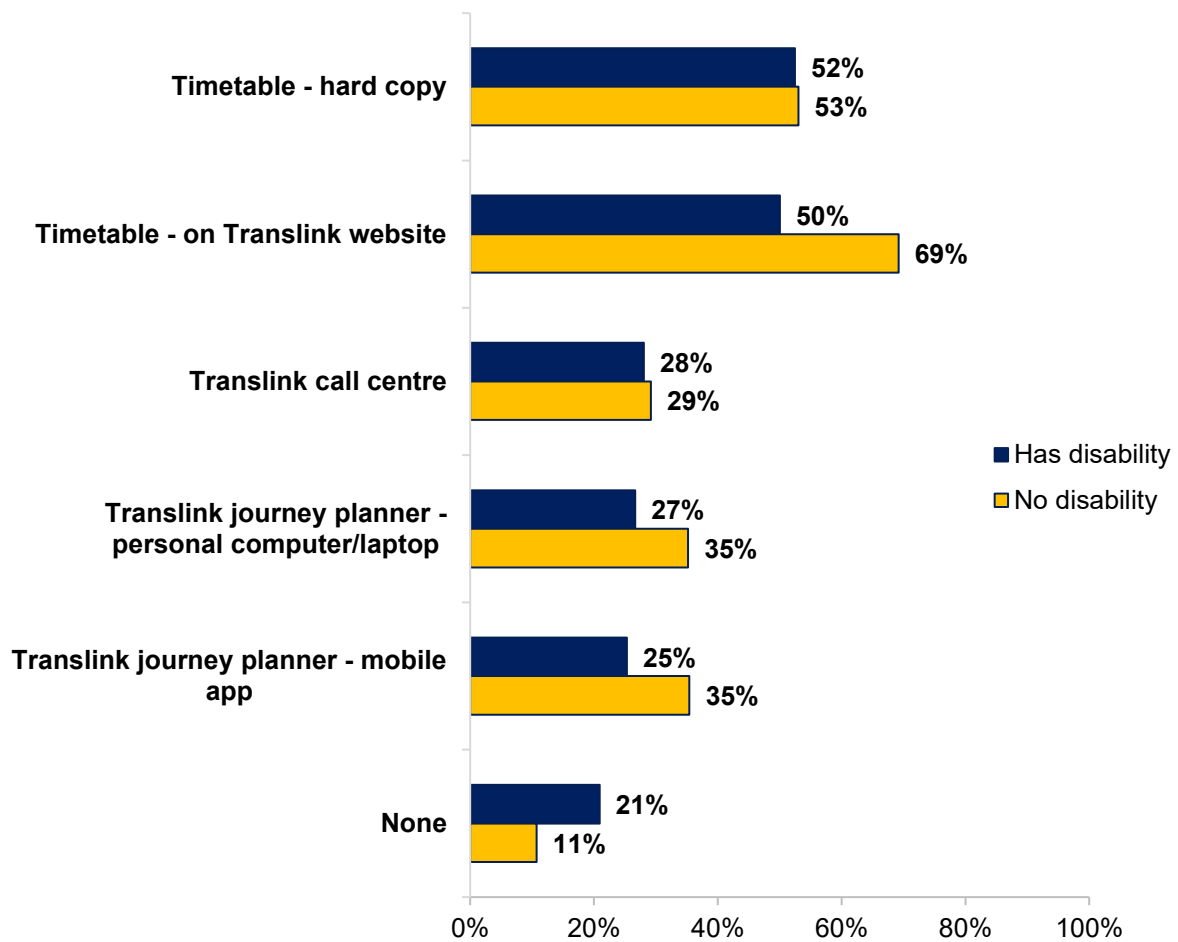


Figure 5: Awareness of journey planning resource by disability status: 2019/20



Respondents who do not have a disability were more likely to be aware of the availability of timetables on the Translink website (69%), journey planner on a personal computer/laptop (35%), and the journey planner mobile app (35%) when compared to those respondents who have a disability (50%, 27%, and 25%, respectively).

Conversely, over a fifth (21%) of respondents who have a disability were aware of no journey planning resources compared with 11% of those with no disability.

Data are available for other respondent groups (e.g. gender, urban/rural, LGD) and can be found in the associated data tables.

Part 3: Planning a Journey

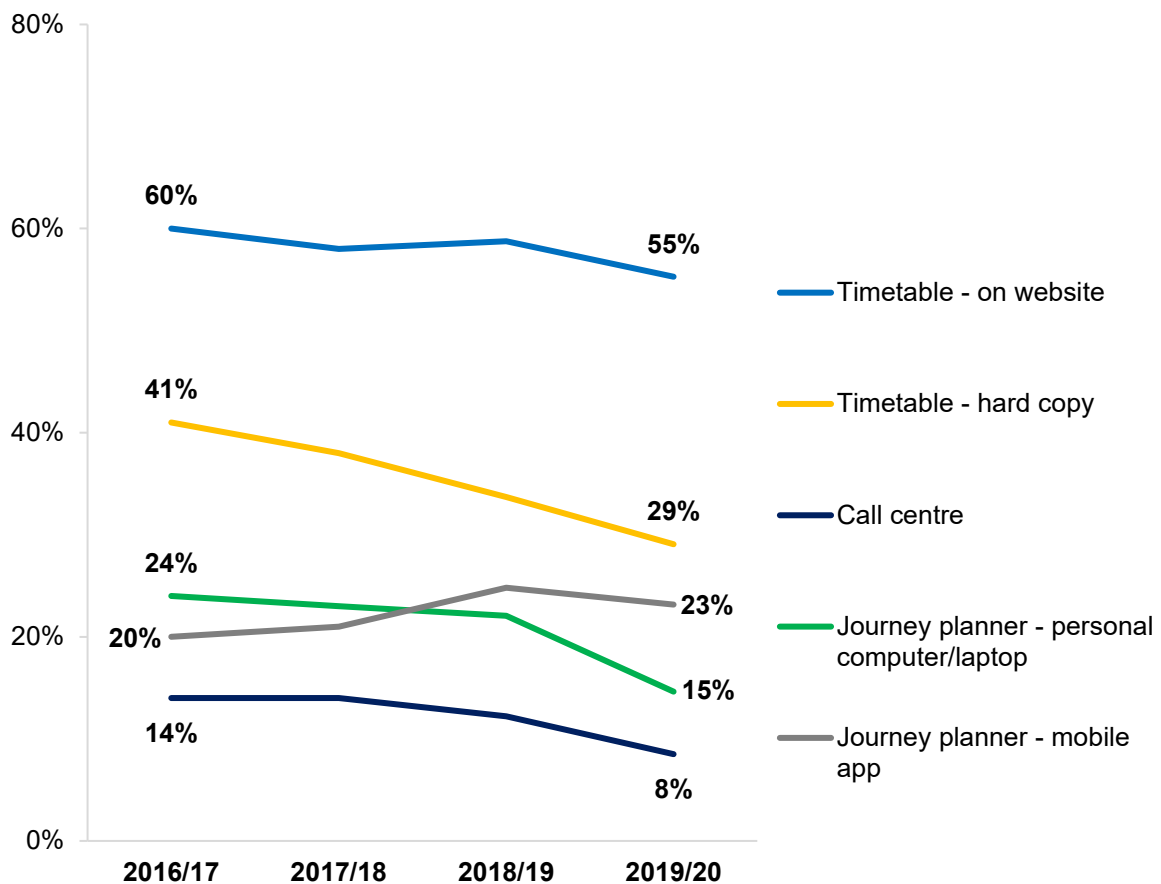
Use of journey planning resources: 2016/17 – 2019/20

Respondents who said they used journey planning resources were asked which methods they used to plan their journey (they could choose more than one option).

Of the respondents who used journey planning resources, 55% used a timetable on the Translink website and 29% used a hard copy timetable. Almost a quarter (23%) of respondents said they use the journey planner mobile app. The resource used the least was the Translink call centre (8%).

Considering the longer term trend since 2016/17, use of the journey planner mobile app has increased from 20% to 23% in 2019/20 while use of use of all other journey planning resources has decreased.

Figure 6: Which of these methods do you use to plan your journeys by public transport?*



*respondents could choose more than one

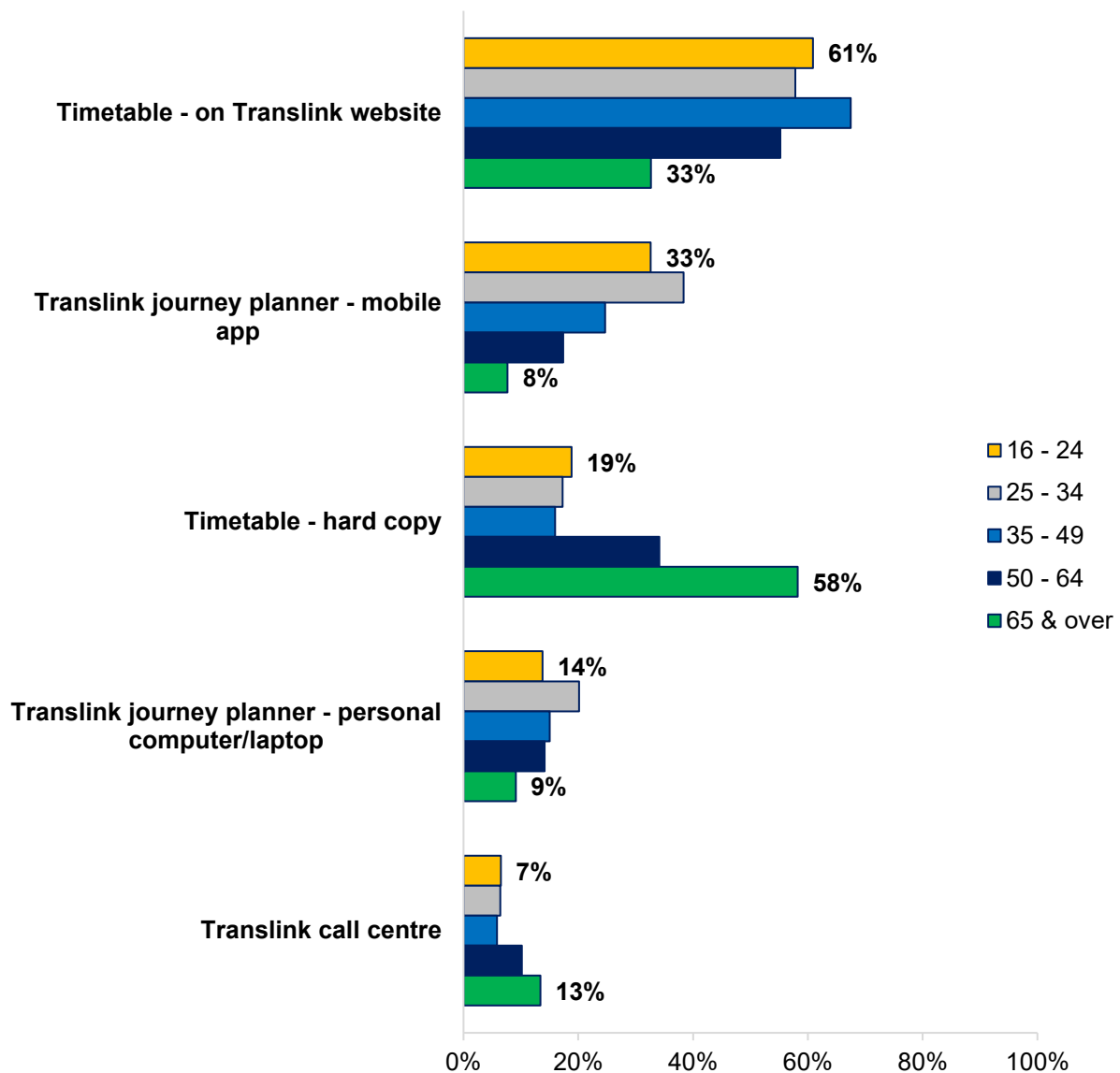
Base: 2019/20 = 2,162

Use of journey planning resources: by respondent group

Use of the range of journey planning resources varies across respondent group. 61% of respondents aged 16-24 use timetables on the Translink website, compared to 33% of those aged 65 and over.

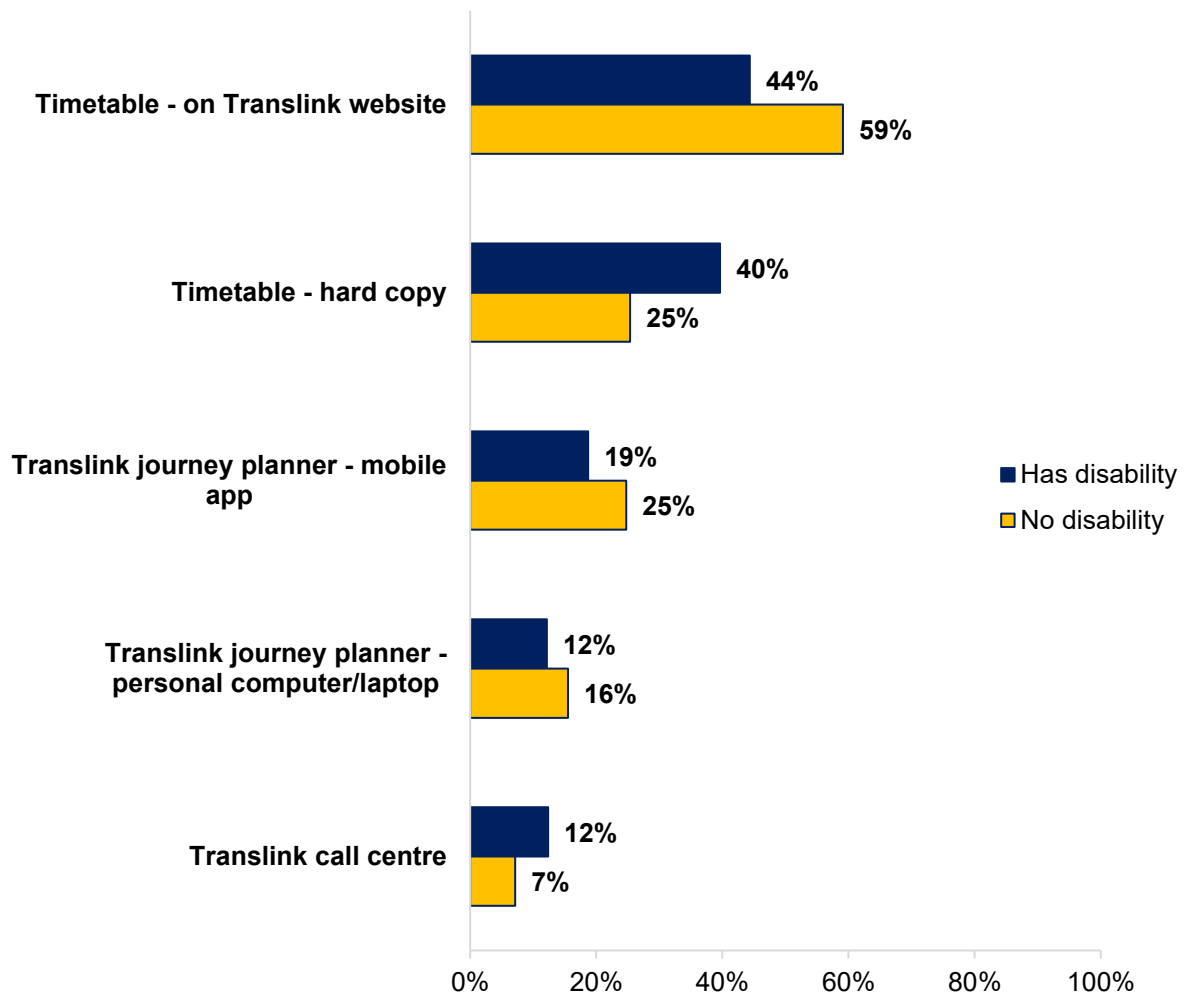
Those aged 16-24 are more likely to use the journey planner facility on a personal computer or laptop (14%) and the journey planner mobile app (33%) than those aged 65 and over (9% and 8%, respectively).

Figure 7: Use of journey planning resource by age: 2019/20



Conversely, those aged 65 and over were more likely to use hard copy timetables (58%) and the Translink call centre (13%) than those aged 16-24 (19% and 7%, respectively).

Figure 8: Use of journey planning resource by disability status: 2019/20



Respondents with no disability were more likely to use timetables on the Translink website (59%), journey planner mobile app (25%) and journey planner on a personal computer/laptop (16%), than respondents with a disability (44%, 19%, and 12%, respectively).

Conversely, respondents with a disability were more likely to use hard copy timetables (40%) and the Translink call centre (12%) than those without a disability (25% and 7% respectively).

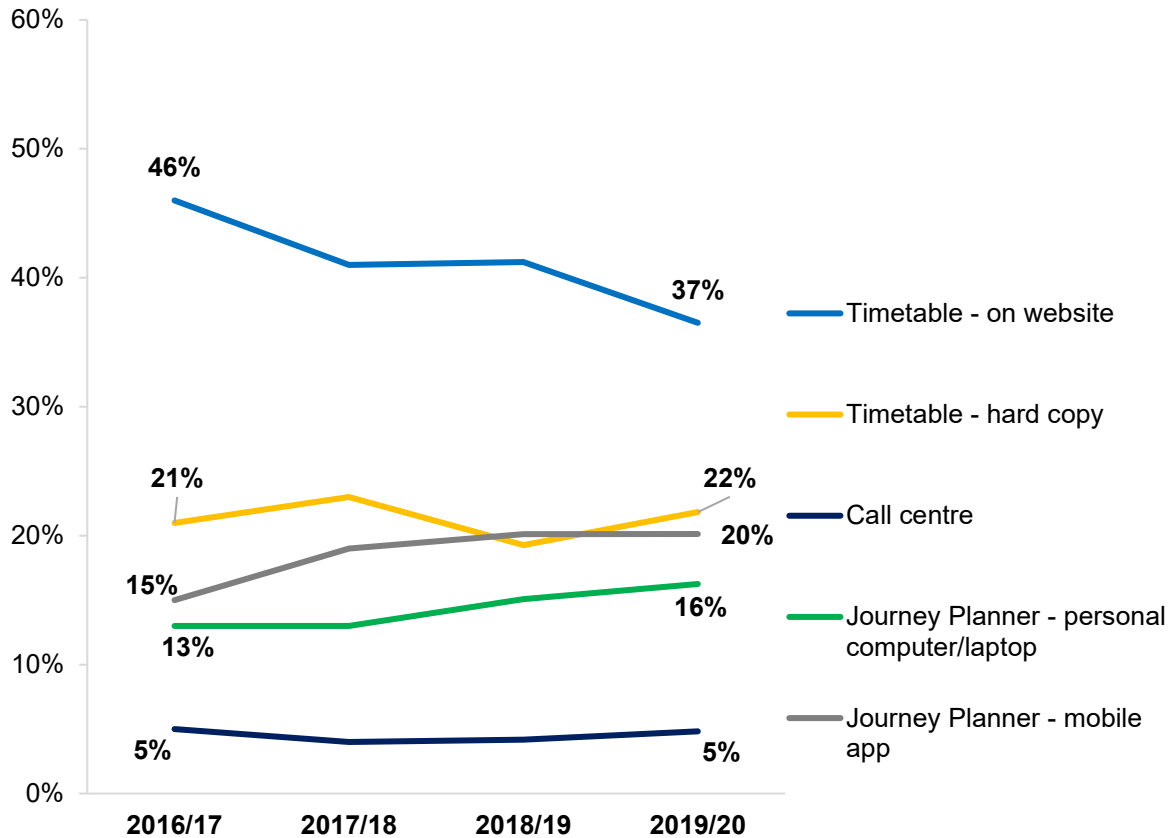
Data are available for other respondent groups (e.g. gender, urban/rural, LGD) can be found in the associated data tables.

Which of these methods do you use most often?

Respondents who said they used more than one of the journey planning resources were then asked which method they used most often.

In 2019/20, over one third (37%) of respondents said they use timetables on the Translink website most often, although this has seen a decrease in popularity since 2016/17 (when 46% of respondents said they used this most often).

Figure 9: Which of these methods do you use most often? 2016/17-2019/20



Base: 2019/20 = 488

Since 2016/17, respondents who said they use the journey planner mobile app most often has increased from 15% to 20% in 2019/20. Use of other journey planning resources has remained similar between 2016/17 and 2019/20.

Appendix 1: Technical Notes

The Northern Ireland Continuous Household Survey

Data Collection

The information presented in this publication derives from the Northern Ireland Continuous Household Survey (CHS), a Northern Ireland wide household survey administered by Central Survey Unit (CSU), Northern Ireland Statistics and Research Agency (NISRA).

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. The nature and aims of CHS are similar to those of the General Household Survey (GHS), which is carried out by the Office for National Statistics (ONS) in Great Britain.

Data Quality

Data were collected by Central Survey Unit (CSU) and various validation checks are 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.

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 Code of Practice for Statistics¹ and the CHS sample was assessed and considered to be a representative sample of the Northern Ireland population at household level.

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 on Confidence Intervals on page 16). 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.

Respondents

The 2019/20 CHS was based on a random sample of 9,000 domestic addresses drawn from the Land and Property Services list of addresses and interviews were sought with all adults aged 16 and over in these households. The survey is split into two versions and this question module is included on one version which is distributed to around 4500 addresses. This dataset contains the records for 2,962 adults aged 16 and over.

The number of respondents who answered each question, i.e. the base number, is stated in the commentary and/or the associated chart. The base number is the unweighted count. Some questions were only asked if the respondent had answered 'yes' to a previous question. The base number may also vary between questions due to some respondents not answering certain questions.

¹ [Statistics Authority Code of Practice for Statistics webpage \(opens in a new window\)](#)

Weighting

Analysis of the Public Transport Journey Planning 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 and gender when compared with 2019 Mid-Year Population Estimates for Northern Ireland. As a result, three separate weights were produced for age, gender and age and gender combined.

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 Public Transport Journey Planning 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 altogether. 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 and gender, many of these complex biases will reduce. However, it would be misleading to suggest that they will be eliminated.

Confidence Intervals

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:

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

where n is the number of respondents on which the percentage is based.

The sample for the CHS Survey is drawn as a random sample, and this formula can be used to calculate the sampling error of any percentage estimate from the survey.

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. 0% may reflect rounding down of values under 0.5.

Significant Difference

Any statements in this report regarding differences between groups such as males and females, different age groups, 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.

Respondent Groups

The following respondent groups were considered either in the main report or in the Excel tables which accompany the report:

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.

Disability status

Disability status is defined as whether or not the respondent has a disability. 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

Gender

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

District Council (LGD14)

Northern Ireland is divided into 11 district councils.

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 and including open countryside.

Appendix 2: Confidence Intervals

A confidence interval represents the range of values in which the true population value is likely to lie. It is based on the sample estimate and the confidence level. As the percentages are calculated from a representative sample of the Northern Ireland population (aged 16 and over), a confidence interval can be calculated to estimate the level of uncertainty in the sample estimate.

All the differences which have been highlighted in the commentary have been tested for statistical significance ($p < 0.05$). This means that there is at least a 95% probability that there is a genuine difference between results and the difference is not simply explained by random chance or sample error. Where the term ‘similar’, ‘no real difference’, ‘no real change’ or ‘around the same’ has been used when comparing results, it means that there is no significant difference between the results being compared.

By means of illustration, the 95% confidence intervals for the headline figures are summarised in Table B1 below.

Table B1: Confidence Intervals for Public Transport Journey Planning in Northern Ireland

	Estimate	Confidence Interval +/-	95% Confidence Range
Proportion of respondents who are aware of timetables (on Translink website)	64%	2%	62% - 66%
Proportion of respondents who make use of timetables (on Translink website)	55%	2%	53% - 57%

Note: Confidence Interval is calculated using unrounded percentages.

- The 95% confidence interval for respondents who are aware of timetables (hard copy) is 64% +/- 2%. This means that there is a 95% probability that the proportion of the Northern Ireland adult population who are aware of timetables (hard copy) lies between 62% and 66%.
- The 95% confidence interval for respondents who make use of timetables (hard copy) is 55% +/- 2%. This means that there is a 95% probability that the proportion of the Northern Ireland adult population who make use of timetables (hard copy) lies between 53% and 57%.

Appendix 3: Public Transport Journey Planning in Northern Ireland Questionnaire

[PUBTRAN1] I am now going to ask a few questions about public transport use. How often do you travel on public transport (Glider/Metro/Ulsterbus/NI Rail)?

1. Every day
 2. At least once a week
 3. At least once every 2-3 weeks
 4. At least once a month
 5. Once every 2-3 months
 6. Once every 6 months
 7. Once a year
 8. Less frequently
 9. Never
- [TLINK5a]

[PUBTRAN2] Which public transport services do you use?
CODE ALL THAT APPLY

1. Glider
2. Metro
3. Ulsterbus
4. NI Rail
5. Other (e.g. commercial operator)

[TLINK1] SHOWCARD (JOURNEY PLANNER AWARE)

I am now going to ask a few questions about public transport journey planning. Which of the following methods that can be used to plan journeys by public transport are you aware of? **CODE ALL THAT APPLY**

1. Timetable - hard copy
 2. Timetable - on Translink website
 3. Translink call centre
 4. Translink journey planner - personal computer/laptop
 5. Translink journey planner - mobile app
 6. None
- [INTROeCAR]

Asked if PUBTRAN1 does not = 9

[TLINK3] SHOWCARD (PLAN YOUR JOURNEY)

Which of these methods do you use to plan your journeys by public transport?

CODE ALL THAT APPLY

1. Timetable - hard copy
2. Timetable - on Translink website
3. Translink call centre
4. Translink journey planner - personal computer/laptop
5. Translink journey planner - mobile app
6. Other → [TLINK3oth]
7. I don't use public transport → [INTROeCAR]

[TLINK3oth] Please specify the other method

Asked if selected more than one response to [TLINK3]

[TLINK4] SHOWCARD (PLAN YOUR JOURNEY)

And which one of these methods do you use most often?

1. Timetable - hard copy
2. Timetable - on Translink website
3. Translink call centre
4. Translink journey planner - personal computer/laptop
5. Translink journey planner - mobile app
6. Other → [TLINK4oth]

[TLINK4oth] Please specify the other method