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Travel Survey for Northern Ireland Headline Report 2017-2019



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um Staitisticí agus Taighde



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About this publication

TSNI Headline Report 2017-2019

This is the first release of 2017-2019 Travel Survey for Northern Ireland (TSNI) results. It contains key information on journeys taken by Northern Ireland residents by mode of travel and purpose of journey. For more detailed information about the TSNI, including details about the publication of future 2017-2019 reports, please see the [User Information](#) section (page 11) and the [Definitions](#) section (page 18).

Data in future reports

This report covers the 2017-2019 time period, prior to the COVID-19 pandemic. This will be covered in the next edition of the Headline Report (2018-2020). There have been changes to the TSNI data collection methodology in 2020 due to the pandemic which could have an impact on future TSNI reports. More details are given in the [Current and future developments](#) section (page 14) in User Information.

Changes from previous Headline reports

Following a user consultation in 2019 (see page 11, within the User Information section), the TSNI In-depth Report was completely redesigned for the 2016-2018 edition. This new format has now been applied to the Headline Report for the current 2017-2019 edition. The report has been updated to reflect current statistical and data visualisation methods to make it more user-friendly and accessible.

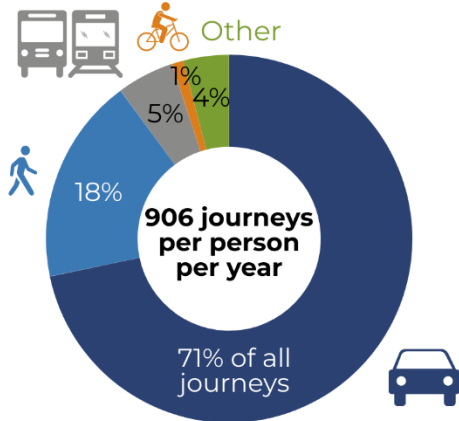
To make the results more digestible, travel modes have been grouped from 14 categories into 5 commonly used modes: Walk, Bicycle, Car, Public transport, Other. Similarly journey purposes have been grouped from 15 categories into 6 commonly used purposes: Commuting & Business, Leisure & Other, Personal business, Shopping, Education & Escort Education, Other escort.

All the tables from previous Headline Reports are available in the spreadsheet accompanying this report, including analysis by 14 travel modes and 15 journey purposes. For ease of comparison, numbering in the spreadsheet matches the tables in previous Headline Reports.

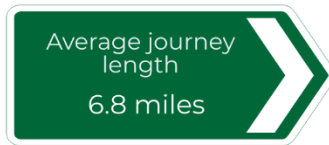
Accessibility

If this document is not in a format that meets your needs, please contact us to discuss your requirements.

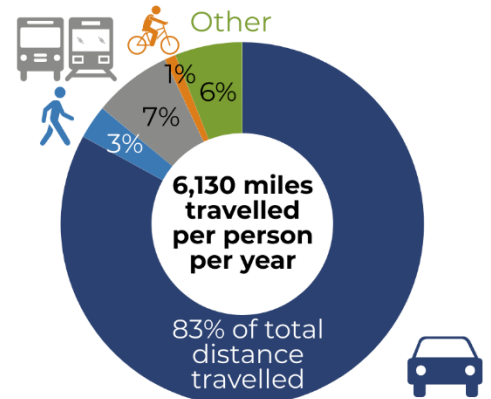
Journeys: % by main mode and average



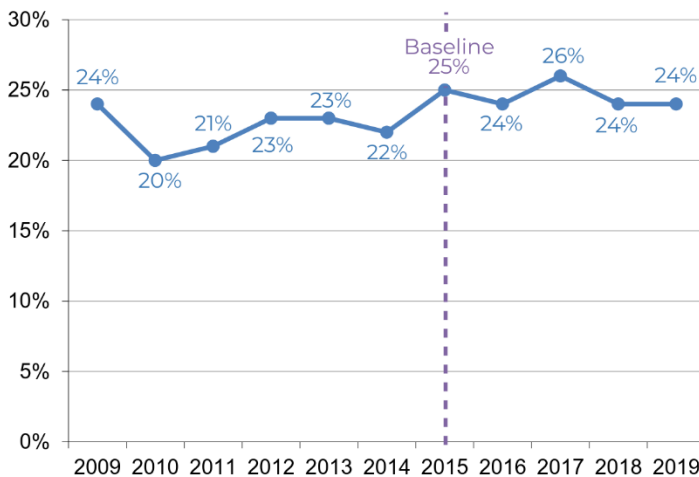
How far people travel



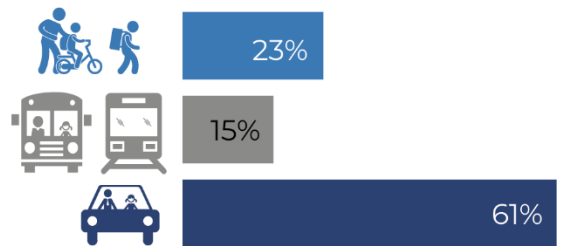
Distance travelled: % by mode and average



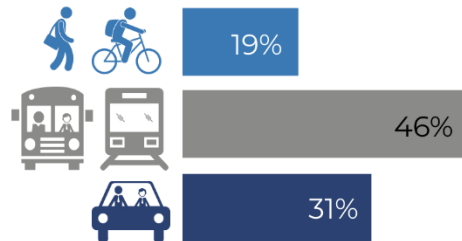
% of all journeys made by walking, cycling or public transport



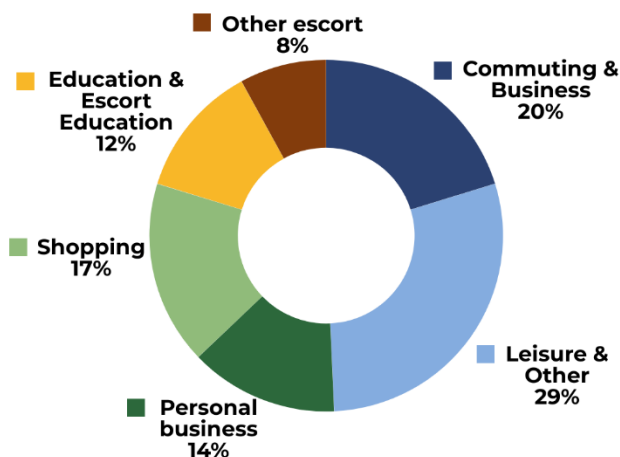
School travel: 4-11 year olds



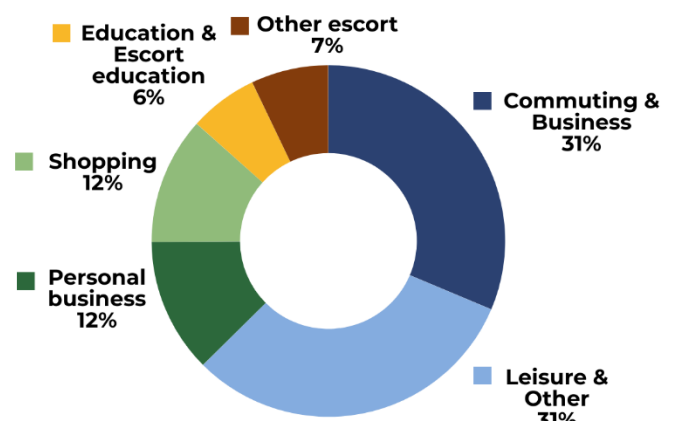
School travel: 12-18 year olds



Journeys: % by purpose



Distance travelled: % by purpose



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Key Points

Overall results

- Over the time period 2017-2019, each person travelled, on average, 6,130 miles per year (approximately 17 miles per day), around the same as 10 years ago (6,002 miles in 2007-2009).
- On average, 906 journeys were made per person per year over the period 2017-2019 (just over 2 journeys per day), no real difference from 2007-2009 (914 journeys per person per year).
- In 2017-2019, the average journey length was 6.8 miles, an increase from 10 years ago (6.6 miles in 2007-2009).

Main mode of travel

- On average, 643 car journeys were taken per person per year in 2017-2019. This equates to 71% of all journeys made, the same as 2014-2016 (71%).
- There were 167 walking journeys per person per year in 2017-2019. This represents 18% of all journeys made, no change compared to 2014-2016 (18%).
- In 2017-2019, 48 public transport journeys were made per person per year. This equates to 5% of all journeys made, the same proportion as 2014-2016 (5%).

Purpose of journey

- On average, 183 commuting and business journeys were taken per person per year in 2017-2019. This equates to 20% of all journeys made, similar to 2014-2016 (19%).
- There were 263 leisure and other journeys taken per person per year in 2017-2019 (visiting friends at private home/elsewhere, entertainment/social activities, sports, holiday/day trip, other including just walk, undefined purpose). This represents 29% of all journeys made, no real change when compared with 2014-2016 (30%).
- Each person made, on average, 153 shopping journeys per year during 2017-2019. This represents 17% of all journeys made, the same as 2014-2016 (17%).
- In 2017-2019, 123 personal business journeys (for services such as bank, doctor or library) were taken per person per year. The proportion of journeys made for personal business has increased from 12% in 2014-2016 to 14% of all journeys made in 2017-2019.

Journeys to and from school

- In 2017-2019, the most commonly used main method of travel to or from school for the 4-11 age group was car (61%), followed by walking & cycling (23%) and then public transport (15%).
- In 2017-2019, the most commonly used main method of travel to or from school for the 12-18 age group was public transport (46%), followed by car (31%) and then walking & cycling (19%).

Journeys made by walking, cycling or public transport

- Indicator 25 of the draft Programme for Government (PfG) framework is the proportion of all journeys which are made by walking, cycling or public transport. This is monitored using Travel Survey for Northern Ireland data for single years. In 2019, just under one quarter (24%) of all journeys were taken by walking, cycling or public transport. There has been no real change comparing 2019 to the baseline year (25% in 2015).

Section 1: Overall results (all travel modes)

Trends in distance and journeys

Over the time period 2017-2019, each person travelled, on average, 6,130 miles per year (approximately 17 miles per day), around the same as 10 years ago (6,002 miles in 2007-2009).

On average, 906 journeys were made per person per year over the period 2017-2019 (just over 2 journeys per day), no real difference from 2007-2009 (914 journeys per person per year).

In 2017-2019, the average journey length was 6.8 miles, an increase from 10 years ago (6.6 miles in 2007-2009).

Figure 1.1: Distance 2007-2009 to 2017-2019 (all modes)

Average miles travelled per person per year

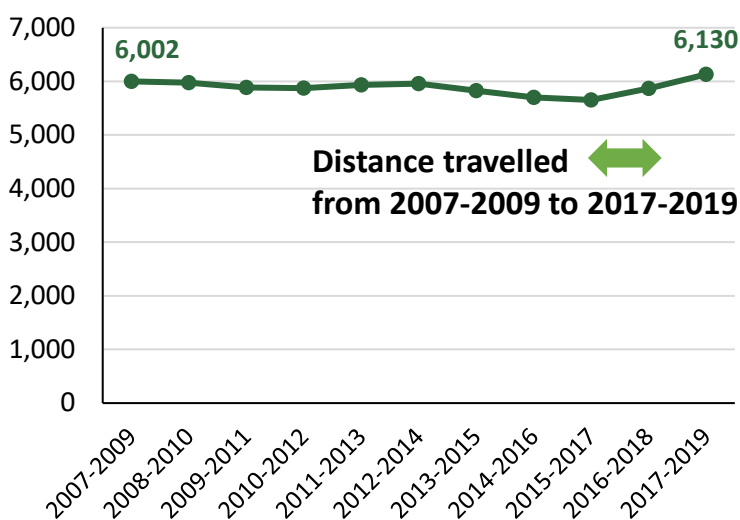
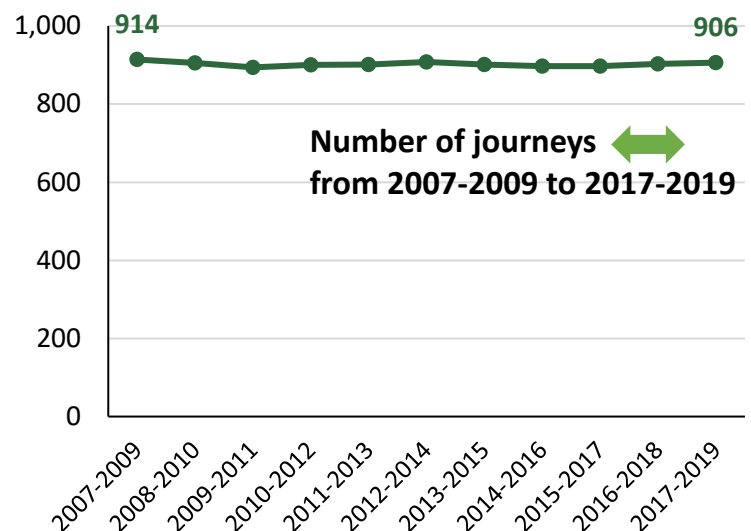


Figure 1.2: Journeys 2007-2009 to 2017-2019 (all modes)

Average journeys per person per year



Comparing with ten years ago



Increase* from 2007-2009 to 2017-2019



No real change* from 2007-2009 to 2017-2019



Decrease* from 2007-2009 to 2017-2019

* Determined by a test of statistical significance. For full details, see Statistical significance subsection

Further reading

For further information and breakdowns on the statistics and charts in this section, please refer to the following tables in the accompanying spreadsheet:

- Table 1: Average distance travelled per person per year by travel mode
- Table 2: Average number of journeys per person per year and average journey length by main mode

Section 2: Mode of travel used for journeys

Distance travelled by mode

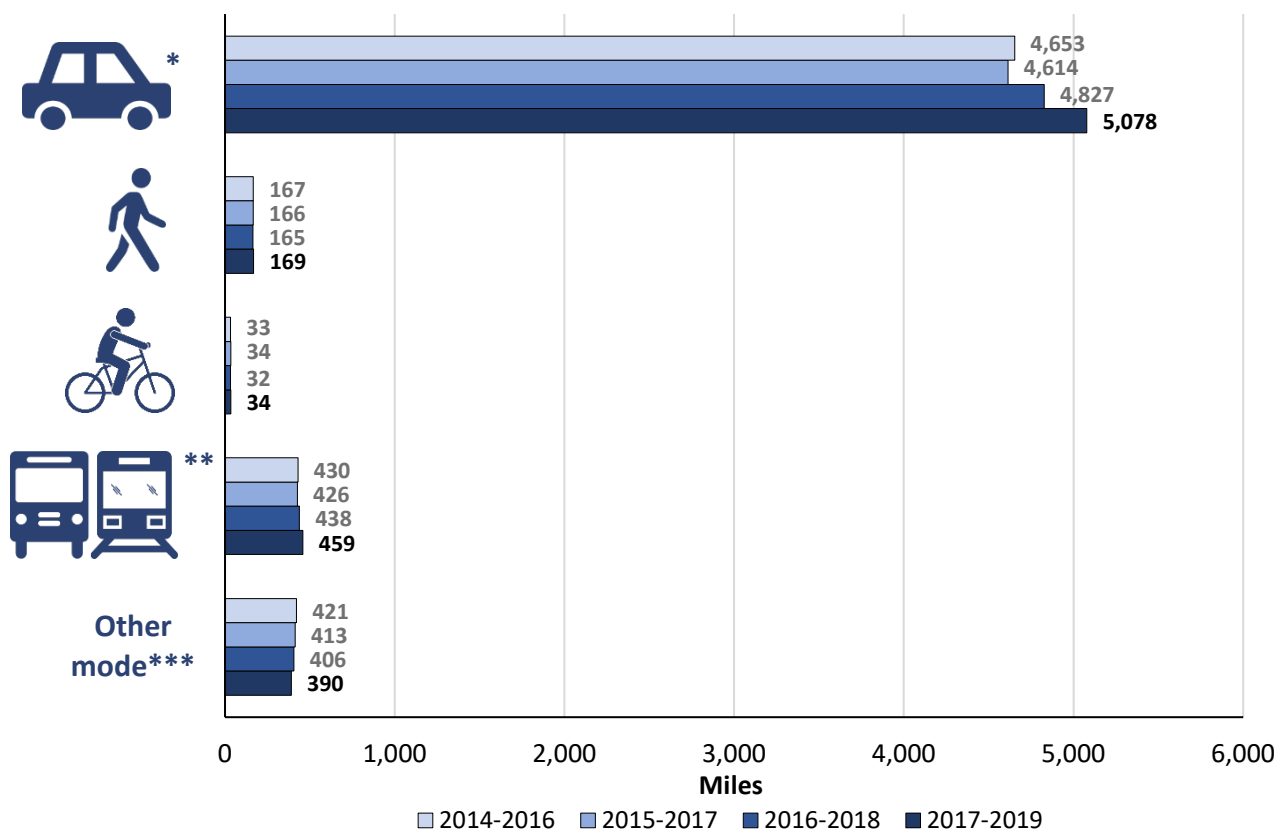
In total, 6,130 miles were travelled on average per person per year in 2017-2019, an increase from 5,704 miles in 2014-2016.

During 2017-2019, 83% of total distance travelled was by car (as a driver or passenger), similar to 2014-2016 (82%). However, over the same time period, average distance travelled by car per person per year has increased from 4,653 miles in 2014-2016 to 5,078 miles in 2017-2019.

7% of the total distance travelled was on public transport (Ulsterbus, Metro, Other Bus, Northern Ireland Railways and Black Taxi). An average of 459 miles per person per year was travelled on public transport in 2017-2019, no real difference from 2014-2016 (430 miles).

Walking accounted for 3% of the total distance travelled. On average, 169 miles were walked per person per year in 2017-2019, around the same as 2014-2016 (167 miles).

Figure 2.1: Average distance travelled per person per year by mode: 2014-2016 to 2017-2019



* Car includes 'Car driver', 'Car passenger' and 'Car undefined'

** Public Transport includes 'Metro and Ulsterbus', 'Other bus', 'NI Railways' and 'Black taxi'

*** Other mode includes 'Motorcycle', 'Other private', 'Taxi', 'Other public' and 'Undefined mode'

See Travel Survey for Northern Ireland In-depth Report 2016-2018 for definitions of individual travel modes

Average number of journeys by main mode

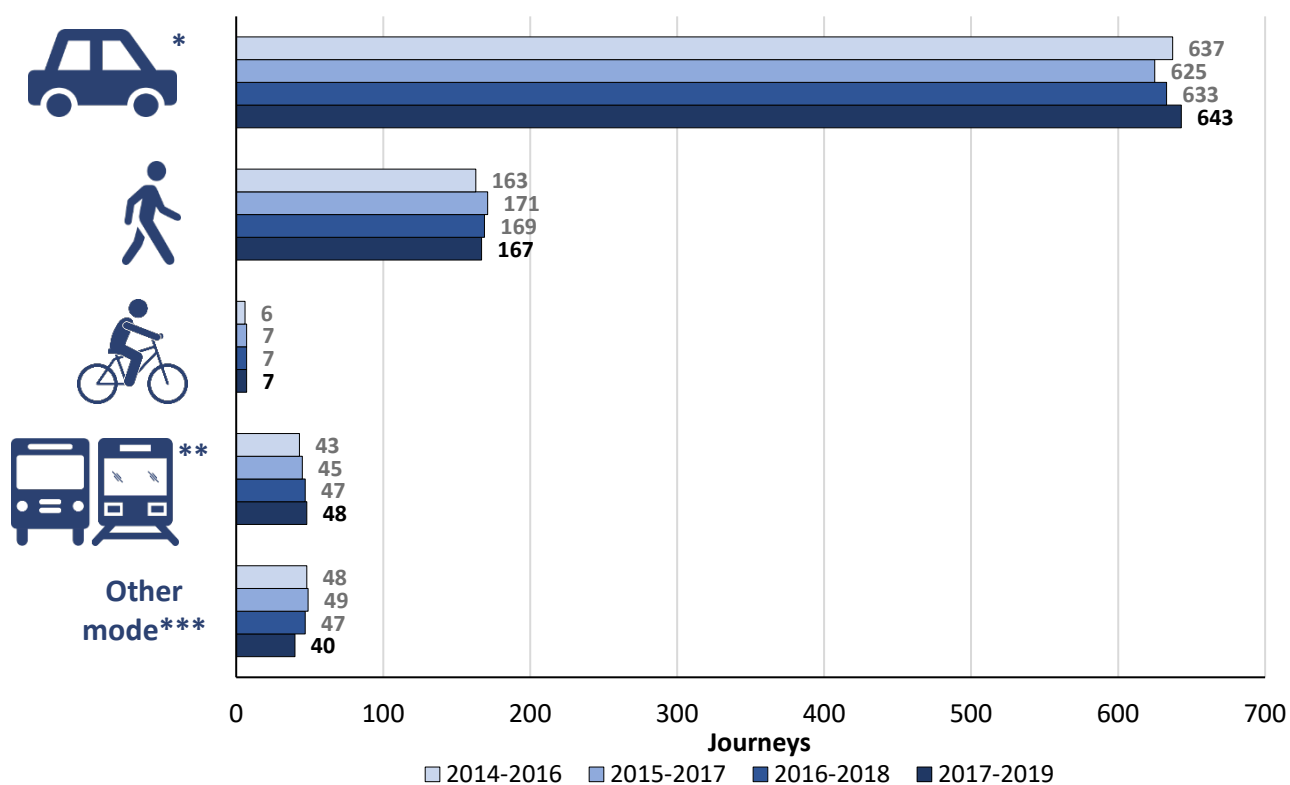
Over the 2017-2019 period, each person took, on average, 906 journeys each year, no real difference from 2014-2016 (897 journeys per person per year).

On average, 643 car journeys were taken per person per year in 2017-2019. This equates to 71% of all journeys made, the same as 2014-2016 (71%).

There were 167 walking journeys per person per year in 2017-2019. This represents 18% of all journeys made, no change compared to 2014-2016 (18%).

In 2017-2019, 48 public transport journeys were made per person per year. This equates to 5% of all journeys made, the same proportion as 2014-2016 (5%).

Figure 2.2: Average number of journeys per person per year by main mode: 2014-2016 to 2017-2019



* Car includes 'Car driver', 'Car passenger' and 'Car undefined'

** Public Transport includes 'Metro and Ulsterbus', 'Other bus', 'NI Railways' and 'Black taxi'

*** Other mode includes 'Motorcycle', 'Other private', 'Taxi', 'Other public' and 'Undefined mode'

See Travel Survey for Northern Ireland In-depth Report 2016-2018 for definitions of individual travel modes

Further reading

For further information and breakdowns on the statistics and charts in this section, please refer to the following tables in the accompanying spreadsheet:

- Table 1: Average distance travelled per person per year by travel mode
- Table 2: Average number of journeys per person per year and average journey length by main mode

Section 3: Purpose of journeys

Distance travelled by purpose

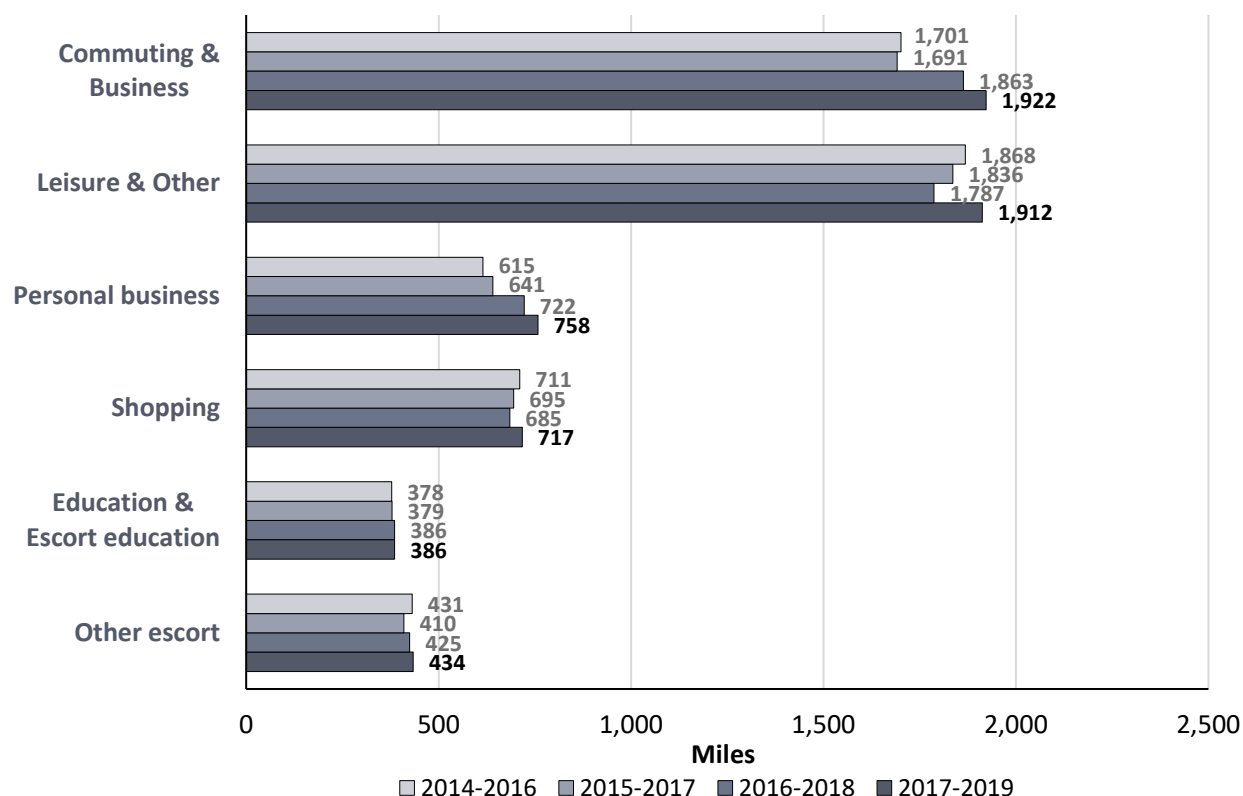
In 2017-2019, 31% of the total distance travelled was for commuting and business purposes, around the same as 2014-2016 (30%). However, over the same time period, average distance travelled per person per year for commuting and business increased from 1,701 miles in 2014-2016 to 1,922 miles in 2017-2019.

Although the proportion of total distance travelled for leisure and other¹ purposes decreased from 33% in 2014-2016 to 31% in 2017-2019, there was no real change in average distance travelled per person per year for these purposes over the same period (1,868 miles in 2014-2016, 1,912 miles in 2017-2019).

Journeys to services, such as the bank, doctor or library (classified as “personal business” journeys) made up 12% of the total distance travelled in 2017-2019, similar to 2014-2016 (11%). Looking at average distance travelled per person per year for personal business, there was an increase from 615 miles in 2014-2016 to 758 miles in 2017-2019.

12% of the total distance travelled was for shopping in 2017-2019. On average, 717 miles per person per year were travelled for shopping in 2017-2019, similar to 2014-2016 (711 miles).

Figure 3.1: Average distance travelled per person per year by purpose¹: 2014-2016 to 2017-2019



¹ See Travel Survey for Northern Ireland In-depth Report 2016-2018 for definitions of journey purpose. Leisure and Other category includes ‘Visit friends at private home’, ‘Visit friends elsewhere’, ‘Entertainment/public social activities’, ‘Sport participate’, ‘Holiday base’, ‘Day trip’, ‘Other including just walk’ and ‘Undefined purpose’.

Average number of journeys by purpose

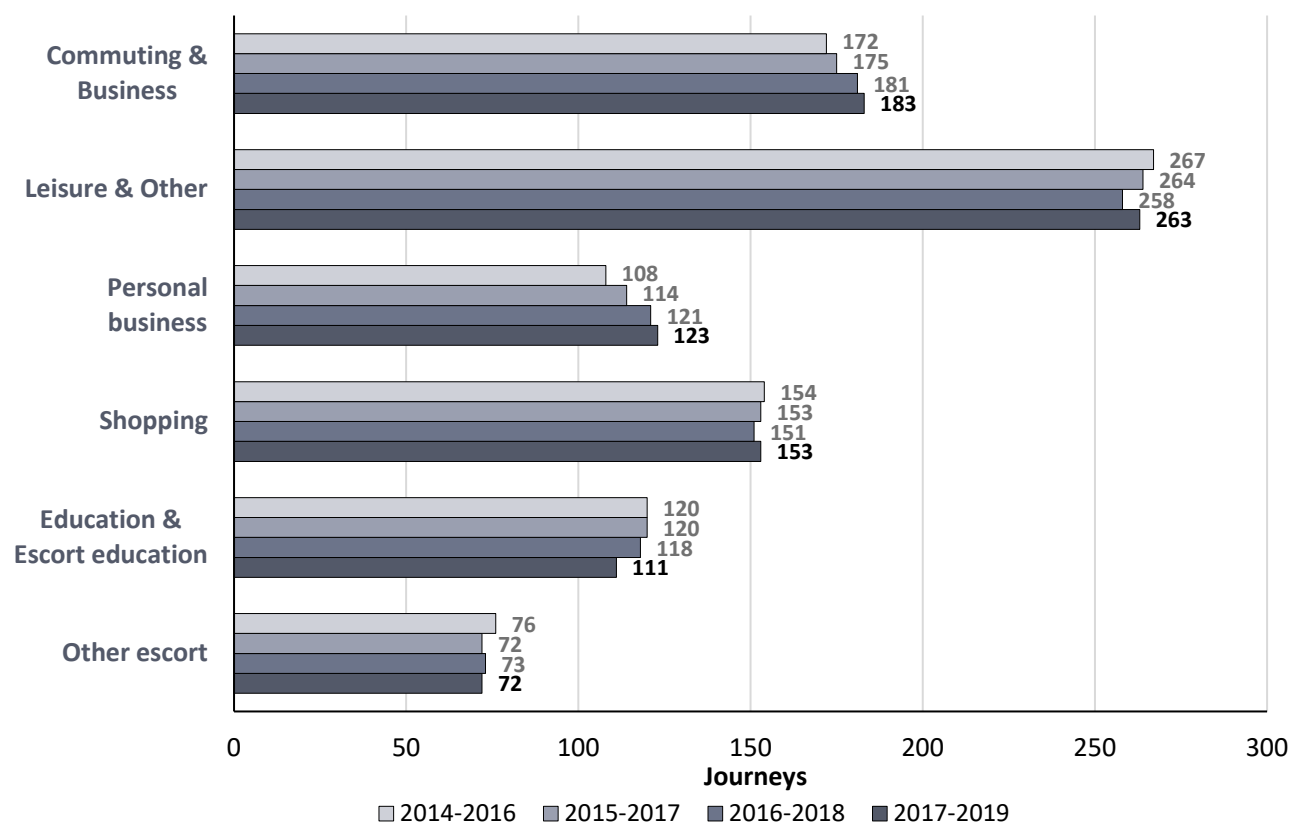
On average, 183 commuting and business journeys were taken per person per year in 2017-2019. This equates to 20% of all journeys made, similar to 2014-2016 (19%).

There were 263 leisure and other¹ journeys taken per person per year in 2017-2019. This represents 29% of all journeys made, no real change when compared with 2014-2016 (30%).

In 2017-2019, 123 personal business journeys were taken per person per year. The proportion of journeys made for personal business has increased from 12% in 2014-2016 to 14% of all journeys made in 2017-2019.

Each person made, on average, 153 shopping journeys per year during 2017-2019. This represents 17% of all journeys made, the same as 2014-2016 (17%).

Figure 3.2: Average number of journeys per person per year by purpose¹: 2014-2016 to 2017-2019



¹ See Travel Survey for Northern Ireland In-depth Report 2016-2018 for definitions of journey purpose. Leisure and Other category includes 'Visit friends at private home', 'Visit friends elsewhere', 'Entertainment/public social activities', 'Sport participate', 'Holiday base', 'Day trip', 'Other including just walk' and 'Undefined purpose'.

Further reading

For further information and breakdowns on the statistics and charts in this section, please refer to the following table in the accompanying spreadsheet:

- Table 3: Travel per person per year by journey purpose

Section 4: Journeys made by walking, cycling or public transport

Trends in walking, cycling, public transport*

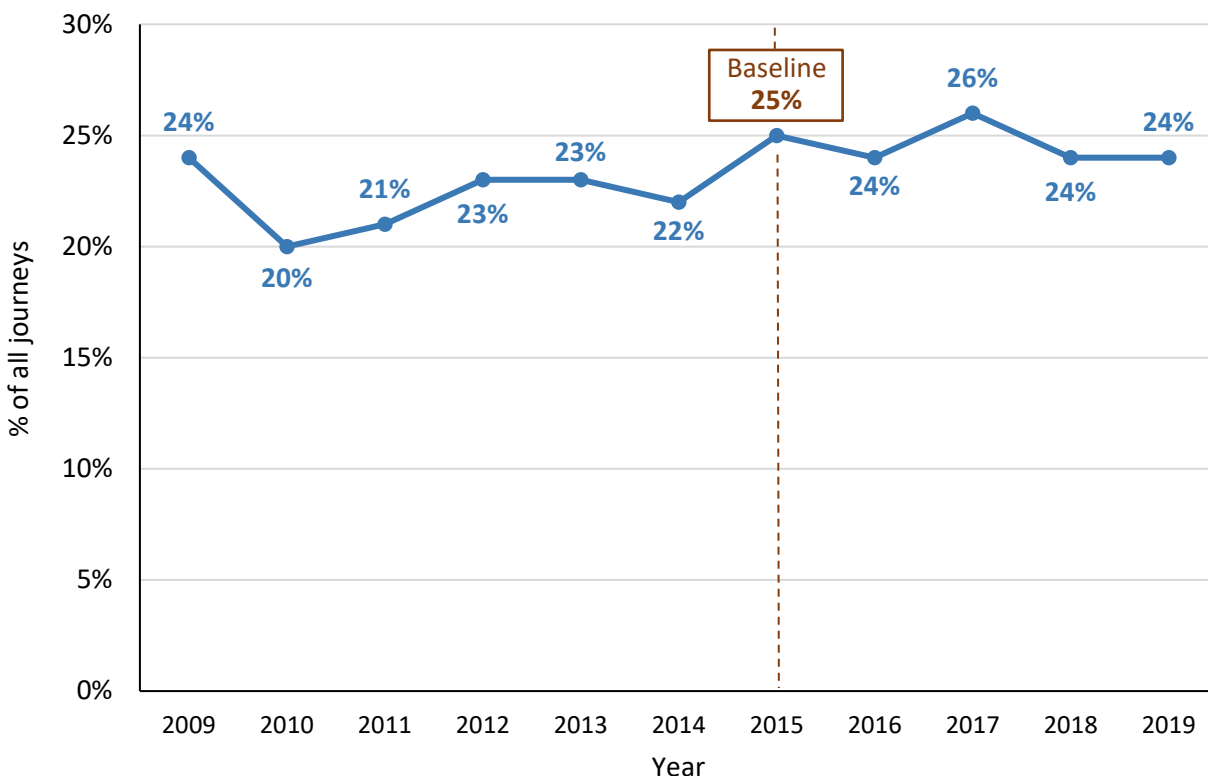
Indicator 25 of the draft Programme for Government (PfG) framework is the proportion of all journeys which are made by walking, cycling or public transport. This is monitored using Travel Survey for Northern Ireland data for single years. The baseline year is 2015. For comparison purposes, data have been included for the last 10 years in Figures 4.1 and 4.2.

In 2019, just under one quarter (24%) of all journeys were taken by walking, cycling or public transport. There has been no real change comparing 2019 to the baseline year (25% in 2015) i.e. the difference is not statistically significant*.

The proportion of journeys taken by walking, cycling or public transport in 2019 (24%) is similar to 5 years ago (22% in 2014) and the same as 10 years ago (24% in 2009).

* For an explanation of terms used when comparing the data, see the [Statistical significance](#) subsection (page 12).

Figure 4.1: Proportion of all journeys where the main mode of travel¹ is walking, cycling or public transport²: 2009 to 2019

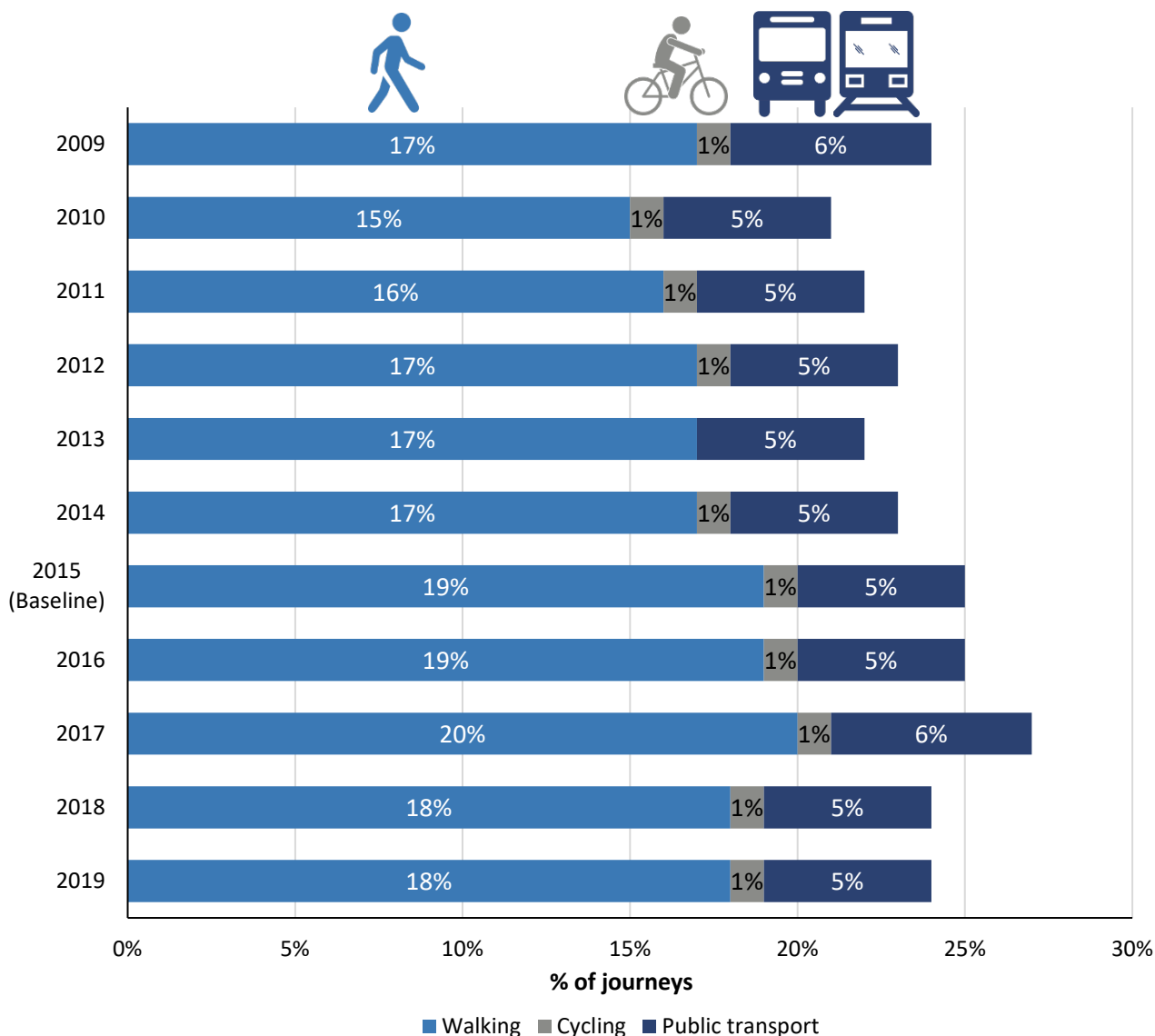


¹ Main mode is the form of transport used for the greatest length of the journey. For example, if the journey had 2 stages, walking 1 mile to the train station and then taking a 10 mile train journey, the train would be the main mode and therefore the journey is assigned to the "public transport" category.

² Public Transport includes 'Metro and Ulsterbus', 'Other bus', 'NI Railways' and 'Black taxi'

Looking at the individual travel modes separately, in 2019 the proportion of all journeys made by walking was 18%, by cycling 1% and by public transport 5%. These proportions are around the same as 2015, the baseline year (19%, 1% and 5% respectively). Similarly, considering the proportions of journeys taken by walking, by cycling and by public transport separately, there has been no real change compared to 5 years ago and also compared to 10 years ago.

Figure 4.2: Proportion of all journeys where the main mode of travel¹ is walking, cycling or public transport²: 2009 to 2019



¹ Main mode is the form of transport used for the greatest length of the journey. For example, if the journey had 2 stages, walking 1 mile to the train station and then taking a 10 mile train journey, the train would be the main mode and therefore the journey is assigned to the "public transport" category.

² Public Transport includes 'Metro and Ulsterbus', 'Other bus', 'NI Railways' and 'Black taxi'

Further reading

For further information and breakdowns on the statistics and charts in this section, please refer to the following figure and table in the accompanying spreadsheet:

- Figure 1 and Table 4: Proportion of all journeys taken where the main mode of travel is walking cycling or public transport

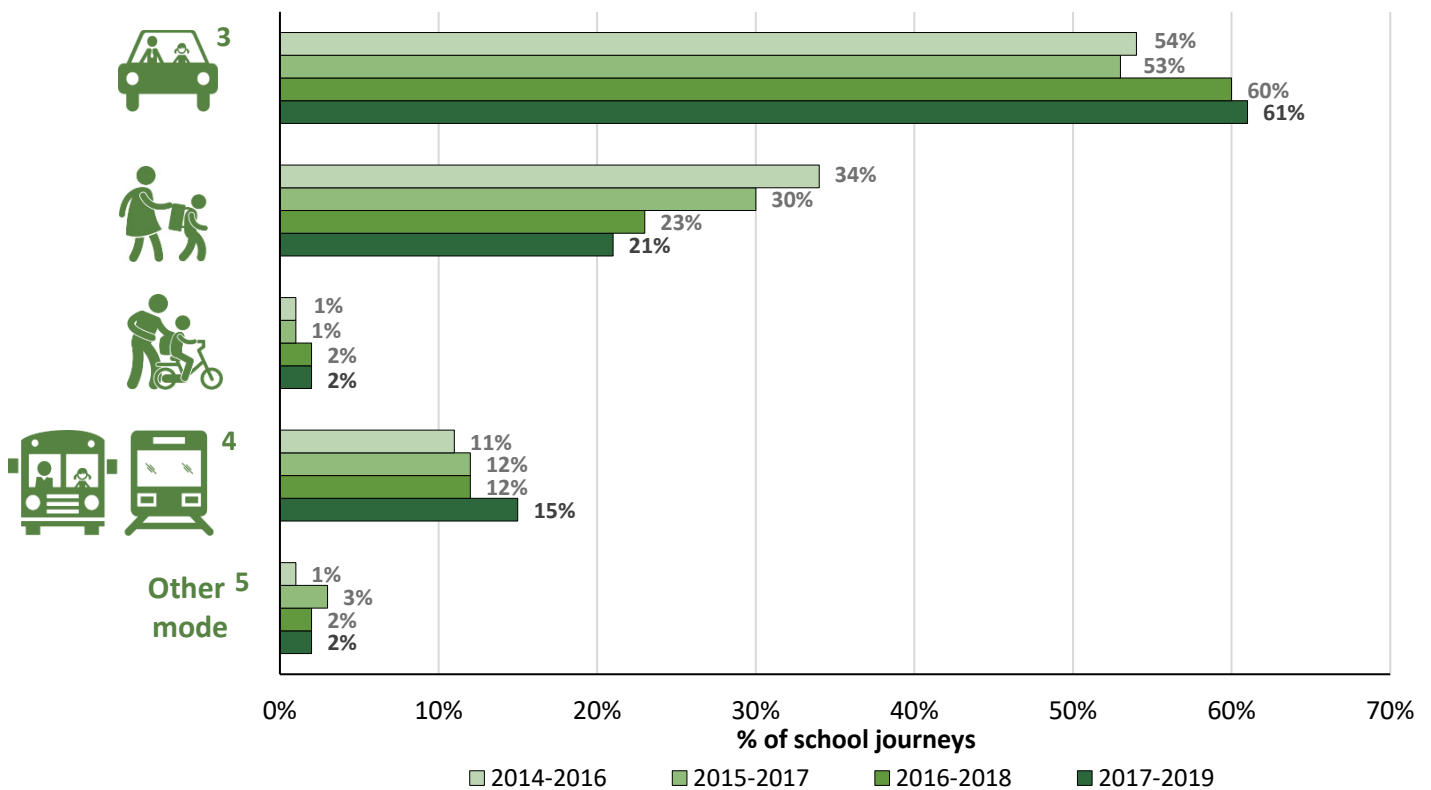
Section 5: Journeys to and from school

Journeys for 4-11 year olds

In 2017-2019, the most commonly used main method of travel to or from school for the 4-11 age group was car (61%), followed by walking (21%) and then public transport (15%).

For this age group, the proportion of school journeys taken by walking, cycling or public transport has decreased from 45% in 2014-2016 to 37% in 2017-2019. In contrast, over the same time period, the proportion of school journeys taken by car for this age group has increased from 54% to 61%.

Figure 5.1: Main mode of travel¹ to or from school² for 4-11 year olds: 2014-2016 to 2017-2019



¹ Main mode of travel: Journeys can consist of stages e.g. walk to bus stop and take the bus to school. The main mode of travel is the form of transport used for the greatest length of the journey.

² Based on journeys where the journey purpose was education. Journey purpose is governed by what the person did at the end of the journey but for journeys home the purpose is governed by the start of the journey. Therefore a journey home from school is classified as an education journey as well as any journey to school.

³ Car includes 'Car passenger'

⁴ Public Transport includes 'Metro and Ulsterbus', 'Other bus', 'NI Railways' and 'Black taxi'

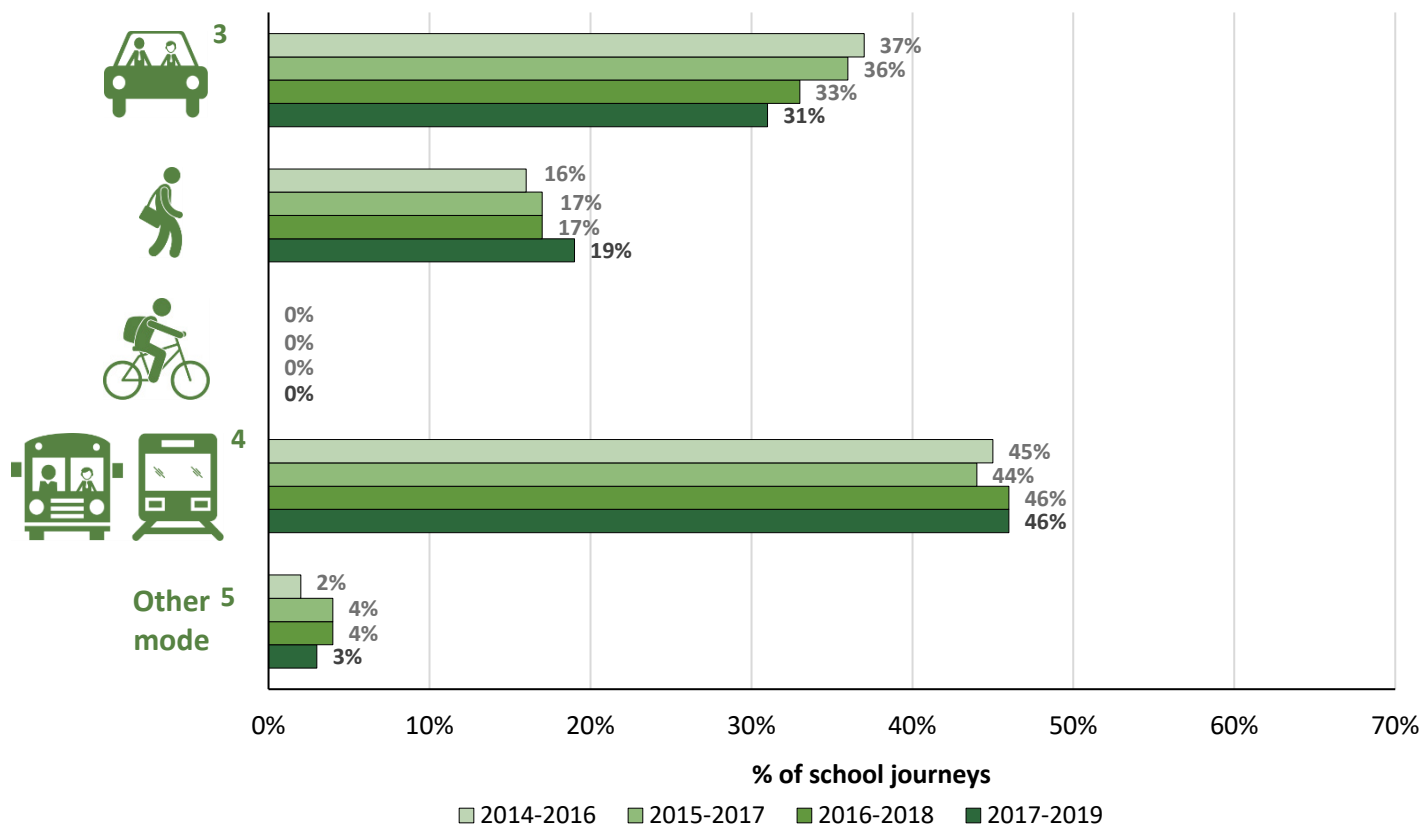
⁵ Other mode includes 'Motorcycle', 'Other private', 'Taxi', 'Other public' and 'Undefined mode'

Journeys for 12-18 year olds

In 2017-2019, the most commonly used main method of travel to or from school for the 12-18 age group was public transport (46%), followed by car (31%) and then walking (19%).

There has been no real change in the proportion of education journeys by walking, cycling or public transport among 12-18 year olds comparing 2014-2016 (60%) to 2017-2019 (66%).

Figure 5.2: Main mode of travel¹ to or from school² for 12-18 year olds: 2014-2016 to 2017-2019



¹ Main mode of travel: Journeys can consist of stages e.g. walk to bus stop and take the bus to school. The main mode of travel is the form of transport used for the greatest length of the journey.

² Based on journeys where the journey purpose was education. Journey purpose is governed by what the person did at the end of the journey but for journeys home the purpose is governed by the start of the journey. Therefore a journey home from school is classified as an education journey as well as any journey to school.

³ Car includes 'Car driver', 'Car passenger' and 'Car undefined'

⁴ Public Transport includes 'Metro and Ulsterbus', 'Other bus', 'NI Railways' and 'Black taxi'

⁵ Other mode includes 'Motorcycle', 'Other private', 'Taxi', 'Other public' and 'Undefined mode'

The proportion of school journeys by walking, cycling or public transport was higher in the 12-18 age group (66%) than in the 4-11 age group (37%). Conversely, the proportion of school journeys by car was lower in the 12-18 age group (31%) than in the 4-11 age group (61%).

Further reading

For further information and breakdowns on the statistics and charts in this section please refer to the following table in the accompanying spreadsheet:

- Table 5: Main mode of travel to or from school for 4-11 and 12-18 year olds

Appendix A: User Information

User engagement

In 2018, ASRB conducted a series of [TSNI user engagement meetings with key users \(opens in new window\)](#). Following on from this, in 2019 ASRB conducted a review of the content and format of the current TSNI reports in order to develop a more concise, accessible and relevant set of reports whilst ensuring that they continue to meet our users' needs.

As part of this, an eight week [user consultation \(opens in new window\)](#) was carried out, closing on 2 July 2019. An online survey was used to collect responses. 93 full and partial responses were received. The [results of this survey \(opens in new window\)](#) were published in September 2019, alongside a [Statement of User Needs \(opens in new window\)](#) indicating future work that will be carried out on TSNI outputs.

Changes to the report

Following on from the user consultation, the In-depth Report was completely redesigned for the 2016-2018 edition. This new format has now been applied to the Headline Report for the current 2017-2019 edition. The report has been updated to reflect current statistical and data visualisation methods to make it more user-friendly and accessible, while retaining all information previously reported.

To make the results more digestible, large tables and charts have been reduced in size:

- Travel modes were grouped from 14 categories into 5 commonly used modes: Walk, Bicycle, Car, Public transport, Other.
- Journey purposes were grouped from 15 categories into 6 commonly used purposes: Commuting & Business, Leisure & Other, Personal business, Shopping, Education & Escort Education, Other escort.

All the tables from previous Headline Reports are available in the spreadsheet accompanying this report, including analysis by the 14 separate travel modes and the 15 separate journey purposes. For ease of comparison, the table numbers in the spreadsheet match the table numbers in previous Headline Reports.

Symbols and Conventions

Rounding of figures

Where figures have been rounded to the nearest final digit, there may be an apparent slight discrepancy between the sum of the constituent items and the total shown.

Weeks in a year

It is assumed in this report that there are 52.14 weeks in the year.

Three years of data combined

As the sample size is relatively small (it has varied between 856 and 1,037 households interviewed in one year), 3 years of data need to be combined to ensure the analysis carried out is robust.



Conversion factors for miles and kilometres


The following conversion factors may be of use:

1 Mile = 1.609 Kilometres

1 Kilometre = 0.6214 Miles

Statistical significance

Only those differences which are statistically significant ($p < 0.05$) have been highlighted in the commentary within this report and are denoted in the text as increase/decrease, higher/lower etc. If applicable, in the charts they are indicated by  or . 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', 'in line with' or 'around the same' has been used when comparing results, it means that there is no significant difference between the results being compared. If applicable, in the charts this is denoted by .

Grouped travel modes and journey purposes

Travel modes and Journey purposes have been grouped as follows:

Category in current report	Categories in previous reports
Walk	Walk
Bicycle	Bicycle
Car	Car driver, Car passenger, Car undefined
Public transport	Metro and Ulsterbus, Other bus, NI Railways, Black Taxi
Other	Motorcycle, Other private, Taxi, Other public, Undefined mode
Commuting & Business	Commuting, Business
Leisure & Other	Visit friends at private home, Visit friends elsewhere, Entertainment/public social activities, Sport participate, Holiday base, Day trip, Other including just walk, Undefined purpose
Personal business	Personal business
Shopping	Shopping
Education & Escort education	Education, Escort Education
Other escort	Other escort

Travel included in the survey

Only travel within Northern Ireland (and inshore islands) is included.

Respondents

Information on journeys is recorded in the travel diary completed by all persons in the household taking part in the survey (adults and children).

Background to the Travel Survey for Northern Ireland (TSNI)

The TSNI is based on the National Travel Survey (NTS), as used in Great Britain up to 2012 (NTS coverage changed to England only from 2013). It began in Northern Ireland as a continuous survey in 1999 (after a pilot survey). It is conducted over a calendar year (from January to December). The first results were published in 2003 for the period 1999-2001. This latest report covers the 2017-2019 time period.

Why are data for three years combined?

As the sample size is relatively small (it has varied between 856 and 1,037 households interviewed in one year), 3 years of data need to be combined to ensure the analysis carried out is robust.

However, for certain stable groups of the sample where it is established that there is a large enough sample size, it is possible to report limited information for shorter (one year) periods of time.

National Statistics status

National Statistics status means that our statistics meet the highest standards of trustworthiness, quality and public value, and it is our responsibility to maintain compliance with these standards.

The Travel Survey for Northern Ireland (TSNI) statistics were designated as National Statistics in March 2011 following a [full assessment \(opens in new window\)](#) against the [Code of Practice for Statistics \(opens in new window\)](#).

Since the assessment by the Office for Statistics Regulation, we have continued to comply with the [Code of Practice for Statistics \(opens in new window\)](#), and have made the following improvements:

- Following the TSNI user consultation in 2019 and the production and publication of the new format 2016-2018 TSNI In-depth Report, the 2017-2019 edition of the report has been redesigned and reformatted to make the report more accessible and user friendly, while retaining all information previously reported. Further details are available in the [Changes to the Report](#) section on page 11.
- Added a section on journeys to and from school, from the 2010-2012 edition onwards, following a user request for these data to assist with performance monitoring. This section has been further revised for the 2017-2019 edition to bring travel mode groups in line with the rest of the report.
- Added a summary page of infographics to summarise the key points in the report in an easily accessible format from the 2012-2014 report onwards.
- Added a section on journeys made by walking, cycling or public transport, from the 2014-2016 edition onwards, to monitor Indicator 25 of the draft Programme for Government.
- Moved from a 2 star to a 3 star rating on the Tim Berners-Lee 5-star rating of linked open data. This was achieved by making the publication tables available in ODS (Open Document Spreadsheet) format from the 2014-2016 report onwards.

Current and future developments

The TSNI Headline Report 2017-2019 is the first publication based on the 2017-2019 TSNI data. The headline report contains key results for 2017-2019 and is produced and published as soon as the data have been processed and any necessary quality assurance carried out. Due to the COVID-19 pandemic, there was delay in receiving the TSNI 2017-2019 datasets and subsequent quality assurance of the data. While the production timescale has remained largely the same, the delay in receipt of data has had a knock-on effect in delaying this publication, which would normally have been released in Summer 2020.

The Headline Report has been redesigned for 2017-2019, following the 2019 TSNI user consultation and the production and publication of the new format 2016-2018 TSNI In-depth Report. Details are given in the Changes to the Report section (page 11).

A technical report, supplementary to this report, will be published in Spring 2021. This will contain information on 2017-2019 survey response rates and confidence ranges.

The next release of 2017-2019 results will be the TSNI In-depth Report 2017-2019 which is planned for publication in Spring/Summer 2021. The In-depth Report contains more detailed results than the Headline Report including longer term trends, urban-rural tables, cross-tabulations by variables such as area, age and gender and results from other questions asked in the survey.

One of the key projects to develop the TSNI is the review of the current database structure. In its current format the TSNI has an extremely complex structure which makes it difficult to analyse. Detailed knowledge of what to include and exclude and how to interpret the output is required. Each time a new piece of analysis is run there is a time consuming checking process to ensure the data are correct. A number of alternatives are being considered and the chosen option will be implemented once it has been determined which provides the most clear-cut database structure and the most efficient way to run queries. Once in place, this will enable dissemination of the TSNI database via the University of Essex Data Archive and the Open Data NI Portal allowing access to researchers for secondary analysis. A date for this will be determined once resource allows the project to proceed.

Changes to 2020 data collection methodology

While this is not relevant to the data in this report, to be transparent to users, it is important to provide some information on future data and reports. This will apply to the 2018-2020 editions of the TSNI reports.

To maintain their interviewers' and the public's safety, face to face interviewing was suspended by Central Survey Unit (CSU) for all their surveys in March 2020 due to the COVID-19 pandemic. Following intensive work by CSU, the TSNI became a telephone survey which commenced in April 2020. The same number of households have been selected every month as for the face to face survey and advance letters are sent out to the selected households. The household is then asked to contact CSU if they are interested in taking part in the survey and an interviewer phones them at a suitable time. There were some further changes to the methodology such as travel diary data collection. In addition, the questionnaire was reduced in size with some questions removed. The suspension of face-to-face interviewing has led to a lower response rate to the survey and we anticipate a reduced achieved sample in 2020. This could have an impact on future reports.

Some potential impacts of the reduced achieved sample include:

- May only allow reporting at the Northern Ireland level i.e. not reporting further sub-population breakdowns
- May possibly need to weight the data to ensure it is representative of the Northern Ireland population.
- May need to weight the data to ensure 2020 data are not underrepresented with the data more skewed to the higher number of respondents in 2018 and 2019.
- The sample size for certain data which is not asked to the full sample may be too small for robust analysis.
- All the above additional considerations may lead to a delay in publication of the next TSNI Headline Report. Users are advised to check the [Dfi Statistics and Research website \(opens in new window\)](#) for updates.

Survey methodology

Information for the survey is collected using two methods. Individuals complete a seven day travel diary, which collects information on all journeys 50 metres or more. Details collected for each journey include the purpose of the journey, the length of the journey and the method of travel. Personal information is also collected in a computer interview. This allows details such as age, sex, working status, etc. to be linked to the journey data.

In order to minimise the burden of completing the travel diary, information on short walks (i.e. under one mile in length) are only collected on day one. The data on short walks are then grossed for the full travel week so that results in this report include short walks for the full seven day period.

Sample design

A sample of 1,920 addresses in 2019 (1,890 in 2018, 1,740 in years prior to 2018) was drawn from the Land & Property Services (LPS) list of private addresses using a methodology that is designed to provide representative geographical coverage across Northern Ireland. This is the most up-to-date listing of private households and is made available to the Northern Ireland Statistics and Research Agency for research purposes. People living in institutions (though not the private households in such institutions) are excluded. The sample size was increased across a number of surveys in 2018 due to lower response rates than previous years.

All persons in the household (including children) are eligible for the survey.

2,762 households and 5,266 persons were interviewed for the TSNI over the time period 1 January 2017 to 31 December 2019.

Uses of the TSNI

The TSNI is the only source of information on how, over the region as a whole, people use different forms of transport to meet their travel needs as individuals or family groups. It provides information to inform government policy, set objectives and to monitor performance in relation to transport and travel in Northern Ireland, for example in the draft Programme for Government 2016-2021. It provides information on areas such as active travel, safe and sustainable travel,

accessible transport and equality monitoring. Data from the TSNi has been used in the development of the NI Transport Model. It is also used in a variety of publications as well as the TSNi reports. This includes the annual NI Transport Statistics publication (from 2013-14), NI Road Safety Strategy to 2020 Annual Statistical Report (from 2016) and the annual NI Environmental Statistics report. Private companies may use the data to look at travel trends, academics for research and other government Departments and Agencies to inform cross-cutting policy and strategy development.

Data quality assessment

A [Background Quality Report \(opens in new window\)](#) has been produced and is published on the Travel Survey for Northern Ireland website.

Data are collected by the Central Survey Unit (CSU) and the sample is selected to be representative of the Northern Ireland population. Data undergo various validation checks 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 the Northern Ireland Statistics and Research Agency (NISRA), an Agency within the Department of Finance. The Unit 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 Statistics \(opens in new window\)](#).

Note that all survey estimates are subject to a degree of error and this must be taken account of when considering results. This error will be reasonably small for the majority of Northern Ireland level results using three years combined data but care should be taken when looking at results based on smaller breakdowns.

Guidance on using the data

- Data at Northern Ireland level are robust. When figures are broken down into sub-regional level, the sample size is reduced. Consequently, data analysis at sub-regional level is limited. For similar reasons, data analysis for single years is limited.

Sampling errors

- Data are from a sample survey i.e. not asked of the whole population of Northern Ireland. Therefore when looking at the figures, the confidence intervals/ranges associated with the figures should be noted.

What are Confidence intervals/ranges?

- As estimates made from a sample survey depend upon the particular sample chosen, they may differ from the true values of the population.
- This variance from the true population value is measured using a confidence interval. The confidence intervals published for TSNi data are 95% confidence intervals. This means there is a 95% probability that the true population value is contained within the range of values given.
- These will be available in the technical report published in the Spring on the [Travel Survey for Northern Ireland statistics webpage \(opens in new window\)](#)

Average distance travelled

For average distance travelled by mode tables in this report, [mode of travel](#) is used (see page 18 of Definitions). This means the actual mode of travel used during each stage of the journey is captured by the data analysis.

Note that there was a change to the travel diary in 2018, adding in a tick box to indicate if the journey crossed the border. Only the portion of the journey distance travelled within Northern Ireland up to the border is recorded (consistent with how this information has always been reported). When comparing single years 2017 and 2018, a significant increase in the average distance travelled was noted: from 5,708 miles in 2017 to 6,286 miles in 2018. This may be connected to the travel diary change. Average distance travelled has remained at a similar level comparing 2018 (6,286 miles) to 2019 (6,374 miles) and no further increase has been observed. Note that there is no real difference between 2017, 2018 and 2019 comparing proportion of total distance travelled by each travel mode. There has been some investigation of the 2018 and 2019 cross-border journeys but no wide-scale issues were noted. We will continue to monitor this and see if the trend of higher average distance travelled continues in subsequent years.

Average number of journeys

For the average number of journeys by mode tables in this report, [main mode of travel](#) is used (see page 18 of Definitions). This is because whole journeys are being tabulated not stages or parts of a journey.

Please note that the majority of journeys are only one stage which means that both the mode and main mode of travel would be the same.

Appendix B: Definitions

For a full set of definitions (including types of modes of travel, types of journey purpose) see [Travel Survey for Northern Ireland In-depth Report 2016-2018 \(opens in new window\)](#).

Geographical coverage

Only travel within Northern Ireland (and inshore islands) is included. This means for a journey to Dublin for example, only the portion of the journey to the border is included.

Journeys

A journey is defined as a one-way course of travel having a single main purpose. Outward and return portions of a journey are treated as two separate journeys. A journey cannot have two separate purposes. A brief call is a relatively incidental stop for a subsidiary purpose e.g. stopping for petrol. If only a brief call is made the journey is not broken up into smaller journeys.

Stages

A journey consists of one or more stages. A new stage is defined when there is a change in the form of transport or when there is a change of vehicle requiring a separate ticket.

Distance travelled

The length of any journey stage is the distance actually covered by the traveller and not the distance 'as the crow flies'.

Mode of travel/Main mode of travel

Mode is the form of transport used for a stage of a journey. The main mode is the form of transport used for the greatest length of the journey.

Example of mode of travel

If a journey consisted of 2 stages, a 1 mile walk to the train station followed by a 10 mile train journey, 1 mile would be assigned to the "walk" mode of travel and 10 miles to the "public transport" mode of travel.

Example of main mode of travel

Looking at the same 2 stage journey as above, walking 1 mile to the train station and then taking a 10 mile train journey, the train would be the main mode and therefore the journey is assigned to the "public transport" category.

Journey purpose

The purpose of a journey is governed by what the person did at the end of the journey. However, for journeys 'home' the purpose is governed by the start of the journey. This means for example the purpose of a journey from the shops to home is 'shopping' when analysing the data.

Journeys excluded

The survey is only concerned with travel involving a person moving from one place to another in order to reach that destination. Travel involving the movement of freight and for people paid to walk (e.g. policemen, postmen, etc.) is excluded.

Travel in the course of work for certain occupational groups is therefore excluded (e.g. bus drivers, conductors, taxi drivers, crew of public transport vehicles, crew of public vehicles such as fire engines or ambulances); travel in industrial or agricultural equipment (cranes, bulldozers, tractors, etc.); travel in specially equipped vehicles used in the course of a person's work (police patrol cars, AA/RAC repair vehicles, Post Office vans, etc.).

Leisure travel which is not competitive to public transport is also excluded (e.g. a boat trip for pleasure). Children's play is excluded.

Generally travel off the public highway (i.e. on private land) is excluded. An exception to this is cross-country walking, running, hiking or mountain climbing which is included even if on private land. Travel in public parks and on greenways is included.