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Kintra Pairts Fordèrin

Travel Survey for Northern Ireland Headline Report 2009-2011



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Symbols and Conventions

Rounding of figures

In tables 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.

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

The following symbols have been used throughout:

- .. = not available/insufficient number of cases in sample
- = negligible (greater than zero but less than 0.5)
- 0 = nil

The following conversion factors may be of use:

- 1 Mile = 1.609 Kilometres
- 1 Kilometre = 0.6214 Miles

Only differences which are 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 results and the difference is not simply explained by random chance or sample error.

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.

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

For further information, there is a User Information section on page 7 and a Definitions section on page 11.

Overall results for 2009-2011

- Over the time period 2009-2011, each person in Northern Ireland travelled on average 5,888 miles per year (approximately 16 miles travelled per day), similar to 2008-2010 (5,976 miles).
- On average, there were 894 journeys made per person per year over the period 2009-2011 (approximately 2 journeys per day). There was no real difference when compared to 2008-2010 (905 journeys per person per year).
- The average journey length for the period 2009-2011 was 6.6 miles, the same as the journey length for 2008-2010.

Mode of Travel used for Journeys (Tables 1 and 2)

Distance travelled by Mode (Table 1)

- During 2009-2011, 4,762 miles per person per year were travelled by car (as a driver or passenger), 81% of the total distance travelled. This is consistent with recent years (back to 2006-2008).
- 7% of the total distance travelled was on public transport (Ulsterbus, Metro, Other Bus, Northern Ireland Railways and Black Taxi). Walking accounted for 2% of the total distance travelled. This is in line with results from recent years included in the table.

Table 1: Average distance travelled by travel mode*: 2006-2008 to 2009-2011

Miles

Travel mode *	Miles per person per year				
	2006-2008	2007-2009	2008-2010	2009-2011	
				Average distance	%
Walk	143	144	136	137	2%
Bicycle	16	20	19	22	0%
Car Driver	3,230	3,143	3,234	3,260	55%
Car Passenger	1,686	1,697	1,625	1,501	25%
Car Undefined	-	-	-	1	0%
Motorcycle	11	14	14	13	0%
Other private**	451	470	460	467	8%
Metro and Ulsterbus***	297	318	295	285	5%
Other bus	53	58	55	52	1%
NI Railways	76	69	71	86	1%
Black taxi	3	3	3	4	0%
Taxi	64	65	62	58	1%
Other public	1	1	-	-	-
Undefined mode	1	1	1	1	0%
All modes	6,033	6,002	5,976	5,888	100%

* See Travel Survey for Northern Ireland In-depth Report 2008-2010 for definitions of travel mode

** Other private includes vans, lorries, land rovers, jeeps, invalid carriages, motorised wheelchairs, caravans, dormobiles, minibuses, private aircraft, etc. (see full definition in Travel Survey for Northern Ireland In-depth Report 2008-2010)

*** See User Information section (page 9), for details about the combined Metro and Ulsterbus figure.

Number and Length of Journeys by Main Mode (Table 2)

- Overall, since the survey started, there has been a downward trend in the average number of journeys taken per person per year.
- On average, 644 car journeys were taken per person per year in 2009-2011, 72% of all journeys made. There were 143 walking journeys per person per year, 16% of all journeys made.
- During 2009-2011, the longest journey length was for train journeys, averaging 20.8 miles. In contrast, the shortest journeys were walks which were 0.9 miles on average.

Table 2: Average number of journeys per person per year and average journey length by main mode*: 2006-2008 to 2009-2011

Journeys / Miles

Travel mode*	Journeys per person per year					Average journey length			
	2006-2008	2007-2009	2008-2010	2009-2011		2006-2008	2007-2009	2008-2010	2009-2011
				Average Number	%				
Walk	160	160	150	143	16%	0.8	0.8	0.8	0.9
Bicycle	5	6	6	6	1%	3.0	3.5	3.3	3.9
Car Driver	431	421	434	440	49%	7.5	7.5	7.4	7.4
Car Passenger	228	222	213	204	23%	7.4	7.6	7.6	7.3
Car Undefined	-	-	-	-	-	..	..	..	..
Motorcycle	1	2	2	1	0%	8.6	9.4	8.8	9.1
Other private**	36	35	34	36	4%	12.7	13.7	13.4	13.1
Metro and Ulsterbus***	39	42	39	38	4%	7.9	8.0	7.9	7.9
Other bus	4	5	5	5	1%	13.4	11.2	11.8	11.0
NI Railways	4	4	4	5	1%	20.6	20.6	20.1	20.8
Black taxi	1	1	1	1	0%	3.4	3.6	3.0	4.1
Taxi	16	17	17	16	2%	4.0	3.8	3.5	3.5
Other public	-	-	-	-	-	..	..	..	..
Undefined mode	-	-	-	-	-	..	..	..	..
All modes	926	914	905	894	100%	6.5	6.6	6.6	6.6

* See Travel Survey for Northern Ireland In-depth Report 2008-2010 for definitions of travel mode

** Other private includes vans, lorries, land rovers, jeeps, invalid carriages, motorised wheelchairs, caravans, dormobiles, minibuses, private aircraft, etc. (see full definition in Travel Survey for Northern Ireland In-depth Report 2008-2010)

*** See User Information section (page 9), for details about the combined Metro and Ulsterbus figure.

Purpose of Journeys (Table 3)

- In 2009-2011, 23% of journeys were made for leisure purposes (visiting friends at private home/elsewhere, entertainment/social activities, sports, holiday/day trip), 20% for shopping, 16% for commuting and 12% for personal business (for services such as bank, doctor or library). This is in line with results from recent years included in the table.
- In terms of miles travelled, 31% of the distance travelled was for leisure purposes (see definition above), 21% for commuting, 14% for shopping and 10% for personal business. As before, these results are similar to recent years (back to 2006-2008).
- 6% of journeys taken were by school children/students going to or from school/college. A further 6% of all journeys were 'escort education' journeys. These are journeys made to accompany a school child/student to their school/college. This is consistent with results from recent years included in the table.
- The shortest journeys, which were 1.5 miles on average, were "other" types of journey including walking for pleasure. The longest journeys were those made to go on holiday (within Northern Ireland), averaging out at 31.7 miles.

Table 3: Travel per person per year by journey purpose*: 2006-2008 to 2009-2011

Number of Journeys/Miles

Journey Purpose*	Journeys per person per year					Miles per person per year					Average journey length			
	2006-2008	2007-2009	2008-2010	2009-2011		2006-2008	2007-2009	2008-2010	2009-2011		2006-2008	2007-2009	2008-2010	2009-2011
				Average number	%				Average distance	%				
Commuting	147	145	144	144	16%	1,249	1,203	1,236	1,239	21%	8.5	8.3	8.6	8.6
Business	35	35	32	33	4%	525	527	504	516	9%	14.9	14.9	15.6	15.8
Education	66	64	59	57	6%	286	272	253	249	4%	4.3	4.3	4.3	4.4
Escort Education	48	53	52	56	6%	110	131	129	142	2%	2.3	2.5	2.5	2.5
Shopping	191	183	182	175	20%	885	844	826	801	14%	4.6	4.6	4.5	4.6
Other escort	73	79	85	83	9%	414	477	510	487	8%	5.7	6.1	6.0	5.9
Personal Business	128	121	117	110	12%	654	636	634	605	10%	5.1	5.3	5.4	5.5
Visit friends at private home	104	101	99	97	11%	810	811	764	726	12%	7.8	8.0	7.8	7.5
Visit friends elsewhere	38	39	39	39	4%	299	294	315	313	5%	7.8	7.6	8.1	8.0
Entertainment/ public social activities	23	22	22	24	3%	176	179	168	183	3%	7.6	8.2	7.5	7.7
Sport participate	20	20	20	22	2%	135	139	141	142	2%	6.7	6.9	6.9	6.4
Holiday base	6	6	5	5	1%	222	207	197	168	3%	37.4	34.9	36.0	31.7
Day trip	17	17	18	19	2%	225	237	256	274	5%	13.2	13.8	14.5	14.4
Other including just walk	29	30	30	29	3%	41	44	44	43	1%	1.4	1.5	1.5	1.5
Undefined purpose	-	-	-	-	-	1	-	..	..	-	..	..	..	..
All purposes	926	914	905	894	100%	6,033	6,002	5,976	5,888	100%	6.5	6.6	6.6	6.6
Journeys per worker per year:														
Commuting	320	315	313	315		2,773	2,661	2,698	2,705		8.7	8.4	8.6	8.6
Business	80	81	74	75		1,202	1,209	1,152	1,192		14.9	15.0	15.6	15.8

* See Travel Survey for Northern Ireland In-depth Report 2008-2010 for definitions of journey purpose

Walking journeys 2009-2011

- 87 short walking journeys (less than 1 mile) were taken per person per year in Northern Ireland during 2009-2011.
- Residents of the Belfast Metropolitan Area (BMA) took on average 101 short walking journeys (less than 1 mile) per person per year. People living outside the BMA took on average 79 short walking journeys per person per year.
- Looking at all walking journeys of less than 2 miles, BMA residents took 150 per person per year and people living outside of the BMA took 112. For all of Northern Ireland there were 125 walking journeys of less than 2 miles per person per year.
- Looking at miles walked per person per year, the average distance walked by BMA residents was 170 miles per person per year. People living outside the BMA walked 118 miles per person per year. The average distance walked per person per year in Northern Ireland as a whole was 137 miles.

User information

Background to the Travel Survey for Northern Ireland (TSNI)

The TSNI is based on the National Travel Survey (NTS), as used in Great Britain. 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 2009-2011 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.

National Statistics

The Travel Survey for Northern Ireland (TSNI) publications are now badged as National Statistics. National Statistics are certified by the UK Statistics Authority as compliant with its Code of Practice for Official Statistics or are awaiting this assessment. The TSNI has undergone assessment and a copy of the final report setting out the assessment team's findings was published in October 2010. The report can be viewed at:

<http://www.statisticsauthority.gov.uk/assessment/assessment-reports/index.html>

Following the completion of a number of requirements, confirmation was received from the UK Statistics Authority in March 2011 that the TSNI publications have been accredited as National Statistics (they were previously designated as Official Statistics publications).

The United Kingdom Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics.

Designation can be broadly interpreted to mean that the statistics:

- meet identified user needs;
- are well explained and readily accessible;
- are produced according to sound methods, and
- are managed impartially and objectively in the public interest.

Once statistics have been designated as National Statistics it is a statutory requirement that the Code of Practice shall continue to be observed.

For a copy of the Code of Practice for Official Statistics:

<http://www.statisticsauthority.gov.uk/assessment/code-of-practice/code-of-practice-for-official-statistics.pdf>

Current developments

The TSNI Headline Report 2009-2011 is the first publication based on the 2009-2011 TSNI data. The headline report contains key results for 2009-2011 and is produced and published as soon as the data have been processed and quality assured. A technical report, supplementary to this report, will be published in July 2012. This will contain information on 2009-2011 survey response rates and confidence ranges. A further report, the TSNI In-depth Report 2009-2011, will be published in December 2012. This will contain more detailed results including longer term trends, 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 alternative structures have been evaluated and the preferred option, which more closely mirrors the hierarchical structure of the data, will, when implemented, greatly enhance the efficiency of running ad-hoc queries.

Once these changes to the database structure have been made, the data will be deposited in the University of Essex Data Archive (planned for early 2013). This will mean the data will be available to researchers for secondary analysis.

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 1,740 addresses per year is drawn from the Land & Property Services (LPS) list of private addresses using a methodology that is designed to provide representative geographical coverage across NI. 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.

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

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 Regional Transportation Strategy.

Data quality assessment

Very good – 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 and Personnel. 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 Official

Statistics Code of Practice (<http://www.statisticsauthority.gov.uk/assessment/code-of-practice/code-of-practice-for-official-statistics.pdf>).

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 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.

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 July:
http://www.drdni.gov.uk/index/statistics/stats-catagories/stats-catagories-travel_survey.htm

Metro and Ulsterbus journeys

In 2007-2009, a large and statistically significant increase was observed in both the average distance travelled on Metro services and the average number of journeys per person per year using the Metro service compared with previous years. Details of the checks carried out and some of the possible reasons for this are noted in the Travel Survey for Northern Ireland 2007-2009 reports.

This trend, of higher numbers of Metro journeys per person per year and higher average distance travelled compared to TSNi data prior to 2007-2009, continued into 2008-2010. It is also worth noting that over this period there was a downward trend in Ulsterbus journeys per person per year and average distance travelled in the TSNi data. Results from the 2009-2011 survey have continued to show the trend of increasing Metro journeys and decreasing Ulsterbus journeys. However, whereas in 2007-2009 and 2008-2010 the TSNi data reflected Translink's own Metro passenger journey and Ulsterbus passenger journey figures, in 2009-2011 this is no longer the case.

According to the findings of the TSNi 2009-2011, there were a higher number of Metro journeys per person per year than Ulsterbus journeys. However, it is clear from Translink figures that there are consistently more Ulsterbus passenger journeys each year than Metro passenger journeys. For example:

- In 2010/11 there were 25.8 million passenger journeys on Metro and 40.8 million passenger journeys on Ulsterbus.
- Using the 2010 mid year population estimate (1,799,392), this equates to approximately 14 Metro journeys per person per year and 23 Ulsterbus journeys per person per year.
- This gives a total of 37 Metro and Ulsterbus journeys per person per year.

From the TSNI 2009-2011:

- There were 22 Metro journeys per person per year and 16 Ulsterbus journeys per person per year.
- This gives a total of 38 Metro and Ulsterbus journeys per person per year.

As has been noted in previous reports, the survey estimate for all Metro and Ulsterbus journeys combined has always approximated Translink's own estimate and can therefore be considered robust. However when looking at the 2009-2011 TSNI Metro journey figures and Ulsterbus journey figures separately, the individual figures are not reflective of the Translink administrative data estimates. This would suggest that there is an element of respondent misclassification between bus types.

We have therefore decided to only publish combined Metro and Ulsterbus figures for 2009-2011. We will discuss possible ways of addressing the issue of respondent misclassification of bus types with Central Survey Unit to improve future TSNI estimates. We will only publish a breakdown of TSNI Metro and Ulsterbus figures once the data more closely mirror Translink's.

In the meantime, users who wish to approximate the number of Ulsterbus journeys per person per year and number of Metro journeys per person per year for 2009-2011 should note that around 61% of all public bus passenger journeys are on Ulsterbus. This is estimated using the Translink figures. Using this and the TSNI 2009-2011 combined Metro and Ulsterbus figure of 38 journeys per person per year, gives an estimate of 23 Ulsterbus journeys per person per year and 15 Metro journeys per person per year in 2009-2011.

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 2008-2010.

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.

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'.

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.

Belfast Metropolitan Area (BMA)/Outside the BMA

The Belfast Metropolitan Area consists of the following 6 Local Government Districts: Belfast, Newtownabbey, Carrickfergus, Lisburn, North Down and Castlereagh. The area 'outside the BMA' is the other 20 Local Government Districts.