

2011 CENSUS RESULTS TRAVEL TO WORK STATISTICS

Summary

- Car availability increased over the last decade but travel to work by car fell slightly.
- The picture for active travel is mixed, with slightly more people walking to work but a slight fall in cycling.
- There was a significant increase in home working (and studying) and 16% of workers now work mainly at or from home.
- 69% of Highland residents work at a fixed location in Highland; 11% have no fixed place of work.
- 2,766 residents work in the rest of Scotland and 1,837 work offshore.
- 2,575 people from the rest of Scotland work in Highland together with 861 people from England & Wales and overseas.
- Comparisons between home address and place of work show that Highland has a mobile workforce.
- The mode of travel to work varies across Highland. Public transport use in our towns is relatively low, but walking to work is relatively high.
- Driving to work is highest in accessible rural areas (within 30 minutes of Inverness)

Introduction

In the 2011 Census, people gave their home address and were asked in questions 11 and 12 about their main place of work or study and their method of travel.

11 What address do you travel to for your main job or course of study (including school)?

◆ Answer for the place where you spend the most time.

◆ If you report to a depot, please write in the depot address.

☐ Not currently working or studying → Go to **13**

☐ Work or study mainly at, or from, home → Go to **13**

☐ No fixed place

☐ Work on an offshore installation - please use the address panel below to write in where you travel offshore from, for example "ABERDEEN HARBOUR"

☐ The address below, please write in

Postcode

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12 How do you usually travel to your main place of work or study (including school)?

◆ Tick one box only.

◆ Tick the box for the longest part, by distance, of your usual journey to work or study.

☐ Driving a car or van

☐ Passenger in a car or van

☐ On foot

☐ Bus, minibus or coach

☐ Train

☐ Underground, subway, metro, light rail or tram

☐ Taxi

☐ Bicycle

☐ Motorcycle, scooter or moped

☐ Other

The results from this question give a rich source of information relevant to both the economy and lifestyle as well as transport studies. This Note presents some of the main findings for Highland and then looks in detail at travel to work movements within Highland and method of travel to work or study.



It is based on analysis of two sets of standard data tables published by National Records of Scotland and ONS / NOMIS, together with 18 million detailed travel records for the UK published on the National Data Archive. In the information that follows:

- The term “travel” does not always equate with “commute” and some people who travel a long distance to work may stay over for some or all of the time.
- The level of detail varies, with less detail in local tables to protect confidentiality.
- There are some apparent inconsistencies depending on the detail of what is included in each table.
- In some tables, similar small settlements might have either high or low results: this is a feature of statistics for small areas and trends may not be significant.

The available information is comprehensive and further detailed local analysis is possible. Contact details for more information are given at the end of this note.

Comparison with 2001

The detailed statistics relating home with place of work are difficult to compare with accuracy because of the way 2001 figures were rounded to protect confidentiality. However, some of the headline figures are comparable and are given below. They show that although car availability increased over the decade from 75% to 79% of households, travel to work by car fell slightly from 51% to 43%: there was a slight increase in both bus usage and walking to work, but a slight fall in cycling. Perhaps the most notable feature is a 50% increase in working or studying mainly at home, from 10% to 15%.

Car or van availability	Highland % 2011	Highland % 2001	Scotland % 2011
No car or van	20.6%	25.1%	30.5%
1 car or van	46.3%	49.2%	42.2%
2 cars or vans	25.6%	21.2%	21.6%
3 or more cars or vans	7.5%	4.6%	5.6%
Travel to work			
Work or study mainly at or from home	14.9%	9.8%	11.3%
Train	1.2%	1.2%	3.5%
Bus minibus or coach	9.5%	7.7%	13.4%
Driving a car or van	42.6%	50.6%	40.9%
Passenger in a car or van	9.6%	9.0%	9.0%
Motorcycle scooter or moped	0.2%	0.5%	0.2%
Bicycle	2.4%	2.9%	1.3%
On foot	17.7%	16.0%	18.5%
Other	1.8%	2.4%	1.9%

Place of Work	Number	Percent
Within Highland	79,737	69
Home	18,470	16
No Fixed Work Location	12,183	11
Rest of Scotland	2,766	2
Offshore	1,837	2
England and Wales	501	0.4
Overseas	454	0.4

Highland Overview

115,948 people living in Highland work, with over two thirds travelling to a fixed location and 10% having no fixed work location. 16% work at home (excludes study). More detail on each work category is given in the paragraphs that follow.

People Living in Highland but Working Outwith Highland (excludes offshore)

79,734 Highland residents travel to a fixed place of work in Highland. A further 3,721 work at a fixed location outwith Highland, with the breakdown by Council area given in the table below (Councils with more than 10 workers from Highland).

Where People Living in Highland Work			
Highland	79,737	Hillingdon	21
Moray	1,010	Dundee City	21
Aberdeen City	561	Renfrewshire	20
Argyll and Bute	221	South Lanarkshire	18
City of Edinburgh	179	West Lothian	17
Glasgow City	163	Richmondshire	15
Aberdeenshire	138	North Lanarkshire	14
Perth and Kinross	63	Wiltshire	13
Orkney Islands	57	Dumfries and Galloway	11
Westminster, City of London	46	Falkirk	11
Eilean Siar	46	North Kesteven	10
Stirling	40	Cornwall, Isles of Scilly	10
Fife	38	North Ayrshire	10
Shetland Islands	38	Working elsewhere	472

People from Elsewhere Working in Highland

2,575 people from the rest of Scotland work in Highland together with 861 people from England & Wales and overseas, with the most significant Council areas of origin given in the table below. Some of the long distance working arrangements may be the result of posting of Forces personnel, but there is no obvious reason for the relatively large numbers of workers from Craven and Bradford.

Where People Working in Highland Live			
Highland	79,737	Angus	25
Moray	1,367	Dumfries and Galloway	23
Argyll and Bute	179	North Ayrshire	23
Fife	121	Dungannon	23
Aberdeenshire	98	Dundee City	21
Perth and Kinross	84	East Lothian	17
Eilean Siar	79	Wakefield	16
Craven	76	Inverclyde	16
Aberdeen City	74	Scottish Borders	16
Bradford	66	Wirral	15
Glasgow City	66	West Dunbartonshire	14
City of Edinburgh	65	Northumberland	13
North Lanarkshire	49	Clackmannanshire	13
Orkney Islands	40	Pendle	12
South Lanarkshire	36	East Riding of Yorkshire	11
Armagh	32	Shropshire	11
Falkirk	31	Craigavon	11
Renfrewshire	27	Carmarthenshire	10
Stirling	26	Living elsewhere	604
West Lothian	26		

When combined with the earlier table above it shows that:

- Even ignoring 1,837 offshore workers, Highland is a minor net “exporter” of workers with 3,721 travelling out and 3,436 travelling in.
- Movement between Highland and our close neighbours is in reasonable balance with a net gain of 357 from Moray and a loss of 42 to Argyll & Bute.
- The economic pull of the oil industry in Aberdeen City is evident in the net loss of 487 workers to the City.

- The flow of workers between Highland and our island neighbours is relatively small and Highland gains 33 workers from Eilean Siar but loses 53 workers to Orkney and Shetland combined.

Home Working

16% of all workers in Highland work mainly at or from home, which compares with an average of 11% for Scotland. The table below gives the ten settlement zones in Highland with the highest and lowest percentages of home working. The highest percentages are all in rural areas and have a general association with a high level of self employment. The lowest percentages are in Inverness and our small towns, or recognised commuter areas to them.

Settlement Zone	% of All Workers Working at Home	% Self Employed	Settlement Zone	% of All Workers Working at Home	% Self Employed
Small Isles	78	54	Thurso	12	10
Knoydart	63	39	Avoch	12	17
Scoraig	52	58	Dingwall	11	10
Kingairloch	50	25	Conon Bridge	11	14
Glenborrodale	46	57	Alness	11	9
Laggan	46	35	Inverness	11	10
Dundonnell	46	46	Culloden	10	10
Kinbrace	46	16	Invergordon	10	8
Dalwhinnie	44	12	Croy	9	15
Garve	44	31	Tore	8	14
<i>Highland</i>	16	11	<i>Scotland</i>	11	7

No Fixed Place of Work

10% of Highland workers have no fixed place of work which is very similar to the average for Scotland. Again there is a loose relationship with self employment. In general towns tend to have lower percentages of residents with no fixed place of work, and Thurso is notable as having a particularly low percentage.

Settlement Zone	% No Fixed Place of Work	% Self Self Employed	Settlement Zone	% No Fixed Place of Work	% Self Self Employed
Scoraig	26	58	Kingairloch	7	25
Strathconon	24	23	Invergarry	6	30
Applecross	24	42	Castletown	6	12
Kilchoan	23	41	Thurso	6	10
Kyleakin	23	29	Dalwhinnie	6	12
Ardgour	21	21	Thrumster	6	14
Lochassynt	21	40	Reay	5	16
Dundonnell	20	46	Small Isles	4	54
Inverasdale	20	35	Achnacarry	4	21
Dornie	20	26	Nigg	1	22
<i>Highland</i>	10	11	<i>Scotland</i>	10	7

Working at an Offshore Installation

2% Highland residents work offshore, double the Scottish average. Offshore working is a feature throughout Highland and 130 out of 182 settlement zones have at least one person working offshore, although the highest percentages are in Caithness and Sutherland.

Settlement Zone	Number Working Offshore	% of All Working People Working Offshore
Keiss	15	4
Melvich	8	4
Bettyhill/Farr	11	4
Onich	4	4
Ardross	8	3
Wick	133	3
Reay	9	3
Kinlochberrie	8	3
Scotsburn	3	3
Inverinate	5	3
Highland	1,837	2

Working Outwith Highland

The table below shows unsurprisingly that settlement zones with the highest percentages of residents working outwith Highland tend to be close to Moray and Argyll & Bute, but it is also common throughout Highland and 177 out of 182 have at least one person working outwith Highland.

Settlement Zone	England & Wales	Rest of Scotland	Overseas	% Outwith Highland	Settlement Zone	England & Wales	Rest of Scotland	Overseas	% Outwith Highland
Ferness	0	22	0	16	Drumbeg	0	3	2	8
Auldearn	7	83	3	14	Ballachulish	2	39	3	8
Nairn	44	457	24	11	Achnacarry	0	2	0	7
Lochaline	1	15	0	10	Scotsburn	1	5	0	6
Onich	1	9	1	10	Grantown	16	96	6	6
Killen	3	7	1	10	Contin	3	11	1	6
Raasay	2	4	0	9	Croy	1	10	1	6
North Ballachulish	2	14	0	9	Nigg	0	1	3	6
Boat Of Garten	2	27	0	9	Nethy Bridge	3	20	2	5
Cawdor	6	36	5	8	Morar	0	7	3	5
<i>Highland</i>	<i>501</i>	<i>2,766</i>	<i>454</i>	<i>3</i>					

Containment

Containment is defined here as both living and working in the same settlement (including home workers) and is shown in the table below. The highest percentages are in rural areas but the picture for the lowest percentages is more mixed with Croy the only settlement that might be recognised as being a commuting area. Mallaig, Aviemore, Ullapool and Fort William all have particularly low containment and people working away are spread across the other categories with no particular pattern. Inverness and Culloden each have lower containment than the Highland average (53% and 51% respectively, Highland 57%) and despite its reputation as a commuter town to Inverness, Nairn has containment above the Highland average (64%).

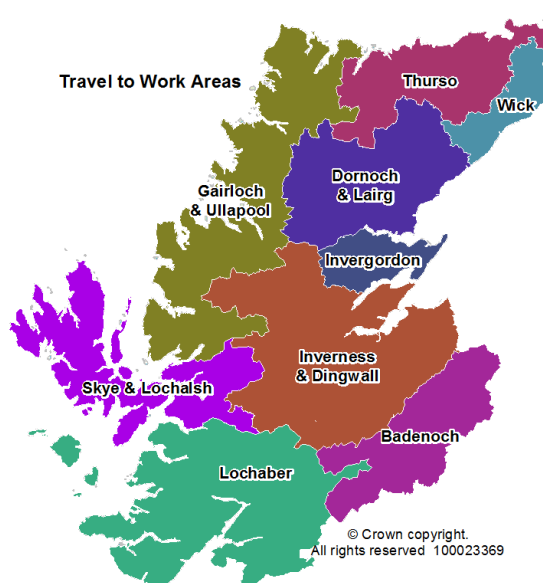
Settlement Zone	% of Residents Working Within the Settlement Zone	Settlement Zone	% of Residents Working Within the Settlement Zone
Small Isles	91	Scotsburn	51
Laggan	83	Kensaleyre	50
Kinbrace	83	Croy	50
Invermoriston	79	Elgol	50
Killilan	78	Fort William	50
Achnacarry	78	Ullapool	50
Stoer	78	Culloden Moor	49
Knoydart	77	Aviemore	49
Rosehall	76	Struan	49
Kingairloch	74	Mallaig	39
Highland	57		

Origin – Destination Analysis

The Census results for Highland give nearly 50,000 records linking place of residence with place of work, and dividing the method of travel into two categories: driving and other method. Three tables are given below as examples of the type of analysis that is possible, together with a graphic showing patterns for our main towns. The figures exclude home workers and those with no fixed place of work.

Flows Between Travel to Work Areas (TTWAs).

TTWAs based on the 2011 Census results have not been published yet and this analysis uses the 2001 areas. The table below shows that the Inverness and Dingwall TTWA gains 1,170 workers from the rest of Highland (mainly from Invergordon and Badenoch) and an additional 1,848 from the rest of Scotland. Thurso gains 469, mainly from Wick, and Lochaber gains 52 from across Highland but all other TTWAs have a net loss of workers.



WORK TTWA	NET FLOWS FOR WORK FROM HOME TTWA (positive values mean that the work TTWA gains, with more workers travelling in than out)										From the Rest of Scotland
	Badenoch	Dornoch & Lairg	Gairloch & Ullapool	Invergordon	Inverness & Dingwall	Lochaber	Skye & Lochalsh	Thurso	Wick	Highland Total	
Badenoch	0	1	7	-7	-287	6	-6	-5	8	-283	191
Dornoch & Lairg	-1	0	9	-40	-102	-8	0	-26	0	-168	29
Gairloch & Ullapool	-7	-9	0	-15	-97	-4	-32	-10	4	-170	49
Invergordon	7	40	15	0	-620	-11	6	-9	-3	-575	77
Inverness & Dingwall	287	102	97	620	0	-2	54	-7	19	1,170	1,848
Lochaber	-6	8	4	11	2	0	20	6	7	52	239
Skye & Lochalsh	6	0	32	-6	-54	-20	0	-5	-5	-52	72
Thurso	5	26	10	9	7	-6	5	0	413	469	49
Wick	-8	0	-4	3	-19	-7	5	-413	0	-443	21

Commuting to Major Centres

The two tables below use Inverness and Reay (Dounreay) as examples of the detailed analysis that is possible.

Inverness. Around two thirds of people who work in Inverness live within the settlement zone, and people travel to work here from 161 out of the 182 settlement zones in Highland. Almost two thirds of the total drive to work. The table below shows the settlement zones with more than 100 people working in Inverness and in general the pattern is much as we might expect, although the numbers travelling from Aviemore and Grantown (143 and 139 respectively) are perhaps a surprise given the difficult winter travelling conditions.

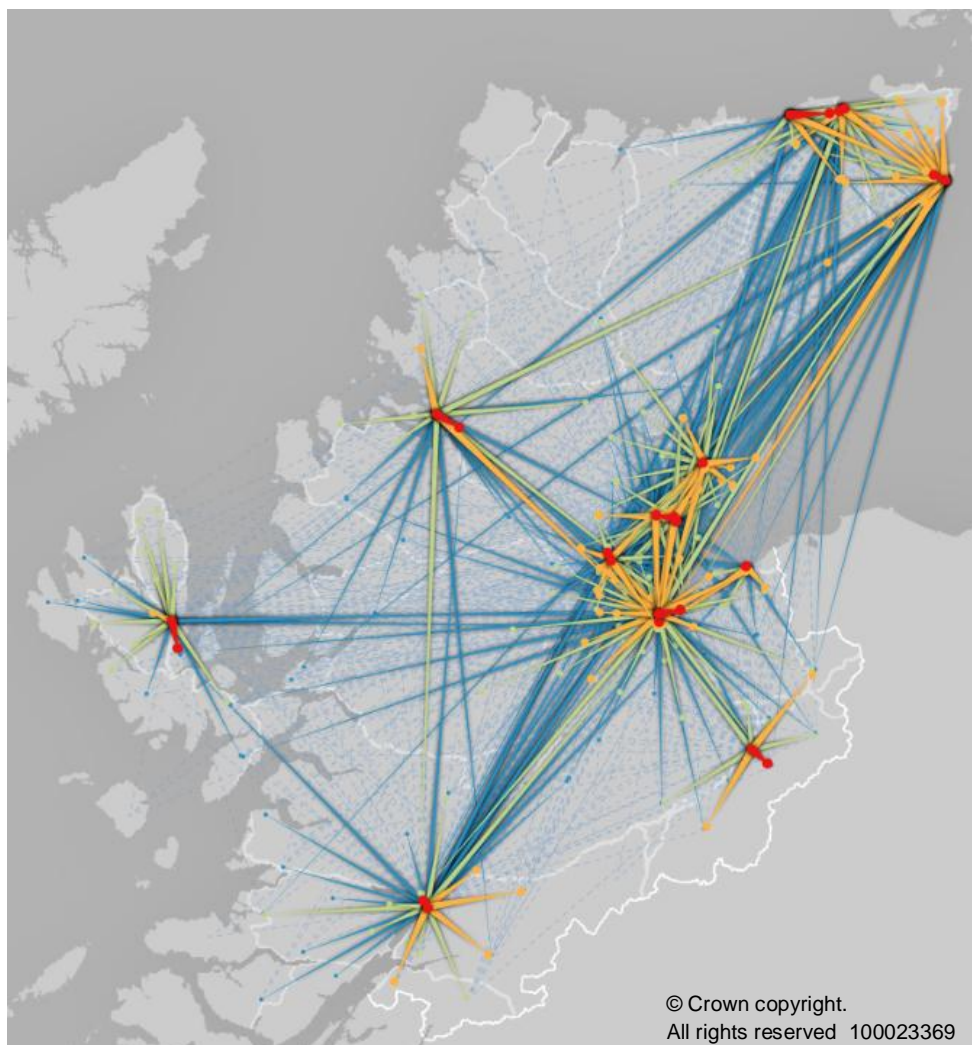
Home Settlement Zone	All People Who Work in Inverness	% Driving to Work
All Inverness workers who	33,725	64
Inverness	16,767	52
Culloden	4,926	68
Nairn	1,192	76
Out Of Highland	1,062	74
Dingwall	620	77
Muir Of Ord	569	75
Fortrose	388	83
North Kessock	350	81
Ardersier	343	73
Beaully	339	71
Alness	315	70
Kirkhill	281	81
Conon Bridge	266	80
Drumnadrochit	262	86
Culloden Moor	248	86
Kiltarlity	234	84
Avoch	230	82
Invergordon	222	68
Evanton	207	82
Maryburgh	199	83
Cawdor	194	81
Culbokie	185	88
Munlochy	178	84
Bunchrew	160	76
Daviot	156	88
Tain	147	75
Strathpeffer	145	89
Aviemore	143	76
Grantown	139	83
Cromarty	134	84
Auldearn	132	84
Moniack	121	75
Croy	106	82
Tomatin	103	90
Kildary	102	69
Working At Home	3,406	

Home Settlement Zone	All People Who Work in Reay (Dounreay)	% Driving to Work
All Reay workers who travel	1,981	61
Thurso	913	65
Wick	294	31
Halkirk	163	77
Castletown	113	63
Reay	78	77
Dunnet	62	69
Melvich	42	86
John O'Groats	38	66
Watten	35	71
Lybster	27	44
Keiss	25	32
Bettyhill/Farr	23	61
Inverness	21	57
Bowermadden	18	78
Lieurary	17	88
Thrumster	17	59
Rest Of Scotland	9	100
Working At Home	51	

Dounreay (Reay Settlement Zone). Almost 2,000 people travel to work in Dounreay with workers from 60 out of 182 settlement zones. The table below shows that around half live in Thurso and that over 95% of Dounreay workers live in Caithness or North Sutherland, with obvious implications for the local economy as decommissioning winds down and ends in the late 2020s.

Graphical Representation

The figure below gives a simple overview of the patterns of travel to our main towns, with high numbers of people travelling shown in thick, bright coloured lines and low numbers as dotted lines. More detailed spider maps are available from the link given at the end of the note.



Method of Travel to Work

Detailed information on the method of travel to work and/or study is available from tables for larger geographic areas, where confidentiality is protected. The table below gives information for Highland and Scotland, and also a comparison between Inverness and the other Scottish Cities as this has attracted attention recently. It shows that the use of public transport in Highland is lower than the Scottish average (6% and 14% respectively across all public transport methods), and although the percentage of all workers driving to work is the same as the Scottish average, the percentage is higher when home workers are taken into account. The table confirms that more people cycle to work in Inverness than in other cities, but the percentage of people walking to work is in the middle of the range.

	Method of Travel to Work - Percentage										
City	Work mainly at or from home	Underground, metro, light rail or tram	Train	Bus, minibus or coach	Taxi or minicab	Driving a car or van	Passenger in a car or van	Motorcycle, scooter or moped	Bicycle	On foot	Other
Aberdeen	8	0	1	13	1.0	51	5	0.4	2	16	3
Dundee	9	0	1	14	0.5	53	8	0.2	1	13	1
Edinburgh	10	0	2	26	0.4	37	3	0.4	4	16	1
Greater Glasgow	9	1	8	13	0.9	51	6	0.2	1	9	1
Inverness	10	0	1	7	0.4	54	7	0.3	5	14	1
Perth	9	0	1	11	0.3	50	8	0.4	2	18	1
Stirling	10	0	5	6	0.2	59	6	0.1	2	11	1
Highland	16	0.04	1.44	4.23	0.3	56	6	0.3	2	12	2
Scotland	11	0.27	3.72	10.03	0.6	56	6	0.3	1	10	1

The table below looks within Highland and compares our main towns with aggregated accessible and remote rural areas – the figures are directly comparable with equivalents in the table above. It shows that public transport use is relatively low in our towns when compared with the Scottish average, although walking to work is relatively high. The highest rate of driving to work is in accessible rural areas (defined as within 30 minutes drive time of Inverness) even when home working is taken into account.

	Method of Travel to Study - Percentage										
Place of Residence	Study mainly at or from home	Underground metro light rail or tram	Train	Bus minibus or coach	Taxi or minicab	Driving a car or van	Passenger in a car or van	Motorcycle scooter or moped	Bicycle	On foot	Other
Alness	15	0	0.5	8	1.0	3	19	0.0	2.1	50	1
Aviemore	13	0	1.1	36	0.0	3	12	0.2	4.4	31	0
Culloden	11	0	0.4	16	0.6	4	25	0.2	3.4	39	0
Dingwall	9	0	1.4	8	0.5	3	18	0.0	1.1	59	0
Fort William	13	0	0.1	29	0.9	2	22	0.1	2.3	31	0
Invergordon	12	0	0.3	14	0.5	4	19	0.3	2.3	47	0
Inverness	10	0	0.4	8	0.8	4	20	0.1	4.0	52	0
Nairn	12	0	0.4	13	0.9	3	21	0.1	4.7	45	0
Portree	16	0	0.4	15	0.3	2	19	0.0	0.2	46	0
Tain	15	0	0.7	10	0.0	3	18	0.0	1.5	51	0
Thurso	12	0	0.2	15	0.4	2	17	0.1	0.7	52	1
Ullapool	11	0	0.3	14	0.9	2	16	0.0	4.3	52	0
Wick	13	0	0.4	19	0.9	2	19	0.0	0.4	45	0
Accessible Rural Areas	12	0	0.8	44	1.6	4	17	0.0	1.4	19	0
Remote Rural Areas	13	0	0.4	37	1.2	3	19	0.0	1.7	24	0
Highland	12	0	0.5	25	0.9	3	19	0.1	2.4	36	0
Scotland	12	0	2.9	21	1.0	5	17	0.1	1.0	39	0

Method of Travel to Study

In the table below, people studying may be at school or in higher and further education, although as a general rule people studying at home are likely to be adults (many distance learning based at UHI). The table shows that:

- The percentage of people studying mainly at home is similar to the Scottish average (12%).
- The percentage of people living in towns who travel by bus is variable, but on average below the Scottish average. In rural areas the percentage is above the Scottish average, and highest in accessible rural areas.
- The percentage travelling by car, as either driver or passenger, is slightly lower than the Scottish average.
- The percentage cycling is low in absolute terms (2.4%) but above the Scottish average.
- The percentage walking in towns is variable but below the Scottish average in rural areas.

Place of Residence	Method of Travel to Study - Percentage										
	Study mainly at or from home	Underground metro light rail or tram	Train	Bus minibus or coach	Taxi or minicab	Driving a car or van	Passenger in a car or van	Motorcycle scooter or moped	Bicycle	On foot	Other
Alness	15	0	0.5	8	1.0	3	19	0.0	2.1	50	1
Aviemore	13	0	1.1	36	0.0	3	12	0.2	4.4	31	0
Culloden	11	0	0.4	16	0.6	4	25	0.2	3.4	39	0
Dingwall	9	0	1.4	8	0.5	3	18	0.0	1.1	59	0
Fort William	13	0	0.1	29	0.9	2	22	0.1	2.3	31	0
Invergordon	12	0	0.3	14	0.5	4	19	0.3	2.3	47	0
Inverness	10	0	0.4	8	0.8	4	20	0.1	4.0	52	0
Nairn	12	0	0.4	13	0.9	3	21	0.1	4.7	45	0
Portree	16	0	0.4	15	0.3	2	19	0.0	0.2	46	0
Tain	15	0	0.7	10	0.0	3	18	0.0	1.5	51	0
Thurso	12	0	0.2	15	0.4	2	17	0.1	0.7	52	1
Ullapool	11	0	0.3	14	0.9	2	16	0.0	4.3	52	0
Wick	13	0	0.4	19	0.9	2	19	0.0	0.4	45	0
Accessible Rural Areas	12	0	0.8	44	1.6	4	17	0.0	1.4	19	0
Remote Rural Areas	13	0	0.4	37	1.2	3	19	0.0	1.7	24	0
Highland	12	0	0.5	25	0.9	3	19	0.1	2.4	36	0
Scotland	12	0	2.9	21	1.0	5	17	0.1	1.0	39	0

Further information is available from Cameron Thomas Cameron.thomas@highland.gov.uk

Detailed travel to work diagrams for our main towns are available [here](#)