nestrans

Regional Transport Strategy Monitoring Report

June 2018

1. Introduction

This Monitoring Report provides information and background data to support the development of the Regional Transport Strategy (RTS), first produced in 2008 and a refresh as approved by Scottish Ministers in 2014. This is the tenth annual monitoring report and provides information against a total of 48 monitored indicators of which 38 have targets set against them, with a total of 45 targets.

This monitoring report is designed to show progress against the objectives of the RTS which is delivered by Nestrans and its partners. It should be noted that it may take many years for the strategy to decisively influence most indicators, but it is Nestrans' intention to maintain regular monitoring of its targets and indicators. Nestrans itself may have limited influence over delivery against some of the indicators however as the delivery of the RTS as a whole relies on the work of many partners, it is important to understand the wider progress and trends across the region.

This report seeks to provide information and consider appropriate indicators for taking the RTS forward. In particular, it contains SMART (Specific, Measurable, Achievable, Realistic and Time-Bound) targets to be refined as part of the Delivery Plan. Targets, where possible, relate back to the strategy's identified objectives and therefore the indicators too relate to objectives and the strategy's 21 strands.

The objectives of the Regional Transport Strategy are as follows:

Economy	
1	To enhance and exploit the north east's competitive economic advantages, and reduce the impacts of peripherality. a) To make the movement of goods and people within the north east and to/from the area more efficient and reliable. b) To improve the range and quality of transport to/from the north east to key business destinations. c) To improve connectivity within the north east, particularly between residential and employment areas.

Monitored by indicators:																				
1a	**1b**	**2a**	**2b**	**3**	**4**	**7**	**8**	**9**	**10**	**11**	**13a**	**13b**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**41**

Accessibility, Safety and Social Inclusion	
2	To enhance choice, accessibility and safety of transport for all in the north east, particularly for disadvantaged and vulnerable members of society and those living in areas where transport options are limited. a) To enhance travel opportunities and achieve sustained cost and quality advantages for public transport relative to the car. b) To reduce the number and severity of traffic related casualties and improve personal safety and security for all users of transport. c) To achieve increased use of active travel and improve air quality as part of wider strategies to improve the health of north east residents.

Monitored by indicators:

2a	**2b**	**22**	**26**	**27**	**32**	**33**	**34**	**38**	**40a**	**40b**	**41**	**42**	**43**

Environment	
3	To conserve and enhance the north east's natural and built environment and heritage and reduce the effects of transport on climate, noise and air quality. a) To reduce the proportion of journeys made by cars and especially by single occupancy cars. b) To reduce the environmental impacts of transport, in line with national targets. c) To reduce growth in vehicle kilometres travelled.

Monitored by indicators:

3	**5**	**6**	**22**	**30**	**31**	**35**	**36**	**37**	**39**	**41**	**44**	**45a**	**45b**	**46**	**47**

Spatial Planning	
4	To support transport integration and a strong, vibrant and dynamic city centre and town centres across the north east. a) To improve connectivity to and within Aberdeen City and Aberdeenshire towns, especially by public transport, walking and cycling. b) To encourage integration of transport and spatial planning and improve connections between transport modes and services. c) To enhance public transport opportunities and reduce barriers to use across the north east, especially rural areas. d) To ensure that all new developments and transport infrastructure improvements give consideration to and make provisions for pedestrians and cyclists as an integral part of the design process.

Monitored by indicators:

1a	**1b**	**3**	**23**	**24**	**25a**	**25b**	**28a**	**28b**	**29**	**39**	**41**

An indication of which indicators are moving in the right direction is provided by using a colour coding scheme, whereby indicators on-target are indicated in green highlight and underlined, those which have *some degree of success (perhaps some parts are being achieved or some improvement, but not as great as targeted) are highlighted in yellow and are in italics*, those which indicate **a move in the wrong direction are highlighted in red and in bold** and those with no data or no significant change are highlighted in grey; those with no target are not highlighted.

In the 2018 monitoring report, there are 48 indicators identified 38 have at least one target set against them. Using the most up-to-date data available, the following results can be summarised:

	2017	**2018**
Indicators on target	21	19
Indicators with *some success*	14	15
Indicators moving in the **wrong direction**	8	11
Indicators with no data available or target set	11	10

It should be noted that although this report is published on an annual basis, it uses the most recent data available from the variety of different sources used to compile this report, of which the two key publications are the 'Scottish Transport Statistics' (published annually in December) and the 'Scottish Household Survey' (published every second year in August). As these publications are produced at different times, the most recent annual results for all indicators do not always show the same year. Caution should therefore be taken when comparing different indicators with each other as sources and years may vary.

This report provides data regarding measurable indicators under each of the strategy's four strategic objectives and twelve operational objectives. The objectives have been developed from the National Transport Strategy's five high level objectives of Economic growth, Accessibility, Safety, Environmental Sustainability and Integration and relate to its strategic outcomes. It also reflects the Government's Purpose and outcomes and correlates to the local authority and Community Planning Partnerships' outcomes. The report also identifies where there are gaps in the information available and considers where there may be a need to ensure that measurements are undertaken to inform transport operators and authorities of the success of interventions in the system.

There are a number of indicators for which it is not appropriate to establish targets, but the indicators will be monitored to provide an understanding of the changing nature of transport in the area.

Nestrans will work closely with local authorities in seeking to ensure that the indicators, targets and monitoring regimes to support Local Transport Strategies are consistent with the RTS and that there is no duplication of effort in producing data.

2. Index of Indicators

	Target	2018
Rail		
1	Number of rail stations in the North East and population with access to a station	*Some success* *Some success*
2	Number of rail services per week (with typical journey times) from Aberdeen to key destinations.	*Some success* **Wrong direction**
3	Number of passengers per year through north east stations	*Some success*
4	Number of passengers per year through north east stations and proportion of all Scotland's rail patronage	**Wrong direction**
Road		
5	Distance travelled by vehicles in the north east	**Wrong direction**
6	Growth in vehicle kilometres travelled in the north east in the preceding decade	On target
7	Traffic in north east as a percentage of Scotland's traffic	No target set
8	Composition of motorised traffic on north east roads	No target set
Air		
9	Number of passengers through Aberdeen Airport	*Some success*
10	Proportion of Scotland's air passengers using Aberdeen Airport	**Wrong direction**
11	The number of destinations served direct from Aberdeen Airport	*Some success*
12	Proportion of passengers through Aberdeen Airport using bus / rail	On target
Maritime		
13	Number of ferry services from north east ports (with typical journey times)	On target On target
14	Number of passengers carried on ferry services to the Northern Isles	*Some success*
Freight		
15	The volume of goods through the north east's major ports	**Wrong direction**
16	Number of countries with shipping services from north east ports	**Wrong direction**
17	The volume of goods to or from the region carried by air freight	No target set
18	The volume of goods to or from the north east carried by Heavy Goods Vehicle	No target set
19	Number of permanent restrictions affecting trunk routes in or to/from the north east	On target
20	The volume of goods to or from the region carried by rail freight	No target set
Coach		
21	Number of coach services per week from the north east direct to key locations	On target
Bus		
22	The number of people using buses in the north east	**Wrong direction**

23	The percentage of north east residents who find public transport convenient	On target
24	The percentage of north east residents who were satisfied with public transport	On target
25	Punctuality and reliability of buses	*Some success*
		Some success
26	The price of car parking in Aberdeen city centre relative to bus fares	*Some success*
27	The cost of a monthly bus ticket in Aberdeen compared with other Scottish cities	No target set
28	The number of people using park and ride sites in the north east	On target
		Wrong direction
29	The ability to transfer from one transport company to another with minimum hassle and using a single ticket	On target
Cycling and Walking		
30	Total number of cyclists recorded on key routes – Aberdeen City	On target
31	Total number of cyclists recorded on key routes – Aberdeenshire	**Wrong direction**
Mode Split and Personal Travel		
32	The proportion of households in the north east without access to a car or van	No target set
33	The number of blue badge holders in the north east	No target set
34	The proportion of taxis which are capable of carrying wheelchairs	On target
35	The proportion of travel to work journeys by modes other than car driver	**Wrong direction**
36	The proportion of children travelling actively to school	*Some success*
37	Number of participants in the Getabout car share scheme	On target
38	Number of car club members	On target
Journey Times and Congestion		
39	The percentage of driver journeys delayed due to congestion	*Some success*
40	Average journey speeds by car and public transport	*Some success*
		Wrong direction
41	Typical journey times by road to and from Aberdeen city centre	No target set
Road safety		
42	The number of casualties in road traffic collisions	On target
43	The number of deaths in road traffic collisions	On target
Environment		
44	Carbon Dioxide emissions road transport	*Some success*
45	The number of public EV points available in the north east	On target
		On target
46	The average atmospheric concentrations of nitrogen dioxide	*Some success*
47	The average atmospheric concentrations of particulates	On target
48	The number of Noise Management Areas	Trend yet to be established

3. Population

The population of the Nestrans area at the time of the 2011 Census was **475,766** – an increase of 36,770 since 2001 (a rise of 8.4% in ten years). Table 1 shows the estimated population, number of households and area of the region at 2016. The Nestrans area and the population of the region are around 9% of the total for Scotland.

Table 1: Population, Households and Area, June 2016

	Population	Number of households	Area (sq km)	Area (sq miles)
Aberdeen City	229,840	106,749	186	72
Aberdeenshire	247,001	110,296	6,313	2,437
North East	476,841	221,045	6,499	2.509
SCOTLAND	5,404,700	2,451,869	77,925	30,087
NE as % of Scotland	8.8%	9.0%	8.3%	8.3%

Source: Scotland's Census, National Records of Scotland, Council Population Estimates

4. Rail

There are currently eight railway stations in the north east. This increased from seven with the opening of Laurencekirk station in May 2009. Progress is being made towards the opening of a new station at Kintore and this project is now being developed in partnership by Nestrans, Aberdeenshire Council, Transport Scotland and Network Rail. Planning applications have been submitted, funding secured and construction is anticipated during 2019.

Indicator 1 provides an estimate of the population within walking distance (1.6 kilometres) of a railway station and within 5 kilometres. With developments focussed on having good accessibility and opening of additional stations, it is the intention that these proportions will increase over time.

Indicator 1 : Number of rail stations in the North East and population with access to a station			
	Number of stations	**Population within 1.6km of a station (and proportion of total North East population)**	**Population within 5km of a station (and proportion of total North East population)**
2001 baseline	7	81,550 (19%)	230,986 (53%)
2012	8	95,259 (20%)	254,431 (53%)
2017	8	108,222 (23%)	246,183 (52%)
Target 1a: *To open a new railway station in the north east every three years, to a total of 12 by 2021.*			
Target 1b: *To increase the proportion of the north east population with access to a station to at least 25% within 1.6 km and at least 60% within 5 km by 2021.*			

Source: Strategic Development Planning Authority Main Issues Report Monitoring Statement (2011), Councils' Small Area Population Statistics (2017).

Indicator 2: Number of rail services per week (with typical journey times) from Aberdeen to key destinations

		London	Sleeper	Edinburgh	Glasgow	Dundee	Inverness	Inverurie	Total journeys
No. of Services (average journey times)	**2007** **Baseline**	19 (7hrs 02)	7 (10hrs 24)	124 (2hrs 25)	102 (2hrs 33)	232 (1hr 11)	59 (2hrs 15)	95 (0hrs 25)	638
	2012 **(5 yrs)**	21 (7hrs 11)	6 (10hrs 05)	117 (2hrs 29)	96 (2hrs 40)	231 (1hr 12)	71 (2hrs 16)	131 (0hrs 23)	673
	2017 **(10 yrs)**	21 (7hrs 16)	6 (10hrs 41)	118 (2hrs 31)	108 (2hrs 39)	229 (1hr 13)	71 (2hrs 16)	144 (0hrs 22)	697
	2018	21 (7hrs 04)	6 (10hrs 04)	118 (2hrs 33)	106 (2hrs 43)	231 (1hr 13)	71 (2hrs 15)	142 (0hrs 23)	695 (+8.9% on baseline)
	2012 - 2018 times are average journey times across all services Monday to Sunday – this is different to previous years which simply recorded a typical journey time.								

Target 2a: *To increase the number of rail services to key destinations by 10% every five years (i.e. services from Aberdeen to six key destinations increasing from 638 services in 2007 to 834 services per week by 2021).*

Target 2b: To have shorter rail journey times to key destinations, reduced by at least 10% of 2007 baseline by 2021 (i.e. Aberdeen-London <6hrs 30; Aberdeen-Edinburgh <2hrs 10; Aberdeen-Glasgow <2hrs 20; Aberdeen-Inverness <2hrs).

Source: Rail timetables

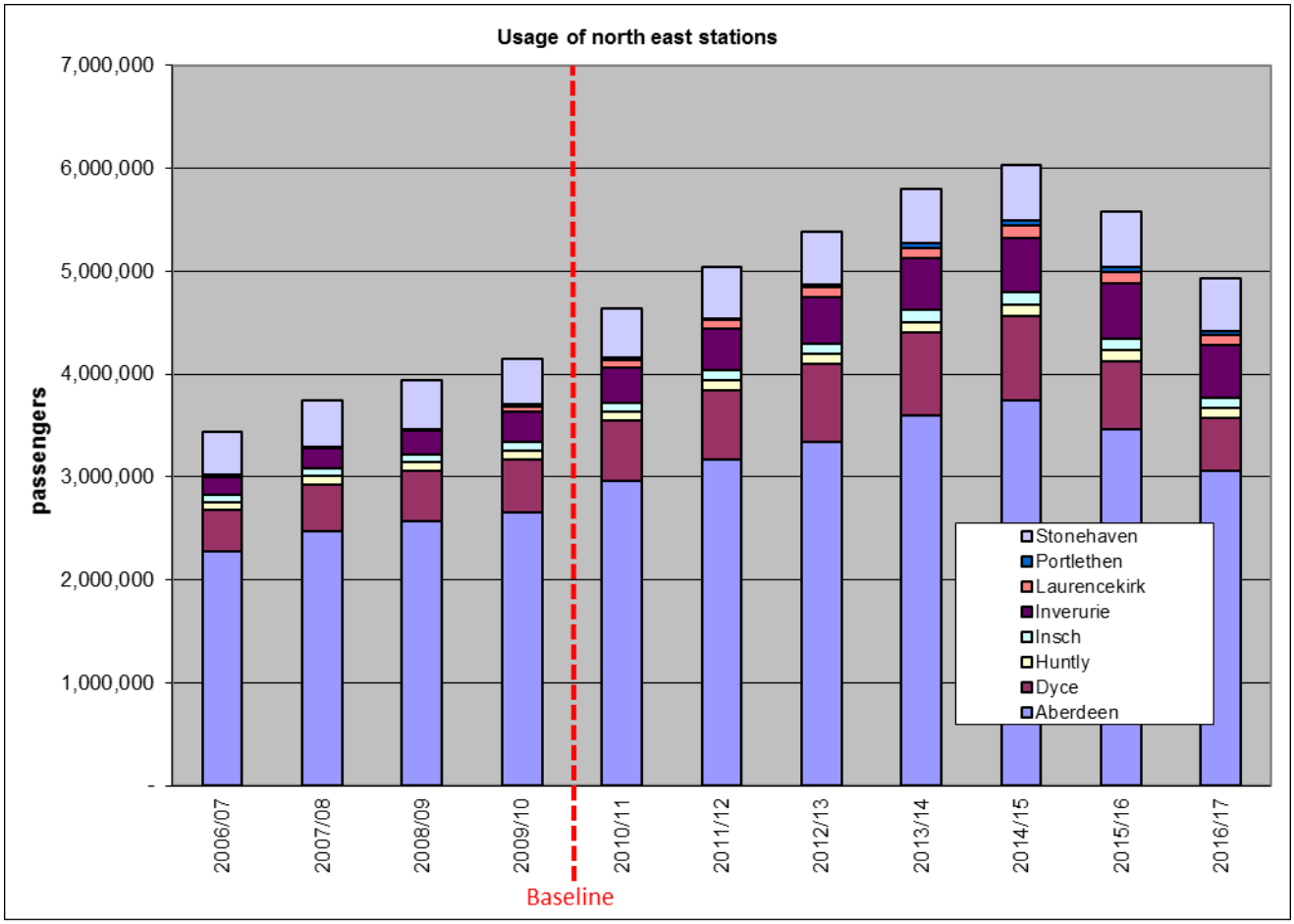
Please note that the increase in the journey time for the sleeper service in 2017 was due to a temporary timetable change affecting Sundays only.

Indicator 3: Number of passengers per year through North East stations (and ranking within Scotland for those in top 100)

	Aberdeen	Dyce	S'haven	Inverurie	Insch	L'kirk	Huntly	P'lethen	TOTAL
2010/11 **Baseline**	2,964,302 (5th)	579,660 (59th)	482,722 (74th)	345,790 (99th)	86,854	73,594	90,010	18,382	**4,641,314**
2014/15	3,742,646	823,866	534,892	534,462	122,404	112,914	104,534	57,152	**6,032,870**
2015/16 **(5 years)**	3,459,944 (5th)	664,396 (58th)	535,698 (79th)	533,972 (80th)	118,378	104,488	105,846	56,324	**5,579,046**
2016/17	3,058,268 (5th)	517,586 (78th)	504,750 (81st)	511,708 (79th)	98,140	96,002	94,904	45,936	**4,927,294**
% change from baseline (2010/11 to 2016/17)	**3%**	**-11%**	**5%**	**48%**	**13%**	**30%**	**5%**	**150%**	**6%**

Target 3: *to increase passenger numbers through the north east's railway stations by 50% by 2021 on 2010/11 figures*

Source: Office of the Rail Regulator and Scottish Transport Statistics



It is estimated that over 3.7 million rail journeys were made to, from or within the north east in 2015/16, with 1.1 million into and 1.1 million out of the region and 1.5 million internal trips (Note that in Indicator 3, internal trips will be counted both as a start and end for passengers through stations). In total, these trips cover an estimated 250 million miles.[1]

Rail journeys (thousands) 2015/16

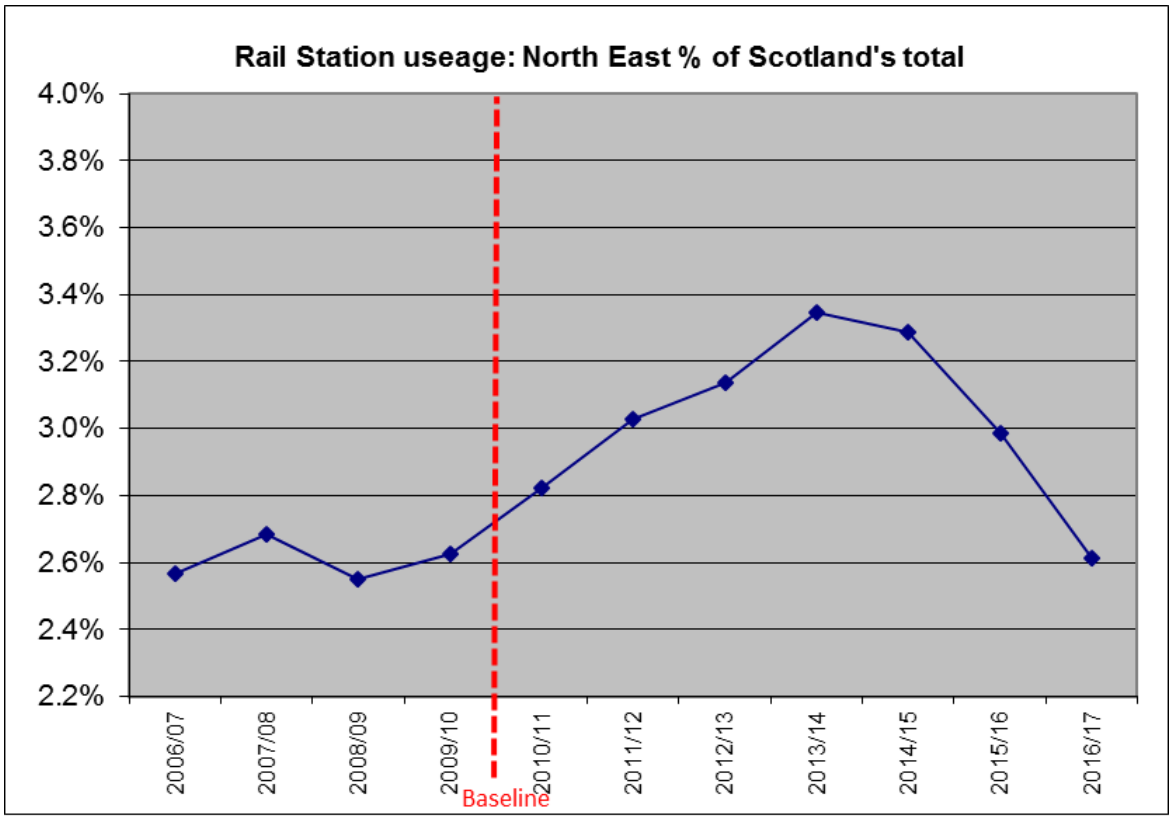
	To north east	Within north east	From north east	Estimated average distance (miles)		Total mileage (thousands)
Angus	141		141	Angus	52 (Arbroath)	14,664
Dundee	105		105	Dundee	67 (Dundee)	14,070
Fife	51		51	Fife	98 (Kirkcaldy)	9,996
Edinburgh and Lothians	269		269	Edinburgh and Lothians	127 (Edinburgh)	68,326
Moray	120		120	Moray	65 (Elgin)	15,600
Highland	120		120	Highland	104 (Inverness)	24,960
Glasgow	201		201	Glasgow	147 (Glasgow)	59,094
Perth, Stirling, Falkirk	66		66	Perth, Stirling, Falkirk	121 (Stirling)	15,972
Rest of Scotland	16		16	Rest of Scotland	184 (Ayr)	5,888
	1,089		1,089			
Within Aberdeen		403			8 (Dyce)	3,224
Within Aberdeenshire		32			25	800
City to Shire		1,106			19 (Stonehaven)	21,014
Total journeys		**3,719**				**253,608**

Source: Extrapolated from Scottish Transport Statistics 2017

[1] Reference: Estimated using data from the Scottish Transport Statistics

Indicator 4 : Total number of passengers per year through North East stations and proportion of all Scotland's rail patronage*			
	North East all stations	**Total number of passengers through Scottish stations**	**NE as % of Scotland**
2010/11 (Baseline)	4,641,000	164,341,000	2.8%
2011/12	5,048,000	166,646,000	3.0%
2012/13	5,382,000	171,476,000	3.1%
2013/14	5,803,000	173,356,000	3.4%
2014/15	6,033,000	183,472,000	3.3%
2015/16	5,579,000	186,718,000	3.0%
2016/17	4,927,000	188,466,000	2.6%
% change from 2010/11 to 2016/17	**+6%**	**+15%**	
Target 4: To increase passenger numbers through the north east's railway stations as a proportion of Scotland's rail patronage to at least 4% by 2021.			

*Note that a journey within Scotland will involve at least two stations (i.e. an entry and an exit, plus any changes or transfers) so total number of passenger journeys is less than half the total number of passengers through stations.



5. Road

Road Lengths (Kilometres) 2016/17

		Transport Scotland		Local Authority Roads		TOTAL
		Motorway	Trunk	A Class	Minor	
Road lengths	Aberdeen	0	31	58	855	944
	Aberdeenshire	0	192	687	4,833	5,712
	North East	0	223	746	5,688	6,657

Source: Scottish Transport Statistics 2017

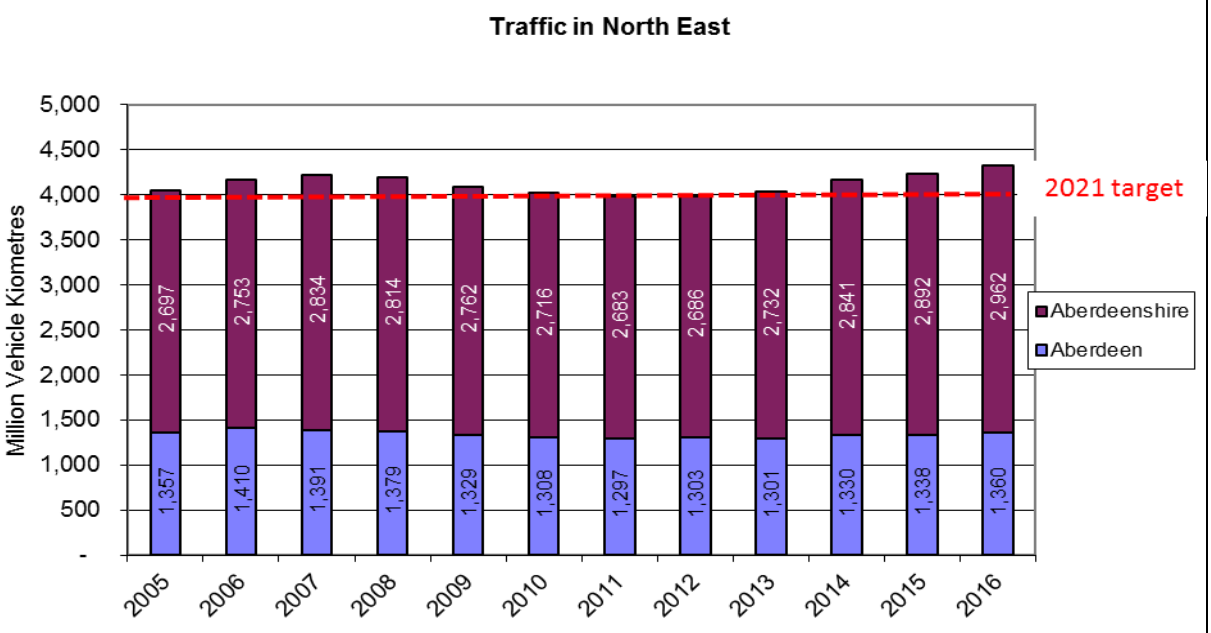
In 2017, roads in the north east made up almost 12% of the total road infrastructure in Scotland.

Traffic in the north east

In 2016, traffic within the north east travelled a total of **4.322 billion kilometres (2.7 billion miles)**, some 9.3% of all traffic in Scotland. In Aberdeen there was almost 1.4 billion kilometres (0.9 billion miles) travelled, and in Aberdeenshire almost 3 billion kilometres (1.9 billion miles).

Traffic levels were on or below the target of 4 billion vehicle kilometres per year between 2010 and 2012, however since 2013 there has been an increase above this target line with 2016 showing an overall increase of 6.6% on the 2005 baseline year (an increase of 2.2% on 2015). This increase is predominantly a result of increased traffic in Aberdeenshire.

Indicator 5: Distance travelled by vehicles in the north east



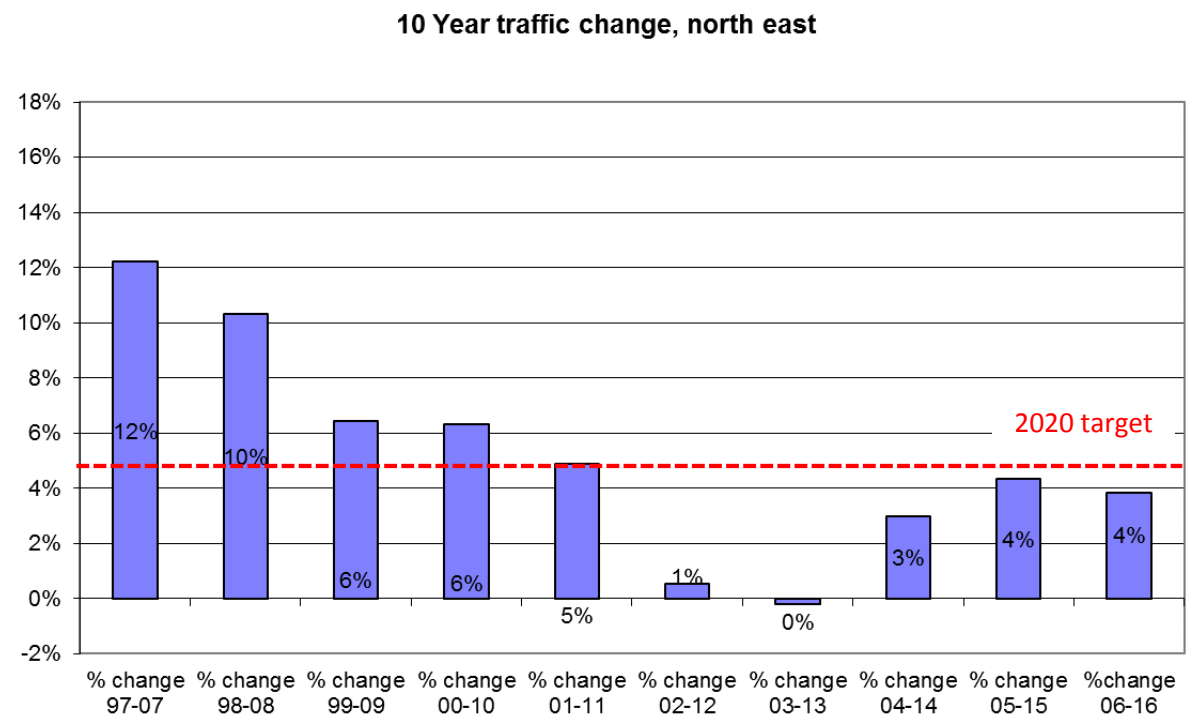
% change 2005 baseline to 2016	Aberdeen City: +0.22%	Aberdeenshire: +9.9%	North East: +6.6%

Target 5: To maintain traffic at or below 4 billion vehicle kilometres per year through to 2021.

Source: Scottish Transport Statistics, 2017

The growth in vehicle kilometres travelled is best represented by considering ten-year growth patterns. In the decade to 2007, growth in the north east was 12%, an average of 1.2% per annum. In the decade to 2016 however, this level of growth reduced substantially and the decade between 2003 and 2013 saw traffic reduce slightly, by 0.2%. Traffic has increased again since 2014, with a growth in traffic of around 4% between 2006 and 2016, but currently remains below target.

Indicator 6: Growth in vehicle kilometres travelled in the north east in the preceding decade.

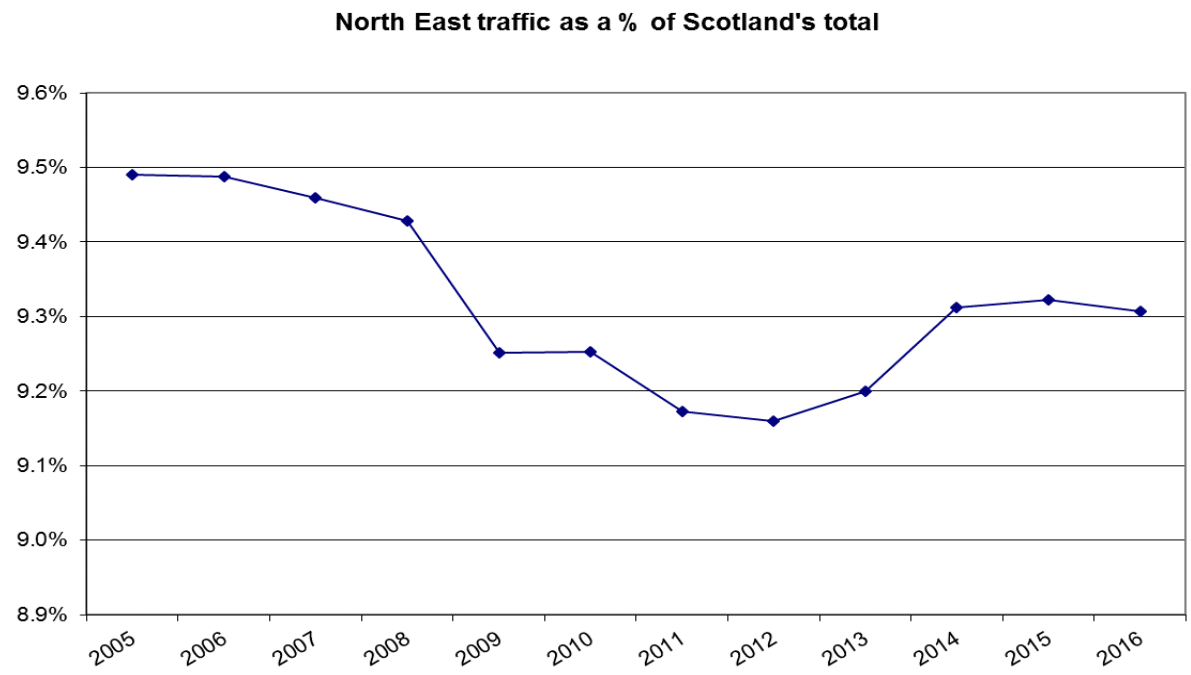


Target 6: To reduce the rate of growth of traffic to less than 5% for the decade to 2021.

Source: Scottish Transport Statistics, 2017

Similarly, whilst traffic in the north east as a percentage of Scotland's traffic has seen some slight increases since 2012, overall traffic growth between 2005 and 2016 has been less in the north east than in Scotland as a whole. Between 2014 and 2016, this has remained fairly constant at around 9.3% of Scotland's traffic.

Indicator 7: Traffic in north east as a percentage of Scotland's traffic

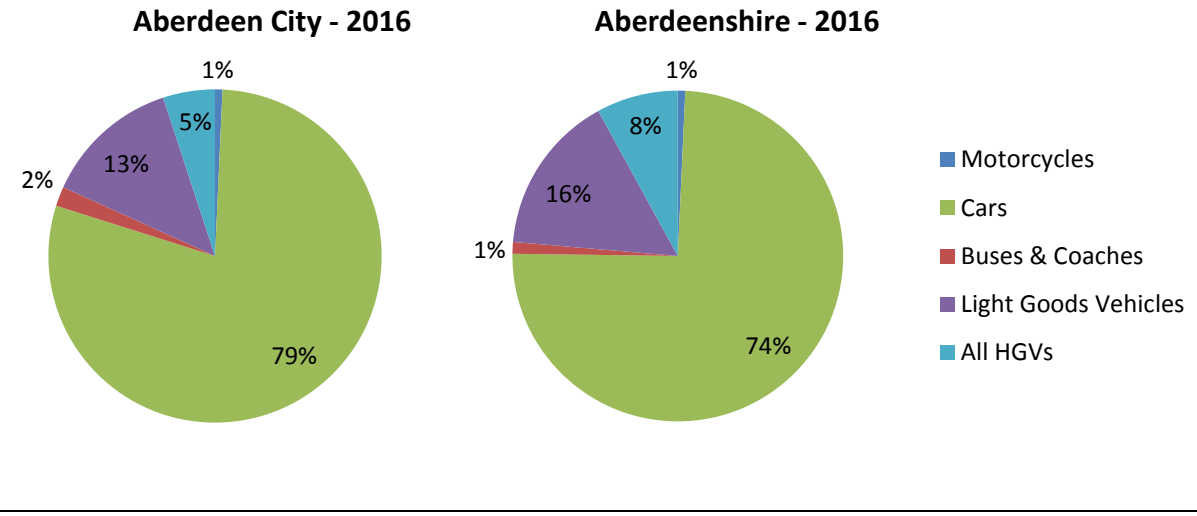


Change in traffic volumes - 2005 baseline to 2016	Traffic in the North East:	Total Scottish Traffic:	North East as a % of Scotland:
2005	4.054 bn km	42.718 bn km	9.5%
2016	4.322 bn km	46.473 bn km	9.3%

Source: Scottish Transport Statistics, 2017

Traffic composition in 2016 was similar in both Aberdeen City and Aberdeenshire, with between 74% and 79% of road traffic made up of cars and with LGVs and HGVs making up another 18 - 24% of traffic. Whilst the composition of buses remain low, there have been increases in the volume of bus traffic over the last 10 years.

Indicator 8: Composition of motorised traffic on north east roads



Source: Department for Transport Road Traffic Counts

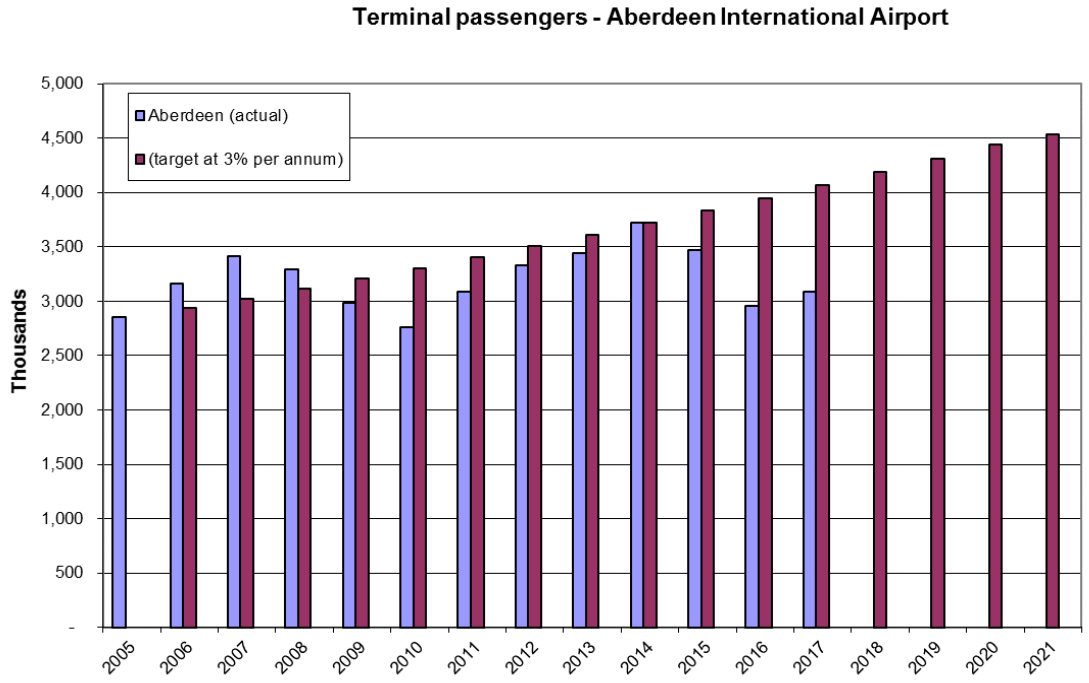
6. Air

Aberdeen Airport is crucially important to the regional economy, contributing millions of pounds directly into the local economy but also supporting business connections. The 2013 Aberdeen International Airport Masterplan states that 56% of passengers using Aberdeen Airport are business travellers, compared to around 30% at both Edinburgh and Glasgow.

Passenger numbers through Aberdeen Airport declined between 2014's peak of 3,723,000 passengers to 2016, but 2017 has shown signs of a reversal of the recent trend as passenger numbers rose to 3,090,000, showing an increase in passenger numbers of 4.6% on the previous year.

The airport is undergoing a further period of development with significant improvements currently being made to the terminal building to increase capacity and improve facilities for passengers.

Indicator 9: Number of passengers through Aberdeen Airport

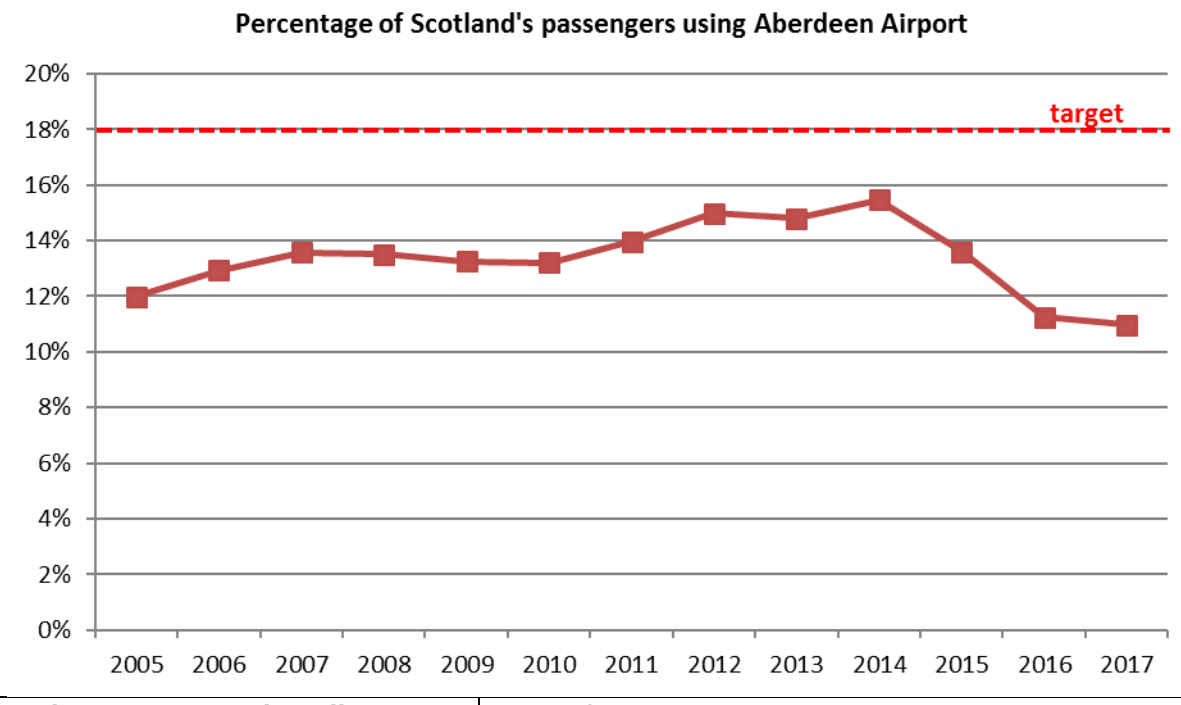


% change on 2005 baseline	+8.3%

Target 9: *To increase the number of passengers through Aberdeen Airport by an average of 3% per year between 2010 and 2021, to more than 4 million by 2021.*

Source: Scottish Transport Statistics, Aberdeen Airport Masterplan, CAA

Indicator 10 : Proportion of Scotland's air passengers using Aberdeen Airport

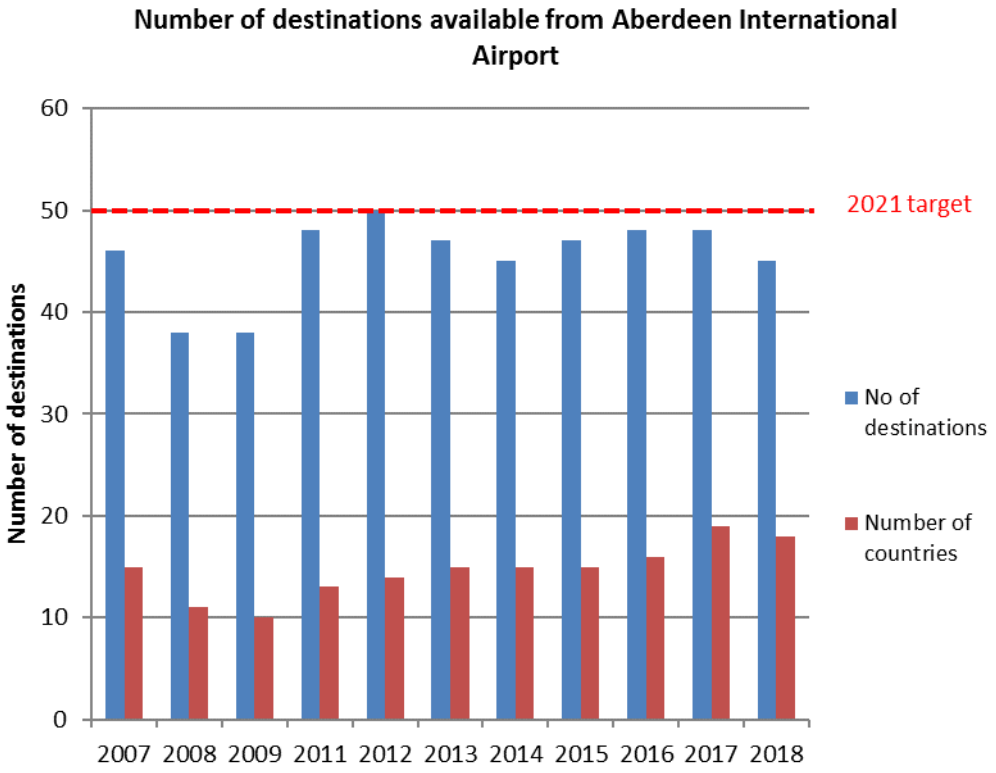


% change on 2005 baseline	-1% point

Target 10: To increase the proportion of Scotland's air passengers who pass through Aberdeen International Airport to at least 18% by 2021.

Source: Scottish Transport Statistics, CAA

Indicator 11 : The number of destinations served direct from Aberdeen Airport



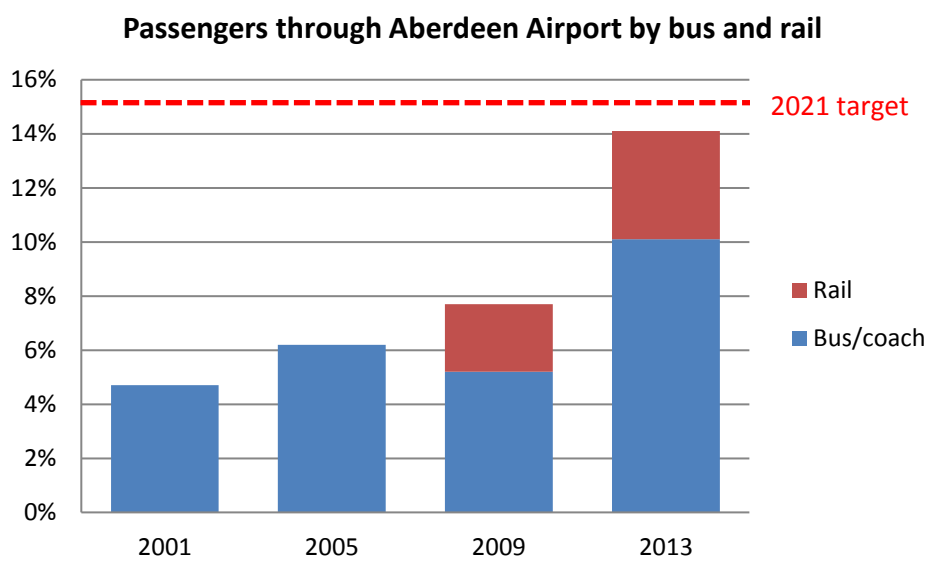
% change on 2007 baseline	Destinations: -2%	Countries: +20%

Target 11: *To increase the number of destinations served direct from Aberdeen International Airport to at least 50 by 2021.*

Source: Aberdeen International Airport website, Spring 2018

Aberdeen International Airport currently (Summer 2018) has flights to 45 airports in 18 countries. The number of unique destinations has had an overall decrease in the last year although new destinations have also been added, including Malta, Antwerp and Reus near Barcelona. It is also the second best connected UK to UK airport with services to 21 other British airports (including London connections).

Indicator 12: Proportion of passengers through Aberdeen Airport using bus/rail.



Target 12: To increase the proportion of passengers accessing Aberdeen International Airport by public transport to at least 15% of passengers by 2021.

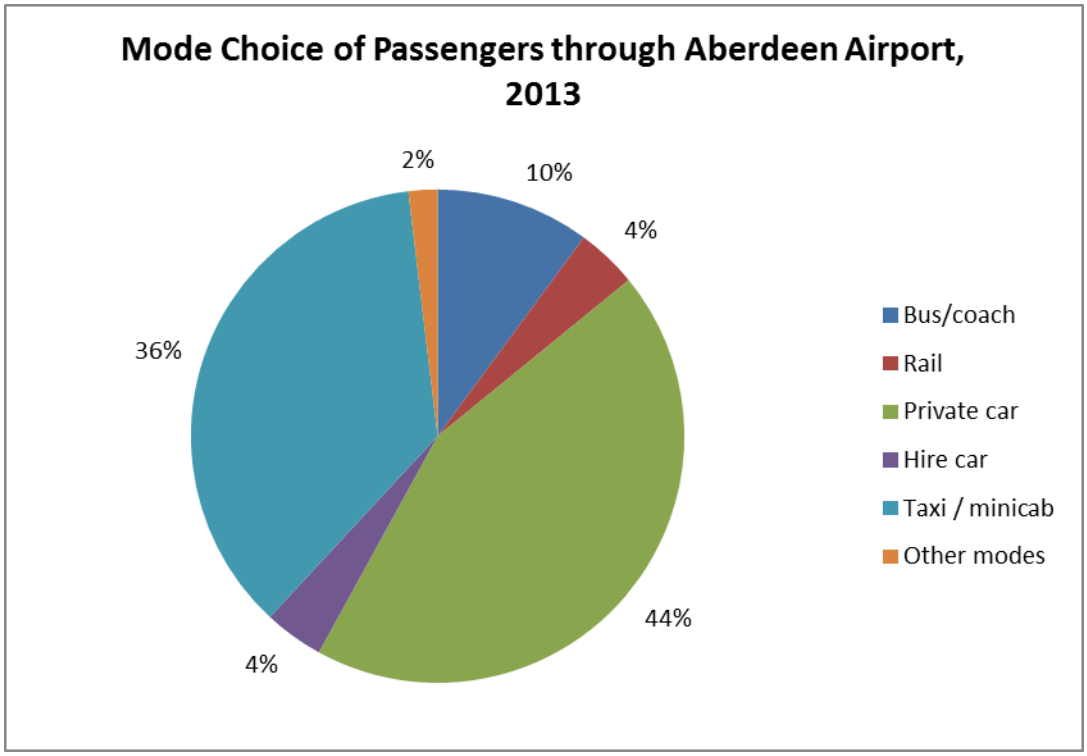
Source: Scottish Transport Statistics, 2014[2]

The Civil Aviation Authority undertakes passenger surveys at airports on a rolling four year basis. The most recent update of this data in 2013, indicates that there has been significant modal shift towards public transport access at the airport from less than 5% in 2001 to over 14%. An update to this data was expected in the 2017 survey but no Scottish airport was included.

In recent years, access to the airport by public transport has been significantly improved through the introduction of the Jet 727 service, with improvements to the frequency and capacity of this service enabling a significant improvement in transport choice.

The 80 Dyce shuttle service originally enabled faster connections between Dyce rail station and the airport since 2008, with improvements being made to the station to allow larger buses to access more easily. However, due to a decrease in passenger numbers in recent years in addition to changes to the train timetable, this service was withdrawn in May 2017.

[2] Data is collected by the CAA on a rolling basis. Scottish airports have not been included in the survey since 2013.



Source: Scottish Transport Statistics, 2014

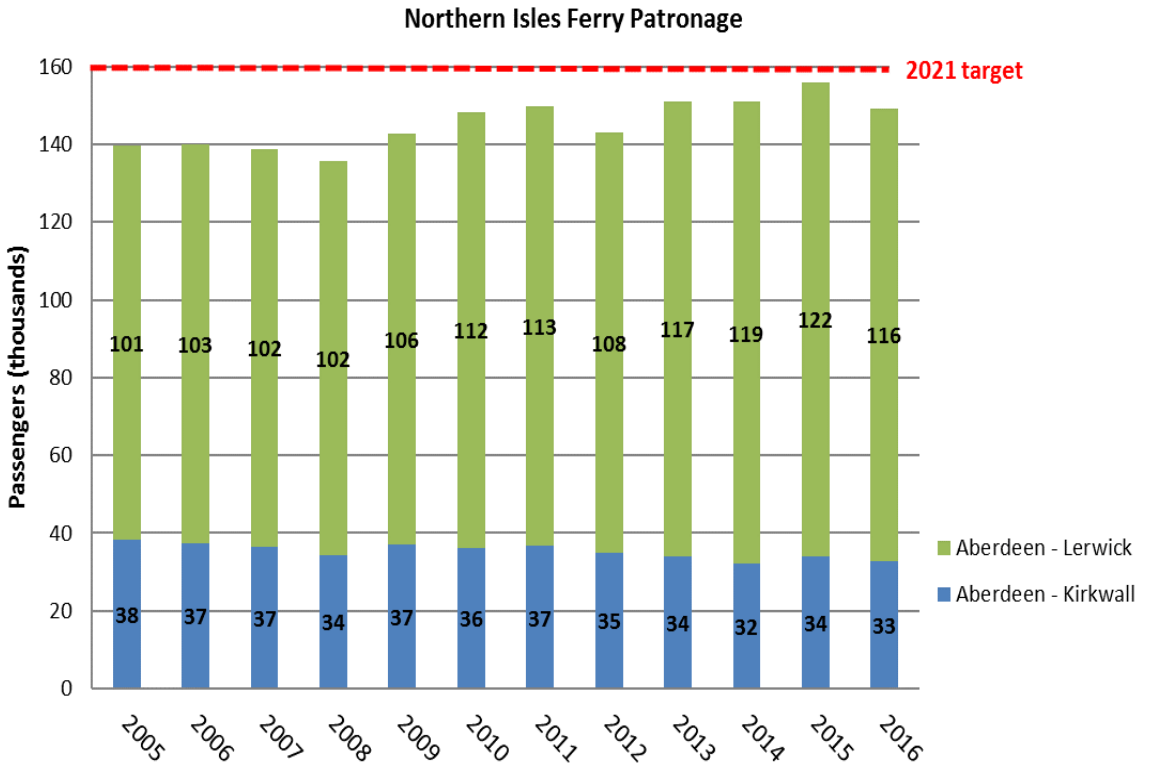
7. Maritime

Indicator 13 : Number of ferry services from north east ports (with typical journey times)				
	To Orkney		**To Shetland**	
	Journeys / week	**Journey time**	**Journeys / week**	**Journey time**
2007 Baseline	4	6 hrs	7	12 ½ hours
2018	4 summer / 3 winter	6 hrs	7	12 ½ - 14 ½ hours depending on whether it calls at Kirkwall
Target 13a: To maintain at least the current number of ferry services and journey times from north east ports through to 2021.				
Target 13b: To maintain at least the current journey times for ferry services from north east ports through to 2021				

Source: Northlink Ferries timetables, 2018

The Scottish Ferries Plan was published in early 2013 and this has confirmed the continuation of the service from Aberdeen to Orkney and Shetland. Serco Northlink Ferries currently operate daily services, but it has been announced that the next franchise may be open to a public sector bidder. The introduction of Road Equivalent Tariffs (RET) in late 2018 is expected to increase demand and the development of the new south harbour at Bay of Nigg may introduce a further potential for significant growth in coming years.

Indicator 14: Number of passengers carried on ferry services to the Northern Isles.



% change on 2007 baseline	Aberdeen-Kirkwall	Aberdeen-Lerwick	Total
	-14%	+15%	+7%

Target 14: *To increase the number of passengers on Northern Isles ferry services from north east ports by an average of 1% per year between 2007 and 2021, to at least 160,000 passengers by 2021.*

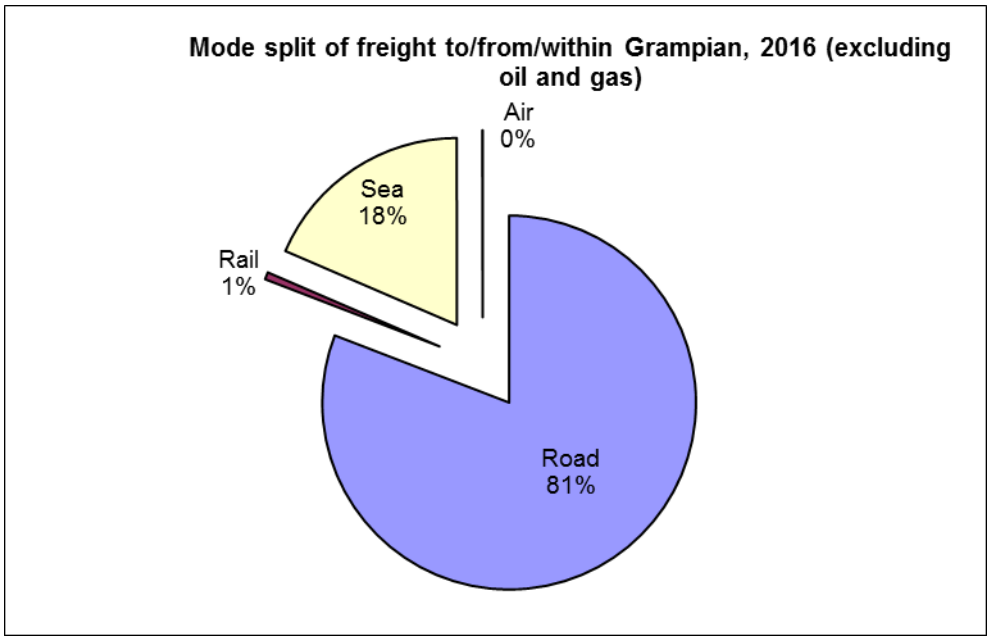
Source: Scottish Transport Statistics, 2017

Overall, passenger numbers are rising, with 149,000 using the Serco Northlink service in 2016. Whilst this is a decrease from the 2015 figure, it is an increase of 14% on the 2007 baseline.

The ferries carried 17,900 cars between Aberdeen-Lerwick and 4,500 between Aberdeen-Kirkwall in 2016. This shows a slight increase from the previous year, by 9% on the Aberdeen-Lerwick route and by 7% on the Aberdeen-Kirkwall route.

8. Freight

Modal split of freight movements is a key indicator of the efficiencies of the movement of goods and the availability of alternative choices.

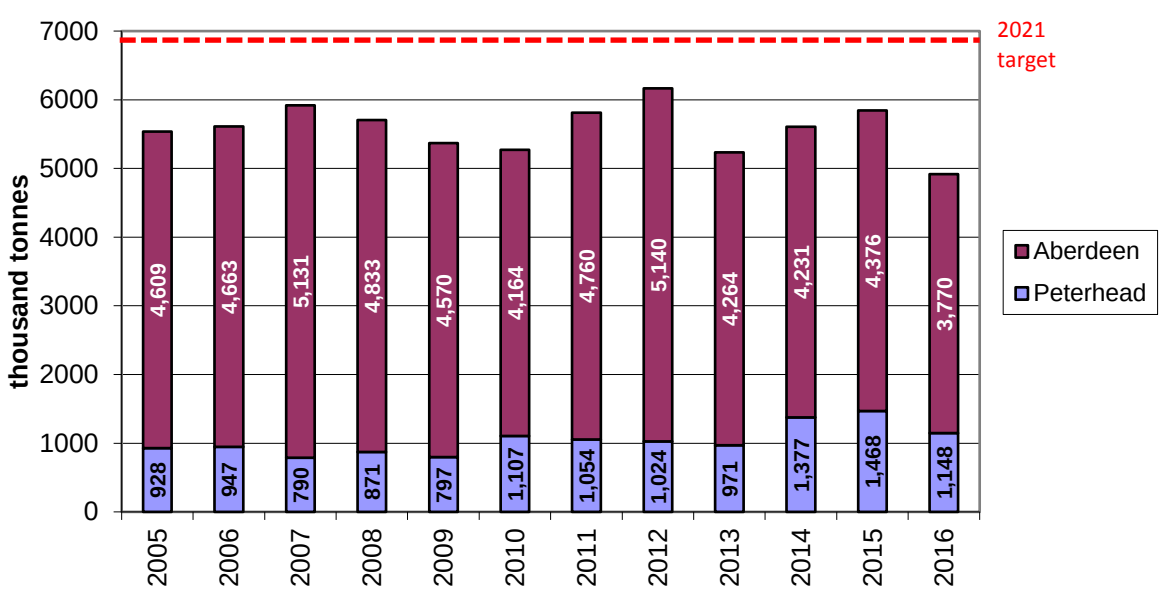


Since 2013 the recording of freight data has changed significantly for railfreight and HGV freight, meaning that continuing comparison between the modes is no longer possible. Freight volumes in the north east region reflect economic factors and have therefore seen reduced tonnages in recent years, with around 27 million Tonnes of Goods (excluding oil and gas) moved in 2016. Information for each of the freight modes are summarised in the following sections.

Maritime freight

The total volume of freight through the north east's two major ports in 2016 was 4.918 million tonnes, a decrease of 16% on the previous year.

Indicator 15: The volume of goods through the north east's major ports (Tonnes)



% change on 2005 baseline	Aberdeen: -18%	Peterhead: +24%	Total: -11%

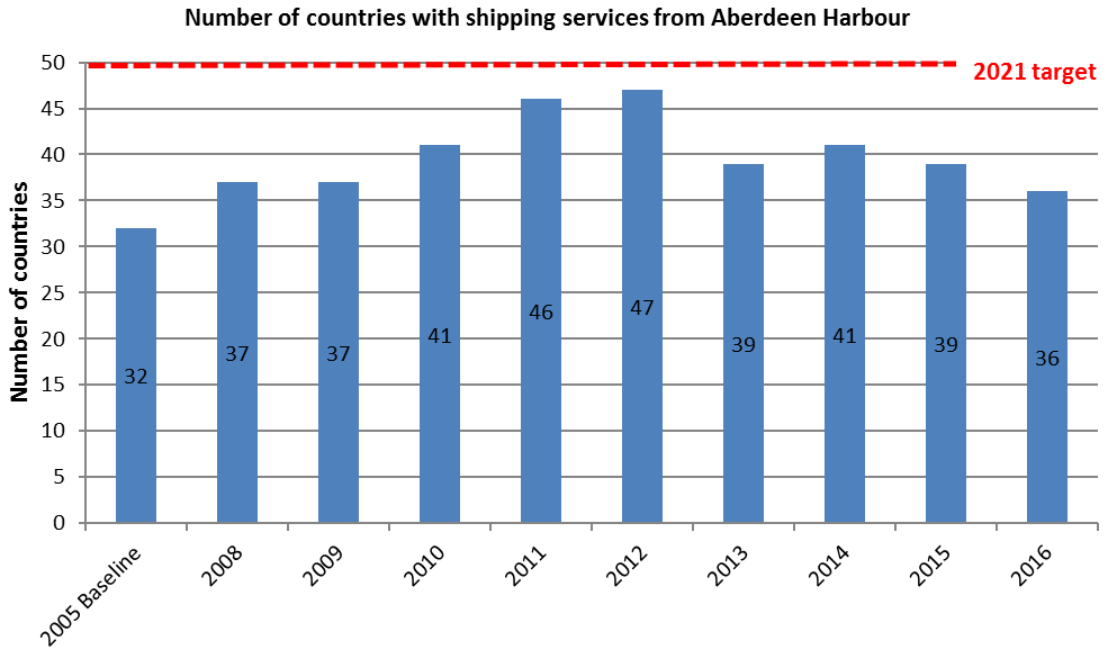
Target 15: To increase the volume of goods through Aberdeen and Peterhead Harbours by an average of at least 1% per year between 2005 and 2021, to 6.9 million Tonnes by 2021.

Source: Scottish Transport Statistics 2017

The movement of goods through Aberdeen and Peterhead harbours have seen varying fortunes since 2000. In 2015 Peterhead saw its highest level since 1999, at nearly 1.5 million tonnes. This dropped in 2016 to 1.148 million tonnes. Aberdeen Harbour on the other hand saw growth of 12% between 2005 and 2012, to a figure of over 5 million tonnes. There has since been an overall decrease in the movement of goods, with 2016 showing under 4 million tonnes through Aberdeen Harbour.

The two ports of Aberdeen and Peterhead carry around 7.4% of Scotland's maritime freight. This proportion has risen from a base of 5.0% in 2005.

Indicator 16 : Number of countries with shipping services from north east ports



Target 16: To increase the number of countries with links from north east ports to at least 50 by 2021.

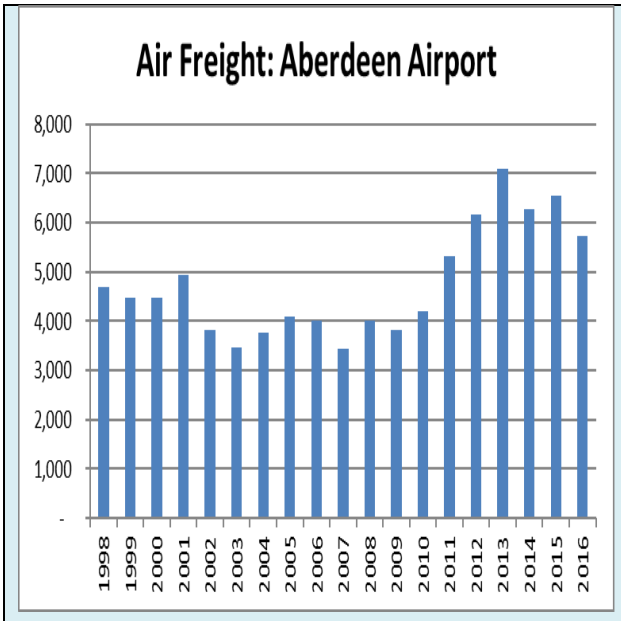
Source: Aberdeen Harbour Annual Review, 2016/17

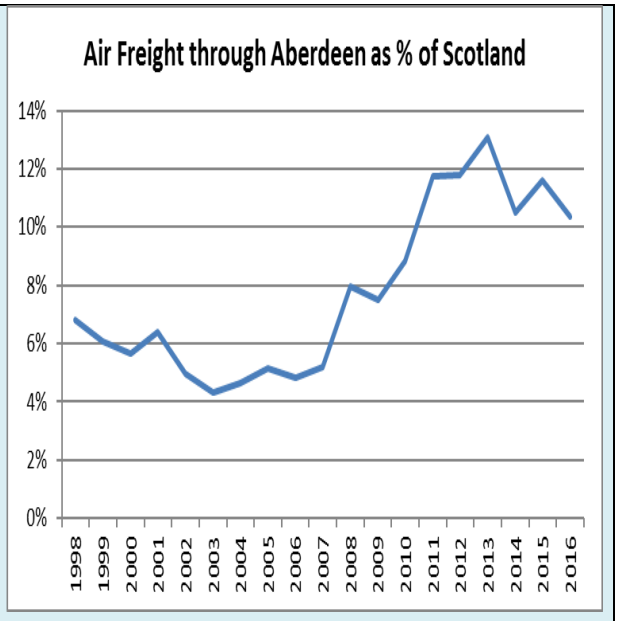
Services from Aberdeen are available on a regular basis to 36 countries worldwide. This has fallen from a peak in 2012, but remains above the 2005 baseline of 32.

Air freight

Freight through Aberdeen International Airport tends to be fairly small volumes, but can often be high value or urgently required goods. In 2016, 5,731 tonnes were transported by air through Aberdeen Airport, an increase of some 40% since 2005, although a decrease from a high of 7,102 in 2013. This represents around 10% of Scotland's airfreight movements.

Whilst Aberdeen has seen a decrease in freight movements in recent years, the level of freight carried bucks the trend seen in Scotland more generally, where air freight has been in an overall decline since 2006. Figures for Scotland in 2016 marked a 30% decline from the 2005 baseline.





Indicator 17: The volume of goods to or from the region carried by air freight

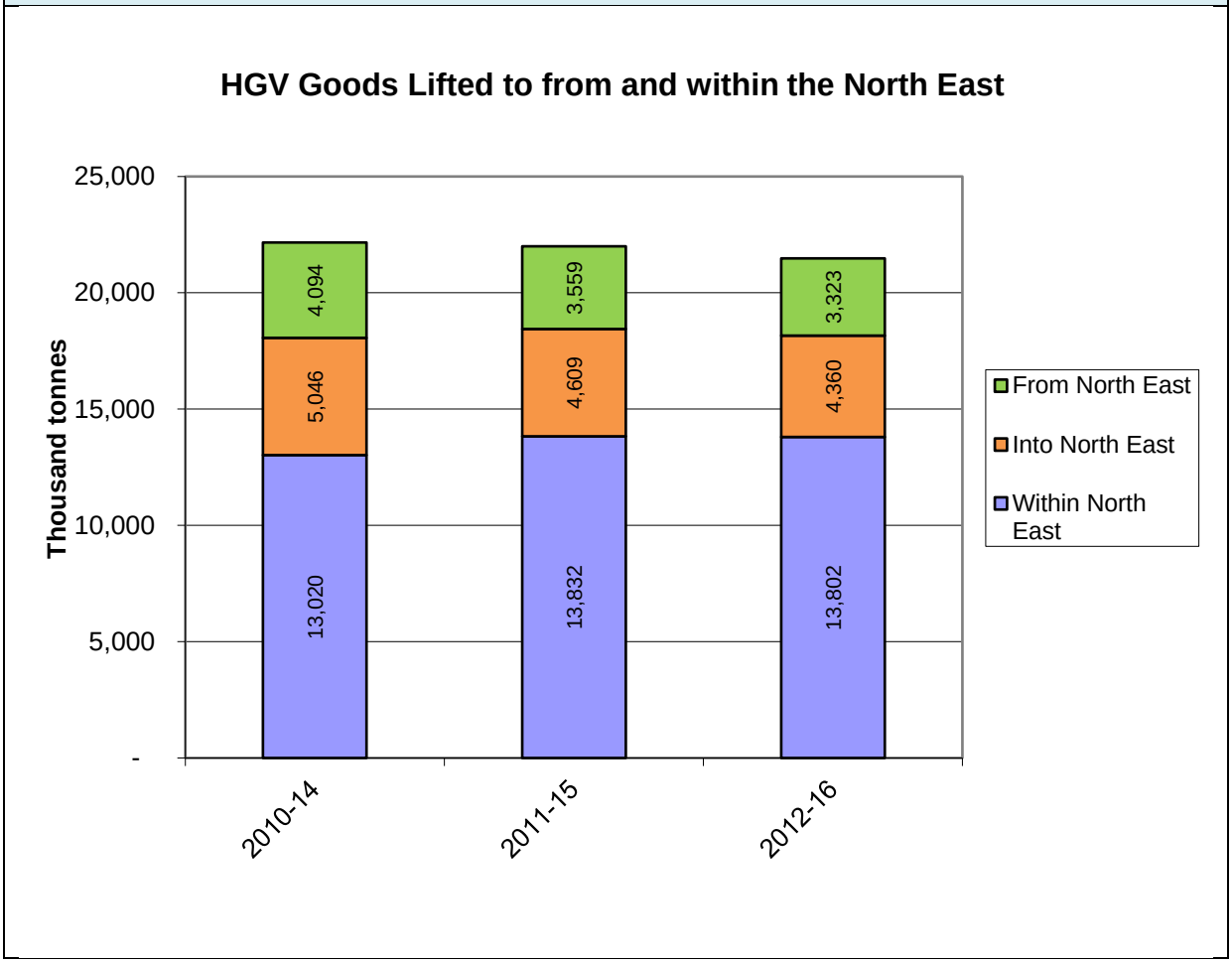
2005 Baseline	4,089 Tonnes
2016	5,731 Tonnes
% change on 2005 baseline	+40%

Source: Scottish Transport Statistics, 2017

Heavy Goods Vehicles

An average of around 21 million tonnes of goods are moved by lorry to, from and within the Nestrans region every year between 2012 - 2016.

Indicator 18: The volume of goods to or from the north east carried by Heavy Goods Vehicle



Source: Extrapolated from Scottish Transport Statistics 2017[3]

[3] Due to limitations in the data currently published, these figures are based on estimates. Further work is required in order to ensure reliability of these figures.

Indicator 19: Number of permanent restrictions affecting trunk routes in or to/from the north east	
2007 Baseline	Number of trunk road restrictions: 2 Height restriction (15' 3") and signal-controlled carriageway on A96 at Inveramsay Bridge Width restriction (7' 0") A90 at Bridge of Dee
2017 Update	Number of trunk road restrictions: 1 Construction of the Inveramsay Bridge upgrade on the A96 trunk road was completed in March 2016 and allows two-way traffic flows. Construction of the AWPR is nearing completion, which will ensure an unrestricted route for HGVs on trunk roads and is due to fully open by autumn 2018.
Target 19: To remove all diversions relating to restrictions on trunk routes by 2018	

Rail freight

In 2007, Network Rail implemented a gauge enhancement between Mossend in Lanarkshire and Aberdeen/Elgin to remove one of the constraints restricting rail freight development to and from the north east. Terminal developments constructed at Raiths Farm, Craiginches and Waterloo Quay have combined to offer a much enhanced rail freight product in the north east.

Since 2013 data from rail freight has not be easily accessible in a comparable form. However recent correspondence in 2017 supplied the following information showing that whilst general rail freight is dropping in volume, the demands on materials required by large construction contracts such as the AWPR and the new harbour has increased the volume of materials carried to the north east. There are currently three active carriers of rail freight that serve Aberdeen. Freightliner Heavy Haul operated in Aberdeen until January 2016 when its contract was taken over by Colas Rail.

Indicator 20: The volume of goods to or from the region carried by rail freight			
Name of Company	Direct Rail Services Ltd	Colas Rail	DB Cargo
Details of Contents	Supermarket grocery containers	Powdered cement	Calcium carbonate and clay slurry
Route	Mossend to Aberdeen	Dunbar to Aberdeen	Mossend to Aberdeen
Frequency	7 days per week	6/7 trains per week on average	Once per week on Fridays

Source: Operator correspondence

9. Coach

Many strategic passenger journeys to, from and within the north east are made by long-distance coach. A number of services are currently operating services to or from Aberdeen, including the Megabus/Citylink/Parks of Hamilton consortium and National Express. Maintaining and improving the choice of a coach option for travel will be important in ensuring that the connectivity of the region is maintained.

Indicator 21: Number of coach services per week from the north east direct to key locations	
Baseline 2007: Direct services per week to: Edinburgh - 0 Glasgow – 111 (3hrs 15) Inverness 86 (3hrs 51)	London – 14 (12hrs) Manchester – 7 (8hrs 20) Newcastle – 0 Birmingham - 0 **Total Services per week: 218**
2012 (5 years from baseline):	**Total Services per week: 275**
2014	**Total services per week: 448**
2016	**Total services per week: 541**
2017 (10 years from baseline):	**Total services per week: 533**
2018: Coaches per week (direct) Edinburgh – 105 (Citylink, Megabus & Parks of Hamilton) Glasgow – 134 (Citylink, Megabus & Parks of Hamilton) Inverness – 126 (Citylink, Megabus, Parks of Hamilton & Stagecoach Service 10) London – 39 (Megabus and National Express) Manchester – 25 (Megabus & National Express) Newcastle – 14 (Megabus) Birmingham – 21 (National Express & Megabus) **Total services per week: 464** % change since 2007 baseline: +113%	
Target 21: To increase the number of bus and coach services to key destinations by 10% every five years (i.e. services from Aberdeen to seven key destinations increasing from 218 services in 2007 to 285 services per week by 2021).	

Source: Operator timetables

Although there has been a recent reduction in the number of long distance coach services, the number of services per week is still currently above target, with all of the identified key destinations having increases since the Baseline. There have been some reductions in the number of Scottish journeys, with connections to Edinburgh having seen reductions since 2014, and Inverness and Glasgow since 2016. Conversely, there has been a recent increase in the availability of travel to English destinations, although Manchester and London also saw decreases in services since 2017.

10. Bus

Bus Usage

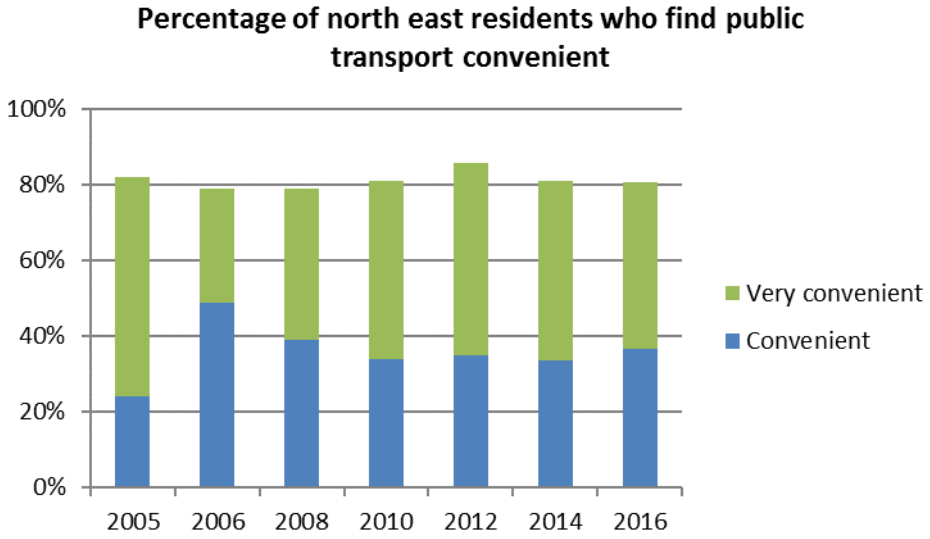
Nestrans continues to work with the two major bus operators and two local authorities as part of a voluntary quality partnership agreement. Due to a change in the way the figures are recorded through the quality partnership, in order to avoid double counting, it is not possible to directly compare bus patronage figures for years prior to 2015/16. There has however been a reduction in paying passengers between 2015/16 and 2016/17.

The Local Authority and Bus Operators Forum are currently working to refresh the bus action plan, due to be implemented in 2018, and this will focus on the delivery of actions to reverse this trend.

Indicator 22: The number of people using buses in the north east.			
	Paying customers	Concessions	Total
2015/16	19.4 million	10.4 million	29.9 million
2016/17	18.1 million	10.5 million	28.6 million
2017/18	16.3 million	10.2 million	26.5 million
% change since 2015/16	-15.9%	-2.4%	-11.2%
Target 22: To increase the number of bus passenger journeys by 2021.			

Source: First, Stagecoach, Aberdeen City Council and Aberdeenshire Council

Indicator 23: The percentage of north east residents who find public transport convenient.



% change on 2005 baseline	Very Convenient: -14% points	Convenient: +13% points	Total: -1% point
Target 23: To maintain 80% of passengers finding public transport convenient or very convenient.			

Source: Transport and Travel in Scotland, Scottish Household Survey

Bus passenger satisfaction

Transport Focus undertake an annual survey on bus passenger satisfaction in Scotland. In order to ensure a large enough sample to produce reliable results, Nestrans funds additional surveys in Aberdeen City and Aberdeenshire. This replaces earlier surveys undertaken by Nestrans and the Local Authority Bus Operator Forum across the region.

Indicator 24: The percentage of north east residents who were satisfied with public transport

How satisfied were you with the overall service that you experienced on your most recent bus trip?

North East

	2014	2016	2017
Very Satisfied	n/a	38%	40%
Fairly satisfied	n/a	48%	46%
Percentage satisfied or very satisfied	**87%**	**86%**	**87%**

Target 24*:* To maintain proportions in the north east who were satisfied or very satisfied with their last bus trip at 80% or more through to 2021.

Source: Transport Focus Bus Passenger Satisfaction Survey in Scotland, 2017

As can be seen from the indicator above, overall satisfaction has remained static in the north east since 2014. The percentage of people that state they are dissatisfied has remained largely unchanged at around 4%.

Reliability and punctuality of buses

Both First and Stagecoach publish data relating to reliability and punctuality.

The table below shows that although reliability (i.e. the number of services operated) remains high for both operators, punctuality (i.e. those running on time) is currently below the target of 95% of buses departing on time set by the Traffic Commissioner[4].

Indicator 25: Reliability and Punctuality				
	Reliability (% of miles operated)		**Punctuality (% buses starting their route on time)**	
	First	**Stagecoach**	**First**	**Stagecoach**
2010	99.5%	99.9%	86%	89%
2016	99.8%	99.7%	95%	84%
2017	97.3%[5]	99.3%	94%	86%
Target 25a: *To secure 99% reliability of bus services run in the north east through to 2021.*				
Target 25b: *To secure 95% punctuality (no more than one minute early or five minutes late) for bus services within the north east through to 2021.*				

Looking at the table above, it should be noted that the technical figures provided by the operators and the perception of passengers are not always in sync. The table below shows that passenger satisfaction rates the punctuality and waiting time of buses as lower than the standards being recorded by the operator. This could be due to reductions in frequency leading to longer waiting times at the bus stop or expectations greater than the Commissioner's standard. However, it should be noted that there was an increase in satisfaction reported by Transport Focus in 2017.

How satisfied were you with the punctuality of the bus that you experienced on your most recent bus trip?

	2014	**2016**	**2017**
Very Satisfied	n/a	37%	38%
Fairly satisfied	n/a	33%	34%
Percentage satisfied or very satisfied	**79%**	**70%**	**72%**

How satisfied were you with the length of time waiting for the bus that you experienced on your most recent bus trip?

	2014	**2016**	**2017**
Very Satisfied	n/a	35%	36%
Fairly satisfied	n/a	36%	37%
Percentage satisfied or very satisfied	**81%**	**71%**	**73%**

Transport Focus Bus Passenger Satisfaction Survey in Scotland, 2017

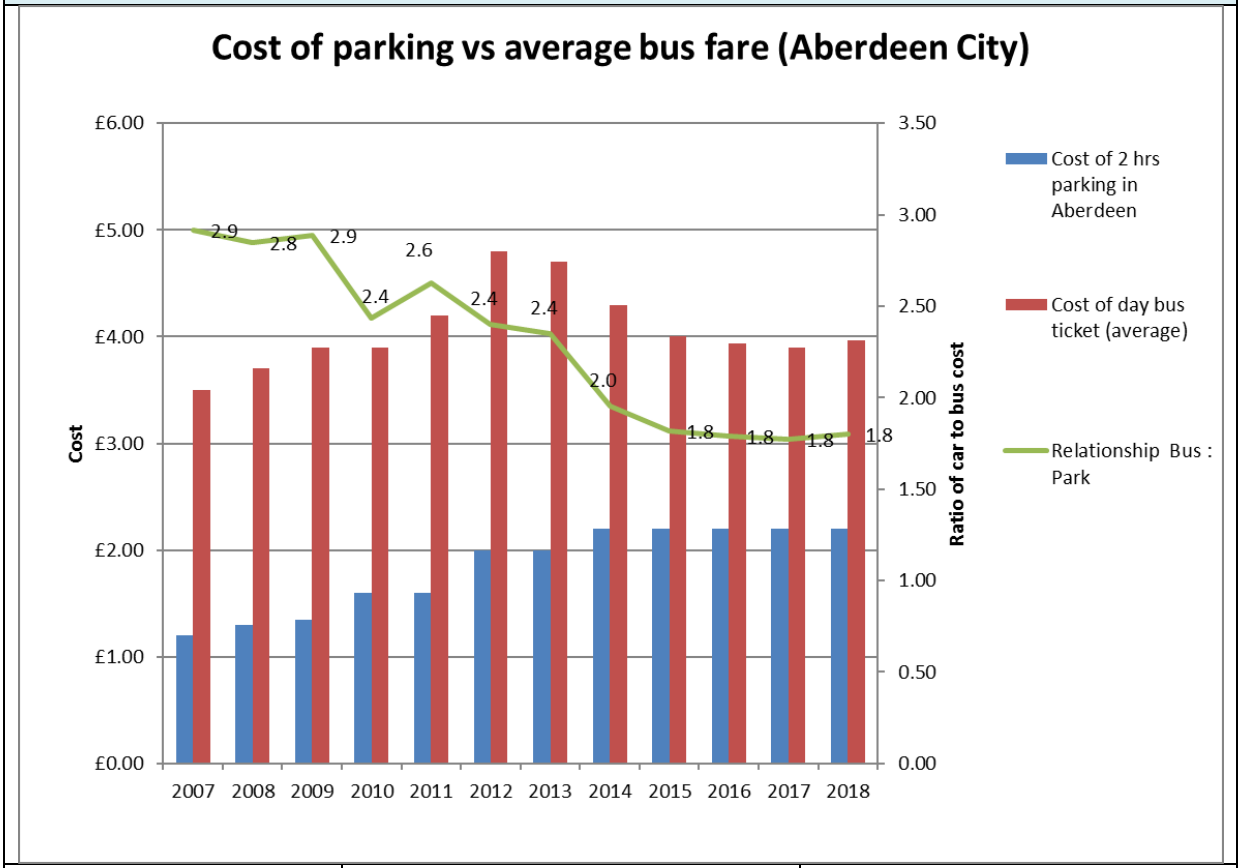
[4] On time is defined by the Traffic Commissioner as being within the window of tolerance of 1 minute early to 5 minutes late.

[5] This may be in part due to drivers strike in early 2018.

Cost of bus services

As a key determinant of mode choice, this report monitors the respective prices of City Centre parking and of average daily bus fares. Indicator 26 shows that whilst daily bus fares have become more competitive, reducing by 17% since 2012, car parking charges have been static. Although the relative cost of bus:parking reduced between 2007 and 2015, a ratio of 1.8 remains.

Indicator 26: To monitor the price of car parking in Aberdeen City Centre relative to bus fares, by comparing a ratio of 2hrs off-street parking in a Council multi-storey car park: cost of peak daily ticket on city buses.



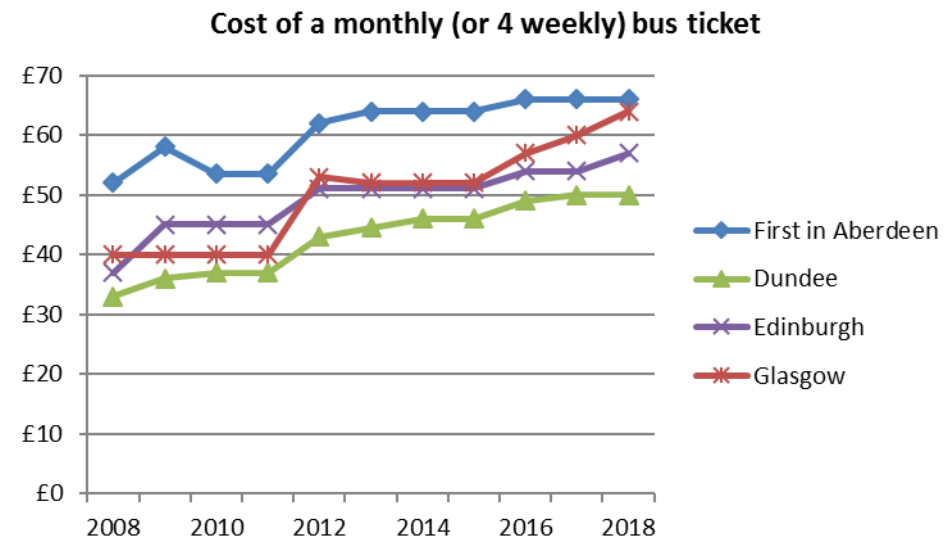
% change in cost on 2007 base	Cost of 2 hrs parking: +83%	Cost of bus day ticket: +13%

Target 26: *To reduce the differential between the cost of parking and bus travel to a factor of no more than 1.5 by 2021.*

Source: Aberdeen City Council, Stagecoach, First Aberdeen & Grasshopper

Monthly bus season tickets are also compared to Scotland's other main cities. Whilst Aberdeen remains the most expensive, at £66 for a monthly ticket the gap between the cities has narrowed with the Aberdeen ticket reducing in real terms.

Indicator 27: To compare cost of monthly (or four weekly) bus ticket in Aberdeen with other Scottish cities.



% change on 2008 baseline	Aberdeen (First): +27%	Dundee: +52%	Edinburgh: +54%	Glasgow: +60%

Source: First Aberdeen, Stagecoach, Travel Dundee, Lothian Buses and First Glasgow

Park and Ride

The north east has three well established bus-based Park & Ride sites, at Bridge of Don and Kingswells in Aberdeen City and at Ellon in Aberdeenshire and a further site opened to the public in June 2017 at Craibstone Park and Ride at Dyce Drive on the A96. The RTS proposes further Park & Ride sites, with a site at Portlethen on the A90(S) having secured planning permission in principle. Aberdeenshire Council are also progressing the development of mini park & ride hubs on the A947 corridor.

Nestrans conducts surveys at park and ride sites to better understand the occupancy of the car parks in order to supplement the information provided regarding overall patronage.

Although the indicator is currently shown as going in the wrong direction due to the decline at the main park and ride sites, it is intended to review this once a clearer picture of how patronage is changing between the usage of the park and ride sites in addition to bus patronage figures is established.

Indicator 28: The number of passengers on park and ride bus services

Park and Ride Car Park Usage

Number of spaces in use (typical day)

	Capacity	2015	2016	2017	Change 2015-17
Bridge of Don	532	182	123	146	-19.8%
Ellon	300	169	172	182	7.7%
Kingswells	915	118	103	213	80.5%
Craibstone	1,000	n/a	n/a	14	n/a
Total	2,747	469	398	555	18.3%

Park and Ride Figures Summary (annual patronage)

	2015	2016	2017	% Change from 2015
North East	316,268	271,565	259,120	-18%
Figures based on all P&R in area from patronage figures supplied by operators.				

Target 28a: To increase the number of park and ride sites to five by 2021.

Target 28b: To double patronage on Park & Ride services by 2021.

Source: Aberdeenshire Council, Aberdeen City Council, Nestrans

Integrated ticketing

Indicator 29: The ability to transfer from one transport company to another with minimum hassle and using a single ticket	
2014/15	A multi-operator ticket 'The Grasshopper', was launched on 8th May 2014 and enables passengers to purchase one ticket for travel on First and Stagecoach services within zones 1-3 and a number of smaller operators in Aberdeenshire.
2015/16	The Grasshopper ticket was extended to a region-wide scheme in 2015, across six fare bands. It is an operator led scheme incorporating 9 local bus operators.
2016/17	The regional fares and ticketing strategy was refreshed in 2016. This includes a number of actions relating to the development of integrated and smart ticketing. In August 2016, the Grasshopper scheme was relaunched as Scotland's first multi-operator bus smartcard.
Target 29: To implement an integrated ticketing scheme including multi operators within the north east by 2017.	

Source: http://grasshopperpass.com/

11. Cycling and Walking

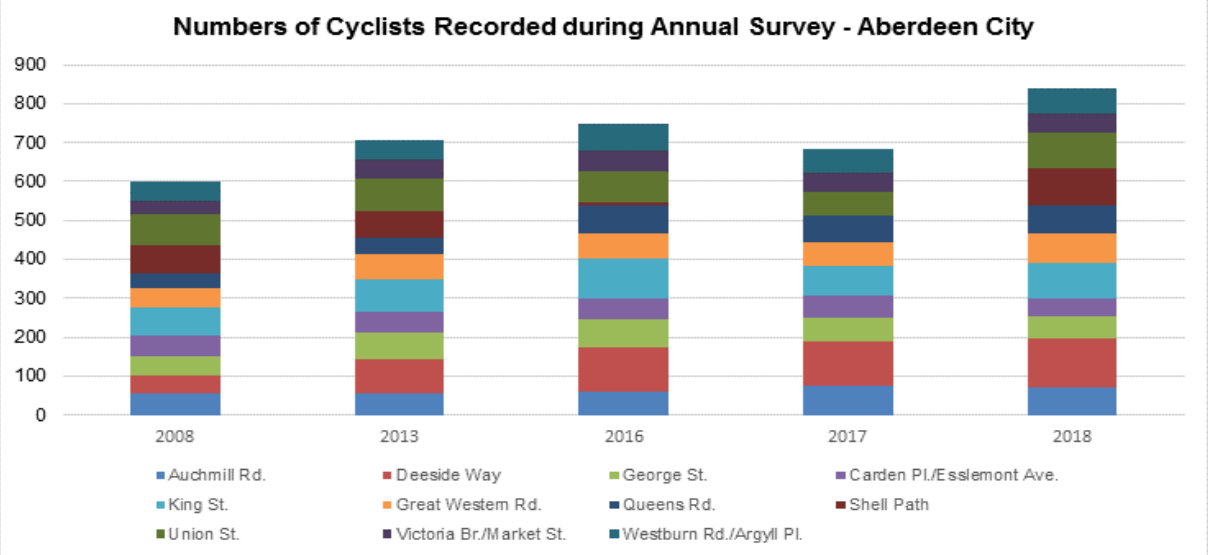
Cycling

In 2008, Aberdeen Cycle Forum first carried out a cycle count survey at 11 points across the city, on key routes and at strategically important junctions, during the morning peak on a weekday morning between 0700 and 0900 hours (the count ran from 0730 to 0900 hours in 2008). The count has continued annually (in May) and, in 2016, the number of locations surveyed was increased to 16.

The 2018 count showed, in line with other nationwide surveys and research papers, that the number of female cyclists (17%) continues to be markedly under-represented.

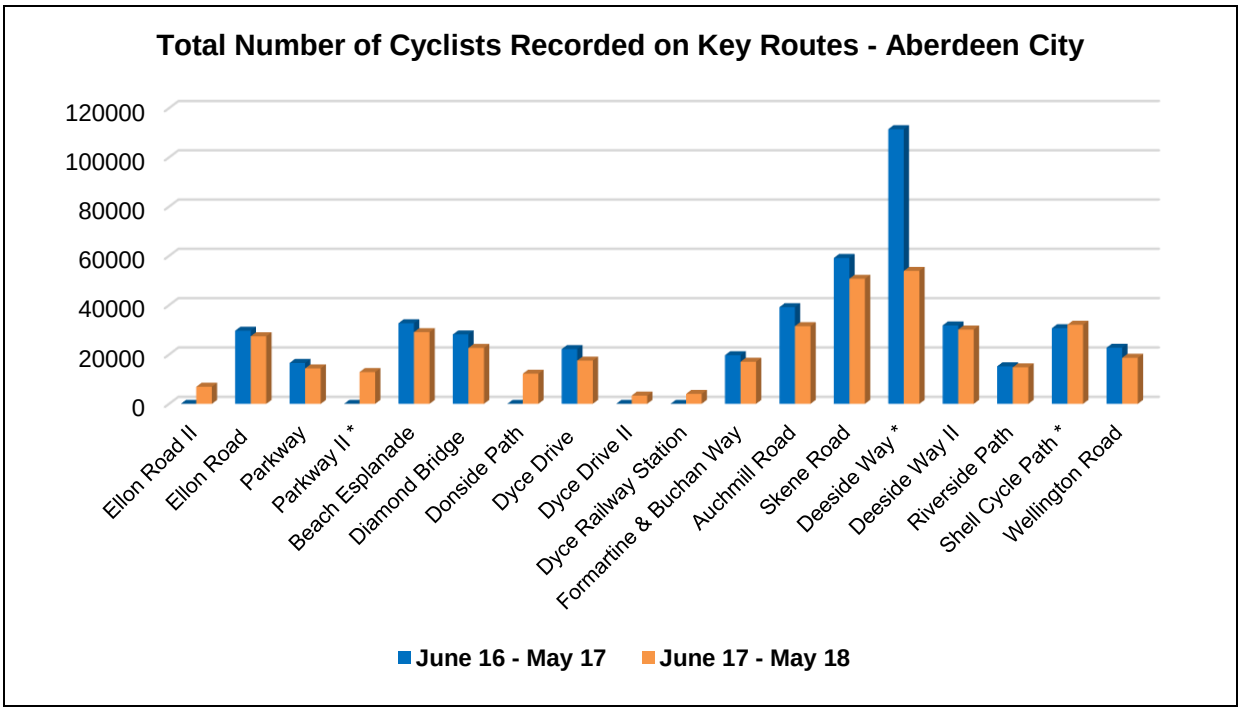
Since 2008, while admittedly only a very brief behavioural snapshot, there has been an over 40% increase in the number of cyclists recorded during these counts.

Indicator 30: Total Number of Cyclists Recorded on Key Routes – Aberdeen City



Target 30: to at least double the number of cyclists recorded on key routes in Aberdeen City between 2008 and 2021

Both Aberdeen City and Aberdeenshire Councils have installed a comprehensive network of automated cycle counters throughout their respective areas. It is hoped that these will provide a reliable evidence-base, from which to measure and monitor behaviour change and analyse modal shift over coming years.

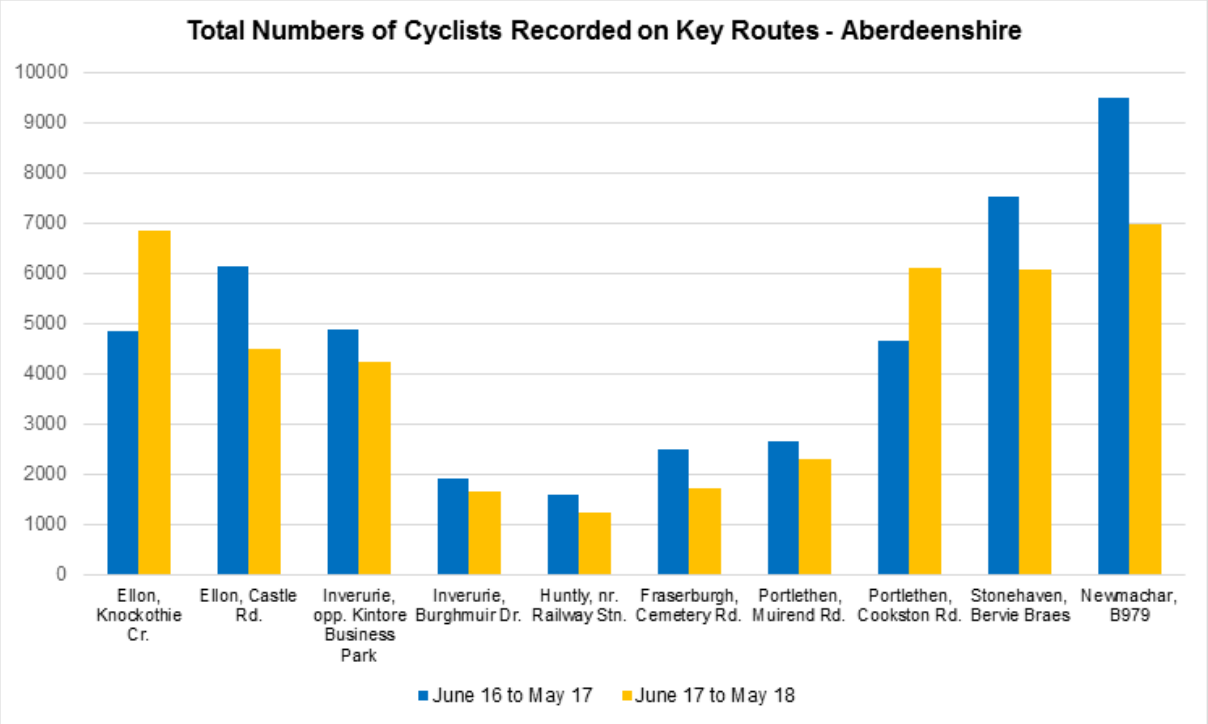


As the Aberdeen City counters are still in their first few years, any downtime for the counters has the potential to skew results. In the graph above, the starred locations denote counters that were only able to provide partial count data for the year 2017/18. This may, in part, account for some locations where cycling has seen a decrease over the last year. More data through continued monitoring will be required to establish a reliable trend.

In recent years, there has been significant investment and improvements to cycling infrastructure across the City, not least the upgrading of the Deeside Way, the introduction of the Shell and Riverside Paths, newly constructed shared paths around Aberdeen Airport and, with the opening of the Diamond Bridge in June 2016, the creation of a network of fully segregated shared paths in Bridge of Don and Tillydrone.

Aberdeenshire continues to benefit from the delivery and development of a wide range of infrastructure improvements aimed at supporting and promoting walking and cycling. Following the success of Aberdeenshire Council's 'Cycle Demonstration Town' project in Peterhead, further work is taking place in the communities of Huntly, Inverurie, Fraserburgh, Portlethen and Ellon to help each support more sustainable and active travel over the coming months and years. Progress is also being made on achieving the long-term goal of linking some of the larger towns and smaller communities in the Shire with the City suburbs by a network of segregated paths.

Indicator 31: Total Number of Cyclists Recorded on Key Routes – Aberdeenshire



Target 31: to at least double the number of cyclists recorded on key routes in Aberdeenshire between 2016/17 and 2021

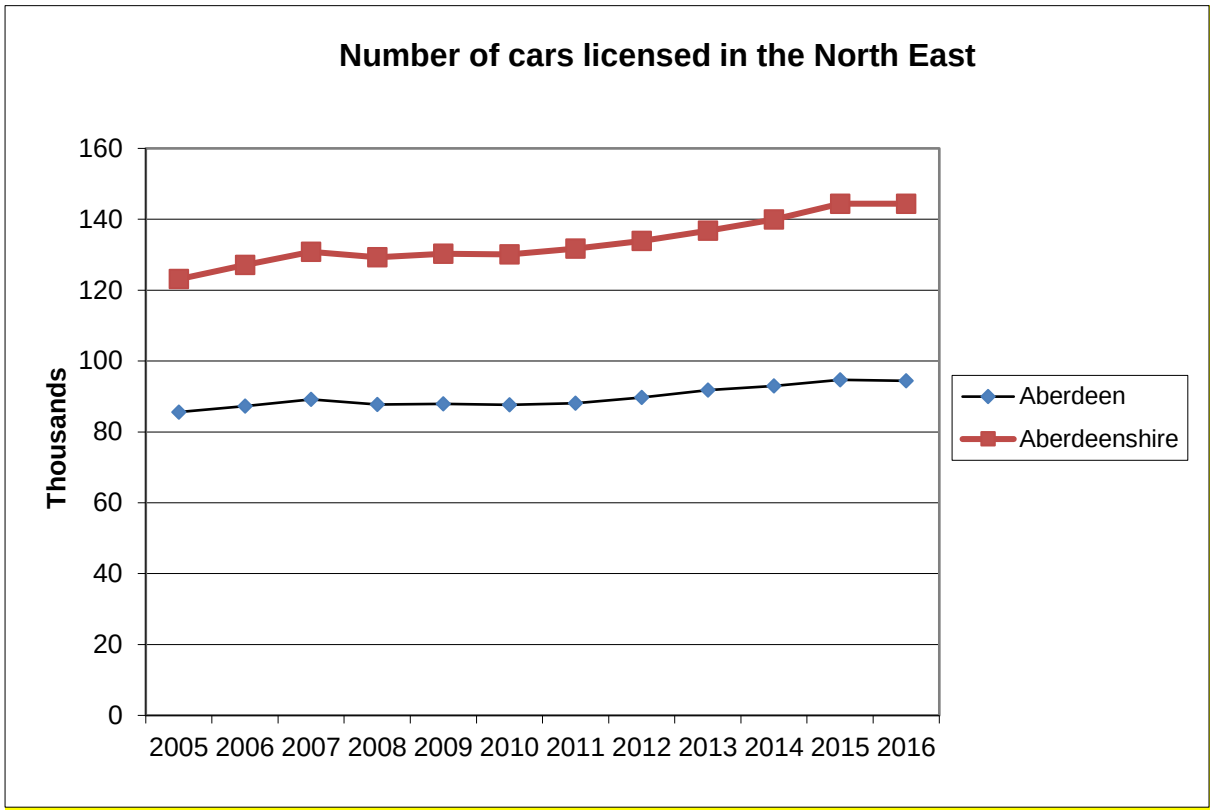
The graph above shows a selected number of count sites across Aberdeenshire, representing a number of key locations. These provide a snapshot of cycling activity at these sites, although a number of other sites are also being monitored. Similar to the Aberdeen City counts, the majority of the Aberdeenshire counts have been recently installed, with the number of available counters more than doubling since 2015. Due to this, more data will be required through continued monitoring in order to establish a reliable trend.

12. Mode split and Personal Travel

Car Ownership

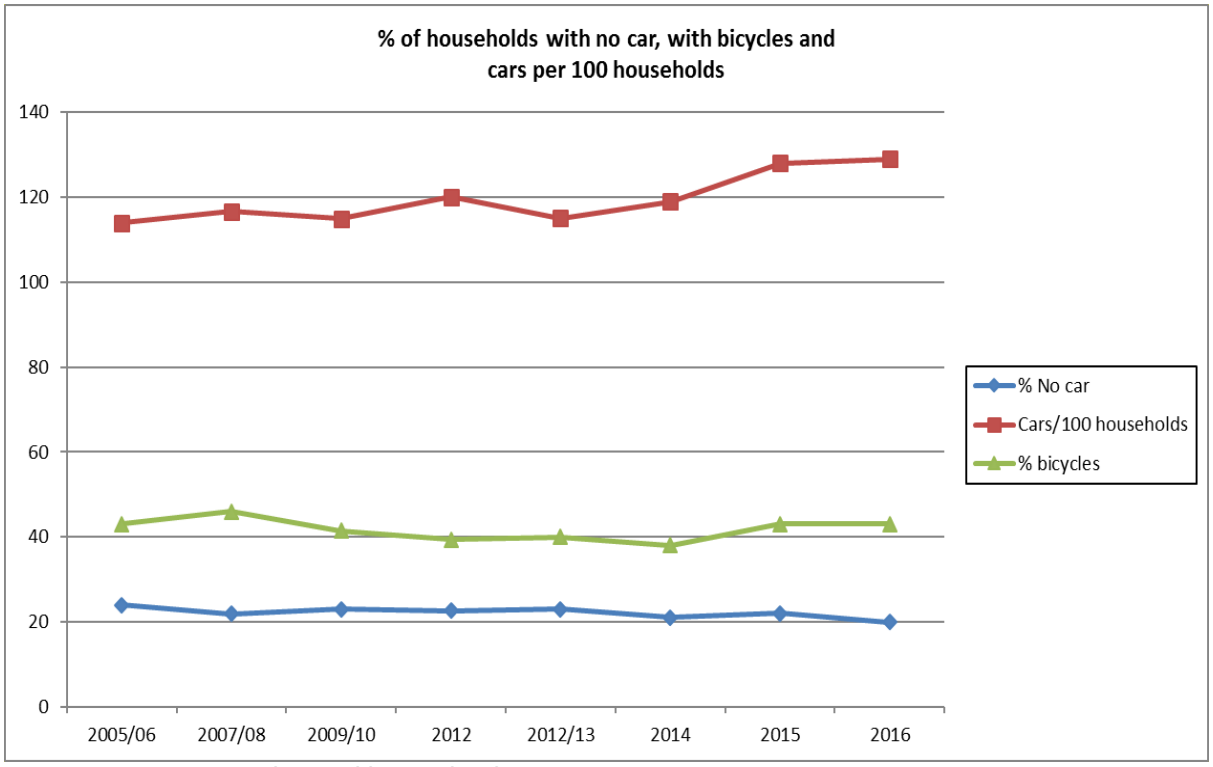
With almost 239,000 cars, the north east has more cars and vans than households, yet 20% of households do not have access to a vehicle.

There were 94,400 cars registered in Aberdeen and 144,400 registered in Aberdeenshire at end December 2016 (Source: Scottish Transport Statistics). Over the entire North East, this represents a total increase of 14% on 2005.



Source: Scottish Transport Statistics, 2017

Car ownership is high in the north east, with 80% of households having access to a car. Aberdeenshire has the highest rate of car ownership in Scotland, with around 91% of households having access to at least one vehicle. Car ownership in Aberdeen City has increased from 65% of households in 2005/06 to around 69% in 2016 (although this is slightly down from 71% in 2015 as a result of an increasing number of households). Despite this, some 32% of households in the City (up from 30% in 2015) and 9% of households in Aberdeenshire (down from 13% in 2015) do not have access to a car or van. Over the last 5 years the proportion of households without access to a car in Aberdeen City has remained relatively static at around 27-32%. In Aberdeenshire however, there has been a gradual decrease in the proportion of households without access to a car, from 17% in 2012 down to 9% in 2016. (Source: Transport and Travel in Scotland, 2016).



Source: Transport and Travel in Scotland, 2016

Indicator 32: The proportion of households in the north east without access to a car or van.			
	Aberdeen	**Aberdeenshire**	**North East**
2005/06	34%	14%	24%
2012	29%	17%	23%
2014	27%	15%	21%
2015	30%	13%	22%
2016	32%	9%	20%

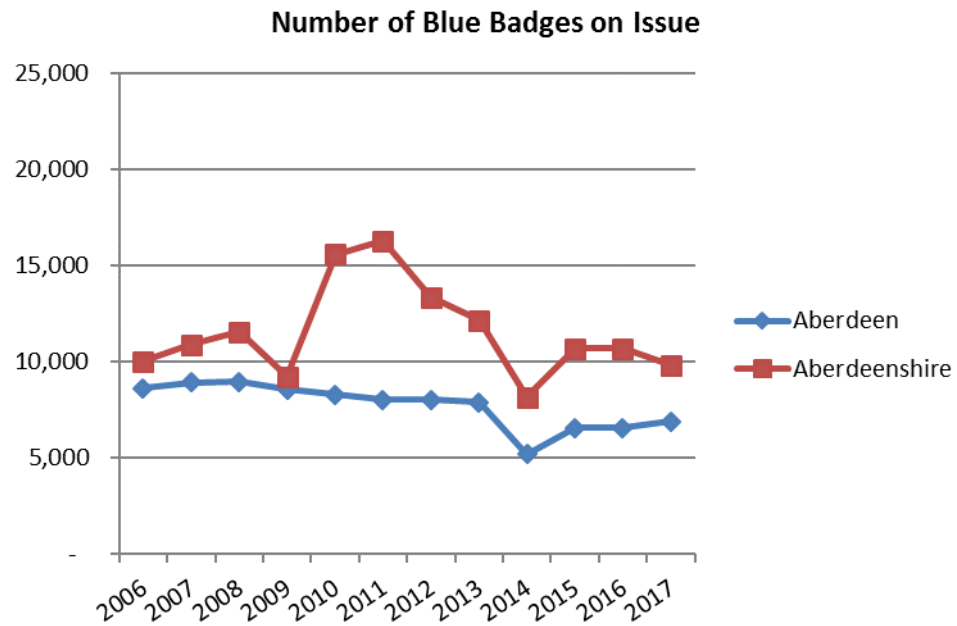
Source: Transport and Travel in Scotland, 2016

Drivers with a Disability

There were 16,746 Blue Badge holders in the north east at the end of March 2017. This represents 6% of cars registered in the region. After a number of years of increases in the number of Blue Badge holders across the north east, there have been reductions in both Aberdeen City and Aberdeenshire since 2011 – a 31% reduction in six years.

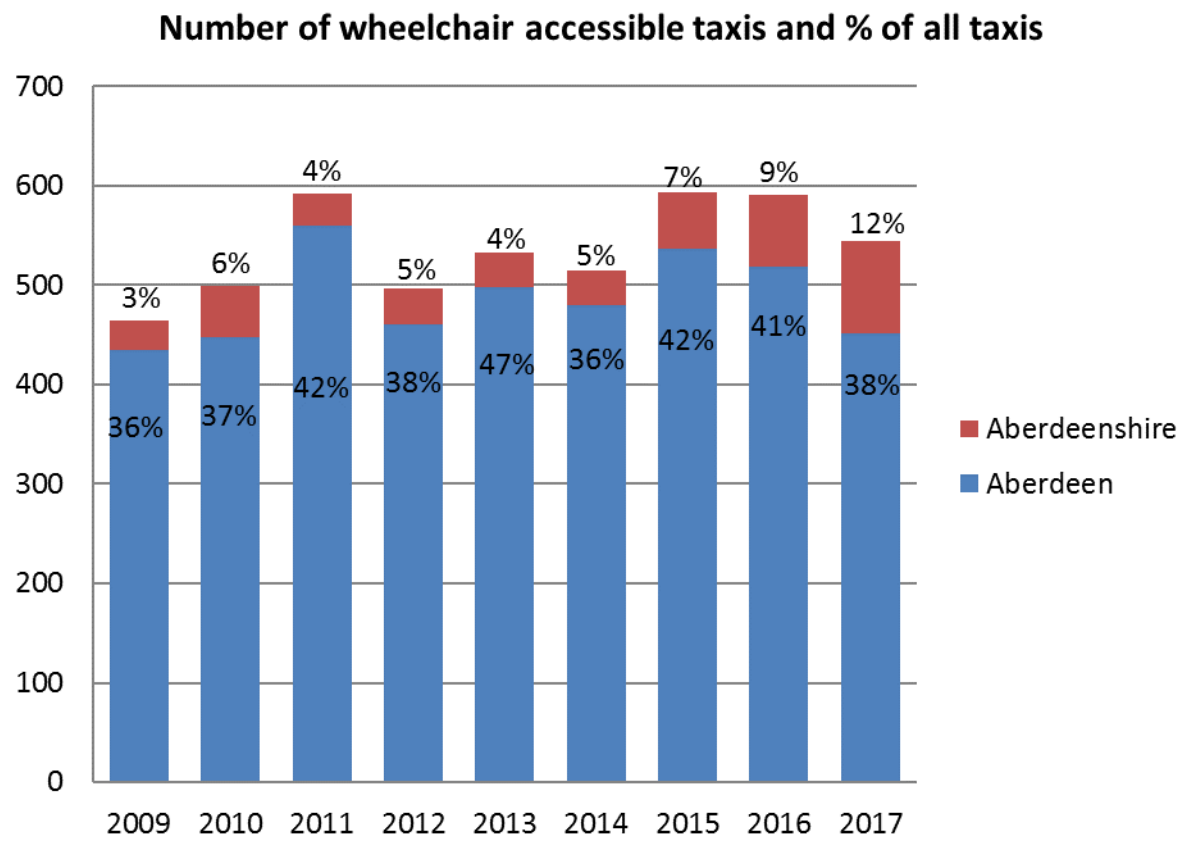
Indicator 33: The number of blue badge holders (and proportion relative to cars registered) in the north east.

	Aberdeen		Aberdeenshire		North East	
	Blue badges	% of all cars	Blue badges	% of all cars	Blue badges	% of all cars
March 2006	8,645	10%	10,024	8%	18,669	9%
March 2011	8,044	8%	16,288	12%	24,332	11%
March 2016	6,643	6%	10,210	5%	16,853	6%
March 2017	6.908	6%	9,838	5%	16,746	6%



Source: Scottish Transport Statistics, 2017

Indicator 34: The proportion of taxis which are capable of carrying wheelchairs



Target 34*:* To increase the proportion of wheelchair accessible taxis across the north east from 39% in 2009 to at least 50% by 2021

Source: Scottish Transport Statistics 2017

In 2012 Aberdeen City Council announced a cap in the number of taxi licences and committed to a 100% wheelchair accessible fleet by 2017. In May 2016 this deadline was extended to 6 June 2018. As can be seen from the graph, the proportion of wheelchair accessible taxis in the city is currently 38%, having seen a reduction in the last 12 months. On 15th January 2018 Aberdeen City Council launched a consultation on the current Wheelchair Accessible Vehicle policy in order to assess whether a mixed taxi fleet of both accessible and saloon vehicles would be the best option for Aberdeen City. This consultation closed on 28th February 2018 with Aberdeen City Council still to determine future policy.

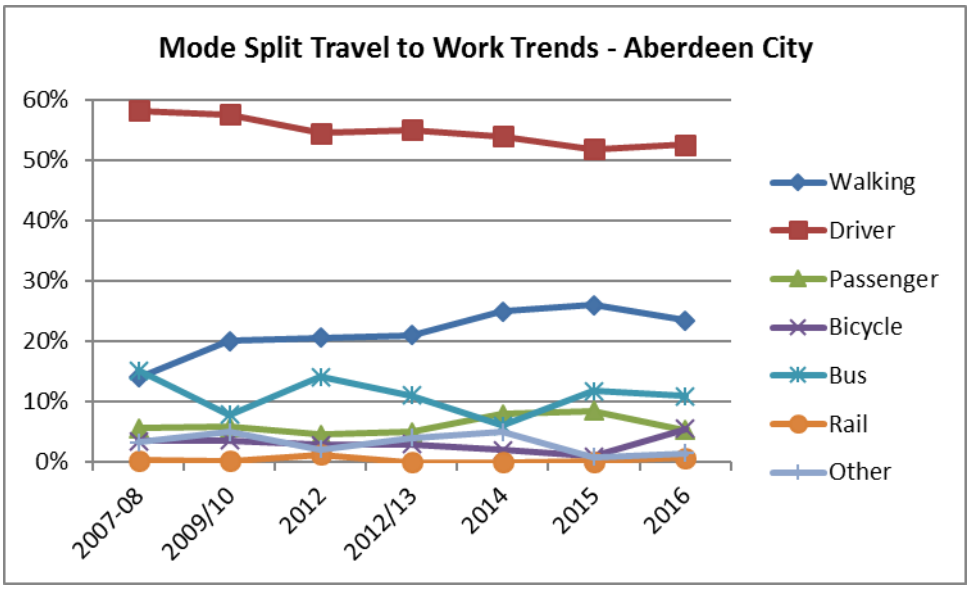
Travel to work

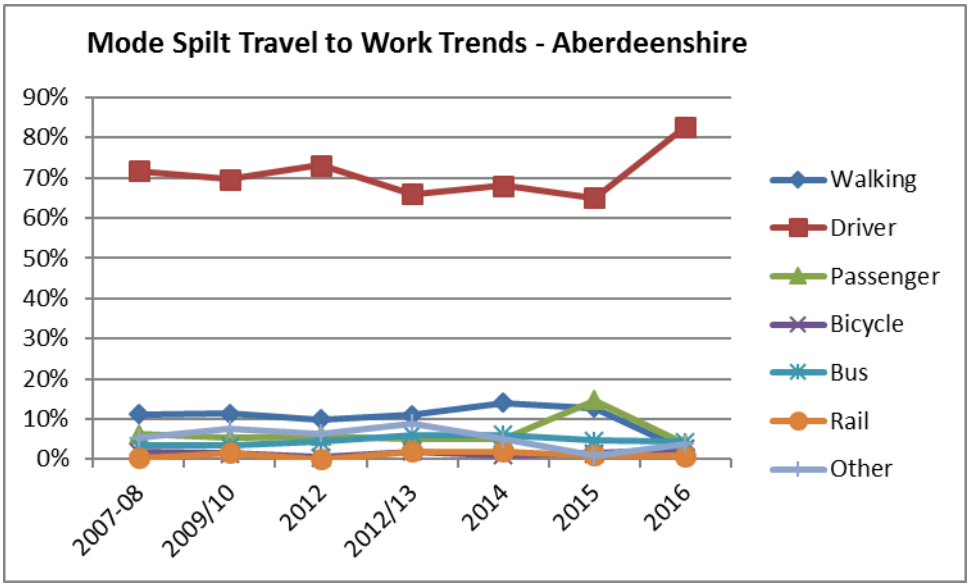
Over half drive to work, but the proportion has been historically reducing.

Across the north east in 2016, some 68% of employed adults not working from home, drove to work and another 5% travelled as passengers in cars or vans. This compares to 65% and 6% respectively in 2007/08. In Aberdeen City, 53% of residents drive to work, compared to 83% in Aberdeenshire (62% is the average for Scotland as a whole).

It should be noted that this survey used small sample sizes, of between 100 and 200 respondents. As such, small changes are liable to make a large impact year on year. Although Aberdeenshire has shown a marked decrease in the number of people travelling to work using a mode other than car driver, comparison will need to be made with future years to determine whether this is a change in trend or an anomaly in recent trends.

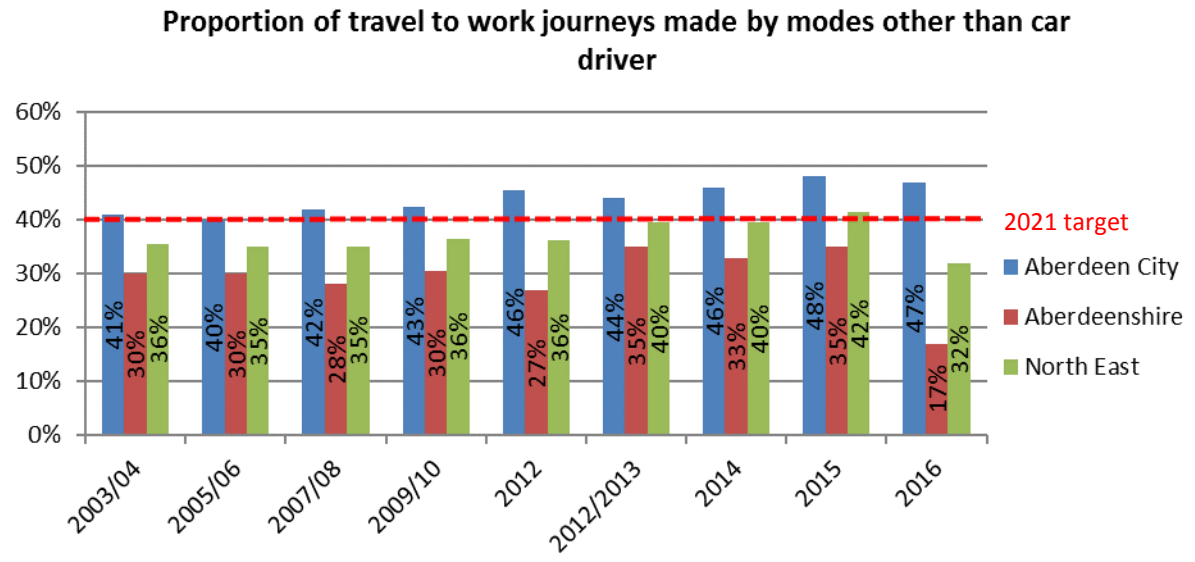
Walking to work in Aberdeen City continues to stay above the average for Scotland as a whole, and cycling increased for the first time since 2012, rising to the highest figure to-date for both Aberdeen City and Aberdeenshire and well above the average for Scotland as a whole. In addition to this, bus use in Aberdeen City has also stayed well above the average for Scotland as a whole, at 11%.





Source: Scottish Household Survey Travel Diary Results/Transport and Travel in Scotland

Indicator 35: The proportion of travel to work journeys by modes other than car driver.



% points change on 2003/04 baseline	Aberdeen City: +6 %points	Aberdeenshire: -13 %points	North East: +4%points

Target 35: To increase the proportion of travel to work journeys by modes other than car driver to 40% across the north east by 2021.

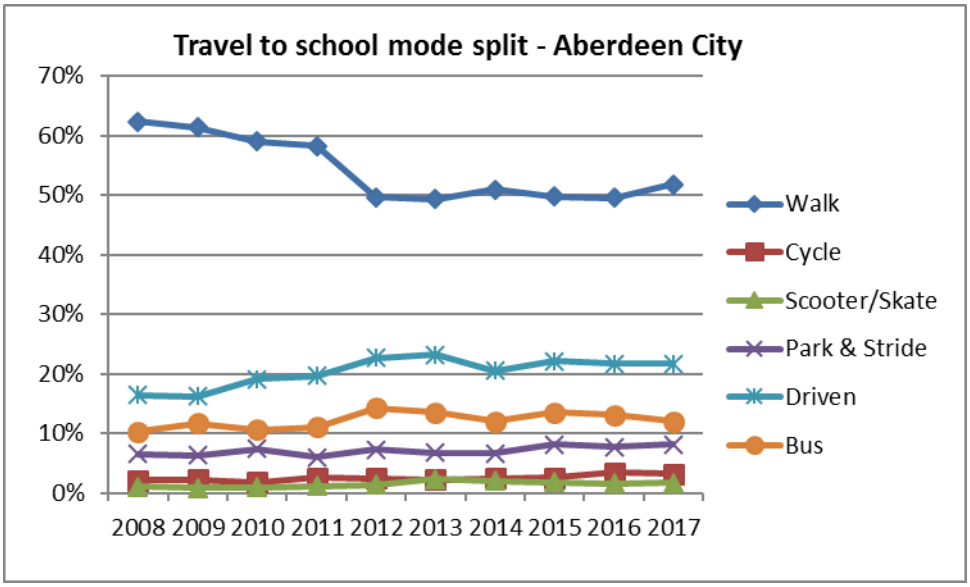
Source: Scottish Household Survey Travel Diary Results/Transport and Travel in Scotland

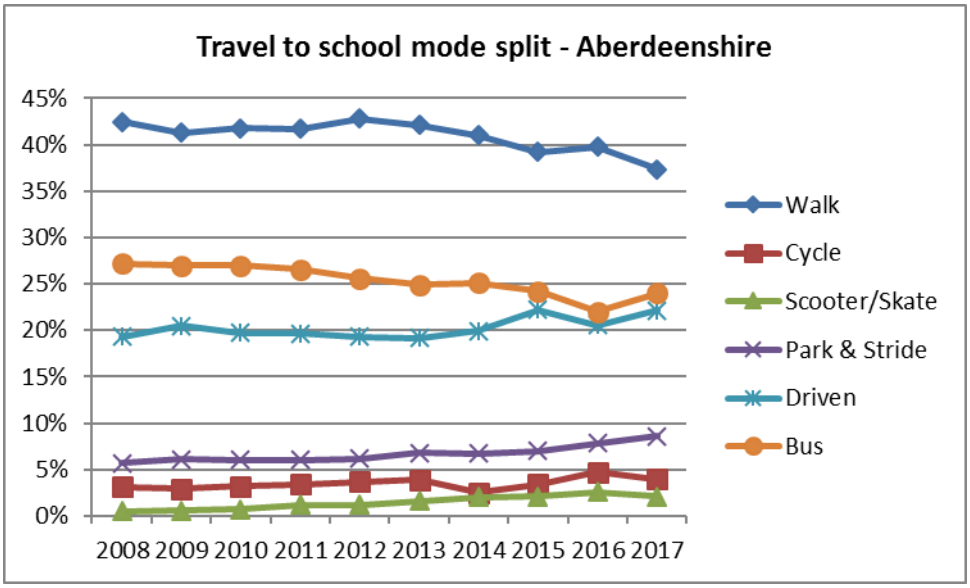
In 2016, whilst Aberdeen City continues to be above target, reductions in walking and increases in driving in both Aberdeen City and Aberdeenshire have reduced the overall result. As noted above, future years will help to determine whether this is a one-off change in the trend, or whether other factors have influenced mode choice.

Travel to School

Around half of north east children travel actively to school

Across the north east in 2017, 45% of pupils in full-time education at school usually walked to school, 4% cycled, 18% took a school bus or other bus service, with 22% being driven.





Source: Sustrans Hands Up Survey

Indicator 36: The proportion of children travelling actively to school (walking or cycling).									
	Walking			**Cycling**			**Scooter/Skate**		
	City	**Shire**	**NE**	**City**	**Shire**	**NE**	**City**	**Shire**	**NE**
2003/04 Baseline	59%	48%	**52%**	0%	1%	**1%**	1%	2%	**2%**
2008	62%	43%	**53%**	2%	3%	**3%**	1%	1%	**1%**
2013	49%	42%	**46%**	2%	4%	**3%**	2%	2%	**2%**
2016	50%	40%	**45%**	3%	5%	**4%**	2%	3%	**2%**
2017	52%	37%	**45%**	3%	4%	**4%**	2%	2%	**2%**
% point change since 2003/04 baseline	-7% points	-11% points	-7% points	+3% points	+3% points	+3% points	+1% point	=	=
Target 36: *To increase the proportion of children walking and cycling to school to at least 60% by 2021.*									

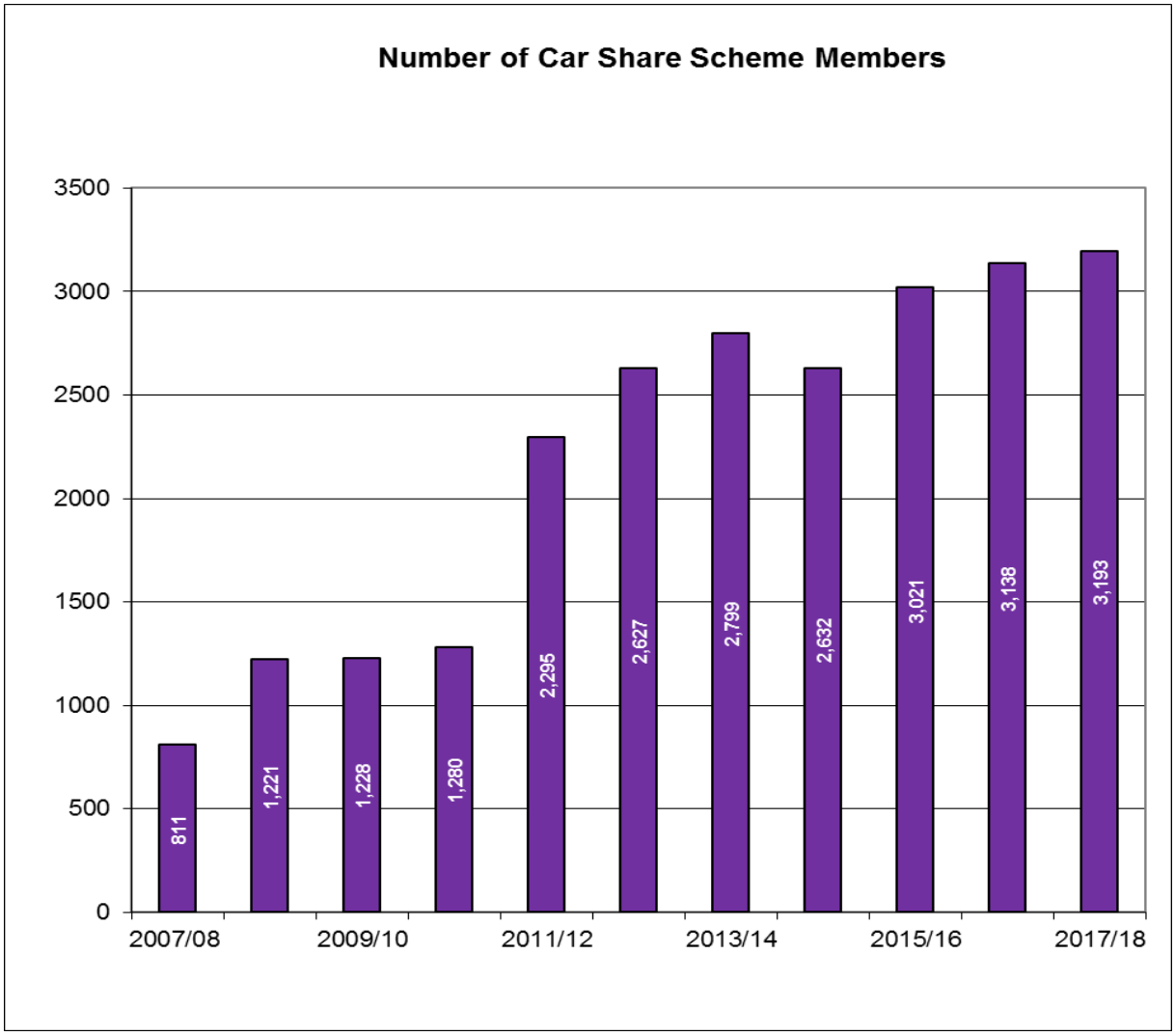
Source: Sustrans Hands Up Surveys

Car Share

Nestrans supports a carshare database www.getabout.liftshare.com, which has a number of umbrella organisations using their own accounts within the scheme. Recognising that car use can be a necessity for many users, Nestrans supports the principle of encouraging sharing where possible.

Indicator 37: Number of participants in Getabout carshare scheme.		
	Total members	**New members in last year**
2007/08	811	284
2012/13	2,627	348
2016/17	3,138	117
2017/18	3,193	338
% change on 2007/08 baseline	+294%	+19%
Target 37: To increase participation in the Getabout car share scheme by an average of 15% each year from 2007/08 to at least 5,000 members by 2021.		

Source: Getabout Liftshare



Source: *Getabout Liftshare*

Indicator 38: Number of car club members							
	Number of cars in the fleet	**Number of electric or alternatively fuelled vehicles in fleet**	**Number of hybrid vehicles in fleet**	**Wheelchair accessible vehicles**	**Number of members (organisations & individuals)**	**Number of drivers registered**	**% utilisation of the vehicles**
2012/13	12	0	n/a	0	104	395	20%
2013/14	26	9	n/a	1	222	642	20%
2015/16	40	21	5	2	561	1,277	23%
2016/17	44 (plus 3 vans)	27	5	2	677	1,524	16%
2017/18	40 (plus 3 vans)	28	5	1	887	1,800	18%
Target 38: To increase the number of drivers registered in north east car clubs by an average of 20% each year from 2012/13 to over 2,000 by 2021.							

Source: Co-Wheels Car Club

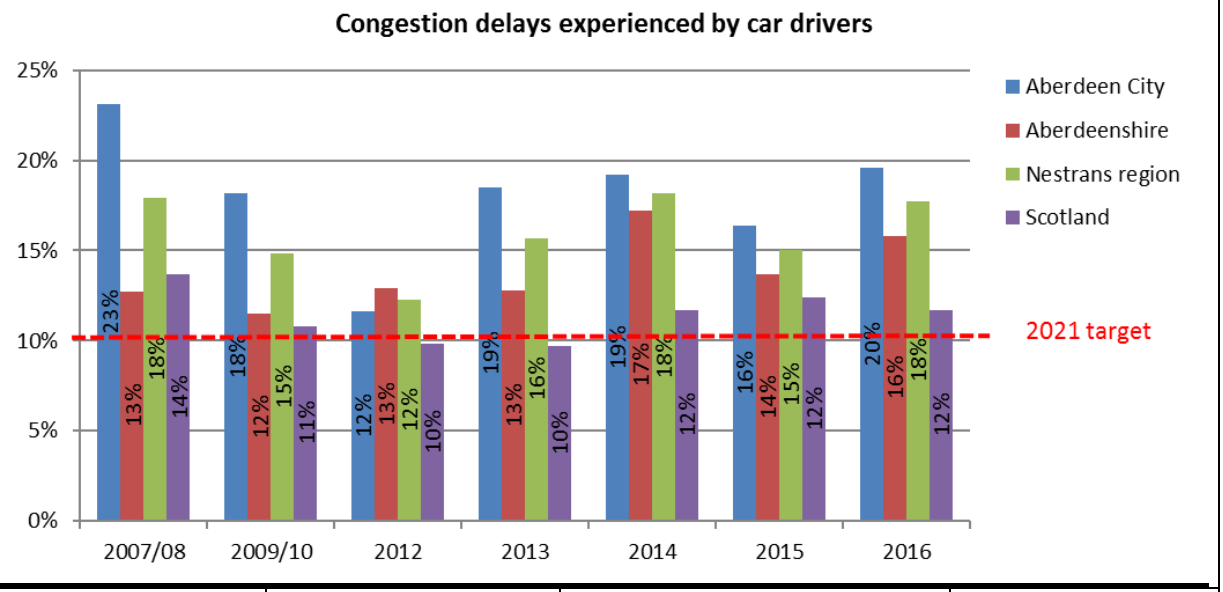
The number of cars in the Aberdeen car club scheme has decreased slightly in the last year and the fleet of 40 cars includes 20 electric vehicles, 5 hydrogen vehicles, 5 hybrid vehicles and 1 vehicle capable of carrying a wheelchair. 3 electric vans are included in the fleet, bringing the total count of electric, hybrid and hydrogen-fuelled vehicles to 33. The number of members has continued to increase, as has the utilisation of vehicles.

A car club scheme was also launched in Huntly in September 2015 and currently has three vehicles in its fleet (a petrol car, a hybrid car and an electric van). The scheme currently has 19 members and 19 designated drivers.

13. Journey times and Congestion

Congestion is a key issue in determining the reliability of journey times and an important indicator of the efficiency of the road network, particularly within the north east.

Congestion



% points change on 2007/08 baseline	Aberdeen City: -3 %points	Aberdeenshire: +3 %points	North East: No overall change

Source: Transport and Travel in Scotland: Local Area Analysis

Indicator 39: The percentage of driver journeys delayed due to congestion			
	Aberdeen City	**Aberdeenshire**	**North East**
2007/08	23%	13%	18%
2009/10	18%	12%	15%
2012	12%	13%	12%
2013	19%	13%	16%
2014	19%	17%	18%
2015	16%	14%	15%
2016	20%	16%	18%
Target 39: *to reduce the proportion of journeys delayed due to congestion in the north east to less than 10% by 2021*			

Journey Times

A key determinant of transport choice is the relative journey time, compared to using a private car. In particular, some journeys require a change of public transport and connections are not always convenient.

There is a need therefore to monitor and maintain records of average journey times by various modes. To do this, twelve key links have been established and annual data gathering undertaken to monitor the journey times, particularly at peak times. The same 12 sample journeys are monitored on an annual basis and assessment made of relative car and public transport journey times. The public transport times allow for a starting time when a service is available (between 8am and 09:30am), but include changes and any connections to be made. Monitoring over time will show changes in journey times which may be influenced by interventions such as better connections or improved journey times, particularly where bus priorities are available or new routes and connections created.

The journeys are planned using journey planning websites to gauge estimated journey times by different modes, although it is difficult to get realistic estimates taking account of possible delays.

Indicator 40 provides an indication of car and public transport journey times aggregated for the 12 sample journeys (detailed below). Between 2012 and 2017, public transport journey times have increased and speeds now average 17 mph, the lowest to date. This was particularly due to some journeys having long connection times. The comparable journey times by car have been reducing and average speeds are estimated at 34 mph – 50% quicker than public transport for equivalent journeys.

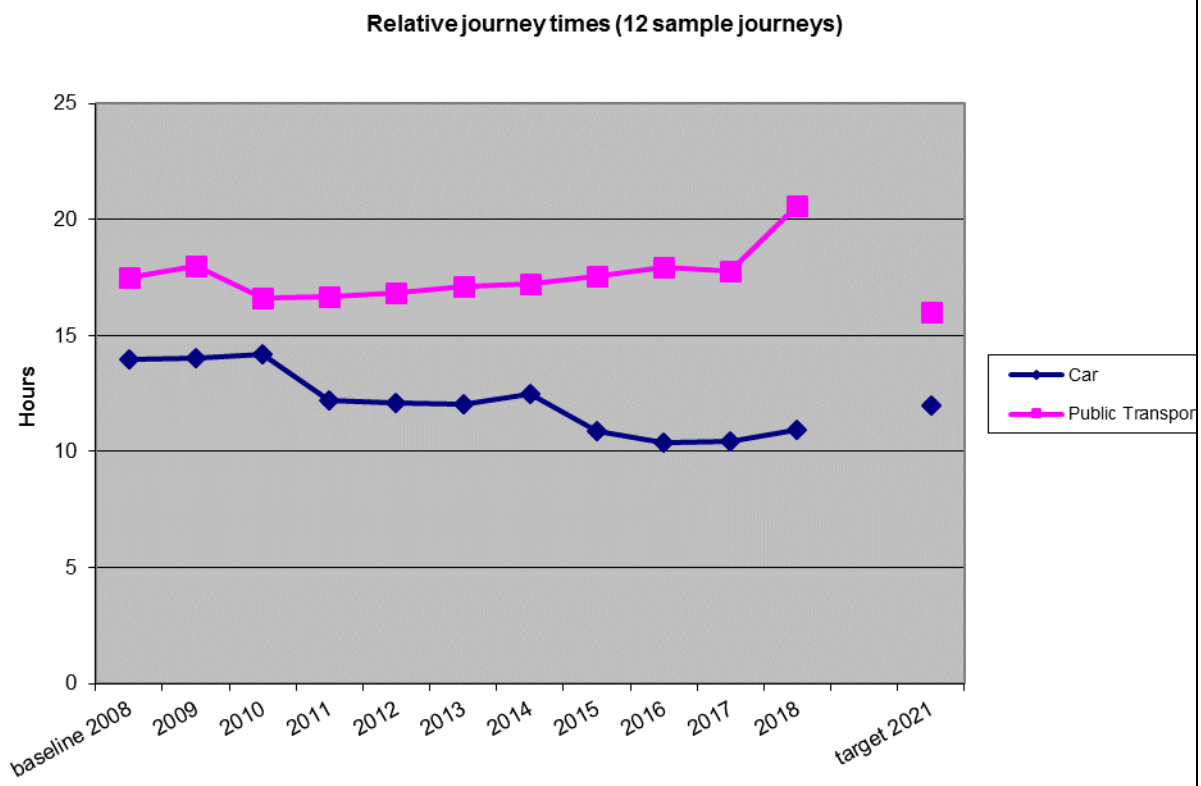
Estimated Journey Times		May 2018	
	Miles	Car	Public Transport*
Fraserburgh to St Cyrus	74	1hour 52min	3hours 24m
Peterhead to Banchory	52	1hour 24min	2hours 46m
Banff to Foresterhill	45	1hour 09min	1hour 42min
Turriff to RGU	36	59 minutes	2hours
Bridge of Don to Dyce	6	21 minutes	41 minutes
Stonehaven to Airport	21	47 minutes	1hour 23min
Braemar to Woodhill House	55	1hour 24min	2hours 52m
Huntly to Union Street	39	1hour 06min	1hour 33min
Seaton to Altens	5	20 minutes	50 minutes
Portlethen to Kirkhill	14	39 minutes	1hour 20min
Tillydrone to East Tullos	5	19 minutes	44 minutes
Cults to Balmedie	15	36 minutes	1hour 19min
TOTAL DISTANCE	367		
Total journey time		10hours 56m	20hours 34m
Average journey speed		34 mph	17 mph

*shortest journey time starting between 0800 and 0959, weekday[6]
Source: www.Google.co.uk/maps and www.travelinescotland.com

[6] The journey times in this chart should be treated with caution. The journey planning website transportdirect was previously used, but has been replaced by Travelinescotland info.

Indicator 40: To monitor average journey speeds by car and public transport for 12 typical journeys across the north east (total distance 367 miles).

	Total journey time across 12 journeys		Average journey speed across 12 journeys	
	Car	**Public Transport**	**Car**	**Public Transport**
April 2008	13hrs 59	17hrs 31	27 mph	21 mph
April 2012	12hrs 05	16hrs 49	30 mph	23 mph
March 2017	10hrs 25	17hrs 48	35 mph	21 mph
May 2018	10hrs 56	20hrs 34	34 mph	17 mph



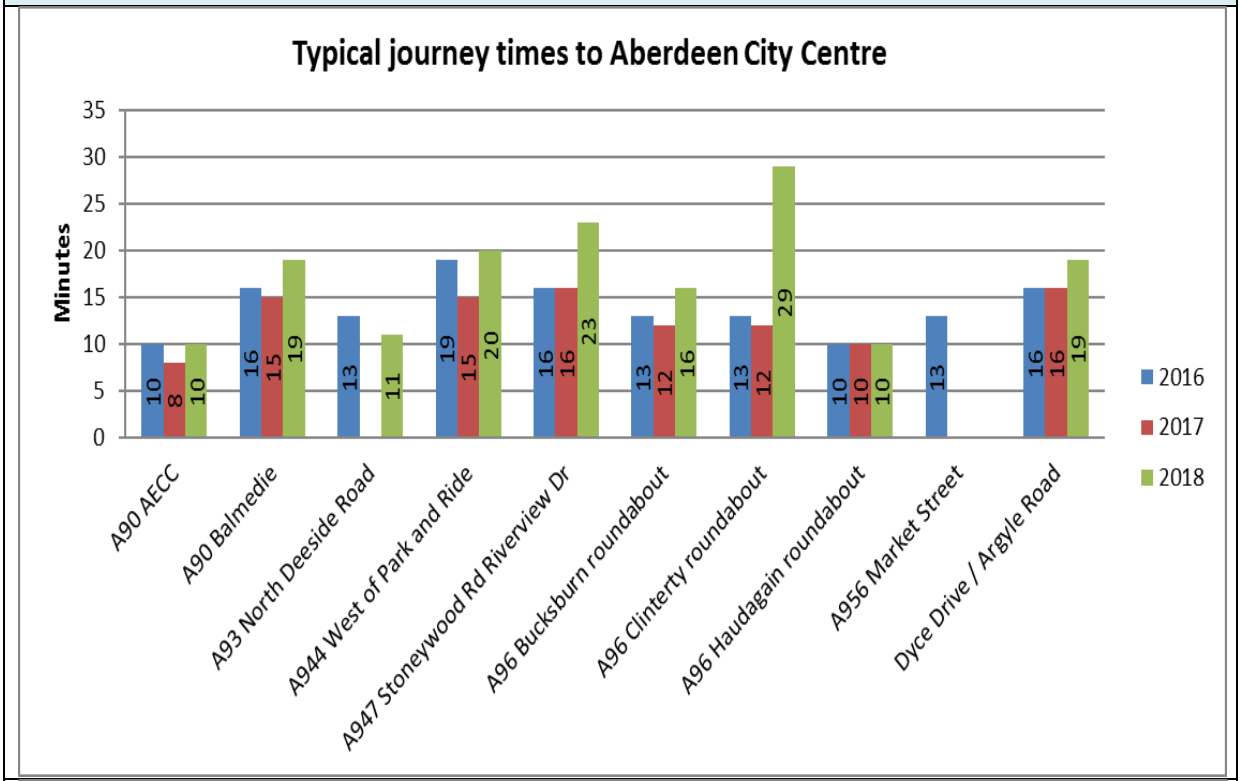
Target 40a: *to reduce journey times between key locations within the north east between 2008 and 2021*

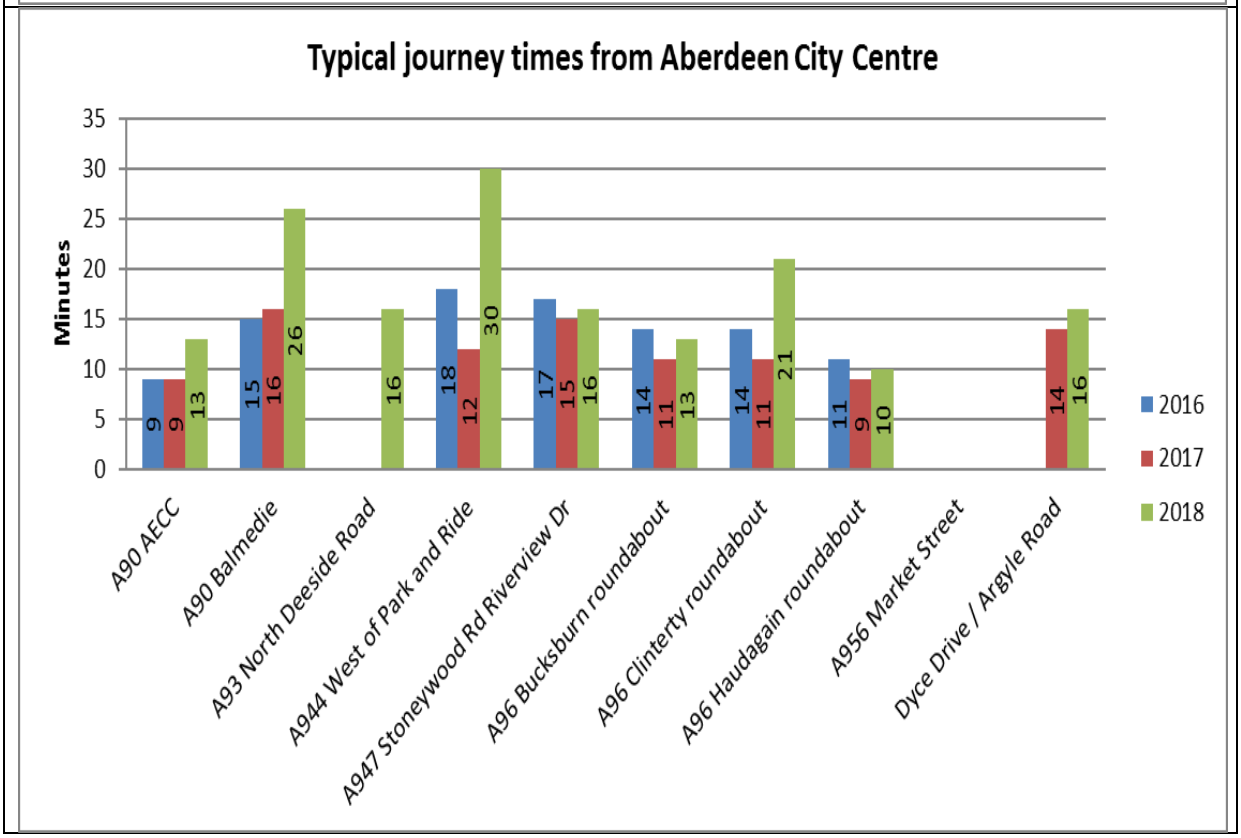
Target 40b: To reduce the differential between public transport and car journey times between key locations within the north east, by ensuring that average speeds for public transport journeys are less than 20% higher than comparable car journeys by 2021.

Source: www.transportdirect.info / www.google.co.uk/maps / www.travelinescotland.com

Since 2016, the Traffic Scotland website has also monitored typical journey times on the road network within Aberdeen City. A comparison has been included below. In future years this should provide a better indication of journey times and congestion within Aberdeen.

Indicator 41: Typical journey times by road to and from Aberdeen City Centre





Source: Traffic Scotland

14. Road Safety

Casualties

The number of casualties in road traffic accidents across the north east has fallen from an average of 1,263 in the period 2001 to 2005 to 882 between 2012 and 2016, a reduction of some 30%.

Indicator 42: The number of casualties in road traffic collisions

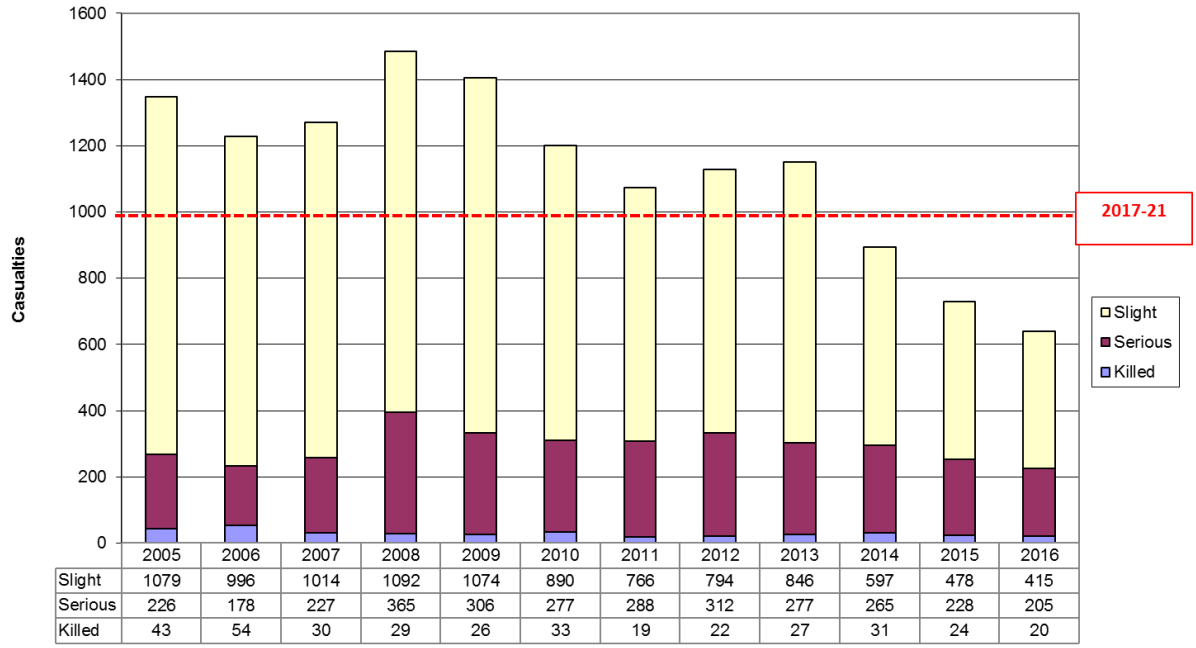
2001-05 average: Baseline

	Fatal	Serious	Slight	All
Aberdeen	6	71	402	479
Aberdeenshire	31	148	607	784
North east	38	219	1,010	1,263

(All severities - reduction of 24.6% on 1994-98 average)

2012-2016 average

	Fatal	Serious	Slight	All
Aberdeen	5	87	261	327
Aberdeenshire	20	170	365	555
North east	25	257	626	882
% Change since 2001-05	-34%	+18%	-38%	-30%



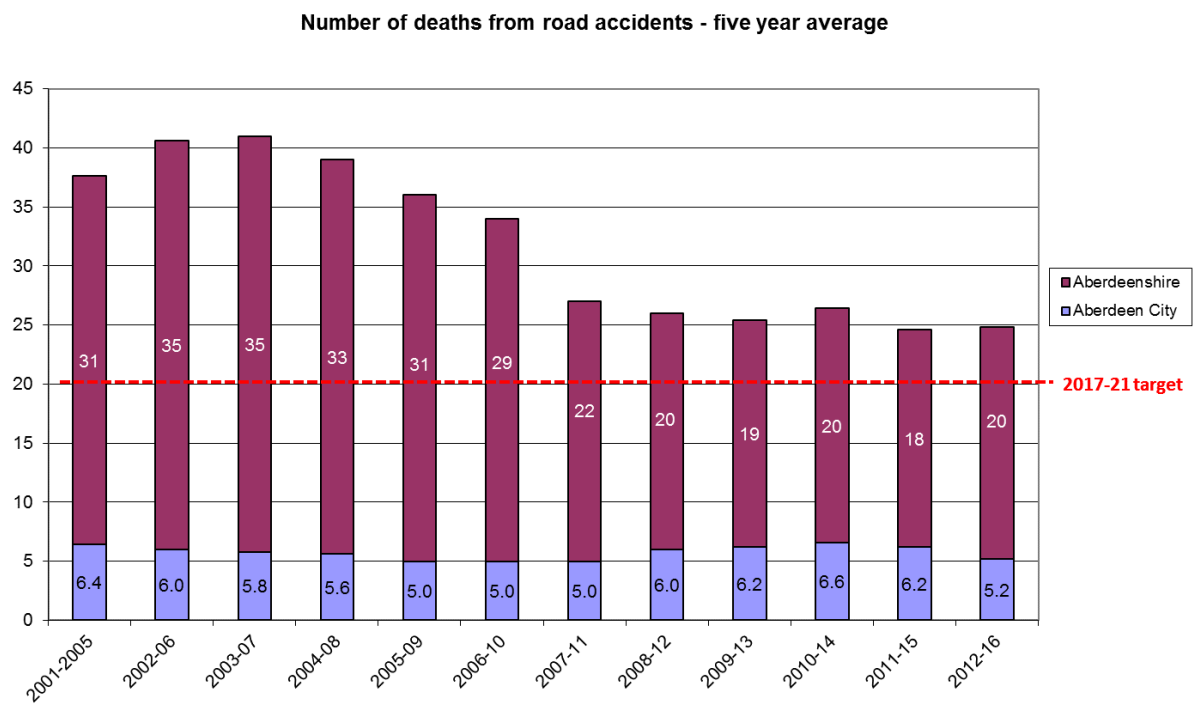
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Slight	1079	996	1014	1092	1074	890	766	794	846	597	478	415
Serious	226	178	227	365	306	277	288	312	277	265	228	205
Killed	43	54	30	29	26	33	19	22	27	31	24	20

Target 42: To reduce the number of casualties in road traffic collisions by at least 2% per five-year average to less than 1,000 of all severities by 2017-21.

Source: Road Casualties Scotland, 2016

This report also monitors fatalities in Road Traffic Collisions and these are shown in Indicator 43. Whilst there has been a 34% reduction from the 2001-05 base to an average of just over 25 deaths between 2012-16, the reduction appears to have been between 2003-07 and 2007-11, with a levelling off since then.

Indicator 43: The number of deaths in road traffic collisions



% change on 2001-05 baseline	Aberdeen City: -19%	Aberdeenshire: -37%	North East: -34%

Target 43: To reduce deaths from road traffic collisions by at least 50% of 2001-05 average to an average of fewer than 20 per year by 2017-21.

15. Environment

Carbon Emissions

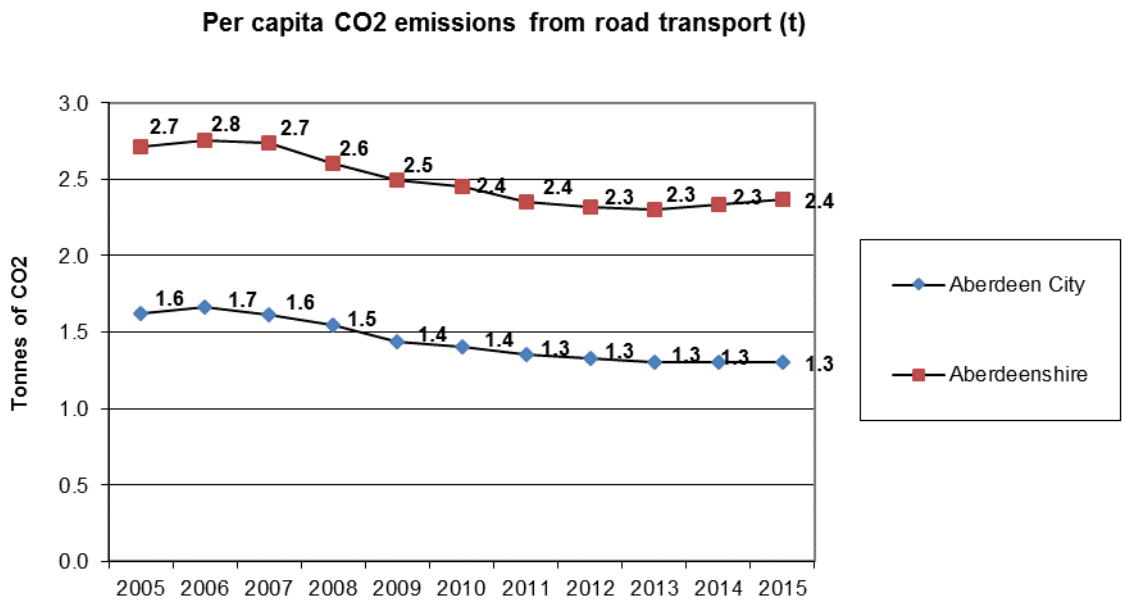
Per capita CO2 emissions from road transport

The UK Government provides data supporting the national indicator of per capita CO2 emissions in Local Authority areas across the UK split by energy sector.

In 2015 transport (including road and diesel railways) accounted for 24% of total carbon dioxide emissions from industry and commercial; domestic; and transport sources in Aberdeen City and 35% in Aberdeenshire. This proportion has increased by 4 percentage points since 2005 in both Aberdeen City and Aberdeenshire.

As well as total carbon emissions, it is appropriate to monitor carbon emissions on a per capita basis to take account of changes in the population. Per capita emissions from road transport have decreased from 2.7 tonnes of CO2 per person in 2005 to 2.4 tonnes in 2015 in Aberdeenshire and from 1.6 to 1.3 tonnes in Aberdeen City. This represents a 15% reduction across the region since 2005. Per capita emissions from road transport for Scotland as a whole were 1.9 tonnes of CO2 in 2015.

Indicator 44: Carbon Dioxide emissions from road transport



% per capita reduction since 2005	Aberdeen City	Aberdeenshire	North East
	-20%	-13%	-15%

Target 44: *To reduce the CO2 emissions from road transport in the north east by at least 2.5% per year, to an average of less than 1.5 tonnes per capita by 2021.*

Source: Department of Energy and Climate Change

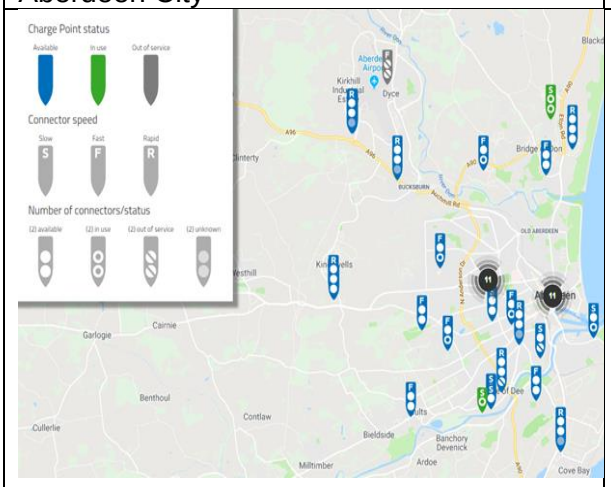
Electric Vehicles

The north east has had a number of publicly available chargers installed in order to encourage the use of electric vehicles. As of 2018, this equates to some 77 facilities, 8% of the total number of chargers available in Scotland, up significantly from 2017 when there were 52. Work is currently underway to install more rapid and fast chargers in order to allow users to charge their vehicles more quickly. The maps below show a snapshot of where the chargers are available.

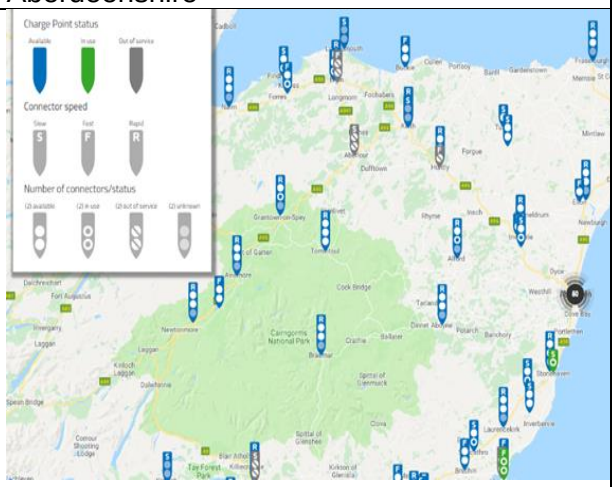
Indicator 45a: The number of publicly available Electric Vehicle charging points across the north east

Number of Chargers (2018)

Aberdeen City



Aberdeenshire



2018	All Chargers	Fast Chargers	Rapid Chargers
Aberdeen City	50	22	10
Aberdeenshire	27	6	11
North East	77	28	21
Scotland*	924	271	190
North East as a % of Scotland	8%	10%	11%

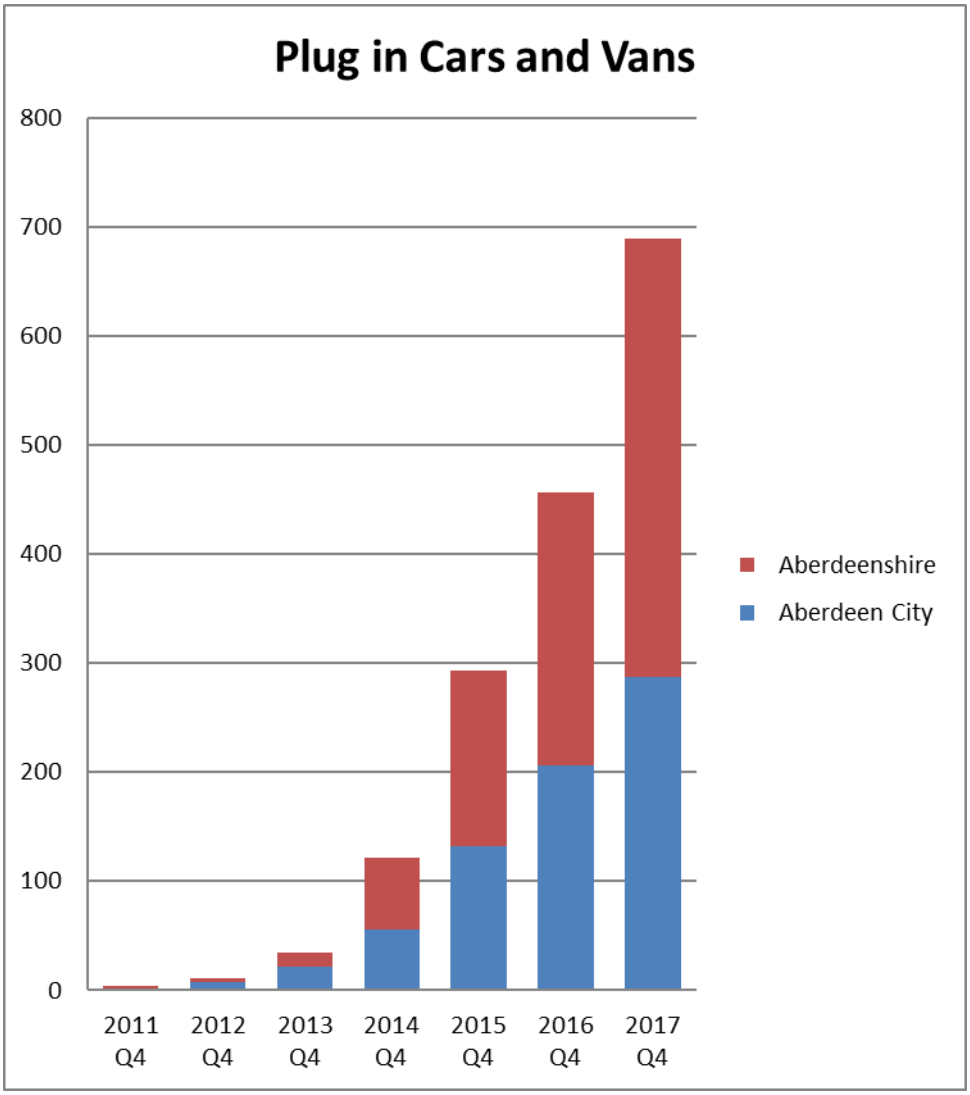
Target 45a: To double from a 2017 base of 52, the number of public EV points available in the north east to at least 100 by 2021.

Source: http://chargeplacescotland.org/
**Numbers are estimated due to difficulty in obtaining accurate figures.*

Total Number of Chargers	**2017**	**2018**
Aberdeen City	30	50
Aberdeenshire	22	27
North East	52	77

Source: http://chargeplacescotland.org/

In addition to the number of charging points increasing across Aberdeen and Aberdeenshire, the number of plug in electric vehicles have also seen significant growth year-on-year. In 2017, there were 287 plug in cars registered in Aberdeen and 402 in Aberdeenshire, a total of some 689 across the north east (an increase of 51% on the previous year's total of 456 and representing some 9.9% of such vehicles in Scotland). The graph below illustrates this trend for both Aberdeen City and Aberdeenshire.



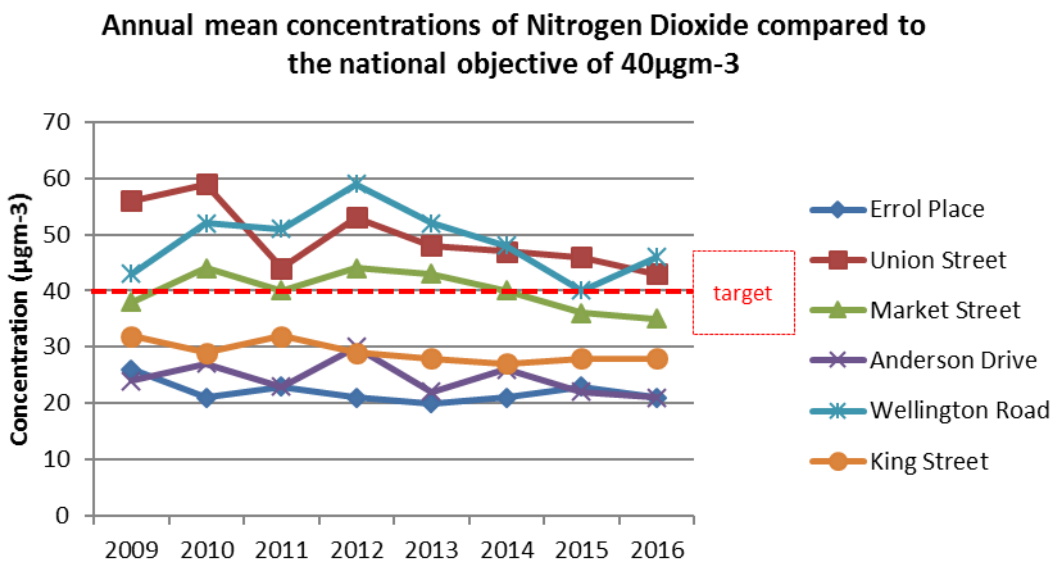
Indicator 45b: The number of plug-in electric cars and vans across the north east			
	Aberdeen City	Aberdeenshire	North East
2016	206	250	456
2017	287	402	689
Target 45b: To double from a 2016 base of 456, the number of plug-in electric cars and vans registered in the north east to at least 1,000 by 2021.			

Air Quality

Three Air Quality Management Areas have been identified in Aberdeen: the City Centre; Anderson Drive; and Wellington Road. These areas have been identified for projected exceedances in permitted levels of both Nitrogen Dioxide (NO2) and Particulates (PM10) and the City Council has produced a plan of action for reducing emissions to within European-defined maximum levels in these areas.

Monitoring stations are in place at six locations and provide data on the current situation as well as annual average concentrations of pollutants. Indicator 46 shows that, as of 2016, Wellington Road has again overtaken Union Street for experiencing the highest levels of Nitrogen Dioxide emissions. Both Wellington Road and Union Street are the only monitoring sites that currently exceed the annual mean objective, although Union Street has been steadily decreasing in mean concentrations of Nitrogen Dioxide since 2012. Market Street has also continued its downward trend for Nitrogen Dioxide emissions. However, Wellington Road increased mean concentrations for the first time since 2012 and is once again above target.

Indicator 46: The average atmospheric concentration of nitrogen dioxide

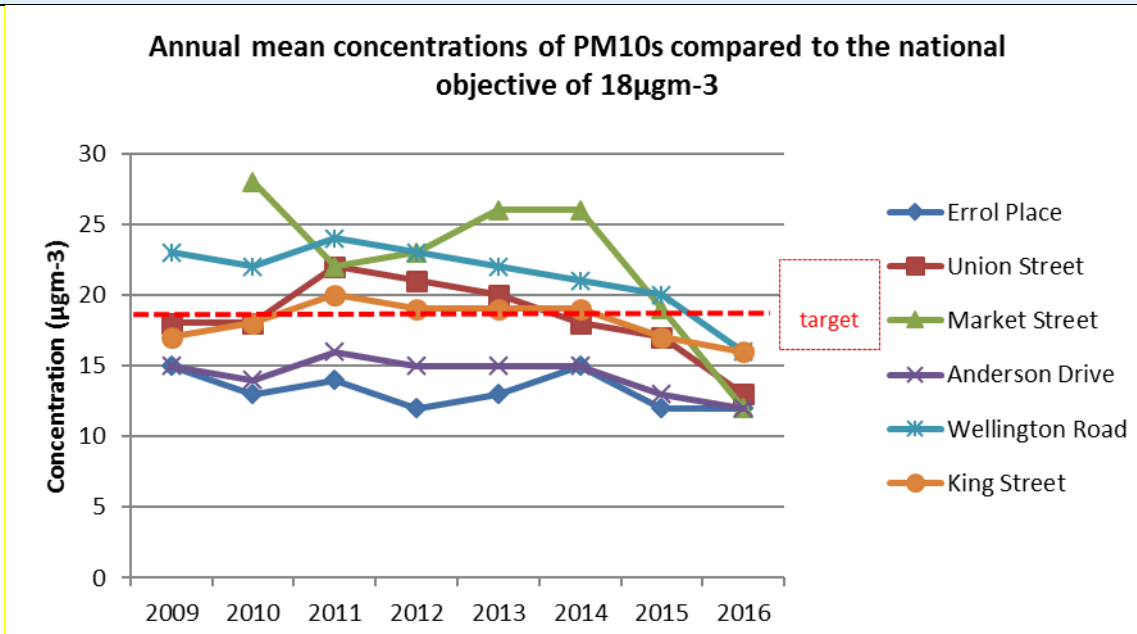


Target 46: *To reduce the levels of identified pollutants and meet national and European legislation on pollutants (enabling the removal of AQMA status at all sites in the north east - in Aberdeen City Centre, Wellington Road and Anderson Drive)*

Source: www.scottishairquality.co.uk and Aberdeen City Council 2017 Air Quality Annual Progress Report

The annual mean objective for particulates reduced across the board and levels are the lowest ever recorded. All sites are now within target.

Indicator 47: The average atmospheric concentration of particulates (PM10s)



Target 47: To reduce the levels of identified pollutants and meet national and European legislation on pollutants (across the three AQMAs in Aberdeen).

Source: www.scottishairquality.co.uk and Aberdeen City Council 2017 Air Quality Annual Progress Report

Indicator 48: The number of Noise Management Areas

In March 2015, Aberdeen City Council declared 15 Noise Management Areas across the City:

1. Auchmill Road at Newton Terrace
2. North Anderson Drive at Clifton Road
3. Great Northern Road near Smithfield Lane
4. King Street at Don Street
5. North Anderson Drive at Mastrick Road
6. North Anderson Drive at Laburnum Walk
7. King Street at Mealmarket Street – excluding Little John Street and Mealmarket Street
8. King Street at St Clair Street
9. Union Street at Dee Street
10. Rennies Wynd, Wapping Street, Carmelite Street, Trinity Street, Guild Street
11. Market Street, Union Street, Netherkirkgate
12. Market Street, Virginia Street, Shore Brae
13. Palmerston Road, Market Street
14. Victoria Road at Walker Road
15. A90 at Holburn Street.

There are no declared NMAs in Aberdeenshire.

Target 48: To reduce the number of Noise Management Areas.

Source: Aberdeen City Council website.

NL/RD June 2018