Transport Directorate Aviation, Maritime, Freight and Canals



# **Freight in Scotland**

December 2013

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# 1 Introduction

- 1.1 This report is a refresh of the Freight in Scotland Report of June 2013. The first Freight in Scotland Report (published in 2009) was originally commissioned by the Scottish Government's Transport Directorate in response to the Freight Action Plan (FAP). It was commissioned to specifically address Action 17 of FAP i.e. "The Scottish Government and Enterprise Bodies will work with other public sector bodies and industry to develop freight information that can be used to inform future freight policy and services."
- 1.2 This document brings together existing information on the freight industry in Scotland. In some instances, data is only available at the GB or UK level. In some cases data on Scotland has been presented together with UK-wide and/or international data. This will allow useful inter-country and international comparisons and will provide a wider context for freight issues in Scotland.

## 2 Transport Infrastructure in Scotland

2.1 Detailed below are the main transport infrastructure routes in Scotland:



- 2.2 Scotland's production of raw materials originates in every region of the country including timber, coal, oil, gas and fishery products. These products often have to be transported over great distances to their markets and consumers.
- 2.3 Whilst some goods only have one transport leg (e.g. coal being moved from mine to power station), most goods are transported several times via intermediate locations for processing and distribution/ storage before reaching the end-user. The choice of transport mode for each of these legs depends partly on cost and reliability and varies greatly by commodity and distance to be travelled. Scotland's size, density of population and transport infrastructure together lead to the majority of inland freight being moved on road with some longer distance movements being made by rail or pipeline (for petroleum). Air freight accounts for a very small proportion of freight although these consignments are normally of high value.
- 2.4 For transportation of bulk commodities the weight is often the limiting factor with lorries/ railway wagons loaded to their maximum permitted weight. This is typically associated with goods being transported on their primary distribution leg such as stone being transported from a quarry.
- 2.5 Conversely, finished goods are usually transported in shipping containers or in cages/ pallets where volume typically is the limiting factor for vehicle loads. The combination of: the lighter weight of finished goods relative to bulk goods; the space taken up by their packaging; and the space required to be able to manoeuvre the cages / pallets on and off a vehicle, all act to increase the volume of vehicle space required per tonne of the good itself.

## 3 Summary of Key Points

## 3.1 Freight Overview



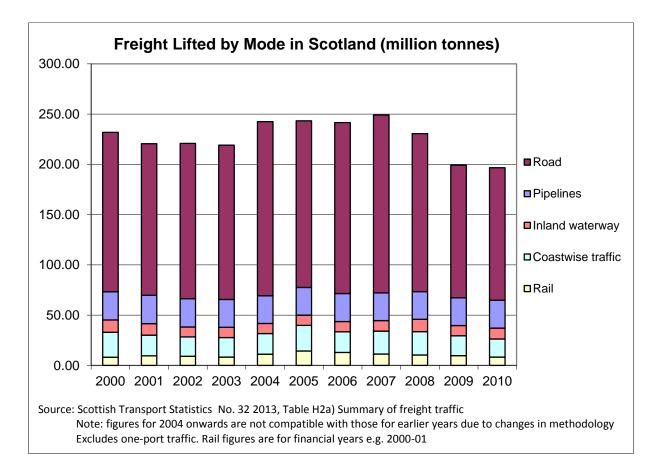
- 3.1.1 The chart above shows total freight, in millions of tonnes, remaining in, entering and leaving Scotland. It includes freight carried by road, rail and water but excludes air as this breakdown was not available. Statistics for road freight lifted in 2011 were not available so this year has been excluded from this analysis.
- 3.1.2 In 2010, the tonnage of freight leaving Scotland for the UK rose marginally on 2009 to 75.2 million tonnes. This was only the second increase in ten years, although the figure remains 35% lower than in 2000. The weight of goods entering Scotland from elsewhere in the UK and EU increased by 6.9% on the previous year to 38.8 million tonnes but remained around 14% lower than the ten-year high of 45.2 million tonnes in 2006. Volume of goods remaining in Scotland continued to fall in 2010 to 123.4 million tonnes. However, this was only 3% down on 2009, compared to the previous year–on-year drop of 16.7%.

	2006	2007	2008	2009	2010	2011		
Total these modes: UK	1.48	1.38	1.50	1.51	1.38	-		
EU	2.42	3.05	2.56	2.77	2.95	-		
Road: UK	0.75	0.75	0.69	0.79	0.83	-		
EU	2.00	2.00	1.67	2.50	2.00	-		
Rail: UK	3.46	2.26	1.91	2.56	1.92	2.07		
EU	1.17	1.23	0.79	0.85	0.87	0.90		
Water: UK	3.18	3.57	4.15	3.61	3.02	3.37		
EU	2.46	3.12	2.63	2.83	3.03	2.35		
Source: Scottish Transport Statistics No.32, 2013, Tables S4								

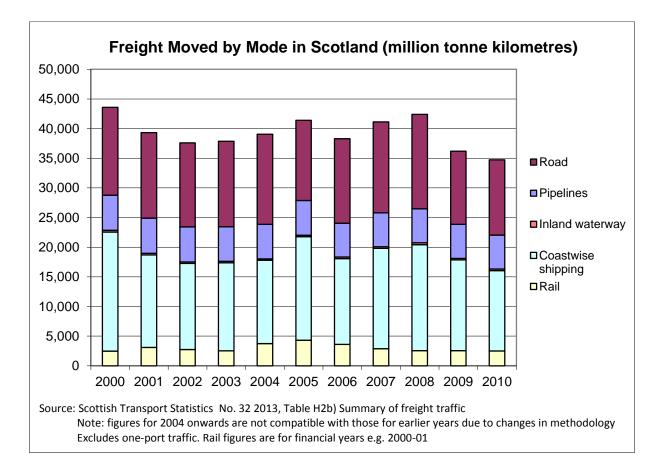
Tonnage of freight leaving Scotland for elsewhere in UK or EU for every tonne of freight entering Scotland from the UK or EU<sup>1</sup>

1. Financial years e.g. 2006-07

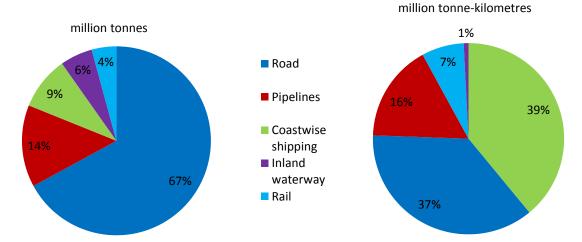
- 3.1.2 This table shows the ratio of goods leaving Scotland to those entering, in terms of weight. When all freight is combined, there was a greater tonnage of freight leaving Scotland for both elsewhere in the UK and the EU than arriving from these places. For example, in 2010 2.95 tonnes of freight left Scotland for the EU for every 1 tonne that entered from the EU. Similarly, for every tonne of freight arriving from elsewhere in the UK, 1.38 tonnes were delivered.
- 3.1.3 In 2010 twice the volume of road freight was moved to the EU than arrived from the EU. However, less freight left Scotland than entered Scotland from the rest of the UK. In both cases this has been the scenario for the last five years.
- 3.1.4 In terms of rail freight, in 2011 just over two tonnes left Scotland for the rest of the UK for every one tonne entering an increase on 2009. However, only 0.9 tonnes of rail freight left Scotland for the EU for every tonne that arrived. This ratio has continued to rise since the 2008 low of 0.79 to 1, but remains below that of 2007 when there was more rail freight (in tonnes) leaving than entering from the UK.
- 3.1.5 In 2012, a higher tonnage of water freight was moved from Scotland to both the UK and EU than entered. The ratio of UK freight leaving rose on 2009 to 3.37 tonnes for every tonne arriving. However, the ratio for EU freight fell to 2.35 to 1, when it was over 3 to 1 in the previous year.
- 3.1.6 The following charts show total freight lifted in Scotland, including that remaining in Scotland.



3.1.7 In 2010, total freight lifted in Scotland dropped to a 10 year low of 198.6 million tonnes, 21% down on the ten-year high of 250.8 million tonnes in 2007. Road freight remained unchanged on 2009, but was 44.9 million tonnes less than in 2007. Rail freight tonnage has been falling year on year since 2005, having almost halved during this period. Coastwise traffic has also fallen from a high of 25.5 million tonnes in 2005 to 16.3 million tonnes in 2010, down 9% on 2009.



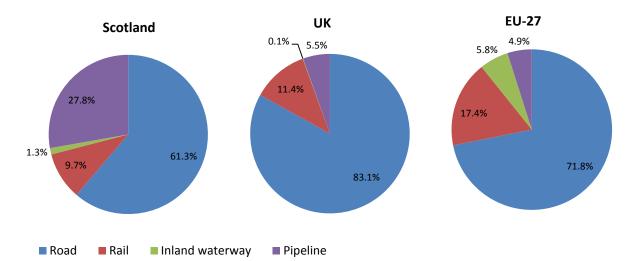
- 3.1.8 Freight moved can also be measured in terms of millions of tonne-kilometres which takes into account the distance that freight travels as well as the weight. Using this measure, total freight moved dropped to a 10 year low in 2010 of 34,743 million tonne-kilometres, despite a small increase in the road freight category. The main change was in coastwise shipping which fell by 11.5% on 2009 to 13,557 million tonne-kilometres.
- 3.1.9 The following pie-charts show the modal split of freight moved in Scotland in 2010 when measured in tonnes and in tonne-kilometres.



#### Freight moved in Scotland in 2010 by mode

Source: Scottish Transport Statistics No.32, 2013, Tables H2 a) & b), excludes one-port traffic

3.1.10 In terms of tonnes lifted, much more freight is carried by road than by any other mode of transport. However, a different picture can be seen when account is taken of the distance that freight is carried. In terms of tonne-kilometres, coastwise shipping accounted for the largest amount of freight moved in most years, with road coming second (in 2004 the position was reversed). Rail and pipeline still move smaller amounts of freight than road. However, they represent a higher proportion of the total for road freight when they are measured in tonne-kilometres, because of the greater distance (on average) for which freight is carried by rail and by pipeline.



#### Freight transport: modal shares (% of total tonne-kms)

Source: Scottish Transport Statistics No.32, 2013, Table 12.1 (excludes coastwise shipping and one-port traffic)

2.12 Included in Chapter 12 of Scottish Transport Statistics is a comparison of freight transport modal shares with other EU countries, using tonnekilometres. This excludes coastwise shipping so the proportions differ from the previous pie-charts. A comparison of modal shares in Scotland, Great Britain and EU-27 is shown in the charts above. The data shows that road has a low-modal share in Scotland (61.3%) compared with the overall EU-27 figure of 71.8%, and that of the United Kingdom as a whole (83.1%). This is due to the high modal share of pipelines (27.8%, higher than in any EU country) in Scotland. The modal shares of rail and inland waterways in Scotland are both below the overall figures for the EU-27.

#### 3.2 Road Freight Main Points

3.2.1 In 2010, an estimated 116.8 million tonnes of goods were lifted within Scotland by UK HGVs and transported to destinations within Scotland. About 14.8 million tonnes of goods from Scotland were delivered to destinations elsewhere in the UK in 2010, 2.2 million tonnes more than in 2009. Around 17.9 million tonnes were brought into Scotland from elsewhere in the UK, an increase of 1.9 million tonnes on 2009. In comparison, the tonnage of international road freight travelling into and out of Scotland from/to the EU is very small: less than 1 million tonnes in total in 2010.

- 3.2.2 Most road freight journeys are 50 kilometres or less in length: 31% of freight lifted by road in Scotland in 2010 was carried a distance of no more than 25 kilometres, and 22% travelled over 25 km but no more than 50 km. The average journey distance, which is calculated by dividing the total tonne-kilometres by the total tonnes lifted, was 93 km.
- 3.2.3 Goods moved on journeys originating in Scotland with a destination in Scotland accounted for around 7.2 billion tonne-kilometres in 2010. The overall total, including journeys with destinations elsewhere in the UK and abroad, was around 12.7 billion tonne-kms, an increase on the same figure for 2009.
- 3.2.4 In 2010, 17.9 million tonnes of goods entered Scotland on UK HGVs from the rest of the UK. 97% of these came from England. Around three quarters of the goods entering came from the North West (43%), North East (16%) and Yorkshire and Humber (16%) regions of England. Fewer goods leave Scotland for other UK countries (14.8 million tonnes) than enter from them (17.9 million tonnes) but the proportions going to and coming from different areas are similar.
- 3.2.5 In 2010, 'minerals and building materials' was the largest single category of goods lifted in Scotland which remained in Scotland, accounting for 35.0 million tonnes out of the total of 116.8 million tonnes.
- 3.2.6 In 2010, UK-registered HGVs carried an estimated 391 thousand tonnes of goods from Scotland to countries out-with the UK, and 182 thousand tonnes from foreign countries into Scotland. Of goods leaving Scotland for abroad, 55% went to France and 11% to the Netherlands. For goods entering Scotland from abroad 28% came from the Netherlands and 27% from France.
- 3.2.7 The number of HGV's licensed in 2012 fell by 500 on 2011 to 28,900. This is a 12% fall from the ten year high of 33,000 in 2006. 70% of goods vehicle operators have only one or two vehicles registered on their license, with only 1% of operators having more than 50 vehicles registered.

#### 3.3 Rail Freight Main Points

- 3.3.1 In 2011-12, 7.6 million tonnes of freight was lifted in Scotland by rail, 9% less than the previous year, and half the level of the 2005-06 peak. Of all rail freight lifted in Scotland, two-thirds was delivered within Scotland and 29% was delivered elsewhere in the UK. In 2005-06 these proportions were reversed with only one third remaining in Scotland and 63% going elsewhere in the UK. Only around 5% of total rail freight was delivered out-with the UK in 2011- 12, similar to the percentage in previous years.
- 3.3.2 In 2011-12, coal and other minerals accounted for 4.2 million tonnes (55%) of the freight lifted in Scotland. This has more than halved since the 2005-06 level of 10.8 million tonnes which made up 75% of all rail freight. Dividing the number of tonne-kilometres by the number of tonnes gives an average length of haul of 199 kilometres for traffic remaining in Scotland, 332 kilometres for

traffic to other parts of the UK, and 716 kilometres for traffic destined for outwith the UK.

## 3.4 Water Freight Main Points

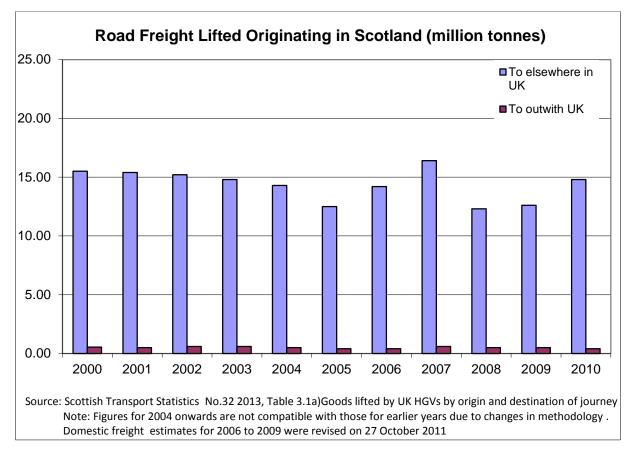
- 3.4.1 In 2011, a total of 52.1 million tonnes of freight was recorded as being lifted by water transport in Scotland: 16.3 million tonnes of coastwise traffic, 2.4 million tonnes of one port traffic, and 33.4 million tonnes of exports from the major Scottish ports. Only 10.7 million tonnes of waterborne freight was carried for part of its journey on inland waterways in 2011. Compared with 2010, there was a 9% decrease in coastwise traffic and the tonnage of port exports fell by 16%.
- 3.4.2 There has been a downward trend in the tonnage of foreign exports over the past decade, falling by over 50% since 2002 to 32.1 million tonnes. Outward domestic freight traffic continued to fall in 2012, dropping 18% on the previous year's low to 15.1 million tonnes, and by nearly 60% since the ten year high in 2005. In 2012, foreign imports were at the highest level since 2006, increasing by 14% on 2011 to 16.3 million tonnes. Inward domestic freight traffic increased by 18% in 2012 to 9.4 million tonnes but remained almost half of that recorded 10 years earlier.
- 3.4.3 Traffic through East Coast ports exhibited a downwards trend between 2000 and 2012, falling by 57% from 110.0 million to 47.4 million tonnes. This was mainly due to large falls in traffic at Orkney, Sullom Voe and Forth, which fell by 92%, 70% and 38% respectively across the period. However, traffic through West Coast ports increased by 50% across the same period from 16.9 million to 25.4 million tonnes, mainly due to traffic through Clyde more than doubling to 15.4 million tonnes in 2012.
- 3.4.4 Crude oil made up 63% of foreign exports in 2012, as well as 36% and 37% of domestic inwards and outwards traffic respectively. Coal was the main foreign import, comprising 40% of all import traffic.

## 3.5 Air Freight Main Points

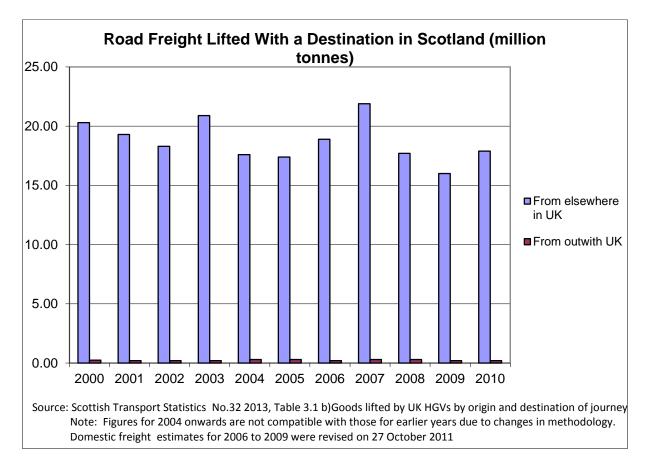
3.5.1 Air freight carried in 2012 increased by 16% on the previous year to 52,200 tonnes. Freight through Glasgow Prestwick fell by 13% to 10,314 tonnes. Glasgow traffic on the other hand almost quadrupled, rising from 2,430 in 2011 to 9,497 tonnes in 2012, moving it above Aberdeen to become the third busiest airport in terms of air freight lifted behind Edinburgh and Prestwick.

## 4 Overview of Road Freight Transported in Scotland

4.1 Detailed figures relating to road freight lifted or moved in Scotland are presented in this section. This includes information on origin and destination of goods, type of good, length of haul and HGV licences.



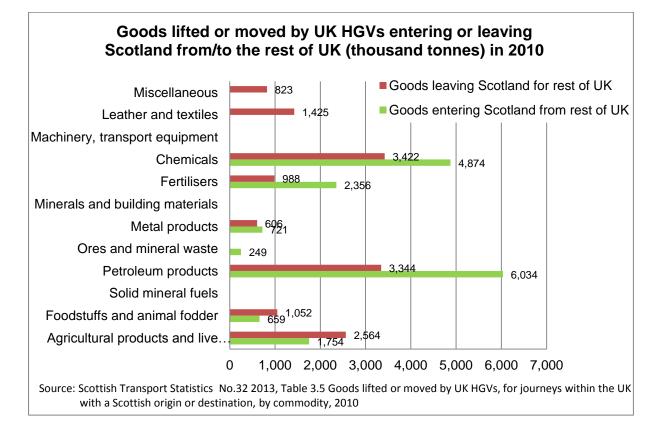
4.2 In 2010, total road freight lifted which originated in Scotland rose to 14.8 million tonnes, a 16 per cent increase on 2009. This was made up of a 17% increase in freight lifted to elsewhere in the UK, but a fall of 0.1 million tonnes to out-with the UK.



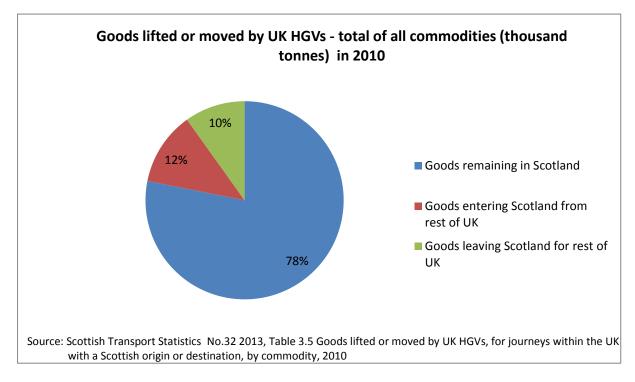
- 4.3 Road freight lifted which had a destination in Scotland and came from elsewhere in the UK rose by 12% between 2009 and 2010 to 17.9 million tonnes. There was no change in freight lifted to countries out-with the UK.
- 4.4 The following charts show information on the types of goods lifted or moved by UK HGV's in 2010 in thousands of tonnes.



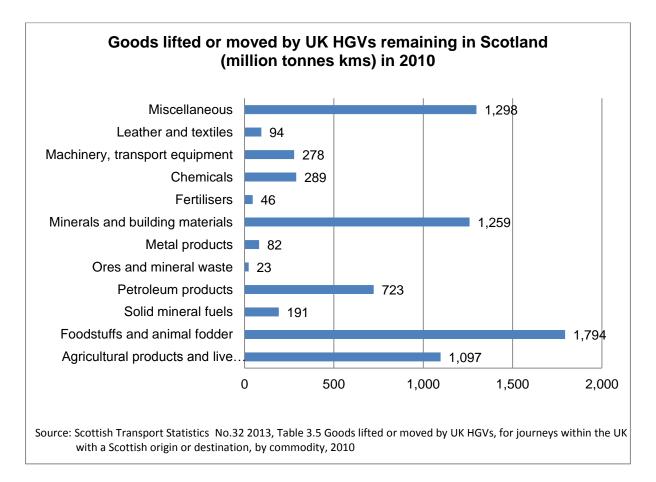
4.5 Of those goods lifted or moved which remained in Scotland in 2010, the most common were minerals and building materials, making up 30% of the total moved. This was followed by miscellaneous goods, and foodstuffs and animal fodder at 19% each.



4.7 Petroleum products and chemicals were the most common goods entering Scotland from the rest of the UK in 2010, at around 34% and 27% respectively. They were also the most common products to leave Scotland for the UK at around 23% each, however at lesser volumes. For example, almost twice as many petroleum products entered Scotland than left.

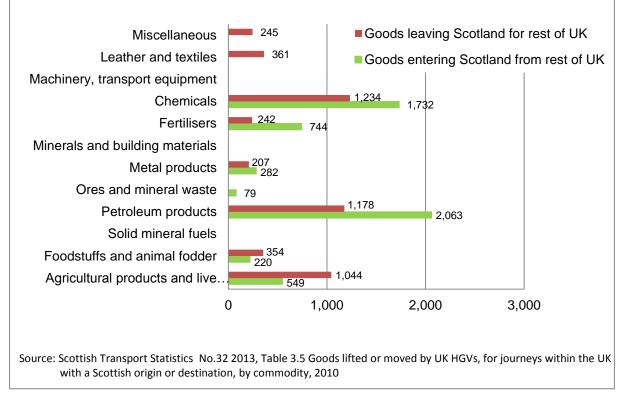


- 4.8 Over three quarters of goods lifted or moved by UK HGVS's in Scotland in 2010 remained within Scotland, when measured in terms of thousands of tonnes.
- 4.9 Goods moved or lifted by UK HGV's can also be measured in millions of tonne kilometres. The following charts show information on the types of goods lifted using this measure.

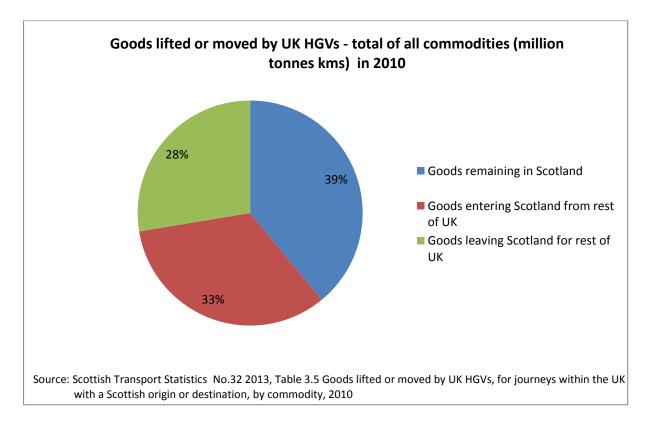


4.10 When measured in terms of million tonne kilometres, the most common type of good lifted or moved remaining in Scotland was foodstuffs and animal fodder at 25%. Minerals and building materials made up 18% of goods moved, compared to 30% when measured in terms of thousands of tonnes.

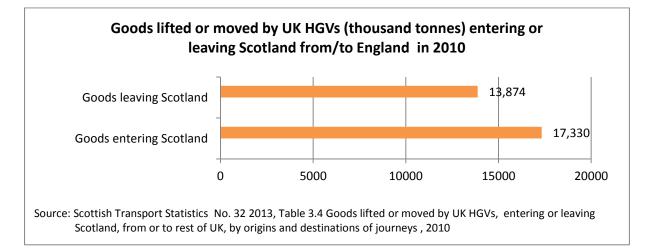
## Goods lifted or moved by UK HGVs entering or leaving Scotland from/to the rest of UK (million tonnes kms) in 2010

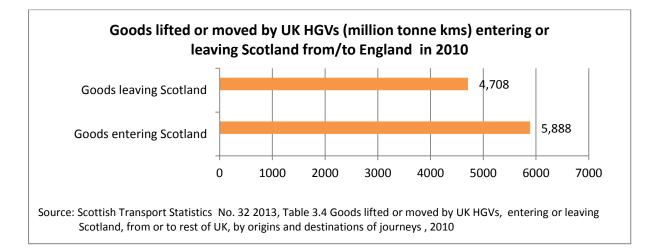


- 4.11 Petroleum products made up 34% of those goods entering Scotland from the rest of the UK, followed by chemicals at 28%. These are very similar to the proportions when measuring by thousands of tonnes.
- 4.12 In 2010, chemicals, petroleum products and agricultural products made up over two thirds of goods moved from Scotland to elsewhere in the UK.

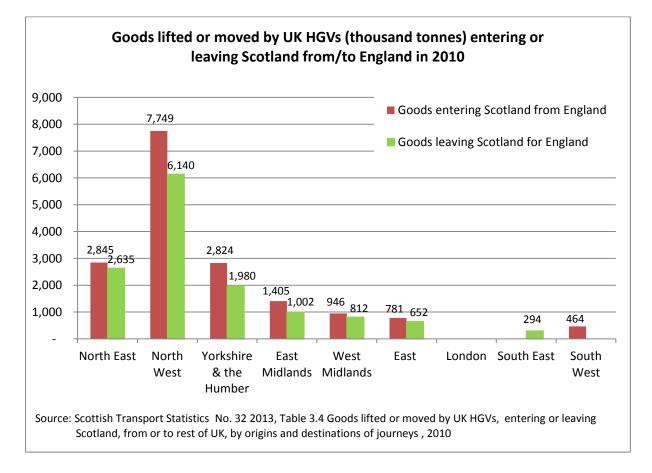


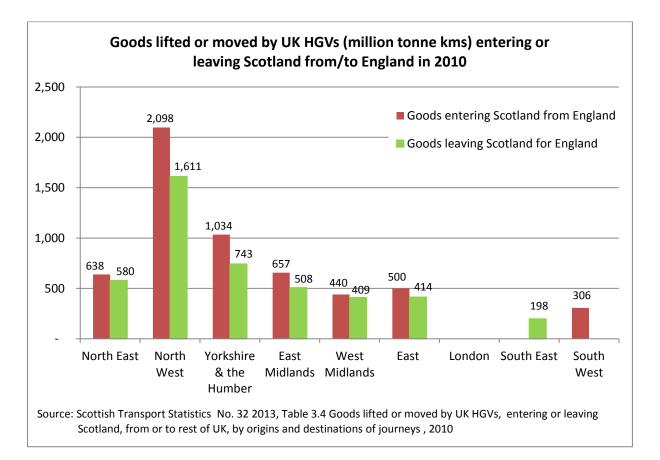
- 4.13 When looking at the total of all commodities, the proportion of goods in each category is quite different when measured in terms of million tonne kilometres compared to thousands of tonnes, with goods remaining in Scotland falling from 78% to 39%. This could be expected as this measure takes into account distance travelled as well as weight.
- 4.14 The following charts provide information on the movement of goods throughout the UK.



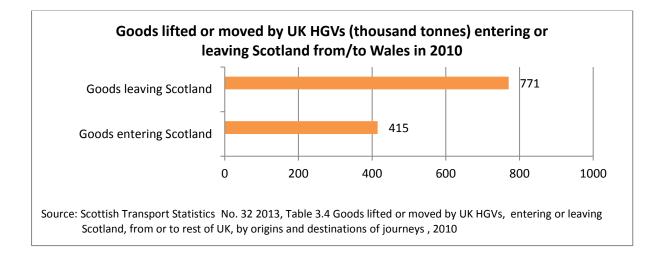


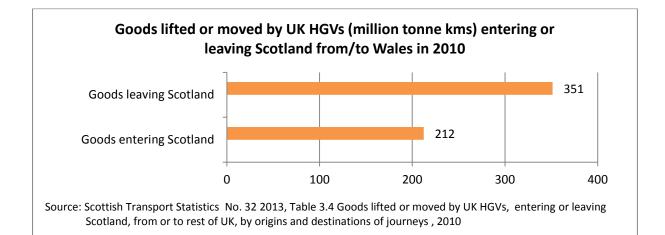
4.15 In 2010, around 25% more goods were lifted or moved into Scotland from England than left Scotland for England. This was the case when analysed by both thousands of tonnes and millions of tonne kilometres.

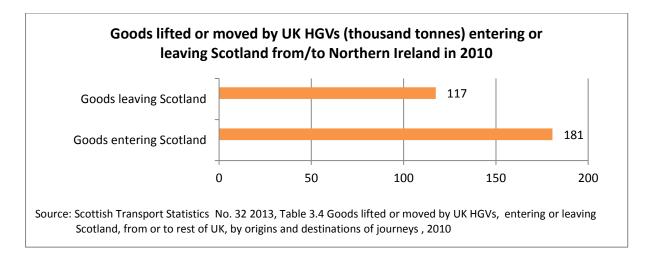


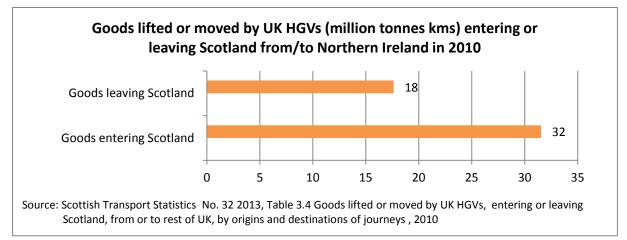


4.16 The majority of goods entering and leaving Scotland via England in 2010 were from the North West, with 45% and 44% respectively when measured by thousands of tonnes. This chart further highlights that more goods are entering Scotland from England than are leaving for England.

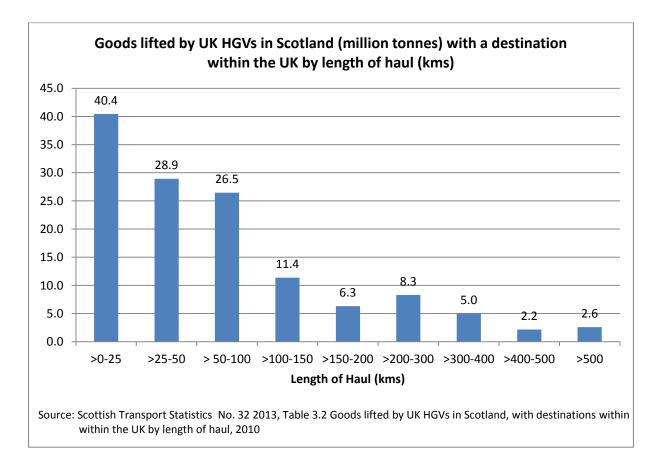








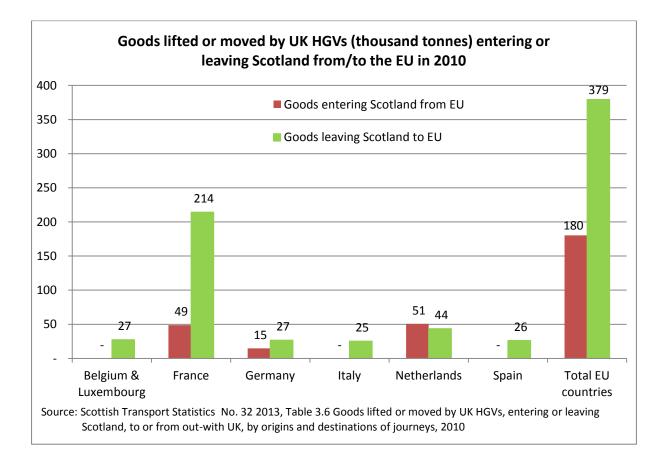
4.17 Of goods moving between Scotland and Wales, nearly twice as many goods enter Wales from Scotland than enter Scotland from Wales when measured using thousands of tonnes. However, around 50% more goods enter Scotland from Northern Ireland than move the other way.

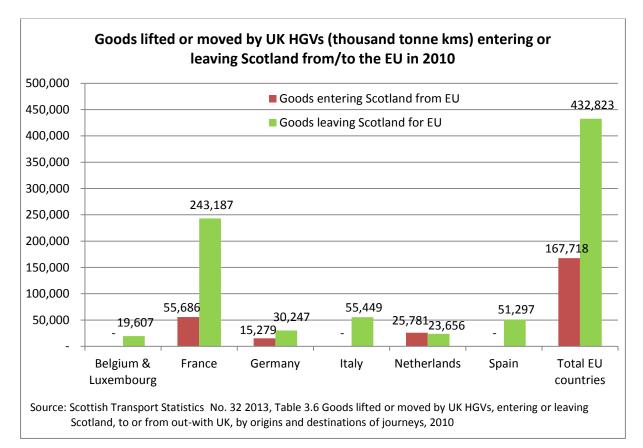


4.18 Nearly one third of goods lifted within Scotland in 2010 had a destination which was up to 25km away. Only around 10% of goods travelled more than 300 kilometres.

## **European Union**

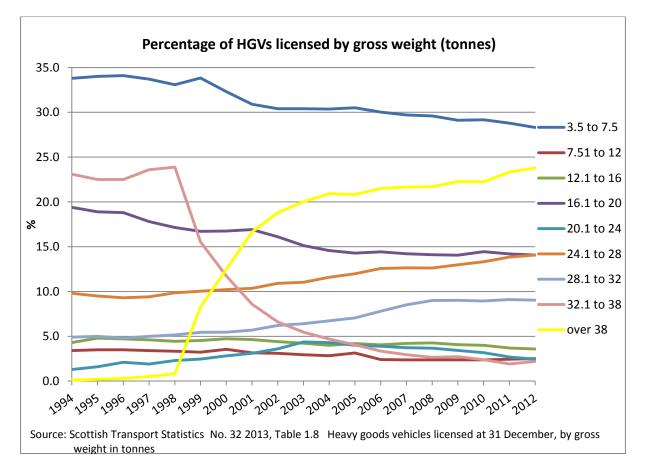
4.19 The following charts show the movement of goods between Scotland and countries within the EU. These statistics are derived from DfT's International Road Haulage Survey. Of the 23 countries in the EU, individual data is only available for 6 of them as the sample size for the other countries was too small to provide a reliable estimate.





4.20 In 2010, twice as many goods were moved from Scotland to the EU than entered Scotland from the EU, based on thousands of tonnes moved. Of those goods leaving Scotland, over 50% went to France.

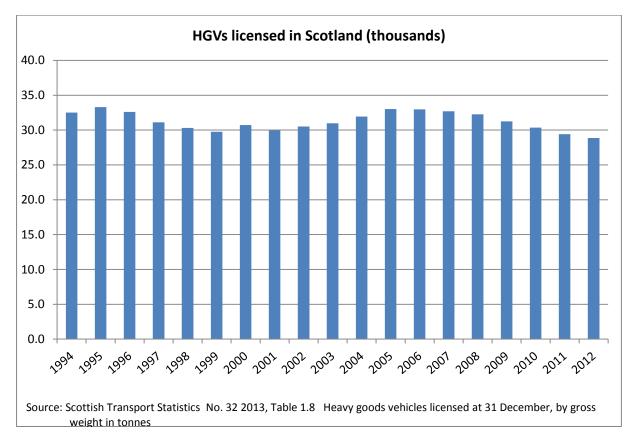
#### **License Holders**



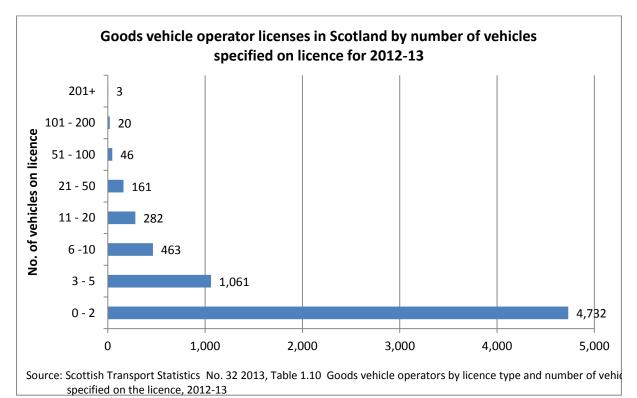
4.21 The following charts show information on HGVs licenses.

- 4.22 There has been a downward trend in the percentage of HGVs in the lowest category since 1994, falling from 34% to 28% in 2012. Percentage of vehicles in the next two categories, 7.51 to 16 tonnes, have remained fairly steady over this period, as have those between 16.1 and 20 tonnes since 2004, following a fall of almost 5% in the previous ten years. The percentage of vehicles between 20.1 and 24 tonnes followed an upward trend until 2003, since when they have fallen by 2%. Those between 24.1 and 28 tonnes have been, in the main, increasing since 1994, rising from 10% to 14% in 2012, as were those in the next category, 28.1 to 32 tonnes, until 2008 since when they have remained steady at around 9%.
- 4.23 The most obvious change occurred between categories 32.1 to 38 tonnes and over 38 tonnes in 1998, where the former fell sharply and the latter jumped up. This was due to a change in legislation which allowed 6-axled lorries to run with a greater tonnage so they effectively switched to the highest category. Over the last ten years the same trends have continued but at a lesser rate, with those in the 32.1 to 38 category falling by almost 3% and those over 38 tonnes increasing by around 3%.
- 4.24 In summary, the percentage of vehicles up to 24 tonnes have fallen or remained fairly steady over the past 10 years. Those in the higher categories have, in the main, displayed an upward trend over this period, with the

exception of those between 32.1 and 38 tonnes as explained in the previous paragraph.

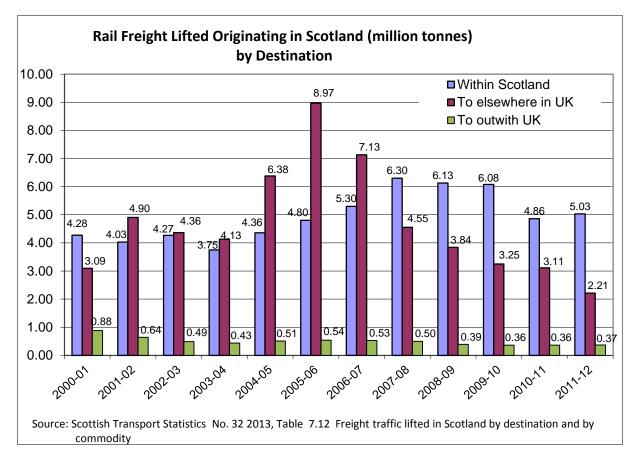


4.25 Since 2005, the total number of HGV's licenced in Scotland has fallen year on year, dropping to a 20 year low of 28,900 in 2012.



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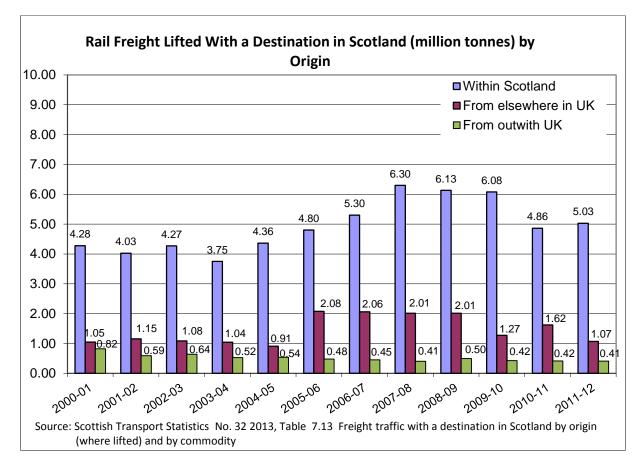
4.26 The majority of goods vehicle operators have up to two vehicles specified on their licence, with 70% falling into this category. Only 1% of operators have more than 50 vehicles.



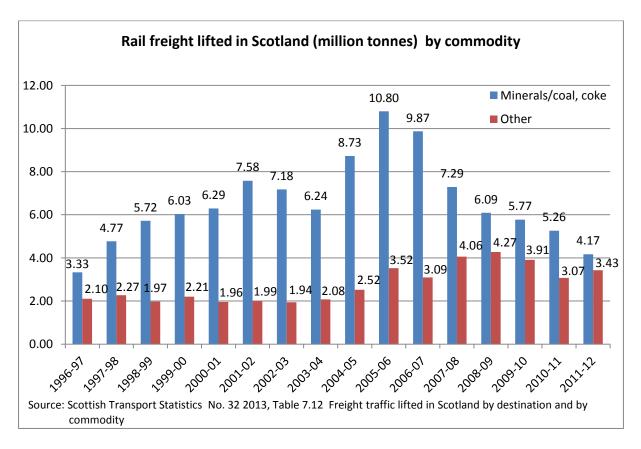
## **5** Overview of Rail Freight Movements

5.1 Rail freight traffic lifted in Scotland (million tonnes) by destination and by commodity are detailed in the following tables.

5.2 Total rail freight originating in Scotland in 2011-12 was at its lowest level since 1997-98, at 7.6 million tonnes, and has almost halved since 2005-06. The largest change during this period was the volume of rail freight lifted with a destination elsewhere in the UK. This fell by 75% between 2005-06 and 2011-12.



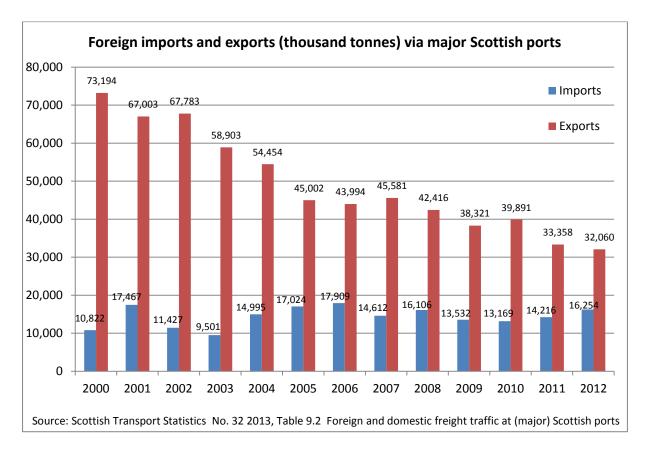
5.3 Total rail freight with a destination in Scotland fell to 6.5 million tonnes in 2011-12, its lowest level since 2004-05. Rail freight from elsewhere in the UK fell by just over a third in 2011-12, to return to levels seen around 10 years ago. In 2005-06, rail freight originating in Scotland going to elsewhere in the UK was four times greater than that with a destination in Scotland from within the UK. In 2011-12, this difference had fallen to just over double.



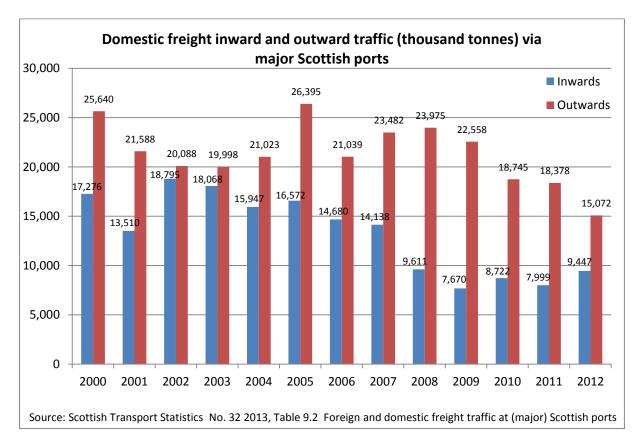
5.4 Rail freight in the form of minerals/coal and coke lifted in Scotland has more than halved since 2005-06 falling to 4.2 million tonnes, its lowest level since 1996-97. This fits with the significant fall in freight lifted to elsewhere in the UK across this period.

## 6 Overview of Freight Movements Through Ports

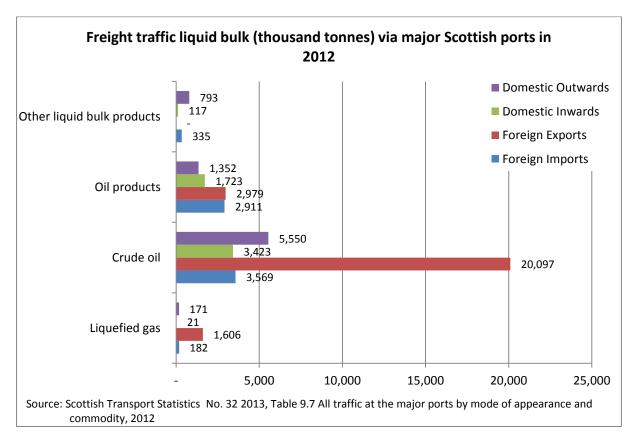
6.1 Foreign and domestic freight traffic at major Scottish ports are represented in the tables below. The figures refer to major ports only. There were seven major ports in 1996, eight major ports in 1997 and 98, nine in 1999 and eleven from 2000 onwards, therefore these figures are not directly comparable.



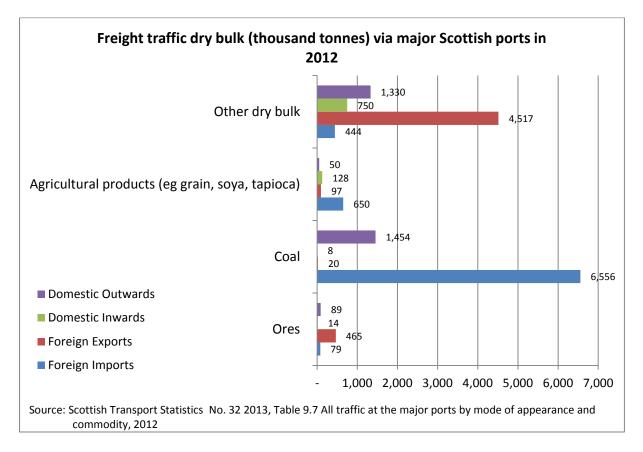
6.2 There has been a downward trend in foreign exports over the past decade, falling by over 50% since 2000. In 2012, foreign imports were at the highest level since 2006, increasing by 14% on 2011.



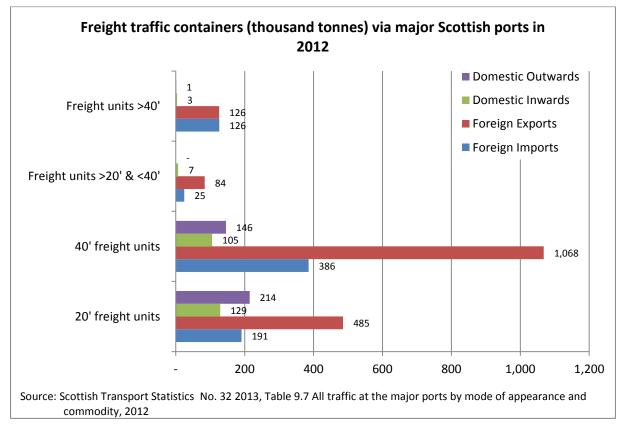
6.3 Outward domestic freight traffic continued to fall in 2012, dropping 18% on the previous year's low. It has fallen by nearly 60% since the ten year high in 2005. Inward domestic freight traffic increased by 18% in 2012 but remains almost half of that recorded 10 years earlier.



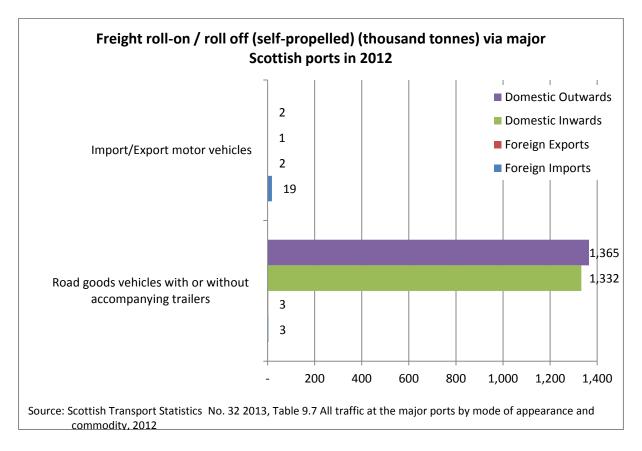
6.4 81% of foreign liquid bulk exports and 71% of domestic outwards liquid bulk in 2012 were crude oil. Crude oil also made up over half of all liquid bulk foreign imports and domestic inwards traffic.



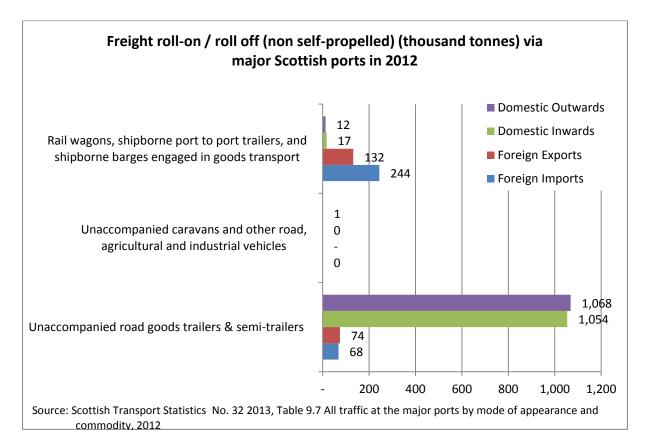
6.5 85% of dry bulk foreign imports in 2012 were coal, where as other dry bulk made up 89% of foreign exports. Domestic outwards dry bulk was split almost 50/50 between coal and other dry bulk.



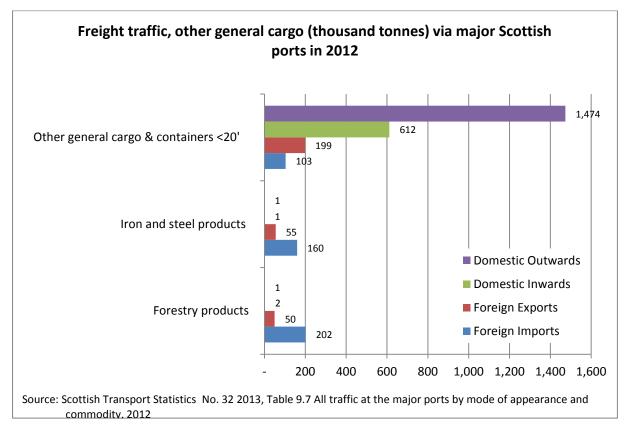
6.6 In 2012, 55% of all freight traffic via major Scottish ports was carried in 40' freight units. It was the most common size for foreign imports and exports, where as 20' units were most frequently used for domestic traffic. One quarter of foreign traffic was transported in units over 40' but only 1% of domestic traffic.



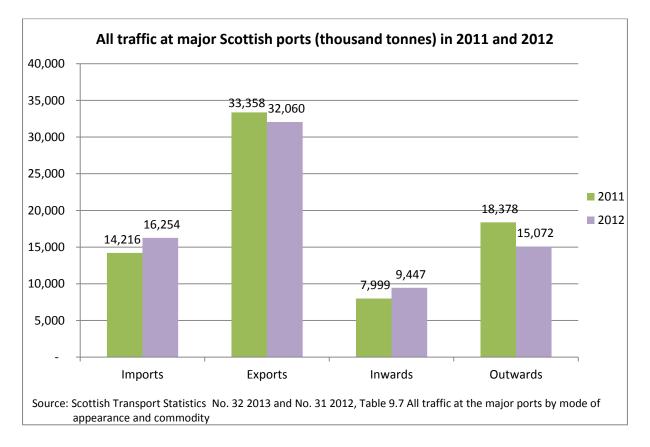
6.7 The vast majority of roll-on/roll-off self-propelled freight was domestic movement of road goods vehicles, with almost equal volumes moving inwards and outwards.



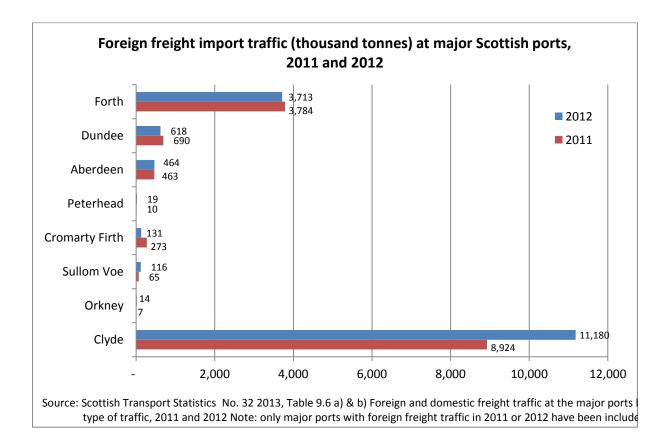
6.8 Just under 99% of domestic inwards and outwards non self-propelled rollon/roll-off freight were unaccompanied road goods trailers and semi-trailers. Over three-quarters of foreign imports and almost two-thirds of exports fell in the rail wagons category in 2012.



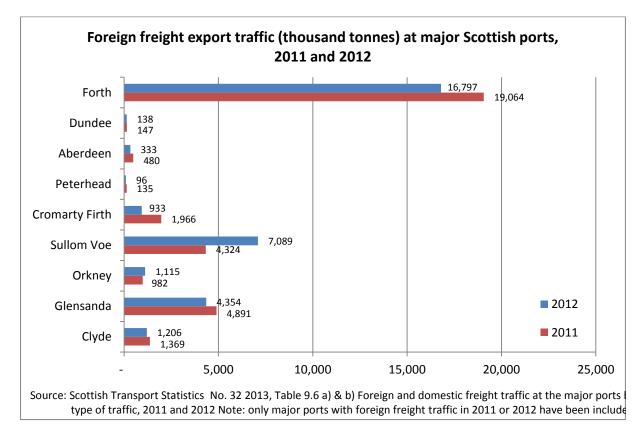
6.9 Almost all domestic freight traffic and 65% of foreign exports classed as other general cargo was carried in containers smaller than 20' in 2012. 43% of foreign imports in 2012 were forestry products and 34% iron and steel products.



6.10 Foreign imports at major Scottish ports rose by 14% between 2011 and 2012, and foreign exports fell by 4%. An increase in domestic inwards traffic of 18% during the same period was reflected by an 18% drop in domestic outwards traffic.

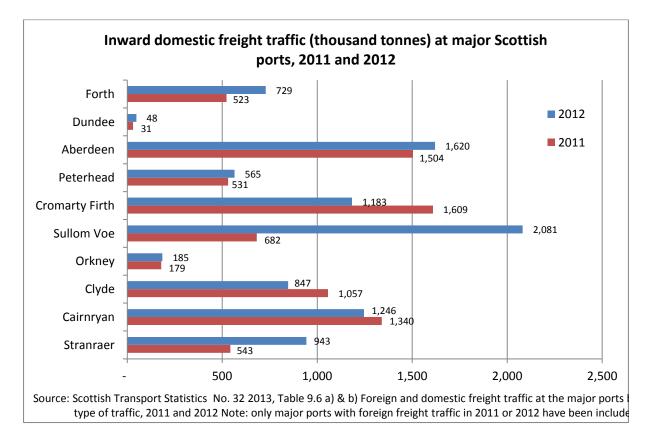


6.11 In 2012, Clyde remained the main port for foreign freight imports, with just over two thirds of all traffic. Clyde also saw a 25% increase in imports on 2011.

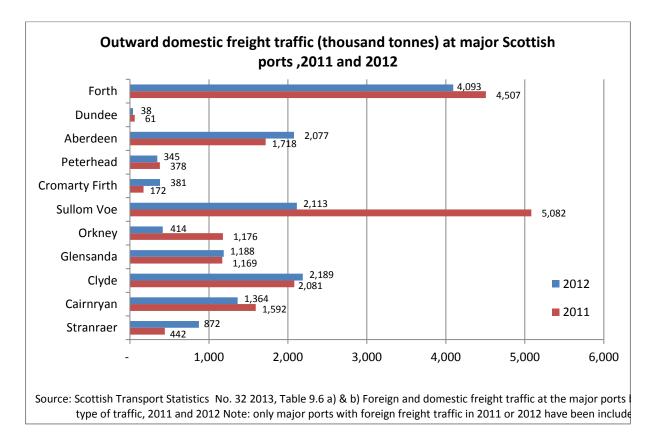


6.12 The majority of foreign freight export traffic passed through Forth in both 2011 and 2012, however Forth traffic fell by 2.3 million tonnes in 2012, taking the

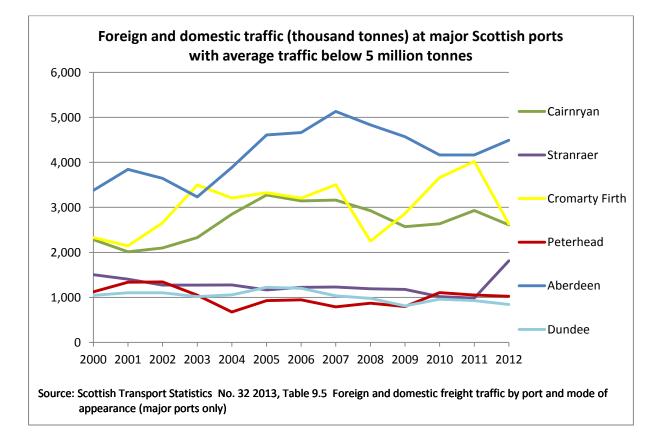
proportion from 57% in 2011 to 52% in 2012. Export traffic through Sullom Voe increased by 79% on 2011 to 7 million tonnes, where as Cromarty Firth exports more than halved.



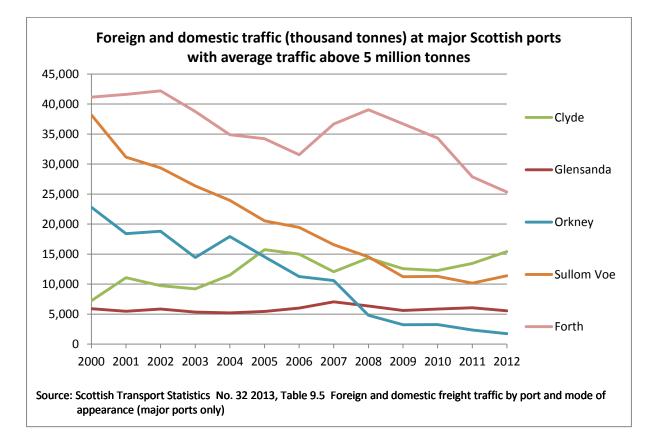
6.13 In 2012, the majority of major ports experienced an increase in inward domestic freight traffic, the most notable being Sullom Voe where traffic almost trebled to 2.1 million tonnes making it the top port in this category. Cromarty Firth, Clyde and Cairnryan were the only major ports where domestic inwards traffic fell, with a drop of 27%, 20% and 7% respectively.



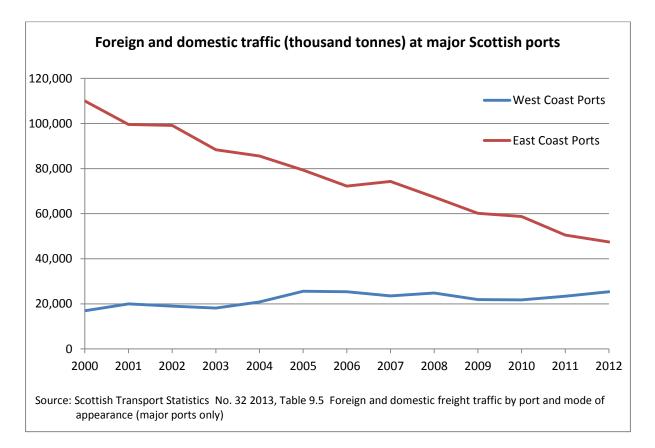
6.14 In 2012, outward domestic freight traffic at Sullom Voe fell by 58% on 2011 to 2.1 million tonnes, making Forth the new top port in this category with 27% of all traffic. Domestic outward traffic through Cromarty Firth and Stanraer approximately doubled in 2012, but traffic passing through Orkney fell by 65%.



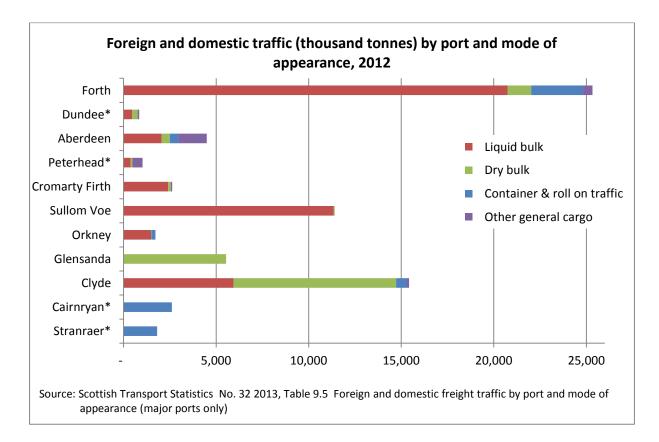
6.15 Traffic through major Scottish ports with an average of less than 5 million tonnes has been quite variable since 2000. Aberdeen traffic increased by a third between 2000 and 2012, rising to a peak of 5.1 million in 2007 then falling to 4.2 million by 2010 and increasing again to 4.5 million in 2012. Cromarty Firth traffic increased by 13% between 2000 and 2012 but experienced a number of peaks and troughs across the period with a high of 4 million tonnes in 2011 which then fell by 35% to 2.6 million in 2012. Stranraer traffic exhibited a mainly downwards trend between 2000 and 2011, falling by 34.5% to just under one million tonnes, before almost doubling in 2012 to 1.8 million. Cairnryan traffic fell by 11% between 2011 and 2012, but experienced an overall increase of 14% since 2000. Traffic through Dundee and Peterhead fell by 20% and 9% respectively between 2000 and 2012.



6.16 At major ports where average traffic exceeds 5 million tonnes, most have experienced a downwards trend in freight traffic since 2000 with the exception of Clyde where traffic has more than doubled during this period and increased 15% on 2011. Glensanda traffic has remained fairly steady since 2000 but fell by 9% between 2011 and 2012. Orkney has experienced a fall of 92% in freight traffic since 2000, falling from 22.8 million to 1.7 million in 2012. In 2012, traffic through Sullom Voe was less than a third of that in 2000, despite an increase of 12% between 2011 and 2012. Since 2000, traffic passing through Forth has fallen by 38%, including a 9% drop in 2012.



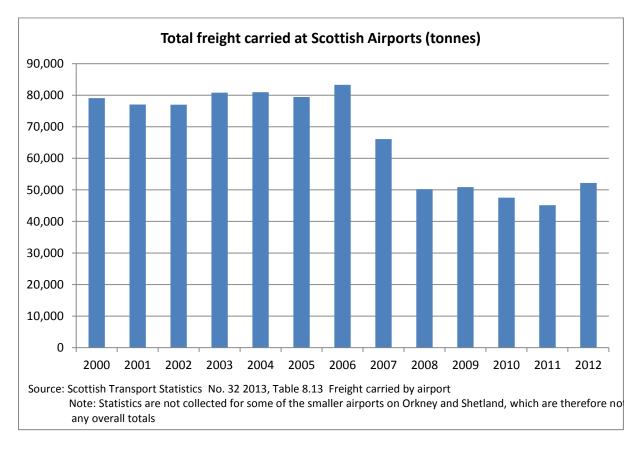
6.17 Traffic through East Coast ports exhibited a downwards trend between 2000 and 2012, falling by 57% from 110.0 million to 47.4 million tonnes. However, traffic through West Coast ports increased by 50% across this period from 20.0 million to 25.4 million tonnes.



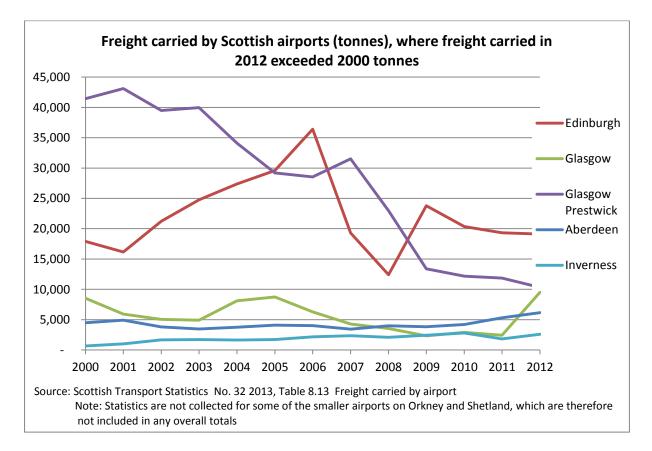
6.18 In 2012, 82% of freight traffic through Forth was liquid bulk, at 20.7 million tonnes. Liquid bulk was also the most common category through Sullom Voe, - over 99% of traffic, as well as Cromarty Firth and Orkney –at 92% and 86% of all freight traffic respectively. All freight traffic moving through Glensanda was dry bulk, compared to Cairnryan and Stranraer which was exclusively container and roll on traffic. Type of freight traffic was more varied through Clyde where 57% was dry bulk, followed by 39% liquid bulk. Aberdeen also moved a mix of freight, with 46% liquid bulk and 34% other general cargo in 2012. 55% of all freight traffic at Dundee was liquid bulk, followed by 35% dry bulk. Other general cargo made up just over half of freight traffic through Peterhead, with liquid bulk making up 38%.

## 7 Overview of Freight Movements Through Airports

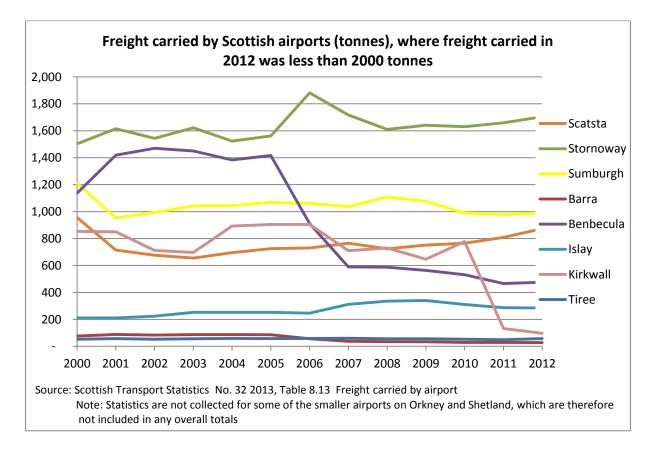
- 7.1 Detailed within the following charts is information on the freight moving in and out of airports within Scotland during the period 2000 to 2012. Statistics have not been collected for some of the smaller airports on Orkney and Shetland, which are therefore not included in any overall totals.
- 7.2 Dundee, Unst, Lerwick and Campbelltown airports have not been included in the following chapter as they moved very little (on average below 8 tonnes per year) or no air freight during this period.



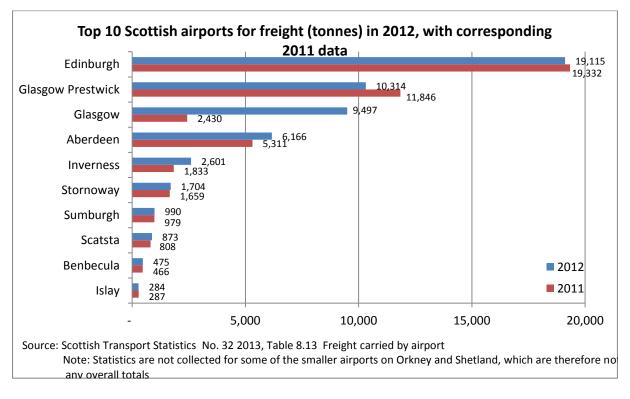
7.3 Total freight carried at Scottish airports increased by 16% in 2012 to 52,200 tonnes. This is around one third less than in 2000, and 37% less than the 2006 high of 83,260 tonnes.



7.4 Freight carried by Glasgow Prestwick airport has followed a mainly downward trend since 2000, falling 75% by 2012 from 41,450 to 10,314 tonnes. Edinburgh airport freight has been more erratic. Between 2000 and 2012 freight carried increased by 7% to 19,115 tonnes, however a peak of 36,389 was seen in 2006, followed by a drop to 12,418 in 2008. Freight carried through Glasgow airport fell by 72% between 2000 and 2011 to 2,430 tonnes. However, 2012 saw a three-fold increase in freight carried, rising to 9,497 tonnes. Inverness airport freight was three times higher in 2012 than 2000, at 2,601 tonnes. Freight moved through Aberdeen airport increased by 16% between 2011 and 2012 to reach its highest level during the 12 year period of 6,166 tonnes.



7.5 Freight carried through Stornoway airport increased by 13% between 2000 and 2012, where it reached a five year high of 1,704 tonnes. Following a high of 1,470 tonnes in 2002, freight carried by Benbecula airport fell by around two-thirds to 475 tonnes in 2012. Since 2001, annual freight carried by Sumburgh airport remained around 1,000 tonnes, and that carried by Tirree airport between 50 and 60 tonnes. Freight carried by Barra airport has been falling since 2001, from 88 tonnes to 27 tonnes in 2012. Islay airport freight tonnage was increasing until 2009, since when it has fallen year on year to 284 tonnes in 2012. The most significant change to take place at Kirkwall airport was between 2010 and 2011 where freight carried fell by 83% to 132 tonnes. This was followed by a further fall in 2012 to 97 tonnes. Between 2000 and 2003, Scatsa airport freight fell by 31% to 655 tonnes. Since then, freight carried at the airport increased by a third to 873 tonnes in 2012.



7.6 Between 2011 and 2012, freight carried through Glasgow airport was almost three times greater than in 2011, rising to 9,497 tonnes. This meant Glasgow took over from Aberdeen as third largest Scottish airport by freight carried. Despite a drop in freight carried at Glasgow Prestwick of 13%, it remained in second place. All other airports also maintained the same ranking in 2012 as in 2011.