



Goods Flows in Sweden

Summary Report 2012:8

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Summary

According to Transport Analysis statistics concerning goods shipments in Sweden, a total of 584 million tonnes of goods were transported in 2010.¹ Of these shipments, 64% were domestic while 36% were sent abroad. Eighteen per cent of the foreign traffic went from Sweden to a foreign country, and the same amount went from foreign countries to Sweden.

Of the goods transported within Sweden in 2010, 86% were shipped by lorry, 11% by rail, and only 3% by water.

The total goods transport mileage more than doubled from 1960 to 2010, increasing from 42 to 98 billion tonne-kilometres.

Goods transported by heavy lorry

The amount of goods transported by heavy lorry in Sweden remained essentially constant from 2005 to 2008. The amount of goods decreased dramatically after the financial crisis, i.e., in 2009 and 2010. In 2010, the goods transported by heavy lorry within Sweden totalled roughly 320 million tonnes. The vehicle miles travelled by heavy lorries carrying cargo totalled 2086 million kilometres, while the transport mileage totalled 33,790 tonne-kilometres.

Just over 70% of the total amount of goods transported by heavy lorry was loaded and unloaded within the same county. However, this share varies depending on the county in which the shipments originate. The share of the total amount of goods transported within county limits is larger in Norrland and Värmland counties than the average for Sweden as a whole. The major urban counties are on a par with Sweden as a whole in this respect, i.e., 70–75% of the goods shipped in each county were also unloaded within the same county limits. On the other hand, the share of intra-county shipments was smaller than average in counties located near major urban regions.

Most outgoing goods shipped by heavy lorry originate in the major urban counties.

The cabotage carried out in Sweden by lorries registered abroad has increased over the last six years in terms of the number of shipments, amount of goods transported, vehicle miles travelled, and transport mileage. Despite this, the share of goods shipped by foreign lorries in relation to lorries registered in Sweden has remained constant, accounting for roughly 1% of the total amount of goods transported within Sweden. However, cabotage by foreign lorries occurs to a greater extent with originations and destinations in different counties than with originations and destinations in the same county.

Domestic shipments by heavy lorries registered in Sweden are characterized by a large share of short-haul shipments. On average, over half of the tonnage of goods is transported over distances of under 50 km and only 3% is transported over distances exceeding 500 km.

The average amount of goods per shipment in domestic goods shipments using Swedish lorries has varied between 13 and 16 tonnes over the last few years. The nature of heavy shipments depends mainly on the maximum load weight of the vehicles used, although other factors, such as the type of goods loaded and the shipping distance, also affect the weight of

¹ Goods shipped by air are not included.

the goods in each shipment. On average, shipments of round timber, iron ore, ores other than iron, and paper pulp weigh 35–40 tonnes, while shipments of household waste, paper, and cardboard weigh an average of approximately 5 tonnes. The average amount of goods per shipment has a strong positive correlation with the shipping distance for goods transported by heavy lorry: i.e., the longer the distance covered, the heavier the shipments tend to be.

In terms of goods types, shipments of earth, gravel, rocks, and sand account for the greatest share of the amount of goods shipped by heavy lorry. In 2010, this group of goods accounted for roughly 27% of all domestic goods shipments transported by Swedish lorries. The largest amounts of such goods are loaded in the major urban counties, 18%, 14%, and 10% of all shipments of earth, gravel, rocks, and sand being loaded in Stockholm, Västra Götaland, and Skåne counties, respectively. Shipments of earth, gravel, rocks, and sand are usually made within county limits, and exclusively over distances of less than 60 km.

Domestic shipments of round timber by Swedish lorries accounted for roughly 14% of all domestic goods transported by Swedish lorries in 2010. Round timber that has been logged is transported to sawmills mainly by timber lorry, the shipping distance depending on sawmill proximity. Shipments of round timber are distributed relatively uniformly over various shipping distances compared with the average distribution for all goods. Roughly 60% of all round timber is shipped less than 100 kilometres. Lorry shipments of round timber are among the most efficient in terms of the amount of goods loaded for each shipment. In principle, the rigs are fully loaded regardless of the shipping distance. The average amount of goods per load is constant at around 40 tonnes, regardless of the shipping distance.

Goods transported by heavy lorry to and from Sweden have evolved similarly over the last six years. In 2010, heavy lorries carried 13.9 million tonnes of goods from Sweden to foreign countries and 14.9 million tonnes from foreign countries to Sweden. Compared with goods shipped by other modes of transport, heavy lorries carried roughly 13% of the goods that left Sweden and about 14% of the goods that entered Sweden.

Västra Götaland and Skåne counties are the biggest loading and unloading sites for goods shipped abroad by heavy lorry, 22% of goods leaving Sweden by heavy lorry in 2010 being loaded in Västra Götaland and 21% in Skåne.

Most goods shipments by heavy lorry travel to and from the countries bordering Sweden, plus Germany, Holland, and Poland. Thirty-four per cent of the goods leaving Sweden in 2010 went to Norway, 15% to Finland, and 12% each to Denmark, Germany, and Poland.

Foreign lorries dominate goods shipments abroad, roughly 75% of the goods shipped abroad from Sweden being carried by lorries registered abroad. The share is even larger for goods transported to Sweden from foreign countries, roughly 85% of which were transported by lorries registered abroad.

Goods shipments by sea

The amount of goods handled in Swedish ports rose by 18% between 1999 and 2010, i.e., from 153 to 180 million tonnes. A total of 180 million tonnes of goods from both domestic and foreign shipments were handled on docks in Swedish ports in 2010.

The five biggest ports in Sweden in terms of the amount of goods handled account for roughly half of the total amount of goods handled in 2010. These ports are, in order of decreasing size, Gothenburg, Brofjorden, Trelleborg, Malmö, and Luleå.

Forty per cent of all goods loaded in ports in 2010 were unidentified with respect to type. Most (i.e., 61%) of these unknown goods were loaded on cargo vehicles such as lorries or trailers. Container-shipped goods accounted for 26% of the unidentified goods, while goods loaded onto railcars accounted for 4%.

Of the 96 million tonnes of goods unloaded and 83 million tonnes loaded in 2010, 12 million tonnes were shipped within Sweden. This means that the domestic traffic corresponds to one-eighth (i.e., 12.5%) of all goods unloaded and 14.5% of all goods loaded in Swedish ports.

Refined petroleum products account for a large share of the amount of goods transported by ship domestically. The share of refined petroleum products totalled 44% in 2010, while ore and other extraction products accounted for 22%.

A total of 70.6 million tonnes of goods were transported from Sweden to foreign countries by sea in 2010, while 84.4 million tonnes of goods were shipped to Sweden from abroad. Compared with goods shipments via other modes of transport, roughly 66% of the goods leaving Sweden and roughly 81% of the goods entering Sweden were transported by sea.

In 2010, roughly one-quarter (26.5%) of the goods loaded for shipment abroad consisted of refined petroleum products. These goods were loaded mainly in the Gothenburg and Stenungssund-Strömstad areas. Twenty-four per cent of the goods transported to Sweden consisted of crude oil. Refined petroleum products accounted for 17% of the incoming goods and round timber for 6%.

The largest single share of goods left Sweden for Germany, followed by Finland and Great Britain. These three countries together accounted for 44% of the goods shipped abroad. Russia, Germany, and Denmark were the countries from which the largest amounts of goods arrived in 2010, 38% of the goods from abroad arriving from these three countries.

Goods shipments by rail

The total amount of goods transported by rail has increased relatively steadily since the early 1990s, except for a drastic reduction in 2009 due to the financial crisis. Nevertheless, 2010 saw the largest amount of goods shipped since 1974, i.e., 68.3 million tonnes.

The volume of intermodal shipments has increased each year since 2001. Goods shipped via intermodal transport have more than doubled overall over the last 10 years. Goods shipped by rail have increased marginally, and the amount of goods (in tonnes) shipped on the Iron Ore Line has risen by just over 30% during this period. Intermodal shipments are increasing primarily with respect to foreign traffic, while goods shipped by rail have decreased. Five times the amount of goods were shipped via foreign traffic by intermodal means in 2010 compared with 10 years earlier. On the other hand, the amount of goods shipped by rail decreased by more than 20% over this period.

The biggest goods group shipped by rail in Sweden consisted of ore and other extraction products, which accounted for 45% of the amount of such goods by weight. Ore shipped on the Iron Ore Line accounted for nearly half (i.e., 44%) of these shipments. The next largest shares were attributable to goods from the agriculture, forestry, and fishery group, accounted for 12% of the total amount of goods shipped by rail.



Transport Analysis is a Swedish agency for transport policy analysis. We analyse and evaluate proposed and implemented measures within the sphere of transport policy. We are also responsible for official statistics in the transport and communication sectors. Transport Analysis was established in April 2010 with its head office in Stockholm and a branch office in Östersund.