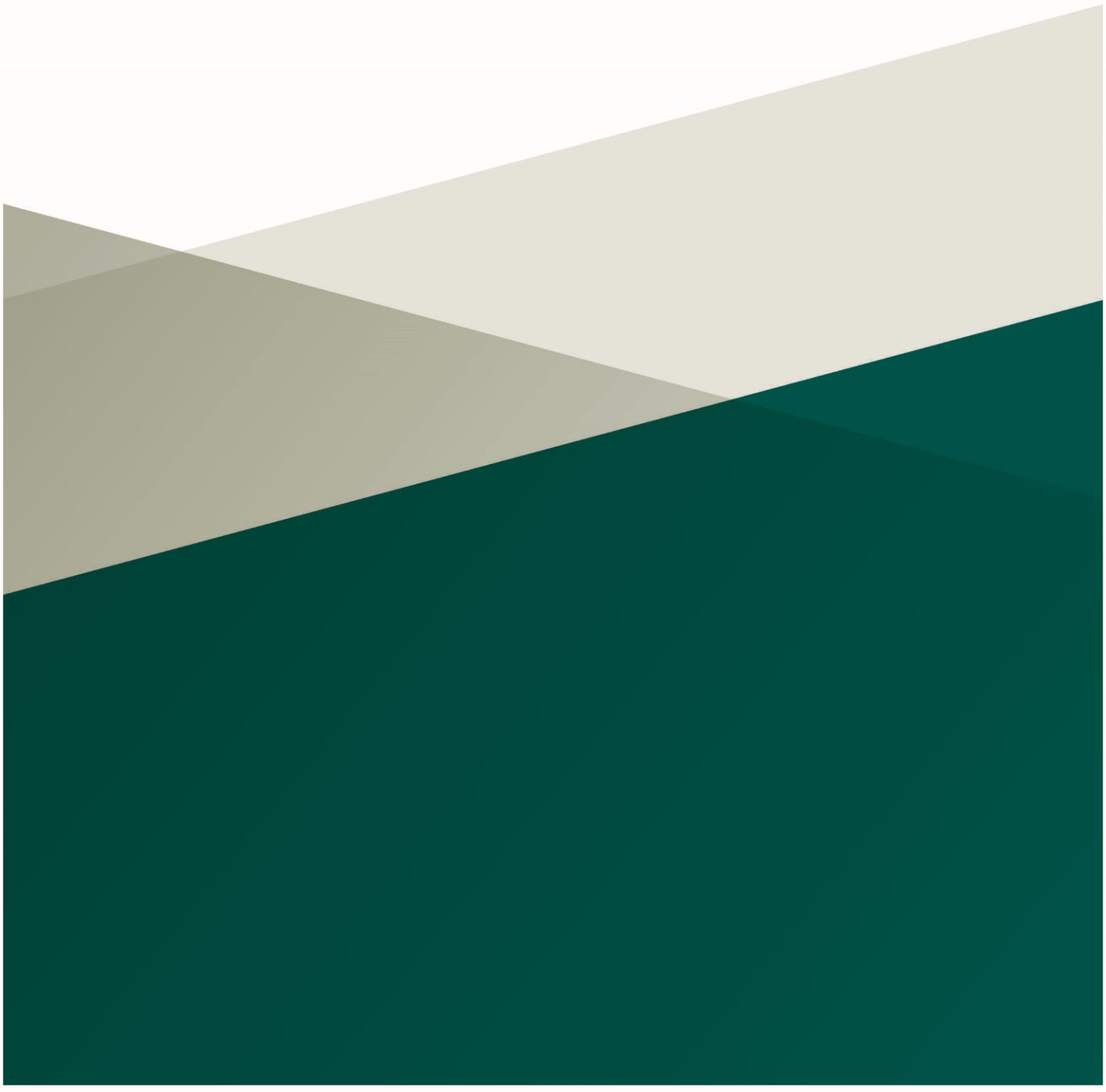
An Roinn Iompair
Department of Transport

Transport Trends 2020

An Overview of Ireland's Transport Sector



Transport Trends 2020 February 2021

Transport Trends 2020 was produced by the Department of Transport's Strategic Research and Analysis Division, a constituent unit of the Irish Government Economic and Evaluation Service. The report is available at both https://www.gov.ie and http://igees.gov.ie/.

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IGEES
Irish Government Economic and Evaluation Service

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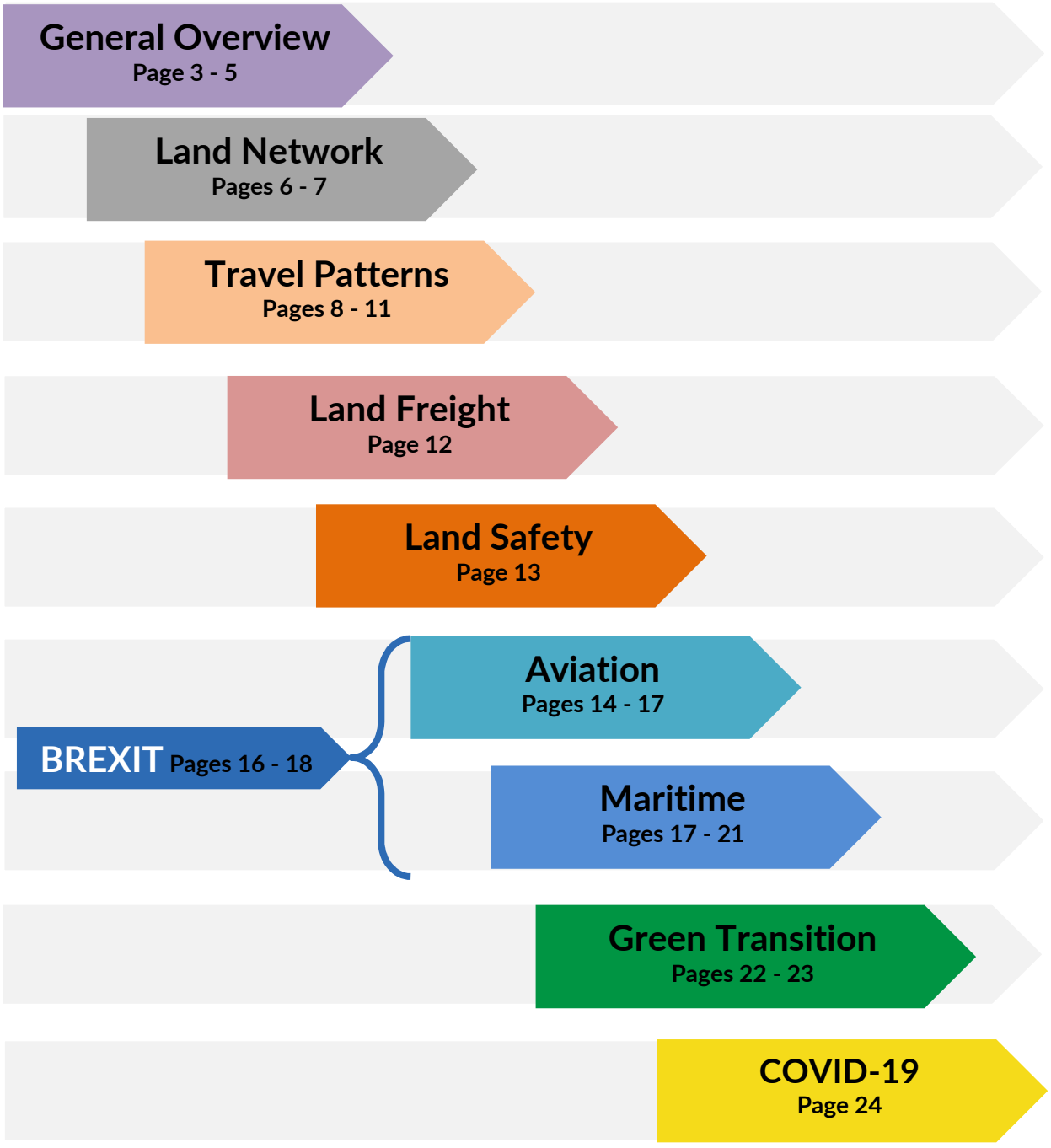
This document was updated on the 9th of December 2021 from the original published version to correct a graphical error on p.3 and amend the associated text.

Introduction and Contents

Transport Trends seeks to provide a concise overview of the key developments that are evident from the latest Irish transport data.

The publication is produced annually by the Department of Transport's Strategic Research and Analysis Division (SRAD); a constituent unit of the Irish Government Economic and Evaluation Service (IGEES), and the Irish Government Statistical Service (IGSS).

The contents of this publication are based primarily on data gathered from external sources. Information provided here should be used for reference purposes and citation should remain with the original source as stated. The 'Notes and References' section (pg.27-29); should be consulted when interpreting this document.



Transport Trends 2020

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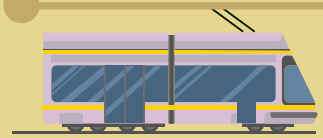
€4.7 billion
Transport Revenue 2019, up 1.4%



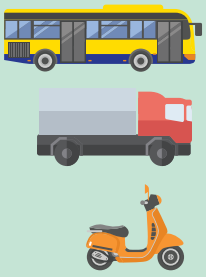
€2.4 billion
Department of Transport allocation 2020, up 19%

108,000
persons employed in transport and storage (Q4 2019)

Road Transport

2.8 million
Total Vehicles 2019

Total number of EVs on the road (Oct 2020) was **24,416**, an increase of **59.5%** on 2019



Modal Split 2019:

Private Car 73.7%

Active Travel 15%

Public Transport 6.5%

Other 4.5%

159.4 million
tonnes of Freight transported by road in 2019, up 6%

Average Journey length in 2019, 13.7k

Aviation

38.1 million
Air Passengers in 2019, up 4.2%

273,500
Commercial Flights at all airports 2019, up 2.7%

Sustainable Mobility

Dublin Bus ↓ 3.3%
Bus Éireann ↑ 6.9%
Irish Rail ↑ 4.4%
Luas ↑ 15.6%
Local Link ↑ 8.7%
on 2019

24,691 walkers and **13,131** cyclists cross the canals into Dublin city centre between 7:00 and 10:00 am daily

100 hybrid buses purchased

CO_2

12 million tonnes of CO_2 emissions ↓0.3% 2019

Maritime

12,952 Vessel Arrivals 2019, down 2.4% while gross tonnage of vessels increased by 5.4%

53.2 million
tonnes Goods handled 2019, down 3.4%

2.6 million
Maritime Passengers 2019, down 0.8%

At the height of the pandemic in Ireland

Passenger Journeys on main public transport operators fell by
82%

Maritime Freight volumes fell by
30%

Flights in and out of Ireland fell by
90%

Snapshot

This year's edition of Transport Trends highlights that in 2019 there was a decrease in the number of private car kilometres while there was an increase in the use of sustainable and active modes of transport. In 2020 the COVID-19 pandemic and the travel restrictions introduced to slow its spread, caused severe disruption to the transport sector leading to a significant falls in national and international travel. A new chapter on the impact of COVID-19 has been added to this edition of Transport Trends to reflect the impact of the pandemic. However, more detailed analysis on the impact of the crisis on the Aviation, Maritime, and Land Transport sectors will not be fully included until the next iteration of Transport Trends.

Land Transport: There was a reduction in both total kilometres driven on Irish roads and private car kilometres by 1% and 1.5% respectively in 2019. By contrast there was a rise of 3% in the number of public transport passenger journeys on the four main state operators in 2019, a total of 326.1 million. Use of active modes (walking and cycling), as measured during the NTA's annual Canal Cordon Count, has seen a 4.8% increase in Dublin in 2019. Irish road freight activity (measured by total road freight tonne kilometres) increased in 2019 by 7.5%, to the highest levels of activity seen in ten years (12.403bn tonne km).

Provisional data records show there were 140 fatalities on Irish roads in 2019, an increase of 1.4% from 2018. European Commission data showed that Ireland had the safest roads in the EU in 2018, with only 2.5 deaths per billion car passenger kilometres.

Aviation: The total number of passengers handled at Irish airports continued to grow in 2019, reaching 38.1m, a 4.2% annual increase. Conversely, the total amount of air freight handled at Ireland's main airports fell by 7.2% from 157,400 tonnes in 2018 to 146,000 tonnes in 2019.

Maritime: The number of vessels arriving at Irish ports decreased by 2.4% in 2019 to 12,952 vessels, while the gross tonnage of vessels increased by 5.4% to 278.8m tonnes. 2019 saw a 3.4% annual decrease in the amount of freight handled at Irish ports. Data from the CSO shows the number of maritime passengers (excluding cruise ship passengers on excursion) handled at all Irish ports fell by 0.8% to 2.6m in 2019, while the number of cruise ship passengers rose by 8.5% in 2019.

Green Transition: The transport sector emitted approximately 12.2m tonnes of CO_2 equivalent in 2019, a slight decrease of 0.3% from 2018. EPA projections forecast that emissions from transport-related activities will reach an estimated 11.3m tonnes (Mt) of CO_2 equivalent by 2030 in a With Existing Measures (WEM) scenario. However, if the emissions reduction target set out in the Programme for Government were achieved then emissions would fall to 6.2Mt by the end of the decade.

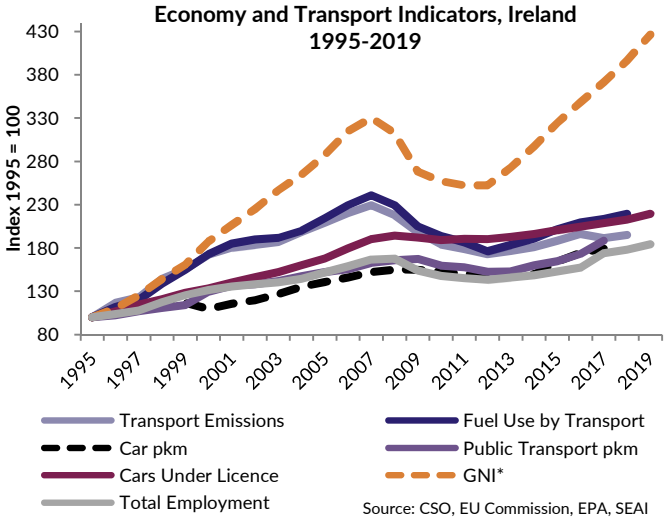
COVID-19: The global pandemic caused severe disruption to the Irish transport sector in 2020. Following international travel restrictions imposed in March, the number of flights in and out of Ireland plummeted by 90% compared to 2019 levels. Freight volumes through Irish ports fell by approximately 30% in April 2020 compared to 2019. Average daily passenger numbers for the four main public transport operators also fell, by 82%, over the period March to April. There was a less dramatic fall in the average daily traffic volumes of 58.8% between March and April. Public transport passenger volumes and traffic levels have increased slowly as restrictions were eased and have fallen once again as new travel restrictions were imposed.

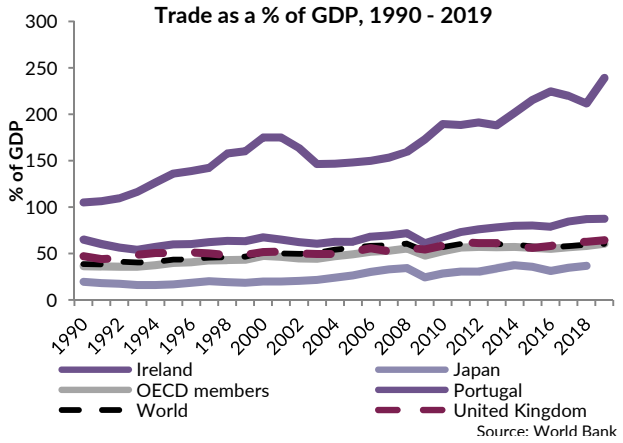
General Overview

This section provides an overview of the transport sector in Ireland. This includes details on how we travel, historical developments, travel costs and employment, recent headline expenditure trends, revenue associated with the transport sector and the wider international context.

The performance of the wider economy is the primary influence on trends within the transport sector. Economic growth both results in and is driven by more commuters, and goods moving around Ireland.

The growth of the economy between 1995 and 2008, measured by GNI* and employment, was associated with huge growth in cars licensed, passenger km travelled by car and public transport, and energy use and emissions in the transport sector. The **recovery in GNI* and employment and measures of transport activity since 2012 continued in 2018/19**. A decrease of 0.3% in greenhouse gas emissions from transport was recorded in 2019, the second year out of the last six with decreased emissions in transport.



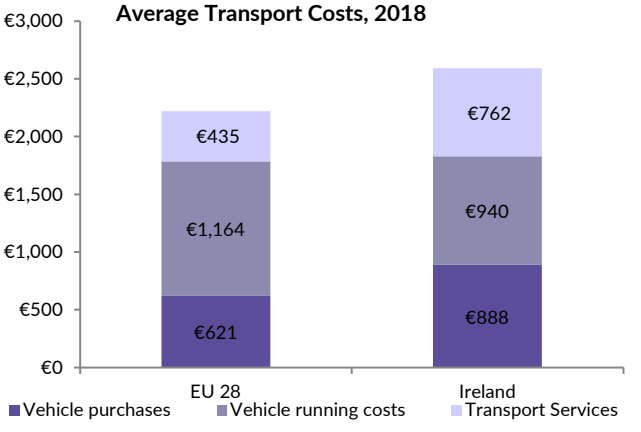


The graph on the left shows the ratio of total exports plus total imports to GDP for various countries and country groups. World Bank data shows that **Ireland is a particularly open economy**, and that this openness has grown over time. **In 2019, Irish exports and imports combined to an amount over twice the size of Irish GDP** (239%). Only Luxembourg (381.5%), Hong Kong (353%), and Malta (261%) recorded higher levels of trade openness, while the OECD average was 60.6%.

Clearly, Ireland's economy is heavily dependent on the movement of goods and services into and out of the country, and therefore on efficient domestic and international transport networks.

Transport is a major component of consumer spending, costing the average Irish person **€2,590 a year in 2018, up 3.6% on 2017. However,** transport spending represents a lower proportion of Irish household costs at 12.9% compared to the EU average of 13.2%. **CSO data indicates transport prices in 2019 increased 0.2% while general inflation was 0.9%.**

CSO figures show some **108,000 people were employed in Ireland in Transportation and Storage in Q4 2019, with 53,200 of these employed in land transport**. As per Census 2016, road freight and postal and courier activities were the two largest transport sectors in terms of employment.

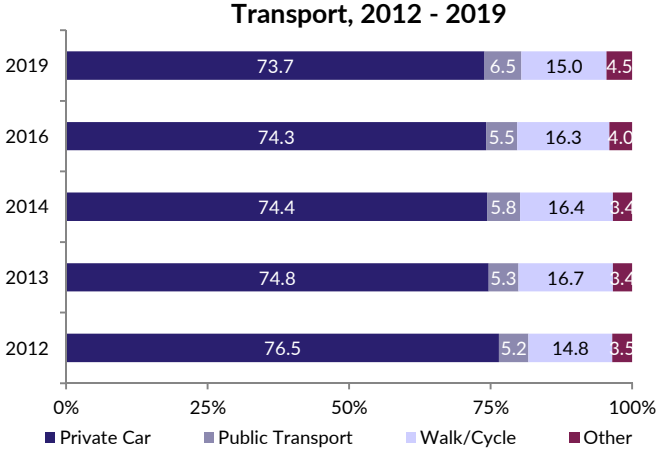


The way we travel continues to rely heavily on the private car, although recent years have seen increases in the use of public transport and active modes. Ireland's reliance on the car is similar to the rest of the EU, but our bus use is higher. Government expenditure and investment in transport has increased back to levels previously seen at the start of the last decade, but remains below the peak of 2008.

The National Travel Survey examines transport used by adults for all types of journeys. **Private car remains the dominant mode of transport at 73.7%**, fractionally lower than in 2016. The proportion of journeys made by **walking/cycling fell by 1.3 percentage points, to 15%,** while **public transport use increased by 1 point.**

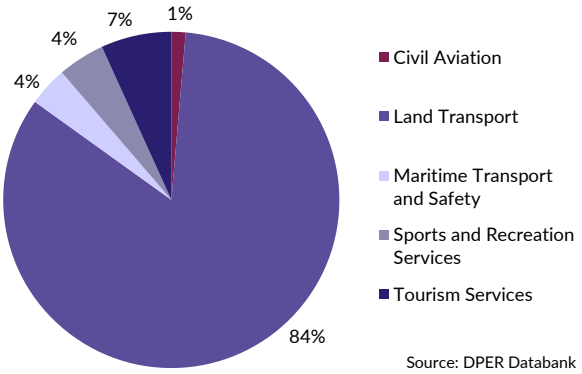
Work and education remain the main reason for making a journey, accounting for 26.3% of all journeys made, falling 7 percentage points since 2016. **Shopping was the second** most common reason for a journey, at 21.3%. The proportion of journeys made as a companion/escort increased by 5 points between 2016 and 2019 to 20%, making it the third most common reason to make a journey.

Percentage of Journeys by Mode of Transport, 2012 - 2019



Source: CSO

Sectoral breakdown of DTTaS Expenditure, 2020



Source: DPER Databank

A sectoral breakdown of the €2.73bn spending allocation for 2020 shows that **84% of funding is for land transport** (€2.3bn), **7% for tourism services** (€185m), **5% for sports and recreation services** (€123m), **4% for maritime transport and safety** (€103m), and **1% for civil aviation** (€37m).

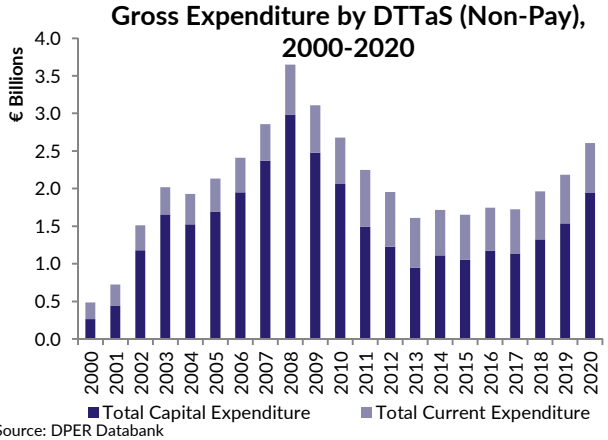
The biggest sectoral allocation increase from 2019 to 2020 is for land transport (20.0%). The 2020 allocation for sports and recreation services represented a 19.3% increase, while the allocation for tourism services increased by 11.4%. Maritime transport and safety had an allocated funding increase of 9.1% and civil aviation saw a 7.0% increase in 2020.

Expenditure (gross, non-pay) by DTTaS in 2019 **amounted to €2.19bn.** The allocation for 2020 increased 19% to €2.61bn, this was slightly below the 2010 spend of €2.68bn, and 29% below the peak spend of €3.65bn in 2008.

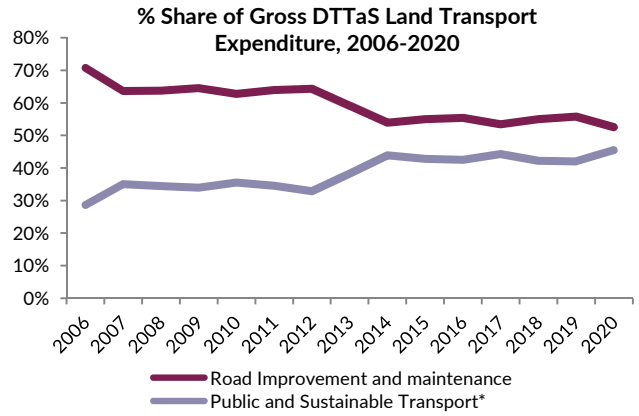
Capital expenditure accounts for 75% of the allocated expenditure for 2020 at €1.94bn. This is a 27% increase on the 2019 capital allocation of €1.54bn and is the highest level of expenditure in this area since 2010 (€2.06bn).

Current expenditure (gross, non-pay) increased by 2.1% in 2020 to €663.9m.

Gross Expenditure by DTTaS (Non-Pay), 2000-2020



Source: DPER Databank



*includes PSO funding , carbon reduction expenditure and agency stipends

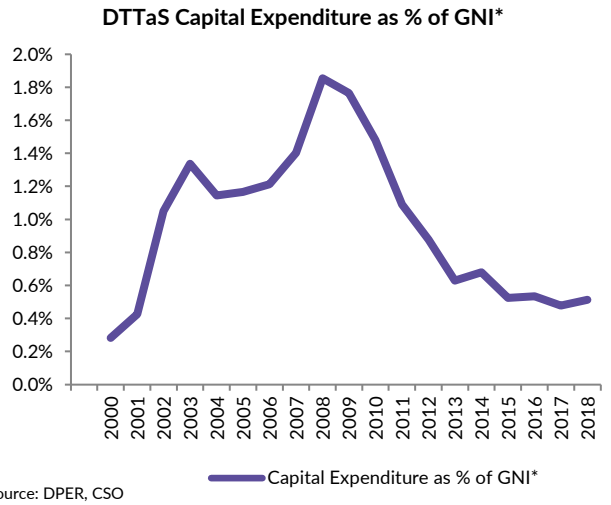
Source: DPER Databank

The largest expenditure item within the Department is land transport which is made up of road improvement and maintenance, public transport, PSOs and sustainable transport. Between 2005 and 2020, roads received an average of 60% of land transport funding while public transport averaged 37% over the same period.

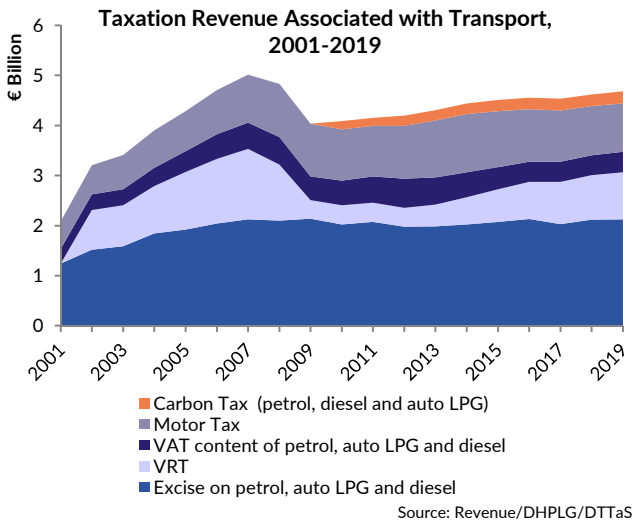
In recent years this gap has narrowed– **expenditure in 2018 and 2019 was 55% on roads and 42% on public transport and PSOs.** The spending allocation **for 2020 is 53% for roads and 45% for public and sustainable transport**. Expenditure areas are not entirely distinct: for example, bus users also benefit from an improved road network.

Capital investment in transport infrastructure, as measured by DTTAS's capital expenditure budget, has averaged 0.55% of GNI* since 2014. **While nominal levels of capital expenditure have been increasing, with €1.94bn allocated for 2020, as a percentage of GNI*, capital investment is far below the levels of the period 2002-2008 (averaging 1.3%pa).**

Analysis conducted by DTTaS in 2018 estimates that the level of Departmental capital investment required to protect and renew existing infrastructure and maintain it in an adequate condition will be €1.3bn annually going forward. However, given that capital investment in recent years has also funded new infrastructure, recent capital expenditure allocations are likely to be insufficient to maintain the steady state of existing transport infrastructure.



Source: DPER, CSO



Source: Revenue/DHPLG/DTTaS

Taxation revenue associated with the transport sector increased 1.4% in 2019 to €4.68bn. While still below the peak of €5bn in 2007, this is the highest taxation revenue associated with transport earned in the last decade.

Excise duties on fuels, such as diesel and petrol, is the largest source of transport-related tax revenue for the State with an estimated €2.1bn collected in 2019. **Vehicle Registration Tax (VRT) receipts have increased** significantly in recent years, increasing by over 5% in 2018 and a further 6.4% in 2019 to €942m. **Motor Tax receipts have fallen, by 4% in 2018 and by a further 1.8% in 2019**. This can be attributed to a reduction in the number of vehicles taxed by engine size and a reduction in the number of vehicles in tax bands C to G.

Despite the increases since 2012, transport investment today is significantly less than in 2008. Ireland continues to invest less than it historically has, less as a proportion of GDP, and less than the estimated level to maintain the current infrastructure.

Land Network

This section of *Transport Trends* discusses the provision of land transport infrastructure and services. The road network facilitates both passenger and freight transport, and both public and private transport, and is broken down into national, regional, and local classifications. Public transport relies on both road and rail infrastructure and provision.

Road Infrastructure, 2019

National Road: 5,309km

Of Which Motorway: 995km

Regional Roads: 13,316km

Local Roads: 82,707km

Total Road: 101,332km

Source: CSO/TII

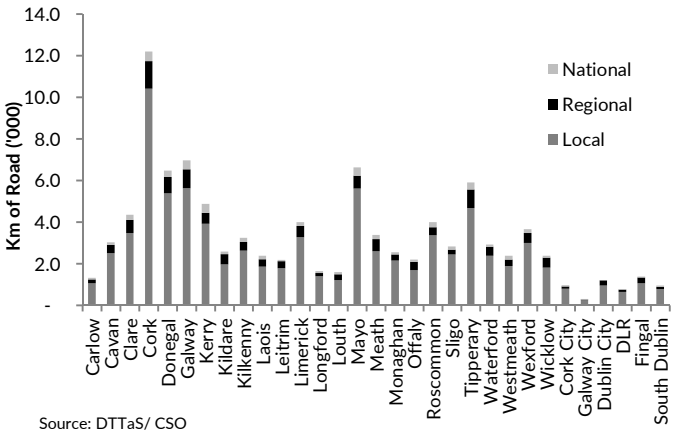
The Irish road network consists of 101,332km of road according to statistics from the CSO and TII. National roads, the primary links between cities and towns, account for 5,309km or 5.2% of all roads. Of these, **995km are motorway;** accounting for almost a sixth (17.5%) of national roads in 2019, while 306km or 5.8% of national roads are dual carriageway, and 4,008km or 75.5% are single carriageway.

The regional road network in 2019 comprised 13,316km (13.1% of all roads) and local roads accounted for 82,707km (81.6% of all roads).

The geographical breakdown of the Irish road network by local authority area in 2019 is presented on the right. The local authority areas containing the highest proportion of the Irish road network are **Cork County** (12,192km or 12.0%), **Galway County** (6,965km or 6.9%), **Mayo** (6,637km or 6.6%) and **Donegal** (6,474km or 6.4%).

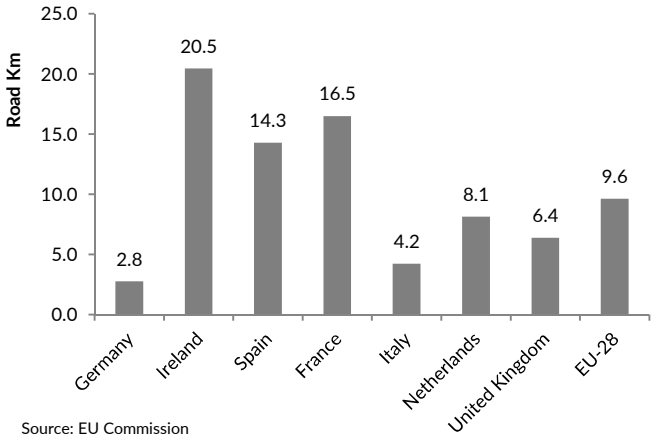
The distribution of the Irish road network is a function of geography and demography and gives an indication of the road asset levels being managed across the country and the relative breakdown of road classifications.

Total Road Km by Local Authority, 2019



Source: DTTaS/ CSO

Estimated Road Km per 1000 Inhabitants, 2018



Source: EU Commission

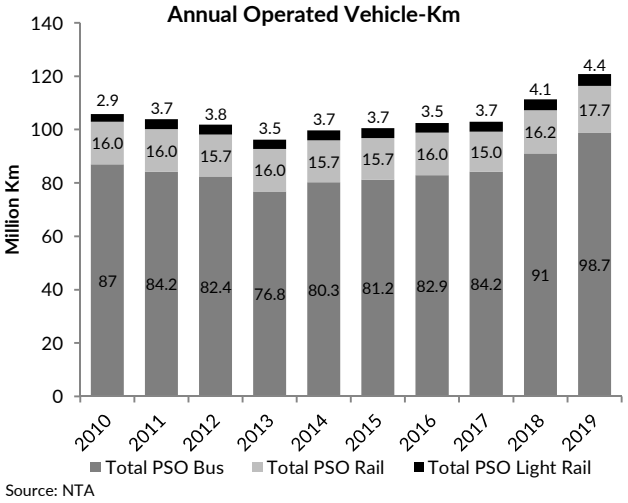
Data published by the European Commission in 2020 allows for a comparison of the level of road density across EU Member States. This is measured as the number of road kilometres per 1,000 inhabitants in 2018. As can be seen in the figure (left), **Ireland's road density is high by European standards**. With **20.5km per 1,000 inhabitants,** this is likely a function of Ireland's low "lived density" and widely dispersed settlement pattern**.**

Ireland's road density is the 7th highest density in the EU, **more than twice the EU28 average** of 9.6km per 1,000 people. Ireland has more than three times the road density of the UK, who have the 8th lowest density in the EU (6.4km per 1,000 inhabitants).

Data from the NTA provides a picture of the level of public service provision in Ireland. The total vehicle kilometres operated across all Public Service Operators increased 8.5% from 111.3m km in 2018 to 120.8m km in 2019.

The 2019 data shows vehicle km increasing across all systems – 8.5% (to 98.7m km) for PSO Bus, 9.3% (to 17.7m km) for PSO Rail, and 7.3% (to 4.4m km) for PSO Light Rail. Vehicle seat km also increased across the three types of services – 6.4% for Bus services, 6.6% for Rail services, and 8.2% for light rail services.

According to NTA data, there were 1,770 buses providing services in 2019. Of these, 55.6% or 985 were operating for Dublin Bus PSO services, 32.4% or 574 were for Bus Éireann PSO services, and 11.9% or 211 were for other licensed bus services.



Source: NTA

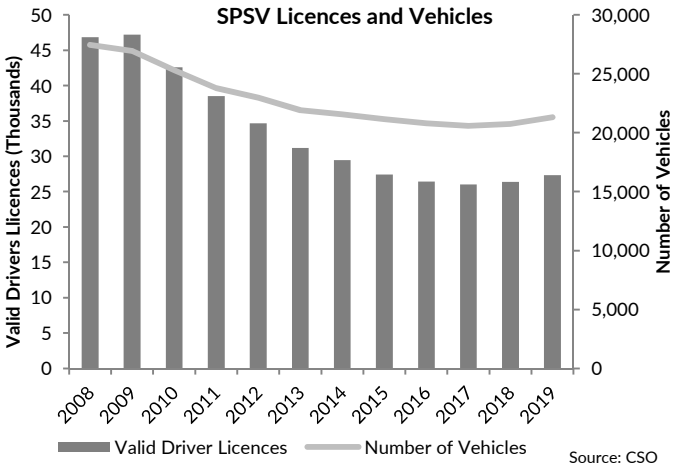
Luas: Key Facts (2019)
Red Line Length: 20.8km
Green Line Length: 22.0km
Trams in Operation: 73
Tram Capacity: 291-408 People
Vehicle Km: 4.3 million
Passenger Km: 239.4 million

Heavy Rail: Key Facts (2019)
Passenger Lines: 1,679km
Passenger Stations: 144
Sources: Luas & Iarnród Éireann

No new trams were added to the Luas fleet in 2019 following the addition of 7 new larger trams in 2018. The newer trams have a maximum capacity of 408 passengers per tram, up from capacities of 291 and 319 passengers on other trams in operation on the red and green lines respectively. The Luas network spans 5 Green Zones, 4 Red, and one Central Zone. In all there are 67 stations, 7 of which have "Park & Ride" facilities.

In operational terms, there were **4.3 million vehicle km provided by Luas in 2019** (up 2.9%) while 239.4 million passenger km were travelled in 2019, an increase of 14% on 2018.

Small Public Service Vehicles (SPSVs) are vehicles with seating for up to 8 passengers and primarily consist of taxis, hackneys and limousines.
The number of **SPSVs increased by 2.9% to 21,326 vehicles in 2019**. Taxis accounted for 69.4% (14,795) of all SPSVs, a decline of 1.8% compared to 2018 (15,064 vehicles). The **number of wheelchair accessible hackneys/taxis has almost doubled** in the last two year to 3,077, accounting for 14.4% of all SPSVs in 2019.
The number of active SPSVs driver licences fell by 45% between 2009 (47,222 licences) and 2017 (26,012 licences). Over the last two years this downward trend has reversed. In 2019 the number of active licences increased 3.6% to 27,328.



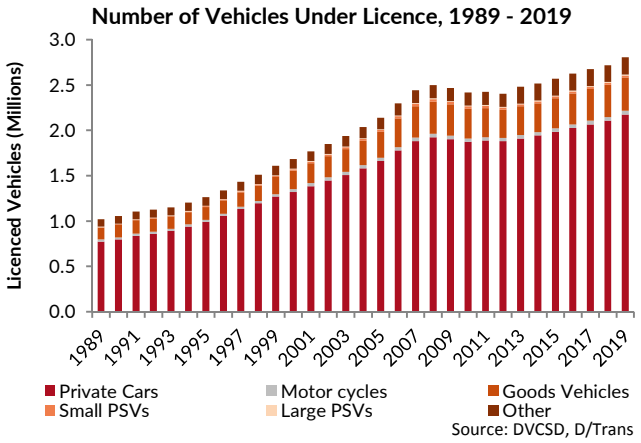
Source: CSO

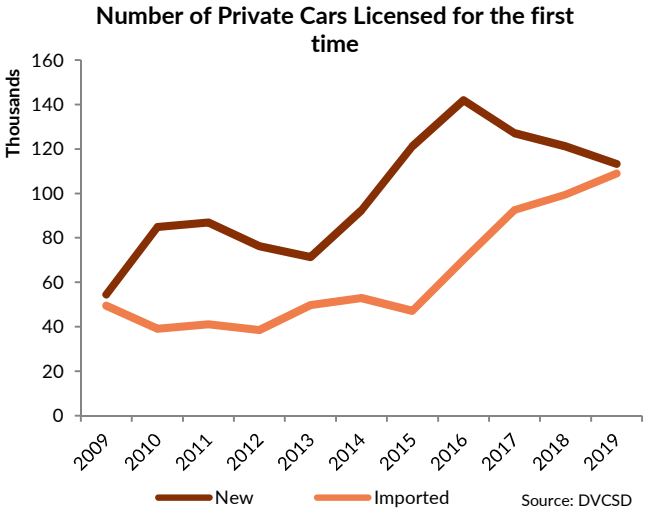
Travel Patterns

This chapter assesses trends in the various modes of land travel in Ireland. Car ownership levels, usage of public transport services and levels of active travel are all discussed in the following sections.

The total number of licensed vehicles in Ireland increased by over 88,000 to 2.8m in 2019, of which 2.17m are private cars. Goods vehicles are the next largest category with 366,760 such vehicles licensed on Irish roads.

While the overall number of licensed vehicles continues to increase, the rate of growth in the different vehicle categories varied in 2019. Numbers of both private cars and goods vehicles increased by 3.2%, the number of large PSVs increased by 4.4%, while small PSVs increased by 1.6%. The number of licensed **motor cycles on the road increased by 5.7%** between 2018 and 2019, accounting for an additional 2,294 motor cycles.



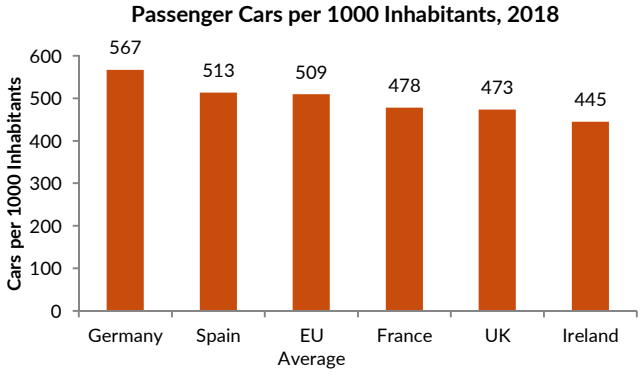


The number of new vehicles licensed decreased for a third consecutive year to 149,748 in 2019, a 5.1% decrease from 2018. A total of 113,305 new private cars were licensed, representing 75.7% of total new vehicles licensed in 2019. This in turn represents a 6.5% decrease from the 121,157 new cars licensed in 2018. The number of new goods vehicles licensed in the same period fell by 3.2% to 24,645.

While the overall number of *new* vehicles licensed continues to fall, **the number of imported used vehicles registered in Ireland increased for the fourth consecutive year**, by 9.0%. In total, 137,196 imported used vehicles were registered in 2019, of which 108,895 were private cars, up 9.5% on 2018. The ratio of new private cars to used imports has been falling since 2016, reaching almost equal in 2019 **(1.09:1).**

Analysis of the latest Eurostat data (2018) indicates that **the level of private car ownership is lower in Ireland than in other European states.**

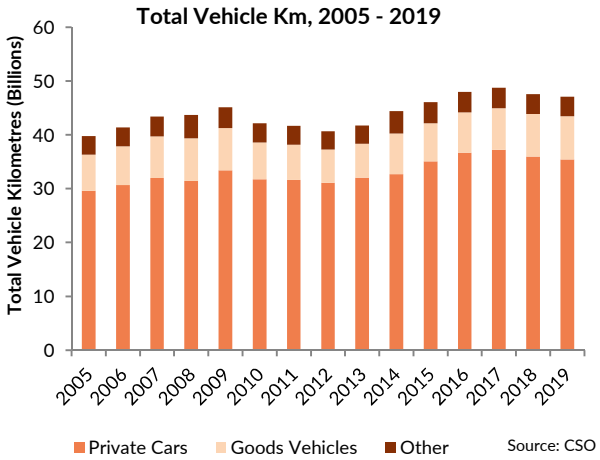
The estimated level of 445 private cars per 1,000 inhabitants in Ireland ranks below the average of 500 for the 27 EU member states for which data is available. The UK (473), Spain (513), France (479) and Germany (567) all have a higher density of private car ownership. Ireland's level is the 7th lowest of the countries for which data is available, increasing by only 1 car per 1,000 inhabitants since 2017.



Source: Eurostat. Average estimated from 27 countries.
Note: UK defintion differs from other countries included above

The volume of kilometres driven by private cars decreased for the second year in a row, while increasing for goods vehicles. In recent years, used vehicle imports have increased, approaching parity with new vehicles licensed. While this trend may ultimately be temporary in nature, there are current implications for the domestic car retail sector as well as for tax revenues associated with new car purchases.

This section explores trends in public transport usage. Unsurprisingly, there has been increased demand for public transport in recent years as the national economy grew, with most operators reaping the rewards. The introduction of Go-Ahead Ireland and other tendered bus services has resulted in Dublin Bus experiencing a decrease in passenger journeys.



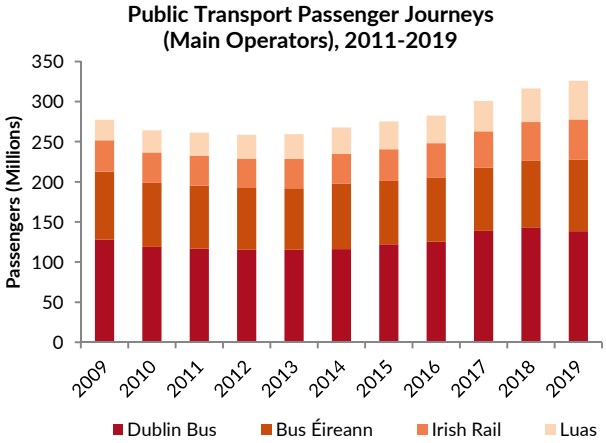
Total **kilometres driven in 2019 decreased to 47.1bn, a 1.0% decrease from 2018 (47.5bn)**. Goods vehicle travel reached the highest levels recorded over the last 15 years, at 8.0bn km, an increase of 1.7% compared to 2018. The total vehicle km travelled by private cars remains below its peak of 37.2bn km in 2017, at 35.5bn km, a drop of 1.5% on 2018 figures (36.0bn km). However, private cars were responsible for 75.3% of total kilometres in 2019, with goods vehicles accounting for 17.0%.

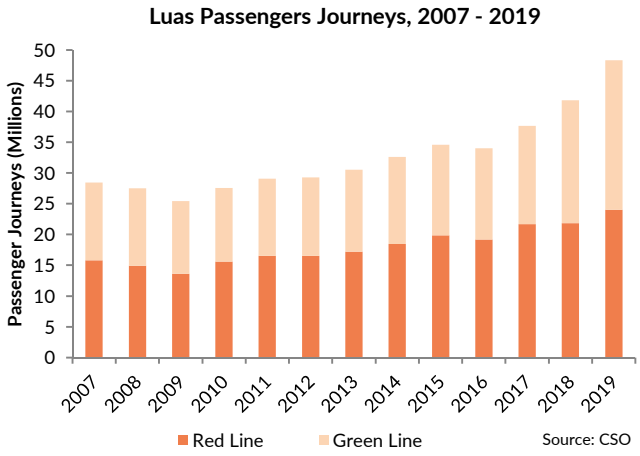
On average each private car covered 16,352km in 2019, a 3.8% decrease from 2018 (16,990km).

The total number of kilometres driven on the Irish road network currently shows a downward trend, data from TII traffic counters show traffic volumes have increased by 2.5% between 2018 and 2019.

The number of passengers carried by the public transport network increased once again in 2019. Passenger journeys facilitated by the four main public transport operators **increased 3.0% to 326.1m in 2019.**

While Dublin Bus accounted for the greatest number of passenger movements with 138.3m journeys in 2019, this was a decrease of 3.3% compared to 2018 figures (143.1m journeys). Bus Éireann was the next largest provider with 89.4m passenger journeys, followed by Irish Rail with 50m passenger journeys. **Luas experienced a strong demand for their services in 2019, increasing passenger journeys by 6.5m to 48.3m.**





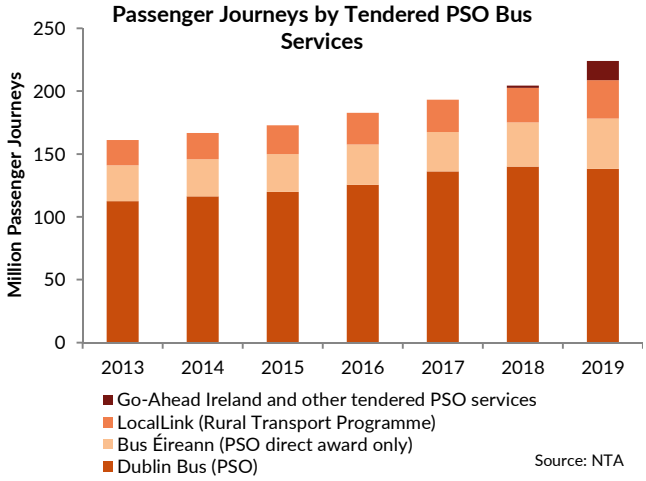
The Luas continues to see growth in its patronage with **48.3m passenger journeys recorded in 2019**. This represents a 15.6% increase from the 41.8m journeys recorded in 2018. This follows the introduction of a number of new longer trams in 2018 to ease overcrowding on some services.

There was a large increase in the number of journeys made on the Green line in 2019 (21.5%), as a result the total number of passenger journeys made on the Green Line in 2019 outweighed that of the Red Line by 255,000 journeys. This is likely a result of the opening of the Green Line extension. The number of journeys made on the Red Line continued to increase in 2019, by 10.1%.

Buses are the most extensively used public transport mode in Ireland. **Over 226m journeys were facilitated by public bus operators in 2019**. Dublin Bus PSO accounted for the majority of these passenger journeys, 138.3m, while Bus Éireann PSO facilitated a further 39.9m journeys, showing an annual increase of 13.3%.

Local Link services have seen annual passenger journeys rise over the years, albeit on a much smaller scale to that of the larger operators. 2018 saw an increase of 21.7%, which was followed by further growth of 8.7%, to 2.5m passenger journeys, in 2019. Go-Ahead Ireland and other tendered PSO services recorded 15.4m passenger journeys in 2019.

There were 30.5m passenger journeys facilitated by licensed commercial bus services in 2019.

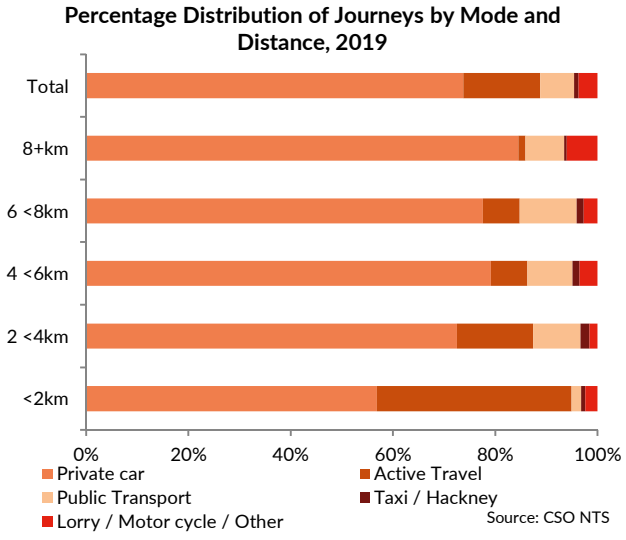


Irish Rail has seen continued growth in passenger numbers since 2013. **Data from the CSO indicates that heavy rail passenger journeys increased by 2.1m to 50m journeys in 2019**. DART and Commuter services to Dublin are the core drivers of heavy rail passenger numbers in Ireland with 21.6m and 14.0m journeys recorded on these services respectively. 2019 saw a small increase (0.4%) in daily journeys in the Greater Dublin Area to 149,750. **Since 2014 the number of daily heavy rail journeys in the Greater Dublin Area has increased by 43.6%.**

Other mainline services accounted for a further 13.2m journeys in 2019, while the Enterprise service to Belfast had 1.3m journeys, a year-on-year increase of 2.6%.

The National Travel Survey (NTS) is carried out by the CSO to compile statistical indications for journey purposes and modes of travel. The most recent survey was held in 2019. The CSO found that the **average journey distance was 13.7km in 2019**.

Longer journeys were more likely to be travelled by private car - 84.6% of journeys of at least 8km are by private car. For short journeys (<2km) this proportion decreases to 57% and active travel modes become more prominent – 38.1% of journeys within 2km are completed by active travel. Increasing this distance to between 2 and 4km, the percentage of journeys carried out by active travel falls to 15%. The proportion of journeys by public transport averages at 9.7% for journeys between 2 and 8km. Less than 2% of journeys within 2km are completed on public transport.

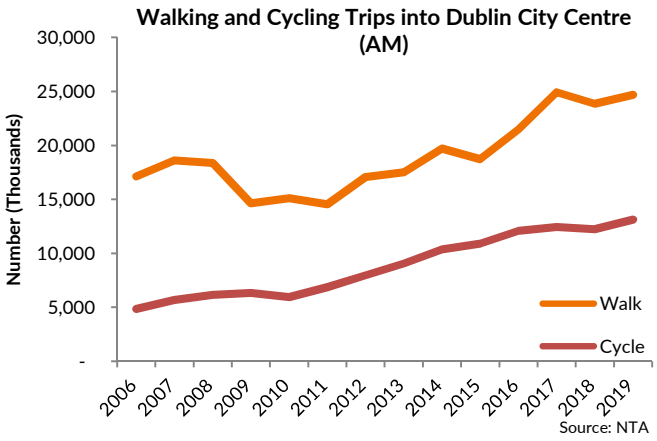


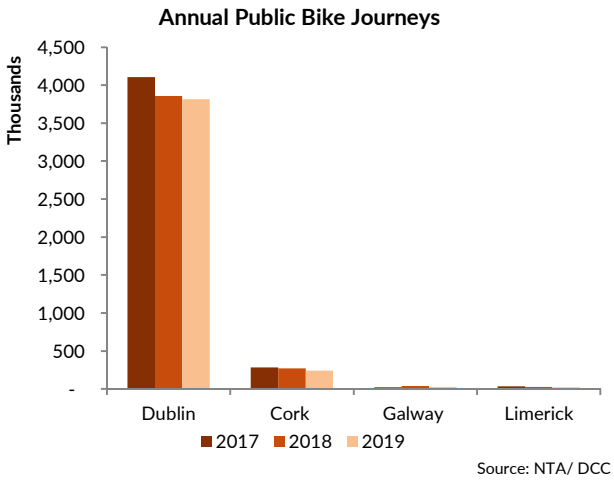
Bus services continue to form the backbone of the Irish public transport system. However, where in place and accessible, other modes of public transport, including heavy rail and the Luas, are heavily utilised by the general public.

This section outlines trends in active travel drawing on data from the NTA's Canal Cordon Count and usage levels for public bike schemes. The section also briefly highlights the use of technology, such as Leap Cards, by users of public transport.

The NTA's Canal Cordon Count (right) measures the number of trips into Dublin city centre on a typical morning in November of each year. Data is collected for all common modes of transport including walking and cycling.

Data for 2019 shows an increase in the number of cyclists recorded entering the city to 13,131, up from 12,227 in 2018. Furthermore, this is 5.5% higher than the previous peak of 12,447 in 2017. The number of walkers also increased in 2019, by 3.5% to 24,691. **The Canal Cordon Count also records the number of car users entering the city. Between 2018 and 2019 this number fell by 4.2% to 57,985.**



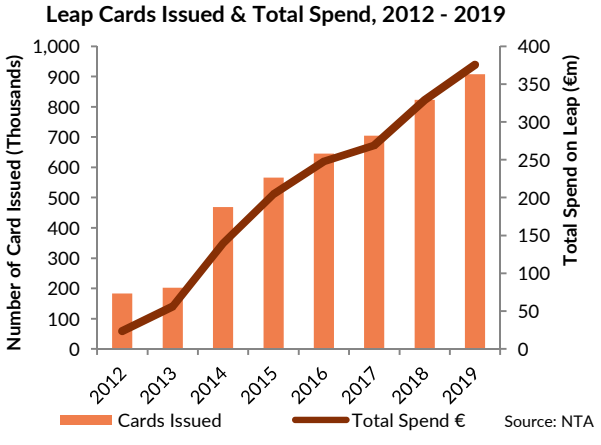


Public bike schemes currently operate in Dublin, Cork, Galway and Limerick. Dublin's public bike scheme has been in operation since 2009, while the remaining three have been in place since 2014. The number of total annual journeys across all four **public bike schemes fell between 2018 and 2019.** This downward trend has existed since 2016, with the exception of Galway, which experienced increases of over 64% for the previous two years.

Two stationless bike-share schemes have been introduced by Dublin City Council in the last 2 years. Bleeperbikes, launched in 2018, recorded over 200,000 journeys in 2019, and more recently Moby Bikes launched a fleet of e-bikes in 2020.

Use of technology by public transport users continues to grow. The Leap Card integrated ticketing system is perhaps the best example of this with the **number of Leap Cards issued increasing 10% to 907,731 in 2019**. The value of top-ups and tickets purchased via Leap Cards also increased 14.2% in 2019. Given the cheaper fares and convenience associated with Leap Cards over cash fares, it is perhaps unsurprising that there has been an increase in their use.

Technology aids have become a highly utilised source in everyday life for travel information**. Data was accessed through the NTA Real Time Public Transport Information (RTPI) App on average 145,449 times a day during 2019.**



Active travel in the form of cycling and walking has been increasing in Dublin in recent years according to the Canal Cordon Count. Usage of public bike schemes appears to be waning with 2019 seeing further decreases for schemes in operation. This may be due to the bikes being confined to zoned areas, restrictions which don't apply to new stationless bike schemes.

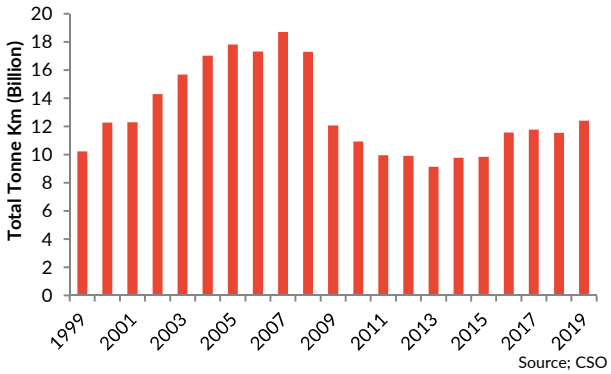
Land Freight

Ireland's road and rail networks play a vital role for economic activity by facilitating the movement of goods around the country. In 2019 road freight activity increased to 12.4 billion tonne km, the highest volume seen since 2008 (17.2 bn tonne km). Rail freight, declined in traffic for the third year in a row.

Irish road freight activity (measured by total road freight tonne kilometres) **increased in 2019 by 7.5%,** to the highest levels of activity seen in ten years (12.403bn tonne km), following a marginal decrease in 2018 (1.7%). In general, activity still remains well below levels experienced during the height of the Celtic Tiger.

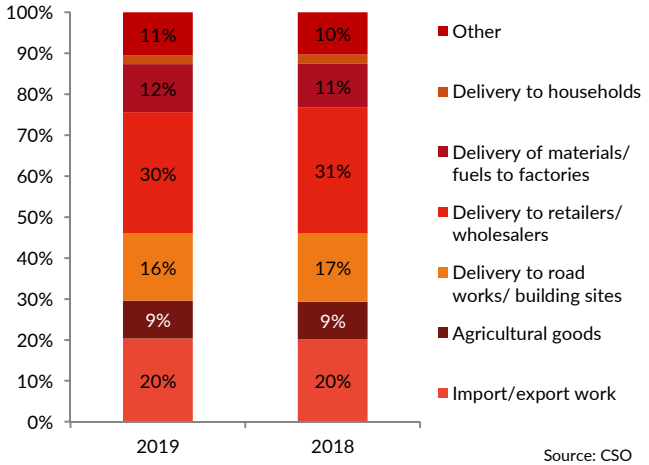
Overall volumes of freight moved on the road network in 2019 increased by 6.3%, to 159.4 million tonnes from 150 million tonnes in 2018. Furthermore, the number of Laden Journeys – journeys made for the purpose of transporting items – grew 8.4% to 14,480, between 2018 and 2019.

Total Road Freight Tonne Km, 1999-2019



Source; CSO

Road Freight Tonne Km by Main Use



Source: CSO

There were some notable changes to the composition of road freight in 2019.

The fastest growing road freight sector in 2019 was deliveries of materials/fuel to factories, which saw a 17.3% increase on 2018 tonne kilometre levels. The fastest growing road freight sector of 2018, deliveries road works/ building sites (16.3% increase on 2017), increased by 5.7% in 2019. Deliveries to households increased by 0.4% in terms of tonne kilometres, however fell by 3.2% in terms of tonnes carried.

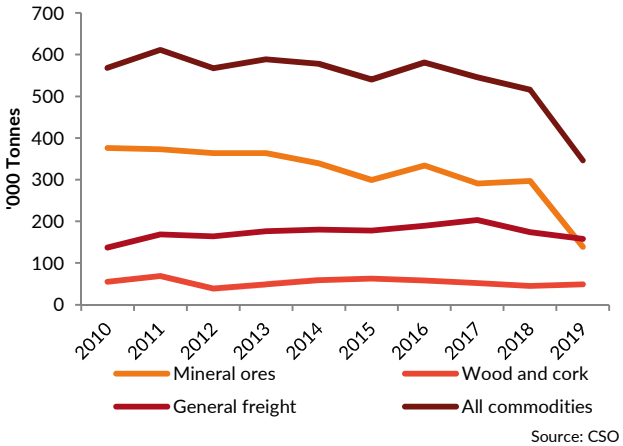
Deliveries to retail/wholesale outlets (29.6% or 3.7bn tonne km) and import/export work (20.3% or 2.5bn tonne km) remains the primary elements of road freight activity.

The volume of freight moved by heavy rail declined in 2019 for the third year in a row. Overall tonnage moved by rail dramatically fell 32.9% to 346,000 tonnes, equivalent to just 0.6% of total tonne kilometres of the land freight sector in Ireland.

Movement of **mineral ore declined significantly in 2019** with 160 kilotonnes less (53.2%) moved compared to 2018. As mineral ore freight accounted for 40% of rail freight in 2018, trends for total rail freight are reflected in this rise and fall of mineral ore freight traffic.

Despite the overall decrease in rail freight, 2019 saw an **8.9% increase in the movement of 'wood and cork'** (49,000 tonnes). 'General' freight was the main form of rail freight in 2019, 158,000 tonnes (46%).

Rail Freight by Commodity, 2010-2019



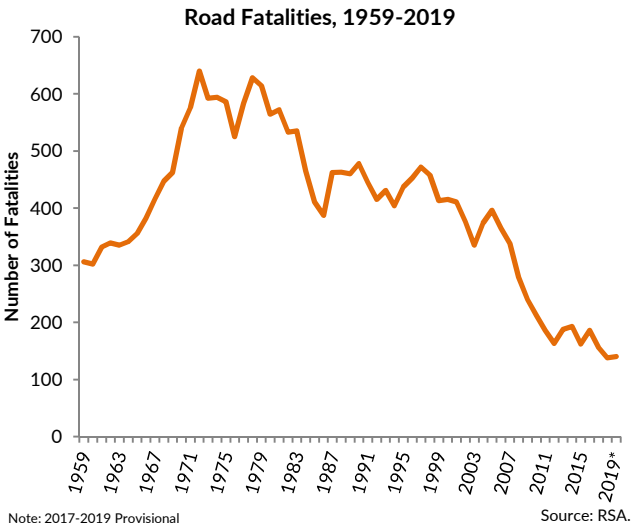
Source: CSO

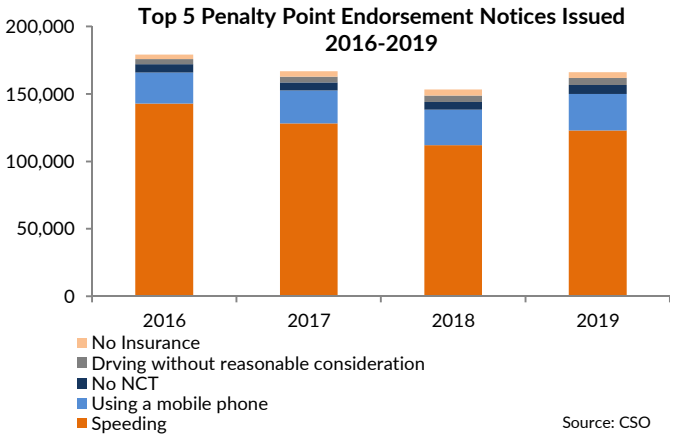
Safety

Ireland had the safest roads in the EU in 2019. While the number of fatalities on Irish roads increased slightly in 2019, over recent years there has been a significant decline in the number of fatalities recorded. Figures outlining the number of accidents recorded on the heavy-rail network and involving Luas trams are also provided.

Provisional data records show there were **140 fatalities on Irish roads in 2019, an increase of 2 (1.4%) from 2018.** September was the worst month in 2019 for fatal road incidents with 19 deaths. July remains the worst month on average with an average of 16.45 deaths since 2009. The number of pedestrian fatalities was 27 in 2019, down 15 (27%) on 2018. The number of cyclist fatalities in 2019 was 8, down 1 (11%) on 2018.

Over the long run there has been a clear and significant downward trend in the number of fatalities on Irish roads, a trend that has been broadly replicated in Europe as a whole. **Ireland had the safest roads in the EU in 2018,** with only 2.5 deaths per billion car passenger km. Other comparable countries also recorded low rates of fatalities such as the UK (2.7), Sweden (2.8) and Germany (3.4).



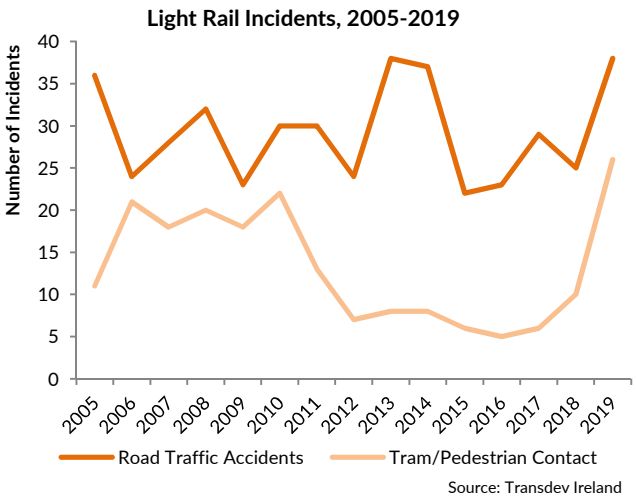


In total **191,104 penalty point endorsement notices were issued in 2019, up 7.9% on 2018.**

The top five offences for which penalty points were issued in 2019 were: speeding, which accounted for 64.3% of all offences, driving while using a mobile phone, which accounted for 14.2%, followed by driving without an NCT certificate (3.4%), driving without reasonable consideration (2.8%) and driving without insurance (2.3%).

There was a significant increase in the number of collisions involving the Luas in 2019. **In total there were 64 road traffic accidents and contacts with pedestrians in 2019 up from 35 in 2018.** Tram contacts with pedestrians increased to 26 in 2019 from 10 in 2018 while road traffic accidents involving trams increased from 25 to 38 in 2019.

The latest safety data available for heavy rail indicates a slight decrease in safety performance for 2018. **There were 6 significant accidents recorded across the rail network in 2018 up from 4 such accidents in 2017.** There was one accident which required parties to be hospitalised for more than 24 hours in 2018. The number of unauthorised person fatalities remained constant at 9 in 2018.



Aviation

The aviation sector is critical to Ireland's connectivity to the rest of the world for travel, business and tourism. This section reviews the primary data and describes the overarching trends and dynamics in relation to airport infrastructure, passenger and flight traffic, and movement of freight by air.

Total Passengers Handled at State and Regional Airports, 2019

State Airports

Dublin: 32.7 million

Cork: 2.6 million

Shannon: 1.6 million

Regional Airports

Knock: 805,443

Kerry: 369,836

Donegal: 48,542

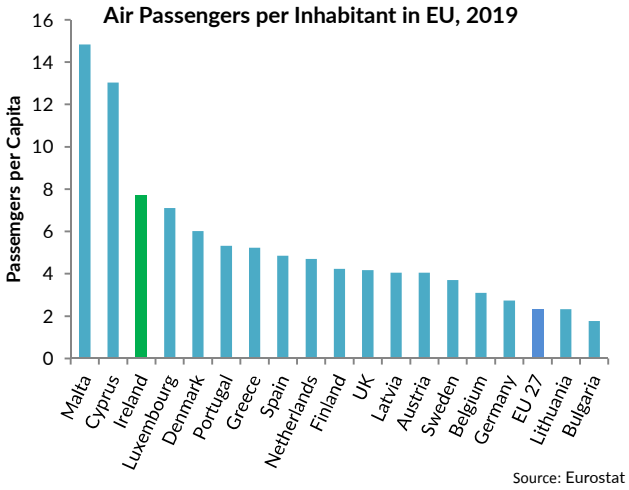
Source: CSO

Ireland's aviation infrastructure is divided into two distinct categories of airports, as set out by the National Aviation Policy published in August 2015. **State Airports** – Dublin, Cork and Shannon – are the primary gateways through which air traffic accesses Ireland. **Regional Airports** – Ireland West Airport Knock, Kerry and Donegal– are important for improving connectivity to their areas.

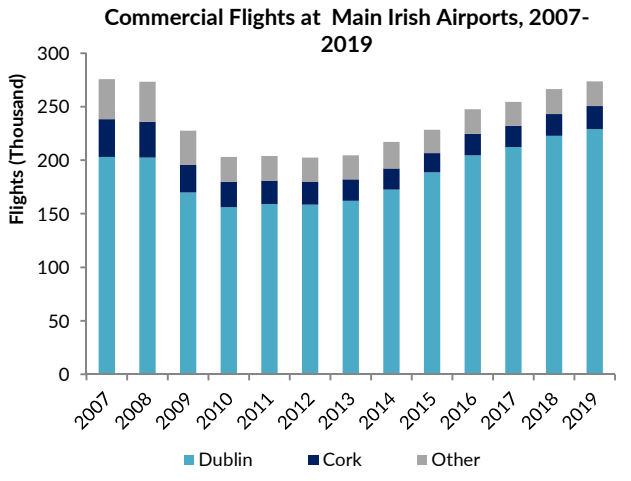
All of these airports, with the exception of Shannon, saw increases in passenger traffic from 2018 to 2019, with Cork and Dublin reporting the highest growth of 8.3% and 4.3% respectively. Conversely, passenger numbers fell by 3.7% in Shannon over the period 2018-2019.

Ireland has one of the highest levels of air traffic per inhabitant in the EU. There were **7.7 passengers carried per inhabitant in Ireland in 2019 compared to 2.3 in the EU27**. This is behind only Malta and Cyprus, two other island nations, and considerably higher than the UK (4.2), Sweden (3.7) and Germany (2.7).

Eurostat data for 2018 shows **Ireland has 5 airports with more than 100,000 annual passenger movements**. An international comparison of Ireland's airport infrastructure shows that Ireland has a similar number of airports to other European countries with comparable populations; France has the highest number (41) and a number of countries including Luxembourg and Malta have only 1.



Source: Eurostat



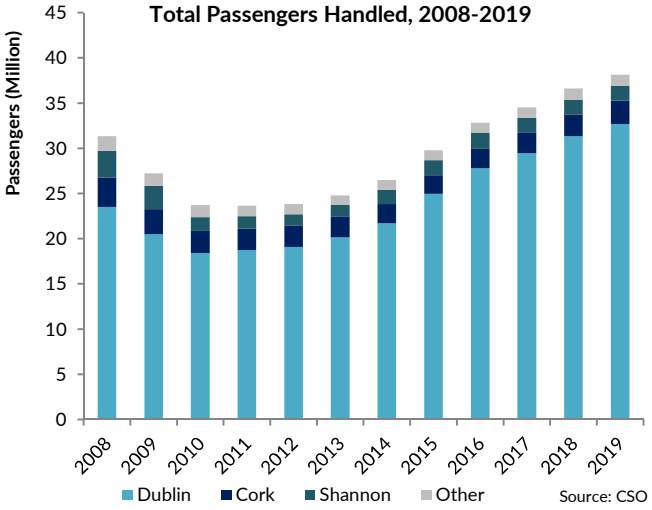
Source: CSO. Other: Kerry, Knock and Shannon

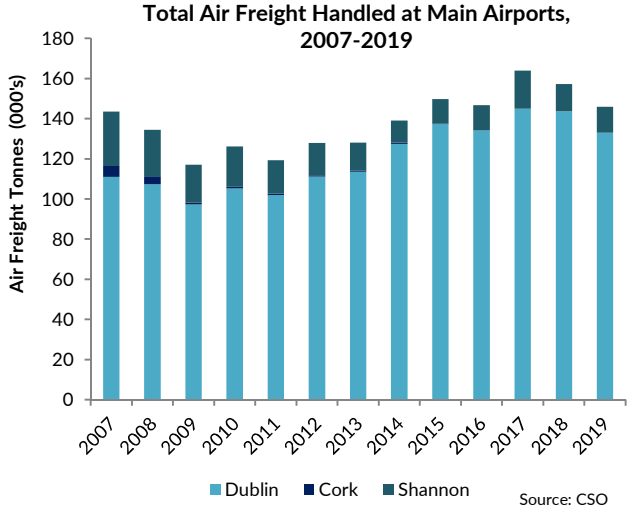
Having fallen from a peak of 283,500 in 2007 to 202,300 in 2012, the total number of commercial flights handled in the main airports rebounded to 273,500 in 2019. **This is an increase of 2.7% on 2018 levels.**

Dublin Airport handled 229,100 commercial flights in 2019, which was 2.9% higher than in 2018, while Cork handled 21,400 commercial flights, up 4.9% from 2018. Shannon handled 13,200 commercial flights, down 3.6% on 2018. The number of commercial flights handled by both Kerry and Knock increased by 9.1% and 1.6% respectively in 2019. Dublin increased its share of total commercial flights slightly to 83.7%. Cork also increased its share of commercial flights to 7.8%. However, Shannon's share of commercial flights fell to 4.8%.

The total number of passengers handled at Irish airports grew in 2019, reaching 38.1m, a 4.2% annual increase. Passenger numbers have grown by 61.2% from the 2011 low of 23.7m.

Dublin Airport accounted for 85.7% of all passengers in 2019 at 32.7m, up 4.3% on 2018. Cork Airport recorded even stronger growth in passenger numbers increasing by 8.3% to stand at 2.6m passengers. By contrast passenger numbers at Shannon Airport were down by 3.7% in 2019 at 1.6m. Eurostat figures show Dublin Airport was the 9th busiest in the EU in 2018.



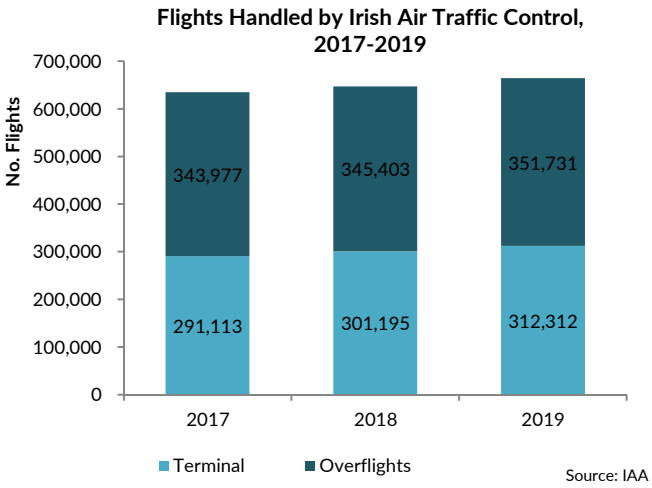


The total amount of air **freight handled** at Ireland's main airports has fallen **by 7.2% from 157,400 tonnes in 2018 to 146,000 in 2019**. This marks a continuation of the downward trend from 2017 when freight volumes stood at 164,000 tonnes. Air freight accounts for a tiny share by weight of all freight exported or imported from Ireland, but includes high-value merchandise such as pharmaceuticals.

Dublin Airport handled **133,000 tonnes of air freight in 2019, down by 7.4%, accounting for 91.1% of total air freight in Ireland.** Cork handled no air freight in 2019 having handled 100 tonnes in 2018, and Shannon handled 13,000 tonnes in 2019, down from 13,600 in 2018.

Data from the Irish Aviation Authority shows that **only 26.5% of air traffic handled in Ireland in 2019 were flights into or out of terminals at Irish airports**. Flights through Irish airspace (overflights) made up 29.9% of the total, with North Atlantic Communications (NAC) flights (over oceanic airspace) constituting the remaining 43.5%. All overflights are handled by Shannon Area Control Centre.

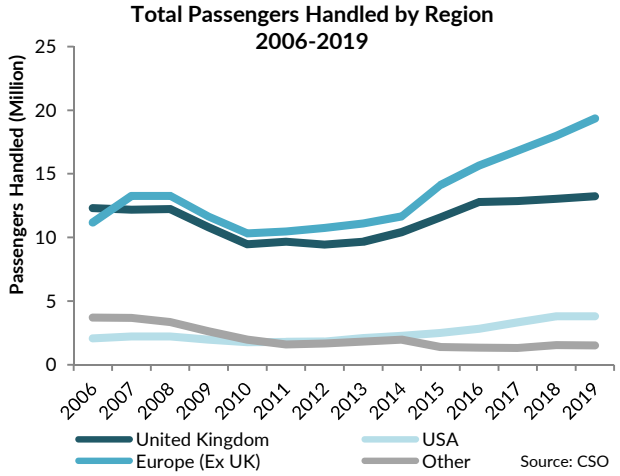
Flights handled by Irish air traffic control increased by 2% from 2018 to 2019, with the total number increasing to over 1.17m. The largest change was in total movements at Cork Airport, which increased by 14.6%. Total movements at Shannon Airport fell by 3.3% during the same period.



The aviation sector has experienced strong growth in passenger numbers in recent years, with all major airports, with the exception of Shannon Airport, recording an increase in the number of passengers handled in 2019. By contrast freight volumes handled at Irish airports recorded a second successive annual decrease in 2019.

Brexit

The United Kingdom has left the European Union. Although the future relationship between the Ireland and UK has changed, core connectivity between Ireland and the UK will be protected. The extent to which it is more difficult or more costly to trade with the UK following Brexit may have a knock on impact on air services and connectivity growth in the medium to long term. This section aims to highlight some of the key connections between Ireland, the UK and the EU, beginning with analysis of passenger and freight movements between Irish airports and international destinations.

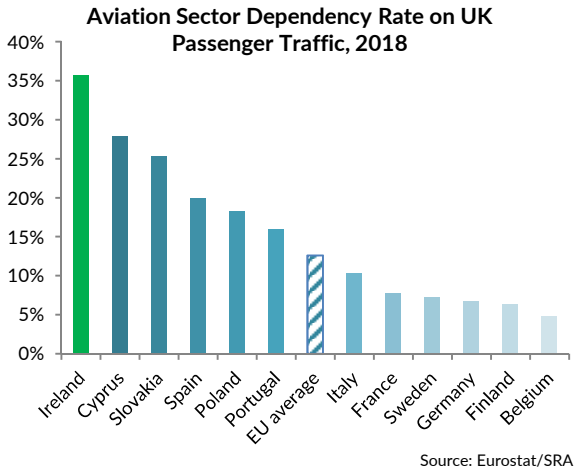


Though air traffic to and from the UK remains vital for Ireland, more passengers are moving between Europe (excluding the UK) and Irish airports than are moving between the UK and Ireland. This has been the case for the last decade and the gap between European (ex UK) and UK passengers to/from Ireland's main airports widened to almost 6.1m in 2019. The number of European (ex UK) passengers grew from 18.0m to 19.3m, an increase of 7.4%, while UK passenger numbers increased by 1.6% to 13.2m.

Elsewhere the number of passengers moving between Irish airports and the USA increased slightly by 0.4% to 3.8m in 2019. However, passenger numbers to other regions decreased by 1.5% in 2019 to 1.5m.

Ireland's aviation sector was the most heavily dependent on UK traffic of any EU country, according to 2018 data**. 35.6% of Irish passenger traffic was to or from the UK, considerably higher compared with just 7.7% of passenger traffic in France and 6.8% in Germany.** Cyprus was the country with the next highest dependency on UK traffic at 28.0%. The EU27 un-weighted average was 12.6%.

While the UK remains by far the biggest source of aviation traffic to or from Ireland, this **dependency has reduced somewhat, from 37.3% recorded in 2017 and 39.2% in 2016.** This can be explained by faster growth rates in passengers travelling to or from other European destinations.



Dublin, Top Routes and % of Passengers 2019

All passengers	32,676,251	
London-Heathrow	1,856,475	5.7%
London-Gatwick	1,348,342	4.1%
Amsterdam Schiphol	1,216,326	3.7%
Manchester	1,004,212	3.1%
Birmingham	947,507	2.9%
London-Stansted	907,220	2.8%
Frankfurt - main	761,819	2.3%
Paris - Charles De Gaulle	760,333	2.3%
Edinburgh	666,776	2.0%
Malaga	327,936	2.0%

In 2019, the busiest routes to and from Dublin Airport continued to be centred on the UK which accounted for six of the top 10 routes, transporting 6.7m passengers, over 61.1% of whom travelled between Dublin and London.

Heathrow continued to be by far the busiest route for Dublin Airport, serving 1.9m passengers in 2019, a rise of 5.7% since 2018. Eurostat figures for 2018 show **Dublin/Heathrow is 9th in the top 10 busiest airport pairs within the EU.** Manchester, Birmingham, Stansted and Edinburgh all increased passenger traffic to/from Dublin in 2019, while passenger traffic to/from Gatwick was largely unchanged, declining by 0.02%.

The UK is an important, but diminishing, component of passenger traffic at Cork Airport, with five British airports accounting for over 1m passengers, i.e. **40.9% of its passenger traffic in 2019,** down from 44.3% in 2018.

Shannon Airport's main routes in 2019 were with the UK and the USA. **Four of its top 10 routes were located in the UK accounting for 674,809 passengers** or 41.7% of all passenger traffic in 2019.

Routes to the UK dominated Knock Airport's passenger traffic in 2019, accounting for nine of the top 10 routes and **83.6% of traffic.**

Cork, Top Routes and % of Passengers, 2019

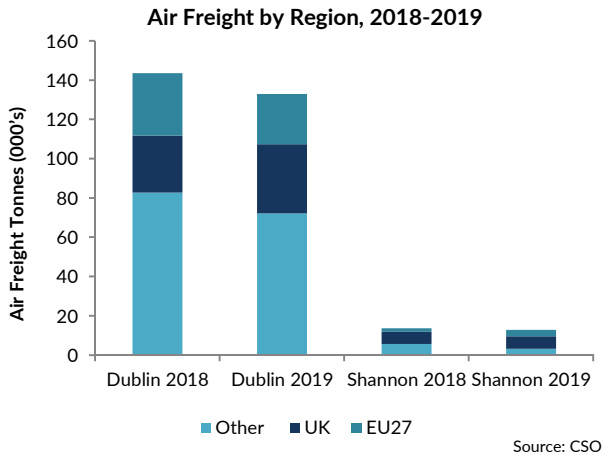
London - Heathrow	379,146	14.7%
London - Stansted	346,013	13.4%
Amsterdam Schiphol	157,325	6.1%

Shannon, Top Routes and % of Passengers, 2019

London-Heathrow	269,956	16.7%
London-Stansted	201,286	12.5%
New York –JFK	135,732	8.4%

Knock , Top Routes and % of Passengers, 2019

London-Stansted	159,092	19.8%
London-Luton	133,152	16.5%
Liverpool – John Lennon	87,614	10.9%



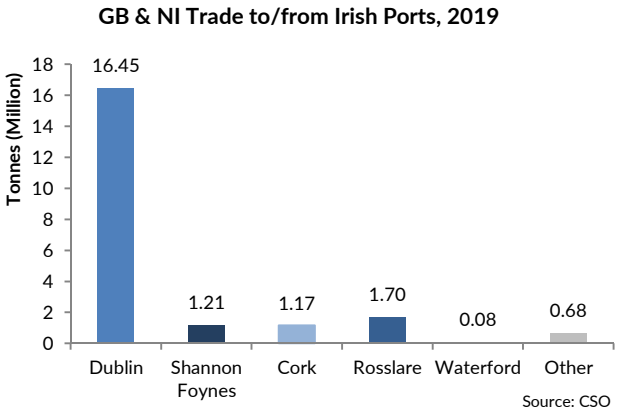
Air freight transported between the UK and Ireland increased from 35.6k tonnes to 41.4k tonnes in 2019, an annual increase of 16.3%. Dublin handled the vast majority (35.2k tonnes) of this freight, with Shannon handling the remaining 6.4k tonnes.

The majority of air freight handled in **Dublin** in 2019 came from countries outside the EU (54.2%), **UK air freight accounted for 26.5% of all air freight handled at the airport in 2019**, up from 20.2% in 2018, while the remaining 19.3% of air freight was transported to/from EU27 countries.

In Shannon Airport 50% of all air freight was transported to/from the UK in 2019, up from 45.3% in 2018.

Turning to maritime trade, more than three quarters of goods (77.3%) shipped between Ireland and the UK in 2019 passed through Dublin Port.

16.5m of the total of 21.2m tonnes of goods traded with the UK were handled by Dublin. Dublin's volume of UK maritime trade was more than nine times greater than any other Irish port. Rosslare had the second largest share of UK trade with 1.7m tonnes or 8%, while Shannon Foynes had 1.21m tonnes or 5.7% of total UK maritime trade. Cork accounted for 5.5% and Waterford just 0.39%. Irish ports other than the five largest accounted for 3.2% of trade with the UK, including 374k tonnes in Drogheda.



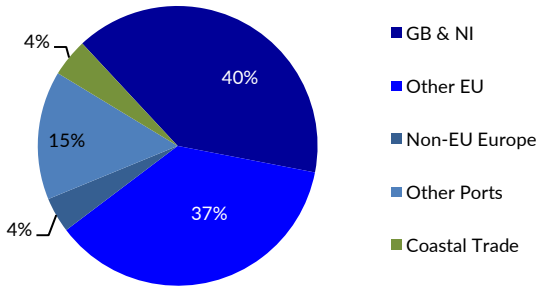
Aviation trends reveal the importance of the UK and Europe for Irish air traffic. Routes to London, other UK cities, mainland Europe and the USA remain the most important for Ireland's five busiest airports. The amout of air freight moving between Ireland and the UK increased by 16.3% in 2019. In terms of maritime trade, Dublin Port handles the majority of Ireland's trade with the UK.

The movement of goods and services between Ireland and the UK by sea plays a vital role in the economy of Ireland. This section highlights how the trade of goods to and from the UK contributes to the total level of maritime freight activity in Ireland, and how UK trade plays a larger role at some of our major ports than it does at others.

The three charts presented left and below indicate the regional origins and destinations of all goods passing through Irish ports in 2019. **Trade with the UK comprised 40% of all Irish maritime trade – up from 38.7% in 2018 - while trade with other EU member states represented 36.6% of all Trade.**

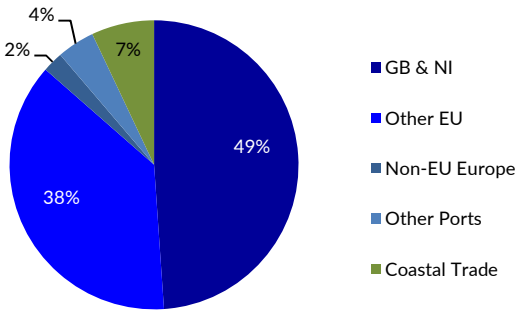
Just under half of all goods forwarded through Irish ports in 2019 went on to the UK (below left), **while 35.5% of all goods received in Irish ports originated in the UK** (below right). EU trade meanwhile accounted for 37.6% of goods forwarded and 36.2% of goods received. **Thus, trade with the UK accounted for a higher share of total maritime trade in 2019, growing by 1.3 percentage points.** This growth was driven by an increase in the goods received by 0.7 percentage points. Goods forwarded to the UK fell by 1.7 percentage points over the same period.

Goods Handled, 2019 (53 million tonnes)



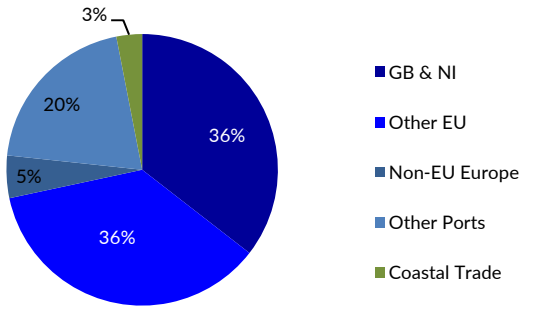
Source: CSO

Goods Forwarded, 2019 (18 million tonnes)

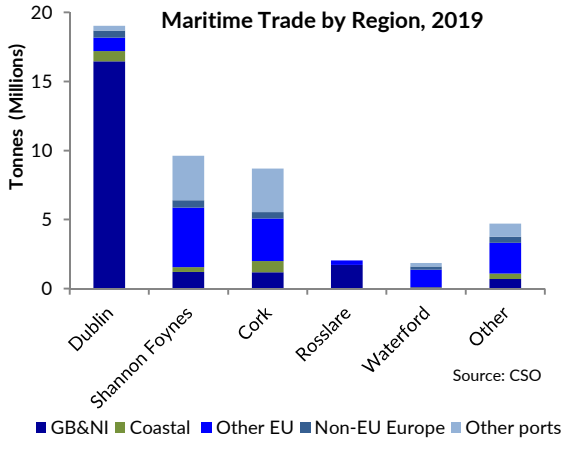


Source: CSO

Goods Received, 2019 (35 million tonnes)



Source: CSO



Source: CSO

Looking at the breakdown of trade in individual ports helps to illustrate the importance of the UK as a trading partner in greater detail.

The ports on the eastern seaboard rely most heavily on UK trade, Rosslare Port, for example, handled only UK and EU freight in 2019. Some UK freight traffic travels between Ireland and continental Europe, using the UK as a 'landbridge'. This route is of particular importance to high value or time sensitive goods due to the significantly faster transit times achieved. Trade outside Europe was most important at Shannon Foynes (42.7%), while 68.2% of trade at Waterford Port was to other EU countries. Cork had the most evenly split trade, across the UK, other EU and outside EU categories.

Maritime

Irish ports provide the infrastructure which allows the movement of goods and people between Ireland and other countries by sea. This section provides an overview on the maritime sector in Ireland including details on port and vessel infrastructure, maritime freight statistics, maritime passenger trends and maritime safety.

Total Freight Handled at Tier 1 and Tier 2 Ports, 2019

Tier 1 Ports

- **Dublin Port:** 26.3 million tonnes
- **Shannon Foynes:** 9.6 million tonnes
- **Port of Cork:** 8.7 million tonnes

Tier 2 Ports

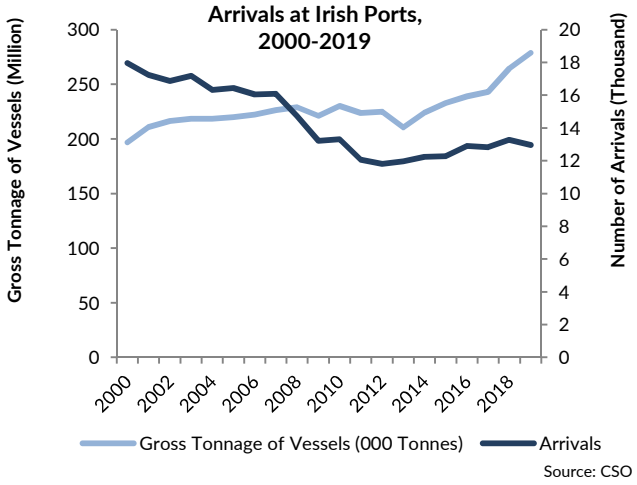
- **Rosslare Europort:** 2.0 million tonnes
- **Port of Waterford:** 1.8 million tonnes

Source: CSO

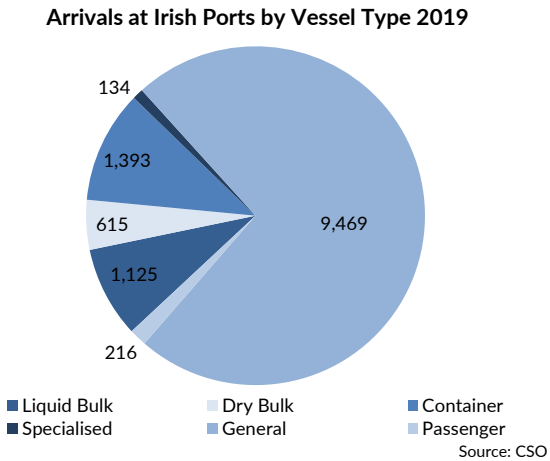
Ireland's National Ports Policy distinguishes between Tier 1 and Tier 2 Ports. Under the policy three ports: Dublin Port, Port of Cork and Shannon Foynes are classified as 'Tier 1 Ports of National Significance'. There are two ports classified as 'Tier 2 Ports of National Significance': the Port of Waterford and Rosslare Europort. Other commercial ports are classified as 'Ports of Regional Significance' with the largest in freight terms (based on 2019 data) being Drogheda, Greenore, Bantry Bay, Galway and New Ross.

The number of **vessels arriving at Irish ports decreased by 2.4% in 2019 to 12,952 vessels, while the gross tonnage of vessels increased by 5.4% to 278.8m tonnes**, the highest it has ever been.

This represents a continuation of the pattern of **fewer but larger vessels arriving at Irish ports since 2000.** Despite a modest increase in the number of vessels arriving since 2012, the 2019 figure is still 28% below the high of just under 18,000 vessels recorded in 2000. However, gross tonnage increased by 42% in that period despite a pronounced dip during the recession.



Source: CSO



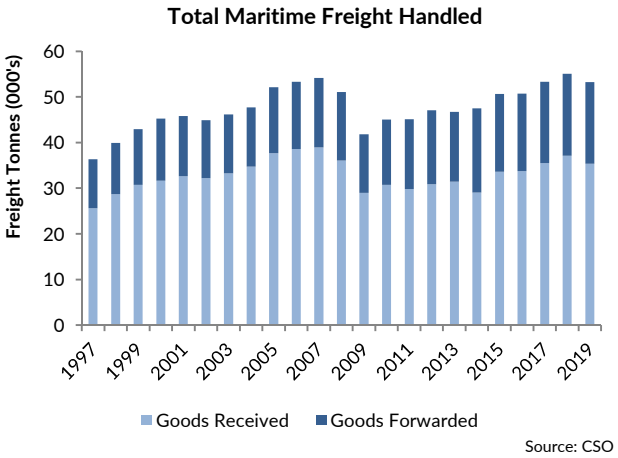
Source: CSO

The vast majority (73.1%) of the 12,952 ships arriving at Irish ports in 2019 were general-type vessels, with container and liquid bulk vessels the next most common types, accounting for 10.8% and 8.7% respectively. Dry bulk vessels accounted for 4.7% of the total, and specialised vessels 1.0%. **There were also 216 passenger ship arrivals in 2019, accounting for 1.7%** of total arrivals in Irish ports.

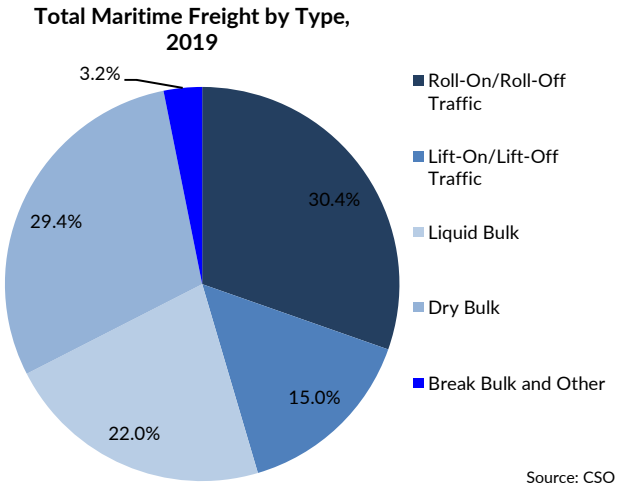
There were **73 vessels with a gross tonnage exceeding 500 tonnes registered under the Irish flag in July 2020**, while the total number of ships registered under the Irish flag stands at 3,256 (though not all are necessarily operating).

2019 saw a 3.4% annual decrease in the amount of freight handled at Irish ports, with the total falling to 53.2m tonnes. This fall in freight levels was mainly driven by a decline in goods received, which fell by 4.6%. Goods forwarded fell by only 0.8% in 2019.

Dublin Port increased its share of freight volumes handled and accounted for nearly half (49.5%) of all goods handled in 2019 (26.3m tonnes). Shannon Foynes and the Port of Cork handled 18.1% and 16.3% (9.6m and 8.7m tonnes) respectively. While the volume of goods handled at Dublin Port was largely unchanged over the period 2018 to 2019 (up 0.01%), freight volumes were down by 9.9% and 8.6% in Shannon Foynes and the Port of Cork respectively over the same period.



Source: CSO



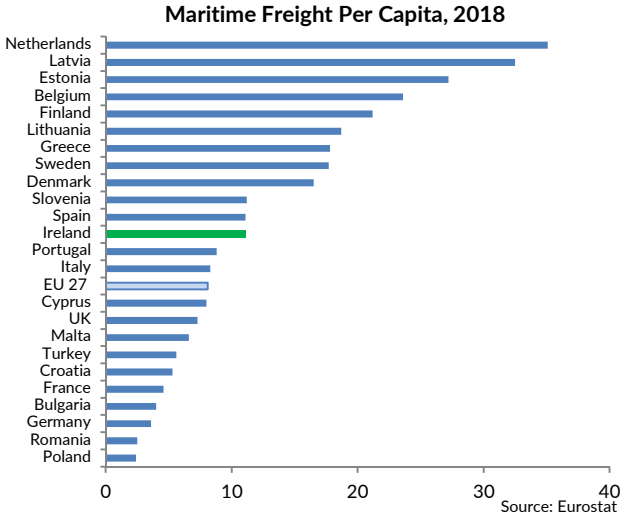
Source: CSO

Over the period 2018 to 2019 Roll-On-Roll-Off (Ro-Ro) Traffic (30.4%) replaced dry bulk (29.4%) as the largest element of maritime freight. Liquid bulk remainded the third largest with 22.0%, with Lift-on/Lift-off (Lo-Lo) accounting for 15.0% and break bulk/other (3.2%) making up the remainder.

Of the Tier 1 ports in 2019, Dublin handled the vast majority of both Ro-Ro (86.8%) and Lo-Lo (72.5%) freight that passed through Irish ports. Shannon Foynes handled a majority of dry bulk (52.9%), while Cork handled the largest share of liquid bulk freight (44.0%). Most break bulk and other types of freight were handled at the other Irish ports.

Ireland's freight tonnes handled per capita in 2018 was 11.1, unchanged from 2017 and below the peak of over 12 tonnes per capita each year from 2005 to 2007.

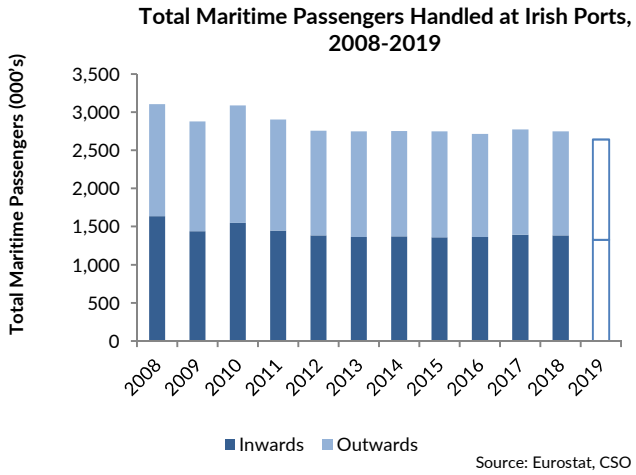
Ireland still ranks well above the EU27 unweighted average of 8.0 tonnes per capita in 2018, equal to Spain (11.1) and above Portugal (8.8), Italy (8.3), and the UK (7.3). The most maritime freight handled per capita in 2018 was in the Netherlands (35.1 tonnes), Latvia (32.5) and Estonia (27.2) while outside the EU, Norway handled 40.6 tonnes per capita.



Source: Eurostat

The maritime sector holds a key role within the economy as an important gateway for the movement of freight between Ireland and its trading partners. The amount of freight handled in Irish ports decreased by 3.4% in 2019. However, according to 2018 Eurostat data, Ireland remains above the EU average for levels of maritime freight handled per capita.

In addition to its role as an international gateway for imports and exports, the maritime sector is also an important facilitator of people travelling to and from Ireland. Our port network caters for travellers through both scheduled ferry services, which fell by 0.8% in 2019, and cruise ships, which saw passenger numbers grow by 8.5% in 2019.

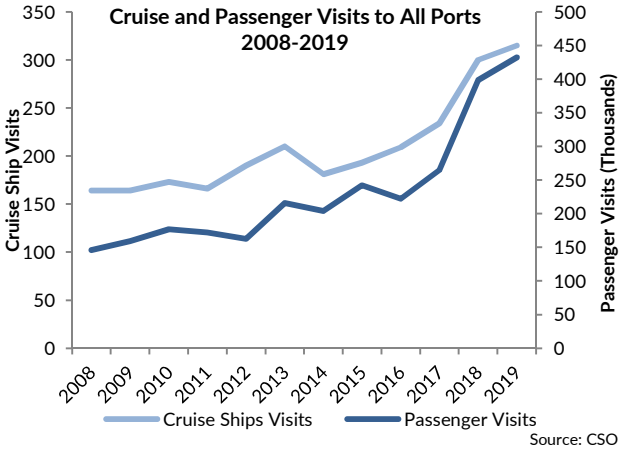


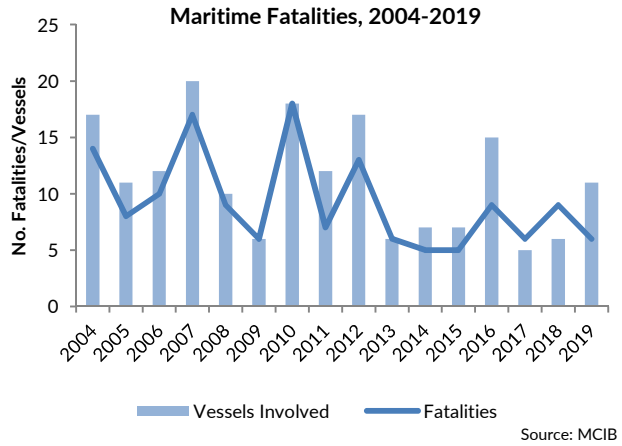
Ireland's ports are a key gateway for international tourism and the movement of people. Data from the CSO shows **the number of maritime passengers** (excluding cruise ship passengers on excursion) **handled at all Irish ports fell by 0.8% to 2.6m between 2018 and 2019**.

Eurostat figures (left) which include all cruise ship passengers handled at Irish ports **i**ndicate total Irish maritime passenger traffic fell 14.7% between 2007 and 2018, while total EU28 maritime passenger traffic fell by just 0.5% in that period. The CSO figures for 2019 are also shown in the graph for reference, **but are not precisely comparable** to the 2007-2018 Eurostat figures depicted.

The cruise ship sector is an increasingly important element of Irish maritime activity. The **number of cruise ship visits grew by 5% from 300 in 2018 to 315 in 2019**, while the **number of cruise ship passengers rose by 8.5% to 432,443 in 2019.** Cruise ship passenger numbers have more than doubled since 2007 when 130 ships visited, bringing 105,725 passengers.

Dublin and Cork dominated the cruise ship market in 2019, hosting 51.1% and 31.8% of ship visits respectively.





Maritime safety, as measured by the number of fatalities recorded, has improved in recent years.

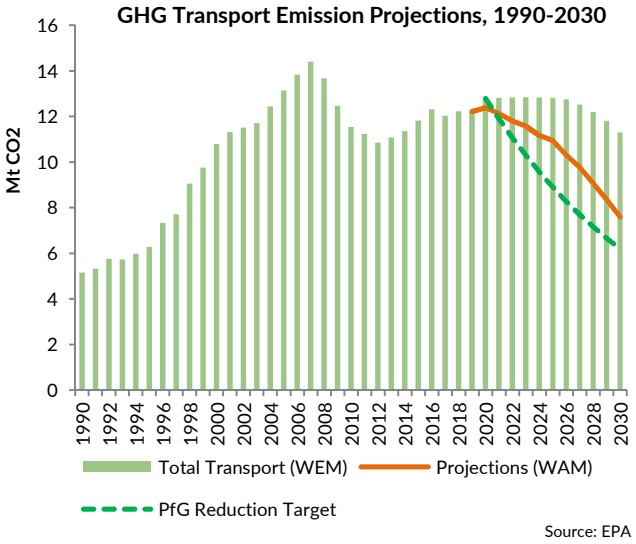
There were 6 fatalities recorded by the Marine Casualty Investigation Board in 2019, down from 9 in 2018 (a 33.3% decrease). While the number of vessels involved, increased by 83.3% from 6 in 2018 to 11 in 2019. This marks the continuation of a downward trend in maritime fatalities over the period 2010-2019. **Over this period fatalities have fallen by 66.7%** from a peak of 18 recorded in 2010.

Green Transition

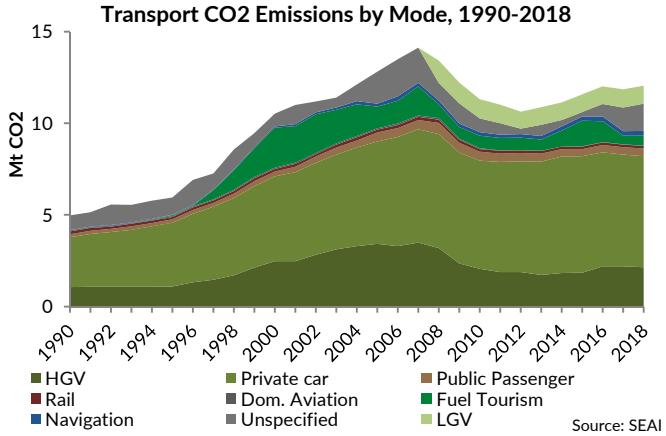
The transport sector was responsible for 20.3% of Ireland's greenhouse gas (GHG) emissions in 2019, making it the second largest contributing sector. This section presents the key trends in Ireland's transport emissions, provides a breakdown of emissions by mode and outlines national emission reduction target set out in the Programme for Government.

The transport sector emitted approximately **12.2m tonnes of CO_2 equivalent in 2019, a slight decrease of 0.3% from 2018.** The sector is the second largest contributor to national GHG emissions at **20.3%.**

EPA projections from 2019 forecast that emissions from transport-related activities will reach an estimated **11.3m tonnes (Mt) of CO_2 equivalent by 2030 in a With Existing Measures (WEM) scenario.** If emissions reduction policies, including those set out in the Climate Action Plan, are fully implemented **in a With Additional Measures (WAM) scenario then emissions would fall to 7.6Mt by 2030.** However, if the more ambitious emissions reduction target set out in the **Programme for Government,** of an average 7% per annum emissions reduction over the period 2021-2030, were achieved then **emissions would fall to 6.2Mt by the end of the decade.**



Source: EPA

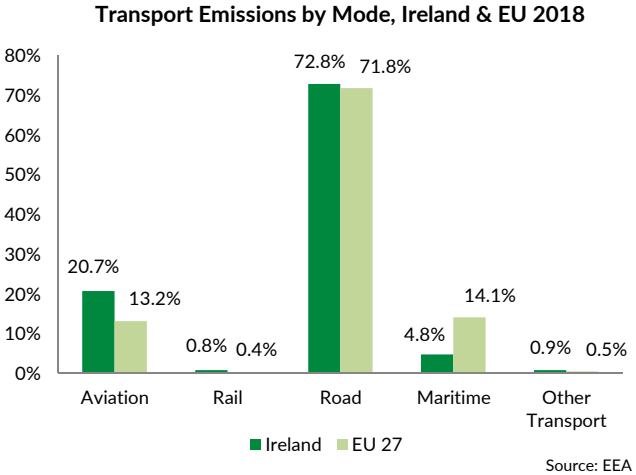


Source: SEAI

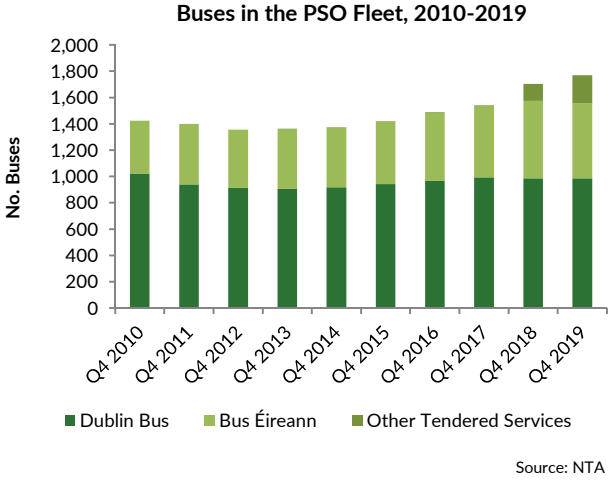
Private cars remain the largest source of GHG emissions in the transport sector, accounting for 50.4% of total transport emissions in 2018, this was down slightly (0.7%) on 2017. Heavy goods vehicles were responsible for a further 17.8% of emissions in 2018, down by 2.3% on 2017. Light goods vehicles share of emissions was 8.1%, down by 1.9% in 2018.

Therefore, while the emissions from the road transport sector decreased slightly in 2018 they still accounted for the vast majority of the transport sector's emissions as a whole.

The breakdown of emissions within the Irish transport sector in 2018 was broadly similar to that of the EU as a whole, with emissions from the **road sector contributing more in Ireland at 72.8% compared with 71.8% in the EU27**. Aviation contributed more in Ireland than the EU average (20.7% to 13.2%) while maritime contributed less (4.8% to 14.1%). It should be noted that the aviation and maritime percentages discussed above include both international aviation and maritime emissions, which are **not** normally counted under national emission reporting. If these figures were excluded from the 2018 totals, **emissions from the road transport sector would rise to 95.6% and 94.6% of the Irish and EU transport emissions respectively.**



Source: EEA

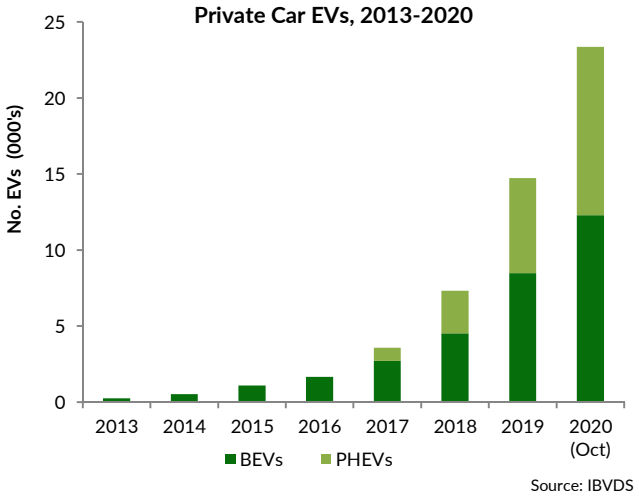


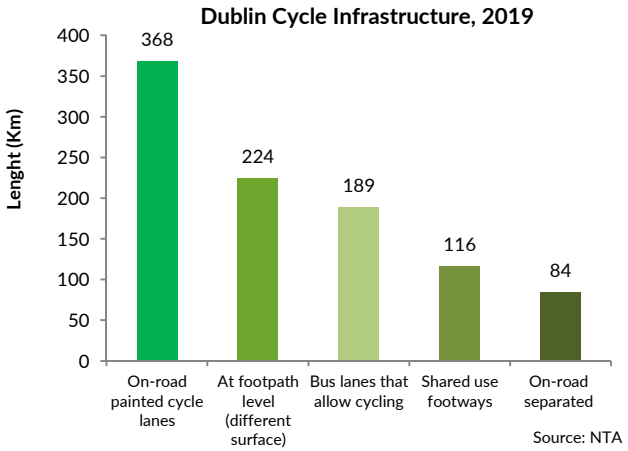
The Public Service Obligation (PSO) bus fleet grew by 3.9% to stand at 1,770 buses in Q4 2019. This growth was driven by growth in Other Tendered Services, including those operated by Go-Ahead Ireland, by 64.8%. There were **9 hybrid buses operating in the Dublin Bus fleet in 2019, while a further 100 have been ordered** to service the urban PSO fleet.

According to European Commission data, **108km of Ireland's 2,045km rail network is electrified (5.2%).** This is the lowest in the EU27, which has an average electrification rate of 55.6%. It is also significantly lower than the UK (37.6%), Germany (52.9%) and Sweden (75.3%). However, 20.9m of rail passenger journeys, or 43.6% of all rail journeys in Ireland in 2018, took place on electrified rail lines.

There were 24,416 electric vehicles (EVs) on the road in Ireland as of October 2020. This was up 59.5% on 2019. The vast majority of these vehicles (23,374) were private cars, with the remainder made up of Goods vehicles and Small Public Service Vehicles (such as taxis).

Of the **private car EV's** on the road in October 2020, **52.5% were battery electric vehicles (BEVs) while the remaining 47.5% were plug-in hybrid electric vehicles (PHEVs).** In 2019, according to ESB data, there were **723 EV charging stations in operation in Ireland, 652 of which were on-street chargers and the remaining 71 were fast chargers.** Note this only includes charging points operated by ESB e-cars and does not include charging stations run by private operators or private household chargers.





There was 981km of cycling infrastructure within the Dublin Metropolitan Area in 2019. The largest share of this was made up of on-road painted cycle lanes (37.5%), while cycle infrastructure that was shared with pedestrians or at footpath level accounted for 34.6% in 2019.

According to Sport Ireland data there were approximately **259km of Greenways in Ireland as of November 2020.** The Royal Canal Greenway from Maynooth to Clondara will also be opened to the public in early 2021, adding to the total. A further **240km of Greenway is currently under construction.**

The mitigation measures outlined above are helping to reduce the transport sectors greenhouse gas emissions, by supporting transport users in shifting to more sustainable and active modes of transport.

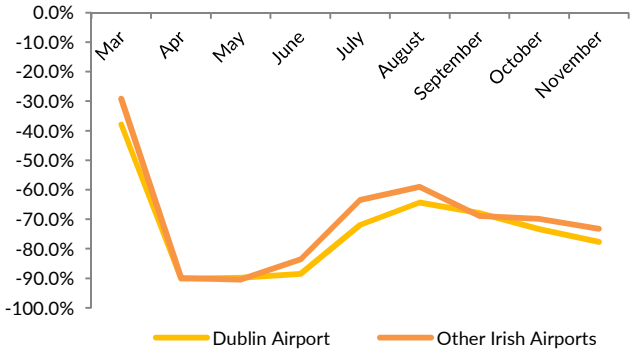
COVID-19

The global pandemic reached Ireland in February of 2020. By the end of March, the government had imposed significant restrictions on movement. The retail and hospitality sectors were hard hit, air travel restrictions were in place, and passenger capacity of public transport was, at times, limited to 25% capacity.

Following the recommendation by the EU Commission of non-essential travel restrictions in March, the number of flights in and out of Ireland plummeted to **a low of 59 flights in one day, 90% lower than 2019 figures**. As restrictions lifted, an increase in daily flight numbers saw deficits reach 60% below 2019 figures. It has been estimated that over 167,000 flights have been 'lost' due to COVID-19 during the first ten months of the year.

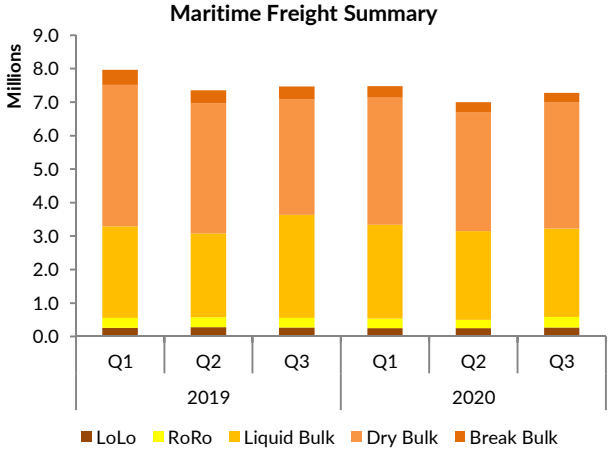
Figures from the CSO show that in the first nine months of the year passenger numbers are down 75% compared to 2019 due to COVID-19 restrictions. Shannon airport being the hardest hit, at 30.5% capacity (YTD end of September) compared to last year.

Annual flight deficit to/from Irish Airports by month



Source: Eurocontrol

Maritime Freight Summary



Source: IMDO

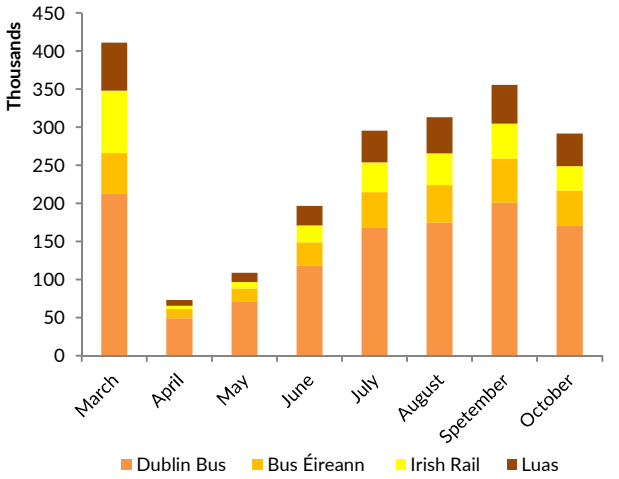
At the height of COVID-19, overall maritime freight volumes through Irish ports fell by approximately 30% (Apr 2020) compared to the same period in 2019. Ro-Ro units fell by 5.4% in Q1 compared with 2019, as restrictions increased through Q2 the year-on-year deficit fell to 15.8%. The Lo-Lo freight market was also negatively impacted during the first two quarters of 2020. Total Lo-Lo volumes through Irish ports reduced by 2% in Q1, declining by 10% in Q2 compared to 2019. By end of Q3 both Ro-Ro and Lo-Lo had seen recovery with a 5% and 3% increase in units respectively compared to 2019. Bulk cargo through Irish ports fell by 6% in Q1 and 4% in Q2 2020. Unlike Lo-Lo and Ro-Ro, Bulk cargo has experienced a fall in units through Q3, down 3% compared to 2019.

In Q2 of 2020 overall maritime passenger numbers fell to 90% below 2019, following COVID-19 restrictions. Data for Q3 shows this deficit decreased to 78% below 2019 figures.

The pandemic has had a profound impact on the public transport sector. **Average daily passenger numbers for the four main operators fell from 410,913 passengers in March to 73,179 in April of this year, an 82% drop**. The commercial bus sector has been equally hard hit. Data indicates rail as the hardest hit public transport mode. Between April and October Irish Rail recorded 59 days where the deficit was at least 90% compared to the same day in 2019. Overall, passenger numbers showed some recovery as restrictions eased, albeit from a low base, however as restrictions were tightened numbers fell once again.

Data from TII show a less dramatic fall in the average daily traffic volumes between March (4.2m vehicles) and April (1.8m vehicles), of 58.8%. Traffic volumes have slowly risen as restrictions eased, falling slightly again during nationwide level 5 restrictions.

Average Daily Passengers by Month



Source: NTA

Transport Data Map

The following section lists a number of resources for transport related data and statistics. This is not exhaustive of all sources but gives an indication of where information which relates to transport can be found. Click each logo for direct link. Conditions of use as stated with source.

An Roinn Iompair Department of Transport	Annual Publication of 'Bulletin of Vehicle and Driver Statistics' Data and Information provided in policy documentation
An Phríomh-Oifig Staidrimh Central Statistics Office	Annual Publication of Transport Omnibus, Various Sectoral Surveys and Bulletins (Maritime, Freight, Aviation, Vehicle Licencing), National Travel Survey every 2-3 years, Census every 5 years
An Roinn Caiteachais Phoiblí agus Athchóirithe Department of Public Expenditure and Reform	Publicly Available Expenditure Data at DPER Databank
DATA.GOV.IE	Government Open Data Portal
eurostat	On-Going Release and Publication of Transport Statistics
European Commission	Annual Publication of 'Statistical Pocketbook' of Europe-Wide Transport Indicators

Ireland Stat Government performance measurement	Whole-of-Government Performance Data
TII Bonneagar Iompair Éireann Transport Infrastructure Ireland	Traffic Count Data Publicly Available. Number of Data-Focused Publications
Údarás Náisiúnta Iompair National Transport Authority	On-Going Publication of Statistical Reports and Bulletins
IMDO-Ireland Marine Institute Foras na Mara	Annual Publication of the 'Irish Maritime Transport Economist'
seai SUSTAINABLE ENERGY AUTHORITY OF IRELAND	Data Portal for Energy Production, Transformation and End Use in Ireland
Dublinked	Open Data for Dublin
International Transport Forum	Produces and Publishes a Number of Statistical Bulletins and Reports

Notes and References

This section provides relevant notes and references for the analysis contained with ***Transport Trends 2020***. Each individual section is directly hyperlinked to the original source where relevant. This section should be used when interpreting the rest of this document's contents. Any queries on this analysis should be forwarded to *transporttrends@transport.gov.ie*.

Section One: General Overview

Economy and Transport Indicators: Transport passenger km from EU Commission. GNI* and total employment from the CSO. Transport emissions in Thousand Tonnes of CO2 equivalent from the EPA. Fuel consumption by the transport sector in Thousand Tonnes of Oil Equivalent from SEAI. Private cars under current license from the CSO.

Exports plus Imports as a Percentage of GDP: Data from World Bank.

Average Transport Costs: Data from European Commission

Percentage of Journeys by Mode of Transport: Data from CSO National Travel Survey.

Gross Expenditure by DTTaS (Non-Pay): Data from DPER Databank. All expenditure is gross and does not include any pay or pensions. All expenditure is as reported on DPER Databank and includes only expenditure as and when it was assigned to the Department (Maritime after 2005 and sports/tourism after 2011). Gross expenditure refers to the overall Departmental spend as distinct from net expenditure which refers to the overall drawdown from the Exchequer (this is lower than gross spend, because it takes account of "appropriations-in-aid", i.e. fees, levies and other receipts which Departments and agencies may retain and use). **Sectoral breakdowns of expenditure** percentage shares of DTTaS expenditure are derived from this data.

Capital Expenditure as a % of GDP: Capital Expenditure figures from DPER Databank and capital spending as a percentage of GDP is calculated based on Irish GDP (2018 Prices) obtained from the CSO.

Taxation Revenue Associated with Transport: Motor Tax provided by D/Transport, other data provided by Department of Finance. Other potential sources of revenue that accrue to government such as tolling, vat on car purchases and maintenance and Local Authority parking revenues are not considered here.

Section Two: Land Transport – Network

Total Road km: Motorway and National road data for 2019 from TII. Regional and Local road estimate from D/Transport for 2019.

Total Road km by Local Authority: National road data for 2019 from CSO. Regional and local road data for 2019 from D/Transport.

Road km Per 1000 Inhabitants: Road length data from European Commission for 2020. Population data also from European Commission. The data is not definitively comparable and are indicative only as some road length data are Commission estimates and there is a variety of definitions.

Total Operated Vehicle km: Data from NTA Bus and Rail Statistics.

Number of Buses Providing Services: Data from NTA Bus and Rail Statistics

Rail Provision: Light Rail data from TII by request. Heavy Rail data from CSO.

Small Public Service Vehicles and Licenses: Vehicles from CSO, Licenses from NTA

Icons made by Freepik from www.flaticon.com

Section Three: Travel Patterns

Number of Vehicles under License: Sourced from D/Transport Irish Bulletin of Vehicle and Driver Statistics, data refers to 31st December of each year. 2013 data for tractors and others were inflated by the three month transition period for motor tax gapping provided for in the Non-Use of Motor Vehicles Act 2013.

Number of New Vehicles and Used Vehicles Licensed: Data from D/Transport Irish Bulletin of Vehicle and Driver Statistics

Passenger Cars Per 1000 Inhabitants: Data from Eurostat for 2017. Estimated European average represents the 24 countries with available data in 2017.

Total Vehicle km: Data from CSO.

Public Transport Passenger Journeys: Data from CSO

Luas Passenger Numbers: Data from CSO

Passenger Journeys by Tendered PSO Bus Services: Data from NTA.

Heavy Rail Passenger Numbers: Data from CSO

Distribution of Journeys by Mode and Distance: CSO National Travel Survey.

NTA Canal Cordon: Data from annual NTA

Annual Public Bike Journeys: Data provided by NTA and DCC

Leap Cards Issued and Total Spend: Data from NTA by request

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Section Four: Land Transport – Freight

Road Freight: Data from CSO.

Heavy Rail Freight Traffic: Rail freight data from the CSO.

Section Five: Land Transport – Safety

Road Fatalities: Data from both the RSA. 2017 to 2019 data is provisional and may be subject to revision.

Penalty Point Notices Issued: Data from CSO.

Light Rail Safety: Data provided by Transdev Ireland by request.

Heavy Rail Safety: Data provided by ERAIL - European Railway Accident Information Links and the Commission for Railway Regulation.

Section Six: Aviation

Airport Infrastructure Definition: From D/Transport National Aviation Policy (2015).

Number of Airports: Data is from the European Commission's Statistical Pocket Book 2020 and airports are classified as being larger than 100,000 passenger movements annually.

Commercial Flights Handled: Data is from CSO Aviation Statistics. Main Airports is defined by CSO as an airport through which in excess of 150,000 passengers fly per annum. The five main airports in Ireland are Dublin, Cork, Shannon, Knock and Kerry.

Aviation Passengers Handled, Region and Routes: Data is from the CSO Aviation Statistics. CSO Aviation Statistics are compiled from data supplied by all Irish airports with more than 15,000 passengers handled per year. The following Irish airports provide data to the CSO: Dublin, Cork,

Shannon, Kerry, Knock, Connemara, Donegal and Inishmore. Note this does not include transit passengers on technical stops.

Air Freight: Data is from CSO Aviation Statistics.

Flights Handled by Irish Air Traffic Control: Data from IAA (by request).

Share of Aviation Traffic to/from UK: Eurostat and Department of Transport UK.

Air Freight by Region: Data is from CSO Aviation Statistics.

Section Seven: Maritime

GB & NI Trade To/From Irish Ports, 2019: Data is from CSO Maritime Statistics.

Goods Handled, Forwarded and Received at Irish Ports, 2018: Data from CSO Maritime Statistics.

Maritime Trade by Region, 2019: Data from CSO Maritime Statistics.

Port Infrastructure Definition: From D/Transport National Ports Policy (2013).

Total Freight Handled at Tier 1 and 2 Ports, 2019: Data from CSO Maritime Statistics.

Arrivals at Irish Ports 2019: Data from CSO Maritime Statistics.

Number of Ships Registered Under Irish Flag: D/Transport data as of June 2020.

Total Maritime Freight & Total Maritime Freight by Type 2019: Data from CSO Maritime Statistics.

Maritime Freight Handled Per Capita 2018: Data from Eurostat.

Maritime Passengers: Data from Eurostat. A main port is a statistical port which has annual movements of no less than 200,000 passengers or recording more than one million tonnes of cargo.

Cruise Ships and Passenger Visits 2019: Data from CSO Maritime Statistics.

Maritime Fatalities: Internal D/Transport data and Marine Casualty Investigation Board (MCIB) and Annual Reports

Section Eight: Green Transitions

Transport Emissions Projections: Data and projections from EPA Greenhouse Gas Emissions Projections and Programme for Government – Our Shared Future.

Transport Emissions by Mode: Data provided by SEAI.

Transport Emissions by Mode, Ireland and the EU: Data from EEA

Hybrid and electric public transport provision: Data from NTA by request.

Current private car EVs under license: Data obtained from D/Transport Bulletin for Vehicle and Driver Statistics series. 2020 data up to October 31st

Dublin Cycling Infrastructure: Data from NTA by request.

Greenway Length: Data from Sport Ireland.

Section Nine: COVID-19

Annual flight deficit to/from Irish Airports by month: Flight data from Eurocontrol COVID-19 Dashboard. Passenger data from CSO transport bulletin.

Maritime Freight Summary: Data from IMDO Quarterly Statistics Bulletin

Average Daily Passenger Numbers: Data from NTA. Traffic data from TII

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Department of Transport