

Transport Trends 2019 An Overview of Ireland's Transport Sector



Transport Trends 2019 was produced by the Department of Transport, Tourism and Sport'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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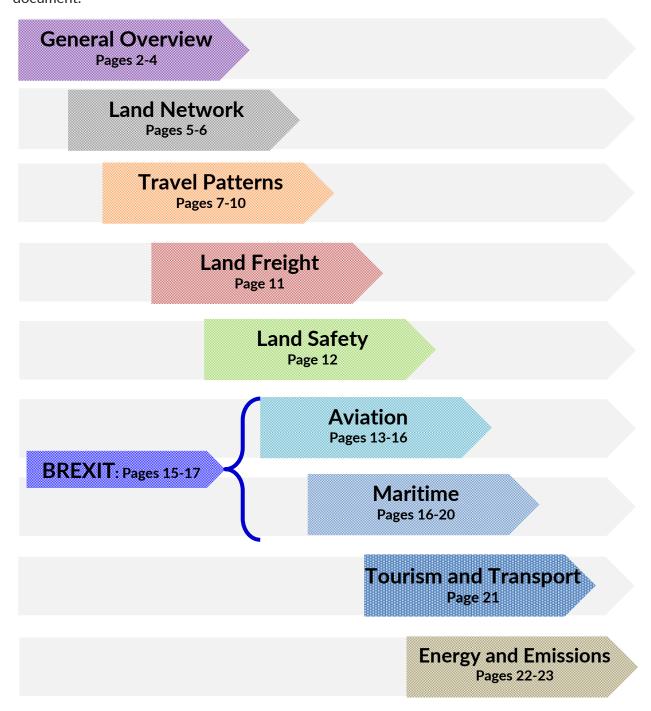
The data underlying this report were collated by SRA between January and August 2019 and were the most up-to-date published data available at that time. As such, users of the document should check with the data sources as to whether more up-to-date data is available. Due to the variety of sources, data may refer to different years i.e. the most recent data for a certain indicator may be from 2016 or 2017 rather than 2018.

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, Tourism and Sport's Strategic Research and Analysis Division (SRA); a constituent unit of the Irish Government Economic and Evaluation Service (IGEES).

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 (pp.26-29); should be consulted when interpreting this document.



€2.3b **TRANSPORT** DTTaS Transport Allocation 2019 **TRENDS 2019** 264.9m **Public Transport PSO Journeys 2018** +5% €4.6b 261,357,777 Real Time Transport Revenue 2018, 12,504 **Passenger Information Requests in 2018 Electric Vehicles** +108% on the Road, 2018 36.6m +66% 923.580 Air Passengers 2018 Leap Cards 146 Road Deaths in 2018 +31% 266,400 Flights at Main Airports 2018 +5% ورون فلانسان والأ **121,157** New Cars licensed 2019 -5% 147.1m 9 Cyclist 2.7m Total Vehicles 2018 +2% Deaths 2018 tonnes

147.1m
- tonnes
of Freight
transported
by road in 2018

+4%

12m tonnes of CO2 emissions 2017

-2%

-36%

48.8b km Driven 2017 +0.5%

101,400 Employed in Transport Sector 2018 Q4

+6%



- **13,264** Vessel arrivals 2018

+3%

55.1m tonnes of Goods Handled 2018

+3%

9.6m

overseas tourists visited Ireland in 2018

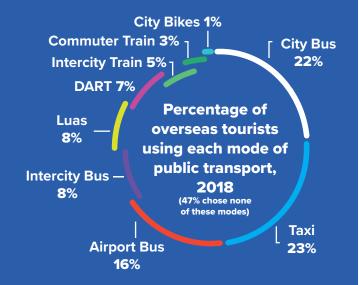
+6%

2.7m

Maritime Passengers 2018

-2%

88% of overseas tourists in 2018 arrived via one of the country's airports



Snapshot

This year's edition of *Transport Trends* highlights continued growth across many transport domains in Ireland. This included increases in the number of passengers carried by public transport, the amount of freight being moved by road, sea or air, the number of people moving through our airports and the number of kilometres driven on Irish roads. A clear correlation between transport demand and wider economic activity remains evident.

Land Transport:

There are 969km of Ireland's road network classified as motorway in 2018 (around 18% of national-level roads), following a 53 km increase in length in 2017. The level of public transport services by bus and rail increased in 2017 and 2018.

Travel demand for land transport showed continued strong growth in many areas in 2016/17. Total kilometres driven on Irish roads increased by 1.6% in 2017, and there were a total of 301 million public transport passenger journeys on the four main state operators in 2017, a rise of 6.5% from 2016. Use of active modes (walking and cycling) has seen small decreases in Dublin as measured by the NTA's annual canal cordon count. There has also been a steady decline since 2016 in the number of people availing of the public bikes schemes in Dublin, Cork and Limerick. By contrast, Galway's public bike scheme surged in popularity in 2018. The number of new vehicles registered fell for the second year running in 2018. However, the number of imported used vehicles has continued to rise suggesting that Irish consumers are taking advantage of a weaker pound sterling and the larger used vehicle market in the UK. Road freight activity continued to show strong growth in 2017 but remains below its pre-recession peak.

The number of road fatalities fell to 142 in 2018, the lowest since records began, but pedestrian deaths increased by 36% from 2017 to 42 in 2018, Deaths among cyclists and motorcyclists fell to 9 and 15 respectively in 2018.

Aviation:

Irish aviation activity continued to show pronounced growth across a range of measures in 2018, with the exception of air freight, which fell by 4.5% from 2017 numbers. However, a record 36.6 million passengers travelled through Irish airports, up 6%, with Dublin Airport handling 31.5 million of them, and total flights handled by Irish air traffic control also grew.

Maritime:

Ireland's ports, when taken as a whole experienced further growth in activity in 2018. The number of vessels arriving at Irish ports increased by 3.5% and the gross tonnage of these ships and the volume of goods handled through Irish ports all increased. The number of maritime passengers fell by 2.1%; however the number of cruise ships and cruise passengers visiting Ireland continues to increase significantly.

Energy & Emissions:

The level of emissions from the transport sector decreased slightly in 2017 to 12m tonnes of CO_2 (down 2.4% from 2016). However EPA projections indicate that emissions from the transport sector will reach an estimated 15m tonnes of CO_2 equivalent by 2030; conversely the 2019 Climate Action Plan suggests that the potential of key transport technologies, principally EVs, if their potential can be delivered at the scale envisaged, could reduce projected transport sector emissions to 7.5m tonnes of CO_2 equivalent by 2030. Despite technological advances, is likely that the growing transport sector will continue to present challenges to the achievement of climate related targets.

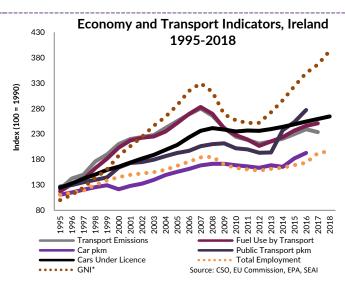
General Overview



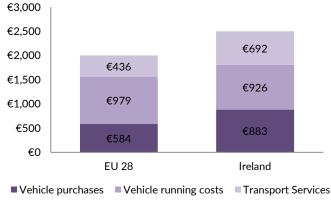
This section provides an overview of the transport sector in Ireland. This includes details on how we travel, historical developments, travel costs and employment, recent headline expenditure trends, revenue associated with the transport sector and the wider international context.

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, goods and tourists 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 has continued in 2017/18. A decrease of 2.4% in greenhouse gas emissions from transport was recorded in 2017.



Average Household Transport Costs, 2016



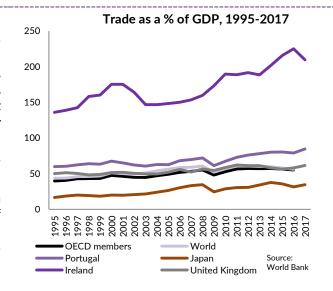
Source: European Commission

Transport is a major component of consumer spending, costing the average Irish household €2,500 a year in 2016, up €200 from €2,300 in 2015. This is 25% higher than the EU average of €2,000 a year. Transport spending also represents a slightly higher proportion of Irish household costs at 13.5% compared to the EU average of 13%. CSO data indicates transport prices in 2018 increased 0.8% while general inflation was 0.5%.

CSO figures show some 101,400 people were employed in Ireland in Transportation and Storage in Q4 2018, with 51,400 of these employed in land transport. According to the 2016 Census, road freight and postal and courier activities were the two largest transport sectors in terms of employment.

The graph on the right 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 2017, Irish exports and imports combined to an amount over twice the size of Irish GDP (209%). Only Luxembourg (412%), Hong Kong (375%), and Malta (249%) recorded higher levels of trade openness, while the OECD average was 57%.

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, including wellserviced ports and airports.

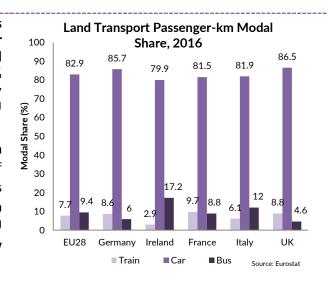


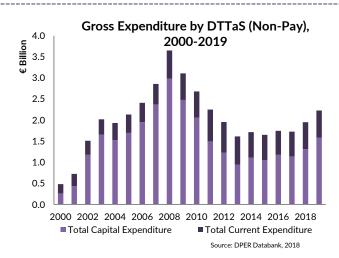


The way we travel continues to rely heavily on the private car, although recent years have seen increases in the use of public transport and active modes. Ireland's reliance on the car is similar to the rest of the EU, but our bus use is higher. Government expenditure and investment in transport has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

Figures from Eurostat for 2016 show Ireland as broadly in line with other EU states in that private car is the dominant mode of transport for inland passenger kilometres. The data (right) shows 79.9% of all inland passenger km travelled in Ireland were by private car, down 0.5% from 2015 and below the EU average of 82.9%.

The modal share of rail in Ireland is lower than in other states at 2.9% compared with an EU average of 7.7%. However, the share of passenger km by bus is 17.2%, well above the EU28 average of 9.4%. In summary car use in Ireland is slightly below the EU average, bus is above average and rail is below average.





Expenditure (gross, non-pay) by DTTaS in 2018 amounted to €1.95bn. The allocation for 2019 has increased 14% to €2.23bn slightly below the 2011 spend of €2.48bn and 39% below the peak spend of €3.65bn in 2008.

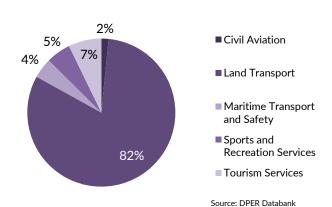
Capital expenditure accounts for 71% of the allocated expenditure for 2019 at €1.59bn. This is a 21% increase on the 2018 capital allocation of €1.31bn and is the highest level of expenditure in this area since 2010.

Current expenditure (gross, non-pay) increased 8.8% in 2018 to €637m. The allocation for 2019 current expenditure has increased by 0.4% to €640m.

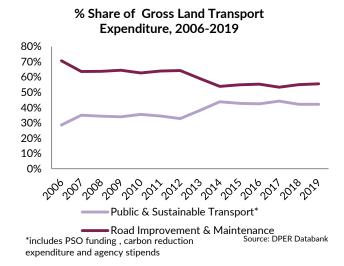
A sectoral breakdown of the $\[\in \] 2.23bn$ allocation for 2019 shows that 82% of funding is for land transport ($\[\in \] 1.9bn$), 7% for tourism services ($\[\in \] 1.9bn$), 5% for sports and recreation services ($\[\in \] 1.9bn$), 4% for maritime transport and safety ($\[\in \] 1.9bn$), and 2% for civil aviation ($\[\in \] 3.7bn$).

The biggest sectoral expenditure increase from 2018 to 2019 is for Civil Aviation (30.1%). The 2019 allocation for Tourism represented a 26.3% increase while the allocation for Maritime and Safety increased 14%. Both Land Transport and Sports and Recreation have had allocated funding increase 13% in 2019.

Sectoral Breakdown of DTTaS Expenditure, 2019





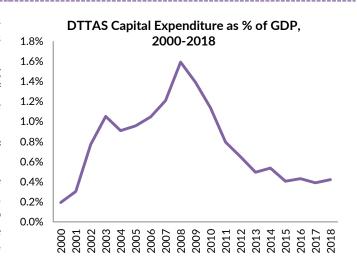


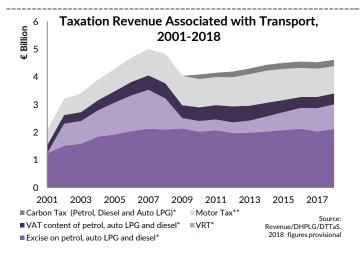
The largest expenditure item within DTTaS is land transport which is made up of road improvement and maintenance, public transport, PSOs and sustainable transport. Between 2005 and 2019, roads received an average of 60% of land transport funding while public transport averaged 37% over the same period.

In recent years this gap has narrowed—expenditure in 2018 was 55% on roads and 42% on public transport and PSOs. The spending allocation for 2019 is 56% for roads and 42% for public transport and PSOs. Expenditure areas are not entirely distinct: some spending on sustainable transport measures may be included under public transport, while bus users also benefit from an improved road network.

Capital investment in transport infrastructure, as measured by DTTAS's capital expenditure budget, has averaged 0.45% of GDP since 2013. While nominal levels of capital expenditure have been increasing with €1.59bn allocated for 2019, as a percentage of GDP, capital investment is far below the levels of the period 2002-2008.

According to previous DTTAS estimates, the level of Departmental capital investment by DTTAS required to maintain the steady state of existing infrastructure going forward is at least €1.3bn annually. 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.





Taxation revenue associated with the transport sector increased 1.9% in 2018 to €4.6bn. While still below the peak of €5bn in 2007, tax revenue from transport activities has been growing an average of 1.6% per annum since 2013.

Excise duties on fuels such as diesel and petrol and Motor Tax are the two largest sources of transport-related tax revenue for the State with an estimated €2.1bn and €982m collected respectively in 2018. Vehicle Registration Tax (VRT) receipts have also increased significantly in recent years, increasing by over 5% in 2018 to €885m.

Despite the increases since 2012, transport investment today is significantly less than in 2008. It remains the case that Ireland is investing less than it historically has, less as a proportion of GDP than other OECD states, and less than the estimated level to maintain the current system. As transport demand continues to grow in line with economic growth, there has been a renewed focus on investment in the sector as part of Project Ireland 2040.

Land Transport - 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 also relies on rail infrastructure, both light rail (in Dublin) and heavy rail (nationwide).

Road Infrastructure, 2018

National Road: 5,332 km

Of Which Motorway: 969 km

Regional Roads: 13,120 km

Local Roads: 80,472 km

Total Road: 98,924 km

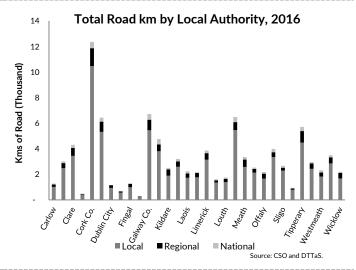
Source: CSO/TII

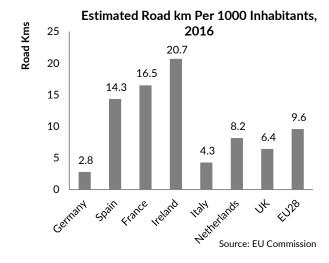
The Irish road network consists of **98,924km of road** according to statistics from the CSO and TII. National roads, the primary links between cities and towns, account for 5,332 km or 5.4% of all roads. Of these, **969 km are motorway;** accounting for almost a fifth (18.2%) of national roads in 2018, while 301km or 5.6% of national roads are dual carriageway, and 4,062km or 76.2% are single carriageway.

The regional road network in 2012 comprised 13,120 km (13.3% of all roads) and local roads accounted for 80,472 km (81.3% of all roads).

The geographical breakdown of the Irish road network by local authority area in 2016 is presented on the right. The areas containing the highest proportion of the Irish road network are **Cork County** (12,362 km or 12.5%), **Galway County** (6,706 km or 6.8%), **Mayo** (6,485 km or 6.6%) and **Donegal** (6,429 km or 6.5%).

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.





Data published by the European Commission in 2018 allows for a comparison of the level of road density across EU Member States. This is measured as the number of road km per 1.000 inhabitants.

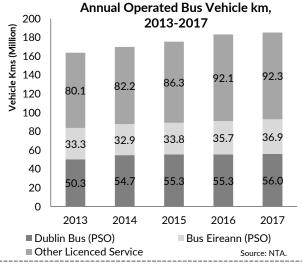
As can be seen in the figure (left), Ireland's road density is high by European standards. With 20.7 km per 1,000 inhabitants Ireland has the 6th highest density in the EU, more than twice the EU28 average of 9.6 km per 1,000 people. Ireland has more than three times the road density of the UK (6.4 km per 1,000 inhabitants).

Ireland's high road density is likely influenced by the high proportion of inhabited land in both urban and rural areas, with 80% of Ireland's 1km² areas being inhabited in 2011. The EU28 average was an inhabitation rate of 50.4% of 1km² areas in 2011.



Data from the NTA provides a picture of the level of bus service provision in Ireland. The total vehicle km operated increased 1.2% from 183.1m km in 2016 to 185.2m km in 2017. The 2017 data shows vehicle km rising 1.3% (to 56m) for Dublin Bus and by 3.4% (to 37m) for Bus Éireann, while vehicle seat km rose by 2.2% (to 3.5bn) and 5.5% (to 2.5bn) respectively. For other commercial bus services, vehicle km rose by 0.2% (to 92.3m).

Based on other NTA data, there were **2,712 buses** providing services in **2017**, up **3.9%** from **2,609** in **2016**. 37.1% or 993 of the buses operating in 2017 were for Dublin Bus PSO services, 19.8% or 542 were for Bus Éireann PSO services and 43.1% or 1,177 were for other licensed bus services.



Luas: Key Facts (2018)
Red Line Length: 20.8 km
Green Line Length: 22.0 km

Trams in Operation: 73

Tram Capacity: 291-408 People
Vehicle Km: 4.2 million
Passenger Km: 209.9 million

Heavy Rail: Key Facts (2018)

Passenger Lines: 1,679 km Passenger Stations: 144

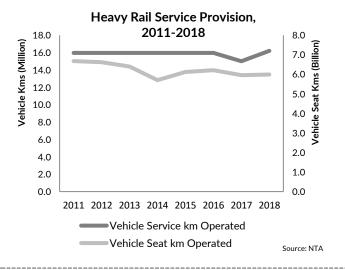
Sources: TII & CSO Transport Omnibus

Dublin's light-rail network, the Luas, expanded in December 2017 with the opening of Luas Cross City, a 5.9 km extension linking the network's green and red lines and continuing to Broombridge.

In response to increased demand on the extended line, TII introduced an additional 7 trams. 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. In operational terms, there were **4.2** million vehicle km provided by Luas in 2017 (up 7.7%) while 209.9 million passenger km were travelled in 2018.

The number of in-service vehicle kilometres operated on heavy rail services rose by 7.9% from 15.0m km in 2017 to 16.2m km in 2018.

The number of operated vehicle seat kilometres had decreased steadily from 6.7bn in 2011 to 5.7bn in 2014, but after two years of growth to 6.2 billion in 2016, extra carriages were added to meet rising demand. However it fell by 4.0% in 2017 to 5.96bn, in part due to industrial action and by service stoppages during Storm Ophelia. 2018 has seen modest growth of 0.4%, bringing operated vehicle seat km to 5986.6m. Much of this growth can be attributed to increased provision of DART services.



In September 2018 the DART timetable was amended to provide DART services every 10 minutes in both directions between 6.50am and 8pm. This required a reduction in the number of trains provided during peak times, with the number of trains running from Portmarnock in to the city centre falling from 12 to 9 during the morning peak. There were some minor changes to the Maynooth Commuter line and off-peak Northern line services, and an increase in service provision at Drumcondra station.

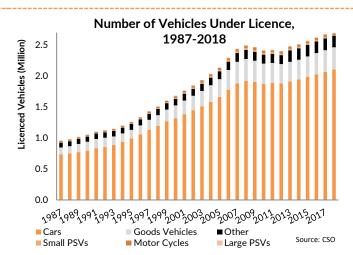
Travel Patterns



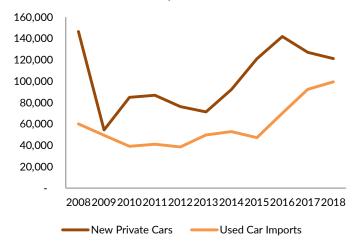
This chapter assesses trends in the various modes of land travel in Ireland. Car ownership levels, usage of public transport services and levels of active travel are all discussed in the following sections. The chapter begins with an outline in vehicle ownership and licensing levels.

In line with continued economic growth, the total number of licensed vehicles in Ireland increased 1.6% to 2.7m in 2018. Over 2.1m of these licenses are private cars. Goods vehicles are the next largest category with 355,000 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 2018. There were 2.0% and 1.8% increases in licensed private cars and goods vehicles respectively from 2017, while the number of large PSVs increased by 5.5%. The increase in 2018 saw the number of goods vehicles licensed surpass the previous high of 351,307 in 2008.



New Private Cars & Used Private Car Imports Licensed, 2008 -2018

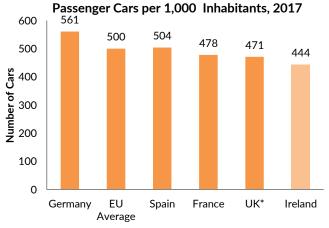


The number of new vehicles licensed decreased for a second consecutive year to 157,865 in 2018, a 2.5% decrease from 2017. A total of 121,157 new private cars were licensed, representing 76.7% of total new vehicles licensed in 2018. This in turn represents a 4.6% decrease from 127,045 new cars licensed in 2017. The number of new goods vehicles licensed in the same period increased 5.6% to 25,459.

While the overall number of new vehicles licensed fell, 2018 saw a 7.5% increase in the number of imported used vehicles registered in Ireland. In total 125,874 imported used vehicles were registered in 2018, of which 99,456 were private cars. **Used car imports have increased 110.6% since 2015**, which may suggest Irish consumers are taking advantage of a weaker pound sterling and a larger used vehicle market in the UK.

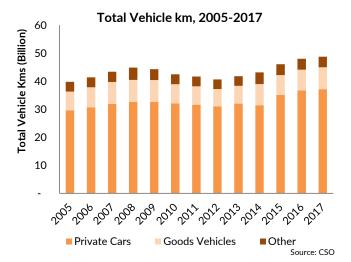
Analysis of the latest Eurostat data (2017) indicates that the level of private car ownership is lower in Ireland than in other European states.

The estimated level of 444 private cars per 1,000 inhabitants in Ireland ranks below the average of 500 for the 24 EU member states for which data is available. The UK (471), Spain (504), France (478) and Germany (561) all have a higher density of private car ownership. Ireland's level is the 7th lowest of countries for which data is available, though recent growth means Ireland has surpassed the 2008 level of 442 cars per 1,000 people.



Source: Eurostat. Average estimated from 24 countries.



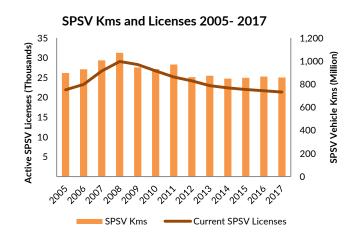


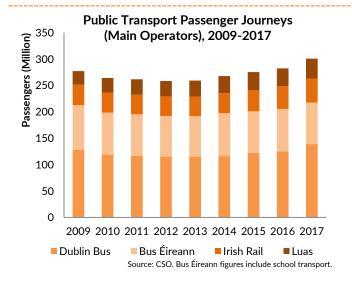
The total number of kilometres driven on the Irish road network continued to increase in 2017 following a number of years of decline between 2008 and 2012.

Total km driven in 2017 increased to 48.8bn, a 1.6% increase from 2016. While private car travel is at the highest levels recorded at 37.2bn kms, the total kilometres travelled by goods vehicles at 7.8bn kms, remains below its peak of 7.9bn kms in 2008. Private cars were responsible for 76.3% of total km in 2017 with goods vehicles accounting for 15.6%. On average each private car covered 17,881 km in 2017, a slight decrease of 0.4% from 2016.

The graph (right) shows trends in small public service vehicle (SPSV) use in Ireland. SPSVs are vehicles with seating for up to 8 passengers and primarily consist of taxis, hackneys and limousines.

In 2018, there were 21,433 active SPSV Licenses, a marginal 0.4% increase on 2017 but still below the 2008 peak of 29,053, which may in part be due to regulations introduced in 2010. With 858m kms travelled in 2017, SPSV activity has remained relatively stable over the last number of years, with an average of 860m kms travelled per annum from 2012 to 2017. Despite this, SPSV activity was still 20% lower in 2017 than its peak in 2008 of 1.07bn kilometres travelled.





The number of passengers carried by the public transport network increased once again in 2017. Passenger journeys facilitated by the four main public transport operators increased 6.5% to 301m in 2017. Dublin Bus accounted for the greatest number of passenger movements with 139m journeys. Bus Éireann was the next largest provider with 79m passenger journeys.

Provisional data for 2018 indicates that public transport usage grew by in excess of 5%. Irish Rail and the Luas in particular are experiencing strong demand for their services, with 48m and 41.8m passenger journeys respectively in 2018. Passenger journeys facilitated by Dublin Bus and Bus Éireann Public Service Obligation (PSO) services increased to 140m and 35m passenger journeys respectively in 2018.

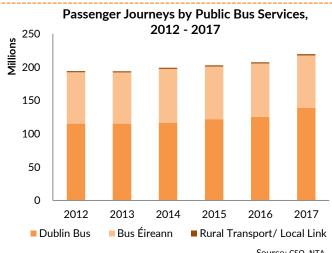
Private car remains the dominant travel mode in Ireland. The volume of kms driven is continuing to increase for private cars and goods vehicles, but has remained largely unchanged for SPSVs. In recent years used vehicle imports from the UK have constituted an increasing share of the new vehicles licensed. While this trend may ultimately be temporary in nature, there are current implications for the domestic car retail sector as well as tax revenues associated with new car purchases.



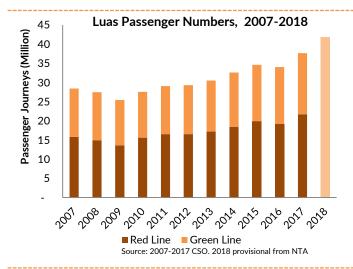
This section explores trends in public transport usage. Unsurprisingly, all the major public transport operators in the State have experienced increasing demand for their services in recent years as the national economy continues to grow.

Buses are the most extensively used public transport mode in Ireland. There were over 219m journeys facilitated by public bus operators in 2017. Dublin Bus accounted for the majority of these passenger journeys with 139m journeys while Bus Éireann a further 79m journeys. Local Link faciltitated services (preceded by Rural Transport programme bus services) have also experienced growth in passenger numbers with 1.9 million passenger journeys in 2017, up from 1.8 million passenger journeys in 2016.

There were approximately 26m passenger journeys facilitated by commercial bus services in 2017. Go-Ahead Ireland also began operations in September 2018 with 1.3m passenger journeys recorded by December.



Source: CSO, NTA

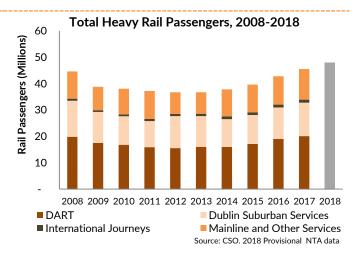


The Luas continues to see growth in its patronage with 41.8m passenger journeys recorded in 2018. This represents an 11% increase from the 37.6m journeys recorded in 2017. To ease overcrowding on some services and to increase overall capacity, a number of new longer trams were added to the existing rolling stock in 2018.

While passenger numbers have been steadily growing on both the Red and Green Lines, data for 2017 indicates 5.7m more passenger journeys took place on the Red Line than the Green Line. There was 19% increase in journey numbers in December 2017 compared to December 2016 which coincided with the public opening of the Green Line extension.

Irish Rail has also seen continued growth in passenger numbers since 2013, primarily a result of the expanding national economy. Provisional data from the NTA indicates that heavy rail passenger journeys increased by 2.5m to 48m journeys in 2018.

Data from 2017 suggests that the DART and Commuter services to Dublin are the core drivers of heavy rail passenger numbers in Ireland with 20.1m and 12.7m journeys recorded on these services respectively. There was a 14% increase in daily journeys in the Greater Dublin Area alone in 2017 to **141,000**. Other mainline services accounted for a further 11.6m journeys in 2017 while the Enterprise service to Belfast had nearly 1.2m journeys.



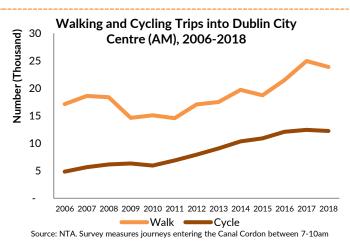
Bus services continue to form the backbone of the Irish public transport system. However, where in place and accessible, other modes of public transport, including heavy rail and the Luas, are heavily utilised by the general public. Continued economic growth, particularly in the Greater Dublin Area, is likely to see demand for public transport services continue to increase in the coming years.

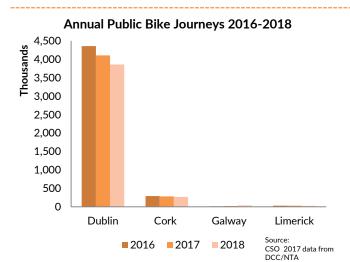


This section outlines trends in active travel drawing on data from the NTA's Canal Cordon Count and usage levels for public bike schemes. The section also briefly highlights the use of technology, such as Leap Cards, by users of public transport.

The NTA's Canal Cordon Count 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.

The data for 2018 shows a slight drop in the number of cyclists recorded entering the city to 12,227, down from 12,447 in 2017. However, this is still more than double the number of cyclists counted in 2010. The number of walkers also dropped in 2018 by 4.5% to 23,858. For the first time, the 2018 Canal Cordon Count also recorded that the number of bus users (64,206) exceeded those travelling by car (60,537) into the city centre.



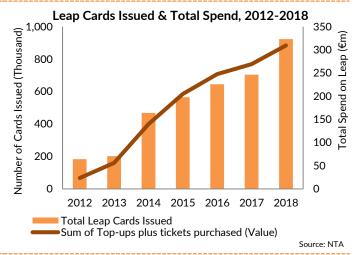


Public bike schemes currently operate in Dublin, Cork, Galway and Limerick. Dublin's public bike scheme has been in operation since 2009, while the remaining three have been in place since 2014. With the exception of the Galway public bike scheme which grew 64.2% in 2018, annual journeys have been declining since 2016.

Figures in Dublin suggest a 6.4% decrease in usage to 3.9m journeys, down from 4.1m in 2017. Cork, the second largest scheme in terms of user numbers, saw a 3.4% decrease in journeys in 2018 to 272,600. Other indicators imply a decline in usage of the public bike schemes. Long-term and short-term subscribers for Dublin Bikes fell 0.4% and 7.1% respectively in 2018. One possible reason for this decline is the emergence of private bike sharing schemes.

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 31% to 923,600 in 2018. The value of top-ups and tickets purchased via Leap Cards also increased 15.0% in 2018. 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.

Other technological travel aids available have also seen their usage increase. The NTA saw use of their Real Time Public Transport Information App increase 20.6% in 2018 with 151.9 million server requests placed by users, up from 125.9 million in 2017.



Active travel in the form of cycling and walking has been increasing in Dublin in recent years according to the Canal Cordon Count despite the small drop for both modes recorded in 2018. Usage of public bike schemes appears to be waning with 2018 seeing further decreases for three of the four schemes in operation.

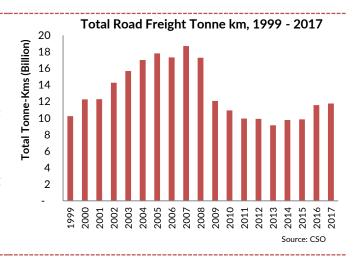
Land Freight



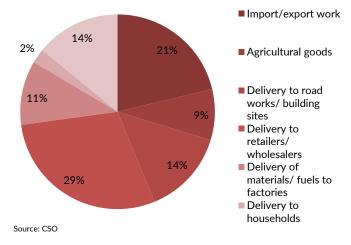
Ireland's road and rail networks play a vital role for economic activity by facilitating the movement of goods around the country. Road freight activity increased once again in 2017, with 1.7% growth in tonne-kilometres. Rail freight, which modestly increased in 2016, saw a marginal decline in traffic in 2017.

Irish road freight activity continued to grow in 2017, albeit at a far more modest pace than 2016 and overall activity remains well below the levels experienced during the height of the Celtic Tiger.

Road freight activity (measured by total road freight tonne-kilometres) increased by 1.7% to 11.8bn tonne-kilometres in 2017. Overall volumes of freight moved on the road network in 2017 increased 3.9% to 147.2m tonnes with the number of laden journeys growing 6.1% to 12,827.



Road Freight Tonne-km by Main Use, 2017



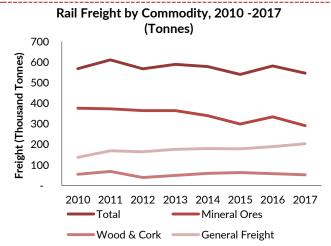
There were some notable changes to the composition of road freight in 2017.

The fastest growing road freight sector was deliveries to households which saw a 12.3% increase on 2016 tonne-kilometre levels. This was closely followed by road freight associated with construction activity which grew by 12.1% over the same period. Delivery of materials and fuels to factories fell 21% in 2017 in terms of tonne-kilometres and 18.3% in terms of overall tonnage.

The primary elements of road freight activity remain deliveries to retail/wholesale outlets (29.1% or 3.4bn tonne-km) and import/export work (21.2% or 2.4bn tonne-km).

The volume of freight moved by heavy rail declined in 2017 following a very modest increase in 2016. Overall tonnage moved by rail fell 6.4% to 546,000 tonnes, equivalent to just 0.9% of total tonne-kilometres of the land freight sector in Ireland.

Despite growth in general freight tonnage in recent years, rail freight is still mainly comprised of the movement of mineral ores. As such, recent trends for total rail freight reflect the rise and fall in mineral ore freight traffic. In 2017, the tonnage of mineral ore moved by rail fell 12.9% to 291,000 tonnes which is reflected in the decline of total tonnage.



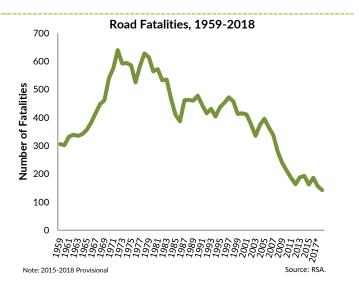
Land Safety

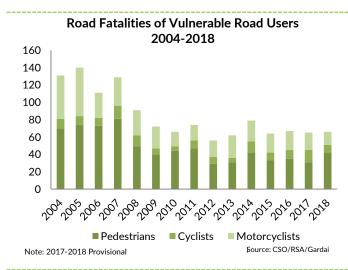


The number of fatalities on Irish roads continued to decline in 2018, maintaining the overall downward trend of recent years, both in absolute terms and relative to the amount of passenger kilometres travelled. Figures outlining the number of accidents recorded on the heavy-rail network and involving Luas trams are also provided.

Provisional data records show 142 fatalities on Irish roads in 2018, a reduction of 15 (9.6%) from 2017 and the lowest number since records began. April was the worst month in 2018 for fatal road incidents with 17 deaths. July remains the worst month on average with an average of 17.4 deaths since 2009.

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. Indeed in 2016, Ireland's safety performance with 3.4 deaths per billion car passenger kms was the third best in the EU and broadly in line with peers such as the UK (2.8), Sweden (2.4) and Germany (3.4).



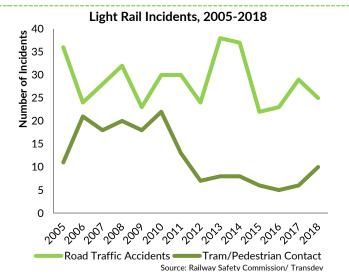


Deaths of vulnerable road users (pedestrians, cyclists and motorcyclists) have followed a broadly similar downward pattern to that seen in overall road fatalities. However, there was a slight increase to 66 such deaths in 2018, up one from 65 in 2017.

With the exception of pedestrians, all road user groups saw reductions in fatalities for 2018. Fatalities among pedestrians increased 36% to 42 deaths in 2018. Deaths among cyclists and motorcyclists fell to 9 and 15 respectively in 2018.

Overall safety performance for the Luas remained largely unchanged for 2018 with 35 incidents of road traffic accidents and contact with pedestrians. Tram contacts with pedestrians increased to 10 in 2018 from 6 in 2017 while road traffic accidents involving trams decreased slightly to 25 from 29 in 2017.

The latest data available for heavy rail indicates a slight decrease in safety performance for 2017. There were 4 significant accidents recorded across the network which required parties to be hospitalised for more than 24 hours. No such accidents were recorded in 2016. Unauthorised person fatalities increased from 5 in 2016 to 9 in 2017.



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 trends, and movement of freight by air.

Total Passengers Handled at State and Regional Airports, 2018

State Airports

Dublin: 31.3 million

Cork: 2.4 million

Shannon: 1.7 million

Regional Airports

Knock: 775,063

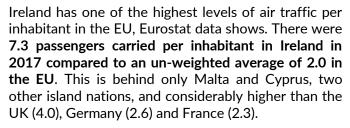
Kerry: 365,339

Donegal: 46,537 🚄

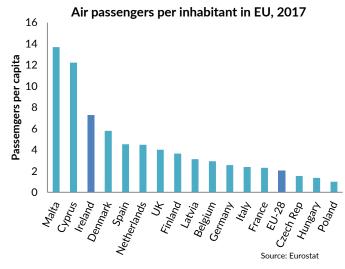
Source: CSO

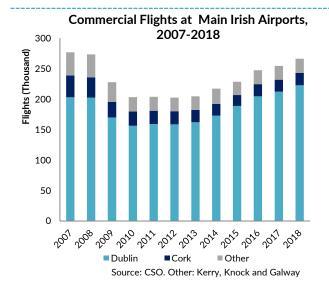
Ireland's aviation infrastructure is divided into two distinct categories of airports, as set out by the National Aviation Policy published in August 2015. **State Airports**—Dublin, Cork and Shannon—are the primary gateways through which air traffic accesses Ireland. **Regional Airports**—Ireland West Airport Knock, Kerry and Donegal—are important for improving connectivity to their areas. Commercial flights to Waterford ceased in June 2016.

Dublin and Kerry reported the highest growth in passenger numbers from 2017 to 2018, with rates of 6.3% and 8.9% respectively. Passenger growth at other airports included rates of 4.9% at Shannon, 3.5% at Knock and 3.8% at Cork, while at Donegal passenger numbers were virtually unchanged.



A comparison of Ireland's airport infrastructure internationally shows that Ireland has a similar number of airports to other European countries with a comparable population. Eurostat data for 2015 shows Ireland has 5 airports with more than 150,000 annual passenger movements, similar to Denmark and Croatia which each have 5 airports of this size too, while Finland has 9 and Slovakia has only 2.





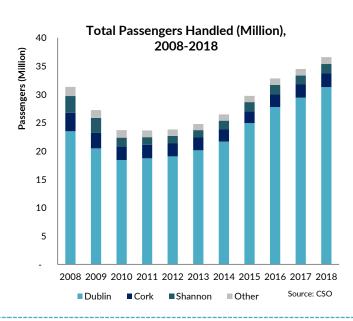
Having fallen from a peak of 283,500 in 2007 to 202,300 in 2012, the total number of commercial flights handled in the main airports has now rebounded to 266,400 in 2018. This is an increase of 4.7% on 2017 levels.

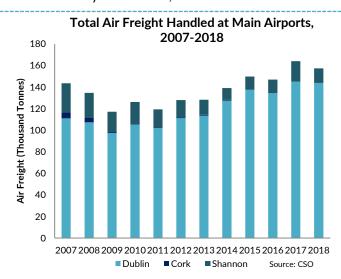
Dublin Airport handled 222,700 commercial flights in 2018, which was 4.9% higher than in 2017, while Cork handled 20,400 commercial flights, up 3.5%. Shannon handled 13,700 commercial flights, up 3.6%, and Kerry and Knock both saw small increases to 3,300 and 6,200 commercial flights respectively. Dublin increased its share of total commercial flights to 83.6%, Cork's dipped slightly to 7.7% and Shannon's share fell to 5.1%.



The total number of passengers handled at Irish airports continues to grow. In 2018, total passengers handled reached 36.6m, a 6% annual increase. Growth has been such that from a low of 23.7m in 2011, total numbers have now exceeded the 2007 peak of 31.5m.

Dublin Airport accounted for 85.6% of all passengers in 2018 at 31.3m, up 6.3% on 2017, with numbers now exceeding the previous peak of 23.5m in 2008. Passenger numbers at other airports have shown slightly less marked increases, with Shannon seeing a 4.9% increase to 1.7m passengers in 2018. Eurostat figures show Dublin Airport was the 11th busiest in the EU in 2017 and the 10th busiest for international journeys. Over 94,000 passengers travelled on the PSO routes between Donegal and Dublin, and between Kerry and Dublin, in 2018.





The total amount of air freight handled at Ireland's main airports has fallen by 4.5% from 164,800 tonnes in 2017 to 157,400 in 2018. This follows a decline from 145,500 in 2006 to 117,200 tonnes in 2009, followed by a stuttering growth trend from 2010. Air freight accounts for a small share of all freight exported or imported from Ireland by weight, but includes much high-value merchandise such as pharmaceuticals.

Dublin Airport handled 143,700 tonnes of air freight in 2018, down by 0.8% and accounting for 88.4% of total air freight in Ireland. Cork handled 100 tonnes, up from none in 2017, and Shannon handled 13,600 tonnes in 2018, down from 19,000.

Data from the Irish Aviation Authority (right) shows that only 26.2% of air traffic handled in Ireland in 2018 were flights into or out of terminals at Irish airports. Flights through Irish airspace (overflights) make up 30.0% of the total, with North Atlantic Communications (NAC) flights (over oceanic airspace) constituting the remaining 43.9%. All overflights are handled by Shannon Area Control Centre.

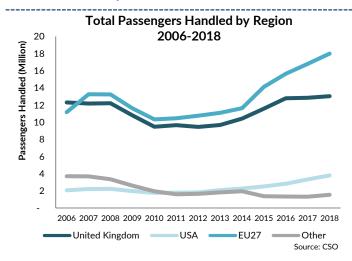
Flights handled by Irish air traffic control increased by 3.5% from 2017 to 2018, with the total number increasing to over 1.15m. The largest change was in total movements at Cork Airport, which fell by 1.4%. They rose by 0.8% at Shannon Airport during the same period.



Whether measured by commercial flights handled, passengers handled or air freight tonnes handled, it is clear that Ireland's aviation sector is exhibiting strong and continued aggregate growth. This pattern is dominated by activity at Dublin Airport, which is responsible for over three-quarters of activity in Ireland on the measures.



Although the details of the final outcome have yet to be determined, the exit of the United Kingdom from the European Union is likely to have significant impact on the Irish transport sector. This section aims to highlight some of the key connections between Ireland, the UK and the EU, beginning with analysis of passenger movements between Irish airports and international destinations, and the prominence of UK traffic at Irish airports.

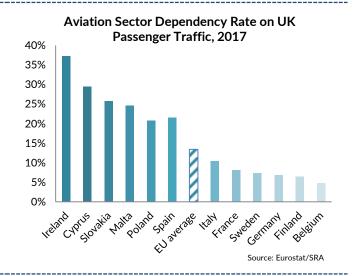


Though air traffic to and from the UK remains vital for Ireland, more passengers are moving between the EU27 and Irish airports than are moving between the UK and Ireland. This has been the case for the last decade and the gap between EU27 and UK passengers to/from Ireland's main airports widened to almost 5m in 2018. The number of EU27 passengers grew from 16.8m to 18.0m, an increase of 7.1%, while UK passenger numbers increased by 1.4% to 13.0m.

Elsewhere the number of passengers moving between Irish airports and the USA increased by 14.2% to 3.8m in 2018. Passenger numbers to other regions increased by 16.6% in 2018 to 1.5m.

Ireland's aviation sector is the most heavily dependent on UK traffic of any EU country, according to 2017 data. 37.3% of Irish passenger traffic was to or from the UK, compared with just 6.9% of passenger traffic in Germany and 8.1% in France. Cyprus was the country with the next highest dependency on UK traffic at 29.5%. The EU27 un-weighted average was 13.4%.

While the UK remains by far the biggest source of aviation traffic to or from Ireland, this dependency has reduced somewhat—by two percentage points 39.2% in 2016. This can be explained by faster growth rates in passengers travelling to or from all regions other than the UK.



Dublin, Top Routes and % of Passengers 2018

London-Heathrow	1,810,126	5.8%
London-Gatwick	1,348,588	4.3%
Amsterdam Schiphol	1,200,263	3.8%
Manchester	985,665	3.1%
Birmingham	926,633	3.0%
London-Stansted	896,977	2.9%
Paris- Charles de Gaulle	722,189	2.3%
Edinburgh	637,527	2.0%
New York - JFK	607,693	1.9%
Barcelona	601,261	1.9%
All passengers	31,319,419	100%

In 2018, 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 6.6m passengers, over 61.4% of whom travelled between Dublin and London.

Heathrow continued to be by far the busiest route for Dublin Airport, serving 1.8m passengers in 2018, a rise of 3.3% since 2017. Eurostat figures for 2017 show Dublin/Heathrow is 8th in the top 10 busiest airport pairs within the EU and the only non-domestic route on that list. Gatwick, Manchester and Edinburgh had increased passenger traffic to/from Dublin in 2018, but there were slight declines to/from Birmingham and Stansted.

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The UK remains important to Cork Airport, despite falling passenger numbers, with five British airports accounting for over 1m passengers, i.e. 44.3% of its passenger traffic in 2018, down from 51.0% in 2017.

Links between London and Cork remain important as Heathrow, Stansted and Gatwick comprised 3 of its top 5 routes, accounting for 873,200 passengers or 36.6% of the total, down from 38.7% in 2017. Liverpool-John Lennon was in 2017's top 10 routes, but was leapfrogged by Faro in 2018. Two of the four UK routes to remain in the top 10 since 2017 have seen passenger numbers decline, with Gatwick seeing the largest reduction of 10.4% followed by Stansted at 1.7%.

Cork, Top Routes and % of Passenger	- 2019

All destinations	2,387,806	100%
Birmingham	77,545	3.2%
Manchester	106,305	4.5%
Lanzarote	112,421	4.7%
Faro	118,781	5.0%
Paris - Charles De Gaulle	122,840	5.1%
London - Gatwick	122,928	5.1%
Malaga	149,728	6.3%
Amsterdam Schiphol	155,952	6.5%
London - Stansted	346,977	14.5%
London - Heathrow	403,269	16.9%

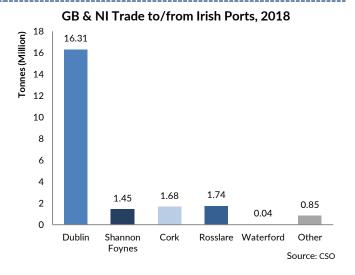
Shannon, Top Routes and	d % of Passenge	rs, 2018	
London-Heathrow	276,236	16.5%	
London-Stansted	203,000	12.1%	
New York -JFK	118,821	7.1%	
Knock, Top Routes and % of Passengers, 2018			
London-Stansted	155,936	20.1%	
London-Luton	132,739	17.1%	
Liverpool - John Lennon	84,870	11%	
Kerry, Top Routes and % of Passengers, 2018			
London-Luton	110,749	30.3%	
London-Stansted	80,137	21.9%	
Frankfurt-Hahn	57,530	15.7%	

Shannon Airport's main routes in 2018 were with the UK and the USA. Four of its top 10 routes were with the UK, accounting for 681,600 passengers or 40.6% of all passenger traffic. Its three main US routes delivered 280,560 passengers, or 20.5% of the total.

Routes to the UK dominated Knock Airport's passenger traffic in 2018, accounting for nine of the top 10 routes and 85.6% of traffic. At Kerry Airport meanwhile the routes to/from Luton and Stansted continued to dominate accounting for 52.2% of passenger traffic in 2018, down from 56.5%. This reduction in the UK share is mostly driven by increasing passenger numbers on the Frankfurt-Hahn route.

Turning to maritime trade, more than three quarters of goods (76.9%) shipped between Ireland and the UK in 2017 passed through Dublin Port.

16.3m of the total of 22m 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 1.74m tonnes or 7.9%, while Cork was third with 1.68m tonnes or 7.6% of total UK maritime trade. Shannon Foynes accounted for 6.6% and Waterford just 0.2%. Irish ports other than the five largest, accounted for 27.3% of trade with the UK, including 456 tonnes at Drogheda port.

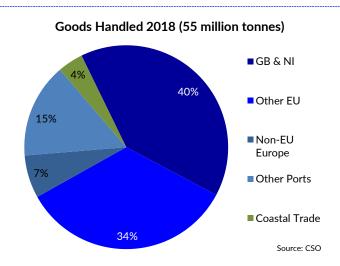


Aviation trends reveal the importance of the UK and Europe for Irish air traffic. Routes to London, other UK cities, mainland Europe and the USA remain the most important for Ireland's five busiest airports. Passenger numbers on many UK routes also grew in 2018. In terms of maritime trade, Dublin Port handles the majority of Ireland's trade with the UK.

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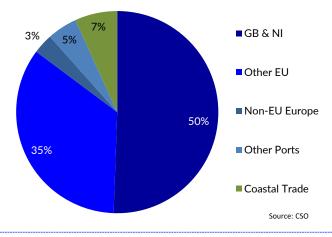
The movement of goods and services between Ireland and the UK by sea plays a vital role in the economy of Ireland. This section highlights how the trade of goods to and from the UK contributes to the total level of maritime freight activity in Ireland, and how UK trade plays a larger role at some of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



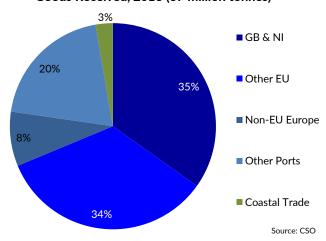
The three charts presented left and below indicate the regional origins and destinations of all goods passing through Irish ports in 2018. Trade with the UK comprised 40.0% of all Irish maritime trade – down from 41.7% in 2017 - while trade with other EU member states represented 34.1%.

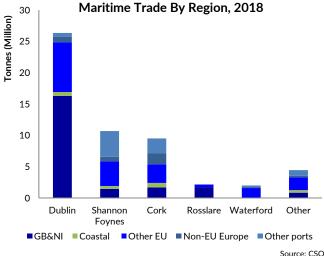
Just over half of all goods forwarded through Irish ports in 2018 went on to the UK (below left), while 34.8% of all goods received in Irish ports originated in the UK (below right). EU trade meanwhile accounted for 34.6% of goods forwarded and 33.9% of goods received. Thus, trade with the UK accounted for a higher, but falling, share of total maritime trade in 2018 than trade with other EU member states, especially for goods forwarded.

Goods Forwarded, 2018 (18 million tonnes)



Goods Received, 2018 (37 million tonnes)





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 – with Rosslare handling only UK and EU freight in 2018. Some UK freight traffic travels between Ireland and continental Europe, using the UK 'landbridge'. This route is of particular importance to high value or time sensitive goods due to the significantly faster transit times achieved. The IMDO estimated that 3.1m tonnes of goods travelled via the landbridge in 2016. Trade outside Europe was most important at Shannon Foynes (42.9%), while 77.1% of trade at Waterford port was direct to other EU countries. Cork had the most evenly split trade.

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 and maritime passenger trends.

Total Freight Handled at Tier 1 and Tier 2 Ports, 2018

Tier 1 Ports

Dublin Port: 26.3 million tonnes **Shannon Foynes:** 10.7 million tonnes

Port of Cork: 9.5 million tonnes



Rosslare Europort: 2.1 million tonnes

Port of Waterford: 2.0 million tonnes

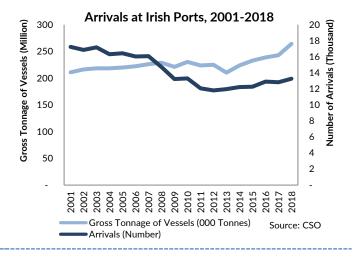


Ireland's National Ports Policy classifies three ports as 'Tier 1 Ports of National Significance': Dublin Port, Port of Cork and Shannon Foynes. There are two ports classified as 'Tier 2 Ports of National Significance': the Port of Waterford and Rosslare Europort. Other commercial ports are classified as 'Ports of Regional Significance' with the largest in freight terms (based on 2018 data) being Drogheda, Greenore, Bantry Bay, Galway and New Ross.

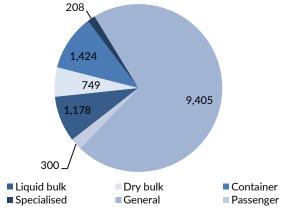
There are 11 other ports nationwide where statistics for the carriage of goods and passengers are reported by the CSO.

The number of vessels arriving at Irish ports increased by 3.4% in 2018 to 13,264 vessels, while the gross tonnage of vessels rose 8.8% to 264.4m tonnes, the highest it has ever been.

In general, there has been a 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 2018 figure is still 26.1% below the high of just under 18,000 vessels in 2000. However, gross tonnage increased by 34.4% in that period despite a pronounced dip during the recession, indicating an overall trend of markedly bigger ships over the last two decades.



Arrivals at Irish Ports by Vessel Type, 2018



Source: CSO Maritime Statistics

The large majority (70.9%) of the 13,264 ships arriving at Irish ports in 2018 were general-type vessels, with container and liquid bulk vessels the next most common types, accounting for 10.7% and 8.9% respectively. Dry bulk vessels accounted for 5.6% of the total, and specialised vessels 1.6%. There were also 300 passenger ship arrivals in 2018, accounting for 2.3% of total arrivals in Irish ports.

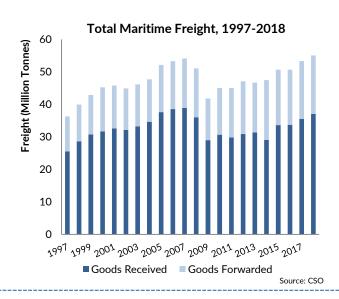
There were 63 vessels with a gross tonnage exceeding 500 registered under the Irish flag in July 2019, while the total number of ships registered under the Irish flag stands at 3,228 (though not all are necessarily operating). Ireland's ports receive ships registered to countries all across the globe.

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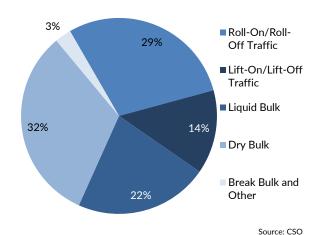


2018 saw a 3.3% annual increase in the amount of freight handled to 55.1m tonnes. This was the fourth consecutive year of growth and freight levels have now exceeded the previous peak of 54.1m in 2007. The data indicates that the drop in maritime freight after 2007 was mainly driven by lower imports rather than lower exports; goods received decreased sharply and have only now fully recovered, whereas goods forwarded declined until 2009 but recovered quickly and by 2011 had exceeded their prior 2007 peak.

Dublin Port accounted for nearly half (47.8%) of all goods handled in 2018 (26.3m tonnes). Shannon Foynes and Port of Cork handled 19.4% and 17.3% (10.7m and 9.5m tonnes) respectively.



Total Maritime Freight by Type, 2018



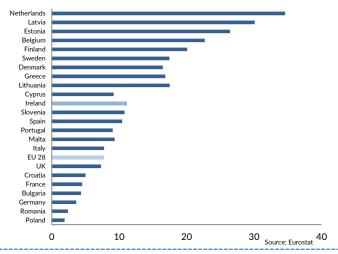
The types of maritime freight handled in 2018 remain similar to those in 2017. The largest element remains dry bulk at 32.2% of the total, with roll-on/roll-off (29.9%) and liquid bulk (22.1%) the next biggest. Lift-on/lift-off (13.9%) and break bulk/other (2.7%) make up the remainder.

Of the Tier 1 ports in 2018, Dublin handled the vast majority of both ro-ro (86.1%) and lo-lo (72.5%) freight that passed through Irish ports. Shannon Foynes handled a majority of dry bulk (52.2%), 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 2017 was 11.2, up 4.2% from 2016, but still below the peak of over 12 tonnes per capita each year from 2005 to 2007.

Ireland still ranks well above the EU28 unweighted average of 7.7 tonnes per capita in 2017, and remains above Spain (10.4), Portugal (9.1), the UK (7.3), and Italy (7.8). Countries with the most maritime freight per capita in 2017 were the Netherlands (34.6 tonnes), Latvia (30.1) and Estonia (26.5) while outside the EU, Norway handled 39.8 tonnes per capita.

Maritime Freight Tonnes Per Capita, 2017

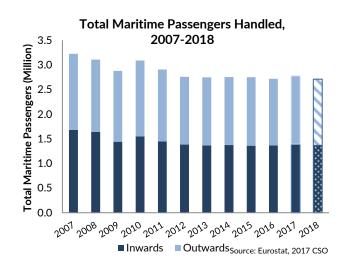


It is clear that the maritime sector holds a key role within the economy as an important gateway for the movement of freight between Ireland and its trading partners. The amount of freight handled in Irish ports grew by 3.3% in 2018. Ireland also remains above the European Union average for levels of maritime freight handled per capita (2017 figures).

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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 and cruise ship visits

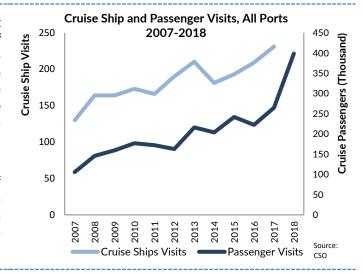


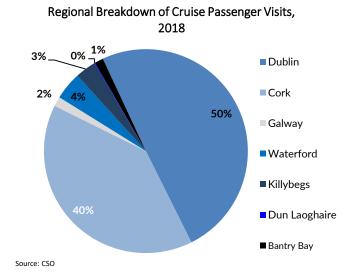
Ireland's ports are a key gateway for international tourism and the movement of people. Data from the CSO shows the number of maritime passengers (excluding cruise passengers on excursion) handled at all Irish ports fell by 2.1% to 2.7m between 2017 and 2018.

Eurostat figures (left) which include all cruise passengers handled at Irish ports indicate total Irish maritime passenger traffic fell 14.0% between 2007 and 2017, while total EU maritime passenger traffic fell 5.5% in that period. The CSO figures for 2018 are also shown in the graph for reference, **but are not precisely comparable** to the 2007-2017 Eurostat figures depicted.

The cruise ship sector is an increasingly important element of Irish maritime activity. The number of cruise ship visits grew by 29.9% from 231 in 2017 to 300 in 2018, while the number of cruise ship passengers rose by 50.5% to 398,505 in 2018. Cruise 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 2018, hosting 81% of ship visits and 89.0% of passengers between them, CSO data shows. With 150 cruise ships visits (up from 127 in 2017), Dublin accommodated half the cruise vessels visiting the Republic of Ireland.





Dublin Port's share of total cruise passengers decreased from 55.3% to 49.4% in 2018; this despite a 34.5% increase in cruise passengers at Dublin Port to 196,899. Cork had a one third increase in ship visits to 93 and 58.8% growth in passenger numbers to 157,669. Bantry Bay's passenger numbers more than doubled with 5,472 cruise passengers visiting, up from 2,388 the year before, and Galway saw passengers grow to 6,059. Killybegs also experienced significant growth, with passenger numbers nearly doubling, growing to 13,070 visitors on 15 ships.

However Dun Laoghaire has seen a 56.0% decline in cruise passengers between 2017 and 2018, from 1,083 to 476. Waterford had 272% more cruise passengers in 2018 than in 2017 at 17,527.

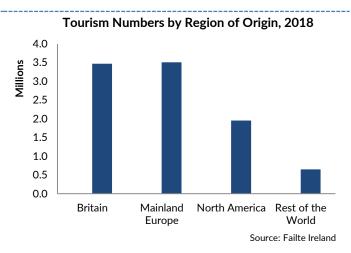
Tourism and Transport

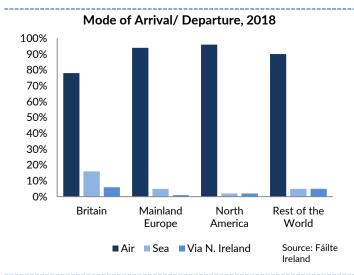


Tourism is an increasingly important sector in the Irish Economy, providing vital employment and income across the country. This chapter examines trends in how tourists travel to and move around Ireland.

Overall, tourism (including domestic receipts and carrier fares) was worth almost €9.4bn to the Irish economy in 2018. Fáilte Ireland estimates that every €1m in tourist expenditure supports 27 jobs with the sector currently supporting an estimated 260,000 jobs. Over 9.6m overseas tourists visited Ireland in 2018, spending over €5.2 billion.

Mainland Europe (3.51m) and Britain (3.47m) are the main source markets for overseas tourists in 2018, followed by North America (1.96m). However, in terms of revenue generated, Mainland Europe (€1.8bn) and North America (€1.7bn) were the most important markets, followed by Britain (€1bn).





Air travel is the primary method for getting to Ireland with 88% of overseas tourists in 2018 arriving via one of the country's airports. Tourists arriving by sea accounted for a further 8%, the majority of whom travelled by ferry from Britain (7%). The remaining 3% of overseas tourists arrived via Northern Ireland (excluding visitors from Northern Ireland itself).

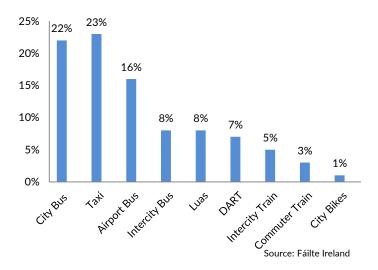
Most British and European tourists travelled directly from Britain or Europe. However, only 51% of North American tourists arrived directly from the United States or Canada with 23% arriving from the United Kingdom and a further 26% arriving from Mainland Europe.

While many overseas tourists visit more than one region during their visit, Dublin was the most popular destination in 2018 with 6.3m visits. The South West is the next most popular region attracting almost 2.5m tourists in 2018.

The majority of overseas tourists (57%) chose not to use a car during their visit to Ireland in 2018. Of those who did, 33% opted for car hire while the remaining 10% travelled in their personal car.

The most popular modes of public transport in 2018 among overseas holidaymakers were taxis and city buses, accounting for 22% and 23% of public transport journeys respectively. Airport bus services were the third most popular public transport mode among holidaymakers accounting for 16% of journeys.

Type of Public Transport Used by Overseas Holidaymakers, 2018



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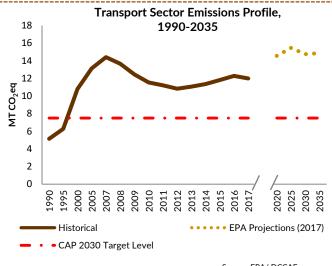
Energy and Emissions



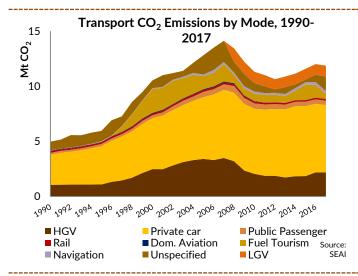
The transport sector is a large consumer of energy and as a result contributes significantly towards Ireland's greenhouse gas (GHG) emissions. This section presents the key trends in energy use and emissions generated as a result of transport sector activity in Ireland. A number of indicators relating to Ireland's progress in sustainable transport are also outlined

The transport sector emitted approximately 12m tonnes of CO₂ equivalent in 2017, a slight decrease of 2.4% from 2016. The sector is the second largest contributor to national GHG emissions at 19.8% after agriculture (33.3%) with energy industries (19.3%) the third largest contributor.

EPA projections from 2017 forecast that emissions from transport-related activities will reach an estimated 15m tonnes of CO2 equivalent by 2030 based on Government policy objectives at the time. Analysis set out in the 2019 Climate Action Plan suggests that the potential of key transport technologies, principally EVs, if delivered at the scale envisaged, could reduce projected transport sector emissions to 7.5m tonnes of CO₂ equivalent by 2030.



Source: EPA/ DCCAE



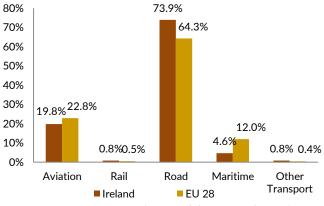
Private cars remain the largest source of GHG emissions in the transport sector accounting for 51.5% of total transport emissions. Heavy goods vehicles were responsible for a further 18.5% of emissions while light goods vehicles share of emissions was 8.4%.

There was an obvious contraction in emissions following the economic downturn of 2008. However, total emissions began to increase again from 2012 onwards reaching 12.3 megatons CO₂ equivalent in 2016. This decreased slightly by 2.4% in 2017 to 12 megatons CO₂ equivalent. These decreases were mainly a result of lower emissions from fuel tourism and private cars.

The share of GHG emissions contributed by transport was slightly lower in Ireland at 19.8% compared to 21.9% in the EU28 (2017 figures). Energy and industry also contribute less to national emissions on average than for the EU28, although Irish agricultural related emissions were higher than average.

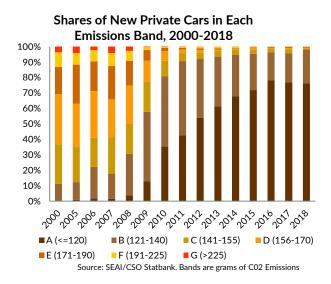
The breakdown of emissions within transport in 2017 was not hugely dissimilar to those in the EU with road contributing more in Ireland at 73.9% compared with 64.3% in the EU28. Aviation contributed less in Ireland than the EU average (19.8% to 22.8%) and maritime contributed less (4.6% to 12%). These latter figures for emissions include both international aviation and maritime emissions, which are not normally counted under national aviation maritime totals.

Emissions share by transport sector, Ireland and EU28 2017



Source: Eurostat/UNFCCC. Includes international aviation/maritime



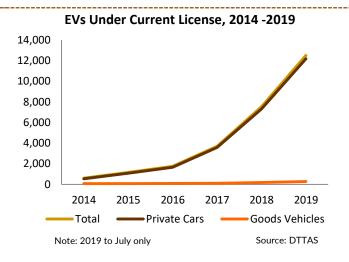


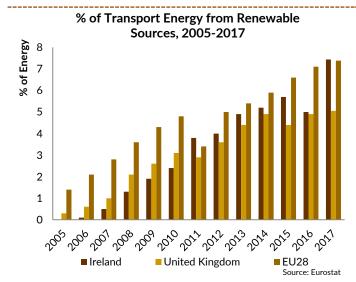
The system of linking VRT and Motor Tax to the CO₂ emissions ratings of new cars has incentivised consumers to purchase more efficient vehicles since 2008. However, the share of new cars purchased in the A-rated CO₂ emission band peaked in 2016 with the share of new cars in the B, C and D emission bands increasing in both 2017 and 2018.

This may be a result of more stringent emissions testing that recently came into use. In 2017 and 2018, the average CO_2 emissions of new cars equalled 112.7 g/km and 113.4 g/km respectively, up from an average of 112.4 g/km in 2016.

The number of electric vehicles (EVs) substantially increased in 2018 with 2,006 new EVs registered. This represents a 119.5% increase in new EV registrations on 2017. Of the 2,006 new EVs, 1,937 were private cars of which 1,222 were fully electric. Another 715 were plug-in hybrid cars.

Due to growth in new EVs licensed, as well as used EV imports, the total number of EVs on Irish roads has increased to over 12,500 as of July 2019, a 65.9% increase since December 2018. Approximately 7,500 of these vehicles are fully electric while the remaining 5,000 are plug-in hybrids. Private cars are by far the most numerous category of EV accounting for nearly 12,200 of the total EVs on Irish roads.





In terms of the supporting infrastructure that EVs require, ESB ecars currently is directly responsible for 650 public charge points alongside 78 fast charge points. There are approximately 1,100 public charge points across the island (including Northern Ireland) including those managed by ESB ecars.

The usage of energy derived from renewable sources by the transport sector in Ireland has been steadily increasing in the last number of years, reaching 7.4% of total energy consumption in 2017 and is broadly in line with European trends. Similarly, the weighted share of biofuels in transport energy has been increasing. In 2017 biofuels weighted share was 7%, up from 5% in 2016.

The economic recovery from 2013 onwards has resulted in increased emissions in the transport sector. Measures and new technologies in the transport sector should help Ireland in meeting its emission reduction targets. However, given the structure and pace of evolution of the Irish transport system, meeting emissions reduction targets in the short-term is very challenging.

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.



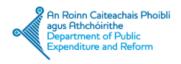
An Roinn Iompair, Turasóireachta agus Spóirt Department of Transport, Tourism and Sport

Annual Publication of 'Bulletin of Vehicle and **Driver Statistics' Data and Information** provided in policy documentation



Central 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



Publicly Available Expenditure Data at DPER Databank



Government Open Data Portal



National Statistics Portal



On-Going Release and **Publication of Transport Statistics**



Annual Publication of 'Statistical Pocketbook' of Europe-Wide Transport Indicators



Whole-of-Government Performance Data



Traffic Count Data Publicly Available. Number of Data-Focused Publications



On-Going Publication of Statistical Reports and Bulletins



Annual Publication of the 'Irish Maritime Transport Economist'



Data Portal for Energy Production, Transformation and End Use in Ireland



Open Data for Dublin



Produces and Publishes a Number of Statistical Bulletins and Reports

Notes and References

This section provides relevant notes and references for the analysis contained within *Transport Trends* 2019. 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@dttas.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 CO_2 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.

Average Household Transport Costs: Data from European Commission

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

Mode Share of Land Transport Passenger Kilometres: Data from Eurostat. All data relates to 2016 and represents the split between car, train and bus use.

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.

Investment in Inland Transport Infrastructure as a % of GDP: Capital Expenditure figures from DPER Databank and capital spending as a percentage of GDP is calculated based on Irish GDP (2016 Prices) obtained from the CSO.

Taxation Revenue Associated with Transport: Estimation of revenue associated with the transport sector provided by Department of Finance. Data for 2018 is provisional. 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 Network

Total Road km: National road data for 2018 from TII. Regional and Local road estimate from DTTaS for 2016, Motorway total for 2018 from TII.

Total Road km by Local Authority: National road data for 2017 from CSO. Regional and local road data for 2016 from DTTaS.

Road km Per 1,000 Inhabitants: Road length data from European Commission for 2016. 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.

Inhabitation rates by 1km²: Eurostat data analysed by City lab

Bus Operated Vehicle-km: Data for Dublin Bus and Bus Eireann from NTA Bus Statistics. Data for other commercial services from NTA Commercial Bus Statistics.

Number of Buses Providing Services: Data from Dublin Bus and Bus Eireann from NTA Bus Statistics and data for other commercial services from NTA Commercial Bus Statistics. The format for collecting data on fleet size and age changed between 2013 and 2014 and some discrepancies may have occurred. Rural transport services are excluded because, in general, the buses used are mini buses.

Heavy Rail Service Provision: Data from NTA. Irish Rail figures do not include rail freight operations.

Section Three: Travel Patterns

Number of Vehicles Under License: Data up to 2017 from CSO and refers to 31st December of each year. 2018 total vehicles licensed is provisional from DTTaS. 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 CSO.

Passenger Cars Per 1,000 Inhabitants: Data from Eurostat for 2017. Estimated European average represents the 24 countries with available data in 2017.

Total Vehicle km: Data from CSO Transport Omnibus.

Small Public Service Vehicle Kilometres and Licenses: Vehicle km from CSO Transport Omnibus.

Public Transport Passenger Journeys: Data for Bus Éireann, Dublin Bus, Irish Rail and Luas from CSO up to 2017. 2018 data from NTA. Specific sources for each operator are listed below.

Passenger Journeys by Public Bus Services: Data from NTA. 2018 School Transport and Local Link data not available at time of publication.

Luas Passenger Numbers: CSO data used up to 2017. 2018 data provided by NTA

Heavy Rail Passenger Numbers: CSO data used up to 2017. 2018 data provided by NTA

NTA Canal Cordon: Data from annual NTA report.

Annual Public Bike Journeys: CSO data used up to 2017. 2018 data provided by NTA

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

Section Four: Land Freight

Road Freight: Data from CSO Transport Omnibus.

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

Section Five: Land Safety

Road Fatalities: Data from both the RSA and CSO. 2016, 2017 and 2018 data is provisional and may be subject to revision.

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Road Fatalities per Billion Private Car Passenger km: Data from Eurostat. Estimation of road fatalities per billion passenger km is compiled by SRA based on Eurostat road safety data and European Commission road use data.

Vulnerable Road User Fatalities and Injuries: Fatalities and injuries **d**ata for 2000-2017 from the CSO. 2018 data from the RSA.

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

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

Section Six: Aviation

Airport Infrastructure Definition: From DTTaS National Aviation Policy (2015).

Number of Airports: Data is from Eurostat and airports are classified as being larger than 150,000 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.

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.

Section Seven: Maritime

GB & NI Trade To/From Irish Ports, 2018: Data is from CSO Maritime Statistics.

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

Maritime Trade by Region, 2018: Data from CSO Maritime Statistics.

Port Infrastructure Definition: From DTTaS National Ports Policy (2013).

Total Freight Handled at Tier 1 and 2 Ports. 2018: Data from CSO Maritime Statistics.

Arrivals at Irish Ports 2018: Data from CSO Maritime Statistics.

Number of Ships Registered Under Irish Flag: DTTaS data as of June 2019.

Total Maritime Freight & Total Maritime Freight by Type 2018: Data from CSO Maritime Statistics.

Maritime Freight Handled Per Capita 2017: 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 2018: Data from CSO Maritime Statistics.

Section Eight: Energy and Emissions

Transport Sector Emissions Profile: Data and projections from EPA Greenhouse Gas Emissions Projections and Climate Action Plan 2019.

Transport CO₂ Emissions by Mode: Data provided by SEAI.

Shares of New Private Cars in Each Emissions Band: Data from CSO.

EVs Licensed for the First Time: Data for new full electric and new plug-in hybrid vehicles from CSO. Petrol and Electric hybrids not included. Data for current EVs under license obtained from DTTAS's Bulletin for Vehicle and Driver Statistics series. EV charging stations data provided by ESB.

Percentage of transport Energy from Renewable Resources: Data from Eurostat.

Biofuels as a Proportion of Transport Energy: Data from SEAI Energy in Ireland (2017).

Section Nine: Tourism and Transport

Tourists by Region of Origin: Data from Fáilte Ireland's Tourism Facts 2018.

Tourists Mode of Arrival/ Departure: Data from Failte Ireland's Tourism Facts 2018.

Type of Public Transport Used by Tourists: Data from Fáilte Ireland's Tourism Facts 2018.

