Key figures on European transport 2022 edition
List of countries

BE Belgium  BG Bulgaria  CZ Czechia  DE Germany  EE Estonia  IE Ireland  CY Cyprus  LV Latvia  LT Lithuania  LU Luxembourg  HU Hungary  MT Malta  NL the Netherlands  AT Austria  PL Poland  PT Portugal  RO Romania  SI Slovenia  SK Slovakia  IS Iceland  LI Liechtenstein  NO Norway  CH Switzerland
Foreword

I am pleased to present this first edition of Key figures on European transport. It provides a selection of key transport indicators for the European Union (EU), its individual Member States and European Free Trade Association (EFTA) countries, drawing from the rich collection of data available at Eurostat. Transport statistics can be used not only to describe the transport of people and goods, but also to provide information about issues such as transport equipment, safety, infrastructure and the economy, as well as transport’s environmental impact.

Transport is critical to European businesses and global supply chains as well as to passengers. The transport sector contributes around 5% to the EU’s gross domestic product and employs more than 6 million people. However, transport emissions represent around 25% of the EU’s total greenhouse gas emissions. Transport’s importance has placed it at the heart of the European Green Deal initiatives which strive for a cleaner, greener and smarter mobility.

Key figures on European transport aims to provide intuitive visualisations and innovative data presentations supported by concise texts, in line with the Eurostat publication Key figures on Europe. It has been conceived to offer a balanced set of indicators. The first two chapters start with a presentation of transport measurement, providing information on the movement of people and goods by land, water and air transport modes. The third chapter looks at transport safety, again presenting information for various transport modes. The fourth chapter combines information on transport, the environment and energy. The final chapter looks at a range of economic indicators, such as employment in the transport sector, transport prices, and expenditure on transport.

The COVID-19 pandemic and related restrictions have impacted on almost every aspect of life in the EU (and further afield) since March 2020. The pandemic itself and accompanying restrictions have affected the supply of and demand for many transport services within the EU. Most of the data in this publication are available up to 2020 or 2021 and show the impact of the pandemic in these years. Eurostat’s most up-to-date statistics showing the economic and social impacts of the COVID-19 crisis can be found online at: https://ec.europa.eu/eurostat/web/covid-19/overview.

Eurostat’s wide range of statistical information on transport can be accessed through our website. The latest and most comprehensive data available on the EU, its Member States, the EFTA countries, as well as candidate countries and potential candidates are available through our online database, while analysis is provided through a range of online articles in Statistics Explained.

I hope that you find this publication interesting and useful.

Viveka Palm
Director of sectoral and regional statistics, Eurostat
Abstract

*Key figures on European transport* presents a selection of key transport indicators for the European Union (EU) and its individual Member States, as well as the EFTA countries. This publication may be viewed as an introduction to European transport statistics and provides a starting point for those who wish to explore the wide range of data that are freely available on Eurostat’s website at https://ec.europa.eu/eurostat together with a range of online articles in *Statistics Explained*.

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For more information please consult

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# Table of contents

Foreword 3

Introduction 6

1. **Passenger transport** 11
   - Modal split of inland passenger transport 12
   - Road passenger transport 14
   - Rail passenger transport 17
   - Maritime passenger transport 18
   - Air passenger transport 20
   - Commuting 23

2. **Freight transport** 25
   - Modal split of inland freight transport 26
   - Road freight transport 28
   - Rail freight transport 31
   - Inland waterway freight transport 33
   - Maritime freight transport 35
   - Air freight transport 37

3. **Transport safety** 39
   - Road safety 40
   - Rail transport safety 42
   - Maritime transport safety 43
   - Air transport safety 44

4. **Transport, the environment and energy** 45
   - Emissions 46
   - Taxes 47
   - Networks 48
   - Energy 50

5. **Transport and the economy** 51
   - Employment 52
   - Prices 56
   - Expenditure 58
   - Investment 60
Introduction

Eurostat is the statistical office of the European Union (EU) situated in Luxembourg. Its mission is to provide high quality statistics for Europe, which allow us to have key information on Europe’s economy, society and environment that we need both as citizens and as decision makers.

Key figures on European transport describes the situation concerning the use of transport and several related subjects. Only initial findings of the COVID-19 related impact on transport are provided: annual data are generally presented through to 2020 or 2021, depending on the mode of transport and the types of indicator.

Structure of the publication

Key figures on European transport provides users of official statistics with an overview of the wealth of information that is available on Eurostat’s website and within its online databases concerning transport.

The publication starts with a presentation of transport measurement, providing statistics on the movement of people and goods by land, water and air modes of transport in the first and second chapter. The third chapter looks at transport safety, again presenting information for various transport modes. The fourth chapter combines information on transport, the environment and energy. The final chapter looks at a range of economic indicators, such as employment in the transport sector, transport prices, and expenditure on transport.

Data extraction and coverage

Data extraction

The statistical data presented in this publication were extracted as and when data became available for a new reference year. Nearly all of the data in Chapters 4 and 5 were extracted in May 2022; most of the data for Chapters 1, 2 and 3 were extracted in September and October 2022. Eurostat’s online database may contain revised data.

Spatial data coverage

This publication presents information for the EU (a sum/average covering the 27 Member States of the EU) as well as the individual EU Member States and EFTA countries. The order of the countries in the figures usually reflects their ranking according to the values for (one of) the indicator(s) illustrated.

References in the publication to EU Member States being northern, eastern, southern or western Member States are based on groupings provided by EU vocabularies (https://op.europa.eu/en/web/eu-vocabularies/concept-scheme/-/resource?uri=http://eurovoc.europa.eu/100277).

The map on the inside cover page identifies the EU Member States and the EFTA countries, as well as pinpointing their capital cities.

Note that data related to rail transport are not available for Cyprus and Malta as these EU Member States do not have a rail network; the same is true for Iceland. Equally, data related to maritime transport
are not available for Czechia, Luxembourg, Hungary, Austria and Slovakia, as these Member States are landlocked; the same is true for Liechtenstein and Switzerland.

### Country codes

- BE Belgium
- BG Bulgaria
- CZ Czechia
- DK Denmark
- DE Germany
- EE Estonia
- IE Ireland
- EL Greece
- ES Spain
- FR France
- HR Croatia
- IT Italy
- CY Cyprus
- LV Latvia
- LT Lithuania
- LU Luxembourg
- HU Hungary
- MT Malta
- NL the Netherlands
- AT Austria
- PL Poland
- PT Portugal
- RO Romania
- SI Slovenia
- SK Slovakia
- FI Finland
- SE Sweden
- IS Iceland
- LI Liechtenstein
- NO Norway
- CH Switzerland

### World regions/continental aggregates

In the first chapter, several maps are shown for the size of air and maritime transport with various regions of the world. The regions are defined within [https://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=LST_NOM_DTL&StrNom=CL_GEO&StrLanguageCode=EN&IntPcKey=48517890](https://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=LST_NOM_DTL&StrNom=CL_GEO&StrLanguageCode=EN&IntPcKey=48517890).

### Temporal data coverage

If data for a reference year (or reference period) are not available for a particular country, then efforts have been made to complete the coverage using data for recent previous reference years (these exceptions are footnoted).

### Notes and flags

Notes and flags are means of explaining and defining specific characteristics of particular data. This publication includes only the main notes required for interpretation of the data and to highlight when a year has been replaced with another. Data that are not shown in individual figures may be simply not available or they may be confidential (in which case they are not published). A full set of notes and flags are available on Eurostat’s website (see below) via the online data code(s).

### Accessing European statistics

The simplest way to obtain Eurostat’s wide range of statistical information is through its website ([https://ec.europa.eu/eurostat](https://ec.europa.eu/eurostat)). Eurostat provides users with free access to its databases and its publications in portable document format (PDF). The website is updated daily and presents the latest and most comprehensive statistical information available on the EU, its Member States, the EFTA countries, as well as enlargement countries and potential candidates.

Eurostat online data codes, such as `tran_hv_psmod`, allow easy access to the most recent data on Eurostat’s website ([https://ec.europa.eu/eurostat/data/database](https://ec.europa.eu/eurostat/data/database)). In this publication these online data codes are given as part of the source below each figure.

Some of the indicators presented in this publication are relatively complex. Statistics Explained provides a comprehensive online glossary with definitions for a broad range of statistical indicators, concepts and terms; it is organised under thematic headings ([https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Thematic_glossaries](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Thematic_glossaries)).

### Modes of transport

In several subchapters, the analysis of European transport statistics is presented by mode of transport. Some modes are common to passenger and freight transport, and some specific to each.
## Passenger transport modes

1. land transport
   - road transport, by
     - passenger cars (¹)
     - motorcycles and mopeds
     - buses and coaches
   - rail transport, including high-speed and conventional railways (²)

2. water transport
   - maritime (sea transport)
   - inland waterways (such as rivers, canals and lakes)

3. air transport

## Freight transport modes

1. land transport
   - road transport
   - rail transport
   - pipelines

2. water transport
   - maritime (sea transport)
   - inland waterways

3. air transport

## Nationality and territoriality principles

### Territoriality principle

Most transport statistics related to the measurement of the transport of passengers or freight are based on the territoriality principle, in other words where the transport takes place. For example, information on rail transport in Luxembourg concerns transport on Luxembourg’s rail network. National transport for Luxembourg is transport between two places within Luxembourg, while international transport concerns goods and/or passengers:

- a) loaded/embarked in Luxembourg that are unloaded/disembarked outside of Luxembourg;
- b) loaded/embarked outside of Luxembourg that are unloaded/disembarked in Luxembourg; or
- c) transiting through Luxembourg.

For international transport, when measuring the distance that goods or passengers are transported under the territoriality principle, only the distance travelled within the national territory is included. For example, a journey between a place in Luxembourg and a place in Belgium would be split between the kilometres within Luxembourg and those within Belgium; only those in Luxembourg would be in the statistics reported for Luxembourg; those in Belgium would be in the statistics reported for Belgium.

### Nationality principle

The road freight transport statistics collected by Eurostat are an exception to the territoriality principle. They are based on the nationality principle, reflecting the nationality of the road vehicle performing the transport. For example, information on road freight transport for Luxembourg concerns transport by vehicles registered in Luxembourg. Another way to understand this is that these data concern transport by Luxembourg’s road freight hauliers, regardless of where the goods are carried.

(¹) Includes road motor vehicles (other than motorcycles and mopeds) intended for the carriage of passengers and designed to seat no more than nine persons including the driver. Includes cars for own transport as well as for hire (such as taxis and rental cars). May include vans and special vehicles (such as ambulances and motor vehicles) designed and used primarily for the transport of passengers.

(²) The railway statistics exclude (sub)urban, light rail, metros/underground railways and trams.
Under the nationality principle, while national transport for Luxembourg is still transport between two places within Luxembourg, it only concerns such transport performed by vehicles registered in Luxembourg. These statistics for Luxembourg do not include as national transport any transport between two places within Luxembourg by a vehicle registered in a different country; this is considered to be a type of international transport (cabotage) recorded in the statistics for the country whose vehicles performed this transport.

In a similar manner, the international transport statistics reported by Luxembourg concern the transport of goods by road vehicles registered in Luxembourg under the following conditions:

a) goods loaded in Luxembourg that are unloaded outside of Luxembourg;

b) goods loaded outside of Luxembourg that are unloaded in Luxembourg; or

c) goods both loaded and unloaded outside of Luxembourg, regardless of whether
   c.1) they pass through Luxembourg (transit), or
   c.2) they stay within the borders of a single country other than Luxembourg (cabotage),
   c.3) they cross at least one border, but none of Luxembourg’s borders (cross-trade).

Note that Eurostat does produce and publish a limited amount of road freight transport statistics on the territoriality principle. These estimates are based on the data collected according to the nationality principle and adjusted for the routes taken for international transport with the help of a distance matrix.

Both approaches are used for road freight transport statistics that are presented in this publication:

- for the modal split of inland freight transport (see pages 26 and 27), estimated data according to the territoriality principle are used;
- for the focus on road freight transport (see pages 28 to 30), data are based on the nationality principle.
1 Passenger transport
Modal split of inland passenger transport

The modal split describes the relative share of each mode of transport, for example by road or rail, in the total of the transport modes. For passengers, the shares are calculated for each mode from the total passenger-kilometres (passenger-km) based on data according to the territoriality principle (transport performed on the territory of a country); one passenger-km is one passenger transported over one kilometre. In practice, currently an analysis of the modal split is limited to inland transport. It excludes water and air transport and also certain modes of land transport (such as motorcycles and mopeds): covered are passenger cars, buses and coaches, and trains.

Development of modal split of inland passenger transport

(\% based on passenger-kilometres, EU, 2010–2020)

Between 2010 and 2019, passenger cars’ share of inland passenger transport in the EU ranged between 82.0 \% and 83.1 \%. This share increased to 87.2 \% in 2020, reflecting the impact of the COVID-19 crisis on the use of transport in general and in particular on public transport. The share for coaches, buses and trolley-buses ranged from 9.5 \% to 10.4 \% between 2010 and 2019 but dropped to 7.4 \% in 2020. For trains, the share increased from 7.1 \% in 2010 to 8.0 \% by 2019 before dropping back to 5.4 \% in 2020.
Modal split of inland passenger transport
(% based on passenger-kilometres, 2020)

In 2020, 87.2 % of inland passenger transport in the EU was by passenger car. Coaches, buses and trolley-buses accounted for 7.4 % and trains 5.4 %. Among the EU Member States, the highest shares for passenger cars were in Lithuania (94.2 %) and Portugal (93.2 %), while Hungary (78.8 %) was the only Member State where passenger cars had a share below four fifths.

Note: ranked on the share for passenger cars.
Source: Eurostat (online data code: tran_hv_psmod)
Passenger car statistics include vehicles registered and licensed to use public roads. Included are vehicles owned by households, businesses and government (other than the military); rental vehicles are also included, as well as special purpose passenger vehicles.

Motorisation rate: passenger cars relative to population size
(per 1 000 inhabitants, 2020)

The motorisation rate for road passenger vehicles is based on the number of passenger cars relative to the size of the population. In the EU, this averaged 560 passenger cars per 1 000 inhabitants in 2020. The highest passenger motorisation rates were in Luxembourg (682 per 1 000 inhabitants) and Italy (670 per 1 000 inhabitants), while the lowest was in Romania (379 per 1 000 inhabitants).

Note: EU, estimate made for the purpose of this publication.
Source: Eurostat (online data code: road_eqs_carhab)
Registrations of new passenger cars by type of motor energy
(%, 2020)

In 2020, petrol- and diesel-powered vehicles accounted for at least 80.0 % of all new passenger car registrations in 21 of the 22 EU Member States for which data are available. The exception was the Netherlands, where electric vehicles accounted for 20.5 % of new registrations.

Note: ranked on the share for electric cars.
BG, CZ, EL, LU and SK: not available. DE: other includes petrol and diesel hybrids and plug-in hybrids which account for 18.1 % of the total. PT: 2019.
Source: Eurostat (online data code: road_eqr_carpda)
An analysis of registrations of new passenger cars over time shows how the types of motor energy of new passenger cars is changing. Information for 16 EU Member States – which collectively accounted for just under half of all registrations of new vehicles in 2020 – shows 44 % more petrol-powered vehicles (including hybrids) registered in 2020 than in 2013 compared with 46 % fewer diesel-powered vehicles (also including hybrids). For alternative types of motor energy, there were 18.9 times as many registrations of new electric vehicles in 2020 as in 2013 while registrations of new vehicles with other energy sources were 95 % higher in 2020 than in 2013.

Note: based on data for 16 EU Member States which collectively accounted for 48 % of new passenger cars within the EU in 2020.
Source: Eurostat (online data code: road_eqr_carpda)
Rail passenger transport

Rail passengers are persons who travel by rail; members of the train crew are excluded. Measurement may be the number of passengers carried or based on passenger-kilometres. For international journeys, the passenger-kilometre data only include the distance travelled on the national network, in other words the part of the journey within the national territory, not the distance of the whole journey.

In 2021, 5.2 billion passengers made national journeys in the EU, travelling a total of 250 billion kilometres. In addition, passengers were carried 10 billion kilometres on international journeys. Relative to population size, this was an average of 560 kilometres per inhabitant on national journeys and 23 kilometres per inhabitant on international journeys. Rail passengers in France travelled the longest average distance on national journeys, 1,073 kilometres per inhabitant. Luxembourg recorded by far the longest average distance for international rail travellers, 135 kilometres per inhabitant.
Maritime passenger transport

Top 10 passenger ports in terms of passengers embarked and disembarked
(millions, EU, 2020 and 2021)

Sea passengers are persons who make a sea journey on a merchant ship; excluded are service staff assigned to merchant ships, as well as infants in arms. Merchant ships are typically passenger ships (for more than 12 fare-paying passengers) including cruise ships, as well as roll-on-roll-off (Ro-Ro) vessels. Sea passengers embarked and disembarked relate to the activity of boarding or leaving a ship. A transfer from one ship to another is a disembarkation followed by an embarkation. Excursions from cruise ships are not considered as a (dis)embarkation.

The 10 busiest maritime passenger ports in the EU included three each in Greece and Italy, two in Spain and one each in Malta and Sweden: eight of the top 10 ports in 2021 were Mediterranean. Collectively these 10 ports accounted for just over one fifth of all passengers embarking or disembarking in the EU.

Source: Eurostat (online data code: mar_mp_aa_pphd)
Passenger embarked and disembarked in all ports
(millions, 2020 and 2021)

In 2021, a total of 268 million passengers passed through ports in the 22 EU Member States with maritime transport (five Member States are landlocked). This was a 16.4 % increase compared with 2020, signifying a partial recovery from the impact of the COVID-19 crisis. Italy (57.9 million) and Greece (52.3 million) had the highest numbers, each accounting for around one fifth of the EU total. Among the Member States with at least 7.0 million maritime passenger numbers in 2021, the strongest growth rates in 2021 were recorded in Croatia, Spain and Greece, up 44.2 %, 32.2 % and 27.8 %, respectively.

Source: Eurostat (online data code: mar_mp_aa_cph)
Air passengers are persons who make a journey by air; excluded are on-duty members of the flight and cabin crews while infants in arms are included. The number of passengers carried counts passengers whose air journey begins or ends at the reporting airport; direct transit passengers (on the same aircraft with the same flight number) are excluded.

Top 10 passenger airports in terms of passengers carried
(millions, EU, 2020 and 2021)

<table>
<thead>
<tr>
<th>Airport</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paris–Charles de Gaulle (FR)</td>
<td>22.8</td>
<td>20.8</td>
</tr>
<tr>
<td>Amsterdam Schiphol (NL)</td>
<td>20.9</td>
<td>25.9</td>
</tr>
<tr>
<td>Frankfurt (DE)</td>
<td>18.2</td>
<td>24.8</td>
</tr>
<tr>
<td>Adolfo Suárez Madrid–Barajas (ES)</td>
<td>18.8</td>
<td>23.2</td>
</tr>
<tr>
<td>Josep Tarradellas Barcelona–El Prat (ES)</td>
<td>18.3</td>
<td>18.3</td>
</tr>
<tr>
<td>Paris–Orly (FR)</td>
<td>15.7</td>
<td>15.7</td>
</tr>
<tr>
<td>Palma de Mallorca (ES)</td>
<td>8.1</td>
<td>8.1</td>
</tr>
<tr>
<td>Athens International Eleftherios Venizelos (EL)</td>
<td>13.9</td>
<td>13.9</td>
</tr>
<tr>
<td>Munich (DE)</td>
<td>12.8</td>
<td>12.9</td>
</tr>
<tr>
<td>Humberto Delgado (Lisbon) (PT)</td>
<td>12.2</td>
<td>12.2</td>
</tr>
</tbody>
</table>

Source: Eurostat (online data code: avia_paoa)

The COVID-19 crisis had a strong impact on air transport, in particular on international passenger transport. Airports that had a relatively large share of domestic transport tended to be somewhat less impacted than those that were more dependent on international flights. In 2021, passenger number increased compared with 2020 but remained well below their pre-crisis levels. Consequently, the list of the 10 busiest passenger airports in 2021 changed compared with 2019. The top five were the same and were in the same order but the next five were quite different. The airports in Palma de Mallorca, Athens and Lisbon were in the top 10 in 2021 but not in 2019. By contrast, the airports of Rome, Dublin and Vienna dropped out of the top 10 between 2019 and 2021.
Air passenger transport
(passengers carried, 2020 and 2021)

The number of air passengers carried on flights to and from each EU Member State can be compared with the resident population in order to give a measure of the intensity of passenger air transport. Several southern Member States that are major tourist destinations had a high ratio of air passengers to inhabitants in 2021, in particular the islands of Cyprus (5.2 per inhabitant) and Malta (4.9 per inhabitant). Luxembourg (3.2 per inhabitant) also had a high ratio, reflecting high demand for air transport for business travellers. The seven lowest ratios were all observed for eastern Member States; alongside these seven, Finland was the only other Member State with a ratio below the EU average (0.8 per inhabitant).
Inward and outward extra-EU air passenger transport
(EU, 2021, millions of passengers carried)

The rest of Europe was the main origin or destination of passengers travelling to or from the EU by air in 2021: 53.5 % of the extra-EU total was for flights to/from European countries other than the European republics of the former Soviet Union. The next largest shares were 9.4 % for Northern America, 9.0 % for Northern Africa, 8.2 % for Western Asia and 6.9 % for the European republics of the former Soviet Union. The smallest shares, each 0.1 %, were for Central Asia and for Oceania and the southern polar regions.

EU passenger air transport to/from non-EU countries increased 18.3 % in 2021, recovering a part of the decreases (down 76.2 %) recorded in 2020. At a more detailed level, passenger air transport continued to fall in 2021 with respect to the markets of South-Eastern Asia, Eastern Asia, Southern Africa, Southern Asia and South America. For all of the other markets, air passenger numbers in 2021 were higher than in 2020. The largest increases in relative terms concerned transport to and from Central America and the Caribbean and also Western Africa, both of which recorded increases of more than 50 %.
Data on commuting time concern the time to get from home to the place of work; note that the time recorded is the time for travel in one direction. The time is based on the most frequently used mode of transport and normal weather conditions.

An analysis according to commuting time for employed persons aged 20–64 years in the EU in 2019 shows that 4.1% did not commute, for example because they lived and worked at the same place, on a farm, above a shop or in a home office. Just over three fifths (61.1%) travelled to work but took less than half an hour (1–29 minutes) to do so. Over a quarter (26.6%) took between half and one hour (30–59 minutes) to travel to work, while the remaining 8.2% took an hour or more (60 minutes and more) to do so. Note that these data refer to 2019, in other words before the COVID-19 crisis.
Share of people aged 20–64 years in employment commuting (one way, from home to work) for 30 minutes or more (%, 2019)

Combining the last two durations, just over one third (34.8 %) of employed persons aged 20–64 years in the EU typically took 30 minutes or more to travel from home to work in 2019. Among the EU Member States, this share ranged from 19.1 % in Cyprus to 45.4 % in Luxembourg and 52.5 % in Latvia.

Source: Eurostat (online data code: lfso_19plwk28)
Freight transport
Modal split of inland freight transport

The modal split describes the relative share of each mode of transport, for example by road or rail, in the total of the transport modes. For freight, the shares are calculated for each mode in the total tonne-kilometres (tonne-km), following the territoriality principle (transport performed on the territory of a country); one tonne-km is one tonne of freight transported over one kilometre. The analysis of the modal split currently is limited to inland transport. It excludes sea and air transport and also excludes certain modes of land transport (such as pipelines): covered are road, rail and inland waterway transport.

Development of modal split of inland freight transport

(% based on tonne-kilometres, EU, 2010–2020)

Having fallen between 2010 and 2012, the share of inland freight transport, based on tonne-km, performed by road in the EU increased thereafter: the share fell from 74.6 % in 2010 to 73.5 % in 2012 but by 2020 it had reached 77.4 %. While the share performed by rail increased between 2010 and 2011, from 18.0 % to 19.2 %, it fell most years thereafter to reach 16.8 % in 2020. The share of inland waterways was 7.4 % in 2010, 2012 and 2013, its highest level during the period from 2010 to 2020. From this relatively high level in 2013, the share of inland waterways declined every year except for 2019; by 2020 it was 5.8 %.

Source: Eurostat (online data code: tran_hv_frmod)
Just over three quarters (77.4%) of inland freight transport, based on tonne-km, in the EU in 2020 was performed by road. Most of the remainder (16.8% of the total) was performed by rail and a smaller share (5.8%) along inland waterways.

With no railways nor navigable inland waterways, all inland freight transport in Cyprus and Malta was by road. Among the other EU Member States, upwards of 95.0% of inland freight, based on tonne-km, was performed by road in Ireland, Greece and Spain. The lowest share for road (35.3%) was in Lithuania, where 64.7% of freight transport was performed by rail, the highest share among the Member States. The largest share of inland freight transport performed along inland waterways was 41.6% in the Netherlands.
Road freight transport

Road freight motor vehicles include:
- single vehicles (such as a lorry) designed to carry goods;
- road tractors, also known as semi-trailer tractors or (the towing part of) articulated lorries, designed to pull vehicles that are not power-driven, typically semi-trailers.

Motorisation rate: heavy lorries and road tractors relative to population size
(per 1 000 inhabitants, 2020)

The motorisation rate for road freight vehicles is based on the number of heavy lorries (Maximum permissible laden weight > 3.5 tonnes) and road tractors relative to the size of the population. In the EU in 2020, this rate averaged 13.0 per 1 000 inhabitants. The highest freight motorisation rate among the EU Member States was in Finland (33.0 per 1 000 inhabitants), while the lowest was in Denmark (7.2 per 1 000 inhabitants).

Note: EU, BG, SI and SK, estimates made for the purpose of this publication.
Source: Eurostat (online data codes: road_eqs_lorroa and demo_pjan)
Road freight transport statistics published here relate to transport by heavy goods vehicles registered in the reporting countries. See the introduction to this publication for an explanation of the nationality principle used for road freight transport statistics. Transport by light goods vehicles is excluded. The threshold for inclusion as a heavy goods vehicle may be based on the load capacity (maximum permissible weight of goods) or the legally permissible maximum weight (the vehicle, the load, the driver and other persons carried). Some reporting countries have a somewhat broader coverage as they apply lower inclusion thresholds.

### Share of EU road freight transport, analysed by country of vehicle registration

<table>
<thead>
<tr>
<th>Country</th>
<th>Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PL</td>
<td>19.8</td>
</tr>
<tr>
<td>DE</td>
<td>16.0</td>
</tr>
<tr>
<td>ES</td>
<td>14.1</td>
</tr>
</tbody>
</table>

In 2021, one fifth (19.8 %) of road freight transport by vehicles registered in the EU was performed by Polish-registered vehicles. German (16.0 %) and Spanish (14.1 %) transporters also had shares above 10.0 %.

Note: MT, not available.

Source: Eurostat (online data code: road_go_ta_tott)

### Share of empty road journeys, analysed by country of vehicle registration

<table>
<thead>
<tr>
<th>Country</th>
<th>Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT</td>
<td>34.3</td>
</tr>
<tr>
<td>IE</td>
<td>34.8</td>
</tr>
<tr>
<td>GR</td>
<td>35.0</td>
</tr>
<tr>
<td>CY</td>
<td>39.5</td>
</tr>
</tbody>
</table>

Road freight transporters aim to avoid empty (unladen) journeys, for obvious cost reasons. The overall share of vehicle-kilometres (the distance travelled by vehicles, regardless of the weight of any load carried) recorded for empty journeys in 2021 was 20.2 % in the EU. Vehicles registered in Austria (34.3 %), Ireland (34.8 %), Greece (35.0 %) and particularly Cyprus (39.5 %) recorded the highest shares of empty journeys in 2021.

Note: IT, MT and RO, not available.

Source: Eurostat (online data code: road_go_ta_tott)
Just over two thirds (68.2 %) of the vehicle-kilometres travelled in 2021 by vehicles registered within the EU were for national transport (within the EU Member State where the vehicles were registered). This share peaked at 99.1 % in Cyprus but was as low as 11.0 % in Lithuania.

For vehicles registered within the EU as a whole, the number of vehicle-kilometres was 16 % higher in 2021 than in 2011. The performance by Lithuanian-registered vehicles was 2.5 times as high in 2021 as it had been in 2011, while performance by Romanian-registered vehicles (data only concern laden vehicles) also more than doubled (up 140 %). The performance of vehicles registered in nine of the EU Member States was lower in 2021 than 10 years earlier.
Rail freight transport

Rail freight transport by country
(billion tonne-kilometres, 2021)

Germany was by far the largest contributor to rail freight transport performance in the EU, with 123 billion tonne-km in 2021, representing 30.8% of the EU total (excluding Belgium). Poland (13.4% of the total) and France (9.0%) had the next highest levels of rail freight performance.

Rail freight transport concerns the movement of goods using a railway vehicle on a railway network. Measurement is based on tonne-km. For international journeys – whether just loaded or just unloaded in a country, or simply transiting through it – the tonne-km data reported for a country only include the distance travelled on the national network, in other words the part of the journey within the national territory.

Note: no railways in CY and MT. BE: not available.

Source: Eurostat (online data code: rail_go_typepas)
All of the rail freight transport performed in 2021 in Ireland was composed of national transport. At the other extreme, national transport accounted for 0.7% of rail freight transport (in tonne-km) performed in Greece. Among the EU Member States, the highest shares for international rail transport were 61.1% for freight loaded in the Netherlands and 72.7% for freight unloaded in Estonia. More than four fifths (82.3%) of rail freight performed in Denmark was transit, more than double the next highest share, which was 40.0% in Hungary.

The performance of rail freight transport in Greece increased 64.5% between 2011 and 2021, the fastest relative increase among the EU Member States. Eight Member States reported less rail freight transport in 2021 than 10 years earlier. The largest decreases were in Estonia (down 66.1%) and Latvia (down 65.6%).
Inland waterway freight transport

In 2021, 136 billion tonne-km of freight were transported by inland waterways in the EU. Vessels registered in the Netherlands dominated this mode of transport, accounting for 49.2% of inland waterway freight transport in the EU. The next largest shares were 15.9% by German vessels and 9.3% by Belgian vessels, emphasising the concentration of this mode around the Moselle and Rhine rivers as well as the Elbe. The fourth largest share (7.5%) was for Romanian vessels, focused on the Danube.

Source: Eurostat (online data code: iww_go_anave)
Inland waterway freight transport, analysed by type of goods transported
(million tonne-kilometres, EU, 2021)

Four types of goods dominated the freight transported along the EU’s inland waterways in 2021:

- mining and quarrying products other than coal, lignite, crude petroleum and natural gas, mainly metal ores or stone, sand, gravel and similar (a 23.8 % share of the total),
- coke and refined petroleum products, mainly liquid refined petroleum products (15.4 %),
- products of agriculture, forestry and fishing, mainly cereals (13.2 %),
- chemicals, mainly nitrogen compounds and fertilisers as well as basic organic or mineral chemicals (11.9 %).

Collectively, these four largest categories accounted for two thirds (64.4 %) of all goods transported on the EU’s inland waterways in 2021.

Source: Eurostat (online data code: iww_go_atygo)
Sea freight transport is the movement of goods using merchant ships on journeys that are undertaken wholly or partly at sea. Transport is measured in terms of tonnes handled in ports, in other words loaded or unloaded to a merchant ship. The transport of goods to offshore installations, for dumping at sea, or reclaimed from the seabed is included, as is transhipment from one ship to another. Bunkers and stores supplied to vessels for their own use are excluded.

In 2021, 3.5 billion tonnes of maritime freight were loaded/unloaded in EU ports. This quantity was 4.1 % higher than in 2020. The two busiest ports were Rotterdam and Antwerpen, with 12.6 % and 6.2 %, respectively, of the EU total. The 10 busiest ports collectively accounted for 35.9 % of the EU’s total maritime freight. Among these 10, Algeciras, Marseille and Amsterdam reported a smaller quantity of goods handled in 2021 than a year before. The other seven reported increases, the largest being in Le Havre and Barcelona, up 16.5 % and 10.0 %, respectively.
Extra-EU maritime freight transport
(million tonnes weight transported, EU, 2021)

Of the 3.5 billion tonnes of maritime freight loaded/unloaded in EU ports in 2021, 2.1 billion tonnes were for transport to or from non-EU countries. This quantity was 4.9 % higher than in 2020. The largest partners in 2021 were elsewhere in Europe, with the European republics of the former Soviet Union accounting for 14.7 % of the total and the rest of Europe for 23.0 %. Outside of Europe, the largest partners were Northern America (11.9 % of the total), Northern Africa (9.5 %), Eastern Asia (8.0 %) and South America (7.4 %).
Air freight transport

Air freight and mail transport is the movement of goods on an aircraft. The statistics published here are measured in terms of tonnes loaded or unloaded from aircraft at airports.

Top 10 main cargo airports in terms of goods loaded and unloaded
(million tonnes, EU, 2020 and 2021)

<table>
<thead>
<tr>
<th>Airport</th>
<th>2020 (million)</th>
<th>2021 (million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frankfurt (DE)</td>
<td>19</td>
<td>23</td>
</tr>
<tr>
<td>Paris–Charles de Gaulle (FR)</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Amsterdam Schiphol (NL)</td>
<td>15</td>
<td>17</td>
</tr>
<tr>
<td>Leipzig/Halle (DE)</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>Liege (BE)</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>Luxembourg (LU)</td>
<td>0.9</td>
<td>1.1</td>
</tr>
<tr>
<td>Cologne Bonn (DE)</td>
<td>0.8</td>
<td>1.0</td>
</tr>
<tr>
<td>Milan Malpensa (IT)</td>
<td>0.5</td>
<td>0.7</td>
</tr>
<tr>
<td>Brussels (BE)</td>
<td>0.5</td>
<td>0.7</td>
</tr>
<tr>
<td>Adolfo Suárez Madrid–Barajas (ES)</td>
<td>0.4</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Source: Eurostat (online data code: avia_gooa)

The COVID-19 crisis had a much smaller impact on air freight transport than on air passenger transport. The list of the EU’s 10 busiest freight airports in 2021 was the same as in 2020 and 2019, with only a few changes in the order of the ranking. In 2020, Frankfurt overtook Paris–Charles de Gaulle as the EU’s busiest airport; it maintained this position in 2021 with 2.3 million tonnes of goods loaded and unloaded.
Inward and outward extra-EU air freight transport
(million tonnes weight loaded and unloaded EU, 2021)

Unlike for air passenger transport, the main origins or destinations of goods freighted to or from the EU by air in 2021 was quite varied, with relatively low shares for other European countries. The largest share was for freight to or from Eastern Asia, with just under a quarter (24.2%) of the total. Northern America (22.8%) and Western Asia (18.0%) were the next largest markets. These three largest markets collectively accounted for close to two thirds (65.1%) of the extra-EU total for air freight transport.

EU air freight transport to/from non-EU countries increased 22.4% in 2021, more than recovering the decrease (down 10.8%) recorded in 2020. Air freight transport continued to fall in 2021 with respect to the relatively small market of Oceania and southern polar regions and was almost unchanged for Central Africa. For all of the other markets, air freight in 2021 was higher than in 2020. By far, the largest increase in relative terms concerned transport to and from Central Asia which recorded an increase of 156%.
Transport safety
Road safety

Development of persons killed in road transport accidents
(per million inhabitants, EU, 2010–2020)

Between 2010 and 2019, the number of people killed in road accidents in the EU fell from 33,000 to 22,800 or from 67 per million inhabitants to 51 per million inhabitants. During this period, the ratio was stable or fell each year except for 2015. The number in 2020 was 18,800 persons killed in road transport accidents or a ratio of 42 fatalities per million inhabitants; as such, these figures for 2020 were considerably lower than in 2019, reflecting the impact of the COVID-19 crisis on the use of road transport.

Persons killed in road transport accidents
(per million inhabitants, 2019 and 2020)

In 2020, the highest incidence among the EU Member States of fatalities through road accidents was in Romania, with 85 deaths per million inhabitants. The lowest incidences were in Malta (23 deaths per million inhabitants) and Sweden (20 deaths per million inhabitants).

The vast majority of EU Member States recorded a lower incidence of fatalities through road accidents in 2020 than in 2019; the exceptions were Estonia, Luxembourg, Latvia, Finland and Ireland. It should be noted that the development of the number of road accidents with fatalities may be quite volatile, particularly for smaller countries.
Regional data for road accidents indicate that there were four regions in the EU where there were more than 100 fatalities per million inhabitants in 2020: Alentejo in the south of Portugal, the French overseas regions of Guadeloupe (in the Caribbean) and Guyane (in South America) and the region of Mazowiecki regionalny around the Polish capital.

In 2020, there were no road accident fatalities in Valle d’Aosta/Vallée d’Aoste in north-western Italy nor on the Finnish islands of Åland.

Source: Eurostat (online data code: tran_r_acci)
Rail transport safety

Development of railway transport accidents
(number, EU, 2010–2020)

The number of significant railway transport accidents in the EU fell from 2,229 in 2010 to 1,331 in 2020; overall, this was a decrease of 40.3%. In most of the intervening years, there was a fall in the number of rail accidents, with annual increases observed only in 2014 and 2017. The decrease of 12.1% in 2020 may reflect, to some extent, a contraction in rail transport related to the COVID-19 pandemic, related restrictions and changes in behaviour such as increased working and studying from home. Nevertheless, it was not completely out of line with earlier changes, such as the decreases in 2015 (down 12.8%) or in 2019 (down 9.1%).

Persons killed in railway transport accidents
(per million inhabitants, 2020)

A total of 687 people died in railway transport accidents in the EU in 2020, equivalent to 1.5 deaths per million inhabitants. Among the EU Member States, this ratio ranged from no deaths in Luxembourg, and 0.2 deaths per million inhabitants in Ireland and Greece, to 3.9 deaths per million inhabitants in Poland, 4.1 deaths per million inhabitants in Romania and 4.9 deaths per million inhabitants in Slovakia.

Note: no railways in Cyprus and Malta.
Source: Eurostat (online data codes: tran_sf_railvi and demo_pjan)

A rail transport accident may be a rail injury accident – with an injury or a fatality – or an accident with damage to railway stock, track, other installations or the environment.
Maritime transport safety

A fatal marine accident is one involving at least one marine vessel in motion resulting in at least one killed person.

**Persons killed in maritime transport accidents**
(number, EU, 2011–2021)

Between 2011 and 2021, the number of people killed in maritime transport accidents in the EU’s waters or involving EU-registered vessels elsewhere in the world ranged between 24 and 90. The two lowest numbers were recorded in the most recent years, 30 in 2020 and 24 in 2021. A large majority of the EU’s maritime transport fatalities in 2021 concerned EU registered vehicles (18 fatalities), while the others (six fatalities) were related to other vessels in the EU’s territorial seas.

**Persons killed in maritime transport accidents analysed by type of victim**
(number, EU, 2011–2021)

In 2021, 23 of the 24 fatalities were crew members, while none were passengers. One fatality was classified as other, a category which includes, for example, service personnel, dock workers, pilots and inspectors. As such, 2021 was the third consecutive year in which no passengers were killed in maritime transport accidents in the EU’s waters or involving EU-registered vessels elsewhere.

Source: Eurostat (online data code: tran_sf_marvper)
Persons killed due to the operation of an aircraft may be in the aircraft, in direct contact with any part of the aircraft, or directly exposed to jet blast.

Between 2010 and 2020, the number of people killed in air transport accidents in the EU (or involving EU-registered aircraft) generally ranged between 173 and 192. Higher numbers of deaths were recorded in 2011 (243) and 2015 (325) and lower numbers in 2017 (128) and 2020 (122). A crash of a single commercial airliner, as was the case in 2015, can lead to notably larger figures for a particular year.

The overall number of people killed in air transport accidents in the EU (or involving EU-registered aircraft) in 2020 reflects the absence of major accidents within commercial aviation.

In 2020, there were 111 deaths (91.0 % of the total) within general aviation for light aircraft, including not only small aeroplanes and helicopters but also other craft such as motor-giders, microlights and hot air balloons. The number of fatalities for other categories were much lower: there were three deaths in commercial aviation, three in general aviation (> 2 250 kg take-off mass), and five in aerial works (where an aircraft is used for specialised services such as for agriculture, construction, photography, or search and rescue).
4 Transport, the environment and energy
Emissions

The emissions presented in this publication use a territoriality principle, with emissions assigned to where gases are emitted rather than the residence of the emitter. To combine emissions of the various greenhouse gases, which each have different global-warming potential, CO₂-equivalents are used. These convert quantities of emissions of other gases into the equivalent quantity of carbon dioxide which would have the same global-warming potential.

Greenhouse gas emissions from fuel combustion in transport
(tonnes of CO₂ equivalents per inhabitant, EU, 1990–2020)

Source: Eurostat (online data codes: env_air_gge and demo_pjan) and European Environment Agency (EEA)

Between 1990 and 2019, total emissions of greenhouse gases through fuel combustion in transport increased 24.0 %, or 162 million tonnes of CO₂-equivalent; note that these values do not include international aviation or international navigation (shipping). Transport was the only fuel combustion source sector which recorded an increase during this period. In 2020, as the COVID-19 crisis impacted on transport, these emissions decreased 13.6 % compared with 2019.

When adjusted for changes in the population, emissions from fuel combustion in transport increased from 1990 to 2007, decreased through to 2013 (during which time economic activity was relatively restrained due to the global financial and economic crisis), and increased thereafter up to 2019. Overall, fuel combustion in transport per inhabitant was 16.3 % higher in 2019 than it had been in 1990. This suggests that the average use of powered transport by people in the EU increased at a faster pace than any improvements achieved in terms of fuel efficiency. As for the overall level of emissions from fuel combustion in transport, when adjusted for changes in population the ratio of emissions per inhabitant decreased strongly in 2020, also down 13.6 % compared with 2019.
Taxes

Environmental taxes can be classified as taxes on energy, transport, pollution or resources. Note that environmental taxes on transport fuels are classified as energy taxes, not transport taxes.

Environmental taxes on transport (% of GDP, 2020)

In 2020, €300 billion of environmental tax revenue was collected in the EU, equivalent to 2.24 % of gross domestic product (GDP). Environmental transport taxes were valued at €57 billion, 19.0 % of the total, equivalent to 0.42 % of GDP.

Among the EU Member States, environmental transport taxes ranged from 0.04 % of GDP in Estonia to 0.92 % in the Netherlands, 0.94 % in Malta and 1.35 % in Denmark.
The rail network includes high-speed and conventional lines. It excludes the networks of light rail and metros, as well as trams.

**Networks**

**Density of railway lines**
(km per 1 000 km² of land area, 2010 and 2020)

Rail network density is influenced, among other factors, by demand for rail passenger and freight services. The former is focused in, around and between urban areas, and the latter is often related to the presence of heavy industries as well as other transport infrastructure, such as ports.

Among the EU Member States, the density of railway lines was highest in Czechia, Germany (2019 data) and Luxembourg, all with more than 100 kilometres (km) of lines per 1 000 square kilometres (km²) of land area in 2020. By contrast, in Finland and Greece the density was less than 20 km per 1 000 km². Note that there is no rail network in Cyprus or Malta.

Between 2010 and 2020, the density of rail networks increased most notably in Estonia and Lithuania, and at a more modest rate in Germany (2010–2019), Hungary and the Netherlands. The density of the rail network declined most strongly in France, a decrease of 4 km per 1 000 km² of land area.
The motorway network includes roads specially designed and built for motor traffic which do not serve properties bordering on them and which are provided with separate carriageways for traffic in two directions, have no crossings at the same level and are sign-posted as motorways.

Density of motorways
(km per 1 000 km² of land area, 2010 and 2020)

Among the EU Member States, the highest motorway density in 2020 was centred across the Benelux countries – Belgium, the Netherlands and Luxembourg (2019 data) – followed at some distance by Germany. This reflects the industrial and logistics specialisation of some of these Member States, their high population density, as well as connections into mainland Europe from the EU’s largest maritime freight ports: Rotterdam and Amsterdam in the Netherlands, Antwerp in Belgium, and Hamburg in Germany. There were no motorways in Latvia or Malta. Elsewhere, the lowest motorway density was in Finland, reflecting its low population density.

The most substantial motorway expansion between 2010 and 2020 was observed in Czechia, an increase of 7 km per 1 000 km² of land area, followed by Denmark, Luxembourg (2010–2019) and the Netherlands. Slovenia was the only EU Member State to record a fall in the density of its motorway network, recording a decrease of 7 km per 1 000 km² of land area.
Energy

Data for various types of energy are combined using conversion factors and the result expressed in tonnes of oil equivalent (toe), a unit based on the amount of energy that can be extracted from crude oil.

**Final energy consumption in the transport sector**
(million tonnes of oil equivalent, EU, 2010–2020)

Source: Eurostat (online data code: nrg_bal_s)

Final energy consumption of the transport sector in the EU was 252 million toe in 2020, down 10.0 % compared with 2010. However, this overall development disguises an increase of 3.2 % between 2010 and 2019, followed by an annual reduction of 12.8 % in 2020, the latter reflecting – in large part – the impact of the COVID-19 crisis.

**Share of energy from renewable sources in transport**
(%, EU, 2010–2020)

Source: Eurostat (online data code: nrg_ind_ren)

Across the EU, the share of energy from renewable sources in transport fell from 5.5 % in 2010 to 4.1 % in 2011; since then, it increased each year such that the share of renewables reached 10.2 % by 2020.
Transport and the economy
Employment

The statistics presented here concern persons aged 15–64 years employed in the land, water or air transport subsectors.

Number of persons employed in the transport sector (2021)

Number of persons employed (1 000)

Source: Eurostat (online data code: lfsa_egan22d)
In 2021, 6.0 million people in the EU worked in the transport sector (see map on the previous page). Nine in every ten (89.6 %) persons employed in transport worked in land transport (such as road or rail), 4.7 % in water transport (inland waterways or maritime) and 5.7 % in air transport.

Among the EU Member States, the largest transport workforces in 2021 were in France (842 000, 13.9 % of the EU total), Poland (13.1 %), Germany (11.4 %), Spain and Italy (both 10.4 %). The smallest transport workforces were in Cyprus and Malta (both 0.1 % of the EU total).

### Employment distribution by transport subsector in the EU (%)

| Subsector | SI | LT | SK | HU | PL | RO | CZ | SE | AT | CH | IT | BE | ES | FR | FI | DE | BG | PT | EE | CY | IE | DK | LV | NL | HR | LU | NO | EL | MT | IS |
|-----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Land      | 98.9 | 97.6 | 97.2 | 96.7 | 96.6 | 95.6 | 94.8 | 92.1 | 91.6 | 90.1 | 89.7 | 89.6 | 89.4 | 89.2 | 88.0 | 87.0 | 87.0 | 86.9 | 86.2 | 83.2 | 82.3 | 79.9 | 79.2 | 78.6 | 76.9 | 70.4 | 68.1 | 64.5 | 46.4 | 35.0 | 65.0 |
| Water     | 1.1 | 2.4 | 2.8 | 3.3 | 3.4 | 4.4 | 5.2 | 7.9 | 8.4 | 9.9 | 10.3 | 10.4 | 10.6 | 10.8 | 12.0 | 13.0 | 13.0 | 13.1 | 13.8 | 16.8 | 17.7 | 20.1 | 20.8 | 21.4 | 23.1 | 29.6 | 31.9 | 35.5 | 53.6 |
| Air       | 4.7 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

**Source:** Eurostat (online data code: lfsa_egan22d)

Land transport dominated the transport workforce in 2021 in all but one of the EU Member States, accounting for a majority of transport workers. The share of land transport generally ranged from 64.5 % in Greece to 98.9 % in Slovenia. Malta was the exception, as its land transport share was 46.4 %.

The combined share of water and air transport was relatively high in Malta and Luxembourg, where air transport had a large share, as well as in Greece and Croatia, where water transport had a large share.
In 2021, a large majority of the transport sector’s workforce in all EU Member States was male. The highest share of females was recorded in Malta at 25.1% and the lowest share was 9.7% in Romania; the EU average was 17.1%.

There is a clear relation between the sectoral structure of employment and the share of males/females in the workforce. For the EU as a whole, 42.0% of people working in air transport in 2021 were women, compared with 21.9% for water transport and 15.2% for land transport.
An analysis by age of the EU’s transport sector’s workforce in 2021 shows that around half (51.0 %) were aged 30–49 years, with 36.9 % older (aged 50–64 years) and 12.1 % younger (aged 15–29 years). The share for persons aged 30–49 years was similar to that for whole economy, but the share of older workers was higher in the transport sector while the share of younger workers was lower.

In terms of age, Malta was again an outlier. The share of younger workers in its transport sector was 26.4 % in 2021, more than double the EU average. The next highest shares for younger transport workers were 20.0 % in Finland and 19.5 % in the Netherlands. By contrast, more than half of the transport sector’s workforce was aged 50–64 years in Estonia and Cyprus, with shares above 40.0 % in 10 other EU Member States.
Prices

Price levels vary between countries and these differences can be expressed using a price level index. The data presented here are based on an index where the average price for the EU as a whole is set at 100. If the price level index is higher than 100, the country concerned is relatively expensive compared to the EU average, while if the price level index is lower than 100, then the country is relatively cheap compared to the EU average. The price level index for transport covers prices for equipment (such as vehicles), the operation of equipment (such as fuel, parts, and repairs) as well as for services (such as transport tickets).

Price level index for transport
(EU = 100, 2019 and 2021)

In 2021, the price level for transport was above the EU average in all of the Nordic Member States, as well as most western Member States, the exception being Luxembourg. In all Baltic, eastern and southern Member States, the price level for transport was below the EU average. The highest price levels were in Sweden and Denmark and the lowest in Poland, Romania and Bulgaria.
Changes over time in consumer prices (deflation or inflation) are also reflected in an index: in the EU this is the harmonised index of consumer prices.

**Annual price change for transport fuels and lubricants**

(%, 2020 and 2021)

The start of the COVID-19 crisis in 2020 resulted in a fall in demand for energy products, and this was reflected in a 9.7% fall in consumer prices for transport fuels and lubricants in the EU in that year. Every EU Member State recorded a fall in these prices in 2020.

Demand for energy products rebounded. In the EU, consumer prices for transport fuels and lubricants increased 17.2% in 2021. Price increases exceeded 20.0% in Luxembourg, Germany, Hungary and Poland. At the other end of the range, Malta (-2.4%) recorded the only fall in consumer prices for transport fuels and lubricants; the smallest increase elsewhere was 11.0% in Ireland.

*Note: MT, fuel prices are regulated*

*Source: Eurostat (online data code: prc_hicp_aindx)*

**Annual price index for transport fuels and lubricants**

(2011 = 100, EU, 2011–2021)

Looking over a longer period, from 2011 to 2021, the EU’s annual consumer price index for transport fuels and lubricants was relatively volatile, reflecting changes in the underlying oil price. The price index fell from a high in 2012 to a low in 2016 before increasing in 2017 and 2018. The stability in 2019 was interrupted by the COVID-19 influenced fall in 2020 and rebound in 2021.

*Note: index rescaled from 2015 = 100.*

*Source: Eurostat (online data code: prc_hicp_aindx)*
Expenditure

Share of household expenditure on transport
(%, 2019 and 2020)

In 2019, 13.1% of total household expenditure in the EU was for transport. The COVID-19 crisis impacted strongly on people’s behaviour, whether relating to daily travel (such as to/from places of work, study, shopping or recreation) or to less frequent activities (such as holidays and business travel). The transport share of household expenditure in the EU fell to 11.6% in 2020. Every EU Member State reported a lower share of household expenditure used for transport in 2020 than in 2019. The largest falls, in percentage point terms, were observed in Slovenia, Luxembourg and Cyprus, while the smallest fall was in Malta.

In 2020, Slovenia reported the largest share of household expenditure used for transport (14.2%), while Slovakia had the lowest share (5.3%).

Development of share of household expenditure on transport
(%, EU, 2010–2020)

In 2019, the shares of household expenditure used for the purchase of vehicles and for transport services in the EU were higher than they had been in 2010, whereas the share for the operation of personal transport equipment was the same. In 2020, all three shares dropped, most notably for transport services.

Source: Eurostat (online data code: nama_10_co3_p3)
Government expenditure on transport is composed of expenditure on each mode of transport. It concerns expenditure on activities such as the operation, use, construction and maintenance of transport systems and facilities, as well as the supervision and regulation of users and their equipment.

**Government expenditure on transport**

*(% of GDP 2019 and 2020)*

In 2019, government expenditure in the EU on transport was equivalent to 2.0 % of gross domestic product (GDP). The COVID-19 crisis impacted strongly on government expenditure, as grants, loans and subsidies were provided to support the operation and maintenance of transport systems and facilities. The ratio of government expenditure on transport to GDP was 2.3 % in 2020.

With the exceptions of Hungary, which recorded a fall in this ratio in 2020, and Ireland and Sweden, which recorded no change, all other EU Member States reported a higher level of government expenditure on transport relative to GDP in 2020 than in 2019. The largest increases, in percentage point terms, were observed in Latvia, Malta, Portugal and Croatia.

In 2020, Hungary reported the highest level of government expenditure on transport relative to GDP (4.6 %), while Cyprus had the lowest ratio (0.7 %).

**Development of government expenditure on transport**

*(% of GDP, EU, 2010–2020)*

In the EU, government expenditure on transport relative to GDP fell from 2.3 % in 2010 to 2.1 % in 2012. It remained at 2.1 % or 2.0 % each year until the COVID-19 crisis in 2020 provoked a return to 2.3 %.

Source: Eurostat (online data code: gov_10a_exp)
Investment in transport equipment (% of GDP, EU, 2011–2021)

Investment in transport equipment in the EU ranged from 1.5 % to 2.0 % of GDP between 2011 and 2021. Investment fell between 2011 and 2013 during the extended recovery from the global financial and economic crisis a few years earlier. Thereafter, investment in transport equipment relative to GDP increased through to a peak of 2.0 % in 2017, a level that was repeated in 2019. The impact of the COVID-19 crisis on such investment can be clearly seen, with this ratio dropping to 1.7 % in 2020 and 1.6 % in 2021.

Source: Eurostat (online data code: nama_10_an6)
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Key figures on European transport presents a selection of key transport indicators for the European Union (EU) and its individual Member States, as well as the EFTA countries. This publication may be viewed as an introduction to European transport statistics and provides a starting point for those who wish to explore the wide range of data that are freely available on Eurostat’s website at https://ec.europa.eu/eurostat together with a range of online articles in Statistics Explained.

For more information
https://ec.europa.eu/eurostat/