Stock of vehicles at regional level

Statistics Explained

Data from May 2025
Planned article update: 5 March 2026

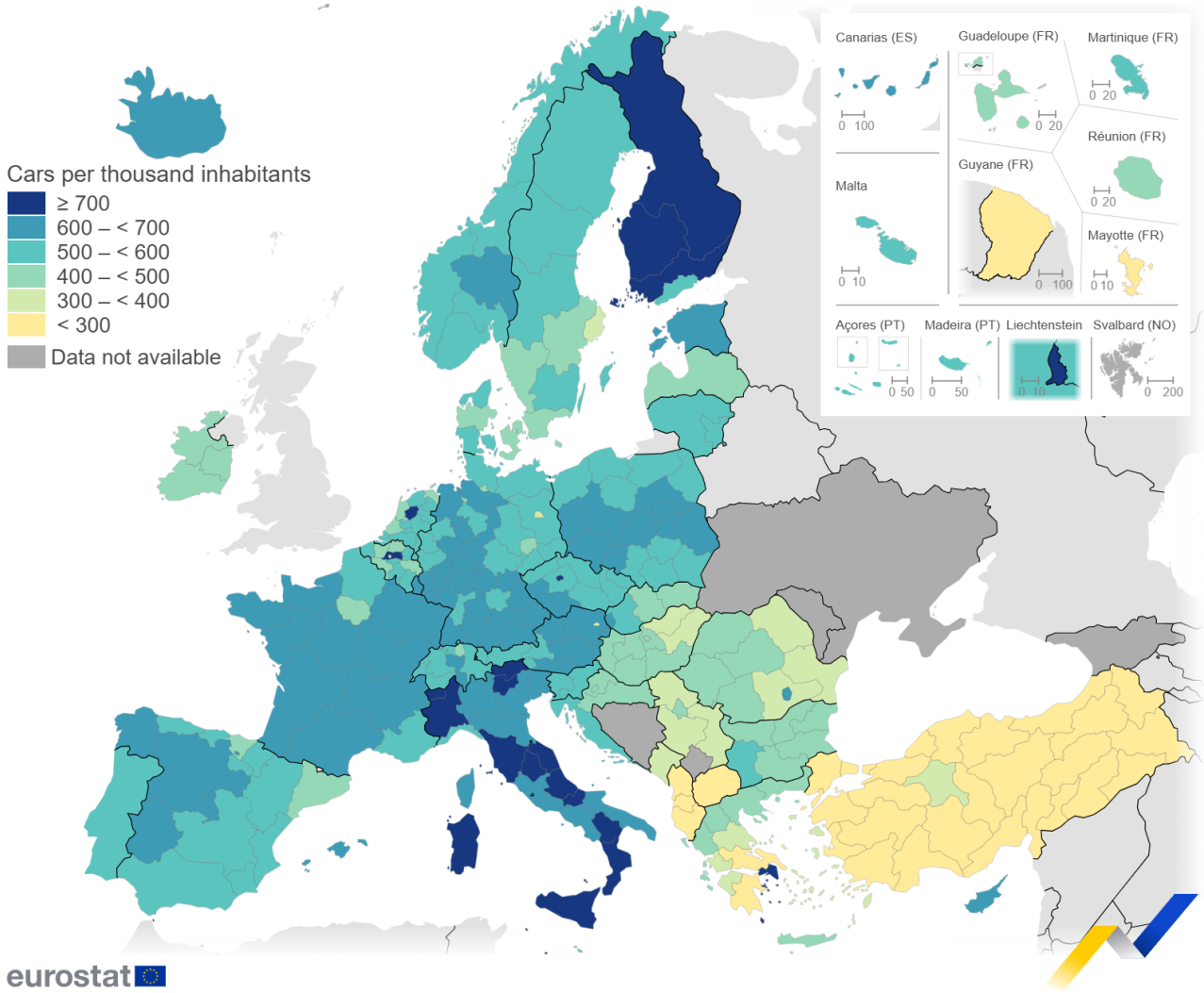
Highlights

In the EU, there was an average rate of 0.55 passenger cars per inhabitant in 2023. At regional level, apart from 2 extreme values, the highest regional rate of passenger cars per inhabitant (1.5) was about 7 times the lowest one (0.2).

In the EU, the highest shares of electric passenger cars in 2023 were often registered in northern European regions, such as Flevoland (Netherlands) which registered 17.1% of electric passenger cars and Stockholm (Sweden) with 10.8%.

In 2023, Poland accounted for 5 of the 15 EU regions with the highest share of utility vehicles in the total number of vehicles. In these Polish regions, the share of utility vehicles ranged between 17.8% and 21.0%.

Motorisation rate, by NUTS 2 regions, 2023
(passenger cars per thousand inhabitants)



Note: France: data at NUTS 1 level except overseas territories. Portugal: data at national level (NUTS 0 level). Utrecht (NL), South Holland (NL), Albania and North Macedonia: 2022 data instead of 2023.
Source: Eurostat (online data code: tran_r_vehst)

Administrative boundaries: © EuroGeographics © UN–FAO © Turkstat
Cartography: Eurostat – IMAGE, 05/2025
Kosovo* - This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence.

Source: Eurostat (tran_r_vehst)

This article presents recent statistics on the number of passenger cars, utility vehicles (lorries, road tractors and special vehicles excluding trailers and semi-trailers), and road public transport (motor coaches, buses and trolleybuses) in the European Union (EU) , as well as in the EFTA and candidate countries, down to the level of regions (NUTS 2).

Stock of passenger cars at regional level

High motorisation rate in regions of northern Italy

Figure 1 indicates that, in 2023, 6 out of the 10 EU regions with the highest motorisation rates (number of passenger cars per thousand inhabitants) were located in Italy. The other regions present in the top 10 are capital regions or regions close to major urbanised areas, such as Flevoland, Attiki or Praha. A particular case is the

Finnish Åland islands group in the Baltic Sea, also with a particularly high motorisation rate. At the other end, 4 regions out of the 10 with the lowest motorisation rates in 2023 were located in Greece, 2 were located in Romania, 2 in France, 1 in Germany, and 1 in Austria. The value for the French overseas region Mayotte was exceptionally low, with 83 passenger cars per thousand inhabitants (see Figure 2).

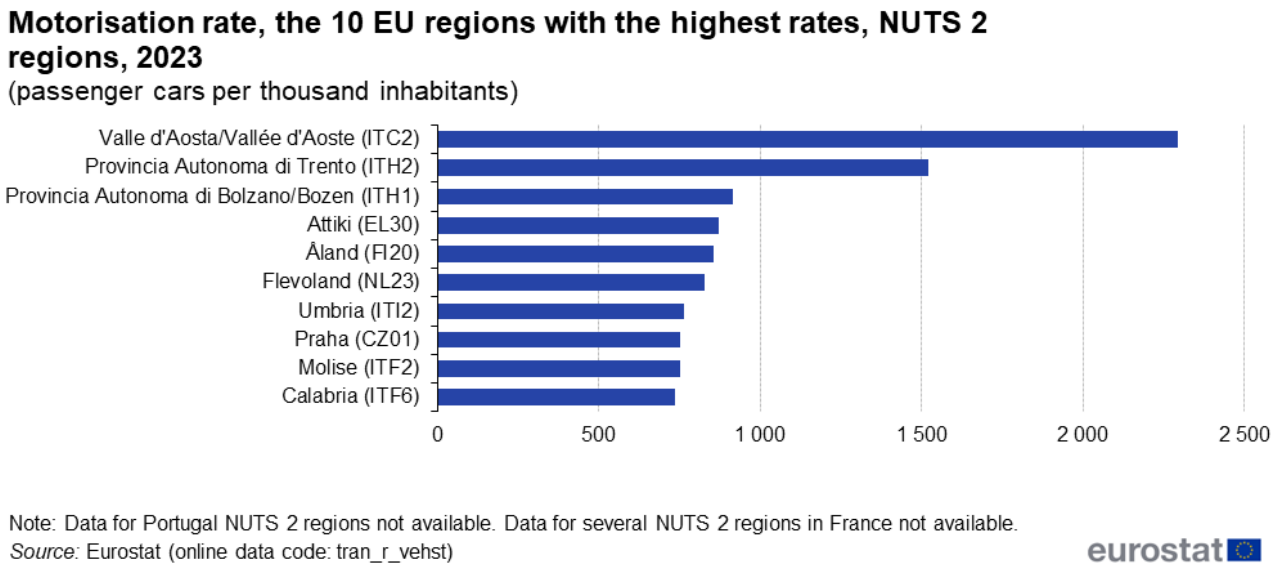


Figure 1: Motorisation rate, the 10 EU regions with the highest rates, NUTS 2 regions, 2023 Source: Eurostat (tran_r_vehst)

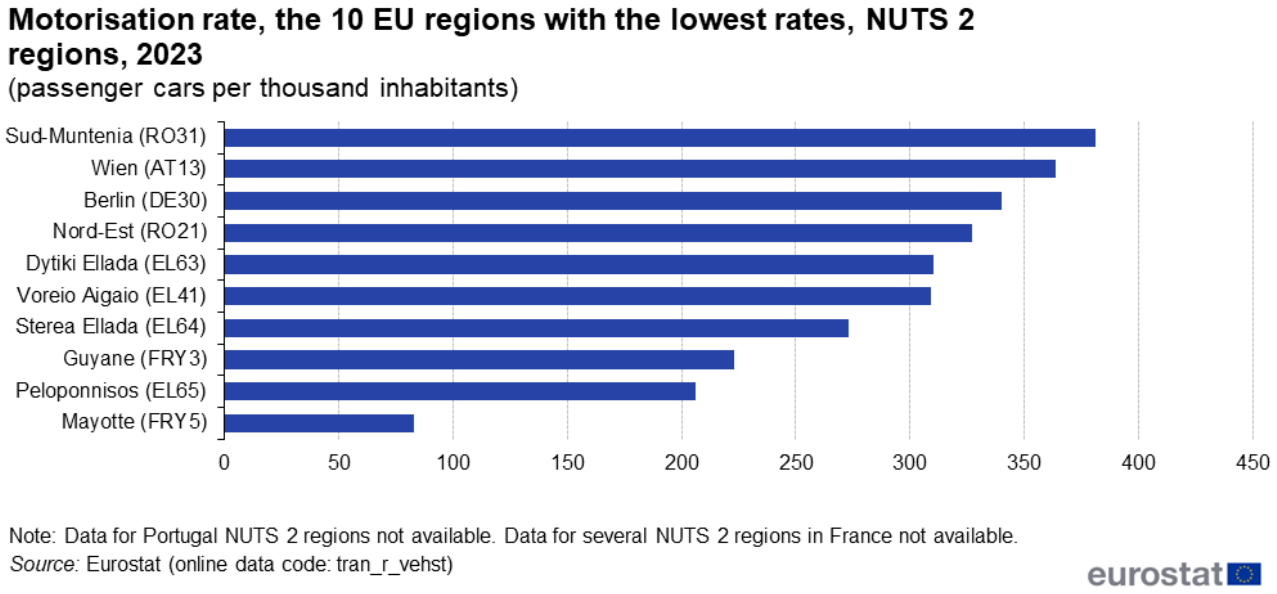


Figure 2: Motorisation rate, the 10 EU regions with the lowest rates, NUTS 2 regions, 2023 (passenger cars per thousand inhabitants) Source: Eurostat (tran_r_vehst)

Over the period 2003-2023, at national level, almost all countries recorded a linear increase of the motorisation rate. Romania registered the highest average annual growth rate of passenger cars among the EU countries (+5.6%), followed by Estonia (+3.6%) and Poland (+3.6%). Türkiye displayed a similar high increase with an average annual growth rate of +4.8%. At the opposite end of the scale, the Netherlands and Ireland (+0.9%), followed by France and Italy (+0.8%), Austria (+0.6%), Belgium and Malta (+0.5%), Germany (+0.4%), and Luxembourg and Sweden (+0.2%) were the only countries recording average annual growth rates of less than 1%.

In general, the Baltic , eastern and central EU countries have registered stronger growths over the 2003-2023 period than western European countries (see Figure 3).

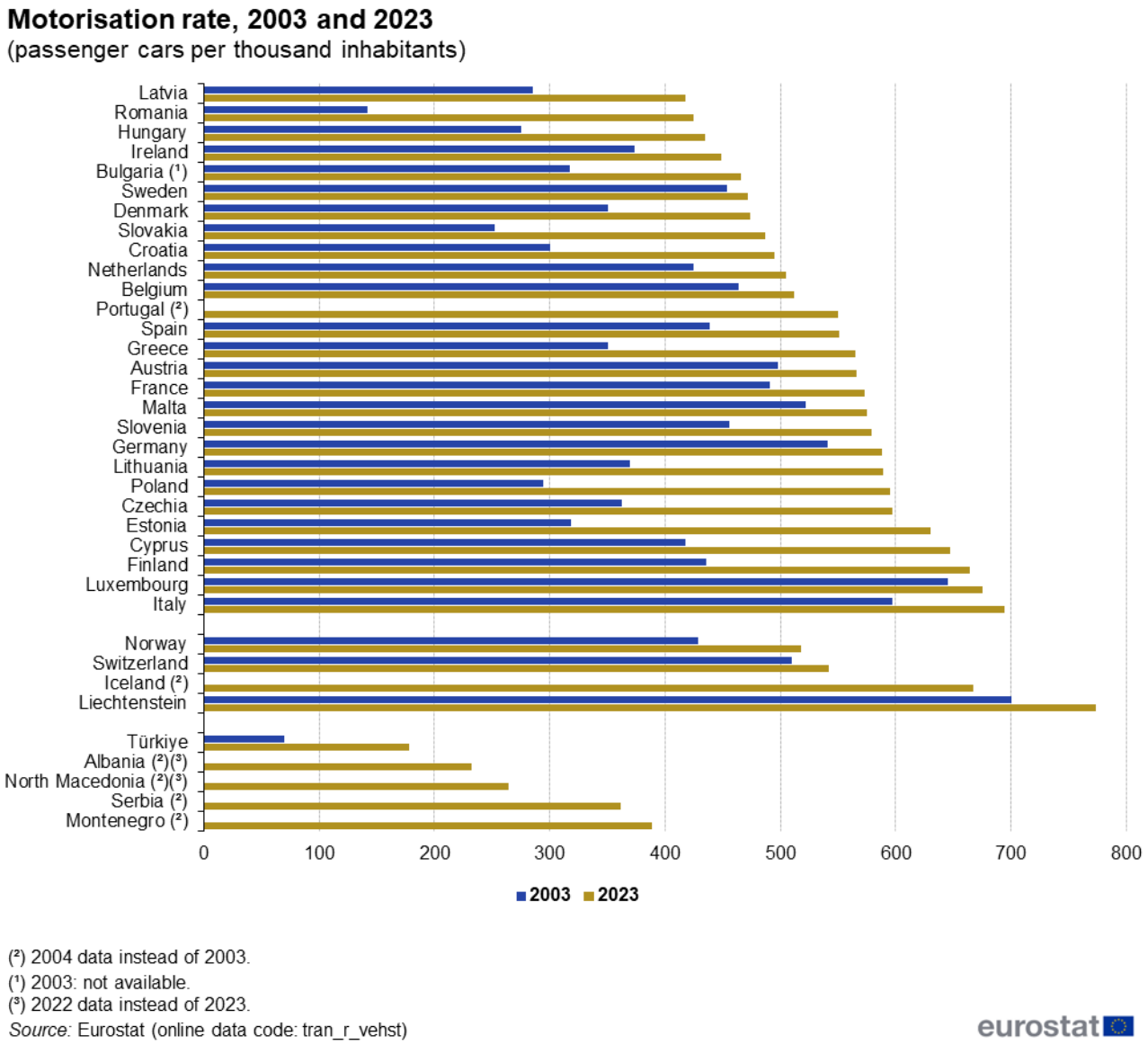
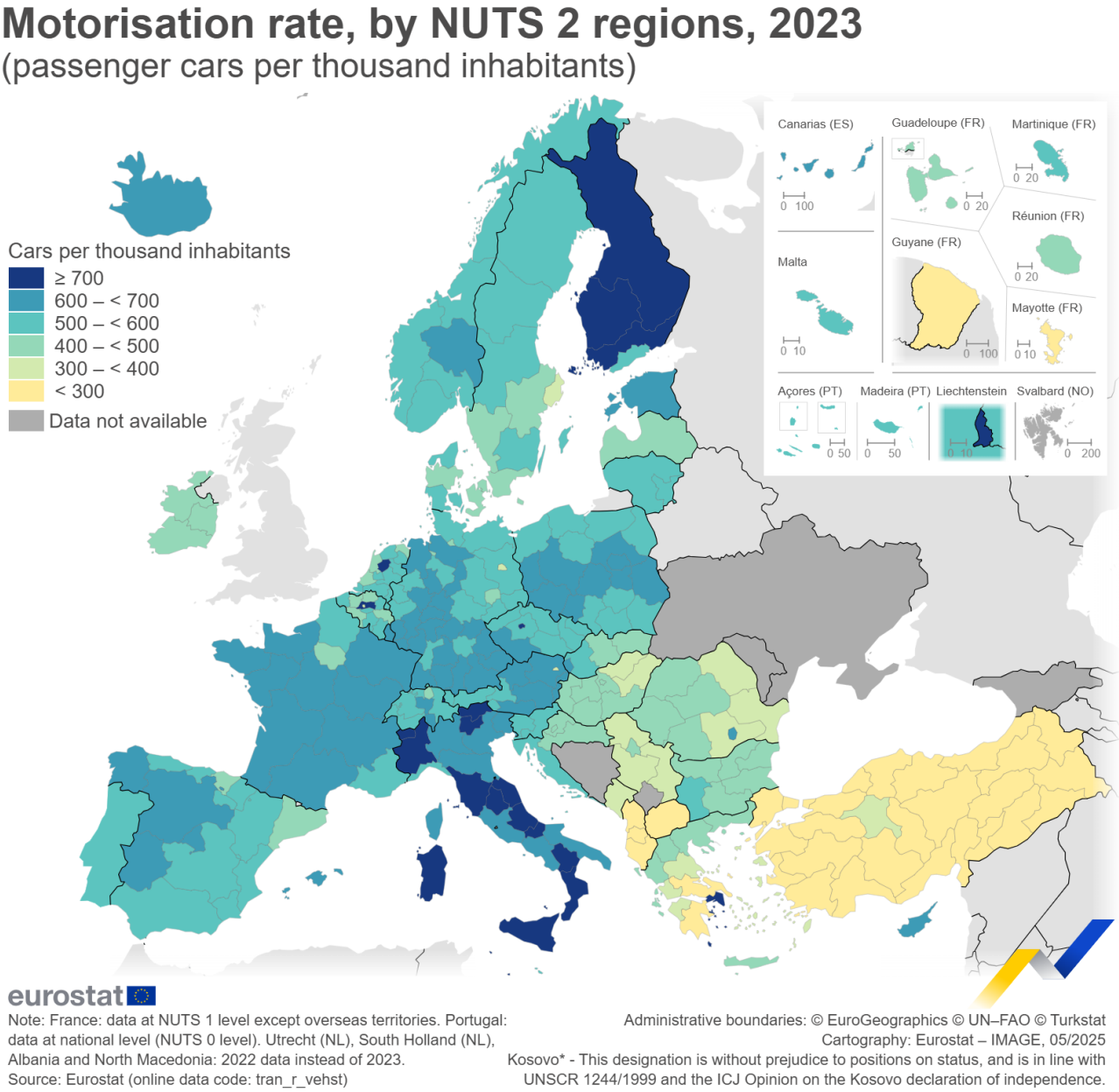


Figure 3: Motorisation rate, 2003 and 2023 Source: Eurostat (tran_r_vehst)

The motorisation rate registered in the various regions of the European Union is often linked to economic issues. A special case was the Italian region of Valle d'Aosta with a lower taxation on new vehicle registration. Several regions close to larger cities also had high motorisation rates, suggesting a larger number of commuters. Examples of such regions were Flevoland in the Netherlands and Attiki in Greece. Map 1 highlights the significant differences observed between western and eastern EU countries when considering the number of passenger cars per thousand inhabitants in 2023. At national level, eastern European countries registered the lowest numbers of passenger cars per thousand inhabitants. In comparison, western and northern European countries recorded higher rates, but with various countries presenting marked regional disparities.



Map 1: Motorisation rate, by NUTS 2 regions, 2023 Source: Eurostat (tran_r_vehst)

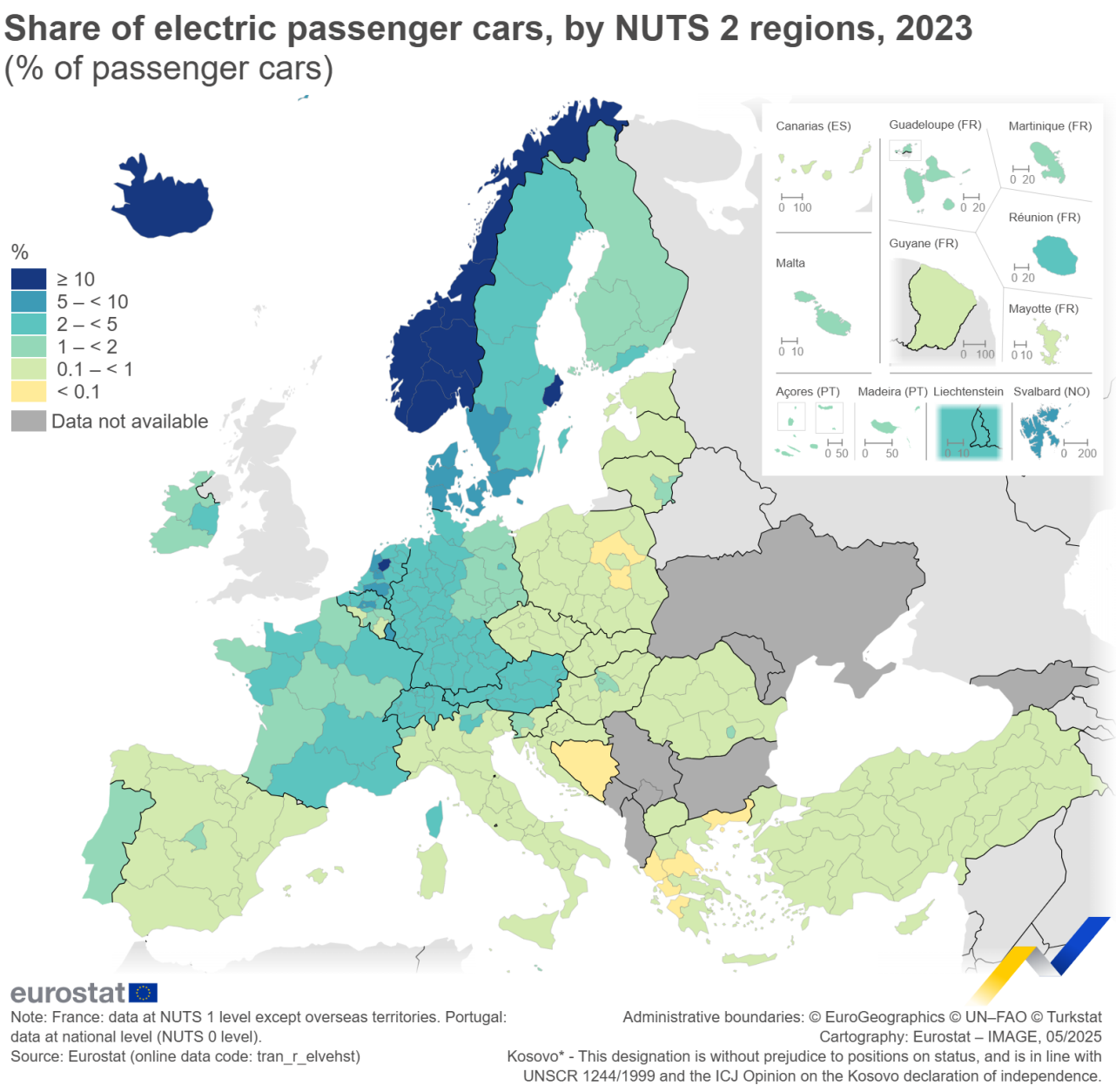
Noticeable disparities are clearly observable for some countries on Map 1. In Greece, for example, strong regional differences could be observed between the highest rate registered in the capital region (872 passenger cars per thousand inhabitants in the Attiki region) and the lower rates observed for the other regions in the country (397 passenger cars per thousand inhabitants on average).

Stock of electric passenger cars

The northern regions adopt electric passenger cars faster than other regions.

The share of electric passenger cars can be linked to different factors such as governmental incentives (like tax reductions or subsidies), the availability and access to recharging stations, as well as the offer of electric passenger cars and their cost. In the EU, the regions from the Netherlands and Sweden were in 2023 among the regions with the highest share of electric passenger cars, with shares of 17.1% in Flevoland and 10.7% in Stockholm (Map 2). Hovedstaden (Denmark) and Utrecht (The Netherlands), both recorded shares of electric passenger cars above 8% in 2023. Norwegian regions had shares of electric passenger cars in 2023 higher than the EU countries, with an

average of 18.6% of electric passengers cars, and peaks at 30.6% in Oslo og Viken and 25.6% in Vestlandet regions. South-eastern European regions, such as in Greece and Poland, had a share of electric passenger cars close to zero in 2023. The same can be observed for regions in Türkiye or for Bosnia and Herzegovina.



Map 2: Share of electric passenger cars, by NUTS 2 regions, 2023 Source: Eurostat (tran_r_elvehst)

Stock of utility vehicles (lorries, road tractors and special vehicles)

The economic importance of the regions influences the stock of utility vehicles

The picture is quite different when looking at utility vehicles (lorries, road tractors and special vehicles excluding trailers and semi-trailers), where no systematic difference could be observed between western and eastern or northern and southern European regions. The share of utility vehicles in the total number of road vehicles (excluding trailers, semi-trailers and motorcycles) in a region depends on several factors. Among these are the regional transport systems and related infrastructure for different modes of freight transport, such as the capacity of motorways, railway lines, ports and airports. The economic characteristics of a region also play a role, i.e. whether

the regional economy is dominated by manufacturing industries or services, and whether the region is located on key European freight corridors. The top 15 EU regions with the lowest shares of utility vehicles in total number of vehicles for which all data are available (excluding trailers, semi-trailers and motorcycles) were in German urbanised areas (ranging between 6.2% and 7.5%) (Figure 4).

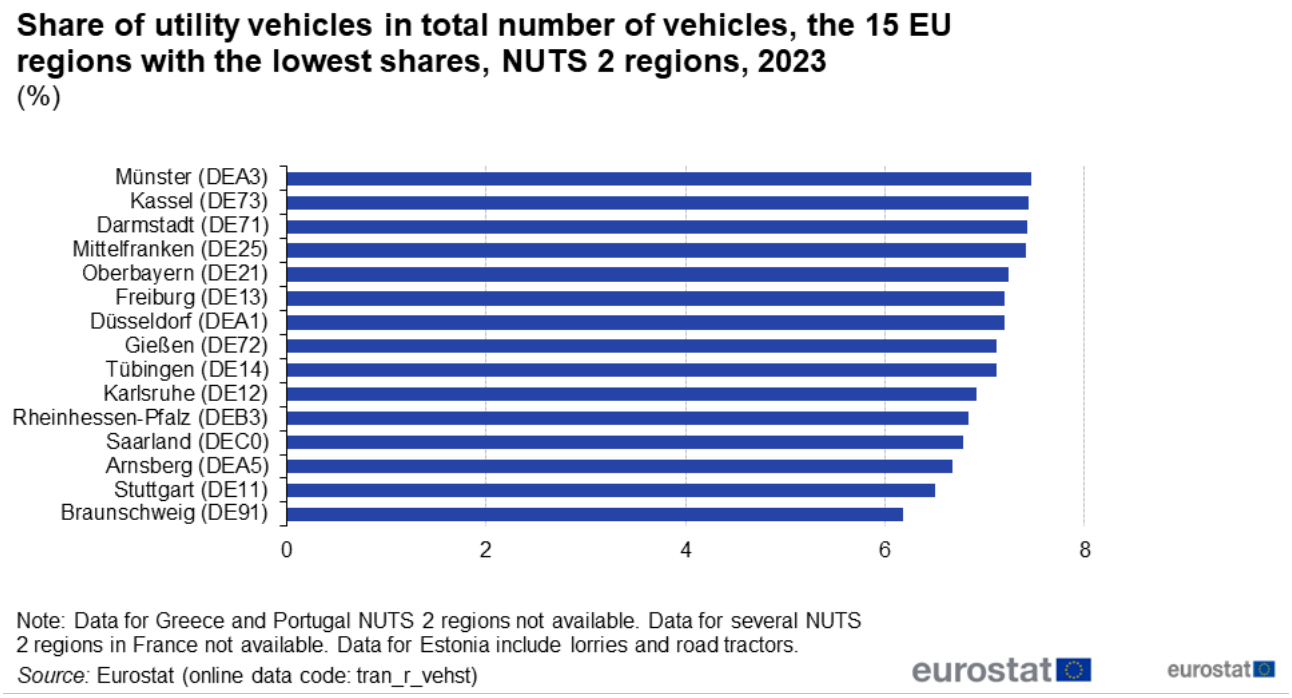
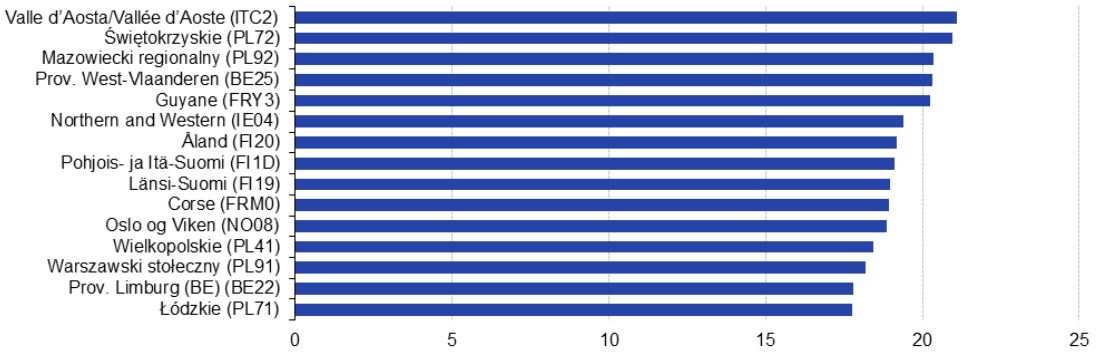


Figure 4: Share of utility vehicles in total number of vehicles, the 15 EU regions with the lowest shares, NUTS 2 regions, 2023 Source: (tran_r_vehst)

Figure 5 indicates that 5 of the 15 EU regions with the highest share of utility vehicles in the total number of vehicles in 2023 were located in Poland, ranging between 17.8% (Łódzkie) and 20.1% (Świętokrzyskie). Finland followed closely with 3 regions which had a share between 19.0% (Länsi-Suomi) and 19.2% (Åland). Two French regions, Guyane (with 20.2%) and Corse (18.9%), are also present in the 15 EU regions, even if data for several NUTS 2 regions in France is not available. Nonetheless, the Valle d'Aosta in Italy is the region with the highest share of utility vehicles; 21.1%. This is partially explained by the region being at the border with Switzerland and France, which is a key European freight corridor between the 2 countries.

Share of utility vehicles in total number of vehicles, the 15 EU regions with the highest shares, NUTS 2 regions, 2023
(%)



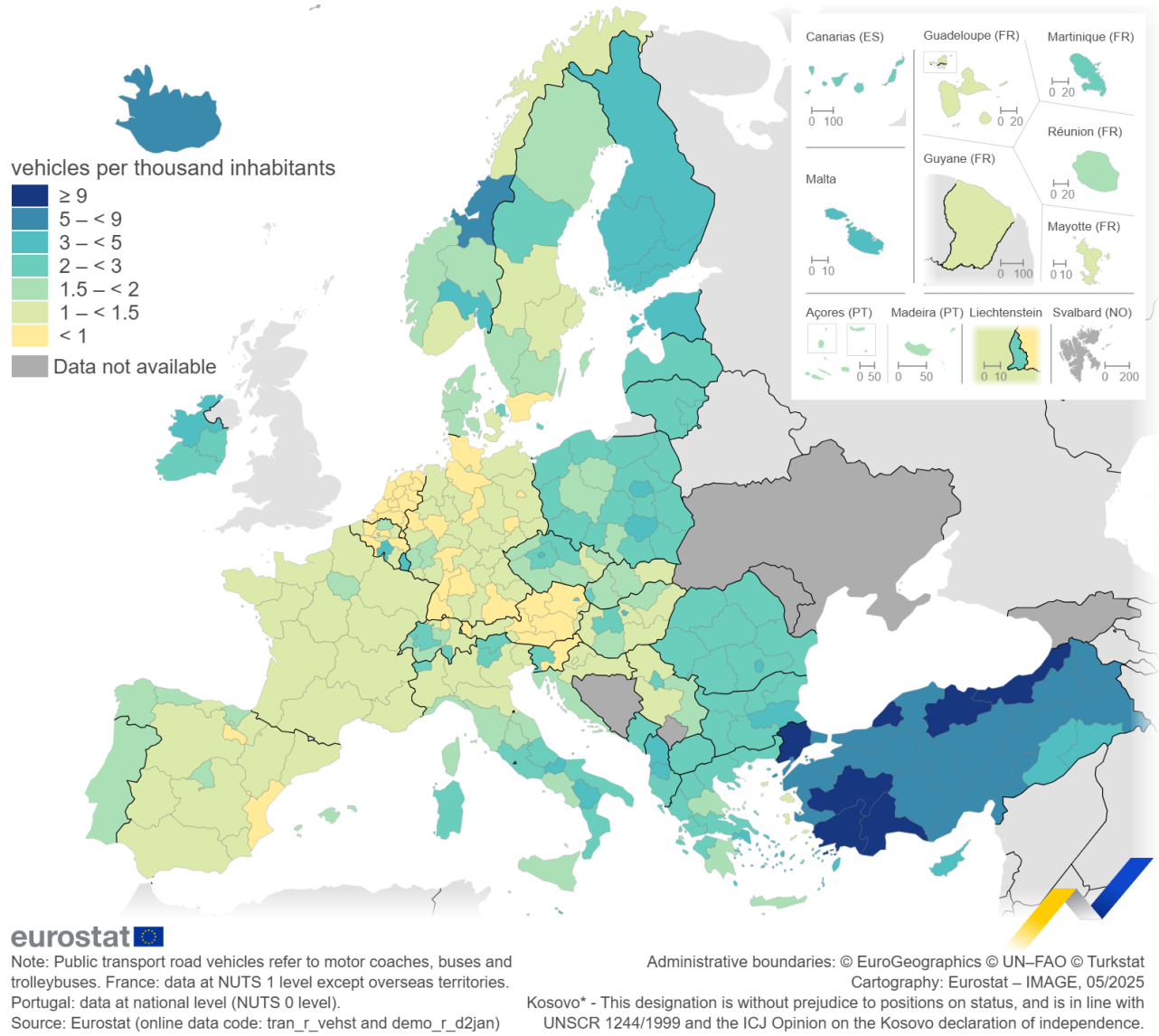
Note: Data for Greece and Portugal NUTS 2 regions not available. Data for several NUTS 2 regions in France not available. Data for Estonia include lorries and road tractors.
Source: Eurostat (online data code: tran_r_vehst)

Figure 5: Share of utility vehicles in total number of vehicles, the 15 EU regions with the highest shares, NUTS 2 regions, 2023 Source: Eurostat (tran_r_vehst)

Stock of public transport road vehicles

The eastern regions favour public road transport compared to western regions

On Map 3, we observe that the stock of public transport road vehicles (motor coaches, buses and trolleybuses) per thousand inhabitants was higher in the eastern European regions, in contrast with the motorisation rate of passenger cars being higher in western European regions. This underlines that road public transport was used more in the eastern regions compared with the western regions where passenger cars were used the most. In 2023, among the EU countries, the region of Bucureşti-Ilfov in Romania recorded the highest stock of public transport road vehicles, with 5.0 motor coaches, buses and trolleybuses per thousand inhabitants, followed by the Province of Namur in Belgium with 4.6 motor coaches, buses and trolleybuses per thousand inhabitants. On the other hand, the regions in the Netherlands are the regions with the lowest stock of public transport road vehicles by having on average 0.3 motor coaches, buses and trolleybuses per thousand inhabitants. Türkiye recorded the highest stock of public transport road vehi-
cles with numbers ranging from 14.3 to 4.5 motor coaches, buses and trolleybuses per thousand inhabitants in 2023.



Map 3: Stock of public transport road vehicles, by NUTS 2 regions, 2023 (public transport road vehicles per thousand inhabitants) Source: Eurostat (tran_r_vehst) and (demo_r_d2jan)

Source data for tables and graphs

- Stock of vehicles at regional level: maps, tables and figures

Data sources

Eurostat collects regional statistics on the infrastructure of road, railways and inland waterways, as well as vehicle stocks and road accidents. The data are provided by the EU Member States, the candidate countries and EFTA countries on a voluntary basis. The data are collected at NUTS 2 level. Population data for Bosnia and Herzegovina and for Kosovo* is not available in the dataset: (Population on 1 January by age, sex and NUTS 2 region) . As a result, indicators expressed per thousand inhabitants (such as the rates in Figure 3, Map 1 and Map 3) are not available for these 2 countries. However, the number of the different types of vehicles for the 2 countries can be found in Eurostat's online database.

** This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo Declaration of Independence.*

Country-specific notes

The major events affecting comparability over time and possible discrepancies in the data are described in the Country Specific Notes .

Passenger cars

Road motor vehicle, other than a moped or a motor cycle, intended for the carriage of passengers and designed to seat no more than nine persons (including the driver). Included are

- Passenger cars
  - Vans designed and used primarily for transport of passengers
  - Taxis
  - Hire cars
  - Ambulances
  - Motor homes
  - Micro-cars (needing no permit to be driven)

Excluded are light goods road vehicles, as well as motor-coaches and buses, and mini-buses/mini-coaches.

Number of passenger cars per inhabitants

For a given year, this indicator is calculated on the basis of the stock of vehicles as of 31st December and the population figures as of 1st January of the following year.

Electric vehicles

Electric vehicles refer to 'pure' electric vehicles (battery-electric vehicles - BEVs). Trolley buses, as electric vehicles per se, are included.

Excluded are the hybrid electric vehicles (HEVs), including plug-in hybrid electric vehicles (PHEVs) and the hydrogen-powered vehicles, the majority of which use a fuel-cell to generate electricity.

Utility vehicles

Utility vehicles correspond to the sum of lorries, road tractors and special vehicles. Trailers and semi-trailers are excluded. A lorry corresponds to a rigid road motor vehicle designed, exclusively or primarily, to carry goods. Road tractors are road motor vehicles designed, exclusively or primarily, to haul other road vehicles which are not power-driven (mainly semi-trailers). Agricultural tractors are excluded. Special purpose road motor vehicles are defined as road motor vehicles designed for purposes other than the carriage of passengers or goods. This category includes:

- Fire brigade vehicles
  - Mobile cranes
  - Self-propelled rollers
  - Bulldozers with metallic wheels or track
  - Vehicles for recording film, radio and TV broadcasting
  - Mobile library vehicles
  - Towing vehicles for vehicles in need of repair
  - Other special purpose road motor vehicles.

Road public transport

Road public transport corresponds to motor-coaches, buses and trolley-buses which are passenger road motor vehicles designed to seat more than nine persons (including the driver). Included are mini-buses and mini-coaches designed to seat more than 9 persons (including the driver). This category includes:

- Motor coaches: passenger road motor vehicles designed to seat 24 or more persons (including the driver) and constructed exclusively for the carriage of seated passengers.
    - Buses: passenger road motor vehicles designed to carry more than 24 persons (including the driver), and with provision to carry seated as well as standing passengers. The vehicles may be constructed with areas for standing passengers, to allow frequent passenger movement, or designed to allow the carriage of standing passengers in the gangway.
    - Mini-buses / mini-coaches: passenger road motor vehicles designed to carry 10–23 seated or standing persons (including the driver). The vehicles may be constructed exclusively to carry seated passengers or to carry both seated and standing passengers.
    - Trolleybuses: passenger road vehicles designed to seat more than nine persons (including the driver), which is connected to electric conductors and which is not rail-borne. This term covers vehicles which may be used either as trolleybuses or as buses, if they have a motor independent of the main electric power supply.

Regional breakdown

The Nomenclature of Territorial Units for Statistics (NUTS) was established by Eurostat more than 30 years ago in order to provide a single uniform breakdown of territorial units for the production of regional statistics for the European Union. From 1 May 2004, the regions in the 10 new EU Member States were added and from 1 January 2007 the regions of Bulgaria and Romania.

Data used are figures at different levels of NUTS 2021 as defined in the following legal acts:

- Regulation (EC) No 1059/2003 of the European Parliament and of the Council of 26 May 2003 on the establishment of a common classification of territorial units for statistics (NUTS);
- Regulation (EC) No 1888/2005 of the European Parliament and of the Council of 26 October 2005 amending Regulation (EC) No 1059/2003 on the establishment of a common classification of territorial units for statistics (NUTS) by reason of the accession of the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia to the European Union;
- Commission Regulation (EC) No 105/2007 of 1 February 2007 amending the annexes to Regulation (EC) No 1059/2003 of the European Parliament and of the Council on the establishment of a common classification of territorial units for statistics (NUTS)
- Regulation (EC) No 176/2008 of the European Parliament and of the Council of 20 February 2008 amending Regulation (EC) No 1059/2003 on the establishment of a common classification of territorial units for statistics (NUTS) by reason of the accession of Bulgaria and Romania to the European Union.
- Commission Regulation (EU) No 31/2011 of 17 January 2011 amending annexes to Regulation (EC) No 1059/2003 of the European Parliament and of the Council on the establishment of a common classification of territorial units for statistics (NUTS).
- Commission Regulation (EU) No 1319/2013 of 9 December 2013 amending annexes to Regulation (EC) No 1059/2003 of the European Parliament and of the Council on the establishment of a common classification of territorial units for statistics (NUTS).
- Commission Regulation (EU) No 868/2014 of 8 August 2014 amending the annexes to Regulation (EC) No 1059/2003 of the European Parliament and of the Council on the establishment of a common classification of territorial units for statistics (NUTS).
- Commission Regulation (EU) 2016/2066 of 21 November 2016 amending the annexes to Regulation (EC) No 1059/2003 of the European Parliament and of the Council on the establishment of a common classification of territorial units for statistics (NUTS).

- Commission Delegated Regulation 2019/1755 of 8 August 2019 amending the Annexes to Regulation (EC) No 1059/2003 of the European Parliament and of the Council on the establishment of a common classification of territorial units for statistics (NUTS).

Certain smaller countries are not sub-divided in NUTS regions. This is the case for Estonia (EE), Cyprus (CY), Latvia (LV), Luxembourg (LU), Malta (MT), Liechtenstein (LI) and Iceland (IS).

For country codes see here .

Context

This article provides basic figures on the regional distribution of the stock of passenger cars, electric passenger cars, road utility vehicles and road public transport. However, these data are only part of the wider set of regional transport statistics available in Eurostat's databases. Regional transport statistics show patterns of variation across regions, where transport-related variables are often closely related to levels of economic activity. Transport policies are at the very heart of efforts to reduce regional inequality and improve regional cohesion. One of Eurostat's long-term objectives is to expand the current regional transport indicators in order to provide a better understanding of the impact of transport policies on economic growth, transport needs and the environment.

Explore further

Other articles

- Road freight transport statistics
- Inland transport infrastructure at regional level

Database

- Transport , see detailed datasets:

Regional transport statistics (tran_r)

Stock of vehicles by category and NUTS 2 regions (tran_r_vehst)

Stock of electric vehicles by category and NUTS 2 region (tran_r_elvehst)

Thematic section

- Transport

Publications

- Regional yearbook 2024 - Chapter 11, Transport
- Glossary for transport statistics (5thedition, 2019)
- Key figures on European transport - 2024 edition

Legislation

- Regulation (EC) No 1059/2003 of the European Parliament and of the Council of 26 May 2003 on the establishment of a common classification of territorial units for statistics (NUTS);
- Summaries of EU legislation: Common classification of territorial units for statistical purposes (NUTS)
- Regulation (EC) No 1888/2005 of the European Parliament and of the Council of 26 October 2005 amending Regulation (EC) No 1059/2003 on the establishment of a common classification of territorial units for statistics (NUTS) by reason of the accession of the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia to the European Union;
- Commission Regulation (EC) No 105/2007 of 1 February 2007 amending the annexes to Regulation (EC) No 1059/2003 of the European Parliament and of the Council on the establishment of a common classification of territorial units for statistics (NUTS)
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- Commission Delegated Regulation 2019/1755 of 8 August 2019 amending the Annexes to Regulation (EC) No 1059/2003 of the European Parliament and of the Council on the establishment of a common classification of territorial units for statistics (NUTS).

External links

- Road safety
- UNECE website for transport statistics