European Environment Agency

8th Environment Action Programme

Share of buses and trains in inland passenger transport

8TH EAP HEADLINE INDICATOR, 2024

European Environment Agency

Share of buses and trains in inland passenger transport in Europe

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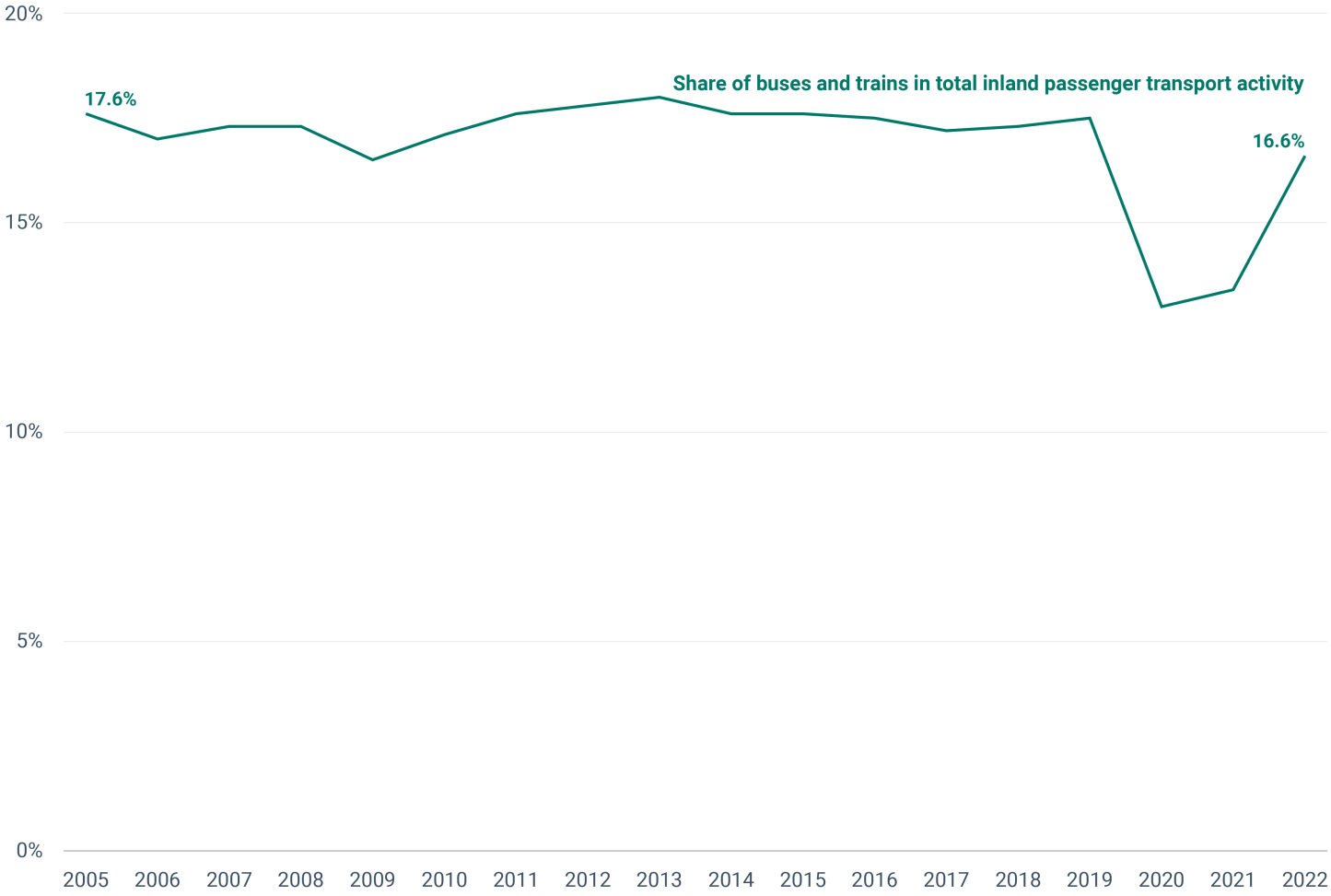
Promoting sustainable transport modes like public transport can reduce greenhouse gas emissions and other environmental pressures such as air pollution and noise. The European Union's Sustainable and Smart Mobility strategy underlines the importance of public passenger transport in greater transport sustainability. The share of buses and trains in total passenger transport has changed very little since 2005, albeit with fluctuation due to the COVID-19 pandemic. Achieving a modal shift towards public transport will require decisive action and a move in long-standing trends.

Figure 1. Share of bus and trains in total inland passenger transport activity in the EU-27



In 2020, under the umbrella of the European Green Deal, the European Commission adopted a Sustainable and Smart Mobility strategy aimed at promoting, inter alia, the use of more **sustainable transport modes**. One of the objectives of the strategy is to increase the number of passengers travelling by rail and commuting by public transport, instead of with a personal car. Achieving this objective could reduce greenhouse gas and air pollutant emissions, and other environmental pressures. Changes to the EU's mobility system are vital to realise the green and digital transformation ambitions and become more resilient to future crises.

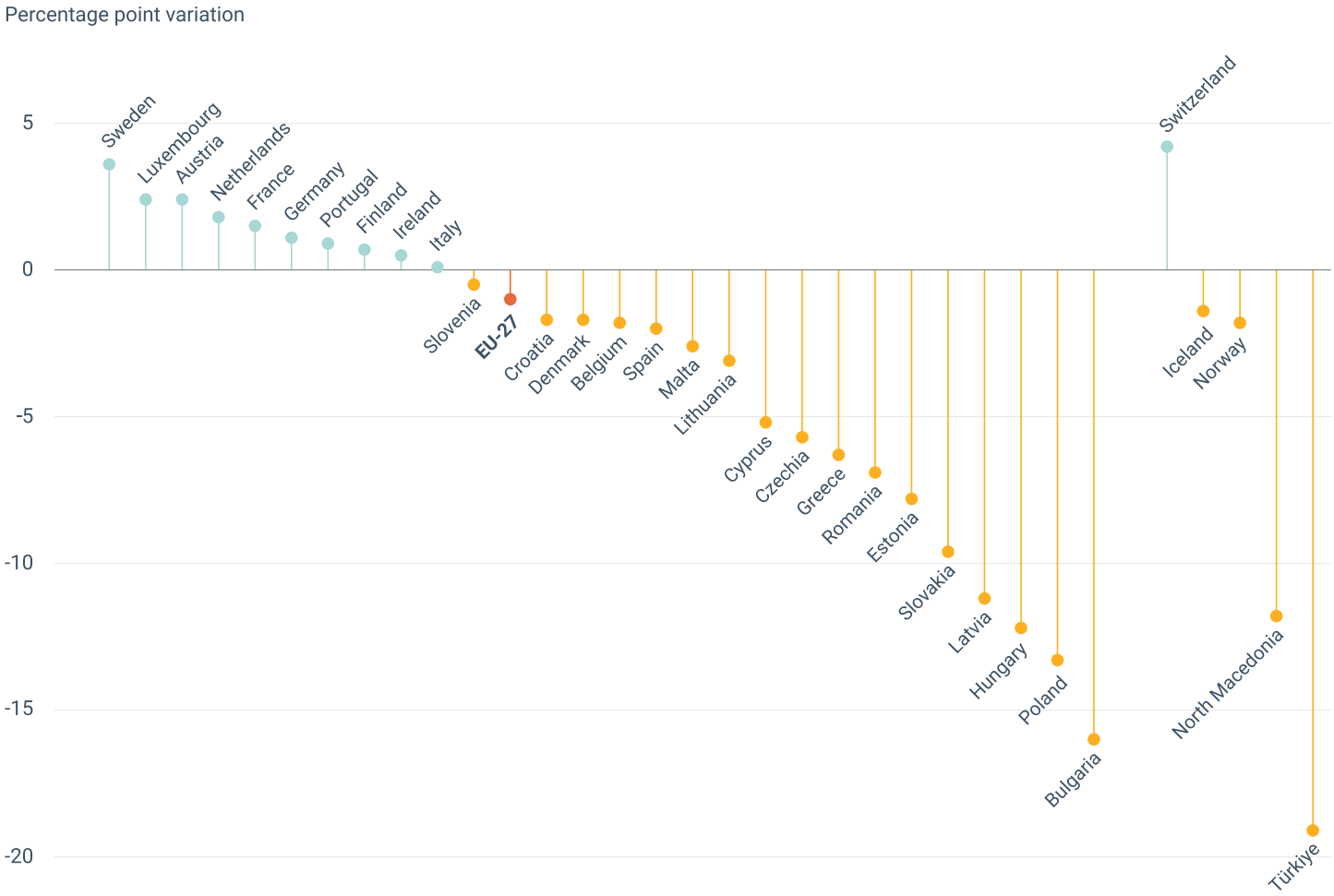
In the period 2005-2019, the share of total passenger transport **demand** met by buses and trains remained relatively constant at around 17%. It fell sharply to 13% in 2020 as a result of COVID-19 pandemic-driven travel restrictions and changed mobility habits[1], then progressively recovered in 2021-2022. The 2022 share almost returned to pre-pandemic levels, at 17%.

At the same time, total inland passenger transport activity increased by 5% in the period between 2005 and 2022, indicating an increase in the use of both private cars and public transportation in absolute terms. Significant efforts to encourage the use of public transport would be needed to achieve a shift towards more sustainable modes. This would require **changes** in the way Europeans commute and travel, and changes in city planning.

The European Commission launched important **initiatives** for the supply side, such as the revised TEN-T regulation (entered into force the 18 July 2024) and rail capacity regulation, which aim to increase the availability of public transport modes. National policies that reduce public transport ticket prices would further contribute to a higher uptake of public transport.

Digitalisation also provides practical tools to internalise the external costs of transport and raise awareness of the pressures exerted by our mobility needs and preferences. The European Commission, is working on **frameworks** to support modal shifts and multimodal trips, as outlined in the EEA's 2022 TERM report. In this context, investments and funding are also required to finance safe, clean and modern infrastructure that ensures access to public transport for all.

Figure 2. Percentage point variation in the share of bus and trains (collective modes) in total inland passenger transport activity by country



The use of buses and trains in passenger transport activity **differs** vastly across countries, both in terms of share values and time evolution. Between 2005 and 2022, the share of buses and trains in total inland passenger transport increased in 10 EU Member States. Sweden experienced the greatest growth, at 3.6 points of share. However, the share of bus and trains declined by more than five percentage points in 10 countries (Bulgaria, Cyprus, Czechia, Estonia, Greece, Hungary, Latvia, Poland, Romania and Slovakia).

For all other EEA member and cooperating countries for which data are available, the share ranged from -19 percentage points in Türkiye to 4 percentage points in Switzerland, during the same reference period. Serbia and Montenegro passenger transport data are available only from year 2010[2].

To **fully transition** to a more sustainable mobility system, a combination of approaches is needed, such as a more efficient and attractive public transport system. Active modes like walking and biking are also key to reducing the impacts of mobility in cities. However, these modes are not presented in this indicator, as data are not currently available.

Supporting information

Definition

Share of collective modes in total inland passenger transport. Collective modes refer to passenger transport via buses, coaches, and trains. Total inland passenger transport performance includes transport by passenger

cars, buses and coaches, and trains. All data are based on movements within national territories, regardless of the vehicle's nationality.

Methodology

Figure 1: raw data for the EU-27 share (in %) of collective modes in total inland passenger transport performance were retrieved from Eurostat. Raw data for the increase in total inland passenger transport demand were retrieved from the 2024 version of the EU transport in figures statistical pocketbook published by DG MOVE. EU-27 aggregate data were used. No additional gap filling was applied to the data. Information on data set uncertainties can be found directly in the metadata and explanatory notes provided by Eurostat. Only official Eurostat data sets have been used.

Figure 2: raw data by country of variation (2005-2022) in the share of collective modes in total inland passenger transport performance were retrieved from Eurostat. Data are displayed at country level and are expressed in percentage points. To provide the broadest possible picture of European countries, geographical coverage was extended to the 32 EEA member countries and the Western Balkan cooperating countries when data were available. No additional gap filling was applied to the data. Information on data set uncertainties can be found directly in the metadata and explanatory notes provided by Eurostat. Only official Eurostat data sets have been used.

Additional information on the methodology used for data collection can be found here: Share of buses and trains in inland passenger transport (sdg_09_50) (europa.eu)

Policy/environmental relevance

The indicator is part of the indicator set tracking EU Sustainable Development Goals (SDG) and their related 169 targets, which are at the heart of the UN's 2030 Agenda for Sustainable Development. It is used to monitor trends on modal shift to environment-friendly transport modes and the progress towards building resilient infrastructure (SDG 9), promoting inclusive and sustainable industrialisation and fostering innovation and towards on making cities and human settlements inclusive, safe, resilient and sustainable (SDG 11). These targets are embedded in the European Commission's Priorities under the 'European Green Deal', 'A Europe fit for a digital age' and 'An economy that works for people'. The indicator is relevant also in the framework of the Commission 'Sustainable and Smart Mobility strategy' adopted in 2020. This strategy lays the foundation for how the EU transport system can achieve its green and digital transformation and become more resilient to future crises.

The share of buses and trains in inland passenger transport is a headline indicator for monitoring progress towards the 8th Environment Action Programme (8th EAP). It contributes mainly to monitoring mobility aspects of the 8th EAP priority objective Article 2.(2)(f) that shall be met by 2030: *'promoting environmental aspects of sustainability and significantly reducing key environmental and climate pressures related to the Union's production and consumption, in particular in the areas of energy, industry, buildings and infrastructure, mobility, tourism, international trade and the food system.'* For the purposes of the 8th EAP monitoring framework this indicator assesses specifically whether the EU will increase the share of buses and trains in inland passenger transport expressed in passenger-kilometres.

Accuracy and uncertainties

The accuracy of the is currently limited due to the voluntary collection of road passenger data. As a result, the transport performance data are based on a large variety of statistical sources and some data gaps are filled with estimates. Additional information can be found here: Share of buses and trains in inland passenger transport (sdg_09_50) (europa.eu)

Data sources and providers

- Share of buses and trains in inland passenger transport [SDG_09_50], Statistical Office of the European Union (EUROSTAT)
- Statistical pocketbook 2023, European Commission (EC)

Metadata

DPSIR

Pressure

Topics

 # Transport and mobility **# Urban sustainability**

Tags

 # mobility **# Buses** **# modal shift** **# 8th EAP** **# TERM046** **# Passenger transport** **# Trains** **# Transport**

Temporal coverage

2005-2022

Geographic coverage

Austria
Belgium
Bulgaria
Croatia
Cyprus
Czechia
Denmark
Estonia
Finland
France
Germany
Greece
Hungary
Ireland
Italy
Latvia
Lithuania
Luxembourg
Malta
Netherlands
Poland
Portugal
Romania
Slovakia
Slovenia
Spain
Sweden

Typology

Descriptive indicator (Type A - What is happening to the environment and to humans?)

UN SDGs

SDG9: Industry, innovation and infrastructure, SDG11: Sustainable cities and communities

Unit of measure

Percentage

Frequency of dissemination

Once a year

References and footnotes

1. Lozzi, G. and et al., 2022, *Relaunching transport and tourism in the EU after COVID-19 — Part VI: Public transport*, European Parliament, Directorate-General for Internal Policies of the Union.
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2. For additional details on the methodology, see the supporting information. In particular, the limited accuracy of passenger data could impact data comparability between countries and the reported trends.
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