

# STATE OF THE ENVIRONMENT REPORT – SLOVAK REPUBLIC

## 2018

25<sup>th</sup> anniversary of annual reports

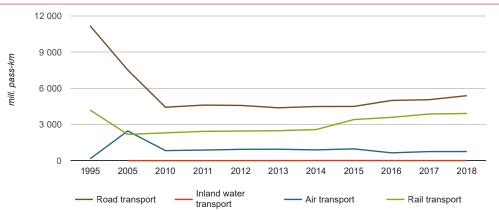




### TRANSPORT TRANSPORT OF PERSONS AND GOODS

In 2018 the increase in the numbers of **people transported** in rail and air transport continued, while road and water transport experienced a slight year-on-year decrease. Transport performance in all types of passenger transport remained at approximately the same level compared to the year before. The shares of the individual modes of transport in the performance of passenger transport is as follows: individual 72%, road public transport 13%, rail transport 10%, city mass transit 3%, air transport 2%.

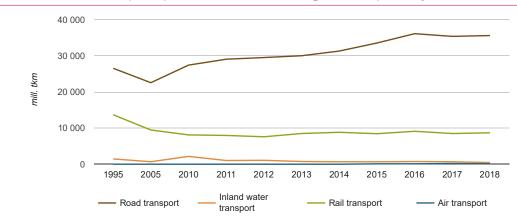
#### Chart 063 I Trend in transport performances by mode of transport



Source: Statistical Office of the Slovak Republic

The transport of goods and transport performances in freight transport increased in road and rail transport year-onyear in 2018, while a slight decrease was recorded in water and air transport. Road transport had the highest share of freight transport performances (approx. 79%), followed by rail transport (19%) and inland water transport with only 2%.

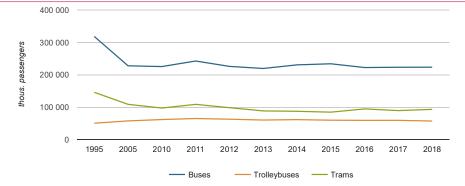
#### **Chart 064 I** Trend in transport performances in freight transport by mode of transport



Source: Statistical Office of the Slovak Republic

**Urban public transport (UPT)** is provided by public transport companies in v Bratislava, Košice, Prešov and Žilina. In other Slovak cities, UPT is provided by private transport companies, respectively by self-employed persons. Such transport is not run as UPT. In 2018 a year-on-year increase in the numbers of people transported by buses and trams was recorded. Passenger transport by trolleybus fell year-on-year. During the monitored period bus transport maintained its leading position, followed by trams and trolleybuses.

#### Chart 065 I Trend in the numbers of people transported by UPT



Source: Statistical Office of the Slovak Republic

#### **TRANSPORT INFRASTRUCTURE**

In **2018 there were no significant** changes in transport infrastructure in the SR. The transport network consisted of **18 045 km of roads and motorways**, with motorways accounting for 482 km and local roads 38 895 km. There were

**VEHICLE NUMBERS** 

In 2018 there were 3 203 441 motor vehicles registered in all categories in the SR, an increase compared to 2017 of **125 793**.

When assessing the increase in road transport and individual car transport, important indicators are the **motorisation rate** (the number of inhabitants of a specific territorial unit per motor vehicle) and the **passenger car rate** (the number of inhabitants of a specific territorial unit per passenger car). In 2018 the passenger car rate was 2.45 people per passenger car, while in 2010 it was 3.25.

In 2016 the Ministry of the Economy of the SR launched a subsidy programme to promote electromobility worth EUR 5.2 million to end in 2018. During the project period between 2016 and 2018, 831 applicants drew from this subsidy,

#### **TRANSPORT ACCIDENT RATES**

In 2018 there were 13 902 transport-related accidents in road transport, a decrease of 111 compared to 2017. The number of fatalities fell to 229 persons and lightly injured persons to 5 643. There was an increase in the numbers of heavily

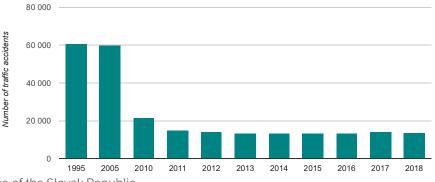
**3 627 km of railway lines**, of which 1 587 km were electrified. The length of navigable watercourses remained unchanged at **172 km** and 38.45 km of canals.

purchasing 514 battery-electric vehicles and 317 plug-in hybrid vehicles. In total there are 1 700 electric vehicles registered in the SR. In 2018 the Ministry of the Economy of the SR resented the **"Action Plan for the Development of Electromobility"** with 15 specific measures to be implemented within three years. The goals of the plan are to increase the numbers of electric vehicles and to construct the necessary infrastructure and promote research and development into components for electric vehicles. The anticipated approval date for the Action Plan is 2019.

The numbers of means of transport in rail and water transport (the most environmental modes of transport for both passengers and freight) saw a minimal year-on-year increase.

injured persons to 1 272. In 2018 there were a record 63 accidents in rail transport, 48 of which occurred on marked railway crossings.

#### Chart 066 I Number of transport-related accidents in road transport



Source: Statistical Office of the Slovak Republic *Note: \* a change in methodology from 2009* 

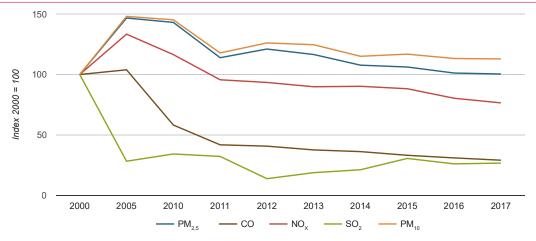
#### THE IMPACT OF TRANSPORT ON THE ENVIRONMENT

In the SR an inventory of the generation of emissions of selected pollutants is carried out on an annual basis, and also includes **an annual inventory of road, rail, water and air traffic**. To determine the quantity of pollutants generated by transport the CORINAIR methodology is used. Its special SW product called COPERT is designed to take inventories of the annual generation of emissions from road transport.

In the total emissions of pollutants for 2017, the 14.7% share of transport in emissions of CO, 45.9% of NO<sub>x</sub>, 7.1% of NMVOC and 0.72% of emissions of SO<sub>2</sub> is significant. The share of non-exhaust emissions of PM<sub>25</sub> particulates was 9% and of PM<sub>10</sub> was 9.2%.

The share of transport, after recalculation, in emissions of heavy metals is approx. 5.2%, while copper (14.3%) had the highest share in emissions of heavy metals generated by transport in 2017, followed by lead (2.0%) and zinc (4.4%).



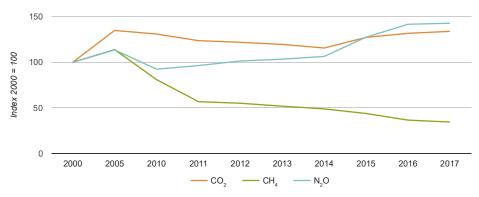


#### Source: Slovak Hydrometeorological Institute

The transport sector's share in total generated emissions of greenhouse gases in 2017 was 20.8% (expressed as  $CO_2$  equivalent). The long-term trend in emissions of  $CO_2$  from transport in the 2000 to 2017 period fluctuated, however in a comparison between 2017 and 2000 emissions of  $CO_2$  from

transport grew by 33.7%. Compared to 2016 they increased by 1.7%. The most significant decrease since 2000 (65.5%) was recorded by emissions of  $CH_4$  while on the other hand emissions of  $N_2O$  increased by 42.7%.

#### Chart 068 I Trend in greenhouse gas emissions from transport



Source: Slovak Hydrometeorological Institute

In the transport and roads sector 1 772 280 t of **waste** was generated in 2018, 16 570 t of which was hazardous waste and 1 755 710 t other waste, an increase of 613 760 tonnes compared to the preceding year.

An overview of the results of the processing of **old vehicles** is provided in the chapter Waste.