MINISZTERELNÖKSÉG

Az EU Kohéziós Politikáját szolgáló EU Alapok társfinanszírozásával megvalósuló fejlesztéspolitikai programok értékelése

SZÉCHENYI 2020

Evaluation of EU-funded transport infrastructure investments of the 20-year EU membership of Hungary

Executive summary

31. 10. 2023.

SZÉCHENYI 2020

FŐMTERV

COLLECTIVO

MAGYARORSZÁG KORMÁNYA

Európai Unió
Európai Strukturális és Beruházási Alapok

BEFEKTETÉS A JÖVŐBE

The aim of the evaluation, carried out at the end of the 2014-2020 programming period, was to assess the results of the transport investments in Hungary carried out during the three EU funding periods (2004-2006, 2007-2013 and 2014-2020) since Hungary joined the European Union and whether the objectives set were met. A particularly important part of the analytical work was also the collection of lessons and experiences, not only for the current implementation, but also to make them applicable for the next programming period.

Hungary in each of the three previous EU programming periods allocated a prominent role and devoted significant resources to the investment of transport with European Union co-financing. Expressways were built in order to facilitate faster transit and create connections between countries, while the settlement bypass roads and settlement road improvements improved the quality of life of the population. The rail, public transport and cycling investments were aimed at achieving more sustainable transport, while the ITS investments promoted the modernization of transport. Given the volume and importance of EU-funded transport investments, it is important to take these results into account on the occasion of the 20th anniversary of our accession to the European Union.

The transport investments funded by the European Union in the period 2004-2006 were basically determined by the fact that the east-west and north-south trade routes pass through Hungary due to Hungary's favorable geographical location. It was necessary to improve the connection with Western European transport axes as soon as possible, to accelerate network investment and to transfer transit traffic as quickly and as regulated as possible in order to promote involvement in global economic and commercial processes[1]. In the 2004-2006 programming period, funds from two operational programs (ROP, KIOP) could be used for transport investment, from which a total of 386.6 M Euros[2] was finally allocated to the various transport sectors.

In the following period, 2007-2013, the most important goal of road investment was to increase global and regional competitiveness, as well as to strengthen economic, social and territorial cohesion. Railway investment was mainly concentrated on the sections belonging to the TEN-T network. In addition, the goal was to increase the intermodality of national and regional modes of transport, to create the infrastructure of intelligent transport organization, to alleviate urban traffic congestion and to reduce traffic safety risks[3]. In the 2007-2013 period, two OPs (KÖZOP, ROP) financed transport projects, as well as funds from Cross-Border Cooperation Programs (INTERREG IV-A) were also available, thus three types of funds provided investments, totaling 12.9 billion Euros[4].

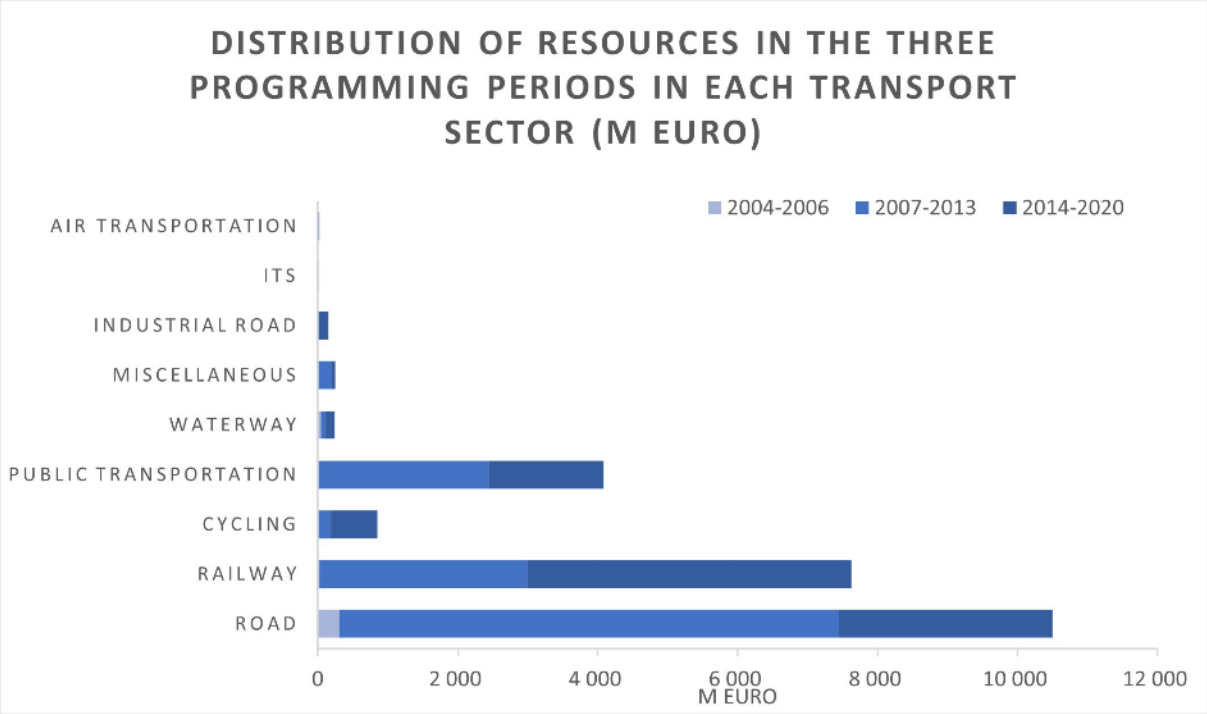
In the 2014-2020 period, the range of sources was expanded, and transport investment subsidies were now available from four OPs (IKOP, TOP, VEKOP, GINOP). In addition, INTERREG programs continued (INTERREG V-A), and the European Network Financing Facility (CEF) was created as a new support program. A total of 10.3 billion Euros were finally allocated to this area from the six programs[5].

Looking at the **territorial distribution** of resources, it can be said that the resources of the 2004-2006 programmes, which had a narrower scope, were more concentrated in the northern and southern regions, while from 2007 onwards more support was given to the Central Hungary region, which will be even more pronounced in the 2014-2020 period. In the less developed regions, in addition to a number of expressway and trunk road network investments, there were also interventions on

[1] Environmental Protection and Infrastructure Operational Programe 2004-2006
[2] Converted using the 2006 average euro exchange rate (264.27 HUF/EUR)
[3] Transport Operational Programme 2011-2013 action plan
[4] Converted using the 2013 average euro exchange rate (296.92 HUR/EUR)
[5] Converted using the 2020 average euro exchange rate (351.17 HUF/EUR)

secondary road networks, while in the developed region and Budapest, the priority was mainly on modal shift projects, i.e. transport investment responded to economic investment. Cross-border investments were supported by the INTERREG programmes of the 2007-2013 and 2014-2020 programming cycles. In both programming periods, Hungary implemented cross-border cooperation programmes in seven border regions (Slovak, Ukrainian, Romanian, Serbian, Croatian, Slovenian and Austrian border sections).

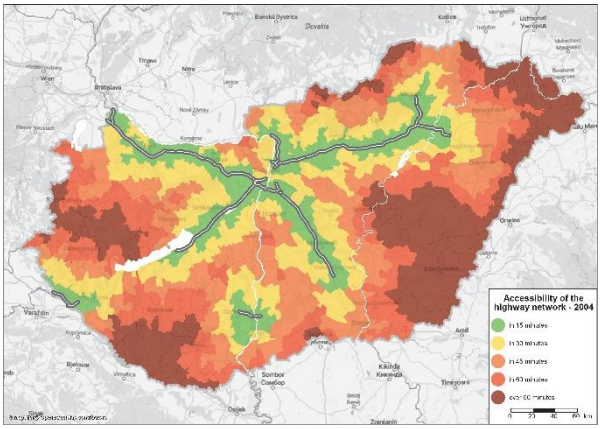
The **sectoral breakdown** of resource use and the results of the investments are presented below.



1. Figure Distribution of resources in the three programming periods in each transport sector

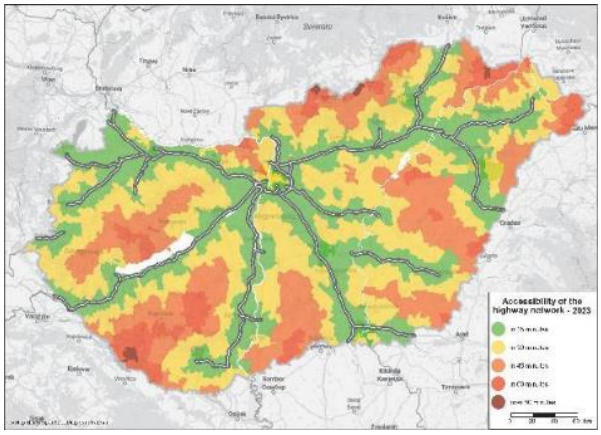
It can be seen that road investments were given a prominent role in all three periods (mainly in the period 2007-2013), but at the same time, in the case of cycling, rail and water transport, the resources spent in each programming period increased continuously, reflecting the growth of environmentally friendly modes of transport. In the 2014-2020 period, special funds were allocated to the renovation of air transport and industrial estate public roads[6], but in a small amount compared to other sectors.

[6] From the TOP schemes "Investment of industrial parks, industrial sites" and "Transport investment for economic investment and labour mobility", only those projects that included some kind of road investment were selected.



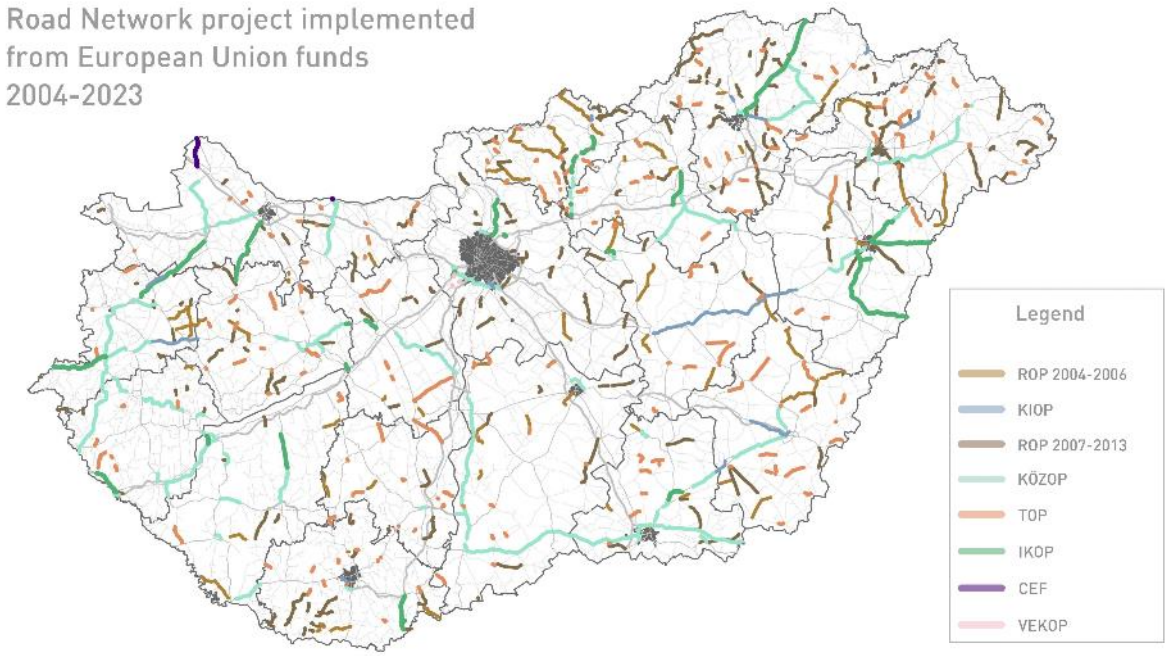
2. Figure Accessibility of the highway network in 2004 and 2023 (Főmterv)

Thanks to **road improvements**, the 655 km long expressway network was expanded to 1,831.5 km from 2004 to 2022, thus significantly improving the accessibility of national borders by expressway. In the initial period, Hungary had three highways that reached the national border, and by 2020 their number had increased to seven, which greatly facilitated the free movement of people and goods within the Union. The investment of the main road network made it possible for most of the country to reach the nearest expressway within 60 minutes.



The road network investments of the period 2004-2020 are illustrated in the figure below means nearly 5,500 km of investment in total [7]:

[7] „According to the so-called to the n+3 rule, it was possible to complete the projects of the period 2014-2020 by 31.12.2023, therefore, the maps show the investments completed until the closing of the report (31.10.2023).”

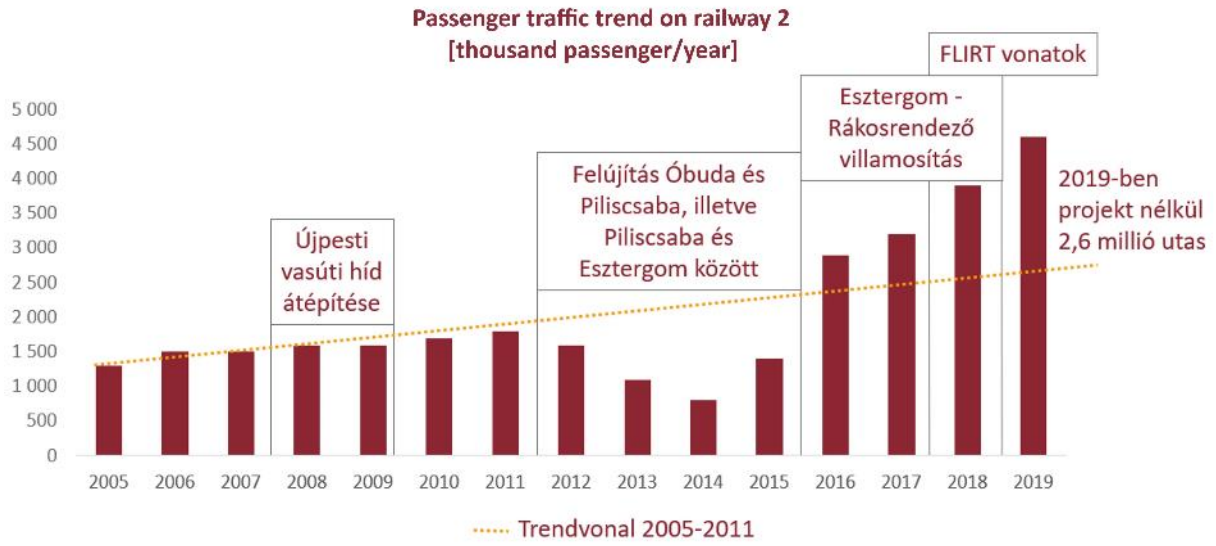


3. Figure Road network projects implemented from European Union funds 2004-2023 (Főmterv)

The investment of **rail transport** was started mainly in the framework of the 2007-2013 KÖZOP program as a result of the package of measures for "more environmentally friendly transport" of the European transport policy objectives, which was continued by the resources of the 2014-2020 period IKOP program, and could be expanded with further investments in the framework of the CEF. During these two programming periods, 102 multiple units could be purchased from EU funds.

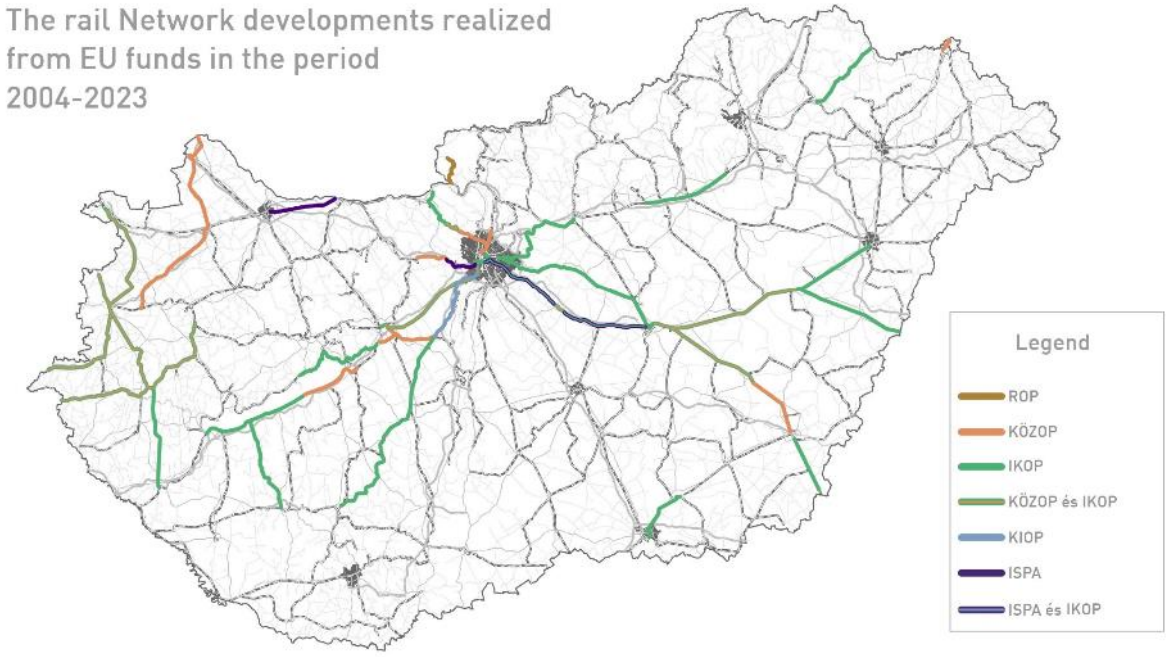
Thanks to the various traffic safety investments, the number of accidents has significantly decreased by two-thirds by 2022 compared to the 2006 data[8]. In passenger transport, there was an overall decrease in passenger traffic for the examined period, in which the COVID-19 epidemic also played a significant role. At the same time, if we examine the developed sections individually, the passenger traffic started to increase. This is illustrated by the increase in passenger traffic of the investment of railway line number 2 (Budapest-Esztergom) in the figure below.

[8] KSH adjusted the threshold value to the EU standard when investigating railway accidents, therefore the data of 2004 and 2005 cannot be compared with later years.



4. Figure Investment of passenger traffic on the Budapest-Esztergom railway line

The figure below illustrates the approximately 1000 km rail network investments realized from EU funds for the period 2004-2023:

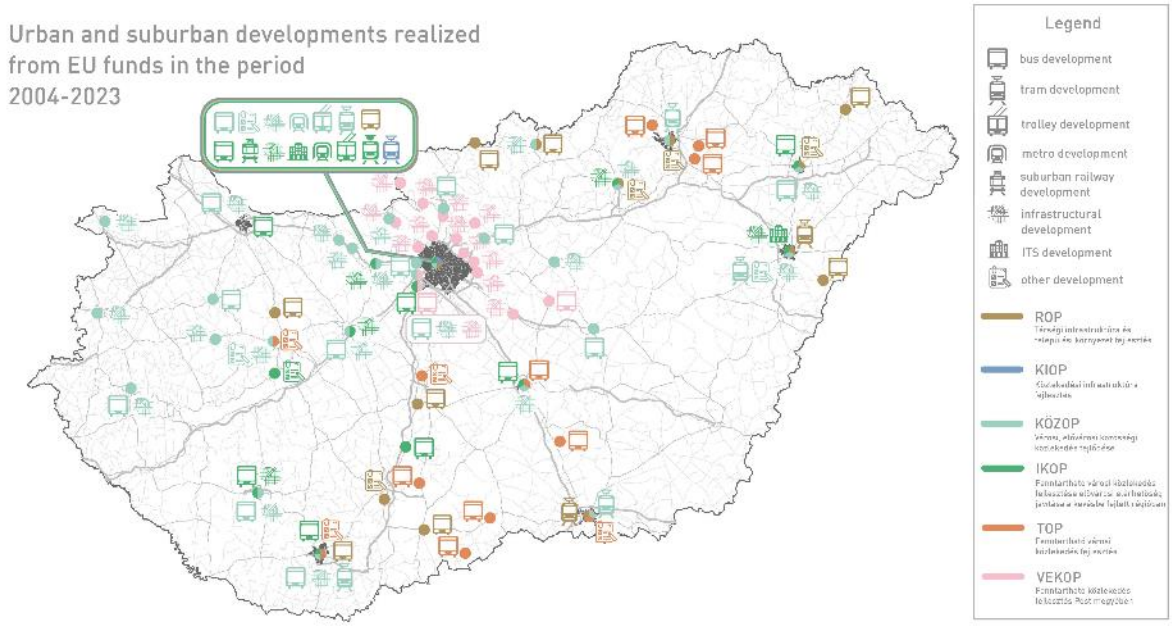


5. Figure The rail network investments realized from EU funds in the period 2004-2023 (Főmterv)

For the investment of **urban transport**, KÖZOP and, in the 2014-2020 period, IKOP provided significant resources, which were used, among other things, for the investment of tram and metro lines, vehicle procurement, and the investment of integrated passenger information, ticketing and traffic management systems. During the three programming cycles, a total of 168 km of tram and metro lines were built or refurbished. The largest change in the modal split (change of travel mode) took place in Budapest. During the renovations, urban transport achieved a leap in quality, and the possibility of

obstacle course transport became more and more extensive. Moreover, a complex thinking has started, which strengthens the building of projects on each other.

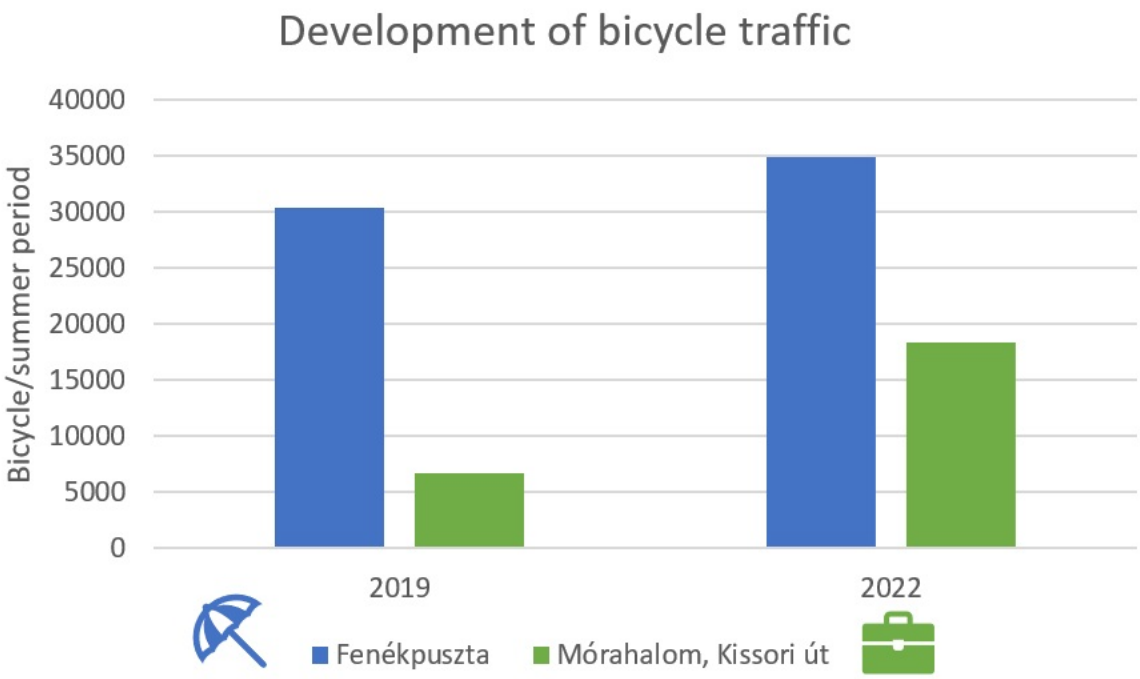
The figure below shows a summary of urban and suburban investments realized from EU funds in the period 2004-2023:



6. Figure Urban and suburban investments realized from EU funds in the period 2004-2023 (Főmterv)

Cycling development provided with opportunities and resources in all three programming periods, but cycling has only recently begun to be seen as a real transport alternative rather than a tourism-enhancing sector. Accordingly, it is mainly in the projects of the last two programming periods that we find major projects for the construction of cycle paths. Since our accession to the EU, more than 2000 km of bicycle traffic facilities have been handed over throughout the country thanks to EU grants, including in border areas financed by INTERREG funds.

The success of cycling investments is well illustrated by the increase in cycling traffic. The figure below shows the increase in the volume of traffic of a professional bicycle investment (Mórahalom) financed from EU funds and a tourist bicycle investment (Fenékpuszta) financed from domestic sources.



7. Figure Investment of bicycle traffic in 2019-2022, Mórahalom és Fenékpuszta

The investment of **inland waterway transport** in all three programming periods was basically concentrated on the ports along the Danube. CEF, IKOP and KÖZOP financed related projects to the greatest extent. Between 2004-2006, two port intermodal connections were developed within the framework of KIOP, and between 2007-2013 KÖZOP 109 and INTERREG IV-A supported six inland waterway transport projects. In the 2014-2020 period, IKOP and GINOP financed seven projects each, TOP two, and ten projects aimed at the investment of water transport were launched within the framework of CEF.

The investment of **air transport** was carried out with EU co-financing exclusively from the CEF resources of the 2014-2020 programming period, which financed 10 projects supporting air transport.

The investment of **ITS** (Intelligent Transportation Systems) was possible within the framework of the ROP in the period 2004-2006. The modernization of the railway traffic control center in Pécs and the introduction of a dynamic traffic management system for public transport in Szolnok were carried out at that time. In the period 2007-2013, Volán companies aimed to increase the level of service by GPS-based real-time tracking of buses, the investment of ticket sales and booking infrastructure, and the integration of individual infrastructures. For the same purpose, in 2009, local or intercity public transport service providers implemented improvements in the field of traffic control and passenger information, and compliance with the Volán companies and GYSEV Transmodel standards also took place. In the 2014-2020 period, the ITS investments on the TEN-T network primarily affected the railway area. In this cycle, several national-scale ITS investments were implemented, such as the FUTÁR (Traffic Management and Passenger Information System) and the EKAER (Electronic Road Goods Traffic Control System).

Summarising the above, it can be concluded that the investment of transport in Hungary over the past twenty years has been dominated by EU-funded investments, and the results of these are not negligible. Thanks to the road improvements, the 655 km long motorway network was extended by

1831.5 km from 2004 to 2022, thus improving significantly the accessibility of the national borders by motorway and making the nearest motorway accessible within 60 minutes in most parts of the country. The most significant result of the railway improvements is the improvement in road safety: the number of accidents has been reduced by two thirds by 2022 compared to 2006. Improving passenger comfort is a major factor in making public transport more attractive, thanks to tram and metro line improvements, vehicle procurement, integrated passenger information, ticketing and traffic management systems. And cycle path projects have encouraged cycling, which is a key driver of sustainability.