Interreg Europe

Co-funded by the European Union

CycleRight

TERRITORIAL ANALYSIS ON CYCLING POLICY

WEST TRANSDANUBIA, HUNGARY | LP WEST PANNON NONPROFIT LTD.

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westpannon team

The CycleRight project is implemented within the frame of the INTERREG EUROPE Programme, with the support of the European Regional Development Fund, co-financed by the European Union and the Hungarian State.

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1. About the CycleRight project

The **CycleRight** project, implemented in the frame of the Interreg Europe Programme, **aims to improve cycling policies in the participating partner regions through mutual exchange of experience**. Accordingly, the project activities will **focus on identifying good practices in cycling, which will be the subject of study visits** to be organized by the project partners and the **integration of the knowledge gained into their targeted policy instruments** and day-to-day organisational operations.

Project activities will be implemented in line with the following framework:

1. urban cycling,
2. regional networks,
3. multimodality.

As a **horizontal approach**, the identified practices and initiatives will also be examined and evaluated in terms of their profile in relation to:

1. climate resiliency,
2. social inclusion / accessibility,
3. safety.

This territorial analysis will serve as **a basis for the knowledge exchange process**, identifying areas where systemic gaps and weaknesses can be identified, which can be addressed by the practices in the partner regions, and presenting initiatives in our region that can provide solutions and inspiration for partner regions.

Accordingly, the document presents the following main topics:

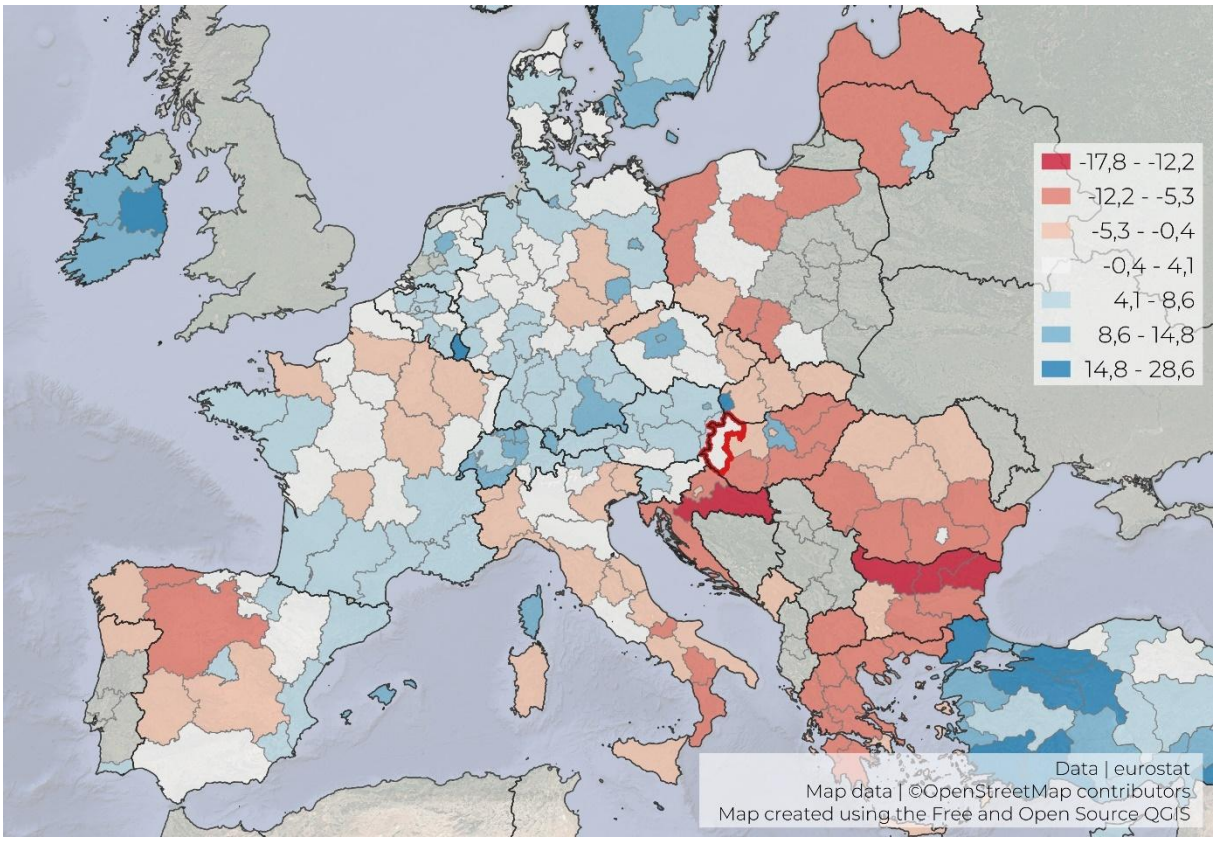
1. the **regional background** & current state of cycling,
2. **strategic background**,
3. overview of the **results reached** during the 2014–2020 programming period,
4. overview the **current plans** and results within the 2021–2027 period,
5. **SWOT analysis** on the project topics,
6. and based on these, **showcasing potential good practices** that would be shared during the study visits and/or in the Cycling Planning Guide that will be developed by the European Cyclists' Federation (ECF) throughout the project.

2. Regional background and current situation of cycling

Socio-economic background

West Transdanubia, as a NUTS 2 planning/statistical region, is located at the western borders of Hungary, stretching north-south, bordering Slovakia, Austria, Slovenia and Croatia. The region includes three counties, Győr-Moson-Sopron, Vas and Zala counties, in a north-south direction.

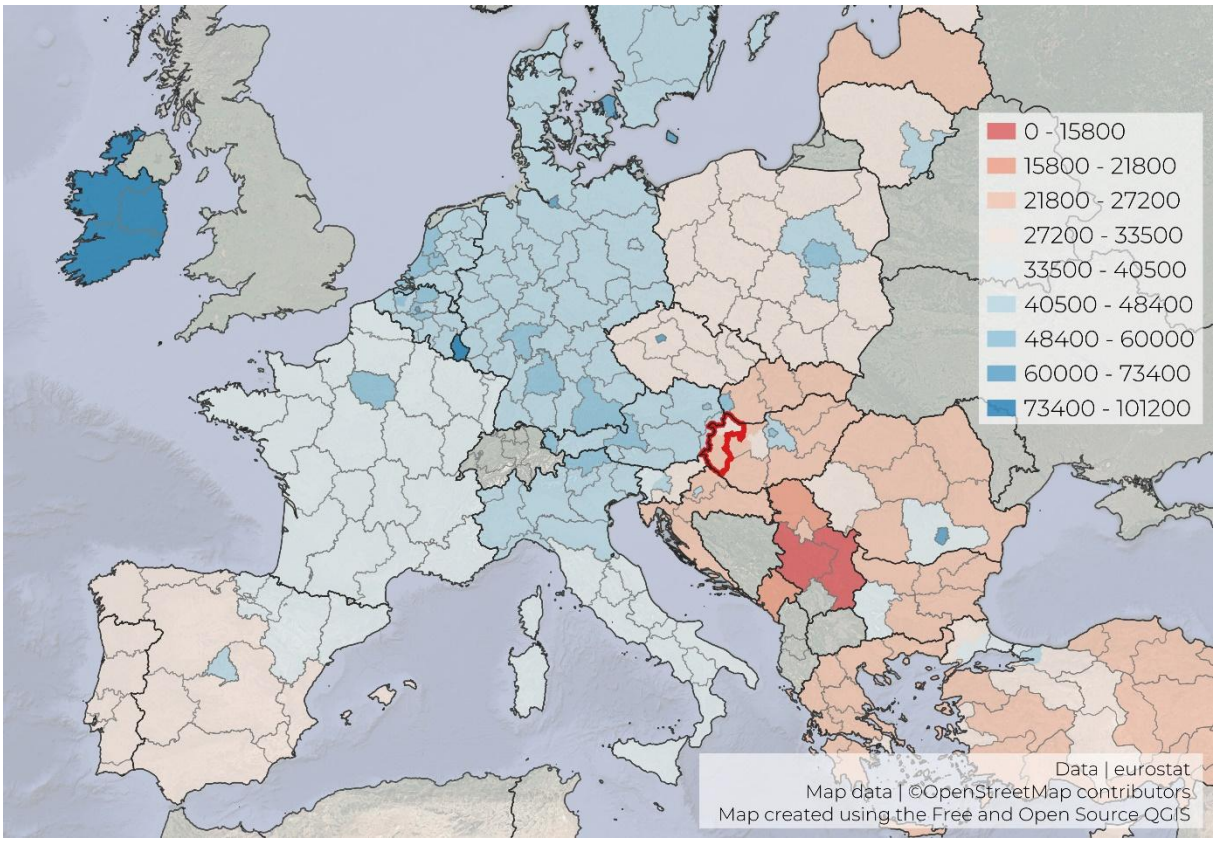
The region has a **population** of 982 924, which represents 10.2% of the total population of Hungary. Looking at time series data, it is clearly **one of the more favourable regions**, with a virtually stagnant situation over the last ten years *(Map 1)*. Looking behind this figure, the main reason for this phenomenon is the positive migration trend that compensates the natural decrease linked to the aging population: the migration balance per thousand inhabitants for the last three years is 7.53, while the natural increase/decrease rate is -5.57 over the same period.



Map 1: Population change by NUTS 2 regions between 2013 and 2023 [%]
(Source: own ed. based on Eurostat data)

The economic situation of the region is also characterised by a slight positive divergence from the national situation: GDP per capita based on purchasing power parity is 16% higher than the national average, excluding Budapest, which is mainly due to the above-average value associated with Győr-Moson-Sopron County *(Map 2)*. Indirectly, this is caused by the favourable geographical location of the county, as it is situated on the Vienna–

Bratislava–Budapest economic axis, while the other counties in the region are practically on the periphery of this axis, transversally connected to it.



Map 2: GDP per capita based on purchasing power parity by NUTS 3 regions in 2022 (Source: own ed. based on Eurostat data)

These are of course not independent processes, and it is worth mentioning the **more favourable economic conditions in neighbouring countries, which causes a significant drain effect on the labour market**. This is well illustrated by the number of Hungarian nationals taking up employment in Austria, which – apart from 2020, a year affected by the COVID-19 epidemic and the related restrictive measures – shows a steady increase *(Figure 1)*. This process has, of course, a number of negative consequences, including labour shortages, but it also implies higher purchasing power and is not negligible in terms of strengthening cross-border tourism and developing transport links.

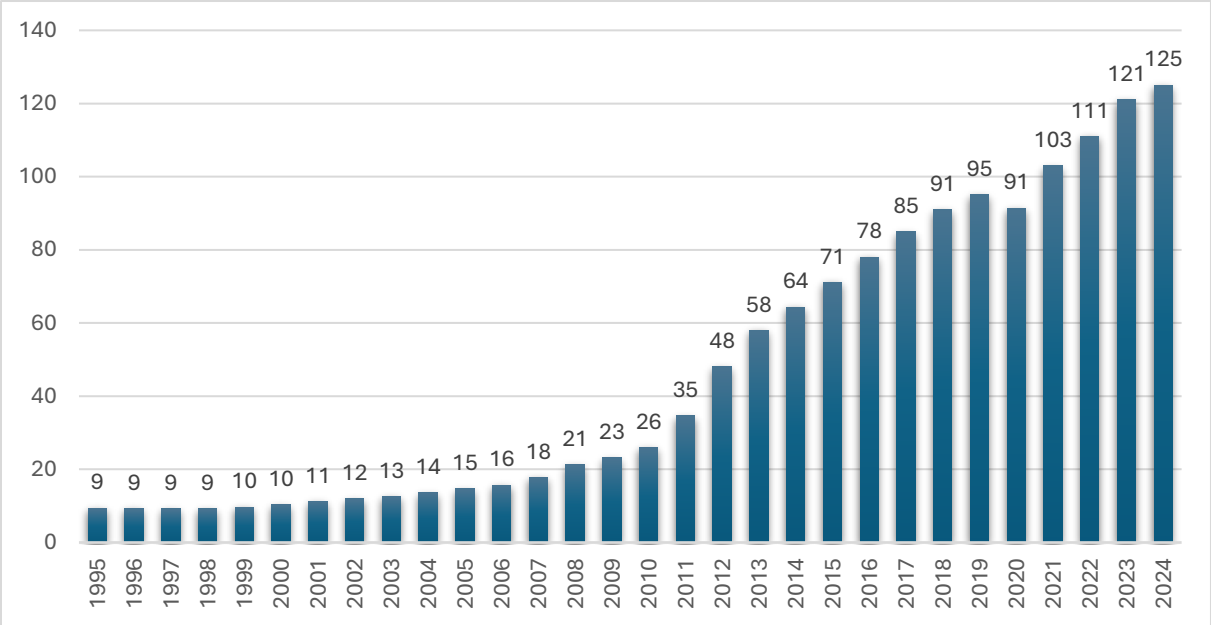
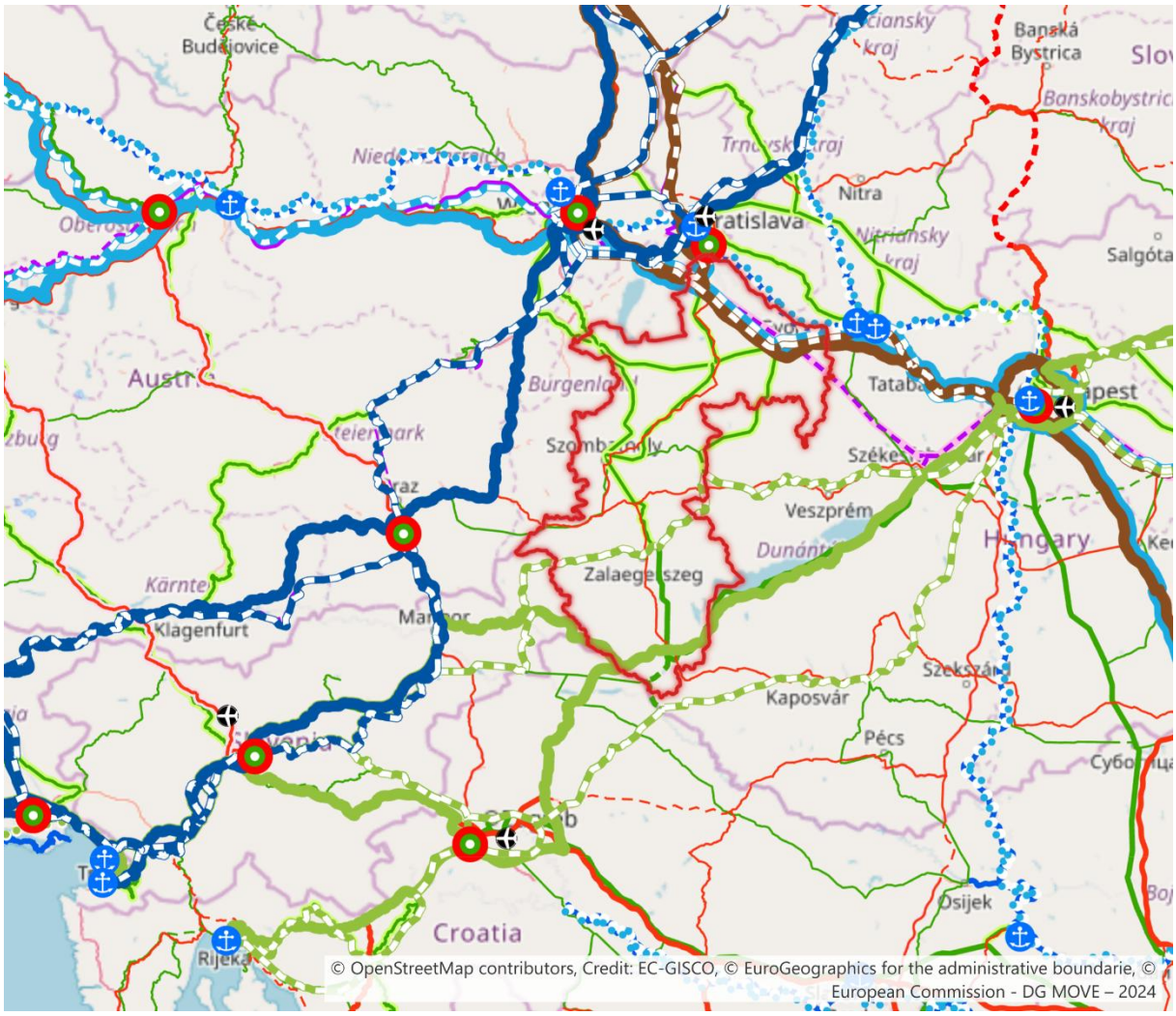


Figure 1: Number of employees of Hungarian nationality in Austria [thousand ppl] (Source: own ed. based on Austrian social security data | socialversicherung.at)

Regional transport links

The macro-regional transport connections of West Transdanubia are characterised by its location in the embrace of three *Trans-European Transport Network (TEN-T)* corridors, which creates a favourable logistical and transport situation *(Map 3),* with a good connectivity of the enclosed areas, which is also among the development priorities (e.g. M86/E65 and M87 expressways). The corridors mentioned are:

- The **Orient/East–Med Corridor** passes through Győr-Moson-Sopron County in the north, connecting Central Europe with the ports of the ports of the North, Baltic, Black and Mediterranean Seas.
- The **Mediterranean Corridor**, the main east-west axis of the TEN-T network south from the Alps, runs along the southern border of Zala county.
- On the other side of the border, the **Baltic–Adriatic Corridor** connects the ports of the two seas and the cities concerned, including Vienna, Graz, Klagenfurt, Villach and Udine.



Map 3: Trans-European Transport Network (TEN-T) elements in the macro-region around the West Transdanubia region (Source: TENtec Map Viewers)

Cycling in Hungary

To present the current situation of cycling in Hungary, the results of the representative survey *„This is how Hungary cycles in 2022"* are presented in this chapter.[1]

The survey was previously conducted in 2018 and 2020, since then there has been no significant increase in the proportion of people cycling, with two-thirds of the adult population still cycling and 16% of the population using bicycle as their primary mode of transport *(Figure 2)*.

[1] A representative survey of 3,000 adults in Hungary, led by the Hungarian Cycling Club and carried out by Medián with the support of the State Secretary for an Active Hungary

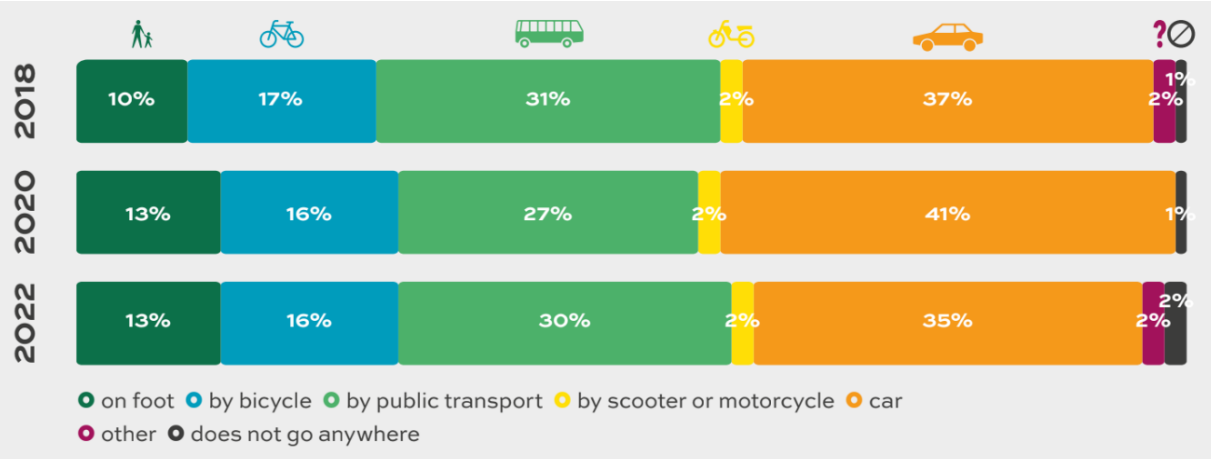
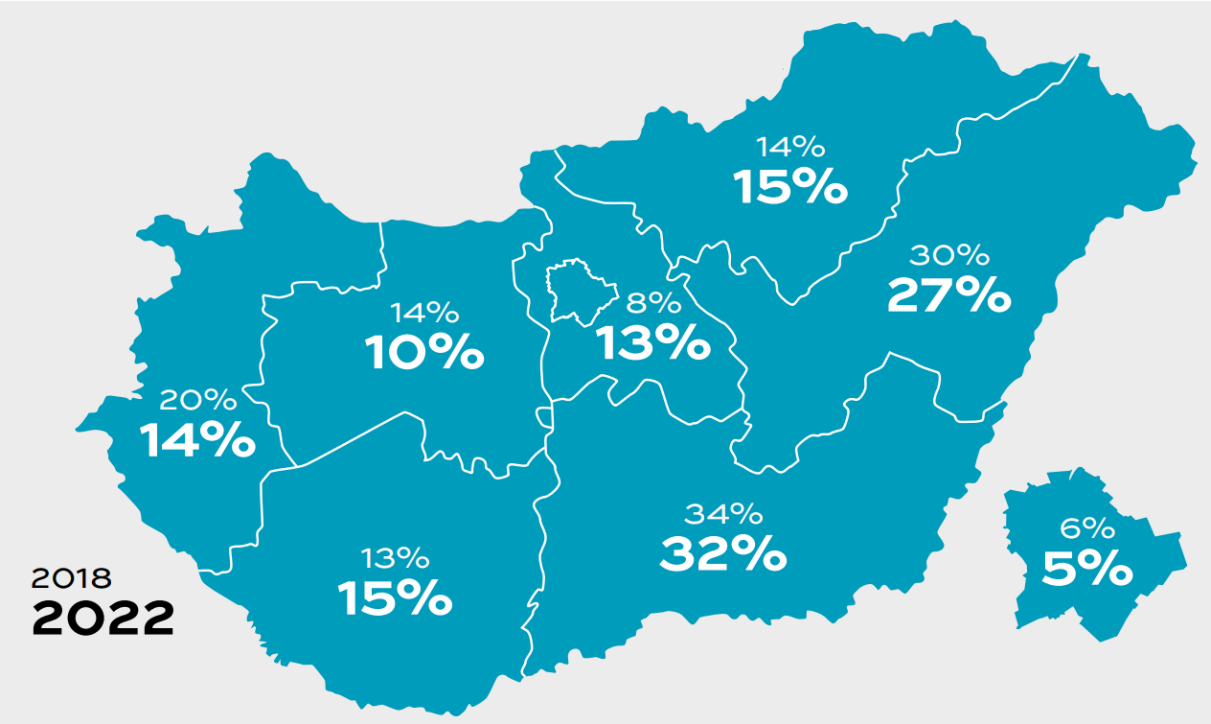


Figure 2: Percentage distribution of the answers on the question „ What is your primary means of transportation in everyday life?" (Source: national representative survey „This is how Hungary cycles in 2022")

At the regional level, 14% of respondents in West Transdanubia consider cycling as their primary means of transport, while the overall proportion is significantly higher in the lowland regions of Hungary with more favourable topographical conditions *(Map 4)*. The results of the surveys show that cycling is still much more common in smaller settlements than in cities, and that **one of the main barriers to the further expansion of cycling is the lack of a sense of safety**.



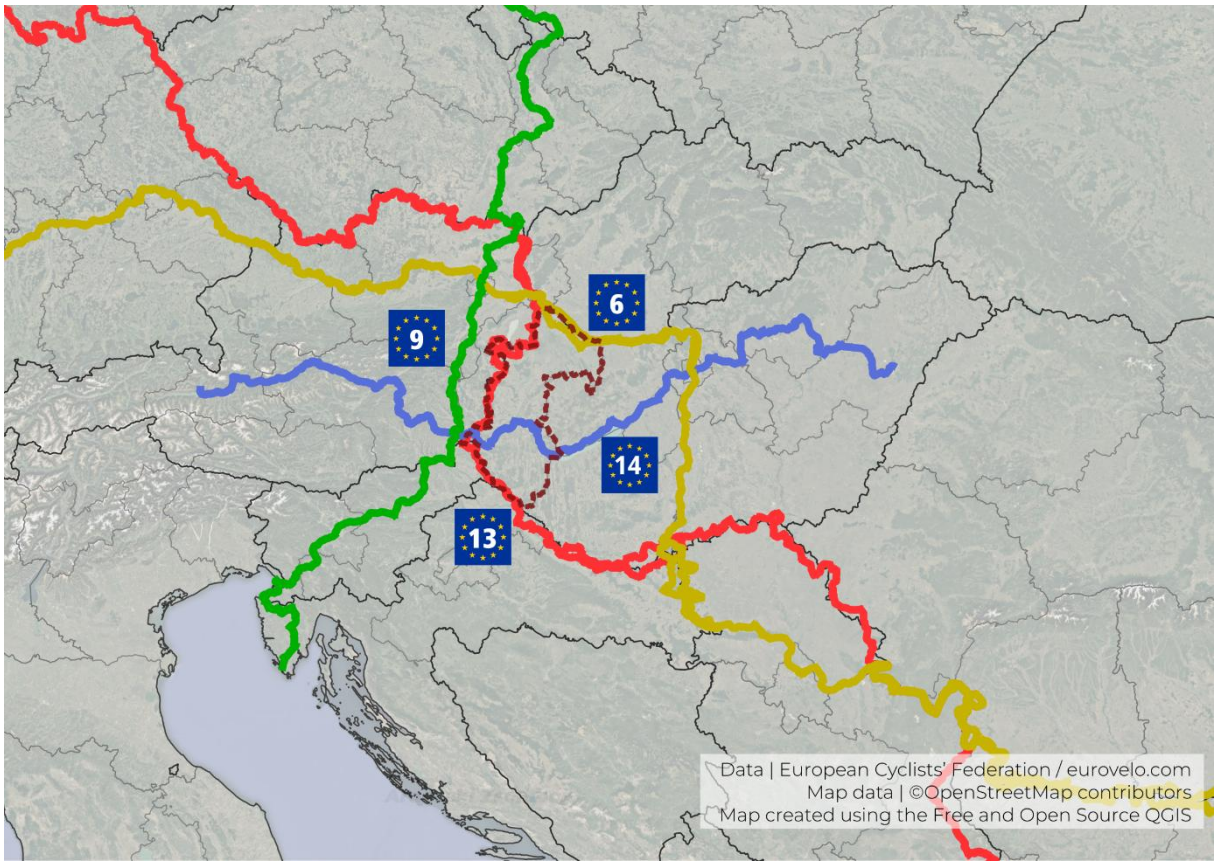
Map 4: Proportion of people travelling primarily by bicycle per region (Source: national representative survey „This is how Hungary cycles in 2022")

Cycling network in West Transdanubia

West Transdanubia is directly connected to three EuroVelo routes, a network of long-distance cycle routes crossing the continent *(Map 5)*:

- The **EuroVelo 6 Atlantic – Black Sea** route runs along the northern border of the region, crossing the 'Szigetköz', one of the main tourist attractions of the region.
- The **EuroVelo 13 Iron Curtain Trail** runs north-south along the western border, crossing neighbouring countries at several points.
- The **EuroVelo 14 Waters of Central Europe** route runs west-east through West Transdanubia, linking the 'Őrség' region and Lake Balaton.

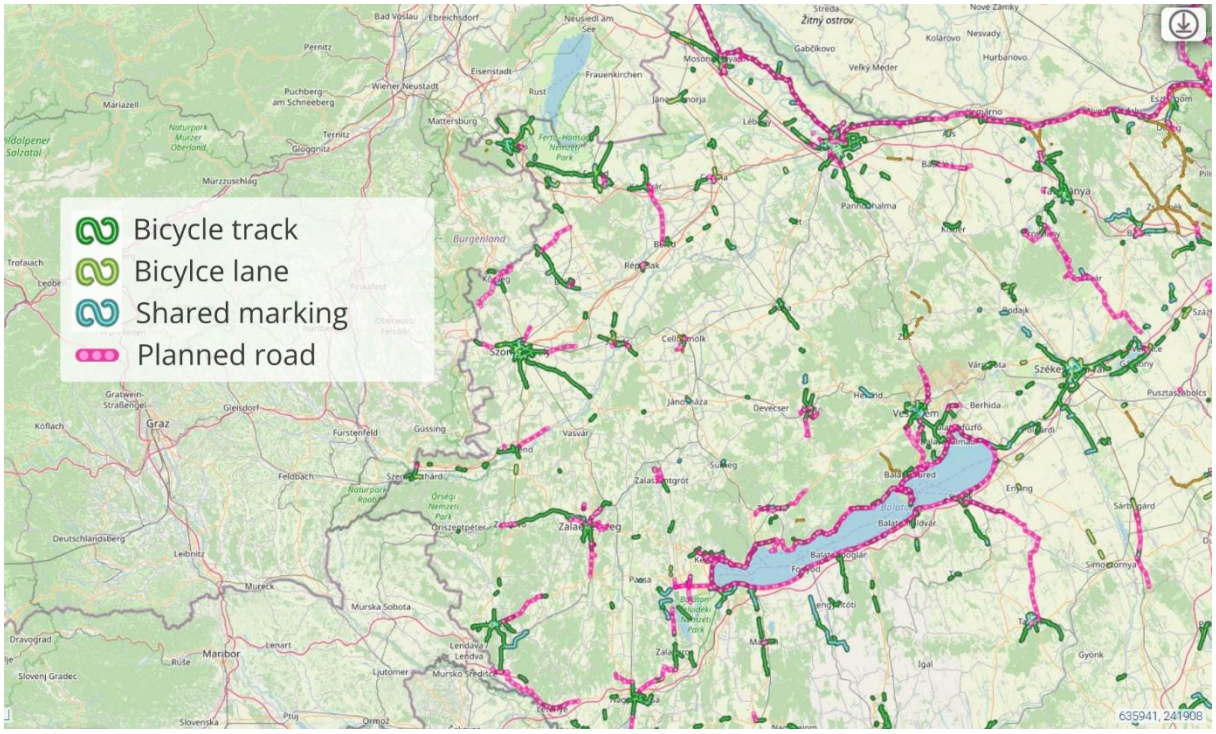
Although it does not directly cross West Transdanubia, for the development of cross-border relations, it is important to mention the **EuroVelo 9 Baltic–Adriatic** route, which runs north-south at the other side of the border.



Map 5: EuroVelo routes around the West Transdanubia region
(Source: own ed. based on eurovelo.com data)

Map 6 shows the cycling infrastructure in the region based on the data of the *Hungarian Cycle Route Register*. It can be clearly seen that a **significant part of the dedicated infrastructure is concentrated in larger cities and their conurbations**. The system also indicates routes under planning, i.e. the improvements planned in the framework of applications submitted in the current calls for proposals; this shows that the extension and further development of agglomeration connections is expected in the next period.

For the sake of clarity, the map does not show the signposted cycling routes, but it is worth noting that **there are a number of good quality trails in the area on low-traffic roads** (e.g. Őrség routes, Vasi Hegyhát – Rábamente).

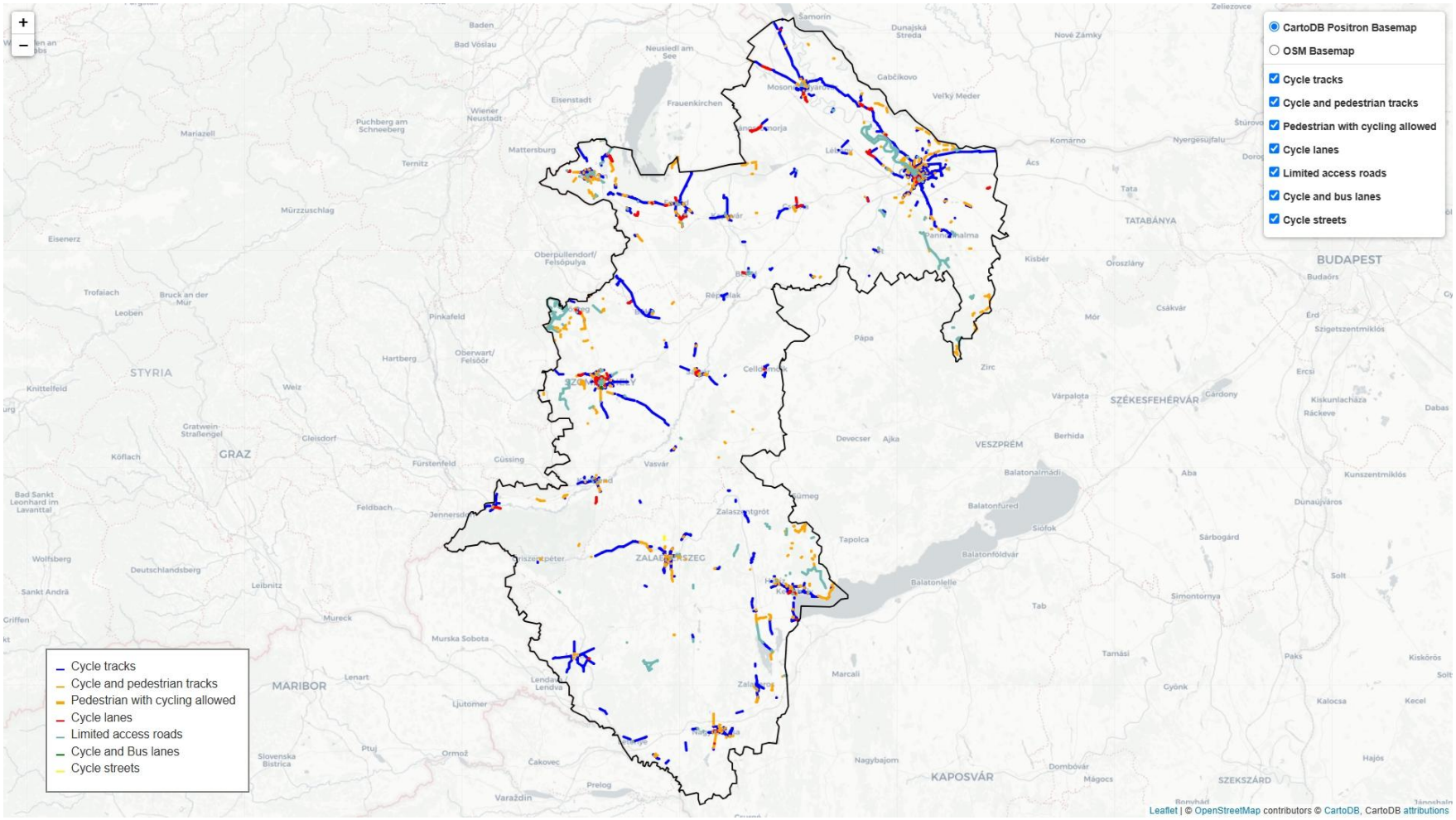


Map 6: Cycling infrastructure network in the West Transdanubia region
(Source: Hungarian Cycling Route Register)

In order to quantify the cycling infrastructure, the *ECF European Cyclists' Federation* has developed a limited version of their online application ***Cycling Infrastructure Tracker***, based on *OpenStreetMap* data, which is available at the following link, focusing on the territorial units represented by the partner organisations participating in the CycleRight project:

https://european-cyclists-federation.github.io/CycleRight/

Map 7 and *Table 1* on the following pages show the data underlying this interface. The comparison of the values in the table does not provide an added value, due to the differences in the territorial levels represented, as cities, counties and regions are involved in the project, but the system gives a good overview of the situation in the participating areas.



Map 7: Cycling infrastructure network in the West Transdanubia region
(Source: [CycleRight Cycling Infrastructure Tracker])

The CycleRight project is implemented within the frame of the INTERREG EUROPE Programme, with the support of the European Regional Development Fund, co-financed by the European Union and the Hungarian State.

	Length in km												Ratio in %		
Area	Main roads	Local roads	Cycle tracks	Cycle lanes	Cycle and pedestrian tracks	Specific service roads	Bus and cycle lanes	Cycle streets	Segregated cycle infrastructure	Total cycle infrastructure	Local one-way roads w/o contraflow cycling	Local one-way roads with contraflow cycling	Segregated cycle infrastructure to main roads	Total cycle infrastructure to all roads	Contra flow cycling to one-way roads
Blekinge län	1 896,38	3 239,86	66,55	4,94	336,41	34,48	-	-	407,91	442,38	19,42	0,11	21,5%	8,6%	0,5%
Bologna	3 725,61	5 438,91	324,49	70,73	374,85	101,86	6,31	7,34	770,08	885,57	438,99	9,60	20,7%	9,7%	2,1%
Deinze	135,06	431,04	61,42	41,83	9,44	16,26	-	19,52	112,69	148,47	6,32	7,35	83,4%	26,2%	53,8%
Latvija	24 806,90	47 288,40	330,26	7,48	520,59	194,10	-	0,66	858,33	1 053,09	213,36	4,32	3,5%	1,5%	2,0%
Livorno	1 198,02	1 495,24	66,26	7,21	28,65	81,17	0,35	5,62	102,11	189,26	296,65	4,20	8,5%	7,0%	1,4%
Nyugat-Dunántúl	**5 909,37**	**6 058,66**	**540,53**	**37,01**	**103,74**	**186,85**	**0,03**	**0,99**	**681,28**	**869,16**	**149,02**	**7,37**	**11,5%**	**7,3%**	**4,7%**
Podgorica	119,03	456,74	12,97	-	5,77	2,58	-	-	18,73	21,32	11,80	-	15,7%	3,7%	0,0%
Sud-Vest Oltenia	10 246,65	13 586,91	33,97	21,16	14,88	56,05	-	-	70,02	126,06	111,74	-	0,7%	0,5%	0,0%
Ungheni	20,29	93,18	-	0,74	-	-	-	-	0,74	0,74	1,27	-	3,7%	0,7%	0,0%
Podkarpackie	8 836,84	13 416,02	443,12	5,18	227,17	463,40	-	2,54	675,47	1 141,41	180,55	0,50	7,6%	5,1%	0,3%

Table 1: Cycling infrastructure network in the areas taking part in the CycleRight project[2]
(Source: CycleRight Cycling Infrastructure Tracker)

[2] The methodology of the system is available at the following link: https://european-cyclists-federation.github.io/Documents/Methodology.pdf, furthermore, the following article supports its deeper understanding: https://wiki.openstreetmap.org/wiki/Hungary/F%C5%91%C3%BAt

Multimodality

The more than 150 years old, Austrian–Hungarian co-owned **Győr-Sopron-Ebenfurth Railway Corp. (GySEV) is responsible for the regional passenger rail transport in West Transdanubia**. Almost 100% of the lines in the railway company's network are electrified, with the exception of the Kőszeg–Szombathely line 18, which is also planned to be electrified in the near future. **In recent years, more than 1 500 covered and open cycle storage facilities have been installed at 39 stations**. This has resulted in a dynamic increase in the number of bicycle tickets sold. **Low-floor FLIRT trainsets, which can carry six or four bicycles at a time**, are also available for the comfort of cyclists. To ensure that everyone wishing to travel by bicycle can be accommodated comfortably, they must register their intention using an online interface. In addition to the infrastructure, there are also attractive ticket offers for cyclists. **Cyclists can buy low-priced tickets for cycling tours** to Lake Balaton, Lake Fertő, Lake Tisza and other one-day tours in the region.

The other rail operator in the region is the **MÁV-START Zrt. Their long-term strategic goals include ensuring comfortable bicycle transport on all trains, building B+R/P+R parking facilities, expanding bicycle storage capacity and making their stations accessible.** From a cyclist's point of view, there are still a number of shortcomings and bottlenecks, both in terms of infrastructure and services, but there is a positive trend, such as the expansion of the bicycle capacity of KISS trains, which can carry 12 bicycles in the standard 600-seat configuration, and will be expanded to accommodate 36 bicycles.[3]

The provision of scheduled intercity and long-distance public bus transport services at national level is the responsibility of Volánbusz Zrt. Bicycles can only be transported during the summer period on certain long-distance services, exclusively in the eastern part of the country, between Budapest, Gyöngyös, Eger and certain tourist destinations in the Mátra, Bükk, Aggtelek and Lake Tisza. The bicycle racks mounted on the back of the buses can carry three bicycles. On the other hand, **bicycle storage capacities have been expanded with a capacity of 3 112 bicycles at 97 bus stations across the country**. In addition, bicycle storage facilities have been built in 58 large technical facilities, with a total of 958 storage units to support workers' commuting to work by bicycle.[4] It is worth mentioning that **private-operated storage facilities are now available in the vicinity of some bus stations in Hungary**. The GyőrBox system *(Photo 1)* is a good example of such public-private cooperation.

[3] https://www.mavcsoport.hu/mav-szemelyszallitas/belfoldi-utazas/boviti-kerekparos-kapacitasat-mav-start-kiss-motorvonatokon
[4] https://www.volanbusz.hu/hu/volanbusz/sajtokozlemenyek/hir/36691-a_mav_volan_csoport_fenntarthatosagi_celkituzesei_a_fold_megovasa_erdekeben

Photo 1: Bicycle storage at Győr bus station
(Source: https://www.facebook.com/gyorbox)

The Volánbusz Zrt. is also responsible for the operation of local urban services, with the exception of the city of Szombathely, where, since 2022, this task has been carried out by Blaguss Agora Hungary Ltd. In their case, **bicycles may only be transported on suitable buses, which the operator indicates on the bus with a pictogram.** The buses where bicycle transport is available, are indicated separately in the timetable. **It is worth mentioning their online trip planner/application can be used to plan a combined trip by bike and bus: https://szombathely.utas.hu/.**

Funding opportunities

- **Territorial and Settlement Development Operational Programme Plus (TSDOP Plus):** a country-wide territorial operational programme for Hungary for the programming period 2021–2027, which aims to improve territorial cohesion at EU level and within the country, and to this end to improve the position of regions and counties, including sustainable transport development measures and cycling-friendly developments.
- **Integrated Transport Development Operational Programme Plus (ITOP Plus):** it targets investments in rail, road, cycling and ports in Hungary, including TEN-T rail and regional intermodal transport development, EuroVelo cycling route development and transport safety investments.
- **Common Agricultural Policy 2023–2027 (CAP 2023–2027):** Pillar 2 of the CAP, which aims to improve the economy and living conditions in rural areas, includes calls for proposals with the possibility to develop cycle lanes and sharrows in the case of the

construction of solid paved roads. However, there is no possibility to create segregated cycle paths separated from road traffic.

- **European Territorial Cooperation 2021–2027 (ETC):** the ETC is a cohesion policy objective that aims to tackle cross-border problems and to combine the potential of different territories. As knowledge and experience exchange-based programmes, they support mainly "soft" activities such as capacity building of service providers, route identification, but may also fund small-scale equipment purchases, signposting, and cross-border infrastructure development in well-justified cases. The following programmes are relevant for the West Transdanubian region:
    - Interreg VI-A Slovakia–Hungary Cooperation Programme,
    - Interreg VI-A Austria– Hungary Cooperation Programme,
    - Interreg VI-A Slovenia– Hungary Cooperation Programme,
    - Interreg VI-A Hungary–Croatia Cooperation Programme,
    - Interreg Central Europe Programme,
    - Interreg Danube Region Programme,
    - Interreg Europe.
- **Hungarian Villages Programme:** funded from the central budget, the programme aims to alleviate the disadvantages of settlements with a population of less than 5 000 inhabitants. In its framework, the supported settlements have the possibility to build or renovate roads, bridges, pavements, cycle paths and other facilities.

2. Strategic and development background

National Development 2030 – National Development and Territorial Development Concept

The **National Development and Spatial Development Concept (NDPC) sets out a long-term vision, development policy objectives and principles,** based on the country's social, economic, sectoral and territorial development needs, until 2030. Its development policy tasks include a focus on **creating sustainable mobility conditions**, rationalising transport and ensuring its sustainability, developing environmentally friendly alternative transport options, and **climate-friendly, low-carbon, competitive and safe urban public transport, with a focus on pedestrian and cycling transport.**

National Spatial Plan

The National Spatial Plan (NSP) defines the conditions of land use and the coordinated spatial arrangement of technical infrastructure networks for efficient territorial and economic development.

It designates the national core network of cycle routes, which includes the EuroVelo and national cycle routes linked to tourist destinations of national importance.

Territorial and Settlement Development Operational Programme Plus 2021–2027 (TSDOP Plus)

The Territorial and Settlement Development Operational Programme Plus is Hungary's territorial operational programme for the period of 2021–2027, which covers the entire

territory of the country, supporting the development of both the less developed regions (all counties) and Budapest, which is considered a more developed region. It has a special focus on the least developed regions and lagging areas.

Counties and municipalities can use this instrument to implement sustainable transport and cycling-friendly developments. The direct objective of the CycleRight project is to improve the quality, efficiency and use of resources of the developments implemented under this policy instrument.

National Cycling Strategy 2030

The **National Cycling Strategy 2030** has been developed under the coordination of the *Centre for Development of Active and Ecotourism*, and describes the current situation of cycling in four main thematic areas, as well as sets goals and defines measures:

- everyday cycling,
- cycling tourism,
- safety,
- horizontal measures.

County Spatial Development Concepts and Programmes

In Hungary, counties and cities with county rights are key players in spatial development, whose planning documents are essential for the mobilisation of development funds.

The spatial development concept defines the long-term development directions and objectives of the county, and aims to coordinate the economic, social and environmental development of the region, taking into account local conditions and needs.

The spatial development programme is a medium-term strategic document based on the concept, which sets out specific objectives and measures.

Integrated Territorial Programmes

The **Integrated Territorial Programmes (ITPs)** are the key instruments of the 2021–2027 EU period in Hungary, and they **govern the use of the county-level resources of the Territorial and Settlement Development Operational Programme Plus**. In practice, the programmes **support the implementation of the above-mentioned development strategies** by applying a system of resource use and project selection that matches and reflects the problems identified.

Spatial Plans for Counties

The **county-level spatial plan** defines the structural plan of the county, as well as the county's spatial zones, land-use and the rules governing them. Basically, it is a **spatial detailing of the technical infrastructure set out in the National Spatial Plan, with the addition of infrastructure elements of regional importance,** as well as with environmental, natural and cultural values, to the national elements.

Cycling Network Master Plans for Counties

The aim of the plans is to assess the situation of cycling in the county and its surroundings: the existing network and its condition, including the links with neighbouring regions, cycling traffic, accessibility, obstacles to cycling, missing elements of the network **and, based on these, to propose improvements to be implemented**.

The preparation of the Cycling Network Master Plans was made possible under the relevant call of the *Territorial and Settlement Development Operational Programme*; the system is in practice an extension to the county level of the previously implemented cycle network planning process carried out at the municipal level, **which solution became a declared good practice by the Interreg Europe programme. The specificity of the process is that the plans must undergo an evaluation by a *Professional Committee*, organised by the *Active Mobility Department of the Prime Minister's Office* before finalisation.**

Settlement Plans

In the past, the *settlement development concept*, the *spatial development plan* and the *integrated settlement development strategy* together formed the long-term and medium-term strategic planning background of a settlement. By the *Government Decree No 419/2021 (VII. 15.)*, the regulatory options that allowed these to be established have been determined, but these elements have not been abolished but are incorporated into the new standards.

Local municipalities are now required to draw up a *settlement development plan* and a *spatial plan* together as a *settlement plan*. It is defined based on the previous *settlement development concept* and *integrated settlement development strategy*, taking into account the geographical characteristics and demography of the settlement, its specific historical features and its role in the settlement network. **The settlement plan shall set out the short-, medium- and long-term objectives, tasks, development actions and measures which the settlement would implement in order to ensure its planned, sustainable and economic development and operation.**

Sustainable Urban Development Strategies and the TSDOP Plus Urban Development Programme Plans

The **Sustainable Urban Development Strategy (SDS)** is a document that takes into account the expectations of the European Union, sets out the strategic development orientations of a city and is **a condition for the use of sustainable urban development funds for 2021–2027**, including for cycling-friendly developments. The SDS also aims to provide a basis for further strategic documents to be prepared by the city in the future. The related **Urban Development Programme Plan is the document directly defining the use of TSDOP Plus funds.**

Sustainable Urban Mobility Plan (SUMP)

Sustainable Urban Mobility Plans aim to provide coordinated solutions to transport challenges while supporting the achievement of climate protection and energy efficiency. In Hungary, the relevant call of the *TSDOP Plus* provides the opportunity to prepare and review SUMPs. For this type of project activity, it is mandatory to involve the *KTI Hungarian Institute of Transport Science and Logistics* as a consortium partner, which provides technical support and evaluation.

Cycling Network Plans

The aim of the cycling network plans at the municipal level is the same as the cycling network master plans for counties, i.e. **to assess the situation of cycling in the municipality and its surroundings, but at least in the designated intervention area:** bicycle traffic, cyclability, hindering factors, and based on these, **to propose improvements** in order to increase the share of bicycle traffic and to enable more people to choose bicycles as their everyday means of transport.

In the framework of the relevant calls of the *TSDOP Plus*, municipalities applying for cycle-friendly developments can only be eligible for funding if their development is in line with the corresponding *Cycling Network Plan*, and, if available, the *County Cycling Network Master Plan*. **The plans must undergo a two-round evaluation and review by the *Professional Committee* organised by the *Active Mobility Department of the Prime Minister's Office* before finalisation.**

Hungarian Road Engineering Standards

Unlike the previous documents, this is not a strategy or programme document for spatial and urban development, but to understand the development background, it is necessary to refer to the **Hungarian Road Engineering Standards** and its specific chapter on the ***Design of Cyclable Public Roads*** (e-UT 03.04.13), which **provides technical guidance and expectations for the design of cycle-friendly facilities.** Applicants under TSDOP Plus are required to take the requirements into account, and in case of non-compliance, their application will be rejected.

3. Main achievements of the 2014–2020 programming period

Between 2014 and 2020, the main pillar for the development of cycling infrastructure was the ***Territorial and Settlement Development Operational Programme*** **(Calls TSDOP-3.1.1. Sustainable Transport Development and TSDOP-6.4.1. Sustainable Urban Transport Development)**, which included the development of cycling networks within municipalities, between municipalities, between municipal centres and residential areas/workplaces outside municipalities, the installation of community bike rental systems, as well as traffic calming, road safety and accessibility measures. The total budget for the two priorities was nearly HUF 126 billion over the seven-year period, which equals to around €315 million *(Figure 3)*.

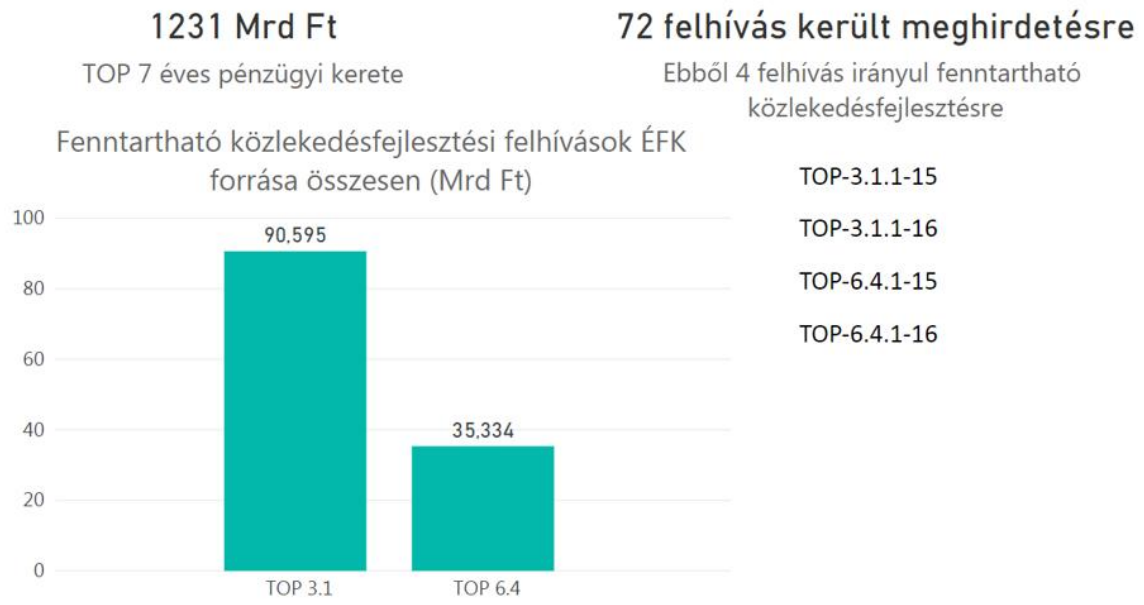


Figure 3: Financial resources available in the calls for proposals for sustainable transport funding (Source: National Development Centre)

Figure 4 below shows the targets set for the HUF 115 billion (around €287,5 million) committed so far, including the length of cycling facilities (km), the number of cyclist-friendly municipalities, the number of newly created traffic calm zones and the number of municipalities implementing road safety improvements.

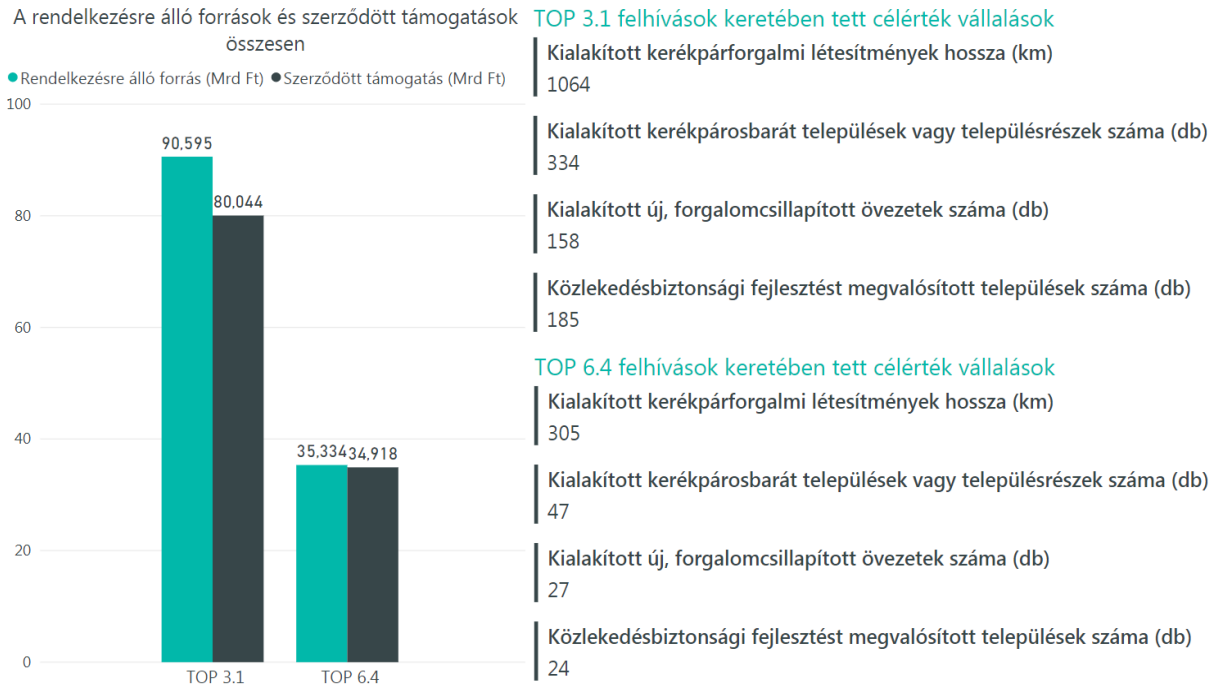


Figure 4: Sustainable transport funding and contracted amounts with target indicators (Source: National Development Centre)

HUF 12.79 billion (around €40 million) is earmarked for the municipalities of West Transdanubia, which represents 11.13% of the total contracted amount. *Figure 5* shows the

contracted amount and the indicators described above, broken down by counties and by cities with county rights.

As an indirect form of cycling-related development, approximately HUF 45-50 billion (€110 million) has been spent in Hungary on the development of tourism infrastructure and HUF 2.4 billion (€6 million) on the development of services. But infrastructure development projects can of course also include service development.

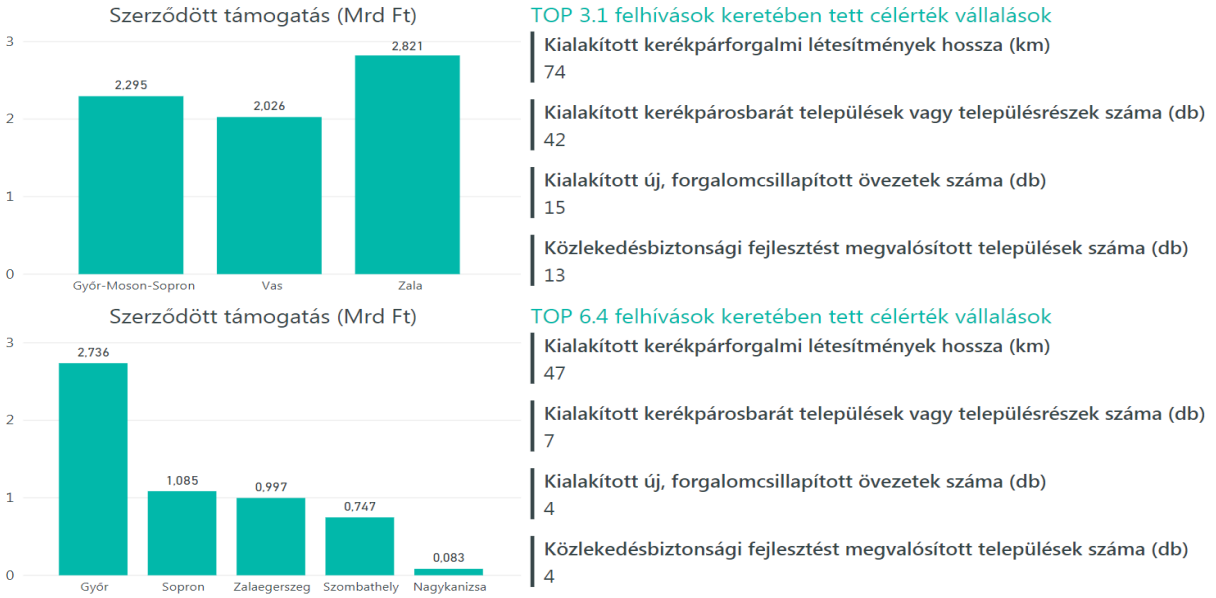


Figure 5: Sustainable transport funding and contracted amounts by counties and cities with county rights in the region (Source: National Development Centre)

4. Plans for the 2021–2027 programming period, achievements and experiences so far

The main development tool for Hungary in the 2021–2027 period – as a continuation of the previous TSDOP – is the ***Territorial and Settlement Development Operational Programme Plus***. The calls supporting sustainable transport development listed in the Annual Development Framework (short: ADF) are the following:

Call	ADF (billion HUF)	Announcment date	Geographical restriction
TSDOP_Plus-1.2.1-21 Liveable settlements	278,01 (€695m)	October 2021	Open to all settlements within the counties, except for the urban areas selected in the sustainable urban development call.
TSDOP_Plus-1.3.2-23 Sustainable urban development	199,35 (€498m)	September 2023	Only the urban areas selected in the sustainable urban development tool is eligible to apply.

Table 2: Calls supporting sustainable transport development listed in the Annual Development Framework (Source: National Development Centre)

The calls aim to implement municipal, inter-municipal and peri-urban transport development measures that create and strengthen the conditions for sustainable transport, contribute to climate change mitigation, reduce carbon emissions and create a liveable urban environment.

The complex thematic areas of the call for proposals **TSDOP_Plus-1.2.1-21 "Liveable settlements"** are:

- developing stormwater management infrastructure,
- development of green infrastructure in the municipality,
- economic and community development of municipal-owned buildings,
- **sustainable transport development,**
- rehabilitation of municipal landfills, elimination of illegal landfills, and remediation and development of brownfield sites.

The **TSDOP_Plusz-1.3.2-23 "Sustainable Urban Development"** call has been announced for the 42 cities with sustainable urban development strategies, with similar professional requirements, covering the same activity group, which is complemented by social urban rehabilitation and urban road development.

Within the sustainable transport development activity group, the following **main activities** – that can be carried out on their own – are eligible for funding:

- bicycle-friendly developments (transforming entire towns/areas into bicycle-friendly zones, creating bicycle traffic routes),
- traffic calming activities,
- road safety activities,
- improving accessibility of public transport areas,
- development of a Sustainable Urban Mobility Plan, review of the existing plan,
- improvement of road-based public transport, including the development of transport buildings, traffic lanes, traffic management/passenger information systems, and electronic ticketing systems.

Optional activities, i.e. activities that can only be carried out together with the main activities, include the following activities relevant from a cycling perspective:

- construction and improvement of municipal and public roads and bridges,
- upgrading existing cycling facilities,
- provision and installation of cycle racks, cycle storage facilities and other accessories
- construction and renovation of pedestrian infrastructure within residential areas,
- modification and construction of intersections and crossings,
- creation of cycle parking facilities,
- purchase of road maintenance machines for cycling facilities, purchase of adapters,
- installation of street lighting,
- installation of automatic traffic counters,
- green area construction and renovation works, preservation of existing vegetation,
- bicycle transport on public transport vehicles,
- other works related to eligible activities (e.g.: storm water drainage, construction and renovation of structures, construction/upgrading of level crossings).

The **main professional expectations** have been partly covered in the previous chapters, but to summarise, the following should be highlighted:

- In the case of sustainable transport development, it is mandatory to implement cycling promotional and/or road safety-related awareness-raising activities.
- Act I of 1988 on Road Transport § 8 (1a) "In the planning and development of public roads, it must be ensured that safe traffic conditions are provided for all individuals entitled to use the road." – Beneficiaries must take into account the provisions of the Hungarian Road Engineering Standards.
- Municipalities applying for cycle-friendly developments can only be eligible for funding if their development is in line with the corresponding Cycling Network Plan, and, if available, the County Cycling Network Master Plan.
- In the case of a bicycle-friendly development, the application must include a map overview or route plan. The aim is to ensure embeddedness in the network, continuity, and safe bicycle storage/parking options.
- Plans must undergo a two-round evaluation by the Professional Committee, one for the network plan and a separate one for the engineering and permit level plans.
- Cyclist-friendly development should also require a Road Safety Audit in accordance with Government Decree 133/2022 (IV. 7.) on road infrastructure safety management.
- In the case of railway crossings, if the planned, segregated bicycle facility crosses a railway line, it must be constructed as a continuous, independent facility using the applicable safety measures as required by regulations. Where justified, the installation of a guide barrier that allows passage for bicycles with trailers may also be supported.
- Within municipalities, the construction of a segregated bicycle facility parallel to a road section with an average daily traffic volume of less than 2000 vehicles is not eligible for support.
- In residential areas, pedestrian and cycle paths without separation are eligible only in exceptional cases, e.g. in case of cross-sectional constraints, lack of space.
- If a utility pole or equipment is located along the planned bicycle facility's route, it must always be relocated. The relocation of the utility pole or equipment cannot be avoided by shifting or diverting the route.
- In the case of SUMP preparation and revision, the involvement of the KTI Hungarian Institute of Transport Science and Logistics as a consortium partner is mandatory.

Table 3 below shows the project numbers of the two calls, highlighting the figures for the West Transdanubian region:

Call	Number of projects	Amount
TSDOP_Plus-1.2.1-21 Liveable settlements	1036 (of which West T.: 91)	HUF 240 billion / €600 million (granted) (of which West T.: HUF 22.3 billion / €55.75 million)
TSDOP_Plus-1.3.2-23 Sustainable urban development	2 (West Transdanubia)	HUF 3.01 billion / €7.5 million (contracted) (West Transdanubia)

Table 3: Supported projects and approved funding under the TSDOP_Plus-1.2.1-21 and TSDOP_Plus-1.3.2-23 calls (Source: National Development Centre)

Based on the submitted applications so far, the following **issues and challenges** are the most common:

- Frequent mistake: incorrect selection of facility type.
- Traffic counting: availability of data and the application of an appropriate methodology are often uncertain.
- Technical/permit plans are already available before the preparation of the network plan – this reversed logic pushes the network-based approach into the background.
- Project preparation and procurement are often significantly in delay, leading to:
    - Additional cost increase requests due to the inflationary economic environment, or
    - Continued planning with reduced technical content, raising quality concerns.

5. SWOT analysis

This chapter aims to summarize the state of cycling policy and the West Transdanubia statistical-planning region, focusing on the key thematic areas targeted by the CycleRight project: urban cycling, regional networks, and multimodality. **The basis for the SWOT analysis includes the desk research of the previous chapters, as well as insights from the stakeholder group meeting / expert workshop** held in Szombathely on September 10, 2024. The event brought together a diverse range of participants, from the National Development Centre – as the Managing Authority of the Territorial and Settlement Development Operational Program Plus, which the project activities aim to support – to the county governments, responsible for planning; the regional directorates of Hungarian Public Roads Nonprofit PLC, involved in maintenance and plan approvals; the organization responsible for cycling-related elements of the Hungarian Road Engineering Standards, as well as cycling NGOs and tour guides, representing the perspective of end users.

Overall, it can be said that West Transdanubia is a region with a more favourable socio-economic situation than the rest of the country, which is an ideal region for cycling due to its favourable geographical features, natural and cultural values and extensive cross-border transport connections. In view of this, the national development policy also provides targeted support for cycling-friendly developments, for which the necessary system has been stably established over the past two EU programming periods – through the Territorial and Settlement Development Operational Programme and its continuation – providing strong support to beneficiaries to enable them to implement their planned investments to a high standard: This includes support for network-focused developments (Cycling Network Plans, Network Plan for Counties, SUMP), the introduction of a two-round Professional Committee in the design process and the use of up-to-date Road Engineering Standards.

The issue of cycling and active mobility is also represented at a high political level (State Secretary for Active Hungary), and its strategic background has also been officially adopted (National Cycling Strategy 2030). The developments are supported and initiated by well-prepared and active professional organisations, the results of which have been spectacular in recent years: the density and connectivity of the network has improved significantly, primarily in the inner areas of larger settlements and in urban-agglomeration relations.

Nationally and regionally active civil society organizations have developed and implemented several exemplary awareness-raising initiatives, including BringásVándor, which provides thousands of young people with exciting and rewarding cycling adventures. There is strong

government support in this area, both through dedicated programmes and financial incentives (e.g., NETA 10%).

Of course, several hindering factors complicate the further spread of cycling. Some of these stem from external factors: for example, the uncertain political and economic environment, along with the resulting lack of funding, which causes difficulties both for development and maintenance. Furthermore, it should be noted that while there is a positive trend, transport culture still requires further improvement. Although cycling infrastructure has undergone dynamic growth, thanks to the continuous expansion of the cycling facilities network, many network elements are still missing, both in urban and rural areas. There are still isolated, network-wise difficult-to-justify developments, partly due to a lack of knowledge and expertise on the applicants' side. Along major cycling routes and key touring paths, the bicycle-friendly service network is incomplete or scattered in isolated locations, and this area also has room for improvement.

In terms of multimodality, the development efforts by GYSEV, responsible for railway services in the West Transdanubia region, have significantly improved opportunities in both parking and transport. Additionally, MÁV-Volán Group has already introduced measures targeting cyclists. However, there is still a significant need for further development and improvements in terms of capacity and accessibility.

Topics	Strengths	Weaknesses	Opportunities	Threats

General / policy instrument	- Established, long-term policy instruments.
	- Stronger the network approach: mandatory Cycling Network Plan / County Network Master Plan.
	- Use of a two-round Professional Committee, separate for the network plan and separate for the technical and permit level plans.
	- Cyclist-friendly development should also be subject to a Road Safety Audit.
	- Extensive support for applicants: technical annexes, guidance documents, KTI Hungarian Institute of Transport Science and Logistics.
	- High quality Road Engineering Standards.
	- Cycling has developed dynamically thanks to the continuous expansion of the network of cycling facilities.
	- Elimination of the previous fragmented image/brand of
		- Lack of knowledge and skills on the side of the applicants.
		- Inappropriate choice of type of facilities.
		- Focus on isolated development ideas as opposed to a network approach.
			- At the regional level, the socio-economic situation can be considered more favorable.
			- More focus on cycling at European level: Pan-European Master Plan for Cycling Promotion, "EU Cycling Strategy: Recommendations for Delivering Green Growth and Effective Mobility by 2030."
			- The issue of cycling is represented at the political level by the State Secretary for Active Hungary.
			- Well-prepared and active professional organizations:
			  - AÖFK Centre for Development of Active and Ecotourism ,
			  - Hungarian Public Roads Nonprofit PLC,
			  - MAÚT MAÚT Hungarian Road and Rail Society,
			  - KTI Hungarian Institute of Transport Science and Logistics,
			  - MAKETUSZ Hungarian Cycling Tourism
				- Global political instability.
				- Risk of moderate economic growth/recession.
				- Inflationary environment.
				- Scarcity of development and maintenance resources.
				- Funding uncertainty: stable resources would need to be secured.
				- Unclear responsibilities for management, development, operation.
				- Project preparation, procurement could be significantly delayed
				- Maintenance difficulties reduce the attractiveness of cycling as a mode of transport.

The CycleRight project is implemented within the frame of the INTERREG EUROPE Programme, with the support of the European Regional Development Fund, co-financed by the European Union and the Hungarian State.

	signposting, development of a single basic concept: 'Travelling Hungary' - signposting and information panels for five different modes.		Association. - Policy strategy framework: National Cycling Strategy 2030. - Potential cyclist-friendly measures in the upcoming revised Highway Code: e.g. cycling zones/streets. - Strong awareness-raising initiatives, active civil society: e.g. BringásVándor, Pisztráng Kör Association activities, operation of bike & canoe eco-mobile fleet (Szigetköz), Zalai Tekergők, Őrség Cycling and Nature Association, Sopron-Fertő region, Győr. - Financial incentives: 10% of the Net Tax on Public Health (NETA) can be offered for active lifestyle programmes and improvements; personal income tax and corporate tax relief is available for Hungarian companies that buy bicycles for their employees. - A number of active initiatives based on international cooperation for cycling, mainly through the various Interreg programmes.	

Regional network	- Overall, progress can be observed: the network's density and interconnectivity have improved, but there is still much work to be done. - Developing agglomeration connections in the catchment areas of larger cities. - Extension of network planning to the county level (County Network Master Plans).	- The dedicated cycling infrastructure network is still incomplete. - Lack of cycle-friendly services and resting places / isolated locations along cycle routes and trails. - Lack of public information on the regional network. - Forestry and agricultural roads should be included in the cycling network to a greater extent, provided they have good quality, stabilised surface. - Attention should also be paid to the development of mountain cycle paths. - There are some good examples of focal points and small regions (e.g. the 'Ride through a thousand wonders of the Sopron-Fertő countryside', Őrség region, the 'Vasi Hegyhát – Rábamente' signposting) but basically none of the developments had a network aspect, the individual development projects were isolated. - Occasional untraceable, ad-hoc signposting and information tables.	- Favourable geographic location, cross-border links – but at the same time, development gaps are also highly visible between countries. - Rich natural heritage. - Rich in relatively low-traffic public roads; there is also potential to exploit these	- The possibility of lack of coordination between county-level network plans.

Urban cycling	- In the larger settlements, the conditions for everyday cycling, the density of the local network and its connectivity have recently improved significantly, but further improvements are needed. - The preparation of Cycling Network Plans / SUMPs has strengthened the network approach. - Mandatory professional involvement of KTI in the preparation of SUMPs. - Mandatory awareness-raising campaigns linked to the projects implemented have also been positively received.	- Missing network elements still occur. - There is still a focus on isolated development concepts as opposed to a network approach. - Some elements of cycling infrastructure, such as storage facilities and cycle parking, are missing ("last mile" problem).	- Improving transport culture. - The impact of rising fuel prices on people's transport choices. - Raising awareness: people realise that cycling is the quickest option for short and medium distances. - Public awareness-raising: initiatives to promote cycling to work and school.	- At the political level, the implementation of cycling developments and awareness-raising efforts is hindered by the public's preference for motorized transport (e.g., "better to build parking spaces instead"). - In many cases, cycling culture is still lacking among the general population. - Municipal budget constraints limit the possibility of developments outside of grant-funded projects. - This financial challenge also affects the maintenance of local cycling networks. - Urban planning issue: in many cases, the existing infrastructure is not suitable for separate cycling facilities, mainly due to space constraints. A further issue is that newly developed city districts often fail to incorporate cycling infrastructure into their design.
Multimodality	- GYSEV, responsible for rail services in the West Transdanubian region, has significantly improved the possibilities with improvements	- The situation has improved, but intermodality needs to be further developed, both in terms of storage and transport conditions for bicycles.	- Regional private service providers have also emerged and strengthened: bicycle transport, bicycle rental. - The impact of rising fuel prices	- GYSEV has undergone a change of ownership - possible change of priorities. - Continued dominance of private motorised road

	such as B&R, new low-floor FLIRT trains. - Volánbusz has also made progress by installing bicycle storage facilities at 97 bus stations nationwide – the BikeBox solution in Győr is a good example. - Within the MÁV-Volán group, Volánbusz has also launched its bicycle transport service in 2021, but only for a few priority tourist destinations.	- For larger groups, rail cycle transport capacity is scarce. - Larger stations lack lifts and it is difficult to access the platforms with larger luggage or e-bikes via the underpass. - More information on their availability (promotion and education) is needed on the public side. - Outside the main tourist areas, the possibility of transporting bicycles by bus is lacking.	on people's transport choices.	transport.

6. Indicative list of good practices to be presented under CycleRight

Based on the strengths and opportunities that emerged from the SWOT analysis, this chapter lists **cycling good practices** that could potentially be presented to the participating international partnership during the study visit to Hungary in autumn 2024. The tables following the descriptions places the initiative in the context of the applicable framework of the project.

BringásVándor – Explorer Bike Camp: a nation-wide initiative to empower young people[5]

A week-long camp for young people, where the group cycles to a new destination every day. Along the way, participants experience a variety of attractions and exciting activities, from castle visits to jumping on hay bales, archery, and swimming. The routes are safe and scenic, leading to lesser-known but fascinating places across the country.

Accommodation, meals, and activities are all pre-arranged. The program provides bicycles, helmets, water bottles, T-shirts, and tour guides. In addition to unforgettable experiences and a sense of achievement, participants also learn bike handling, road safety, and cycling traffic rules. The program welcomes children with disabilities and/or special educational needs.

The initiative operates with 1,400 bicycles and 200 tour leaders. The State Secretariat for Active Hungary covers 75% of the approximately €400 per participant cost.

[5] https://www.bringasvandor.hu/bringasvandor/

Photo 2: BringásVándor Explorer Bike Camp (Source: MAKETUSZ)

Topics	Climate resiliency	Social inclusion / accessibility	Safety	N/A
Urban cycling				
Regional network				
Multimodality				
Other		X	X	

Nature-based tourism experience and youth awareness-raising in the Szigetköz region: operation of a canoe-and-bike eco-mobile fleet[6]

The inland delta of the Danube, the Szigetköz and the Csallóköz, with its nearly 1 000 km of waterways, offers countless canoe trip opportunities. For day trips, the only obstacle is the distance and how to cover it. To overcome this, the eco-mobile fleet, consisting of a canoe/bike trailer, 30 trekking bikes and 8 indian canoes, was invented in 2012 and is based at the Ecopark in Dunasziget. The team pick up the bikes at the Ökopark and cycle to the Trianon sluice gate in Rajka, where they are met by a trailer and minibus loaded with canoes. The canoes are unloaded, the bikes are loaded onto the trailer, paddles and life jackets are taken from the car and the paddling adventure back to the island of Dunasziget can begin.

From the autumn of 2020, the equipment purchased in the INTERREG V-A SK-HU BIKE&BOAT project will also be in operation, so that tours can now be carried out with 100 bicycles, 40 canoes and 16 double canoes. In total, 15 eco-mobile tours have developed,

[6] https://www.pisztrangkor.hu/hun/oko-mobil-turak.html

specifically designed to help discovering the exciting natural wonders of the Szigetköz–Csallóköz–Moson Plain.

Photo 3: Eco-mobile fleet
(Source: https://www.pisztrangkor.hu/hun/oko-mobil-turak.html)

Topics	Climate resiliency	Social inclusion / accessibility	Safety	N/A
Urban cycling				
Regional network				
Multimodality		X		
Other				

Luminescent cycle path surface[7]

In April 2018, Hungarian Public Roads Nonprofit PLC established an experimental application-based construction committee, which has since provided a platform for 28 innovative products or technologies to demonstrate their practical applicability in everyday transportation.

[7] https://bikemag.hu/magazin/vilagito-burkolatjelekkel-ellatott-kerekparutat-adtak-at-zalalovon/

Among these innovations, a glow-in-the-dark pavement for cycling paths and illuminated road markings has been submitted. The experimental material used is borosilicate granules with photoluminescent properties, embedded in resin. These granules absorb sunlight during the day and emit light in the dark, making unlit road sections more comfortable and safer to use at night.

This solution allows cyclists to easily follow the path after sunset and before sunrise. The technology was first tested on a section of EuroVelo 6 near Esztergom and later implemented between Zalaegerszeg and Zalalövő.

Photo 4: Glow-in-the-dark cycle path near Esztergom
(Source: Hungarian Public Roads Nonprofit PLC)

Topics	***Climate resiliency***	***Social inclusion / accessibility***	***Safety***	***N/A***
Urban cycling				
Regional network	**X**		**X**	
Multimodality				
Other				

Safe Cycling Routes Toolkit (SCRT)[8]

The SCRT (Safe Cycling Routes Toolkit) is one of the key outcomes of the SABRINA *(Safer Bicycle Routes in Danube Area)* project, implemented within the Interreg Danube Transnational Programme. The project focused on the traffic safety aspects of cycling-related

[8] https://irap.org/2022/12/sabrina-safe-cycling-routes-toolkit-for-safer-european-cycleways/

infrastructure, highlighting existing, planned, and missing cycling corridors in nine countries of the Danube region. Its goal was to improve cycling safety conditions by enhancing the skills of national, regional, and local stakeholders, thereby contributing to the sustainable and safe development of both existing and future infrastructure.

As part of the project, the SCRT online decision-support tool was developed to assess the expected impact of various development concepts in the infrastructure. Based on these assessments, the tool offers alternative development solutions and conducts cost-benefit analyses.

The SCRT is built on three key traffic safety and cycling infrastructure evaluation methodologies: iRAP *(International Road Assessment Programme)*, CycleRAP, and ECS *(European Certification Standard by ECF)*, along with research on the impact of infrastructure on cycling safety.

The evaluation modules provided by the tool do not replace any of the methodologies used, but instead, they serve as a way to estimate the safety impact of a given cycling infrastructure project, even without prior knowledge of the methodologies mentioned above.

The tool is available online at: https://sabrina-scrt.eu/scrt/

Topics	*Climate resiliency*	*Social inclusion / accessibility*	*Safety*	*N/A*
Urban cycling	**X**		**X**	
Regional network	**X**		**X**	
Multimodality				
Other				

Opportunities for the participation of people with special needs in ecotourism (PaNaNet+ project)[9]

The Pannonian Nature Network – a cross-border project of the national and nature parks in the West Pannonian region – has, since 2008, established a strong network of committed and experienced partners. At the same time, it has enabled significant expansion and development of ecotourism offers and infrastructure related to nature experiences across all participating areas. The cross-border aspect of "nature experience" has been further developed within the PaNaNet+ project, implemented under the INTERREG V-A Austria–Hungary Programme.

A key focus of the project was the development and optimization of accessible and innovative nature tourism offers, including promoting active participation in tourism for individuals with special needs. As part of this effort, an accessible tour guide training module was developed, and special bicycles equipped with wheelchairs were procured. These bicycles are available for free rental at the Fertő–Hanság National Park for families who wish to explore nature independently as mobility-impaired individuals or together with a child with special needs.

[9] https://www.interreg-athu.eu/hu/pananetplus/

Photo 5: Special bicycles available free of charge at the Lászlómajor Visitor Centre near Sarród (Source: PaNaNet newspaper 2)

Topics	Climate resiliency	Social inclusion / accessibility	Safety	N/A
Urban cycling				
Regional network				
Multimodality				
Other		X		

Sustainable urban mobility planning in Budapest[10]

The new direction in strategic transport planning, which began in 2012, focuses on the development of Sustainable Urban Mobility Plans (SUMP) that integrate transport development concepts into broader urban development strategies.

For Hungarian cities, adopting the SUMP (Sustainable Urban Mobility Planning) approach is the most important transport planning task. Sustainable urban mobility planning is a strategic and integrated approach designed to address the complexity of urban transport. Its fundamental goal is to enhance accessibility and quality of life in cities by shifting towards more sustainable mobility solutions.

[10] https://bkk.hu/rolunk/strategiank/budapesti-mobilitasi-terv/fenntarthato-varosi-mobilitastervezesi-iranyelvek/

Mobility plans developed using the SUMP methodology support fact-based and data-driven decision-making. Budapest's first mobility plan, the Budapest Mobility Plan, was created from the outset in alignment with SUMP principles and methodological guidelines.

Topics	*Climate resiliency*	*Social inclusion / accessibility*	*Safety*	*N/A*
Urban cycling	**X**		**X**	
Regional network				
Multimodality	**X**		**X**	
Other				