NATIONAL CYCLING STRATEGY

2030

National Cycling Strategy 2030

Prepared with the coordination of Active and Ecotourism Development Centre

June 2023

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Foreword to the National Cycling Strategy

“There is no favourable wind for the sailor who doesn't know where to go”
(Seneca)

The above quote may be one of the most important mottos of my work as a state secretary. In 2016, when the Government entrusted me with the development of cycling and later the entire active tourism sector, I encountered many good initiatives, enthusiastic professionals, and useful projects. However, there was a lack of vision, a lack of long-term objectives to establish the development programmes and provide direction for daily operational work.

In recent years, I have made professional visits to several major European cities, providing me with the opportunity to converse about cycling with numerous internationally known and recognized experts and city leaders. While cycling habits, technical solutions, and therefore the policies may vary, in each case, they are always based on a vision and long-term objectives agreed with stakeholders. Without this, the time, money, and energy invested in the development of cycling do not yield proper results.

This is precisely why we decided to create a long-term strategy for cycling, aiming for our work to be even more successful and efficient than before. In recent years, unprecedented investments have been made, the cycling infrastructure and services are expanding dynamically, a coordinated institutional system has been established for managing and implementing the work, and both the government and the European Union provide significant funding for the development of cycling.

I trust that the strategy developed collaboratively with organizations and experts involved in cycling will serve the long-term interests of cyclists, whether it’s daily commuting or weekend tours. The goals outlined in the strategy are ambitious and achieving them is not an easy task. Yet, based on the experiences of recent years, I believe that we can achieve these through collaborative efforts. We can make our dreams come true, making Hungary the leading bicycle-friendly country in the region by 2030

Máriusz Révész
State Secretary responsible for Active Hungary

Executive summary

Hungary ranks third in terms of the proportion of cycling among transportation modes in Europe. Only the Netherlands and Denmark surpass Hungary, proving that we are a true cycling nation. Cycling is important from social, economic, and climate protection perspectives, positively impacting the competitiveness of the country. Setting development directions is crucial for proper coordination. Responding to public demands and achieving expected benefits require a long-term strategy, accepted by the government, that outlines the directions for the development of cycling in the country. The National Cycling Strategy was developed at the request of the State Secretary responsible for Active Hungary, with the involvement of professional and civil organizations, relevant ministries, and supporting institutions, by the Aktív- és Ökoturisztikai Fejlesztési Központ Nonprofit Kft.

In Hungary's rural regions, the number of regular cyclists has traditionally been high at the European level. The primary reasons for this are the gentle topography, and the fact that cycling is the simplest and most cost-effective mode of transportation within small settlements or for commuting to neighbouring areas. However, in larger cities, especially the capital, fewer people cycle compared to other cities in Europe. There are several reasons for this, but it can be mainly attributed to the shortcomings in infrastructure, motor vehicle-centric urban development, and current storage capacity issues.

The government is committed to the development of cycling infrastructure and has allocated significant resources to this cause in recent times. Thanks to this, both the tourism and professional traffic networks are dynamically expanding. The regional, or even national-level network has mostly been developed in smaller patches. It can be said that many sections of the existing network not only require renovation but even redesign.

High-quality cyclist-friendly services (primarily tailored to the needs of cycling tourists) are only present in certain regions. A good basis for its development is provided by the fact that in recent years, a unified set of criteria has been established for the certification of service providers.

Although forest cycling is not as widespread as it should be given the geographical and natural conditions of the country, the legal requirements for establishing forest cycling trails are in place. The increasing demand has prompted several forward-thinking developments in recent times. In many settlements across the country, smaller pump tracks have been established, primarily popular among children but relevant for all age groups to learn and strengthen cycling skills.

Surveys show that one of the main barriers to the further expansion of cycling is the lack of a sense of safety. Although cooperation and partnership among road users have clearly improved in recent years, currently the application of traffic rules and practices does not always ensure an adequate level of safety for the most vulnerable road users. This is also supported by the high number of cycling accidents. Traffic education is already introduced in elementary school, but it is not yet emphasized enough. In addition to this, training and sensitization of drivers also need improvement.

Cycling is becoming more prevalent in daily communication, whether it's about commuting to work or spending leisure time. It can be increased through targeted campaigns and further promotion of cycling.

A significant portion of the population owns a bicycle, but the proportion of high-quality or electric bicycles is still relatively low. At the same time, financial incentives and support systems have emerged to aid the spread of e-bikes and enable the acquisition of corporate bicycle fleets. Although not widely known, Hungary has significant bicycle manufacturing capacity; however, most of the activity in these factories is assembly, with a relatively low proportion of research and development activities.

In line with the situation analysis and international as well as domestic public policy objectives, we have formulated a vision for the mid-term future that we aim to achieve:

By 2030, cycling in Hungary will be a fast, safe, accessible, and economical alternative for everyday commuting, while being the most popular leisure activity. Consequently, Hungary will become the leading bicycle-friendly country in Central-Eastern Europe.

By 2030, 35% of the population will use bicycles multiple times a week as their primary means of transportation. The national network will be safe and attractive, featuring independent bicycle paths between settlements, directional cycling facilities within urban areas, and traffic-reduced, and reduced-speed zones to facilitate cycling. As a result, the number of cyclists will increase in cities, while in rural areas, the current high level of cycling will be maintained.

Up-to-date online and offline information about bicycle-friendly routes will be available, with route planners promoting cycling as a viable option for travel. With increased reliability and a heightened sense of safety, cycling becomes a realistic alternative for commuting to school and work nationwide. Through financial and other communication incentives, choosing a bicycle for short trips becomes much more economically viable than using a car.

As a result of the measures, the conditions for safe cycling significantly improve. Campaigns and training contribute to enhanced cooperation among road users, leading to a reduction in conflicts. Both children and adults possess fundamental cycling and traffic knowledge. The number of cycling accidents significantly decreases, with fatal accidents decreasing by at least 50% compared to 2019 (63 fatal accidents).

The length of the tourist cycling network increases to 15,000 kilometres. Cycling tourism regions offering high-level services and experiences emerge, benefiting local businesses with additional revenue, while ensuring sustainable tourism without causing additional environmental burden. Leisure cyclists have access to well-maintained cycling networks for various purposes, including recreational, mountain biking, and road cycling.

Bicycles are accessible to all classes of the population, whether they are private, shared, or corporate bikes, with or without electric assistance. The acquisition of bicycles is supported by various targeted incentives. The bicycle industry and trade thrive, with increasing development activities taking place alongside assembly in domestic factories. Simultaneously, the quality of the bicycle service network improves, expanding its coverage.

Regulations that support and incentivize cycling will be established, encompassing traffic rules, infrastructure planning, regional planning, parking, and the transportation of bicycles on public transport. As a result, not only will cycling become easier and safer, but the costs of investments can also be reduced.

The Strategy presents the current state of cycling, sets goals, and defines measures in four main thematic areas:

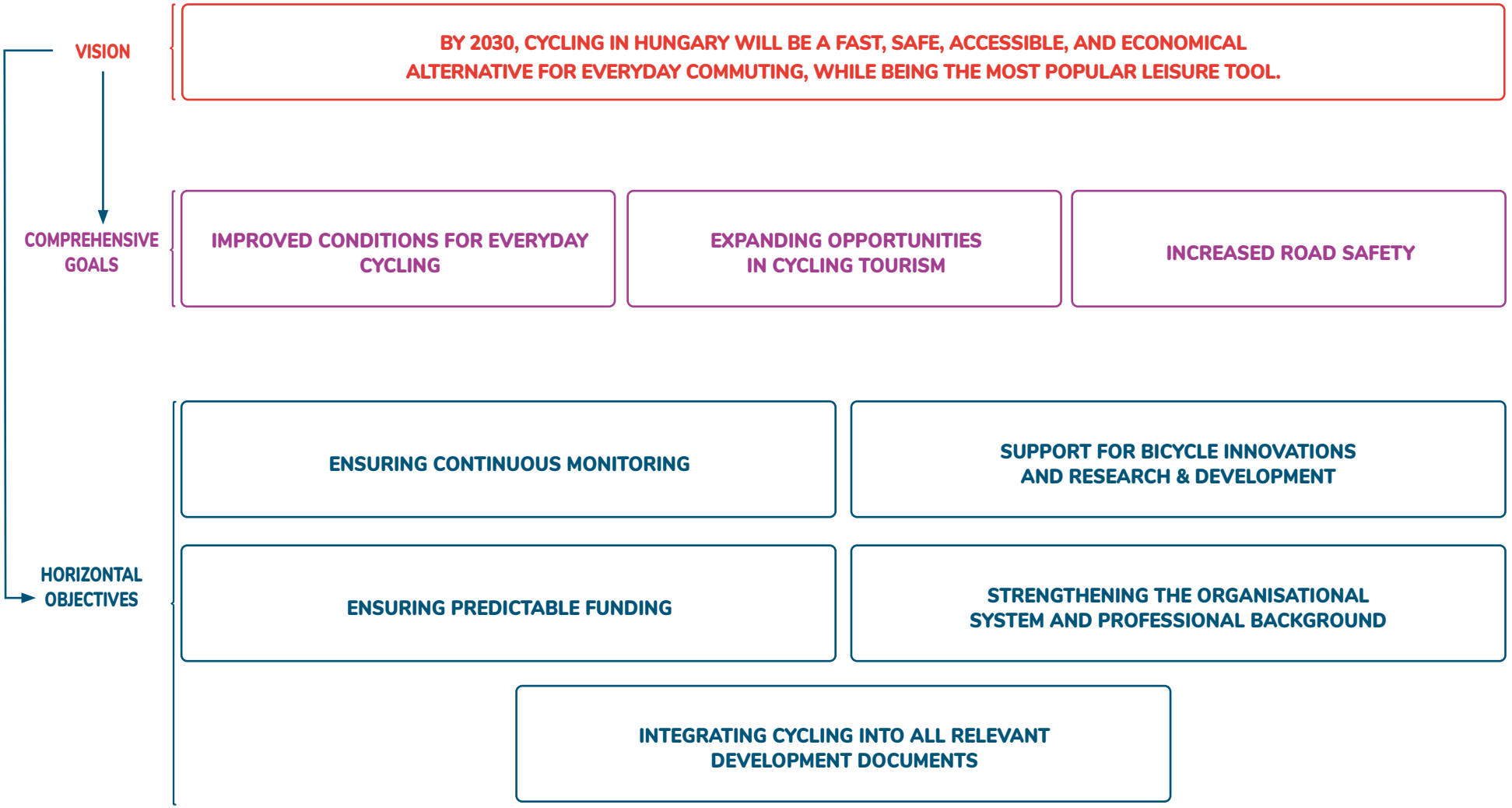
The measures are categorized into three groups:

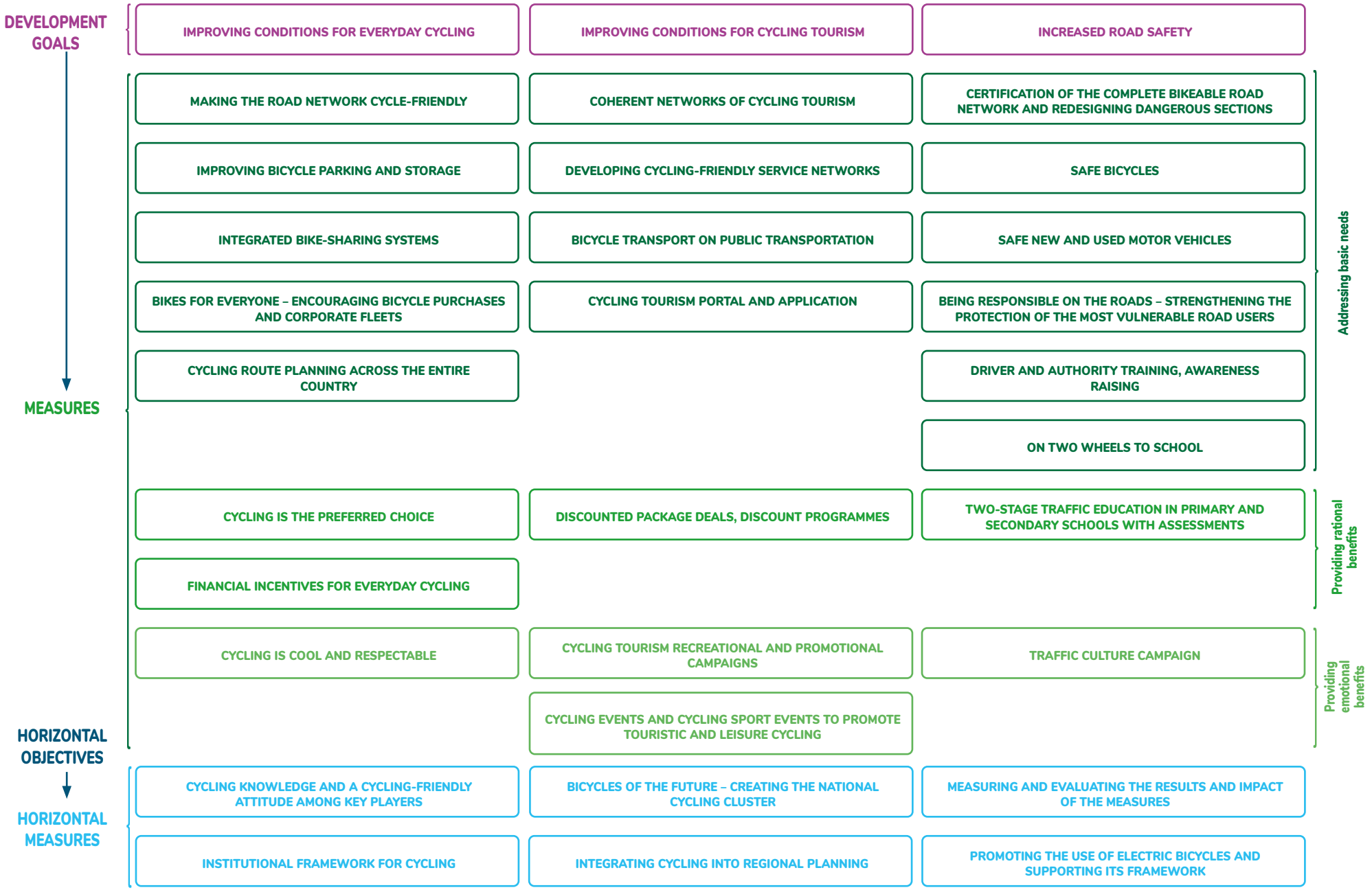
- (A) Measures serving the satisfaction of basic needs: typically, these are measures that ensure the fundamental conditions for safe and comfortable cycling, without which cycling would not be possible (e.g. construction of bicycle paths, establishment of storage and parking facilities, cycling-friendly traffic regulations)
- (B) Measures ensuring rational benefits: measures that, in addition to the fundamental conditions, provide economic, health, and environmental benefits for cyclists (e.g. supporting bicycle use, providing e-bike charging facilities)
- (C) Measures ensuring emotional benefits: measures that, in addition to the fundamental conditions and rational benefits, provide some emotional extra value through cycling (e.g. social appreciation, sports achievements).

A total of 29 measures are included in the strategy, along with indicators, activities, a list of involved organizations, estimated costs, and a schedule for implementation.

It is important to emphasize that local municipalities and county councils play a crucial role in the implementation of individual measures since the majority of developments and investments take place at the local level. Therefore, a successful implementation requires a thorough understanding of the goals and measures of the strategy, as well as continuous collaboration with professional organizations.

Strategic objectives

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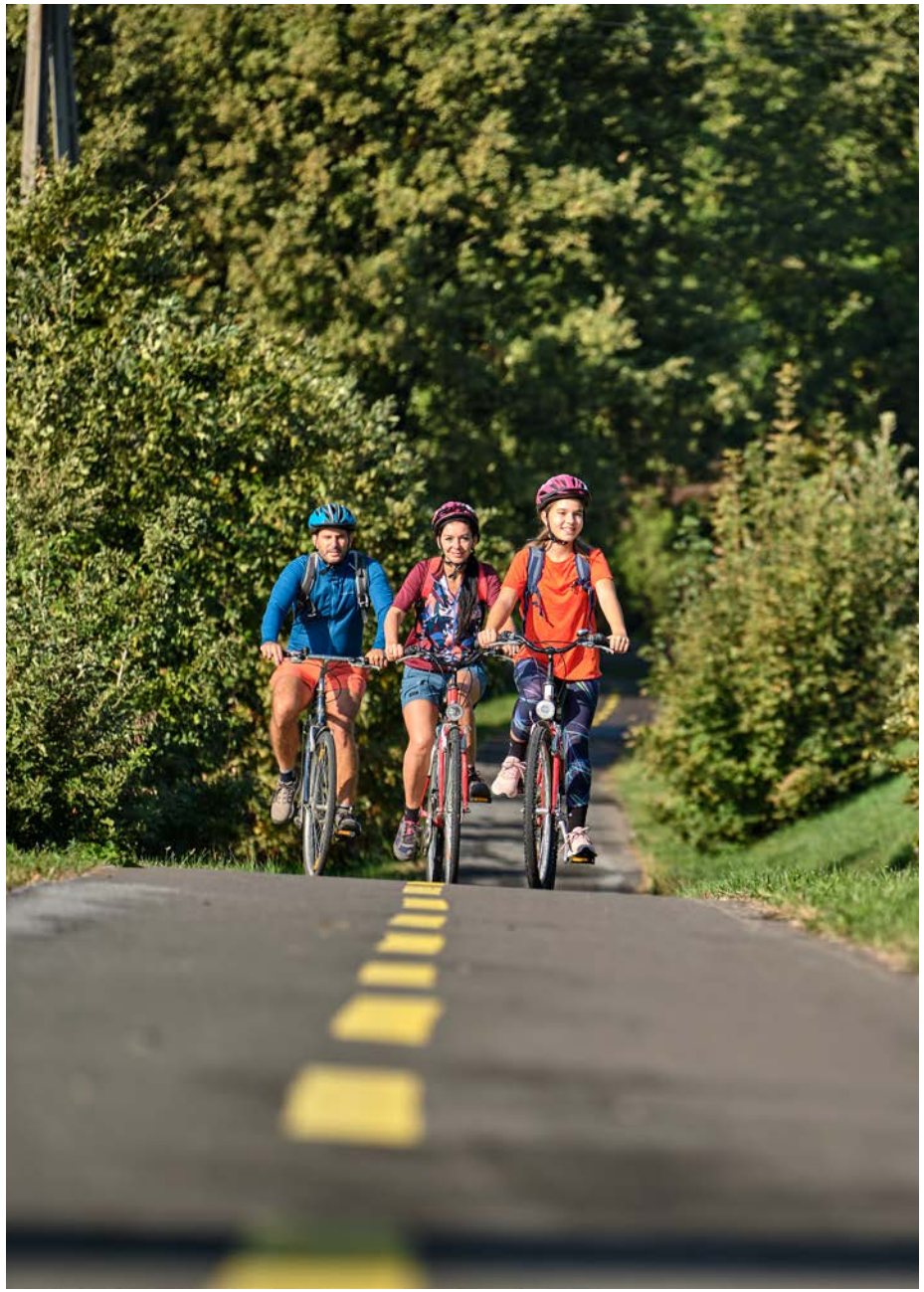
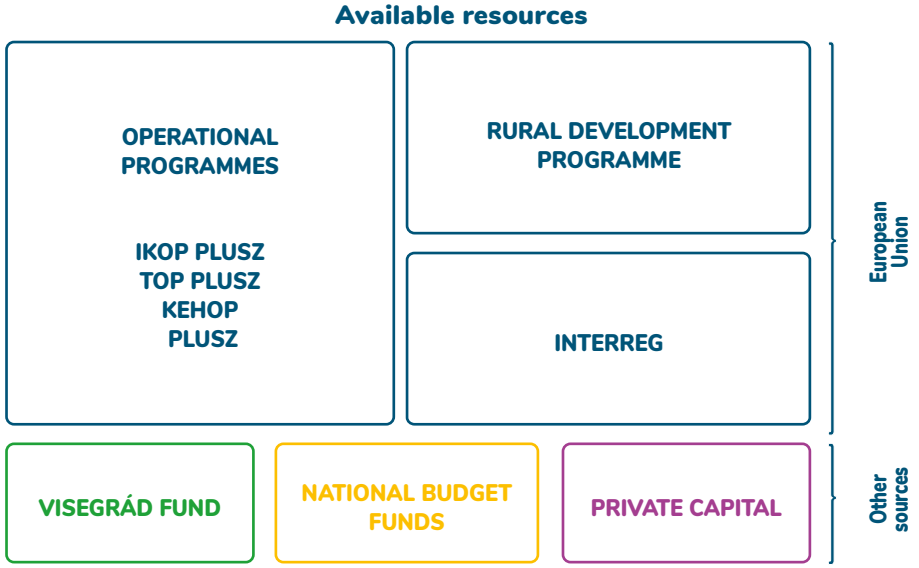


The cost requirements for the measures during the period 2023-2030 are as follows:

Resources needed for implementation	
Everyday cycling	HUF 110.37 billion
Development of tourism recreation	HUF 117.35 billion
Improving road safety	HUF 16.36 billion
Horizontal measures	HUF 3.89 billion
Total:	HUF 247.97 billion

The estimated total cost for the implementation of the measures outlined in the strategy is HUF 247.97 billion, which can be covered by the following sources:



Introduction

Today, cycling is experiencing its renaissance globally. More and more people recognize that bicycles provide a fast, comfortable, safe, and environmentally friendly mode of transportation in everyday life, such as commuting to work or to school, shopping, or running errands. Cycling also plays an increasing role in tourism. Surveys indicate that in Hungary, it is the second most popular type of active tourism, as evidenced by the seasonal use of cycling paths around our larger lakes. In addition to improving health, cycling contributes to economic and rural development. Therefore, it is crucial to pay special attention to positive trends related to cycling.

In densely populated urban areas, with the current modal shares of transportation means, the set climate protection goals cannot be met. Encouraging and prioritizing communal, cycling, and pedestrian transportation, coupled with thoughtful territorial planning, can lead to significant emissions reduction. Cycling plays a crucial role in this, and its role is expected to grow in the future. Through infrastructure development, favourable regulations, and mindset shifts, the bicycle should become the predominant mode of transportation for urban journeys (typically shorter than 5-7 kilometres). However, to achieve the attractiveness of sustainable transportation modes, we need to examine the entire travel chain to understand the criteria behind residents' travel choices. Bicycles provide a fast and comfortable way to navigate through urban nodes, while public transportation, due to its hierarchy, can only be economically efficient and competitive in terms of user perspective between central parts of a city. The combination of these two means of transport, fixed-track public transportation (possibly long-distance and local bus services) and bicycle usage is ideal for connecting any two non-urban locations as well. As a result, air quality and noise pollution in cities improve, creating a more liveable and safer environment. In addition, the pedestrian and cyclist-friendly parts of the city are seeing visible economic development, with previously deserted shopping areas coming back to life in non-car-oriented streets.

The emergence of electrically assisted bicycles has opened up new perspectives in cycling. The length of comfortably achievable routes with a bicycle has increased, making it competitive even in suburban areas. E-bikes have made cycling more accessible to a much wider range of people, by making physical ability, fitness or the difficulty of the terrain less of a factor. The electric assistance has turned cargo bikes into an essential part of the logistics chain in urban areas where vehicle traffic is restricted or increasingly limited. The market predicts a further dynamic spread of electrically assisted bicycles, which should be expected in the long term.

The purpose of developing the National Cycling Strategy is to provide guidance for achieving the long-term vision and goals set for the year 2030. The Strategy, on the one hand, defines development directions that build upon the results and trends of the past period, and on the other hand, it proposes methods and interventions different from those used so far by assessing shortcomings and considering new challenges. Due to current and upcoming challenges, the Strategy must set bold goals, some of which can be achieved through the implementation of measures that bring about radical changes. All of these contribute to making Hungary one of the most liveable countries in Europe by 2030.

It is important that the government adopts the National Cycling Strategy as a policy strategy and supports its implementation in the long term by all possible means.

Why do we support cycling?

Cycling significantly contributes to reducing the negative externalities caused by transportation, such as pollutant emission and noise pollution. However, there is a lack of domestic data for estimating and calculating these effects in Hungary due to the absence of necessary traffic data for such assessments. Cycling also contributes to a healthy life span. Currently, more people die from diseases caused by lack of physical activity than from cycling accidents. Cycling serves both as a means of physical activity for health promotion and as a mode of transportation.

According to a report from the European Cyclists' Federation (ECF), the European Union (EU) gains considerable direct and indirect benefits from cycling, based on available data. Cycling already generates a benefit of around 150 billion EUR annually in the EU alone. Of this, over 90 billion EUR contribute to the environment, healthcare, and transportation. In contrast, a recent study by the European Commission indicates that the costs of motorized road transport on the environment, health, and mobility amount to 800 billion EUR annually.

If we add estimable data that are related to other areas to the quantifiable data of cycling, then the overall benefits of cycling could be much higher. Cycling has the potential to contribute to various policy areas, including industrial policy, employment, and social policy. Its advantages even extend to social areas such as refugee integration, access to mobility or employability. According to some estimates by the ECF, the overall benefits could surpass 500 billion EUR annually in the EU alone.

To meet the targets required by the EU Energy Efficiency Directive 2018/2002/EU, we need to set goals for promoting more energy-efficient vehicles, cycling, walking, and public transportation, as well as popularizing mobility and urban planning that reduce transportation demand.

Table 1: Measurable cycling benefits with estimated values in the EU
(source: Neun, M. and Haubold, H. 2016. The EU Cycling Economy – Arguments for an integrated EU cycling policy. European Cyclists' Federation, Brussels, 2016)

	Profit	Estimated costs (Mrd EUR)
Environmental + climate protection	Reduction of CO^2 emissions	0.6-5.6
	Reduction of air pollution	0.435
	Reduction of noise pollution	0.3
Energy + Resources	Saving fuel	4
Health	Longer and healthier life	73
	Reduction in sickness absence	5
Business / Economy	Bicycle manufacturing	13.2
	Cycling tourism	44
Mobility benefits	Reduction in road congestion, traffic jams	6.8
	More cost-effective infrastructure development	2.9
Overall annual profit		**150-155**

The importance of cycling extends beyond protecting our environment, enhancing the liveability of our cities and towns, or preserving our health. It also comes with measurable and significant economic benefits. Decision-makers must take these benefits into account, especially when considering substantial investments, such as the construction of new cycling infrastructure.

The place for cycling in government strategic planning

Until 2016, cycling was a less emphasized aspect of the government's transportation strategy. The National Cycling Concept and Network Plan, developed as part of the National Transport Infrastructure Development Strategy published in 2014, cannot be considered a strategy. The National Strategy for the Development of Tourism and the National Active Tourism Strategy address the development of cycling infrastructure, facilities and services that serve tourism at national level and in several tourist areas. However, this document is limited to reflecting the demands and primary measures dictated by tourism.

While significant budgetary and EU resources were also available for the development of cycling in the past, and both intra-city and inter-city road networks expanded with their help, a notable change occurred in 2016 when the government appointed a commissioner for the development of cycling. This made cycling more prominent in governmental strategic planning.

Cycling has become increasingly emphasized in climate protection, sustainability, and health objectives set at various levels. In alignment with these goals, for example, Budapest aims for a 10% cycling level by 2030 in its relevant policy document.

During the development of the National Cycling Strategy, we primarily considered the provisions of Government Decree No. 38/2012 (III.12.) on Government Strategic Management (hereinafter: Government Decree). The Government Decree establishes the requirements for the preparation, social consultation, adoption, publication, implementation, monitoring, as well as preliminary, interim, and post-evaluation, and revision of strategic planning documents.

The Government Decree defines the hierarchy of strategic documents as follows:

The National Cycling Strategy, classified as a policy strategy, covers the period until 2030.

The Strategy follows the content structure outlined in the Government Decree and, accordingly, provides a situational analysis, vision, and objectives for the following four thematic areas, along with the principles of the concept and implementation, an action plan, and a system of tools:

The development of the strategy falls within the responsibilities of Máriusz Révész, the Commissioner for Active Hungary, as stipulated in point 4.b of Government Decree No.1377/2020 (VII. 10.) on government measures related to the implementation of the Year of Cycling programme. Operational tasks were carried out by the Aktív- és Ökoturisztikai Fejlesztési Központ Nonprofit Kft, with the involvement of the former Bicycle Coordination Department of the Ministry of Innovation and Technology, and with the help of various relevant professional and civil organizations, and external experts.

Vision

By 2030, cycling will be an attractive alternative for daily commuting, being fast, safe, and cost-effective. Consequently, it will also become one of the most favoured ways to spend leisure time.

Hungary aims to be the leading bicycle-friendly country in Central and Eastern Europe by 2030, and to achieve this:

- 35% of the population uses the bicycle several times a week as their primary means of transportation.[1]
- The proportion of cycling tourism increases compared to the 2022 level.[2]
- The significant improvement in the objective safety of cycling is indicated by a 50% decrease in fatal cycling accidents compared to the 2022 level. The population also feels this change, as children, youth, and the elderly all choose the bicycle as a means of transportation without fear.
- The competitive constraints of cycling disappear, and cyclists have access to infrastructure and services that are at least as fast, safe, and attractive as those for motorized traffic. In addition, financial incentives make choosing a bicycle more advantageous than a car

By 2030, the entire road network will be safe and attractive for cyclists, and to achieve this the following developments will take place:

- In cities and between suburbs/villages – where necessary – separate bike lanes will be established.
- Within the settlements, two-sided, directionally separated cycling facilities will be established along main roads and access roads.
- In side streets and residential areas, reduced traffic zones with a reduced speed limit of a maximum of 30 km/h will support cycling.
- The elements of the cycling infrastructure are in good condition and regularly maintained.
- The improved intersections are safe
- Developed and designated cycling tourism, mountain biking, and road cycling route networks await cyclists. Continuous and high-quality maintenance of the roads is also ensured

In Hungary, everyone will have access to a suitable personal or rentable bicycle; by 2030:

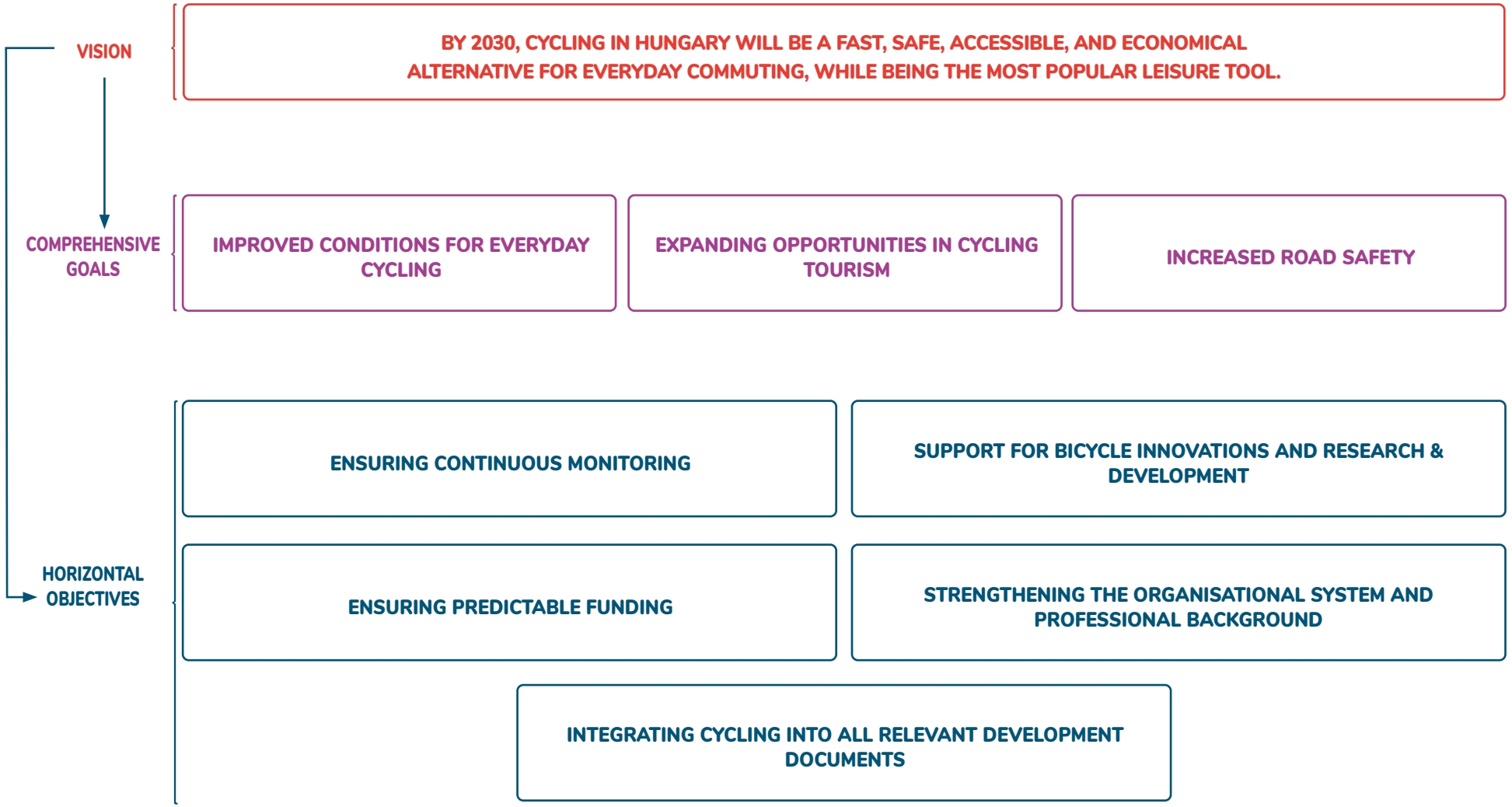
- Financial incentives and rental systems support bicycle usage.
- Bicycles are part of the travel chain and can be used to travel from home to home, from home to work, even with the use of public transport.
- At least 3000 certified bicycle-friendly service providers are available throughout the country.
- Fresh information about bicycle-friendly routes is available, and cycling is recommended as an option by route planners.
- The rational economic, health, and environmental benefits of cycling are well understood by the entire population, thanks to awareness campaigns. Successful bike-sharing systems operate in Budapest and medium-sized cities in the countryside, adapting to local needs and even incorporating electrically assisted bicycles.

Both children and adults possess fundamental cycling and traffic knowledge. Cooperation among motorized, pedestrian, and cycling road users improves.

The necessary resources, knowledge, information, and organizational support for the development of cycling are available on both the governmental and municipal levels, as well as among businesses and civil organizations. The partnership between these actors is fully operational and the involvement of civil society organisations is institutionalized.

1 Calculated based on the methodology of the Cycling in Hungary, 2022 research commissioned by the Hungarian Cyclist Club and Active Hungary, conducted by Medián. (2022 baseline: 31%)
2 According to the methodology of the active tourism research commissioned by the AÖFK in 2022, conducted by Századvég Research Institute

Strategic objectives



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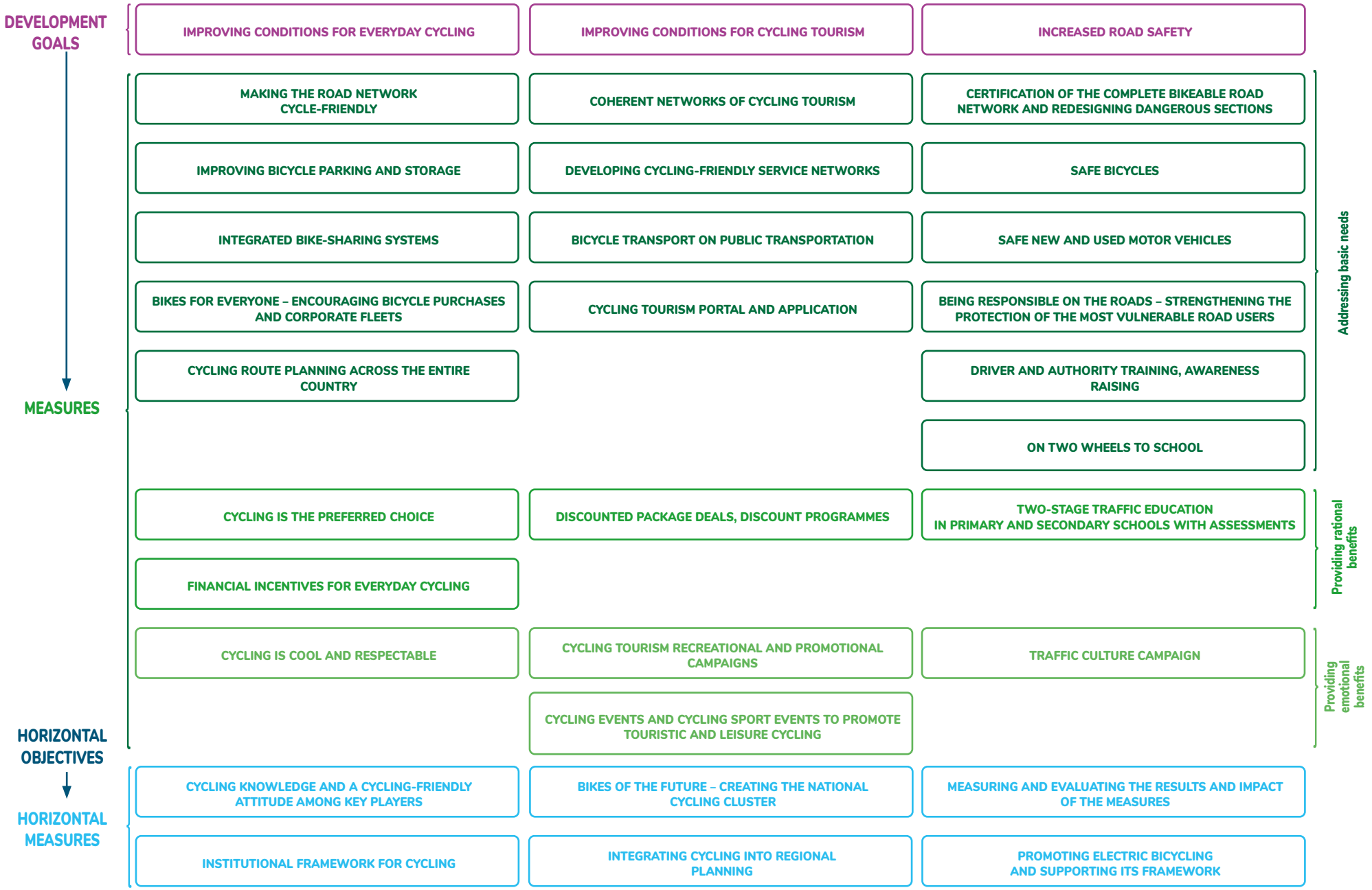
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Everyday cycling

Current status and problem identification

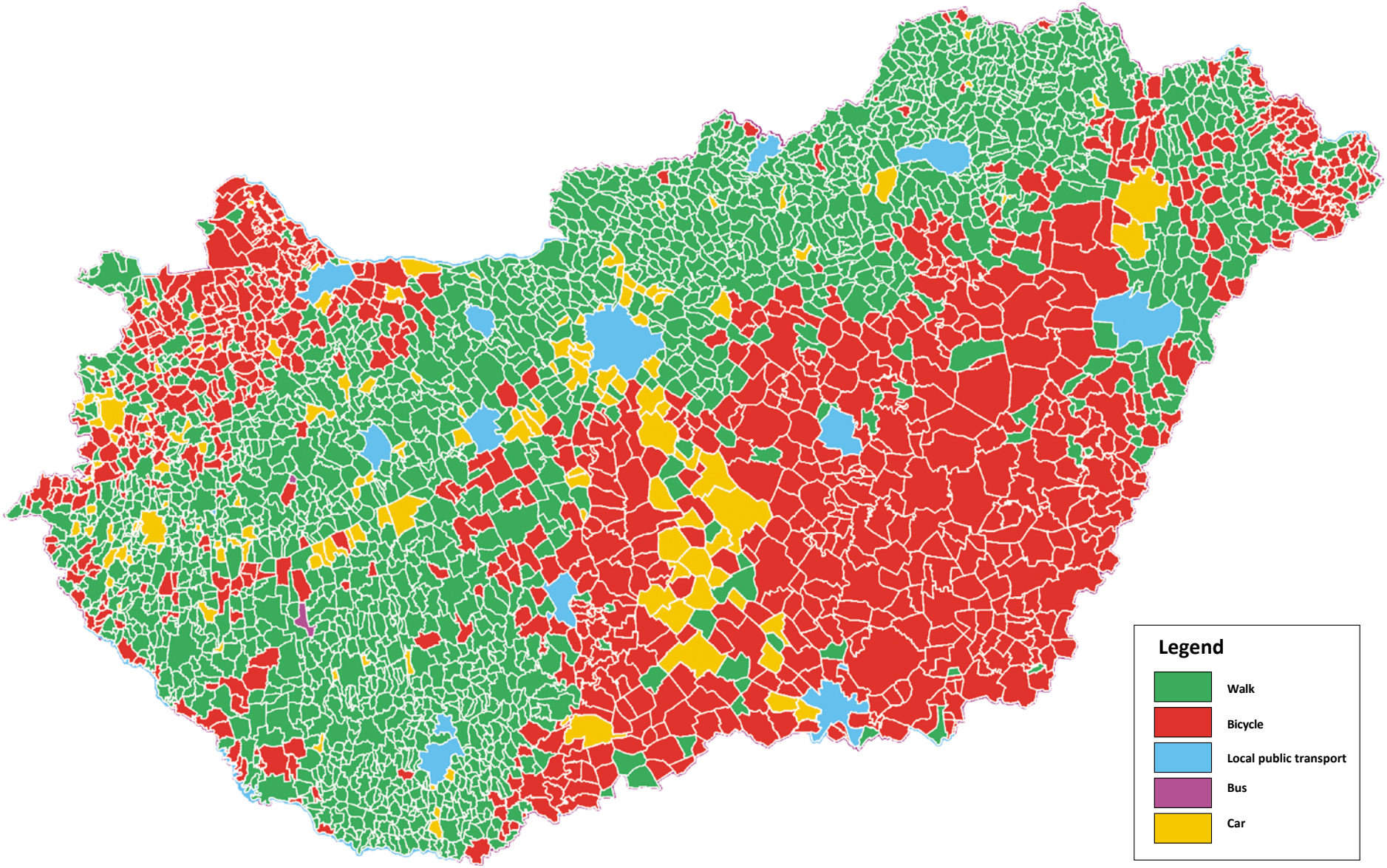
Earlier, the concept of transportation primarily focused on vehicles, particularly car traffic, and its associated problems. In contrast, the modern notion of mobility considers all modes of movement. From the 2022 data, it becomes evident that only 35% of people use cars in their daily lives. People walking, cycling or using public transport are, in proportion, now counterbalancing the former dominance of the car in the thinking of the related fields. Emerging issues receive nearly equal attention across all modes of transportation. In recent years, e-micro-mobility devices have appeared in increasing numbers, primarily in urban areas, especially on bicycle paths. While their growth is desirable for climate protection goals, there is also a need for a review of the current regulations.

Apart from transportation planners, various other professionals, such as urban planners, landscape architects, and geographers, participate in transportation development. A common issue is the scarcity of labour resources in both the planning-permitting and execution-operation sectors. It is crucial to integrate bicycles as a mode of transportation into the diverse professional environment in a way where the importance of cycling-developments is generally accepted and supported. Currently, communication between professions often lags, and in larger-scale national or regional bicycle developments, local interests are frequently overlooked, making improvement in this regard an important task. A significant portion of the national road network currently lacks the basic conditions for safe cycling due to the volume and/or actual speed of motorized traffic. This underlines the magnitude of the task, requiring a change in mindset and unified action among those involved in bicycle development and planning

When examining municipalities, the success and proper operation are significantly determined by well-functioning connections between various functions. In the development of municipalities, one of the primary tasks is to ensure and organize the infrastructure network, particularly transportation connections. A general trend in Hungary is that urban regions are increasingly spreading out spatially, with individual functions (such as residential and workplace areas) becoming more distant from each other. Due to the increased distances, cycling alone becomes less competitive, leading more people to switch to cars. Mitigating urban expansion is an important task for the professions involved in urban development. In areas where urban expansion has already occurred, efforts should focus on creating a more compact urban structure, promoting multi-centre cities, and establishing compact sub-centres to reduce commuting times, moving away from a single-centred city model. Combining cycling with fixed-track public transportation can make cycling competitive again in expanded cities. However, currently, the necessary conditions for this, such as public transportation infrastructure and bicycle storage at stations, are only available in a few places in the affected cities. In order for the development to take place in the locations and in the way that is most needed, data related to cycling is needed at the national, municipal, and even sub-municipal levels.

Unfortunately, there are mixed-quality data available for everyday bicycle use. Existing data, often differing and contradictory (from domestic and international sources), are mostly based on different measurement or research methodologies. Therefore, the situation analysis is mainly based on the Eurobarometre 2014 and the Medián representative surveys conducted every two years since 2018, with 3000 participants, each focusing on the Hungarian adult population. According to Eurobarometre 2014 data, Hungary ranks third in Europe in terms of daily bicycle use, following the Netherlands and Denmark. More recent data from 2019 places Hungary in fourth position. While in most European countries, bicycles are more popular in large cities, in Hungary, this is more true for rural regions, as depicted on Trenecon Kft.'s 2016 research map (map 1).

Map 1: Primary mode of transport for commuting to work and school within a settlement (Source: 2011 KSH household survey, daily commuting data)



Due to natural and historical factors, as well as the characteristics of rural public transportation and the costs associated with using motor vehicles, the proportion of cycling in rural areas remains high today. However, the positive change in income situations immediately shifts the population toward car transportation in these regions, as evident in the data. According to the Medián survey, the proportion of those who indicated the bicycle as their primary daily means of transportation decreased from 17% to 16% between 2018 and 2022. Unfortunately, this decline was mainly observed in rural areas, while urban areas typically experienced an increase in this percentage. In cities, factors such as infrastructure investments, supportive government measures, the spread of a health-conscious lifestyle, changes in consumption and leisure habits, and active involvement of civil organizations contributed to a 5% increase in the proportion of daily cyclists in the past two years.

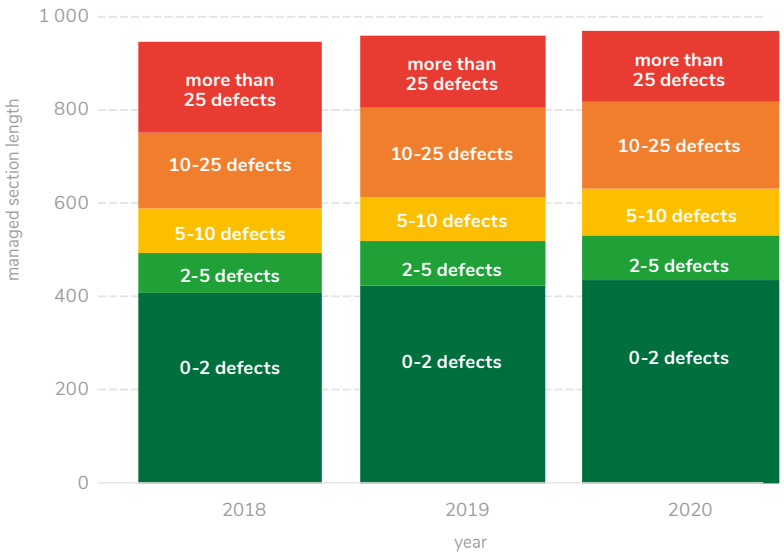
There is still significant potential for an increase in the number of cyclists in cities, as the infrastructure is not sufficiently safe for a substantial potential user group. To encourage more people to choose cycling for their daily travel, infrastructure that provides a higher (subjective) sense of safety is needed. Currently, rather than area-based, complex, cycle-friendly solutions, there are often isolated developments without a network-oriented approach. A complex cyclist-friendly environment, with comfortable and safe urban bike path networks, can be created by combining designated linear and area-based (network-oriented) developments for cycling. However, it should be emphasized that developments in urban spaces often come with conflicts due to space limitations, so detailed planning and preparation are necessary. Short-term, everyday cycling can replace a significant number of car trips, improving the quality of neighbourhoods and streets, the health of the population, and reducing air pollution.

It is important to address shared micro-mobility services in urban transportation, as they are becoming increasingly significant elements of the transportation system and effectively complement public transportation. In order to regulate shared services, which come in various forms (vehicles) and operational models (ranging from fully private to those organized with public services), and to effectively support them for strategic goals, it is necessary to streamline the legal and regulatory framework (e.g. traffic regulations, data reporting, public space utilization, parking, etc.).

There is limited data available regarding the condition of the cycling infrastructure. The current network, spanning nearly 9,000 km, is primarily managed by local authorities. Typically, these are sections within urban areas, and local governments handle operational and maintenance tasks based on the resources and expertise available to them (such as equipment and machinery). In addition to the European Union funding for the development of new cycling infrastructure, in recent years there have also been opportunities for renovation under the Hungarian Village Programme, which is funded by the Hungarian government. Improving the condition of cycle paths and expanding the network will remain an important task for the future.

The Hungarian Public Roads Nonprofit Ltd. regularly assesses the condition of its 1102 km network. For the operational and maintenance tasks of this part of the network, an annual budget of 1 billion forints has been available since 2018, and from 2022, the annual budget has increased to 1.5 billion forints, providing opportunities for multiple renovations. The chart below shows that the condition of the network managed by the Hungarian Public Roads is gradually improving. The company also operates 56 automatic traffic counters nationwide, supplemented by counters in larger settlements and manual counting.

Figure 1: The condition of the bicycle path network managed by Hungarian Public Roads: number of defects per 100 meters (Source: Hungarian Public Roads)



Several factors beyond infrastructure can hinder the growth of the number of cyclists. The legal, financial, and technical regulations currently serve and promote the continuous increase in individual vehicle use. The societal costs of individual vehicle use exceed the benefits derived from it. The regulations do not incorporate elements that would prevent those who do not use individual vehicles from bearing the societal costs of individual vehicle use, either instead of or alongside the users. Among sustainable modes of public transportation, the state only marginally supports or encourages walking and cycling for commuting, and commuting with public transport is supported only in local traffic. The picture is somewhat nuanced by the programme launched in 2020 to support the purchase of electrically assisted bicycles (e-bikes), with a total budget of 1 billion forints. In addition, from 2022, the spread of corporate bicycle fleets is also encouraged by the Corporate Tax and Personal Income Tax laws, as costs associated with corporate bicycles are reimbursable, and bicycles can be provided as tax-free benefits for employees to use. In 2022, a programme supporting the purchase of electrically assisted cargo bicycles was launched with a budget of 400 million forints, supporting the purchase of 270 bicycles by the end of the year.

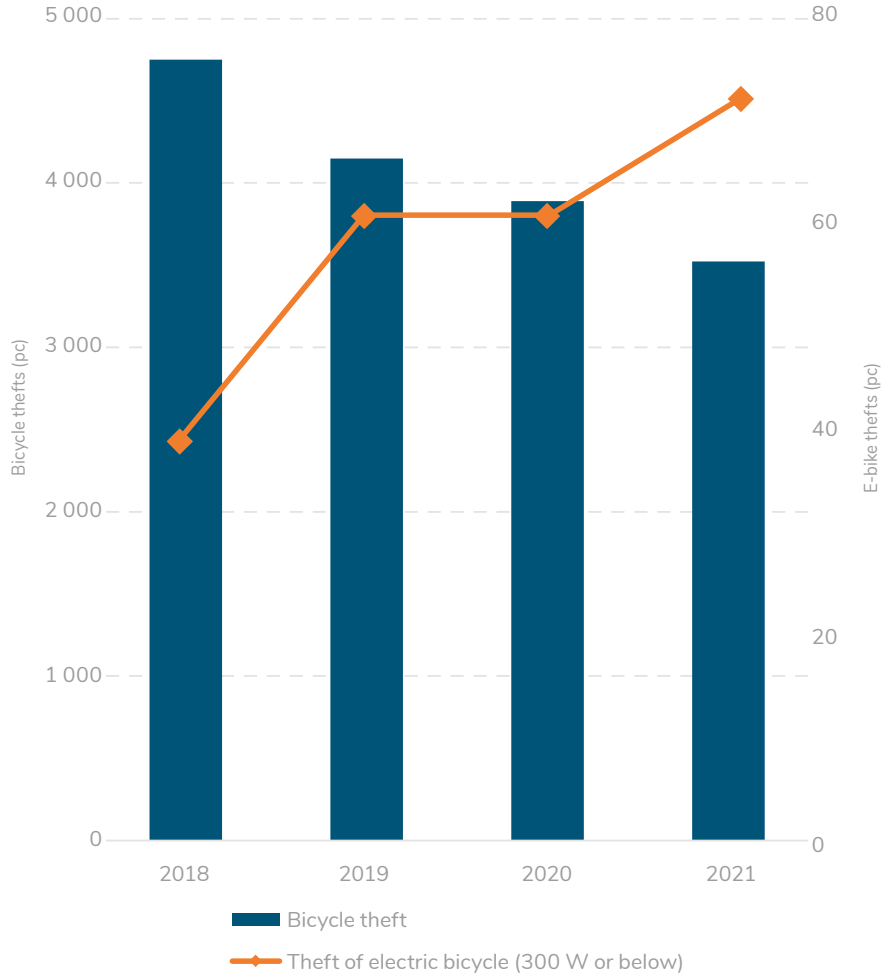
In addition to the lack of an attractive bikeable road network, the perception of cycling is also not favourable enough, therefore breaking down prejudices and misconceptions related to cycling is also an important task. Often, due to the lack of awareness and communication of developments, the subjective sense of security among cyclists is worse than the actual conditions. This prompts people to avoid choosing cycling even when it would be the best option for them.

A significant deterrent to everyday cycling is that many people are afraid to leave their bikes unattended on the street, in the absence of secure storage. According to data from the Ministry of Interior, in 2021, the police handled a total of 3,392 cases related to bicycle theft. Compared to recent years, this shows an improving trend, with a 26% decrease in bicycle thefts compared to 2018. It is worth mentioning that a portion of bicycle thefts remains unknown due to the lack of reporting.

A separate registry is maintained for the increasingly popular and often higher-value e-bikes.

As seen in the second figure, the number of e-bike thefts, in contrast to traditional bicycles, shows an increasing trend, with a total of 72 cases reported in 2021

Figure 2: Trends in the number of bicycle thefts
(Source: Based on data from the website https://enyubs.bm.hu hosted by the Ministry of Interior)



The **BYPAD methodology** was developed for municipalities and regions to assess how well the political institutional system supports cycling and to provide recommendations for improving the cycling situation. The methodology brings together representatives from three levels of interest (political, operational, and user levels) in small groups. They discuss various aspects of cycling policy based on a pre-filled questionnaire. In 2021, a working group consisting of representatives from different levels used the international BYPAD methodology to assess Hungary's national-level support for cycling. In this evaluation, a score of 100% would mean that cycling (and the national-level institutional system behind it) works perfectly in all areas. Overall, Hungary achieved a 60.63% result in terms of the integration of cycling into policy-making from a political perspective. It's essential to note that this value should not be compared to the values of other countries but can be used to measure future development.

Based on the examination of user needs, cycling is a decisive and important topic. Various organizations deal with cycling in a coordinated manner, but they have limited support and resources. The Cyclists and their advocacy organizations have the opportunity to participate in consultations on specific cycling issues, but these discussions are not regular. A significant problem is that in most development projects, cycling struggles or cannot assert itself against the lobbying of motorized modes of transportation, and many projects are implemented focusing on transportation modes rather than comprehensive planning.

Regarding the relationship between **land use and infrastructure planning**, the integration of land-use-based transportation development and the integration of all modes of transportation only appears in certain projects.

The current **leadership and coordination** involve some individuals (leading politicians and officials) who pioneer the development of cycling policies. An internal cross-institutional and cross-organisational working group is in place to provide background support. However, except for central administrative bodies, at the local and regional levels (municipalities), this operation has not yet appeared in a regulated manner.

In terms of how the **policy works in principle**, there is an unofficially adopted set of cycling targets, but it is not explicitly included in other documents determining transportation development. This is not only a feature of cycling policy: there are system-level parallelisms and even contradictions in development documents. The cause of cycling is supported by several independent laws and regulations; however, they do not address many problems and are not up-to-date. Only a few organizations are involved in reviewing the legal environment, making the process time-consuming, taking several years.

In terms of modules, we have achieved good results in the **"human capacity and resources"** area, with an annual budget allocated for cycling investments and measures. Additional financial resources are also available from other areas (health, tourism, environmental protection, etc.) and EU programmes. However, there is a lot of uncertainty in the system, and currently, there is no multi-year, comprehensive budget. Within the responsible ministry, there is a separate department dedicated to cycling issues, with a well-defined task of preparing and implementing cycling policies. However, for capacity expansion, it would be necessary to increase the workforce.

Source: BKK

With the exception of a few cities, conditions for a **safe cycling network** are inadequate. There are many gaps in the networks between facilities. Intermodality, the combination of cycling and public transportation, is a key focus, but this directive is still not widely implemented in many cases. For this, professional guidelines and national-level support are provided, and in recent years, the construction of high-quality bicycle storage facilities has commenced at public transportation stops. Support for cycling is available at various levels: government agencies provide support for communication projects or local/regional campaigns (European Mobility Week, Bringázz a Munkába! campaign). This support takes the form of material, financial, and expert support. The mindset supporting practical bicycle education for children is still emerging. Unfortunately, however, good domestic investments to create a safe environment for children learning to cycle are scattered, as, among other things, the technical road standards do not recognise the Dutch model of residential streets (woonerf, liveable streets).

SWOT analysis

Strengths

- The topography of a significant part of the country is ideal for both recreational and everyday cycling
- Hungary ranks 3rd in the EU in terms of daily bicycle usage
- Funding for cycling developments is increasing, and the decision-makers are committed to these improvements
- Cycling has a strong base in rural areas
- Incentives for purchasing e-bikes and measures encouraging businesses to invest in bicycles have been introduced
- Representation for cycling has strengthened within the government and professional and civil organizations

Weaknesses

- The weak traffic culture and lack of cooperation among road users reduce the sense of safety, causing many to fear cycling
- Misconceptions and prejudices exist regarding cycling
- Primarily due to infrastructure shortcomings, cycling is less popular in cities than in rural areas
- The bicycle faces a competitive disadvantage due to deficiencies in the road network, along with safety issues within cities, suburban areas, and areas between settlements
- Bicycle paths develop on a linear rather than a territorial basis, leading to a lack of comprehensive networks
- While tools and support encouraging bicycle use have been introduced, overall they are not enough
- Urban planning and road infrastructure planning are vehicle-centric, lacking a bicycle-friendly approach
- The planning and preparation time for new bicycle paths is extremely long
- Despite modern regulations in bicycle path planning, many solutions are outdated, and impractical, leaving cyclists reluctant to use the paths
- Cycling receives little emphasis in driver training and general education

Opportunities

- With the rise of green and health-conscious thinking, an increasing number of people are cycling or would be willing to cycle
- Urban planning trends (liveable cities, humanizing public spaces, and increasing green areas) provide more space for pedestrian and cyclist developments
- Developing railway stations and rolling stock allows for the transport of bicycles and promotes combined travel
- Due to the growth of motorized traffic and congestion, cycling becomes the best means of short-distance transportation in cities
- Shared micro-mobility systems are becoming more popular, further encouraging urban cycling
- Technological advancements and the widespread use of electric bicycles broaden the appeal of cycling to a wider audience
- Successes in cycling sports contribute to popularizing cycling
- During leisure time, cycling is the second most popular type of recreational activity, which can also reinforce daily commuting

Threats

- With the increasing number of cyclists, the underdeveloped cycling infrastructure in urban areas becomes overloaded, leading to accidents and congestion, which may result in the unsustainable growth of the cyclist population
- The decreasing allocation of funds for cycling developments
- The continuous growth in demand for bicycles and manufacturing capacity issues lead to an increase in the cost of bicycles, raising the entry barrier
- The share of cycling in rural areas may decrease as car penetration and living standards increase

Overall objective

Hungary aims be the leading cycling-friendly country in East-Central Europe and the leading country for rural cycling in Europe, with 18% of people choosing bicycles and electric bicycles as their main means of transport.

Specific objectives to achieve this

- Preserving a high proportion of cycling in rural areas, primarily in the flat Hungarian Plain and Little Hungarian Plain regions.
- Promoting the use of electric bicycles to improve the proportion of regular cyclists in hilly regions. Additionally, leveraging the opportunities provided by electric bicycles, commuting from suburban areas becomes easier due to their greater range, and the reduced physical effort makes it possible to reach and encourage older individuals and those with lower fitness levels to engage in cycling.
- Increasing the popularity of cycling in urban, densely populated areas. In Budapest, achieving the goal outlined in the Budapest Mobility Plan by multiplying the number of bicycle trips.
- Ensuring that cycling becomes an increasingly accessible option for the population. Achieve 50%[4] of people cycling at least once a week. Engaging and encouraging the target audience that is open to cycling but does not currently engage in it. Raising awareness among the target audience that rejects cycling.
- Integration of cycling into the transportation system and promoting modal shifts.
- The goal is to make the right to cycle equal to the rights granted to drivers among the general public and decision-makers.
- In accordance with the 1988 Act I, during the planning and development of public roads, procedures should be followed to ensure that safe traffic conditions are provided for all road users, so that cycling is not disadvantaged during the developments.
- Establishment of a safe infrastructure for all target groups (e.g. novice cyclists, children, women, seniors).
- Making local side road networks within urban areas pedestrian- and cyclist-friendly.

Commitments

- Increasing the proportion of cycling in urban and metropolitan areas, while maintaining the existing high level in rural areas.
- Creating the conditions for comfortable and safe cycling, within settlements primarily through directional planning, and outside settlements by establishing dedicated infrastructure.
- Encouraging the creation of traffic-calmed zones to improve the conditions for cycling and enhance the liveability of cities.
- Maintaining an accessible and up-to-date database for everyone about the cycling route network.
- Significantly increasing the number of secure bicycle storage facilities and bicycle parking spaces.
- Continued support for cycling and access to bicycles with additional financial and other incentives, whether it's a personal, public, company, or cargo bike, with or without electric assistance.
- Further promoting cycling through regular campaigns.
- Developing the network necessary for carrying bicycles on trains in the (Budapest) agglomeration area.

4 Calculated based on the methodology of the Cycling in Hungary, 2022 research commissioned by the Hungarian Cyclist Club and Active Hungary, conducted by Medián.

Target groups

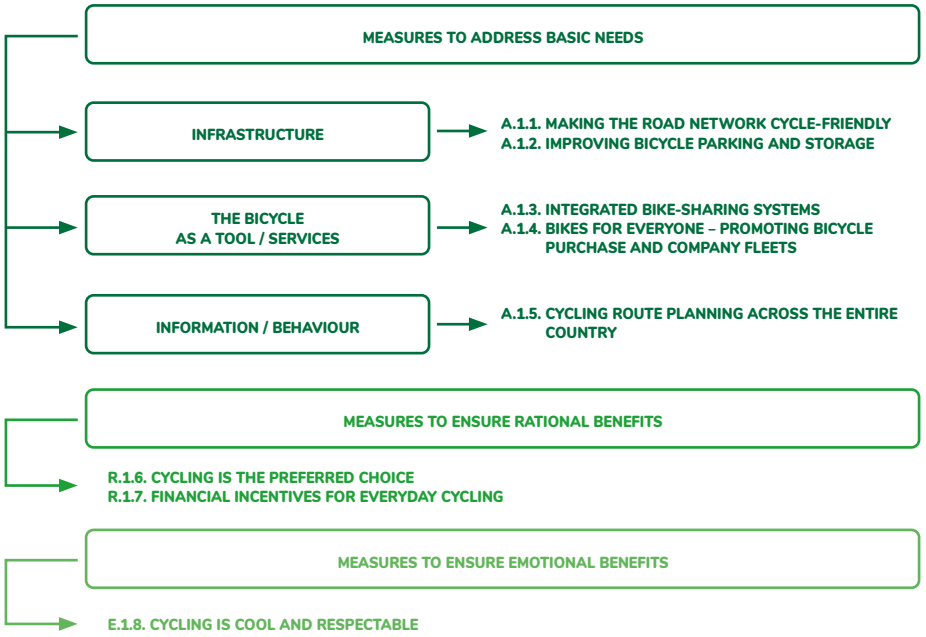
By town size:

- Residents of large cities (Budapest, Debrecen, Szeged, Miskolc, Pécs, Győr, Nyíregyháza, Kecskemét).
- People living in medium-sized and small towns (county towns with less than 100,000 inhabitants).
- Residents of small towns.

By bicycle use:

- People, who currently use a bicycle regularly or occasionally.
- People, who are not currently cycling, but are open to cycling.
- People, who are not currently cycling, and are rejecting it.
- Mode switchers: those who often choose this mode of transport as a complement to other modes of transport.
- Novice or less confident cyclists seeking a higher sense of security. Emphasis on children, women, and older age groups.

Measures



Flagship projects

- Cyclist-friendly city centres.
- Creation and maintenance of five high-quality, fast urban-suburban cycling routes (bike highways) in Hungary.
- Bike and ride – bicycle parking linked to public transport.
- Financial incentive for commuting by bicycle to work.

Source: Máté Sebők

A.1.1. Making the road network cycle-friendly

Goal

Increase the length of road sections on the bikeable road network where cycling is safe. It is crucial to ensure that conditions for cycling are created along roads currently used by vehicular traffic.

Increase the proportion of settlement areas where conditions for safe and comfortable cycling are present. In every municipality, there should be a self-explanatory and easily understandable road network. In larger cities, the fundamental tool for development is the reallocation of traffic surfaces with a prioritization of active and sustainable modes of transportation. In the basic network of cities, it is necessary to achieve the reduction of traffic volume and speed by creating modern residential streets with mixed traffic. On the main cycling network, it is essential to increase the safety and comfort of cycling by separating it from other modes of transportation and implementing directional designs. Proper measures can also contribute to the revaluation of areas affected by interventions.

Activities

Methodological activities

- In addition to continuous improvement of existing technical regulations and design guidelines, the technical solutions for creating a bikeable road network should be integrated into other technical regulations and standards. Strategic development documents (territorial, municipal, and sectoral) should give more emphasis to cycling among sustainable transportation modes.
- Simple, self-explanatory, and attractive routes should be established in new construction and renovation projects as well. Facilities should be standardized and designed according to technical regulations, taking into account the volume and speed of motorized traffic, as well as other factors.
- Not only in the case of developments, but also in the case of road renovations, the provision of cycling facilities and road surfaces suitable for cycling should be considered, along with a review of the regulatory environment.
- An important design principle to be taken into account is that cycling facilities should be built in biologically active green areas,
- protected areas, to the smallest possible extent and with the least possible damage to the natural environment, taking into account the subsequent operation.

Specific interventions

- The creation and improvement of infrastructural conditions for cycling and pedestrian traffic in every major city (see later as flagship projects).
- The redistribution of cross-sectional space from wall to wall along main and access routes within urban areas. The establishment of two-way directionally separated bicycle facilities wherever possible. The development of independent/protected cycle paths as part of the urban main network where justified/necessary. In the development of the main network, a key consideration is ensuring sufficient cross-sectional width to allow for overtaking and accommodate the movement of specialized bicycles.
- In cities, a basic network must be established from bike paths, bike lanes, and traffic-calmed streets, ensuring that it enables safe and quick access everywhere by bicycle.
- Establishment of five high-quality urban-suburban direct connections (bike highways) (2 in the Budapest metropolitan area and 3 in other major urban regions), with the definition of highlighted operational needs (see later as flagship projects).
- Radical traffic calming measures in residential neighbourhoods and small streets where children and local residents can travel with a high sense of safety, at least periodically.
- Rural bikeable road network programme: completing missing elements of the main cycling network along sections of main roads with heavy road traffic or where cycling is prohibited. Creating conditions for safe commuting by bicycle, especially in the catchment areas of large and medium-sized cities.
- Regular, high-quality operation, and maintenance of bicycle infrastructure. Establishment of the regulatory environment for express bike paths. Creation of the regulatory environment for bike streets.
- Reduction of conflict points and complex intersections along riverbank sections, with an emphasis on traffic engineering.

Organisations involved in the implementation

Competent ministry responsible for cycling, and other related ministries, Municipalities, Hungarian Public Roads, BKK Budapest Public Roads, professional civil organizations

Estimated resource requirements

Establishment of directionally separated cycling facilities on main routes in populated areas: Creation of directionally separated facilities on a 1,000 km stretch through the redistribution of cross-sections, traffic management interventions, without major construction (HUF 10 billion), and on a 100 km stretch with significant construction (curb modification, pavement replacement, road elevation) (HUF 20 billion): a total of HUF 30 billion.

Automatic opening of all one-way traffic streets for two-way cycling (with exemptions if justified): within the road operator's jurisdiction, funded from existing operational resources (2023-2030): HUF 1 billion.

Establishment and improvement of infrastructure for bicycle and pedestrian traffic in all major cities: redistribution of public spaces, general speed limits in settlements (30 km/h in small settlements), point-based, small-scale interventions (creating ramps, lowered curbs, shortcuts) (2023-2030): HUF 1 billion.

Establishment of five urban-suburban high-quality direct connections (bike highways), including 2 in the Budapest agglomeration and 3 in other metropolitan areas: 5x15 km = 75 km = HUF 25 billion.

Rural bikeable road network programme: construction of missing main network elements in areas with significant bicycle traffic between and within large municipalities;

Making 100 sample settlements bicycle-friendly through tender: HUF 10 billion. Building 250 km of independent facilities between municipalities in an independent bicycle project (estimated funding requirement: HUF 37.5 billion).

Indicators

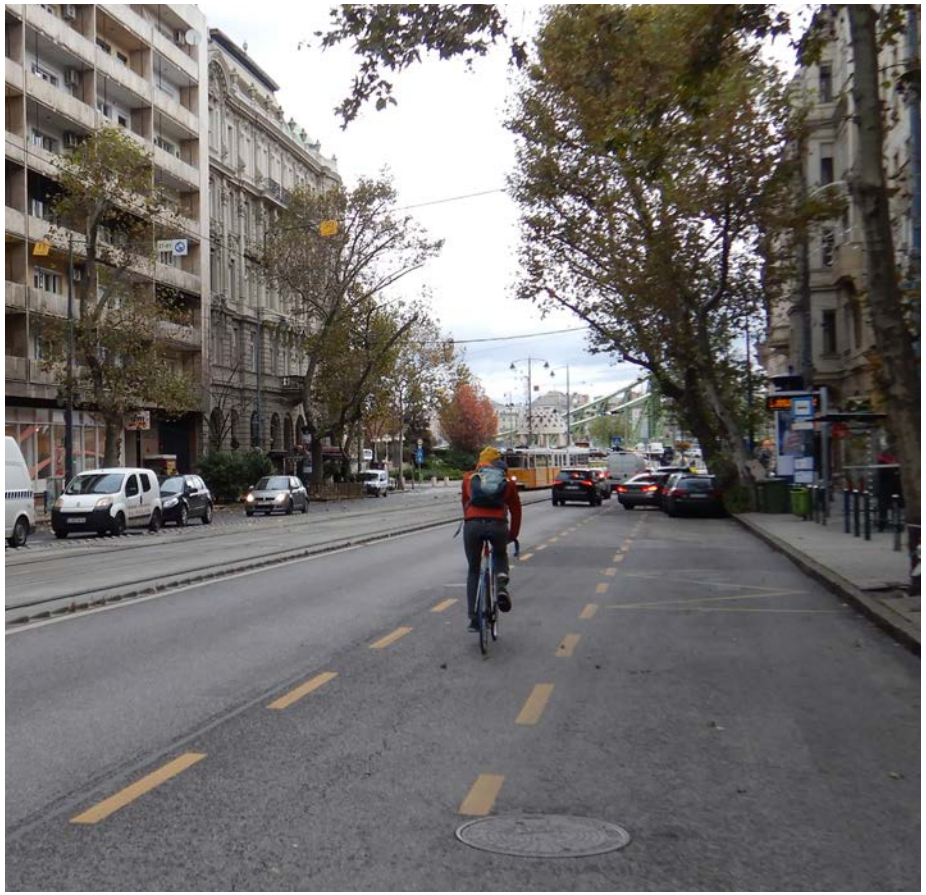
Output	Result
• Number of bicycle-friendly settlements, districts, and routes (pc) • Number of traffic-calmed streets and districts (pc) • Length of converted road sections (km) • Availability of professional guidelines and modern technical regulations (yes/no)"	• Length of road sections safely suitable for cycling (km) • Length of high-traffic but bikeable road sections (km) • Length of high-quality urban-suburban bike paths (km) • Percentage of directionally separated facilities within settlements (%)

Timing

Good practice abroad

Pedestrian and cycling city centre (Brussels)

Pedestrian-bicycle zone in the city centre of Brussels. A rising bollard ensures that only vehicles with permits can enter the zone, with walking and cycling being the default modes. An informative sign provides information about the rules and recommended behaviour for each mode of transportation.



Good practice in Hungary

Redistribution of cross-section to create a cycle lane (Budapest, Béla Bartók street)

Reducing the competitive disadvantage of cycling through the redistribution of cross-section: On Budapest's Bartók Béla Street, due to the volume and speed of vehicle traffic, cycling was not safe. In 2017, with minimal costs and within the road maintenance budget, a directionally separated bike lane was established, making cycling a viable choice for many more people in this area.

Flagship

Bicycle-friendly city centres

Comprehensive traffic calming in the inner districts of Budapest (I., II., V., VI., VII., VIII., IX., XIII. districts), district centres, and the inner zones of rural cities, with a reconsideration of public space functions and the creation of healthy streets.

Source: BKK

Good practice abroad

Cycling highways in Europe

In the Netherlands, Denmark, Belgium (Flanders), the United Kingdom (London), and Germany, in recent years, they have started connecting the city centres and suburbs directly with continuous, fast, safe, and comfortable bicycle roads. The high-quality infrastructure of the road network, along with the widespread use of electric bicycles and effective branding and promotion, provides a competitive alternative to individual motorized transport, even for commuting distances of 10-20 km. It enables door-to-door transportation while its implementation, despite its high quality, comes with significantly lower costs compared to the expansion of roads used by motor vehicles or fixed-track public transportation infrastructure.

Flagship

The establishment and operation of five high-quality, fast urban-suburban cycling routes (bicycle highways) in Hungary.

In Budapest and several county-level cities, significant cycling infrastructure development projects have been underway in the past 15 years. However, these projects hardly provide an attractive alternative for commuting between suburban areas and city centres. We aim to build cycling infrastructure on 5 selected routes in the following places: Between Budapest and 2-3 suburban areas and in 2-3 county-level cities. It would be implemented step by step, with continuous quality improvement, along the following criteria:

Fast – avoiding unnecessary detours, inclines, reaching the city centre via the shortest and easiest route.

Safe – separated from faster and higher-volume motor traffic, with curves allowing fast cycling, intersections are either grade-separated or cyclists have priority.

Coherent – a uniform facility type (not changing every few hundred meters), without “side-switches” in the internal areas immediately adjacent to public roads, directionally separated, uniformly signposted and clearly marked by paving/colouring.

Attractive – a wide and smooth paved surface, is bordered by street lighting and a green belt, with rest areas and service points implemented alongside.


Full-Bike
FULLenergy

A.1.2. Improving bicycle parking and storage

Goal

Establishing safe bicycle stands that do not damage bicycles and secure bicycle parking, organizing the orderly parking of other micro-mobility devices, and increasing their capacity at workplaces, residences, schools, and transportation hubs. Developing B+R systems at all relevant public transportation stops, with 50,000 new spaces by 2030.

Increasing the number of combined (bicycle + public transportation) journeys and reducing the number of trips made by individual motor vehicles.

In densely built city centres, it is necessary to design bicycle storage and parking facilities in a way that takes into account the long-term planning of the given street or road section and the expected future utilization of public spaces. With this in mind, the wall-to-wall cross-section of the street should be re-designed to include storage and parking areas in line with the long-term objectives set out in the urban development documents.

Activities

- The analysis and modification of the regulatory environment for bicycle parking and B+R-type bicycle storage, as well as residential (home), school, and workplace bicycle storage, should incentivize building operators, road, and building planners and developers to promote bicycle parking development.
- On public parking surfaces used for on-street parking, each municipality should establish safe bicycle parking/shared micro-mobility service points in proportions aligned with its own modal split targets, with over 25,000 spaces.
- B+R development at every major passenger traffic public transportation line terminal and stop, with special consideration for larger urban agglomerations (over 25,000 spaces by 2030). By increasing bicycle – public transport travel chains, public transport is attracting new passengers who previously travelled by car. Capacity expansion for public transportation may also be necessary on congested routes.
- Residential complex and apartment building bicycle storage programme: transforming existing spaces or installing lockable, covered storage boxes in public areas where internal building arrangements are not feasible. Developing guidelines for retrofitting bicycle storage in residential buildings, with examples.
- Developing an operational model for establishing closed bicycle storage facilities in public or vacant commercial spaces, initiating a pilot programme.
- Creating parking and storage facilities suitable for micro-mobility devices.
- Developing guidelines for the implementation of storage facilities for municipalities.

Organisations involved in the implementation

Competent ministry responsible for cycling and other relevant ministries (OTÉK), Municipalities (HÉSZ), MÁV-Volán Group, GYSEV, BKK, Hungarian Cyclists' Club.

Estimated resource requirements

B+R improvements integrated into complex projects: HUF 0.

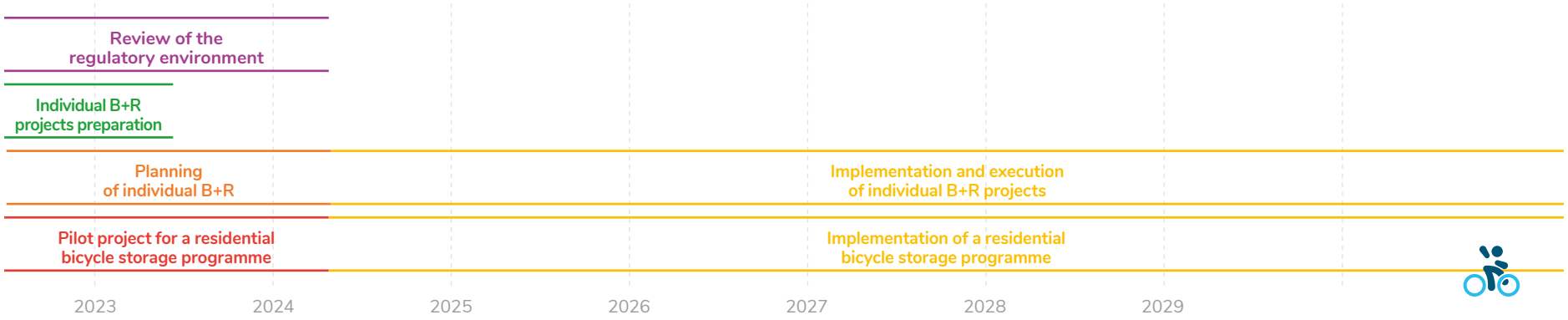
Preparation and design of a stand-alone B+R project and public bicycle parking: HUF 500 million, implementation: HUF 5 billion (2023-2030).

Residential bicycle parking programme: pilot HUF 100 million, national extension HUF 1 billion.

Indicators

Output	Result
• The new regulation regarding bicycle parking and storage will be established (yes/no). • The residential area bicycle storage programme will be launched (yes/no) • The school bicycle storage programme will be launched (yes/no) • The number of newly established B+R bicycle storage facilities (pcs)	• The number of B+R bicycle parking spaces (pcs) • The number of public bicycle stands (pcs) • The number of school bicycle storage facilities (pcs) • The number of residential bicycle storage facilities (pcs) • The number of railway stations equipped with B+R bicycle storage (pcs)

Timing



Flagship

Bike and ride – bicycle parking linked to public transport

Comprehensive establishment of 50 B+R locations in the Budapest agglomeration: Installation of B+R facilities at 50 railway and/or bus stops, covering 10% of the daily passenger traffic at each stop. Installation of missing facilities and expansion of existing ones. Implementation of unified passenger information. Objective: Mitigation of car commuting from the agglomeration affecting the capital, promoting the combination of cycling and public transportation.

Source: MÁV Hungarian State Railways Private Company Limited by Shares (MÁV Co.)

Source: BKK

A.1.3. Integrated bike-sharing systems

Goal

Regulation and simplification of the usage of shared micro-mobility services, including the so-called public bike system.

For micro-mobility services, the goal is to continuously increase the number of users on a national scale. Only functional systems that can be operated based on local needs, following well-functioning examples, should be established.

Supporting the widespread use of cargo bikes for last-mile delivery, primarily in urban environments.

Activities

- Regulation of shared micro-mobility services and devices (infrastructure usage, parking/storage, pedestrian zones), sharing data collected by service providers, and encouraging common tariff systems.
- Uniform purchase of time-based tickets (e.g. with a bank card) without registration in existing and new shared micro-mobility services. Integration of access and rental fees into the tariff of public transportation systems. Usage can be increased gradually, relying on the development of a cycling-friendly road network, financial incentives and integrated communication.
- Supplementing shared micro-mobility services with electrically assisted bicycles, with a focus on diverse terrain municipalities.
- Initiating a cargo bike sharing programme, supporting the acquisition of electrically assisted bicycles, and providing short-term parking for larger cargo bicycles as well.
- Employers should be able to provide the bicycle-sharing tariff to their employees tax-free.
- Integration of bike-sharing and public transportation systems into the National Mobile Payment System.

Organisations involved in the implementation

Relevant Ministry for Bicycle Transportation and other related ministries, Municipalities, and KKKR (Central Coordinating Centre for Public Transport) operators

Estimated resource requirements

Development of shared micro-mobility services (expansion, electric public bicycles): HUF 5 billion.

Indicators

Output	Result
• New regulation for micro-mobility services will be established (yes/no) • Modern and integrated tariff systems will be established (yes/no) • The number of usage-related data-sharing systems (pcs) • Flexible service packages, customisable to personal needs, are available (yes/no)	• The number of available shared bikes and other micro-mobility devices per settlement (pc/settlement) • The number of shared cargo bikes per settlement (pc/settlement)

Timing

A.1.4. Bikes for everyone – encouraging the purchase of bicycles and company fleets

Goal

Facilitating access to bicycles for everyone for whom it enables mobility but who currently do not have such access. Encouraging corporate fleets. Helping university students in obtaining bicycles.

Promoting the refurbishment and resale of old, unused bicycles for sustainability.

Activities

- Encouraging bicycle purchases: Developing and implementing various campaigns to increase the number of bicycles, including those for commuting, mobility, and urban logistics.
- Support for company bicycle fleets through favourable tax regulations.
- Prevention of bicycle thefts through the expansion of existing programmes (e.g. BikeSafe).
- Facilitating access to bicycles for university students through long-term rental systems available at a low cost with a student ID. Encouraging the establishment of fleets consisting of bicycles suitable for urban transportation and available for rent, with primarily lower specifications, on a market basis.
- In the spirit of equality, we support initiatives and programmes that enhance cycling opportunities for people with disabilities.
- Support for bicycle servicing: Dutch model, which ensures the good condition of bicycles over the long term.
- Develop and promote community bicycle repair stations.

Organisations involved in the implementation

Competent ministry responsible for cycling and other related ministries, AÖFK, professional civil organizations (Hungarian Cyclists' Club, KETOSZ, MKKSZ), higher education institutions.

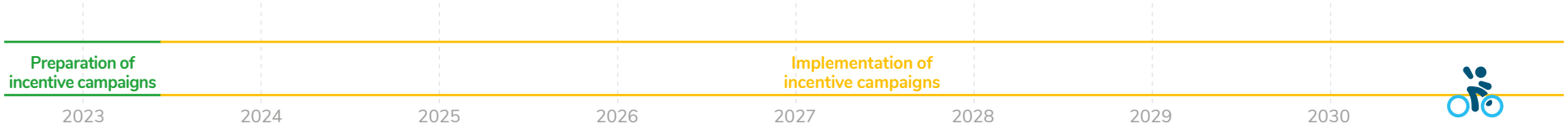
Estimated resource requirements

Development and implementation of incentive campaigns HUF 100 million/ year

Indicators

Output	Result
• Number of bicycle access programmes (pc) • Number of bicycle theft prevention programmes (pc)	• Percentage of people having their own bicycles (%) • Number of bicycles sold per year (pcs) • Number of cargo bicycles sold per year (pcs) • Number of company bicycle fleets (pcs) • Number of registered bicycles (pcs) • Number of people using public bicycle systems (individuals)

Timing



Source: Máté Sebők

A.1.5. Cycling route planning across the country

Goal

Cyclists intending to travel should easily and quickly access reliable, up-to-date information on how to reach their destination by bicycle. Route planning specifically supports combined travel chains and includes key services.

Activities

- Creation of a basic database: It is a government task to conduct surveys, update data, operate and develop the existing common platform (KENYI), and make it publicly accessible and queryable, with municipalities and other relevant stakeholders providing data in a standardized format.
- Support for market players in developments that aid travel.
- Mutual data exchange between the state, municipalities, and market players.
- Establishment of a unified geographical information platform and database structure.
- The further development of the Central Bicycle Route Database (KENYI) with uniformly surveyed and evaluated routes based on comprehensive (and not just operational) criteria. Regular updates, maintenance, and public disclosure of the database.
- Presentation on various platforms, collaboration with market players (e.g. Google).
- Introduction of comfort levels based on the survey and evaluation of the infrastructure.

Organisations involved in the implementation

Competent ministry responsible for cycling, AÖFK, Hungarian Public Roads, Municipalities, market players, MAKETUSZ

Estimated resource requirements

Database, geographical information platform development: HUF 50 million.
Monitoring and surveys: HUF 30 million annually (state and municipal).

Indicators

Output	Result
• Unified data collection and registration platform is established (yes/no) • Up-to-date and accessible database is available to everyone (yes/no) • Review of data management regulations is completed (yes/no) • Regular data provision by the infrastructure owner or manager (yes/no) • Regular data exchange operates among data custodians (yes/no)	• Number of data requesters/visitors to the platform (number of individuals)

Timing


Montevideó utca
Kőbánya-Kispest
2 óra 47
36 perc
47 perc
További információ
Dekorellátó Oktatóközpont és...
49 p
54 p
47.p
47 p (14 km)
Előnézet
Lépések

R.1.6. Bicycle: the preferred choice

Goal

Mindset change: promoting the rational benefits and competitiveness of cycling for individuals. Making the rational advantages of cycling well-known to the entire Hungarian population: convenient, practical, fast, reliable, financially advantageous, healthy, environmentally friendly.

Promoting safe bike paths and routes, with a focus on groups that prioritize safety: women, children, the elderly.

Activities

- Continuous, nationwide communication campaigns promoting cycling with positive messages about cycling (comfort, speed, cost-effectiveness, etc.).
- Launching targeted campaigns primarily for rural settlements, where the main goal is to maintain a high proportion of cycling.
- Implementing targeted campaigns to address groups requiring a higher level of safety (women, children, and the elderly) after successful developments to dispel fears associated with cycling.
- Promoting intermodal transportation and the rational choice of transportation modes to reshape commuting habits.
- Creating a communication guide for conducting cycling campaigns.

The communication activities showcase existing benefits and efforts within the current Cycling Strategy that support the above message.

- Introductory campaign – Online, social media, TVC, outdoor campaign – “No more excuses! Starting tomorrow, I'm cycling!"
  - “Why don't we cycle?" campaign through influencers, presenting answers as the resolution.
  - “Commitment roadmap” campaign, where not everything has to start within the campaign period, but everything needs to be declared as a commitment (e.g. bike lane, road construction, storage).


Source: BKK

- Always-on public awareness campaign and messages (social media and PR).
  - Individual cycling lane and bicycle highway openings embedded with the message "cycling is comfortable, fast, and safe."
  - Construction of showers and storage spaces, showcasing successful SME tender application nationwide – individually and continuously.
  - Introducing new office buildings where showers and storage spaces have already been built – individually and continuously.
  - Handing over bicycle storage facilities and B+R centres.
  - Daily cyclist count.
- A two-month challenge campaign demonstrating that cycling is fast.
- The communication campaign, in the form of online and PR content, presents tests from various points across the country proving that cycling is the fastest choice compared to other urban transportation modes. The campaign continues with User Generated Content (UGC), a kind of challenge where everyday cyclists can submit their comparative test videos, which the team will share. Participants submitting the best content can win cycling-related gifts.
- Campaigns promoting safe road sections. Systematic joint cycling tours on urban routes, during which the "tour" leaders draw attention to the safety of the specific road section and what to pay attention to for maintaining a sense of safety.

Organisations involved in the implementation

Ministry responsible for cycling, AÖFK, professional civil organizations (Hungarian Cyclists' Club, MAKETUSZ), market players

Estimated resource requirements

Preparation: HUF 200 million
Execution: 7 years x 450 million = HUF 3.15 billion.

Indicators

Output	Result
• Introductory campaign will be created (yes/no) • Always-on campaign is launched (yes/no) • Number of targeted campaigns (pcs)	• Percentage or number of population reached by campaigns (% or persons) • Number of influencers, contributors involved in campaigns (%)

Timing

Source: BKK

R.1.7. Financial incentives for everyday cycling

Goal

The system of financial incentives related to transportation (reimbursements, tax benefits) should reflect the prioritization of sustainable modes of transportation and should include supportive measures for cycling and other micro-mobility solutions. The goal is to promote sustainable modes of transportation parallel to climate protection efforts. Currently, cycling does not receive adequate support compared to car journeys subsidised on a per-kilometre basis and supported public transport. In the long run, the incentives should shift towards sustainable modes of transportation, with cycling being a crucial element, especially for urban commuting. Other micro-mobility solutions should also be supported following appropriate regulations.

Transformation of the financial incentives system: By 2030, commuting with sustainable modes of transportation should be more attractive in terms of support compared to commuting with motor vehicles.

Motivating businesses and institutions to provide bicycles instead of company vehicles to encourage the widespread adoption of cycling.

Activities

- Development and implementation of an individual cyclist incentive system (e.g. tax benefits, direct support) to such an extent that it becomes a favourable alternative to company cars.
- Design and introduction of a corporate incentive system (e.g. bicycle storage, workplace changing rooms, and showers, tax benefits).
- Encouragement of integrated public transportation and shared micro-mobility service fee products.
- Encouraging micro-mobility or vehicle-sharing services instead of a corporate car fleet.

Organisations involved in the implementation

Competent ministry responsible for cycling, other relevant ministries

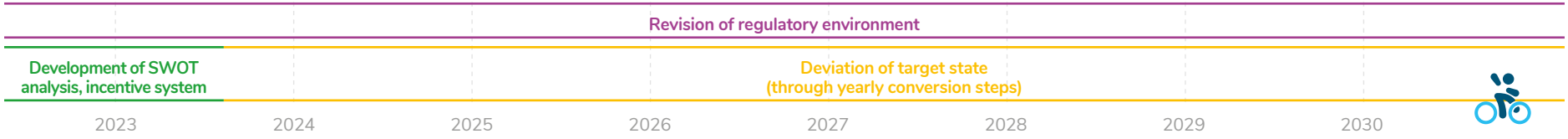
Estimated resource requirements

Due to the current reallocation of resources for the financial incentive of commuting, the resource requirement is HUF 0.

Indicators

Output	Result
• New tariff products integrating public bike services available (yes/no) • Discounts for cycling (% or HUF)	• Number of registered users (pcs) • Number of trips (pcs)

Timing



Flagship

Financial incentives for cycling to work

Encouraging commuting by bicycle with a fixed kilometre fee, reimbursement, or other targeted benefits, incentive programmes to make cycling financially attractive as a mode of transportation compared to individual car use in local commuting.Corporate bicycles: Similarly to providing corporate personal vehicles, it is recommended to offer corporate bicycles. The employer can do this at their own expense, but they may transfer this cost to the employee as a tax-free benefit. To encourage employers, it is recommended to ensure 120% deductibility of their costs, reducing their pre-tax profits and the base for corporate tax.

The planned incentive measures, with minimal budgetary impact (tax revenue loss), can approximately increase bicycle usage by 2%.


HARKA PLATEAU
HARKA PLATEAU

E.1.8. Cycling is cool and respectable

Goal

Leading message: "Hungary is a cycling nation." The aim is to raise awareness and use this to promote cycling

Change of mindset: cycling is also emotionally beneficial for the individual. Make cycling the "coolest" choice for the entire Hungarian population. In rural areas, reduce negative prejudices associating cycling with poverty to prevent those already cycling from switching to motor vehicles despite increasing incomes.

Activities

- "Pride" image campaign
- Campaign videos showing the results achieved so far:
  - Growth in the number of daily cyclists in Budapest over the past two decades.
  - Hungary ranks high in terms of rural cycling in Europe.
- Campaign film presenting goals and ambitions:
  - Introduction of measures (Hungary and Budapest).
  - Emphasis on collaboration ("We're counting on you! Get on the bike, Hungary!")
- Cycling is cool + healthy + environmentally friendly: campaign on social media.
  - Social media-based influencer campaign on switching to cycling and its health (physical-mental) and environmental benefits.
  - Nationally recognized influencers from various fields (athletes, actors, musicians, artists, experts) and various age groups.
  - Local micro-influencers popularizing everyday cycling among the rural and local population.

Organisations involved in the implementation

Competent ministry responsible for cycling, government communication agencies, professional civil organizations, and scientific workshops (Hungarian Cyclists' Club, MAKETUSZ, MKSZ, KTI)

Estimated resource requirements

Preparation: HUF 60 million, execution: HUF 400 million.

Indicators

Output	Result
• Number of campaigns to promote cycling (pcs) • Number of cycling campaign films (pcs) • Number of cycling-related social media posts (pcs)	• Percentage or number of population reached by campaigns (% or persons) • Reach data of cycling-related social media posts (persons)

Timing

Tourism, recreation

Current status and problem identification

Hungary can become an excellent cycling tourism destination due to its diverse topography, easily navigable terrain, and the absence of high mountains. Cultural landscapes, forest areas, rivers, and lakes are attractive destinations for cyclists. The climate allows for a 6–8 month-long cycling season with a low number of rainy days. As a result, and partly due to the restrictions of the past two years, cycling tourism has been experiencing growing popularity.

The MAKETUSZ (Hungarian Cycling Tourism Association) was established in the summer of 2017 to bring together cycling tourism and related civil organizations. Since its establishment, the organization has implemented numerous cycling tourism developments. The coordination of cycling tourism is the responsibility of the AÖFK (Aktív- és Ökoturisztikai Fejlesztési Központ – Active and Ecotourism Development Center). The centre aims to coordinate the activities of various tourism and business stakeholders related to cycling tourism. In addition, its tasks include promoting cycling transportation, popularizing cycling leisure activities, and increasing the number of people reached.

Among Hungary's cycling routes, the busiest and most popular ones form a continuous network or are part of international cycling networks (such as Balaton Cycling Tour, EuroVelo 6, EuroVelo 11, tours around Lake Tisza and Lake Velence). Our large lakes are increasingly emerging as independent cycling tourism destinations in Hungary's tourism offer.

Currently, a 9100 km long cycling network is available to tourists, including 4000 km of independent cycling paths and 5100 km of designated cycling routes. The network of cycling routes for tourism purposes is continuously evolving. The backbone of the network includes the four EuroVelo routes, providing an excellent opportunity for Hungary to be featured on the European cycling tourism map. Further development is still needed for this purpose. Cycling tourism routes are forming regional networks in more and more places. Notable initiatives have been implemented in Őrség, Szigetköz, along the Körös rivers, along the Mura and Dráva rivers, and in the Upper Tisza region. The Lake Tisza circuit closed with the Tiszafüred-Poroszló bridge. The Lake Velence gained renewed value with the construction of the Budapest-Balaton bike path. However, planning and route designation need further improvement for the quality and attractiveness of the routes.

Cycle routes around lakes

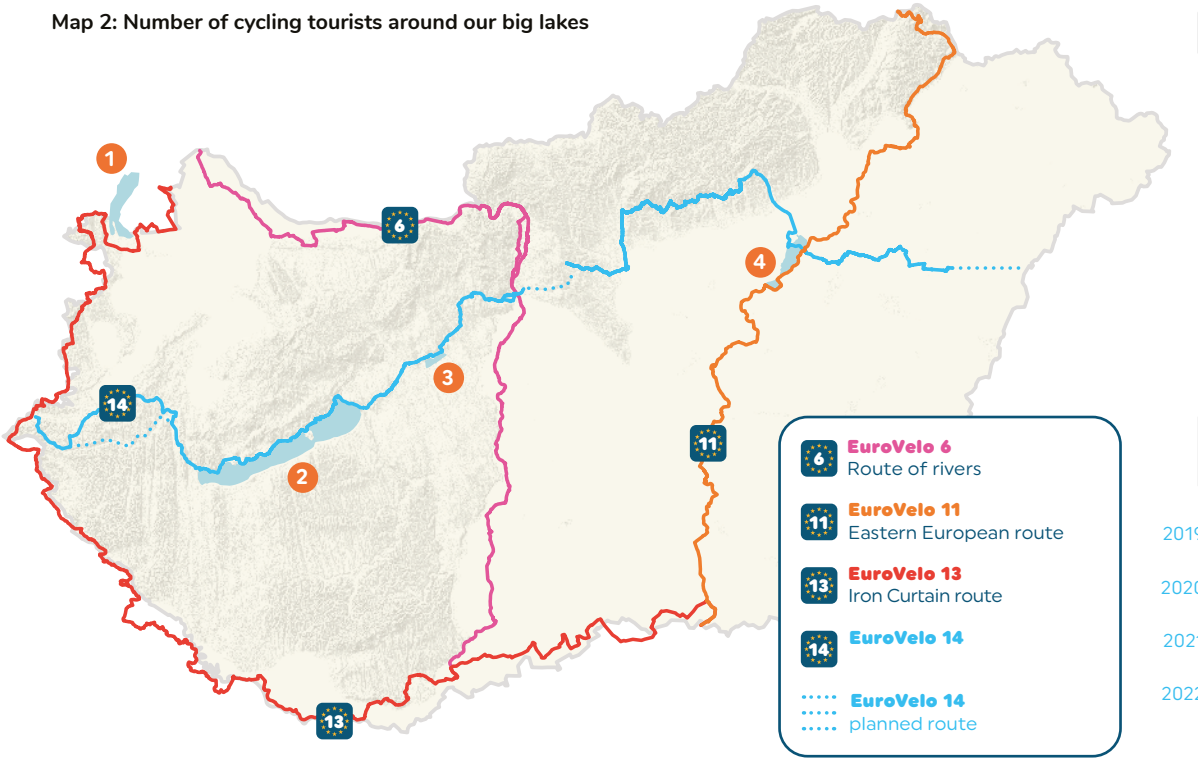
Route	Length
Balaton	210 km
Fertő lake	130 km
Tisza lake	65 km
Lake Velence	30 km

Hungarian sections of international bicycle routes

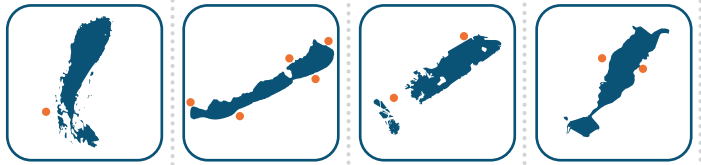
Route	Length
EuroVelo 6 – Route of rivers	515 km
EuroVelo 11 – Eastern European route	507 km
EuroVelo 13 – Iron Curtain route	475 km
EuroVelo 14 – Central European Water Route*	737 km

* approved, under development

Map 2: Number of cycling tourists around our big lakes



Manual counting locations



LAKE FERTŐ
EuroVelo 13
Based on data from 1 monitoring station

BALATON
EuroVelo 14
Based on data from 5 monitoring station

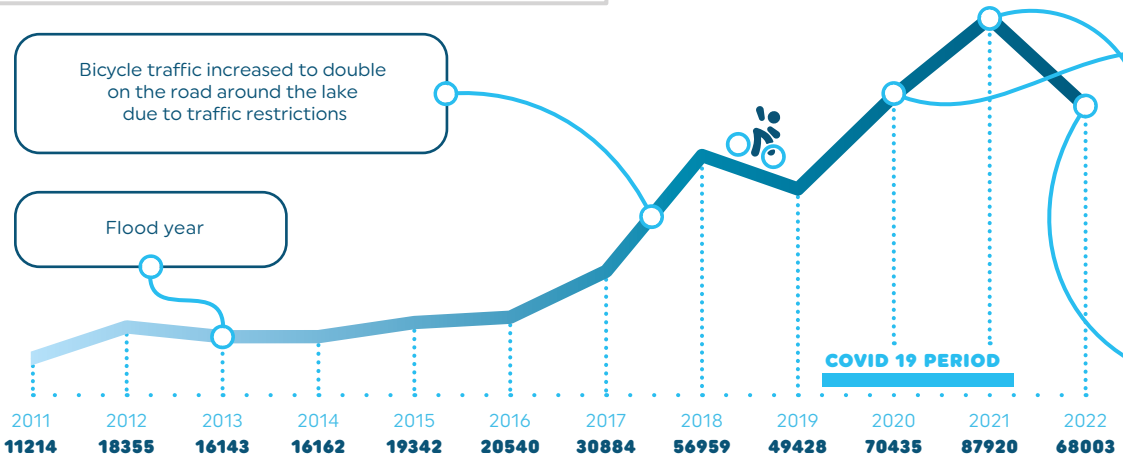
LAKE VELENCE
EuroVelo 14
Based on data from 2 monitoring station

LAKE TISZA
EuroVelo 11
Based on data from 2 monitoring station

Results of the monitoring stations on a summer weekday and a summer weekend day

2019	1419	8639	3415	2783
2020	1629	15955	6850	4665
2021	1088	16986	5104	3123
2022	936	15102	3898	2455

Number of cyclists passing the Kisköre Hydroelectric Power Plant



Handover of the Poroszló-Tiszafüred section

First full year with the new bridge, which closed the Lake Tisza Loop, due to the effect of COVID

Reduction in traffic following the lifting of COVID restrictions.

Plans for nearly 1000 km of cycling routes are ready for funding. Additionally, the preparation for signposting an additional 4500 kilometres on forestry and agricultural roads, dams, and low-traffic local roads is underway. When designating the planned sections, priority was given to those in rural areas, which are critical from a network perspective or have significant importance in terms of tourism and professional traffic.

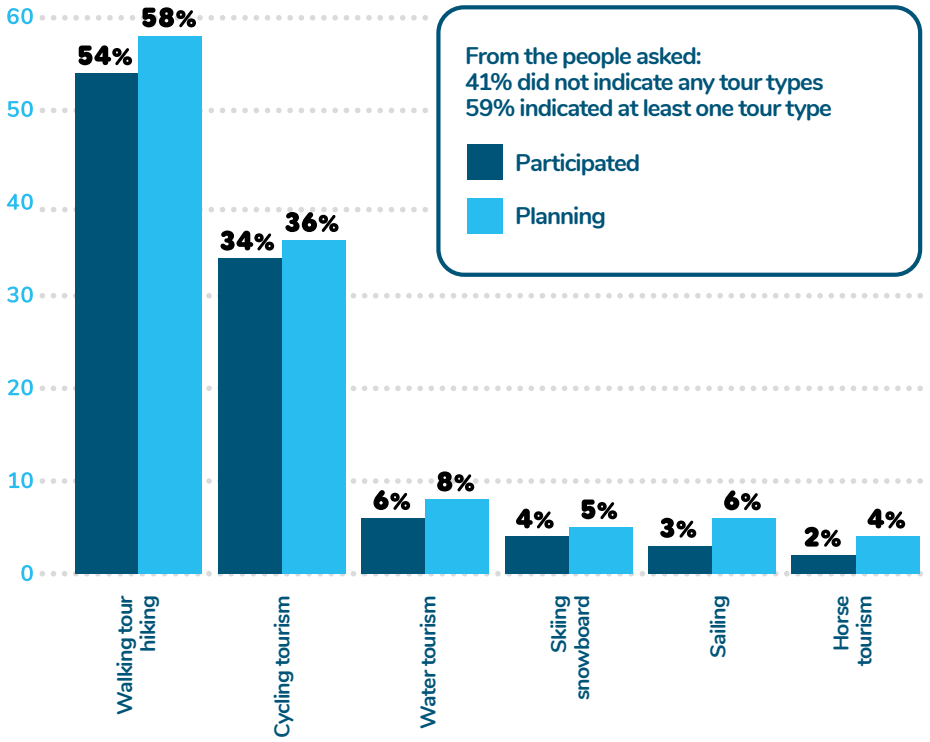
In addition to infrastructure development, efforts have been made to enhance services for cyclists. In several areas of the country, the Balaton region, the Sopron-Fertő region, Lake Tisza and the Upper Tisza region, developments have been mainly financed by GINOP funds. Based on this, the establishment of a cyclist-friendly service network has begun, currently with 300 members (aiming for 3000). A significant advancement is that, for the first time in the region, cyclists in Hungary can plan routes using the largest route planner. However, information on the quality and difficulty level of the routes is not available to hikers. To address this, in recent years, the development of a unified, national map database and the associated application (BB365) has begun, with ongoing further development and multi-regional expansion. Furthermore, a Hungarian website showcasing the EuroVelo routes passing through Hungary is available and under development.

While progress has been made in communication (Active Hungary publications, online platforms), the signposting and marketing of existing routes require further improvements. The connection with other types of activities (kayaking, canoeing, sailing, horseback riding, hiking) is not yet well-known to a significant portion of tourists.

Attractions, scenic locations, and the tourism superstructure (accommodation and hospitality) form a dense network in several regions. However, the number of package deals is still insufficient, and there is a lack of development in bicycle tourism products. Regions with a well-developed network of cycle routes and quality services, and the country as a whole, have insufficient communication on this issue, and information is not reaching the potential target audience. Comprehensive developments involving infrastructure, service improvement, and promotion are necessary.

According to a 2020 survey on the popularity of active tourism, between 2017 and 2020, 26% of the Hungarian population engaged in cycling tours and hikes, and 33% planned to do the same. In the 2022 survey, which focused only on the previous year, 43% of respondents stated that they had participated in at least one cycling tour in 2021. This is a significant increase, which is promising for the development of domestic cycling tourism. Similarly encouraging is the participation of 5000 children annually in hiking camps on 11 routes, who will hopefully become the cyclists of the future when they grow up.

Figure 3: Percentage of Hungarian population actively participating in tourism tours between 2017-2020 and planning to participate in the next 3 years (2021-2024)



SWOT analysis

Strengths

- Attractive, easily bikeable landscapes include mid-hills, hilly areas, and plains with diverse surface forms and untouched, nature-friendly habitats.
- A 9100 km cycling network is available for tourists.
- 4 EuroVelo routes passing through Hungary.
- Well-established and popular hiking circuits.
- Cycling areas with above-average infrastructure and complex services have been developed in the Őrség, Szigetköz, around Lake Tisza, Lake Velence, Lake Fertő and in the Upper Tisza region.
- There is significant growth potential with a high number of interested individuals.
- The development of a network of cycling-friendly services has started.
- The designation and signposting of cycling routes has started with a uniform design.

Weaknesses

- The development of cycle routes for tourism remains a task.
- The quality of EuroVelo routes and signposting varies.
- Cycle tourism routes form regional networks only in a few areas, and the quality and attractiveness of the routes are not always satisfactory.
- Cycling is still highly seasonal, which is not beneficial for the development of services.
- The number of package offers is low and there is a lack of development of cycling tourism products.
- There is no national database of routes and services.
- Inadequate communication and promotion.

Opportunities

- Complex experience-oriented developments also capture the attention of foreign tourists.
- Due to climate change, the cycling season is extending.
- With the growth of urban population and the strengthening of urban cycling, there is an increasingly strong demand for exploring nature on two wheels.
- Positive national economic indicators also positively influence the purchasing power of the population, which can lead to an increase in the number of cycling tourists and service providers.
- The technological advancement of bicycles enables longer and more comfortable tours.
- Bicycle tourism can become a leading industry in many regions.

Threats

- Decrease in funds available for cycling developments.
- Seasonality remains difficult to mitigate.
- Popular cycling routes may cause excessive degradation of the natural environment.
- Slow preparation and bureaucracy lead to the slow construction of important backbone routes.
- There may be a shortage of workforce at bicycle-friendly service providers, especially in rural small-town areas.

Specific objective

Hungary should be one of the leading cycling tourism destinations in Central and Eastern Europe by 2030[5].

The objectives to be achieved for this purpose are:

- Increasing the number of foreign cyclists visiting the country. Establishing cross-border cycling route networks to ensure conditions for cross-border touring and collaboration among service providers.
- Boosting the number of regular recreational cyclists and domestic tourists using bicycles during vacations (Hungary 2016: 11.3%, Germany 2016: 40%).
- Increasing the number of regularly cycling youth through the promotion of camps, events, tours, amateur competitions, and bike parks.
- Raising the proportion of revenue from cycling tourism within the overall tourism sector (currently around 10% in the EU).
- Integrating cycling tourism into regional tourism offerings (e.g. cultural events, wine and gastronomy tourism) and ensuring bicycle access to other tourist attractions in all regions.
- Focusing cycling developments on the 11 Tourist Regions designated by the Hungarian Tourism Agency (MTÜ), as well as the 15 highlighted cycling regions and 10 cycling regions specified in the National Active Tourism Strategy.
- Integrating municipalities in disadvantaged regions into cycling tourism.

Commitments

- Expanding the cycling tourism backbone network by building 1,500 km of bike paths and designating 4,500 km of routes, thus extending it to 15,000 km.
- Establishing at least 5 internationally acclaimed cycling regions. These regions have prominent cycling communication, diverse and interconnected infrastructure, and an extensive network of cyclist-friendly service providers.
- Creating an up-to-date, open database for cycling routes and services.
- Supporting the establishment of 3,000 cyclist-friendly service providers and 10 cycling centres nationwide.
- Establishing at least five internationally recognized bike parks and encouraging the creation of forest cycling trails and road cycling circuits.
- Further improving railway bicycle transportation options. Testing and implementing bicycle transport on long-distance buses where possible, aiding public transportation for cyclists and reducing harmful emissions.
- Encouraging the creation of package deals and experience packages tailored to cyclists' needs.
- Every year, we organise a big cycling tourism festival and promote the organization of smaller regional events.
- Enhancing the quality of as many EUROVELO routes as possible.

5 Czech Republic, Poland, Slovakia, Romania, Slovenia, Croatia, Serbia

The target groups for cycling tourism according to the ECF methodology are:

1. Cyclists on a multi-day bike tour.
2. Individuals cycling away from their place of residence during their vacation or leisure time.
3. Leisure cyclists engaging in activities near their place of residence (returning home).
4. Cyclists with sports and fitness goals.

However, since it is impossible to determine the uniform distribution of these groups throughout the entire road network, the methodology classifies cyclists into three simplified groups ("average," "occasional," and "cyclists with special needs"):

- Average cycling tourists: Cyclists with significant experience in everyday cycling and recreational cycling. They are skilled, physically prepared, and able to flexibly choose their routes and accommodation. Seeking new experiences is an important motivation for this group.
- Occasional cycling tourists: Cyclists with basic cycling skills who are accustomed to cycling but are not particularly experienced and/or have average physical fitness. They require safe and comfortable routes, as well as good-quality, frequent accommodations and information. Recreation is their main motivation.
- Cyclists with special needs: Users who most need safe and convenient routes. Among the users of these routes, many are families with small children – many of them using child bike seats – as well as users of multi-wheeled vehicles, such as hand-driven bicycles.

Target groups

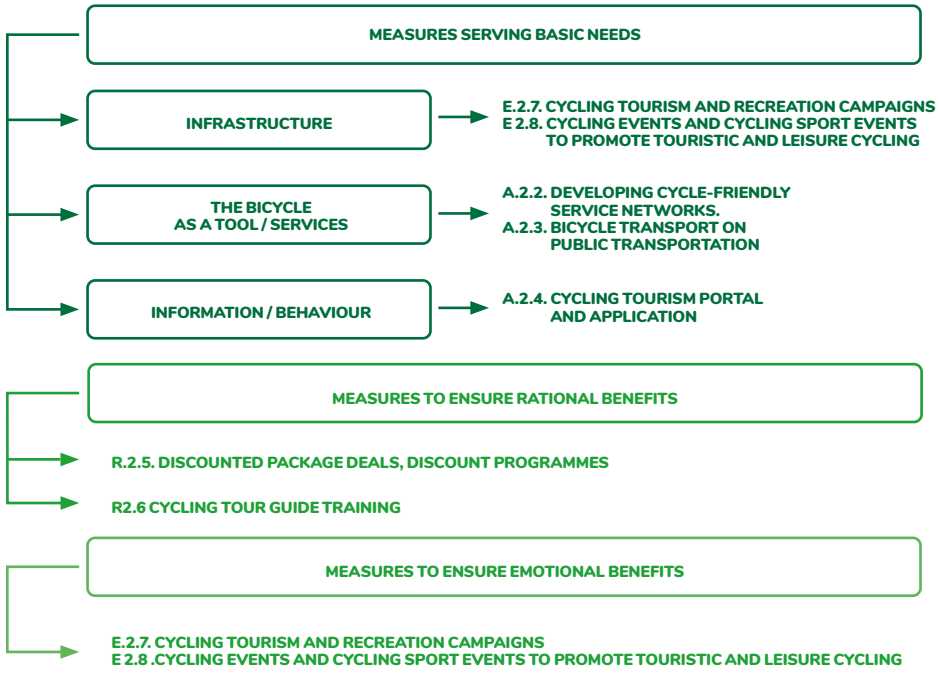
By sending country:

- Domestic (urban population, primarily from large and medium-sized cities).
- Foreign (mainly D, NL, A, SK, PL, CZ, SLO).

By activity:

- People who already use bicycles for recreational, tourism, and sports purposes.
- Domestic tourists who are open to an active lifestyle but are currently not cycling.
- Domestic target audience not currently open to an active lifestyle.

Measures



A.2.1. Creating coherent cycling tourism networks, bike parks, road cycling circuits

Goal

A total of 15,000 km of attractive and high-quality backbone routes and EuroVelo network. Connecting key tourist regions.

Establishing regional cycling networks in 5-7 uniquely characterized tourist regions that are marketable and communicable to both domestic and international demand.

Where possible, designating more nature-friendly routes instead of busy, noisy, and less attractive bike paths (e.g. along abandoned railway lines or, if the environment permits, parallel to less trafficked existing railway lines).

Activities

- Establishment of a national cycling tourism backbone network considering the bicycle path network outlined in the National Development Plan and the EuroVelo network, utilizing existing infrastructure elements (low-traffic public roads, agricultural and forestry roads, embankments), constructing new bicycle paths if necessary, renovating, eliminating network deficiencies, and creating rest areas and information points. Establishing the organizational background for the unified maintenance and upkeep of the entire backbone network, involving relevant stakeholders (Hungarian Public Roads, national park directorates, water management directorates, state forestry). The EuroVelo 6 and EuroVelo 14 routes can be developed through central government investment.

- Creation of regional cycling tourism route networks and thematic cycling tourism routes leading to attractions and services, primarily using existing infrastructure elements, and construction if necessary. Determining cycling tourism regions with special attention to regions highlighted in government resolutions and cross-border areas.

- Establishing regional mountain biking routes using existing routes, and by creating new paths and trails, aligning with existing supporting facilities (e.g. forest accommodations, rest points, trail type switching points), and attractions. Separating mountain biking from other types of trails to avoid conflicts. Developing and promoting the methodology required for the design, maintenance, and use of the routes.

- Establishing bike parks nationwide. Mountain biking can make cycling attractive to many, but to enable regular practice, it is necessary to create bike parks with mountain bike trails of various levels of difficulty and with services.

- Larger cycling parks are recommended to be established mainly in regions with existing cable cars, where topographical, nature conservation, and forestry interests can be harmonized.

- Creating road cycling circuits. Recreational cycling is becoming increasingly popular on roads as well. In order to increase the number of people visiting the country's iconic road routes (e.g. those used by cycling races), these routes need to be promoted through road signs and digital communication tools. Safety can be increased primarily through traffic management tools (e.g. bike lanes, speed limits, warning signs).

- Developing new linear infrastructure elements or capacity-enhancing improvements to existing ones should involve minimal impact on biologically active green areas and areas under nature protection, causing the least possible environmental damage (considering the natural and environmental impacts of activities related to the facility's maintenance and operation).

Organisations involved in the implementation

Competent ministry responsible for cycling, other relevant ministries, AÖFK, Hungarian Public Roads, forestry, national park directorates, water management, MAKETUSZ, local NGOs

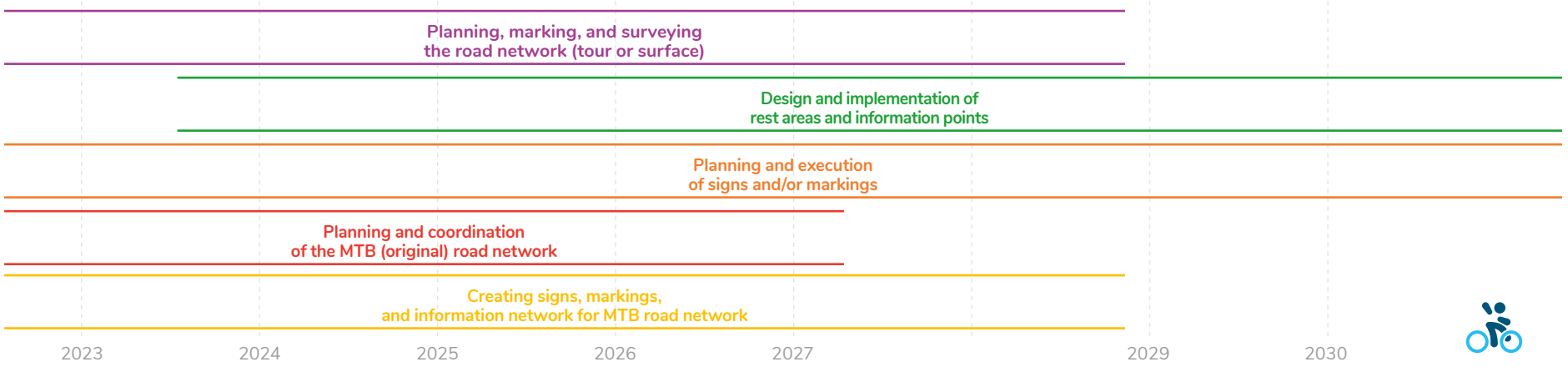
Estimated resource requirements

Establishment of backbone routes: HUF 85 billion.
Establishment of regional networks: HUF 10 billion.
Forest and mountain bike trails: HUF 1.5 billion.
Road cycling circuits: HUF 500 million.

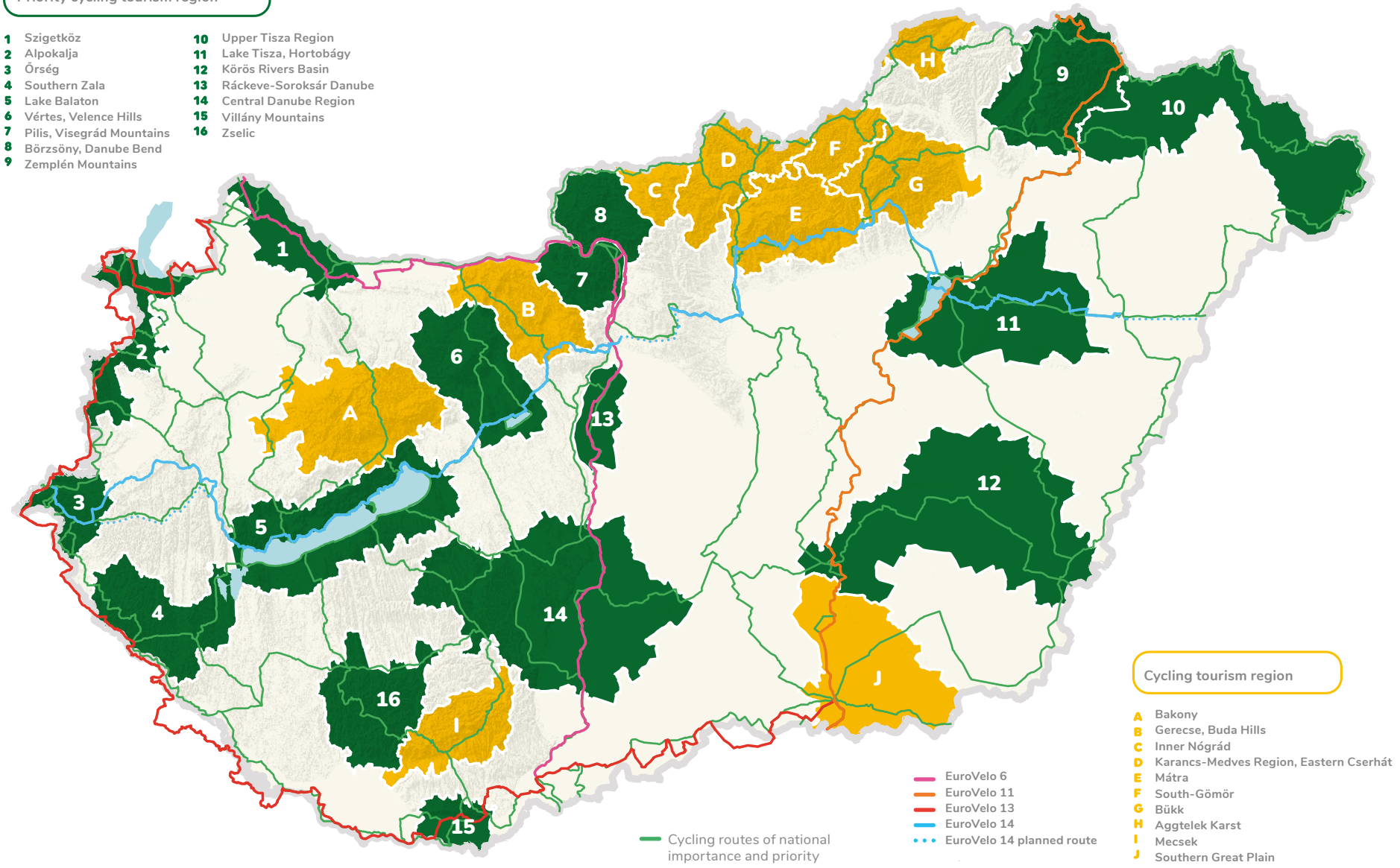
Indicators

Output	Result
• Length of newly designated tourist routes (km) • Length of newly constructed tourist routes (km) • Length of newly designated mountain biking tourist routes (km) • Number of new road cycling circuits (pcs)	• Total length of national cycling routes (km) • Total length of national mountain biking routes (km) • Number of well-developed regional route networks offering various alternative routes (pcs) • Total length of national road cycling circuits (km)

Timing



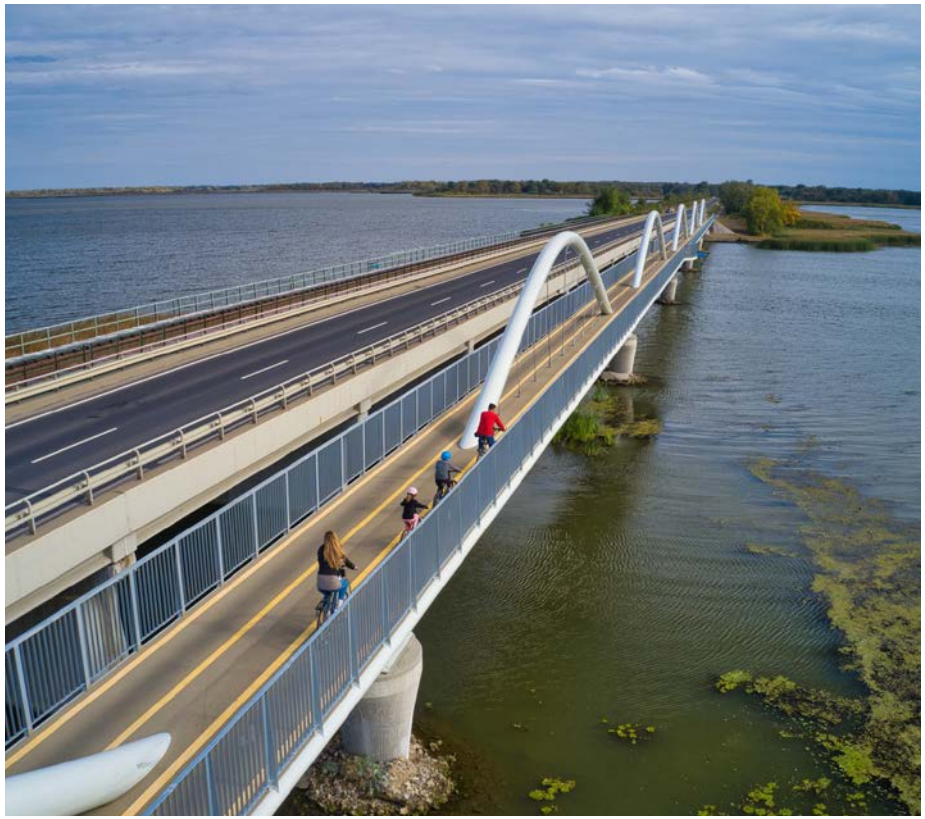
Map 3: Cycling areas in Hungary
(Source: own work)



Good practice abroad

Cycling network of Lower Austria

In Lower Austria, the landscape has been utilized to create a cycling network that caters to every market segment, offering suitable routes for each. Emphasis has been placed on establishing easy routes that run along river valleys, allowing for circular tours. The province is intersected by EuroVelo backbone routes, which traverse either on dedicated cycling paths or low-traffic roads. Panoramic routes have been developed in hilly areas, while marked trail networks cater to mountain bikers in mountainous terrains. The signs are visible and easily understandable everywhere. The markings for the main cycling routes and regional network are clear. For mountain biking, they have established bike parks and trail centres. Due to this diversity, mountain biking experiences are accessible to everyone, regardless of age or skill level.



Good practice in Hungary

Lake Tisza cycle bridge (Poroszló-Tiszafüred)

The cycling route around Lake Tisza serves as an excellent example of how flood protection embankments, used for other purposes, can be designated as cycling routes. The route around Lake Tisza was completed when the missing 6.5 km section was handed over, featuring a key element, a cycling bridge over the Tisza River. This not only allowed for the closure of the circuit but also facilitated the connection of the cycling network on both the right and left banks of the Tisza. Undoubtedly, the construction of the bridge marked a breakthrough, but the development of the region's cycling profile has been the result of conscious decisions for over a decade.

Good practice in Hungary

Őrség Cycling Region

Őrség is one of Hungary's most enchanting landscapes with its small hills, dense forests, romantic peasant houses, tiny lakes, and welcoming residents. The region is easily accessible by bicycle, and its low-traffic roads are perfect for family bike tours. Additionally, the settlements and attractions are located at short distances from each other. In the region, six cycling routes have been designated. In addition to cycling, tourists have access to high-quality accommodation, dining options, and numerous attractions that can be explored by bicycle. Overall, the Őrség can be considered a well developed and popular cycling tourism area, both in terms of infrastructure and services.

Flagship

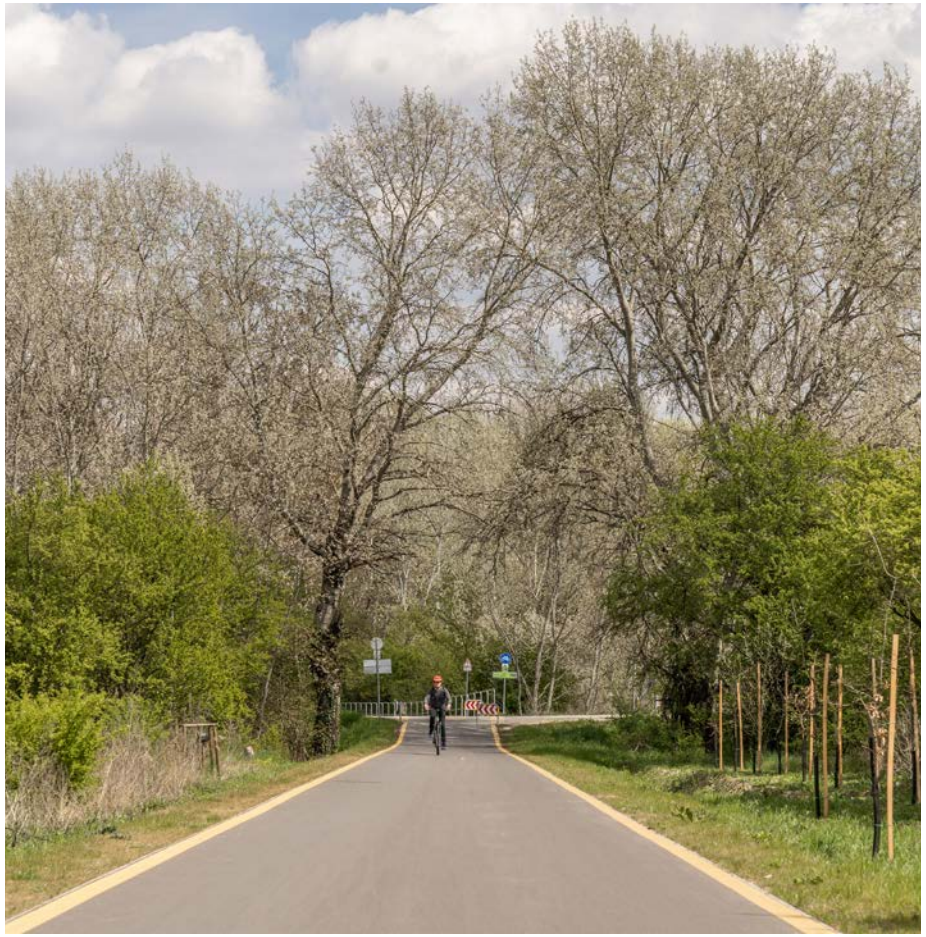
EuroVelo 14

With the construction of the Budapest – Balaton route, not only could the capital city market be connected to the most popular region, but several small regions suitable for cycling would also become accessible by bicycle (e.g. Etyek – Tarján, Lake Velence, and Vértes). The Budapest – Balaton section is an integral part of the EuroVelo 14 route, so its construction would make the capital accessible to cyclists arriving from the west. The development of further sections of the route requires a central, government investment.

Flagship

EuroVelo 6, Vienna-Budapest-Belgrade route

The EuroVelo 6, also known as the Danube Cycle Route, is one of the busiest cycling routes in the world. While its Hungarian section is already known, the continuation of the developments started in recent years should be continued to attract more cyclists. In the first step, it is necessary to build the route up to Budapest and then to the south with high quality as part of a central, government investment.



Flagship

Cycling tourism regions: South Zala, Upper Tisza, Mátra and the Danube Bend

The southern part of Zala and the Upper Tisza region may not belong to Hungary's most visited and significant tourist destinations, but the hills covered with beech forests and vineyards, the natural areas of the Tisza floodplain, ancient churches, living traditions, and hospitality can turn these regions into ideal destinations for rural tourism. The Mátra Mountains, with the most significant elevation differences in the country, provide a challenging mountain biking destination, and their development required close cooperation with the forestry and nature conservation. By leveraging cycling tourism, competitive routes, and experiential and programme packages can be created from the many locally significant attractions in all three regions. As a result, the number of visitors and the region's visibility are expected to noticeably increase.

The developments will generate new tourism services and contribute to sustainable rural development. While the Danube Bend is currently very popular due to its proximity to the capital, visitors concentrate temporally and spatially in this area. The goal of the developments is to increase the length of stay and make the currently less visited regions more attractive.

A.2.2. Developing cyclist-friendly service networks

Goal

The increase in the number and improvement in the quality of services accessible to cyclists to attract target cycling groups.

The integration of cycling into the regional tourism offerings.

Significant growth in revenues generated by cycling tourism in tourist regions through the sale of high-level services.

The establishment of a national-level cyclist-friendly certification system has commenced, currently involving 300 providers, and is expanding. The plan is to expand this number tenfold in the coming years. The supporting application for this initiative is already available, and its promotion is in the interest of both cyclists and service providers to enhance cycling safety and comfort.

Activities

- Quality assurance of tourist-oriented bicycle rental and luggage transport. Bicycle rental is typically provided by individual, local small businesses, offering variable (but generally weak) quality bikes in different regions. Therefore, the purpose of this measure is to support businesses engaged in this activity, encouraging them to organize into a network (providing different drop-off and pick-up points) and improve the quality of the available rental bicycles.

- Establishment and operation of a "National Cyclist-Friendly Service Provider" certification system and trademark. As part of this measure, the goal is to create and support a unified criteria system, image, quality assurance, communication, and coordination organization. The planned system, when implemented, would initially cover key cycling routes, regions, and eventually the entire country with certified accommodations, dining services, attraction sites, and service points. To achieve and develop cyclist-friendly certification, it is crucial to establish a support system for service providers.

- Creation of 10 cyclist centres. In regions where cycling tourism constitutes a significant part of the offerings and contiguous regional cycling and/or mountain biking routes are developed, it is recommended to encourage the establishment of comprehensive cyclist centres (either dedicated to cycling or combined with other active tourism sectors). These centres would provide visitors with information (route suggestions, maps, attractions), enable bookings for tours and packages, and offer services such as bicycle rental, maintenance, and luggage transport. (Ideally, these centres would also accommodate regional managers, as outlined later in the horizontal section).

- Integration of cycling tourism into the regional tourism offerings. In all already popular regions having a well-developed tourism profile (e.g. health and spa, gastronomy, wine tourism) the aim is to develop cycling services and link products to create opportunities for longer and shorter cycling trips, expanding the local offer and increasing the activity of visitors.

Organisations involved in the implementation

AÖFK, MAKETUSZ, Bringakultúra Association, Hungarian Tourism Agency, TDMs, tourism and rural development organizations, forestry, national park directorates, Hungarian Cyclists' Club.

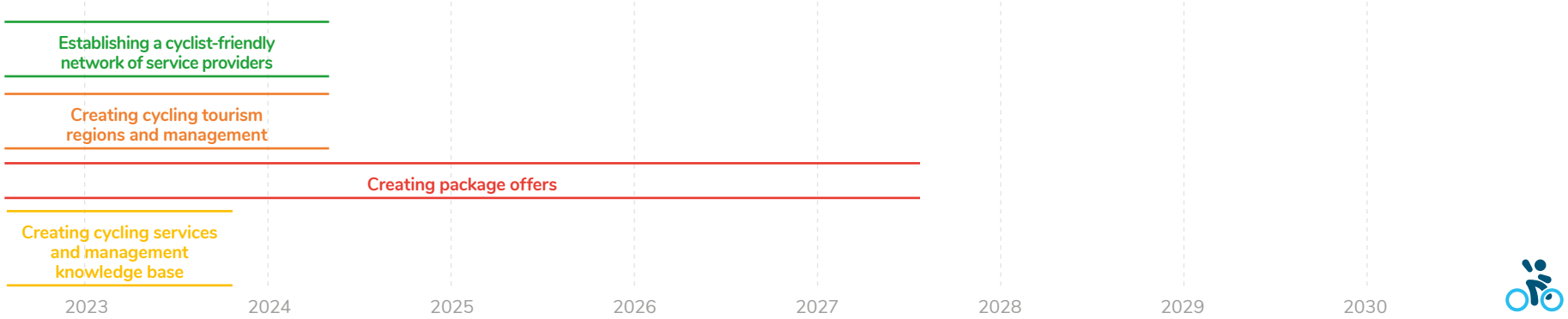
Estimated resource requirements

Bicycle rental: HUF 1.5 billion.
Creating and operating a network
of cyclist-friendly services: HUF 500 million.
Cyclist centres: HUF 1 billion.

Indicators

Output	Result
• The requirements for the cyclist-friendly service provider network are established (yes/no). • The cyclist-friendly service provider network has its own certification system (yes/no).	• Number of cyclist-friendly service providers (pcs) • Number of bicycle rentals per region (pcs/region)

Timing



Source: MÁV Hungarian State Railways Private Company Limited by Shares (MÁV Co.)

A.2.3. Bicycle transport on public transportation

Goal

Improving the conditions for bicycle transportation, primarily on long-distance public transportation, to reduce the environmental impact of bicycle tourism and better reach target groups without access to or not using private cars. Another goal is to prioritize sustainable transportation modes over individual car usage.

Activities

- In the case of railway transportation, expanding bicycle transport capacity and improving the quality of services on busy routes, following the example of developments targeting our major lakes (e.g. Balaton, Lake Tisza). The newly acquired railway vehicles are expected to comply with the changing EU directives, allowing for the transport of a minimum of 4-8 bicycles everywhere. However, greater capacity is needed, especially towards Lake Balaton during peak hours. The goal is establishing a flexible system capable of accommodating the predetermined needs of cycling groups (number of cyclists, timing, connections). This requires appropriate refurbishment of the rolling stock and new acquisitions. Ensuring barrier-free access to platforms at stations is also an important task.

- Creating the possibility of local bicycle transport on buses, primarily for cyclists facing difficulties due to service issues. Procuring low-floor vehicles that allow the transport of wheelchairs, strollers, or bicycles. Utilizing external bicycle carriers on the most frequented long-distance regular service lines.

- Connecting cycling destinations that are currently not or only to a limited extent accessible directly by train or regular bus service (e.g. South Zala or the Őrség) initially with Budapest, using separate buses capable of transporting bicycles (which, with a trailer, can carry cyclists up to their full capacity).

- Improving the conditions for bicycle transport by boat in the affected regions.

Organisations involved in the implementation

Competent ministry responsible for cycling, and related ministries AÖFK, MÁV-VOLÁN-Group, GYSEV, BKK, market players

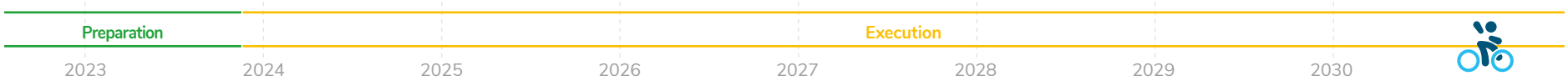
Estimated resource requirements

Bicycle transport by train: HUF 700 million (only modifications and renovations). Bicycle transport by bus: HUF 200 million (only for bicycle transport equipment). Special bicycle bus services: HUF 100 million.

Indicators

Output	Result
• Number of tools purchased (pcs) • Number of lines newly equipped with bicycle transport equipment (pcs))	• Number of bicycle transport vehicles available (pcs) • Capacity of bicycle transport on each public transport line (pcs)

Timing



Source: Takács Tamás

A.2.4. Cycling tourism website and application

Goal

An up-to-date information database that is an effective motivation for target groups open to cycling tourism to choose cycling as a leisure activity and subsequently to receive help with route planning and navigation.

Ensuring that participants in cycling tours and recreational cycling become satisfied, returning "guests" who would choose cycling again.

Providing suitable printed and online maps for orientation during cycling activities.

Activities

- Developing a unified cycling tourism information platform and database based on road data, existing attraction registers, and service networks. This platform is fully public, accessible to end-users, and developers.
- Creating a multi-regional cycling tourism portal and application, part of the national active tourism communication system. The portal and application will have a dynamic map interface suitable for route planning and navigation, along with a feedback and two-way communication interface. It is essential for the app to support interactive games, "badge earning," and bonus actions.
- Publishing printed cycling tourism maps.

Organisations involved in the implementation

AÖFK, MAKETUSZ, MKSZ, MTÜ, TDMs, tourism and rural development organisations, national park directorates

Estimated resource requirements

Database (including upload and data maintenance): HUF 300 million.
Portal and app (with inputs from promotional campaigns): HUF 100 million.

Indicators

Output	Result
• Number of portals, applications, platforms	• Visitor data of the portal, application, platform created

Timing

R.2.5. Bookable offers, discount programmes

Goal

Facilitating accessibility and attractiveness of cycling tourism and recreational activities. Catering to the specific needs of different target groups, such as families.

Activities

- Developing, bringing to market, marketing, selling, and implementing target group-oriented cycling tourism package offers. Currently, the signposted cycling tourism routes only cover a significant portion of bikeable routes in the most developed regions (and not all roads even there), and in many places, certain services are missing (e.g. dining, water supply, bicycle transport), making the tour challenging for less experienced cyclists. To enhance the experience during thematic tours and visits to special attractions, storytelling by tour guides could make the experience complete. Considering all these factors, including convenience (avoiding the hassle of the organization for a single booking), cycling tourism packages represent a common solution.

- Developing and implementing discount programmes. Offering financial incentives through discount programmes can significantly motivate cyclists to extend or repeat their stay or tour. These can be related to a package offer (see the previous point) or even a card system. In the case of the latter, connecting to an existing system (e.g. TEKA, Kajla) or issuing a card jointly with other types of tours is suggested, rather than creating a new discount programme exclusively for cycling tourism purposes.

- Developing cycling offers and experience packages for families.

Organisations involved in the implementation

AÖFK, MAKETUSZ, MKSZ, MTÜ, TDMs, tourism and rural development organisations, national park directorates, forestry

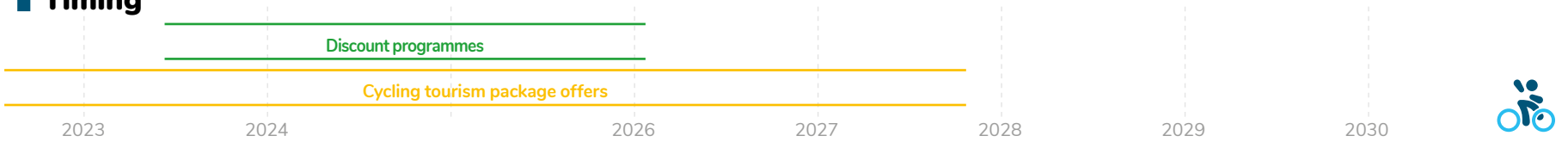
Estimated resource requirements

HUF 200 million per year, for a total of HUF 1.4 billion.

Indicators

Output	Result
• Number of discounts and package offers created	• Number or percentage of cycling tourists (persons or %)

Timing



R.2.6. Cycling tour guide training

Goal

Making unified training materials available for the training of domestic cycling tour guides.

Providing experts for those entering cycling tourism, less experienced hikers, and groups specifically consisting of children, who can develop suitable tour offers considering the physical condition and technical knowledge of the participants and provide them with relevant information during the tour.

Encourage physical education teachers in primary and secondary schools to participate in these training sessions.

Activities

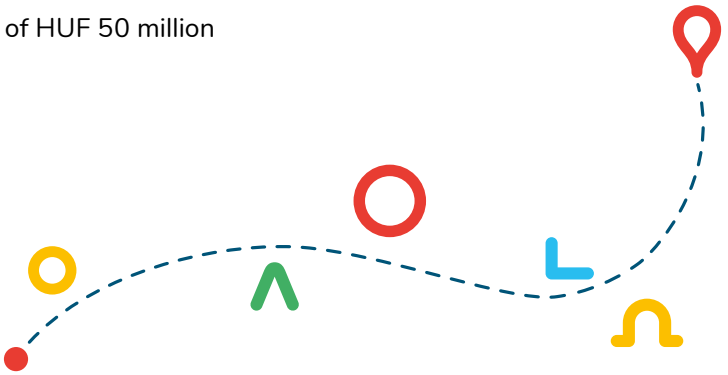
- Compilation of training material for cycling tour guides
- Conducting training courses for cycling tour guides, issuing qualifications

Organisations involved in the implementation

AÖFK, the relevant ministry responsible for cycling, professional NGOs (MAKETUSZ, MKSZ, Bringakultúra Association)

Estimated resource requirements

A total of HUF 50 million



Indicators

Output	Result
• Cycling tour guide training material available (yes/no) • Number of training courses for cycling tour guides (number)	• Number of participants in cycling tour guide trainings (persons) • Number of people with a cyclist tour guide qualification

Timing

AZ ÉV KERÉKPÁRÚTJA 2021

MAGYAR KERÉKPÁROSKLUB

KTE

A KÖZLEKEDÉSI KULTÚRA NAPJA MÁJUS 11.

MAGYAR KÖZÚT

Aktiv Magyarország

E.2.7. Cycling tourism recreational and promotional campaigns

Goal

To promote Hungary and its regions as cycling tourism destinations to 4 million potential domestic and half a million foreign cycling tourists.

Those who regularly cycle for tourism purposes should use their bicycles more frequently in everyday transportation as well.

Activities

- Development and implementation of a national and regional marketing and communication plan, aligning with the activities of the Hungarian Tourism Agency (MTÜ), targeting domestic and foreign audiences. The campaigns are organized around the following social values ("social currency"):
  - “Round completed” organizing cycling circles, instant tours, longer distances, and performance tours, along with interactive point collection, aimed at increasing the length and frequency of tours among current cyclists and those touring with bicycles. Communication focuses on promoting performance and recognition among those not yet engaged in cycling.
  - "Hungary is cool/niche": improving the image of cycling vacations in Hungary among foreign target groups who already use bicycles. The goal is to provide Hungarian destinations with a uniqueness and "cool factor" that surpasses popular European cycling routes.
  - Patriotism ("Let’s ride in Hungary!"): general promotion of domestic cycling vacations and tours, as well as the popularization of cycling tourism regions in the spirit of love for the homeland and patriotism among the domestic target audience.
- Complementary activities:
  - design of a coherent image and destination concepts,
  - participation in exhibitions at home and abroad,
  - organisation of study tours, press appearances.
  - Continuation of initiatives such as the “Ride into Green!” programme (with 6000 participants in 2022), the cycling around mountain tours, and the “From Home to Homeland” tours.
  - Continuation of the “Cycling Across Borders” programme, featuring cycling tours that extend beyond national borders.

Organisations involved in the implementation

AÖFK, MAKETUSZ, MKSZ, KTI, MTÜ, TDMs, tourism and rural development organisations, forestry, national park directorates, MABEUSZ

Estimated resource requirements

Preparation: HUF 500 million.
Implementation: HUF 4.5 billion.

Indicators

Output	Result
• Number of cycling tourism communication campaigns (pcs)	• Reaching data of the interfaces participating in the campaign

Timing


KÖVESZETEK VÖLGYE

E.2.8. Cycling events and bicycle sports gatherings to promote recreational and leisure cycling

Goal

Increasing awareness and promoting a specific tourism region:

Promoting cycling through sports and cultural events, festivals.

25% of multicultural events (e.g. Valley of Arts, Ördögkatlan Festival) should include a cycling tour.

Increasing the number and attendance of cycling events.

Activities

- Facilitating the approach to larger (non-cycling) events and festivals by bicycle and ensuring bicycle storage.
- Encouraging the organization of cycling tourism festivals: encouraging the organization of a major event of national importance as well as smaller events every year.
- Continuation and expansion of the bicycle touring camp programme. One-week cycling tour for children, aiming to foster love for cycling through camp experiences and introducing different regions of the country. Marking routes for touring camps.
- "Ride into the Green" programme: organizing primarily recreational, enticing, short, entertaining cycling tours and events at local and regional levels.
- Organizing thematic cycling tours exploring specific regions (heritage, memorial tours, tours showcasing natural and/or cultural treasures).
- Hosting amateur and professional cycling events: lake circuit races, "granfondos", stage races, performance tours, mountain bike marathons.

Organisations involved in the implementation

AÖFK, professional NGOs and cycling sport and leisure associations (MAKETUSZ, MKSZ, Magyar Hungarian Cyclist's Club) MTÜ, TDMs, tourism and rural development organisations, event management companies, forestry companies, national park directorates

Estimated resource requirements

Cycling tourism festival, major event: HUF 2.5 billion.
Cycling camp programme: HUF 1 billion.
Ride into the Green programme: HUF 500 million.
Organizing thematic cycling tours: HUF 500 million.
Organisation of amateur and professional cycling events: HUF 5 billion.

Indicators

Output	Result
• Number of cycling tourism events (pcs)	• Event attendance data (persons)

Timing

Road safety

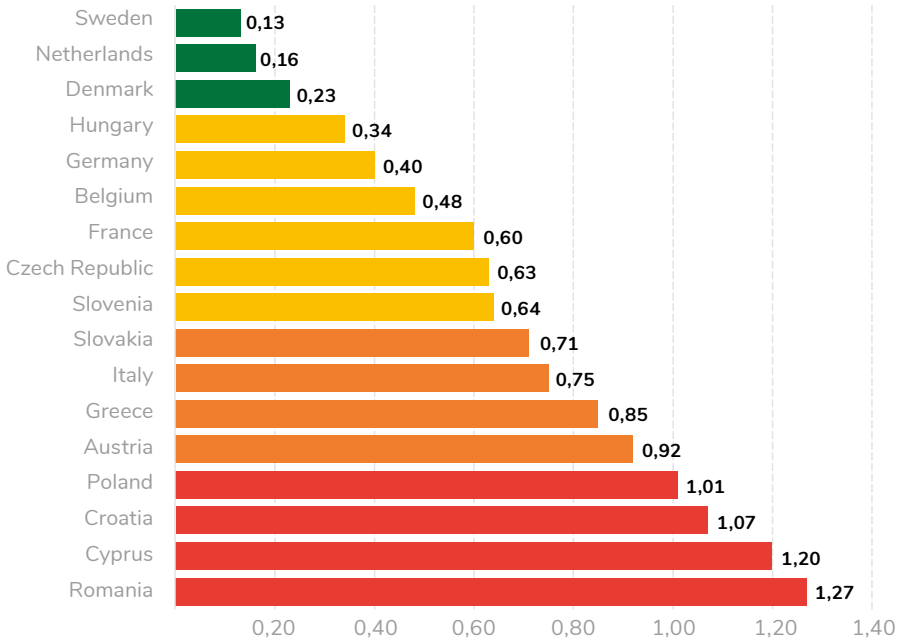
Current status and problem identification

Before examining cycling accident data, it is essential to highlight a crucial statistic reflecting how many Hungarian lives could be saved if road users paid better attention to rules, each other, and the technical condition of transportation. The principle of shared responsibility is also significant, as road planners, developers, and operators bear the responsibility for creating safe traffic conditions. The average number of road deaths per million inhabitants in the European Union was 42 in 2020, compared to 46 in Hungary. In Sweden, which performed the best, this figure was 18. When analysing the number of fatal cycling accidents per one million inhabitants (7.4), Hungary is among the leaders in Europe, and the proportion of cyclists mong those who died in traffic accidents is one of the highest in Hungary (11-13%).

On our public roads, out of 37 accidents daily, 8 involve cyclists, with an average of 2.68 cycling accidents resulting in serious or fatal outcomes per day. Between 2011 and 2018, there were a total of 389 fatal, 7432 serious, and 15970 minor cycling accidents, with a Pareto distribution observed: 80% of cycling accidents occur in 14% of urban areas, mainly at intersections. The majority of fatal and serious injury accidents involved individuals aged 55-60, although a decreasing trend in such accidents has been observed in recent years. Minor injury accidents mostly occurred in the 13-18 age group.

While these data indicate the need to improve the safety of cyclists, it is important to note that Hungary has one of the highest proportions of people using bicycles for everyday transportation among European Union countries. Taking into account the rates of bicycle usage, a risk index can be created, providing more accurate information about the likelihood of cyclists experiencing an accident in a given country.

Figure 4: Cycling risk indices in Europe (own editing)



The cyclist risk index is derived from the ratio of the frequency of bicycle usage to the population-adjusted number of fatal cycling accidents. The index is significant because it interprets the number of accidents in relation to the extent of usage. The index, like public safety indicators in general, is influenced by three main factors: human behaviour, infrastructure design, and vehicles participating in road traffic. Figure 4 shows that, in terms of the risk index, Hungary performs well in European comparison.

The analysis of the distribution of cyclist injury accidents in terms of contributing factors reveals a gradual decrease in the number of cyclist-at-fault incidents. Therefore, blaming cyclists is a flawed approach, as half of the cycling accidents are not caused by cyclists, but they are still injured. It is worth noting, however, that currently there is a significant number of bicycles in circulation in Hungary that are in poor condition, of low quality, or lacking proper equipment. Improvement in this regard is necessary to minimize accidents caused by technical problems or


Source: BKK

equipment deficiencies, as cyclists often bear responsibility for maintenance or equipment issues. Regulation is crucial concerning the mandatory equipment of bicycles.

Regarding human behaviour, current driver education does not adequately address pedestrians and cyclists, providing insufficient support in conflict resolution from both theoretical and practical perspectives. Additionally, the current traffic control does not effectively deter speeders, drunk drivers, and those unlawfully waiting/parking on bicycle facilities. One obstacle to the further popularity of cycling is the belief that cycling is not safe. This misconception persists, even though the safety of cyclists has clearly improved alongside the growth in cycling traffic. Additionally,the communication of traffic safety campaigns is not always appropriate, although they mostly address relevant issues. Incorrect or unlawful behaviour is not always addressed with equal weight for different groups of road users in these campaigns. While raising awareness of road safety issues, expanding the target audience of these campaigns is necessary.

A significant problem is the lack of emphasis on traffic knowledge – particularly pedestrian and cyclist traffic – in primary and secondary schools. Teacher preparation is inadequate, and the quality of existing trainings and educational materials varies and is not audited. In teacher training (and further education), there is insufficient emphasis on preparing educators to transfer traffic knowledge.

The current Traffic Code (1/1975. (II. 5.) Joint Decree of the Ministry of Interior and Ministry of Transport on Traffic Rules) and other related regulations contain numerous provisions for cyclists that are not realistic, and their observance and enforcement can be considered unjustified. Therefore, it is high time to modify and simplify these regulations.

The collection and analysis of accident data do not result in the introduction of measures that would have a significant impact on the traffic safety of our roads.

Progressive traffic safety policies are based on the Vision Zero principle, which is not well-known, widespread, or applied in the Hungarian mindset, despite its adoption by the European Parliament following the Valletta Declaration. While it is true that the priorities and objectives of the domestic road traffic safety programme for the period 2021–2030 should be determined in alignment with the EU programme, there may be certain differences, as the circumstances and conditions are not identical in every member state.

The RISM directive (Road Infrastructure Safety Management), international research projects (e.g. the SABRINA project, with a specific focus on improving the traffic safety of the Danube Region's cycling infrastructure), and domestic road technical regulations can provide a solid foundation for the development of safe infrastructure. However, the system for applying these regulations is not yet adequate.

SWOT analysis

Strengths

- National campaigns for safer cycling have emerged.
- The number of directionally separated bike paths, isolated from pedestrian and vehicular traffic, is increasing.
- There is a growing number of traffic-calmed and car-free zones.
- There is an improving trend in reducing conflicts among road users in larger urban areas.

Weaknesses

- Traffic safety-related data collection and in-depth analyses are incomplete.
- Public thinking lacks responsibility and the principle of mutual consideration; victim blaming and intolerance are common.
- Despite continuous development and maintenance efforts, the road network is in poor condition, with many facilities being outdated or neglected.
- The lack of safety is the main restraining force for the further expansion of cycling.
- Despite infrastructure improvements, the number of cycling accidents remains high.
- Current driver education does not adequately address pedestrians and cyclists.
- Traffic safety campaigns do not reach everyone. Communication is only targeted at road users, decision-makers and planners are not getting the important messages.
- Traffic knowledge receives insufficient emphasis in primary and secondary schools; teacher preparation is insufficient, and the quality of existing trainings and educational materials varies and is not audited.
- The Traffic Code is unrealistic and outdated.

Opportunities

- Evaluation and implementation of international best practices in regulations.
- Traffic behaviour and culture are slowly but positively changing.
- Due to the achievements of professional cyclists, the perception of cyclists in the country is shifting positively, leading to increased attention to cyclists in traffic.
- With the increase in the number of cyclists, safety also improves (safety in numbers).

Threats

- The simultaneous growth in the number of vehicles and cyclists leads to additional conflicts where infrastructure is inadequate.
- The development of traffic behaviour and culture slows down and stagnates. The number of speeding incidents is on the rise.
- Lobbying of motorists prevents the development of cyclist- and pedestrian-friendly regulations.
- A minority that does not comply with traffic rules negatively affects the overall perception of cycling.
- Risks arising from poorly planned and executed road developments.
- Risk of solitary falls due to operational and maintenance deficiencies.
- The pace of road maintenance cannot keep up with the rate of degradation.
- A car-centric mindset does not significantly change at decision-making levels.
- The number of cars continues to increase, leading to increased traffic. The average weight of passenger vehicles is increasing, making them more dangerous for cyclists.

Specific objective

The number of fatalities during bicycle use should decrease by 50% (from 73 in 2016 to 35 in 2030, reaching 0 by 2050, taking Vision Zero into account). To achieve this by 2030, the following measures are necessary:

- Qualification and resolution of dangerous sections of the entire bikeable road network.
- Strengthening the protection of the most vulnerable road users (legal and regulatory aspects, enforcement, responsibility, micro-mobility devices).
- By 2025, 10-year-old children should have basic traffic knowledge, and by 2027, 16-year-olds should possess advanced traffic knowledge and technical skills.
- Significant improvement in cooperation between motor vehicle and bicycle users (attitude change).
- Significant improvement in the technical condition of bicycles and vehicles.
- With the increase in the proportion of cycling, we should achieve a reduction in the number of accidents.
- Reduce the sense of danger by effectively enforcing speed limits. The related regulations should be reviewed.
- Prepare annual public traffic safety reports.

Commitments

- As a result of the planned developments, the number of fatalities during bicycle use is expected to decrease by 50%.
- Initiate amendments to the Traffic Code and related regulations to facilitate and enhance the safety of cycling and other micro-mobility transportation.
- Continue educating young people about traffic, introducing a two-stage training programme that provides both theoretical and practical knowledge.
- Initiate a traffic safety assessment of the entire bikeable network, organize problematic sections and intersections into a database, followed by their gradual, prioritised reconstruction.
- Initiate the transformation of the surroundings of at least 20 schools annually to encourage more people to walk, cycle, or use scooters to get to school.
- Strengthen the protection of the most vulnerable road users in education, training, and communication.
- Improve cooperation between road users through communication campaigns and awareness-raising.

Target groups

By bicycle use: people who

- currently use bicycles, people who
- do not currently use bicycles.
- Novice or less confident cyclists seeking a higher sense of safety. Especially children, women, and older age groups, as well as individuals with limited mobility.

Other road users:

- pedestrians,
- drivers (including motorcyclists),
- professional drivers (public transport, lorry drivers).
- decision-makers, planners

Measures

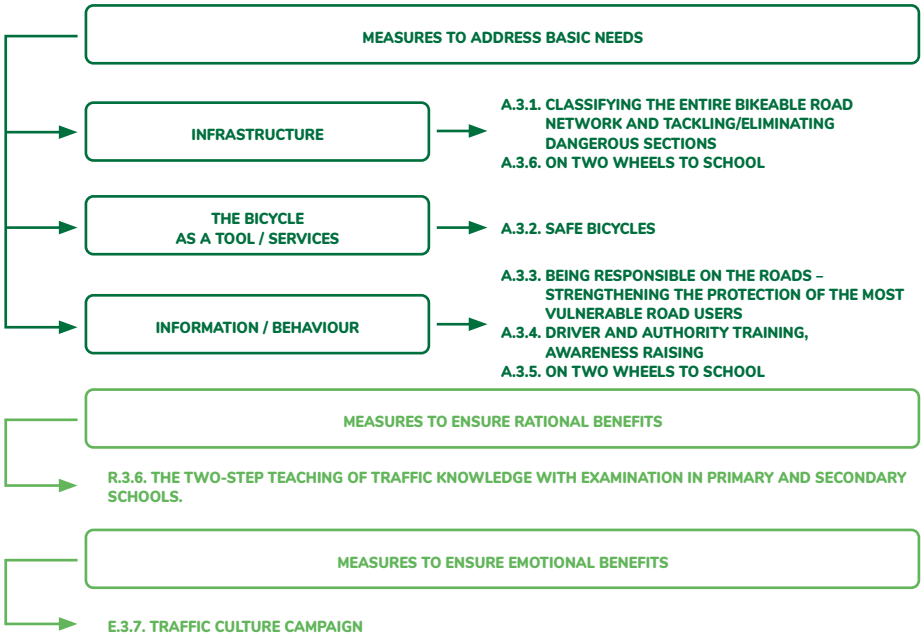
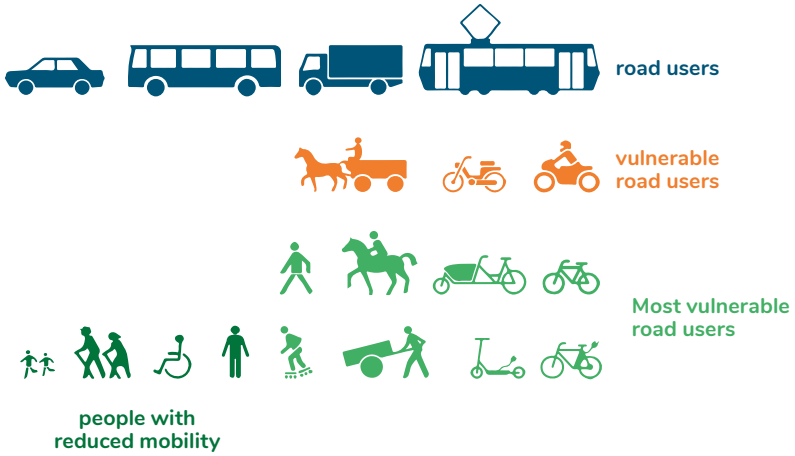


Figure 5: Road users (Source: Zoltán Kunhalmi)



Flagship in this chapter

“On Two Wheels to School” programme

The “On Two Wheels to School!” programme encompasses both infrastructure improvements and educational activities in an integrated manner. Drawing from international best practices, transforming the surroundings of schools through temporary or permanent speed and/or traffic calming interventions, with priority given to pedestrians and cyclists. Safe and secure bicycle and scooter storage facilities of adequate capacity should be provided within schools. Additionally, fostering a change in mindset and providing training for students, parents, and teachers is necessary to encourage the sustainable modes of transportation for commuting to school. During the project preparation, it is recommended to consider the results of the international STARS (Sustainable Travel Accreditation and Recognition for Schools) project.

Source: BKK

A.3.1. Classification of the entire bikeable road network and upgrading of dangerous sections

Goal

Making the entire national bikeable road network safe for cycling.

Activities

- Methodology: Further development of the road safety audit system based on EU and national regulations, research projects (methodology, training, certification, database).

- Creation of "Action Groups" for Road Safety Audits. Their task is to assist local authorities in the development of cycling-friendly road networks and public spaces:
  - speed mitigation, reducing speed differentials, especially on main roads traversing through settlements.
  - calming and slowing transit traffic (installation of speed bumps, narrowing road surfaces).
  - transformation of intersections (e.g. through raised features, redesigning railway crossings),
  - alteration of existing infrastructure (reallocating road space). establishment of dedicated bicycle infrastructure.

- Speed reduction and traffic calming: Reconsideration of regulations to set universally applicable speed limits within populated areas (e.g. 50 km/h allowed speed on main roads, otherwise 30 km/h). The measure serves the interest of every road user by making transportation safer for all participants.

- Regular evaluation of results and, based on this, a review of planning regulations and practices.

- Regular analysis of existing data.

Organisations involved in the implementation

The ministry responsible for cycling transport, other relevant ministries, municipalities, Hungarian Public Roads, BKK Budapest Public Roads, Institute of Transport Sciences, Hungarian Cyclists Club

Estimated resource requirements

Developing the methodology: HUF 50 million.

Conducting traffic safety audits to establish a bicycle-friendly road network: (25 municipalities/year, HUF 100 million), totalling HUF 0.7 billion.

General reduction of speed limits and traffic calming within residential areas: (HUF 20 million/municipality, 25 municipalities/year, HUF 0.5 billion per year), totalling HUF 3.5 billion.

Indicators

Output	Result
• Certification of the entire cycling road network available (yes/no) • Number of nodes made safe (pcs) • Number of audit systems (pcs)	• Number of cycling accidents (number)

Timing

A.3.2. Safe bicycles

Goal

Safe bicycles: Ensure that every bicycle is properly equipped with the mandatory accessories as required by the law, and that these accessories must be in good working condition.

Regulation and enforcement regarding electric bicycles should be realistic.

Activities

- Ensuring that new bicycles placed on the market are properly equipped. The aim is that only new bicycles equipped with practical and legally mandatory accessories should be available on the market.
- Conducting awareness-raising checks on cyclists to enforce existing regulations that contain appropriate provisions. The purpose of the checks is not to impose fines but to raise awareness, for example, by imposing symbolic fines. In the case of on-the-spot payment, cyclists with inadequate equipment receive a visibility package (or the missing equipment, in which case the penalty amount can also be differentiated).
- Clarifying regulations for electric bicycles and electric cargo bicycles.
- Making regulations regarding bicycle equipment more realistic.
- Developing regulations for micro-mobility devices and separating them from other vehicles or devices at the regulatory level.
- Providing targeted support for bicycle servicing. Encouraging bicycle repair education.

Organisations involved in the implementation

Competent ministry responsible for cycling, MKKSZ, ORFK

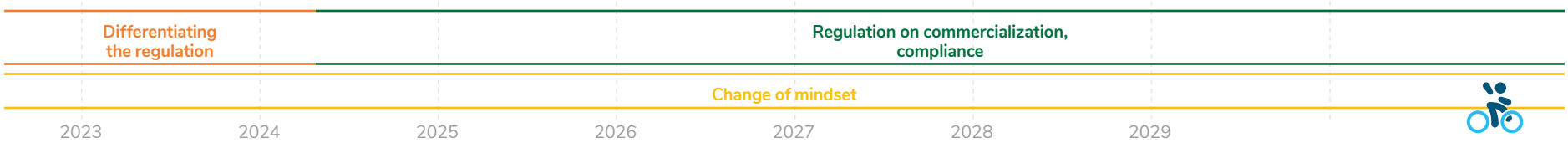
Estimated resource requirements

Enforcement of the existing regulations containing appropriate provisions through awareness-raising checks on cyclists: HUF 50 million/year, total HUF 350 million.

Indicators

Output	Result
• Necessary regulations will be reviewed and amended (yes/no)	• Number of bicycle sales (pcs) • Number of checked cyclists (pcs) • Estimation of the technical condition of bicycles in traffic based on representative research (%/technical condition)

Timing



A.3.3. Being responsible on the roads – strengthening the protection of the most vulnerable road users

Goal

Creation of legal protection for cyclists and strengthening the enforcement of regulations.

Real responsibility of drivers towards the most vulnerable road users should be reflected in accident investigations and determination of responsibilities.

Strengthening the enforcement of regulations and accountability of cyclists objectively, as responsible drivers.

Exclusion of victim-blaming communication and intensive communication regarding the safety of the most vulnerable road users.

Effective enforcement of speed limits. Review of necessary regulations.

Activities

- Initiating amendments to the Traffic Code (1/1975. (II. 5.) Joint Decree of the Ministry of Interior and Ministry of Transport) and other related regulations to strengthen the responsibility of drivers and facilitate the safety of cycling.
- Campaign-like inspections of cyclists to draw attention to proper traffic behaviour and visibility.
- Enforcement of rules concerning the most vulnerable road users (sideways distance, parking, right of way, speed limits) with all road users through continuous and campaign-like checks and awareness campaigns.
- Developing a new examination methodology to emphasize the responsibility of drivers.

Organisations involved in the implementation

Competent ministry responsible for cycling, other relevant ministries, ORFK, professional NGOs (Hungarian Cyclists Club, Hungarian Automobile Club)

Estimated resource requirements

Preparation and execution: HUF 150 million.

Indicators

Output	Result
• Necessary regulations will be reviewed and amended (yes/no) • Number of roadside checks per county (pcs)	• Number of offences (pcs)

Timing


POLICE
POLICE

A.3.4. Driver and authority training, awareness raising

Goal

Every driver should possess the mindset and basic skills necessary for cooperation on the roads.

Mindset shaping within the traffic authority, police, and road management.

Activities

- Incorporation of traffic situations including cyclists into driver training. Modification of the methodology of driver training:
  - introduction of awareness-raising practical training sessions (such as walking, cycling, pushing a stroller, using a wheelchair) in practical education,
  - increasing the proportion of educational material and questions related to cyclists' traffic in the question database serving as the basis for the traffic rules (KRESZ) exam.
- Sensitizing actions (e.g. blind spots, overtaking side distances)
- Regular information and training for the traffic authority, police, road operators, and professional drivers.

Organisations involved in the implementation

Competent ministry responsible for cycling, other relevant ministries, ORFK, professional NGOs (Hungarian Cyclists Club, Hungarian Automobile Club)

Estimated resource requirements

Introduction of awareness-raising training in practical education: HUF 50 million.

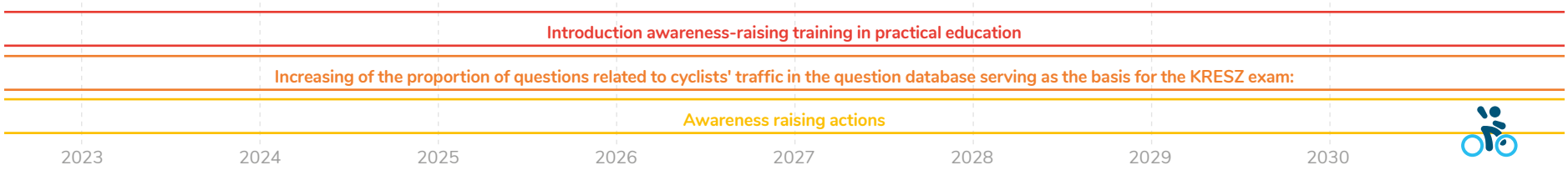
Increasing the proportion of questions related to cyclists' traffic in the question database serving as the basis for the KRESZ exam: HUF 10 million (preparation of measures).

Awareness-raising actions, e.g. bus drivers on bikes: HUF 200 million.

Indicators

Output	Result
• Number of training courses (pcs) • Number of awareness-raising actions (pcs)	• Number of participants in the trainings (persons) • Number of drivers reached by actions (persons)

Timing



A.3.5. Bike to school

Goal

The aim is that children should not be transported to school by car in the first place. To achieve this, the surroundings of schools should be made safely accessible by bicycle and on foot. Where possible, create traffic-calmed or traffic-restricted school streets. The aim is to support civil initiatives where children walk or cycle to school in supervised groups (walking bus, bike bus).

Activities

- The transformation of the environment around at least 20 schools annually, making it safe for cycling or walking to school, simultaneously making car use a less attractive alternative.
- The redevelopment of school environments based on tenders and traffic safety audits, primarily involving traffic interventions (restricting parking, stopping, and entry, setting a 30 km/h or lower speed limit, narrowing road surfaces, establishing speed bumps, creating pedestrian crossings, and bike lanes).
- Providing traffic support personnel around schools during peak hours.
- Encouraging awareness-raising initiatives for the transformation of school environments, supporting "soft" interventions around institutions to make pedestrian and cycling traffic safer; compiling tools and guidelines for schools and local governments to achieve the above goals.
- Launching campaigns and programmes promoting cycling or walking to school. Changing the mindset of children, parents, school staff, and educators.
- Establishing covered and supervised or enclosed bicycle storage at schools.
- Encouraging initiatives like "bike buses" (group cycling to school under supervision), creating a supportive environment for such endeavours.

Organisations involved in the implementation

Competent ministry responsible for cycling, AÖFK, Municipalities, Educational institutions, Hungarian Cyclists Club

Estimated resource requirements

Preparation: HUF 50 million.
Implementation: HUF 2.4 billion.

Indicators

Output	Result
• Number of interventions to improve traffic safety and traffic calming (pcs) • Number of schools involved in the programme (pcs)	• Supporting the interventions

Timing

Good practice abroad

Bikeability System (United Kingdom)

In England, a national standard has been established for the methodology of practical cycling education. Accredited organizations, with the assistance of accredited instructors, provide cycling education in schools based on these standards. The system's operation is supported by regular (annual) budgetary funding from the Department for Transport (DfT), and the distribution of funds and quality assurance of the programme are overseen by an organization called the Bikeability Trust. Through this programme, approximately 300-350 organizations with about 2,500 instructors reach around 400,000 children annually.

Source: BringaAkadémia

Good practice in Hungary

BringAkadémia programme

The BringaAkadémia programme (and its predecessor, the Bringasuli) aims to educate the 9-12 age group in cycling. Its primary tool is accredited teacher training organized for educators. Additionally, the programme includes the organization of school cycling days and the development of educational materials (workbooks, instructor manuals, and other publications) necessary for teaching.

Good practice in Hungary

Ovibringa

The Ovibringa (Kindergarten Cycling) is a preschool programme created by a private enterprise in 2018. Its goal is to make physical activity and cycling enjoyable for children aged 3-7. The programme aims to impart a confident movement culture and a transportation mindset to the children, that will enable them to cycle safely and comfortably throughout their lives.

During the Ovibringa programme, children can learn to balance and manoeuvre on balance bikes in a cheerful and playful environment. Later, they progress to pedal bikes. Additionally, the programme prepares them for common traffic situations so that, under the supervision of their parents, they can cycle safely in public spaces.

Source: BringaAkadémia

Source: BringaAkadémia

Flagship

On Two Wheels to School

Make school cycling education available to every 4th-grade child through the establishment of a national system for cycling education. Alongside the professional review of textbooks and teaching aids used in school education, create national standards for practical education. Ensure the financial support for education, establish a professional organization to coordinate education, and guarantee its quality assurance.

R.3.6. Teaching traffic education in primary and secondary schools, with assessment

Goal

By 2025, 100% of 10-year-old children should have basic traffic knowledge, and by 2028, 100% of 16-year-olds should possess advanced theoretical and practical traffic knowledge.

Primary school students should receive adequate hours of theoretical and practical traffic education, and their acquired knowledge should be assessed through examinations (90,000 children annually in the 4th grade of primary school).

The practice-oriented education of cycling should be uniformly implemented nationwide with high quality.

In secondary schools, 14-16-year-old students should be able to take the KRESZ-exam within the framework of free training.

The goal is for every child to undergo a basic traffic examination before the age of 12, and by 2030, at least 30% of the 12-year-old age group should also receive practical cycling education.

Activities

- To strive to ensure that by 2025, through the modification of the National Curriculum and the use of alternative teaching methods, every 4th-grade student (90,000 children annually) receives theoretical and practical traffic education and demonstrates their acquired knowledge through examinations. To achieve this, it is necessary to continue developing, digitizing, and creating interactive educational materials, as well as developing a mobile application to assist learning. In addition, traffic education should be introduced into teacher training as a subject in universities, colleges and accredited further education. Furthermore, institutions need to be provided with the necessary tools for practical training.
- The establishment of an independent professional organization is needed for the professional coordination of educational activities and to develop and operate a quality assurance system for school cycling education based on the English model.
- Ensuring high school students are prepared for the traffic rules (KRESZ) exam within school hours (or outside school hours with state support).
- Developing students' technical knowledge of cycling. Practical exams should be required.

Organisations involved in the implementation

Competent ministry responsible for cycling, AÖFK, Local Governments, Educational institution maintainers, Hungarian Cycling Club, ORFK-OBB, Ministry responsible for education.

Estimated resource requirements

Teaching cycling skills in primary schools:

- Curriculum development (digitalisation), teacher training development: HUF 60 million.
- Provision of teaching material (Traffic workbook): HUF 30 million/year, total HUF 240 million.
- Running training courses: HUF 15 million per year, for a total of HUF 120 million (so-called blended training, involving 500 teachers).

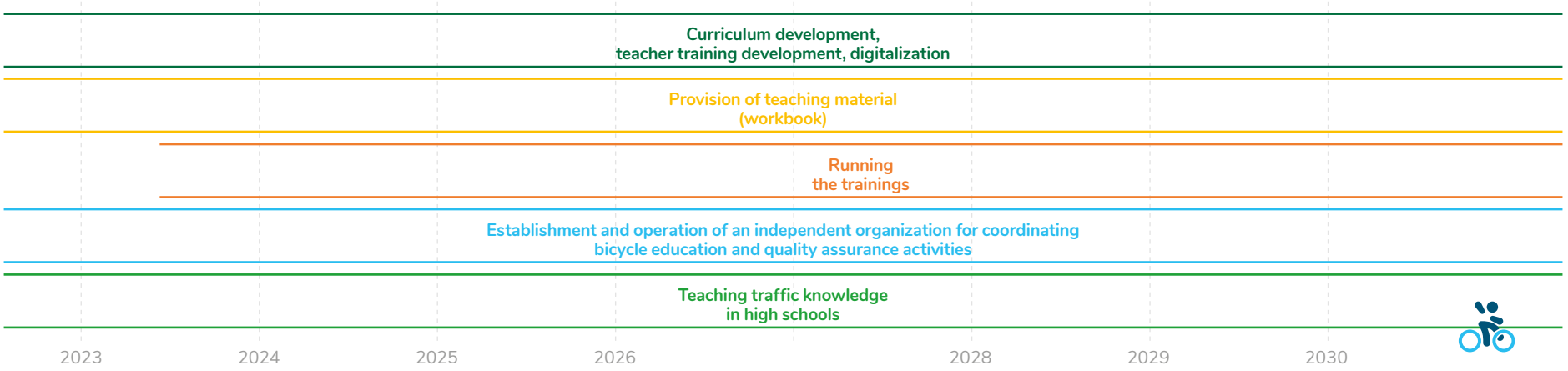
Establishing a separate organisation to coordinate cycling education and quality assurance activities:

- 2023-2024 pilot project: HUF 200 million,
- From 2024, the annual cost of running the system: HUF 225 million, a total of HUF 1.35 billion.
- Preparation for the KRESZ exam in secondary school: HUF 750 million/year, a total of HUF 5.25 billion.

Indicators

Output	Result
• The teaching of basic traffic knowledge is incorporated into the curriculum of primary and secondary schools in two stages (yes/no) • The coordinating professional organization is established (yes/no) • Methodology and curriculum have been developed (yes/no) • Number of participants in the training (persons)	• Number of students involved in the programme (persons) • Number of successful exams (pcs) • Percentage of people under 14 with traffic knowledge (%) • Percentage of the total population with traffic knowledge (%)

Timing



E.3.7. Traffic culture campaign

Goal

Promoting mutual sensitivity among all participants in traffic. Expanding cycling opportunities for people with reduced mobility.

Activities

- Organizing and supporting campaigns that promote collaboration among various vehicles and road users.
- Launching paid advertisements (ATL), online, and social media campaigns presenting the perspectives of individual participants. Engaging opinion leaders and influencers for each mode of transportation.
- Reviewing current campaigns: launching meaningful campaigns to protect vulnerable road users and ending victim-blaming campaigns. Targeting real problem-solving through communication, continuing fair and essential campaigns (e.g. blind spots, right hook, side distance).
- Emphasizing proper behaviour in a positive light rather than over-emphasising the dangers, conducting nationwide and local campaigns for both cyclists and motorists.
- Communication regarding amendments to the Traffic Code and related legislation.

Organisations involved in the implementation

Competent ministry responsible for cycling, governmental communication agencies, professional civil organizations, BKK, KTI, ORFK-OBB, MOL, automobile manufacturers, and potential involvement of car-sharing services)

Estimated resource requirements

HUF 300 million per year, for a total of HUF 2.1 billion.

Indicators

Output	Result
• Number of communication campaigns (pcs) • Number of advertisements and social media appearances (pcs)	• Number of target audiences reached by campaigns (persons)

Timing

Source: BKK

Horizontal measures

Current status and problem identification

The importance of cycling and its contribution to economic, social, and environmental goals is widely accepted nowadays, with a breakthrough from the previously heavily car-centric perspective.

Both everyday and tourism, recreational, and sports cycling have undergone significant development in organizational, financial, and innovative aspects in Hungary over the past 15 years. At central government level, cycling developments were coordinated first by a ministerial commissioner and then, from 2016, by a government commissioner. Later, the Active and Eco-Tourism Development Centre (AÖFK) established in 2019, as well as the former Cycling Department of the Ministry of Innovation and Technology, became involved. Since 2022, these coordination tasks have been transferred to the Prime Minister's Office. The Active Mobility Department, operating within the State Secretariat for Active Hungary, currently collaborates with the AÖFK handling such tasks. Hungarian civil organizations (Hungarian Cyclists' Club, MAÚT, MKSZ, MKKSZ, MAKETUSZ) have done tremendous work in this field in recent years, but their resources have been limited.

Unfortunately, very few local governments have dedicated, qualified individuals responsible for cycling matters, leading to well-intentioned measures often falling short of expected results. In some cases, inadequate and accident-prone cycling facilities are still being constructed, which cyclists are reluctant to use. Companies and businesses are often unaware of the possibilities of supporting cycling commuting, such as providing bicycles or e-bikes for employees, as revealed by the 2022 "This is How Hungary Cycles" research by Medián.

Positive aspects regarding funding include the Hungarian government allocating HUF 200 billion for cycling developments between 2014 and 2020, which corresponds to approximately 8 euros per person annually, compared to the EU-recommended 15-25 euros per person per year. However, with the municipalities' own resources, there has been a noticeable improvement in the cycling path network in recent years, as evidenced by the 2022 "This is How Hungary Cycles" research, with 47% of the population experiencing positive changes in the number and condition of cycling paths.

Table 2: The minimum resources allocated for cycling development
(source: ECF.com)

Minimum resources allocated per capita for cycling development		
Level of cycling knowledge	**Maintaining the level/ proportion of cycling**	**Increasing the level/ proportion of cycling**
Beginner (0-10%)	5 €/resident	10 €/resident
Intermediate (10%-25%)	10 €/resident	15-25 €/resident
Advanced (above 25%)	25 €/resident	30 €/resident

In contrast to the previous situation, support for cycling developments is predictable, and the subsidies now directly reach the public (e.g. e-bike purchases, cycling camps). There is still a need for progress in the efficient utilization of resources.

The domestic cycling industry has grown dynamically in recent years, primarily due to the establishment of assembly plants here. The aim is for Hungary to play an important role in future developments and research in the bicycle industry, for which the recent investments in vehicle industry higher education and research provide a good foundation.

Parallel to the development of cycling, micro-mobility devices are becoming increasingly widespread. When planning and developing cycling infrastructure and related services, it is necessary to take into account the requirements posed by micro-mobility devices.

In recent years, the public's knowledge about cycling has significantly improved, thanks to the awareness-raising activities of both civil and governmental organizations. However, on an international scale, Hungary tends to play more of a follower than an innovative role.

SWOT analysis

Strengths

- Cycling has undergone significant development in its organizational, financial, innovation, and information background.
- Strong civil organizations and governmental determination drive the developments.
- The government allocates significant domestic and EU funds for cycling development.
- Support for cycling initiatives is predictable, and the support directly reaches the public.
- The survey and registration of cycle routes is largely operational.
- Automatic counters and research are available for monitoring.
- The domestic bicycle industry is growing dynamically.
- The most important cycling routes are now under state operation.

Weaknesses

- The sign systems for bike routes, rest areas, and forest cycling paths do not have clearly designated operators.
- Capacity and staff shortages, lack of up-to-date training.
- The measurement of the effects of supported measures is incomplete, making it very difficult to assess their effectiveness and efficiency.
- On an international scale, Hungary tends to play more of a follower than an innovative role in cycling-related knowledge.
- Municipally managed cycle paths are sometimes in poor condition and underfunded in operation and maintenance.
- Charging opportunities for electric bikes

Opportunities

- Additional resources may be available.
- Collaboration among stakeholders is strengthening, and those involved in cycling are gaining more advocacy power.
- The domestic innovation capacity is increasing.

Threats

- There is a persistent labour shortage.
- Professionals are leaving the field, further decreasing innovation capacity.
- Due to cheaper labour and better technology, foreign companies are becoming more competitive than domestic ones.

Specific objective

- *Increasing and measuring the impact of cycling and the effectiveness and efficiency of measures supporting cycling. Regular reports are prepared on the implementation, impacts, and review of the Strategy.*
- *Establishing a predictable, efficient, and proportionate financing system for cycling.*
- *Every county and county-level urban municipality should have a trained professional responsible for cycling issues, and their regular training should be organized.*
- *The organizational system of cycling further strengthens, regular professional forums facilitate collaboration, and cycling considerations are taken into account in all relevant fields.*
- *Integration of cycling into territorial and urban planning processes and into all relevant strategic documents through the revision and application of existing manuals and guidelines.*
- *Promoting electric cycling and supporting its framework*

Commitments

- We will create an accessible cycling knowledge base for everyone.
- We will organize an annual professional cycling conference and submit applications to host the UCI Bike City Forum and the ECF Velo-city international conference.
- We will continue organizing foreign study trips. We will invite annually at least 50 city leaders, decision-makers, chief architects, and designers for study trips to learn about international best practices firsthand.
- We will initiate the establishment of a cycling industry cluster.
- We will regularly prepare reports on the state of cycling, supported by accurate data. We will appoint data custodians and those responsible for data collection.
- We will hold cycling forums twice a year for decision-makers.
- We will increase the funds allocated for cycling development by at least 10% annually.

Target groups

By social function

- decision-makers, politicians
- professionals, researchers, educators, designers
- business people, entrepreneurs
- NGOs, influencers, media

By field

- transport, urban planning, environment and nature conservation
- tourism, catering
- health, sport, education

H.4.1. Cycling knowledge and a cycling-friendly attitude among key players

Goal

All relevant state, private, professional, and civil stakeholders should possess the necessary knowledge, information, and mindset required to perform their tasks in their respective fields. At least 1,500 participants in various training, research, awareness-raising, and informational activities.

Activities

- Establishment of a Cycling Knowledge Centre and a publicly accessible database.
- Training and awareness-raising of the engineering community involved in cycling traffic.
- Organizing foreign study trips to acquire firsthand knowledge related to cycling, providing practical insights and fostering a cyclist-friendly mindset.
- "Cycling Professor" Programme: Introducing a support system for universities that incorporate subjects related to cycling traffic and cycling tourism into their curriculum and are employing educators for this purpose. These institutions receive support for a specified period (e.g. 2-5 years) to cover salary and other costs (comprehensive support for a total of at least 25 years of full-time salary and other costs). Under other costs, in addition to social security contributions and institutional expenses, it is necessary to reimburse the costs of conducting research tasks and inviting guest lecturers. (Based on the German model.)
- Creation of a "Scholarship Programme" for students participating in transportation planning, urban planning, urban development, or cycling coaching programmes, as well as those in tourism or other relevant fields. The programme provides scholarships that include both international stays and domestic academic work, focusing on the topic of cycling.
- Organizing the National Cycling Conference covering the entire spectrum of cycling annually, following the example of Austrian and German national conferences, with invited foreign speakers. Organizing the UCI Bike City Forum and ECF Velo-City conference.
- Establishing cyclist-friendly awards to recognize outstanding achievements in various categories (infrastructure, services, communication, activities supporting cycling, photo contest, cyclist-friendly municipality, and workplace). Building the Hungarian cycling model and brand. Market the successful solutions in Hungary to other countries (primarily in the region).
- Develop training for regional coordinators and tour guides/organizers in cycling tourism.
- Encourage municipal authorities to develop cycling through training and awareness programmes, study trips, and professional consultancy.

Organisations involved in the implementation

Competent ministry dealing with cycling, AÖFK, professional NGOs, and scientific workshops (Hungarian Cyclists' Club, MAKETUSZ, MKSZ, KTI)

Estimated resource requirements

HUF 90 million per year, for a total of HUF 630 million.

Indicators

Output	Result
• Cycling Knowledge Centre established (yes/no) • Number of cycling-related further education sessions (pcs) • Number of foreign study trips (pcs) • Number of scholarship programmes (pcs) • Launch of Cycling Professor programme (yes/no)	• Number of participants in cycling-related further education (persons) • Number of participants in study trips (persons) • Number of participants in scholarship programmes (persons) • Number of Cycling Professor positions (pcs)

Timing

Good practice abroad

German National Cycling Conference and Knowledge Base

In Germany, two national conferences are held: the Fahrradkommunalkonferenz (a cycling conference primarily for municipalities), which takes place annually. This two-day event is free and is primarily aimed at local and regional municipalities, operators, employees in the public administration sector, and decision-makers. Every two years, the Nazionaler Radverkehrskongress (National Cycling Congress) is organized. This, too, is a two-day free event, and English translation is provided for the plenary session and typically one selected section.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Aktív
Korszaknyitó
Konferencia
2021

H.4.2. Bicycles of the future – creating the National Cycling Cluster

Goal

Increasing the added value and competitiveness of the Hungarian cycling industry and its supporting industry. Establishment of the National Cycling Cluster. Encouraging domestic development and research activities to enhance the added value of manufacturing and assembly plants.

Activities

- Establishment of an institute and incubator house supporting innovations related to cycling (e.g. bicycles, accessories, infrastructure, software, supporting industry), along with the development and implementation of an associated financial support system:
  - Formation of a cluster, involving relevant organizations and government participation, to develop the organization's strategy. Its task is to bring together developers, facilitate synergy among bicycle and automotive companies interested in "bike technology," connect them with higher education institutions and research institutes, engage in communication and education, support regulation, and build international relationships.
  - Creation of a research centre, laboratory, and incubator house.
  - Providing financial assistance, offering physical space, and mentoring to support innovations in various stages of research and development, as well as bringing the finished products to the market.
  - Development of a programme related to bicycle mechanic training.

Organisations involved in the implementation

Competent ministry dealing with cycling, MKKSZ, universities and research centres, market players

Estimated resource requirements

Preparation: HUF 20 million.

Implementation: HUF 1.2 billion.

Indicators

Output	Result
• Cycling cluster is created (yes/no)	• Number of people employed in the cycling industry (persons) • Resources spent on research and development (HUF)

Timing

H.4.3. Measuring and evaluating the results and impact of the measures

Goal

Measurement of the effects of cycling and the effectiveness and efficiency of area-based differentiated measures supporting cycling. New road monitoring and user monitoring platforms are established, 100 new bike counters are installed nationwide, and data from smartphones are integrated into the system. An annual survey is conducted on cycling habits. Monitoring the implementation of the strategy and making necessary adjustments.

Activities

- Data collection and analyses for evaluating the effects of developments and monitoring the implementation of the strategy.
- Improvement of infrastructure records, including accident and traffic data, user opinions, in addition to the current technical data.
- Regular surveys of the characteristics of everyday and tourist bicycle use through new automatic counters, manual counts, research, and big data. Integration of the data from automatic counting systems operating in the country into a common database and visualization of the data.
- Calculation of environmental, economic, and social impacts based on the data.
- Regular analysis of the domestic and international market for bicycle tourism.
- Analysis and thorough examination of traffic safety data. Investigation into the real causes of accident conditions and issues to ensure that further measures are based on real data and facts.
- Preparation of two interim reports on the implementation of the Strategy with the formulation of possible modification proposals.
- Detailed examination of accidents and regular analysis of accident hotspots.

Organisations involved in the implementation

Hungarian Public Roads, BKK Budapest Public Roads, Local Governments, AÖFK, KTI, ORFK-OBB. Hungarian Cyclists' Club

Estimated resource requirements

Total of HUF 300 million.

Indicators

Output	Result
• The number of newly installed automatic traffic counters (pcs) • The number of newly designated manual traffic counting points (pcs) • The creation of a cyclist traffic database (yes/no) • Annual reports are available (yes/no)	• The number of available automatic traffic counters nationwide (pcs) • The number of manual traffic counting points nationwide (pcs) • The number of accident cluster analyses (pcs)

Timing


CYCLISTS TODAY
1 000 000
900 000
800 000
700 000
600 000
500 000
400 000
300 000
200 000
100 000
0
CYCLISTS THIS YEAR
Thank you
for bicycling
SFMTA
Municipal Transportation Agency

H.4.4. Institutional framework for cycling

Goal

Strengthening coordination and collaboration among the actors involved in implementing the strategy.

In public space development or transportation-related tenders, make cyclist-friendliness a horizontal criterion or encourage it where conditions are suitable.

Activities

- Regular convening of the National Cycling Forum to discuss strategic issues related to cycling and evaluate the Strategy twice a year.
- In addition to the forum addressing general issues at the highest level, the establishment and operation of working groups dealing with policies along the lines of the most critical emerging issues, with the participation of experts delegated by various organizations. Creation of an inter-ministerial consultation mechanism.
- Ensuring a predictable institutional and financial background for government, municipal, and civil organizations responsible for coordination and development tasks.
- Organizing an annual professional meeting for municipal cycling representatives for knowledge exchange.
- Incorporating bicycle-friendly public space developments into tender systems.

Organisations involved in the implementation

Competent ministry responsible for cycling, with the participation of all relevant organisations and partners

Estimated resource requirements

Total of HUF 10 million.

Indicators

Output	Result
• Cycling forum and working groups established (yes/no)	• Number of organisations participating in the cycling forum and working groups (pcs)

Timing

Source: Máté Sebők

H.4.5. Integrating cycling into spatial planning

Goal

Integrating cycling into national, regional, and urban planning processes and into all relevant strategic documents to make cycling an attractive option instead of individual motorized transport, achieved through the appropriate development of regional structures.

Expanding the regional planning tasks of counties to include cycling infrastructure.

Aligning the cycling route network with urban green and blue infrastructure networks, taking relevant considerations into account.

Modifying regulations and requirements that hinder reasonable developments.

Activities

- Integration of cycling considerations into regional and urban planning processes, primarily through regulatory tools.
- Reducing the number and duration of intra-urban trips by modifying land-use regulations (placing different functions close to each other, adopting the 15-minute city concept), thereby promoting cycling.
- Integration of cycling in such a way that cycling considerations are mandatory in all relevant public space development or transportation-oriented developments. To achieve this, the relevant regulations and project support systems should be reviewed and proposals for amendments should be made.

Organisations involved in the implementation

Competent ministry responsible for cycling, other relevant ministries, Lechner Knowledge Centre, county and municipal governments, professional NGOs

Estimated resource requirements

Total of HUF 10 million.

Indicators

Output	Result
• Necessary regulations are reviewed and amended (yes/no)	• Number of urban development documents integrating cycling aspects (pcs)

Timing

H.4.6. Promotion of e-bikes and supporting its framework

Goal

Promotion of electric bicycles through campaigns, with a focus on cities and towns in hilly and mountainous areas. Encouragement of corporate e-bike fleets. Promotion of usage structures for employees similar to company cars.

Support for the development of infrastructure necessary for the use of e-bikes (e.g. charging networks). Inclusion of electric bicycle charging as a project element in all developments where it can be sustainably operated.

Activities

- Encouraging the use of electric bicycles in order to increase the popularity of more expensive electrically assisted bicycles and cargo bicycles, that on the other hand support mobility, commuting, and urban logistics.
- Promoting the establishment of charging facilities for electrically assisted bikes, especially at service providers where cyclists spend longer periods during tours, for example, for dining purposes.
- Creating a unified database, signs, and promotion of charging points.
- Facilitating the expansion of the service provider sector to ensure the conditions for repair and maintenance.
- Organizing e-bike tours and competitions.

Organisations involved in the implementation

Competent ministry responsible for cycling, other relevant ministries, government communication agencies, AÖFK, professional civil organizations (Hungarian Cyclists' Club, MAKETUSZ, MKSZ), TDMs, and tourism and rural development organizations

Estimated resource requirements

Support for the construction of a charging network: HUF 500 million

Due to the current reallocation of funds dedicated to financial incentives for commuting, the funding requirement is HUF 0.

The integration of information regarding charging points into informational interfaces will be realised in other communication measures, therefore the cost here is HUF 0.

Indicators

Output	Result
• Number of e-bike charging stations established (pcs) • Number of campaigns promoting electric cycling (pcs)	• Number of e-bikes (pcs) • User satisfaction regarding the number of charging points • Percentage or number of population reached by campaigns (% or persons)

Timing

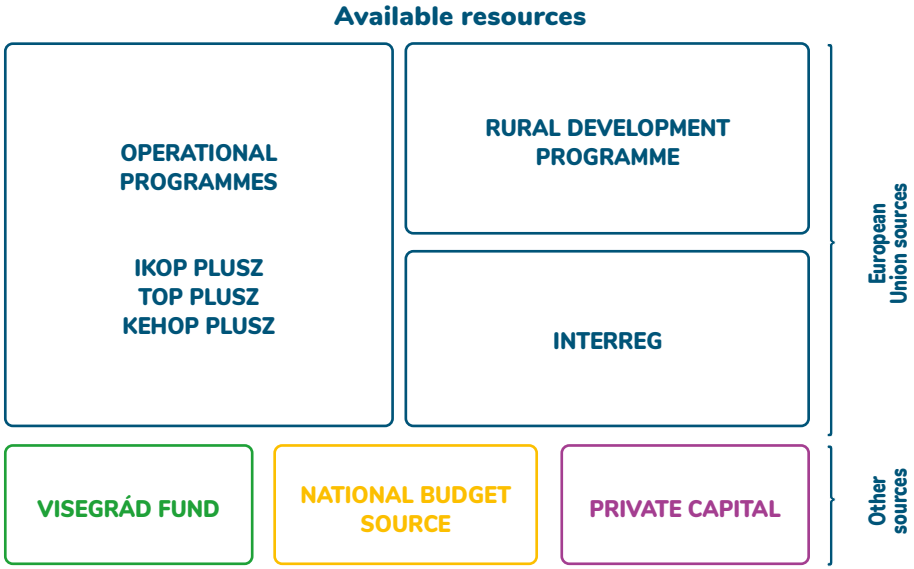
Source: Bike-Energy

Costs of implementing the Measures

The cost requirements of the measures during the period between 2023 and 2030 are as follows:

Resources needed for implementation	
Everyday cycling	HUF 110,37 billion
Development of tourism recreation	HUF 117,35 billion
Improving road safety	HUF 16,36 billion
Horizontal measures	HUF 3,89 billion
Total	HUF 247,97 billion

The estimated total cost for the implementation of the measures outlined in the strategy is HUF 247.97 billion, which can be covered by the following sources:



Taking into account the operational programmes and calls for the EU financing cycle between 2014 and 2020, the budgetary resources provided in recent years, and private investments, the HUF 247.97 billion needed to implement the strategy could be available in the period up to 2030.

The table below contains in detail the estimated costs of implementing individual measures and the possible sources.

Estimated cost of implementing measures (HUF billion)		TOP+	IKOP+	KEHOP+	Rural development	INTERREG	Visegrád Fund	Domestic funds	Private capital
Everyday cycling	**110.37**								
A.1.1. Making the road network cycle-friendly	94.5	+	+			+		+	
A.1.2. Improving bicycle parking and storage	6	+	+						+
A.1.3. Integrated bike-sharing system	5	+				+			
A.1.4. Bikes for everyone – encouraging bike purchases and company fleets	0.8							+	+
A.1.5. Cycling route planning across the country	0.26					+		+	
R.1.6. Bicycle, the preferred choice	3.35							+	+
R.1.7. Financial incentives for everyday cycling	0							+	
E.1.8. Cycling is cool and respectable	0.46							+	+
Tourism, recreation	**117.35**								
A.2.1. Coherent cycling tourism networks	97	+	+	+	+	+		+	+
A.2.2. Developing cycling-friendly service networks	3	+				+	+		+
A.2.3. Cycle transport on public transportation	1		+				+		
A.2.4. Cycling tourism portal and application	0.4					+		+	+
R.2.5. Discounted package deals, discount programmes	1.4	+				+	+		+
R.2.6 Cycling tour guide training	0.05	+				+		+	
E.2.7. Cyclist tourism recreational and promotional campaigns	5	+				+	+		+
E.2.8. Cycling events and bicycle sports gatherings to promote recreational and leisure cycling	9.5					+		+	+
Road safety	**16.36**								
A.3.1. Classification of the entire bikeable road network, and upgrading of dangerous sections	4.25	+	+			+		+	
A.3.2. Safe bicycles	0.35							+	+
A.3.3. Being responsible on the roads – strengthening the protection of vulnerable road users	0.15							+	
A.3.4. Driver and authority training, awareness raising	0.26							+	
A.3.5. On two wheels to school	2.45	+						+	
R.3.6. Two-stage education in traffic knowledge in primary and secondary schools, with assessment.	6.8							+	
E.3.7. Traffic culture campaign	2.1							+	+
Horizontal measures	**3.89**								
H.4.1. Cycling knowledge and a cycling-friendly attitude among key players	0.63					+		+	
H.4.2. Bikes of the future – creating the National Cycling Cluster	2.44							+	+
H.4.3. Measuring and evaluating the results and impact of the measures	0.3	+	+			+		+	
H.4.4. The institutional framework for cycling	0.01							+	
H.4.5. Integrating cycling into regional planning	0.01							+	
H.4.6. Promoting electric cycling, supporting its framework	0.5	+		+		+		+	+
	247.97								

Alignment of the Strategy's objectives

The vision and goals articulated in this strategy have been shaped or determined by international and national-level goal systems outlined in various other strategic documents. The goals and measures of the National Cycling Strategy align fully with the objectives of the National Development and Regional Development Concept (OFTK), which stands at the top of the national development policy hierarchy, contributing to the fulfilment of comprehensive and specific goals outlined therein. The strategy includes measures aimed at increasing the role of bicycle manufacturing and innovation, aligning well with the goal of economic development that ensures value-creating employment. Cycling, through physical activity, contributes to improving the health of the population, which is crucial for the economy (healthcare expenses, productivity). Additionally, it serves the goal of achieving a healthy and renewable society outlined in the OFTK. As cycling is a sustainable mode of transportation, it also aids in achieving the OFTK's environmental and sustainability objectives. Areas targeted for cycling tourism often extend to economically disadvantaged regions, thus contributing to the development of these underdeveloped areas and mitigating regional inequalities.

Among the sustainable development goals defined by the United Nations for the 2030 agenda, the following can be considered as guiding principles from the perspective of cycling:

- Health and well-being (3): ensure healthy lives and promote well-being for all at all ages.
- Decent work and economic growth (8): promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all.
- Sustainable Cities and Communities (11): Make cities and human settlements inclusive, safe, resilient, and sustainable.
- Climate Action (13): Take urgent action to combat climate change and its impacts.

The relevant objectives formulated by the *European Union* are as follows:

- By 2030, achieve a net reduction of at least 55% in greenhouse gas emissions within the Union compared to 1990 levels (European Climate Regulation).
- By 2050, reduce emissions in the transport sector by 90%.
- By 2030, have 100 European cities achieve climate neutrality.
- By 2030, establish 5,000 km of new bicycle paths or lanes in European cities.
- Reduce the number of serious and fatal traffic incidents to 0 by 2050 (Vision Zero)

Relevant objectives and measures set by national policy strategies:

National Transportation Infrastructure Development Strategy

- Enhancement of resource-efficient transportation modes: Socially beneficial transportation modes need to be determined for specific functional regions through careful analysis. The development and promotion of non-motorized (pedestrian and bicycle) transportation are essential.
- Establishment of a comprehensive European and national bicycle traffic network, with the construction of missing elements.
- Ensuring the maintenance and operation of certain elements of the cycling network, owned by different entities (state, local government), preferably under unified minimum conditions.
- Changing the social attitude that favours individual motorized transportation towards cycling, walking, and public transportation.
- Promoting non-motorized modes (walking, cycling) through infrastructure and management tools.
- Traffic safety interventions in major cities. In cities with a population exceeding 60,000, improving critical intersections through construction or traffic engineering tools, primarily considering the preferences of non-motorized transportation and vulnerable road users, prioritizing pedestrian and bicycle traffic.
- Development of modal shift (P+R and B+R) systems.
- Improvement of traffic safety at existing roads and intersections. Continuous monitoring of road safety on public roads (ranking road safety) with the identification and planned correction of emergency situations arising from the design and traffic management of critical points, as well as the pedestrian and cyclist-friendly transformation of road sections problematic from the perspective of pedestrian and cyclist traffic.

National Environmental Protection Programme (2021-2026)

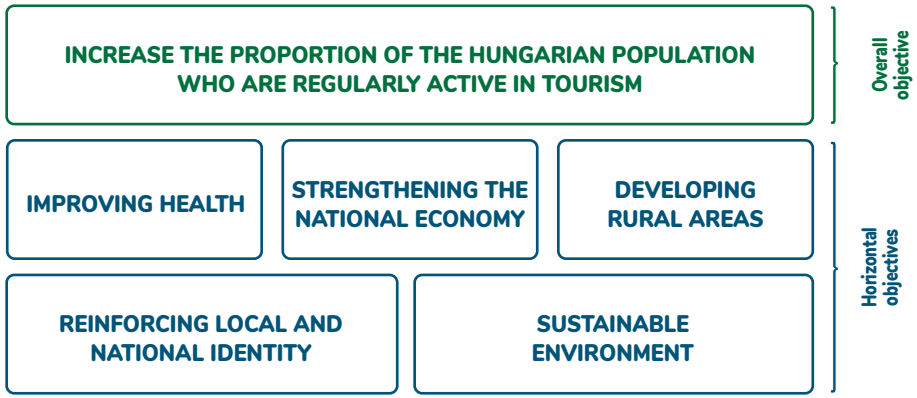
The reduction of air pollution and the greening of road transport include the development of cycling and its infrastructure as a strategic direction. This involves:

- the improvement of community cycling infrastructure,
- the promotion of cycling,
- and the support for developing cycling infrastructure with consideration for nature and environmental conservation.

The National Tourism Strategy NTS2030 – Tourism 2.0

It addresses the development of cycling infrastructure, supporting facilities, and services for tourism at the national level and in several tourism regions, including Debrecen and its surroundings, Mátra-Bükk, Tokaj and Nyíregyháza, Sopron-Fertő, and Balaton.

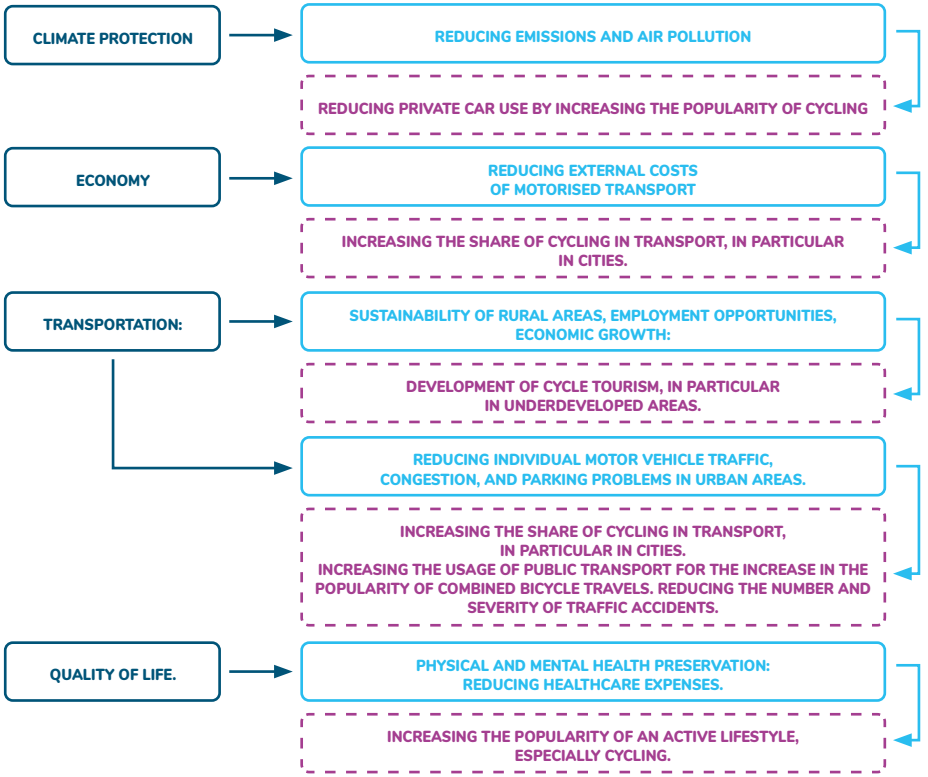
Overall aim and horizontal objectives of the National Active Tourism Strategy



Specific objectives of the National Active Tourism Strategy relevant to cycling

- Establishing and maintaining high-quality national and regional cycling route networks. Creating suitable infrastructure for those seeking more extreme and for the ones preferring safe cycling experiences alike.
- Providing specialized services for each type of active tourism in adequate quantity and density.
- Services at accommodations and hospitality establishments should be tailored to meet the specific needs of active tourists based on their types of tours, provided in a networked system that complements each other.
- Increasing the length of stay and providing comprehensive experiences through collaboration among service providers and by selling each other's services as a package.
- Establishing a unified national and regional platform for existing and newly implemented state-owned investments, state-owned tourist attractions, routes, and services. Implementing all of this in an open-source system to maintain the possibility of IT developments by market players.
- Further development of the available monitoring tools and system. Measuring and influencing the development and impact of active tourism, as well as the effectiveness of interventions, in the desired direction.

From the various levels of goal systems, the following main objectives can be identified for the cycling strategy:



Annexes

Matrix showing the relationship between measures

Number and title of the measure		A.1.1.	A.1.2.	A.1.3.	A.1.4.	A.1.5.	R.1.6.	R.1.7.	E.1.8.	A.2.1.	A.2.2.	A.2.3.	A.2.4.	R.2.5.	R.2.6.	E.2.7.	E.2.8.	A.3.1.	A.3.2.	A.3.3.	A.3.4.	A.3.5.	R.3.6.	E.3.7.	H.4.1.	H.4.2.	H.4.3.	H.4.4.	H.4.5.	H.4.6.
A.1.1.	Making the road network cycle-friendly					■				■								■			■		■						■	
A.1.2.	Improving bicycle parking and storage						■	■															■						■	■
A.1.3.	Integrated bike-sharing systems						■	■													■									■
A.1.4.	Bikes for everyone – encouraging bicycle purchases and company fleets							■	■										■											■
A.1.5.	Cycling route planning across the country	■								■			■					■					■							
R.1.6.	Bicycle, the preferred choice		■	■				■	■		■					■														■
R.1.7.	Financial incentives for everyday cycling		■	■	■		■					■								■										■
E.1.8.	Cycling is cool and respectable				■		■																■							■
A.2.1.	Coherent cycling tourism networks	■				■					■				■		■	■			■								■	■
A.2.2.	Developing cycling-friendly service networks						■			■		■	■	■			■													■
A.2.3.	Cycle transport on public transportation							■			■				■		■													
A.2.4.	Cycling tourism portal and application					■					■			■	■		■													
R.2.5.	Discounted package deals, discount programmes										■		■		■	■	■													

	Number and title of the measure	A.1.1.	A.1.2.	A.1.3.	A.1.4.	A.1.5.	R.1.6.	R.1.7.	E.1.8.	A.2.1.	A.2.2.	A.2.3.	A.2.4.	R.2.5.	R.2.6.	E.2.7.	E.2.8.	A.3.1.	A.3.2.	A.3.3.	A.3.4.	A.3.5.	R.3.6.	E.3.7.	H.4.1.	H.4.2.	H.4.3.	H.4.4.	H.4.5.	H.4.6.
R.2.6	Cycling tour guide training									■	■		■	■			■											■		
E.2.7.	Cycling tourism and recreational campaigns									■		■	■	■		■	■													
E.2.8.	Cycling events and cycling sports events to promote recreational and leisure cycling						■							■	■		■													
A.3.1.	Classification of the entire bikeable road network, and upgrading of dangerous sections	■				■				■											■		■							
A.3.2.	Safe bicycles				■																			■		■				■
A.3.3.	Being responsible on the roads – strengthening the protection of vulnerable road users	■		■						■								■		■		■	■	■	■			■		
A.3.4.	Driver and authority training, awareness raising																				■		■		■			■		
A.3.5.	On two wheels to school	■	■			■			■									■			■	■		■						■
R.3.6.	Two-stage education in traffic knowledge in primary and secondary schools, with assessment																		■		■		■		■			■		
E.3.7.	Traffic culture campaign	■					■		■								■			■	■			■						
H.4.1.	Cycling knowledge and a cycling-friendly attitude among key players																				■	■		■				■		■
H.4.2.	Bicycles of the future – creating the National Cycling Cluster																		■	■								■		■
H.4.3.	Measuring and evaluating the results and impact of the measures																													
H.4.4.	The institutional framework for cycling																				■	■		■	■	■				
H.4.5.	Integrating cycling into regional planning	■	■							■																				
H.4.6.	Promoting electric cycling, supporting its framework		■	■	■		■	■	■	■	■								■				■		■	■				

2. annex: Cycling risk index

Ország	Fatal cycling accidents per 1 million people	Cycling as the main mode of transport	Cycling risk index
Austria	5.5	6	0.92
Belgium	6.3	13	0.48
Cyprus	1.2	1	1.2
Czech Republic	5	8	0.63
Denmark	5.4	23	0.23
France	2.4	4	0.6
Greece	1.7	2	0.85
Netherlands	5.9	36	0.16
Croatia	6.4	6	1.07
Poland	7.1	7	1.01
Hungary	7.4	22	0.34
Germany	4.8	12	0.4
Italy	4.5	6	0.75
Romania	8.9	7	1.27
Sweden	2.2	17	0.13
Slovakia	5	7	0.71
Slovenia	5.8	9	0.64

Source of data on bicycle use

Eurobarometre 2014 (Based on responses to the question 'How do you typically commute on an average day?')

https://ec.europa.eu/commfrontoffice/publicopinion/archives/ebs/ebs_422a_en.pdf

Accident and population data source

CARE database (2016 or latest), population Eurostat (2018)

https://ec.europa.eu/transport/road_safety/sites/roadsafety/files/pdf/statistics/dacota/bfs20xx_cyclists.pdf

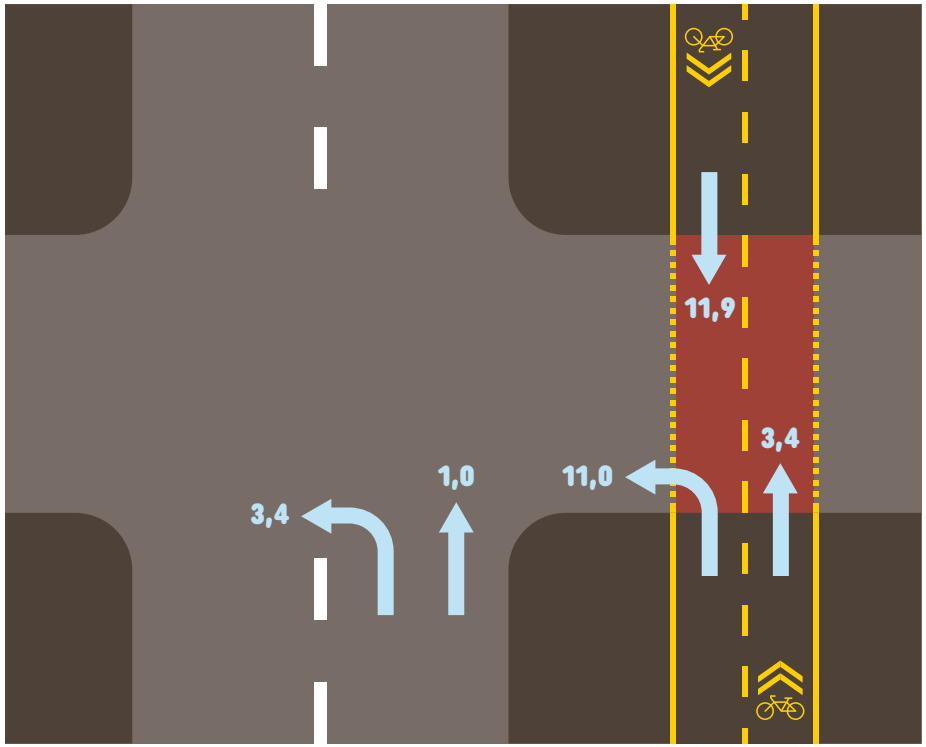
List of abbreviations

Abbreviation	Meaning
AÖFK	Aktív- és Ökoturisztikai Fejlesztési Központ – Active and Ecotourism Development Centre
B+R	bike and ride
BFK	Budapest Fejlesztési Központ – Budapest Development Centre
BKK	Budapesti Közlekedési Központ – Budapest Transport Centre
BKV	Budapesti Közlekedési Zrt. – Budapest Transport Ltd.
BM	Belügyminisztérium – Ministry of the Interior
GYSEV	Győr–Sopron–Ebenfurt Railway
HÉSZ	Helyi Építési Szabályzat – Local Building Codes
HUMDA	Hungarian Mobility Development Agency
IM	Igazságügyi Minisztérium – Ministry of Justice
ITM	Innovációs és Technológiai Minisztérium – Ministry of Innovation and Technology
ITM KKF	Innovációs és Technológiai Minisztérium, Kerékpáros Koordinációs Főosztály – Ministry of Innovation and Technology, Department of Cycling Coordination
KETOSZ	Kerékpárosbarát Települések Országos Szövetsége – National Association of Cycling Friendly Municipalities
KK	Klebelsberg Központ – Klebelsberg Centre
KKKR	Kerékpáros Közösségi Közlekedési Rendszer – Bicycle Community Transport System
KTI	Közlekedéstudományi Intézet Nonprofit Kft. – Transport Research Institute Nonprofit Ltd.
MABEUSZ	Magyar Beutaztatók Szövetsége – Hungarian Inbound Travel Professionals' Association
MAKETUSZ	Magyar Kerékpáros Turisztikai Szövetség – Hungarian Cycling Tourism Association
MAÚT	Magyar Út- és Vasútügyi Társaság – Hungarian Road and Railway Society
MÁV-VOLÁN	Magyar Államvasutak és Volánbusz Zrt. – Hungarian State Railways and Volánbusz Zrt.
MGOE	Magyar Gépjárműkereskedők Országos Egyesülete – National Association of Hungarian Motor Vehicle Dealers
MK	Magyar Kerékpárosklub – Hungarian Cyclists' Club
MKKSZ	Magyar Kerékpáripari és Kereskedelmi Szövetség – Hungarian Bicycle Industry and Trade Association
MKSZ	Magyar Kerékpáros Szövetség – Hungarian Cycling Federation
MOL	Magyar Olaj- és Gázipari Nyrt. – Hungarian Oil and Gas Plc.
MTÜ	Magyar Turisztikai Ügynökség – Hungarian Tourism Agency
ÖBB	Österreichische Budesbahnen – Austrian Federal Railways
ORFK	Országos Rendőr-főkapitányság – National Police Headquarters
OTÉK	Országos Településrendezési és Építési Követelmények – National Town Planning and Building Requirements
PM	Pénzügyminisztérium – Ministry of Finance
TDM	Turisztikai Desztináció-menedzsment szervezet – Tourist Destination Management Organisation

Recommendations on infrastructure design

Directionally separated design

In urban environments, it is always necessary to strive for the establishment of directionally separated infrastructure (bike lanes, bike paths). In populated areas, directionally separated bicycle infrastructure provides much greater safety for cyclists and other road users; it is also suitable for avoiding hazardous situations caused by turning cars. The diagram below illustrates the various accident risk factors in different traffic situations. (Source: AÖFK / based on research from Lund University)

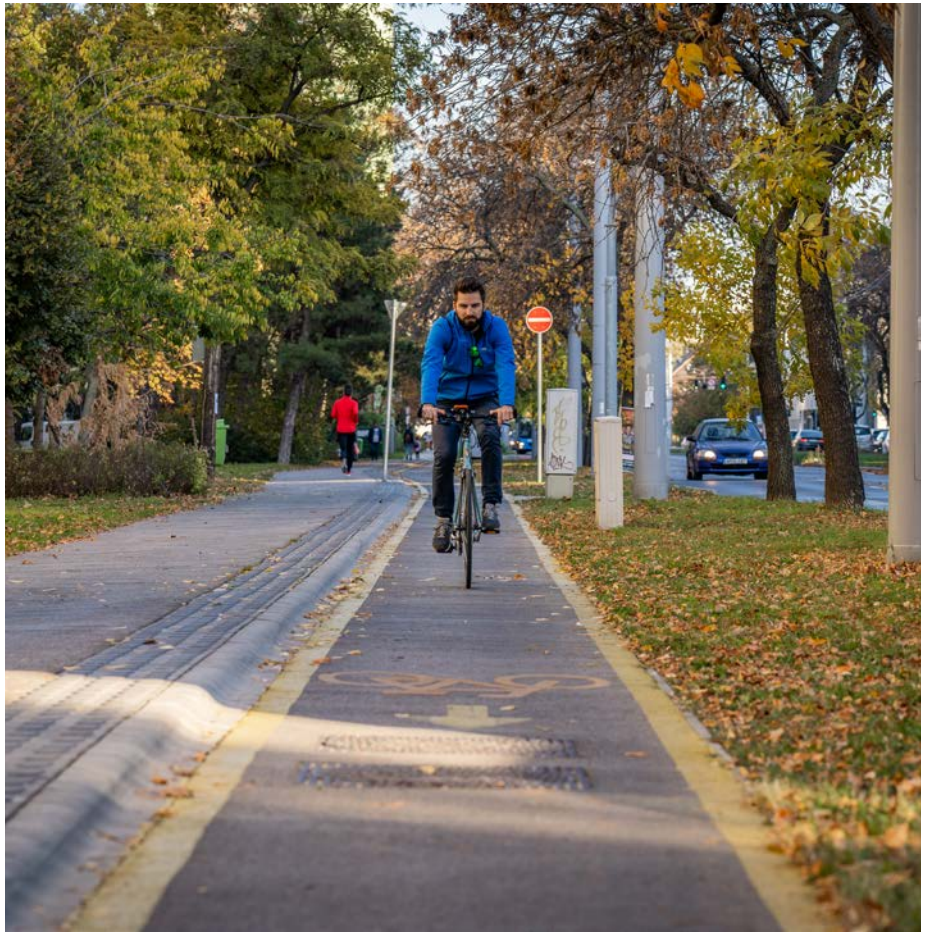


Protected bike lanes

Protected bicycle facilities further enhance the comfort level, so where justified, the infrastructure should be developed according to this directionally separated approach. A bicycle lane can be protected not only with level separation but also with other reinforced separation methods. It is important that, near intersections, the bike lane should be lowered to the level of the road due to crossing traffic, and sufficient cross-sectional width should be provided for passing and the movement of special bicycles.

Separation of Pedestrian and Bicycle Traffic

Pedestrian and bicycle traffic must be separated. Use of a shared surface is only possible in unavoidable cases, by reducing the speed of cyclist traffic. The development and renovation of pedestrian surfaces are important objectives, but they are not possible within the framework of the construction of cycling infrastructure. Bicycles should be treated as vehicles, not pedestrians, as stated in the Traffic Code. Shared pedestrian-bicycle surfaces cause potential accidents and discomfort due to speed differences.



Integration or Separation

As a general principle, whenever there is a significant speed difference between cyclists and motor vehicles, a bike lane separated from motor traffic is necessary (separation). Within urban areas, due to the dense road network, frequent changes in direction are common, making cycling on the roadway (integration) a safer and more convenient solution.

Networking

During everyday cycling, efforts should be made to establish the shortest bicycle-friendly routes. In the planning and design of investments, priority should be given to area-based, network-oriented thinking to ensure continuous and safe infrastructure for cyclists throughout their journeys. The creation of isolated road sections not connected to the network should be avoided.

Linear developments with network deficiencies

Area-based developments, network oriented thinking

Self-explanatory, simple design

In the case of bicycle routes, the simplest technical designs, logical routes, and clear intersections are necessary. Bicycle infrastructure should be self-explanatory, easily interpretable by all road users even without specific signs or surface markings. Frequent changes in facility types and complex, ambiguous designs cause uncertainty and become a potential source of accidents.

Elimination of Barriers

Efforts should be made to ensure that cyclists can travel continuously and safely. All obstacles that force cyclists to sudden braking, dismounting, pushing, or lifting the bicycle, increasing the risk of accidents, should be removed (e.g. elements standing in the middle or protruding from the sides of the bicycle path). In the planning and design process, attention should be paid to non-standard bicycle designs and sizes (e.g. tandem or cargo bikes).

Access Control

The use of access restriction devices should be avoided. If such devices are absolutely necessary, they should be placed in a way that does not obstruct the movement of cyclists and does not pose a risk of accidents. Access restrictions should not narrow the bicycle path, and it is recommended to replace access restrictions, for example, by surveillance cameras.

Comfort Level

Efforts should be made to ensure that the comfort level of every cycling facility is high. The type and cross-section of infrastructure, as well as the size of standing areas, should be determined based on current and future traffic needs, making cycling a realistic and accessible mode of transportation for all users.

Bikeable Side Streets

Within the settlement, certain side streets can be important elements of a comfortable and safe cycling network. Side streets only provide a comfortable alternative for cyclists if they are free from through traffic and have speed and traffic reducing measures. These restrictions serve not only the interests of cyclists in the long run but also improve the quality of life for local residents.

Bicycle parking

Bicycles should be parked using bicycle racks (inverted "U" or "P" shaped racks) because devices that grasp the wheel of the bicycle can damage the spokes or disc brakes. Ensuring the secure parking of bicycles is a fundamental requirement for making cycling an attractive and viable mode of transportation.

Modal shift

Near metro, tram, bus, and train stops, as well as railway stations, it is necessary to provide a sufficient number of facilities for convenient access by bicycle and secure parking of bicycles. Typically, bicycles are an efficient means of transportation for trips shorter than 5 km, but when combined with public transportation, they become a realistic alternative for longer trips as well.

Source: MÁV Hungarian State Railways Private Company Limited by Shares (MÁV Co.)