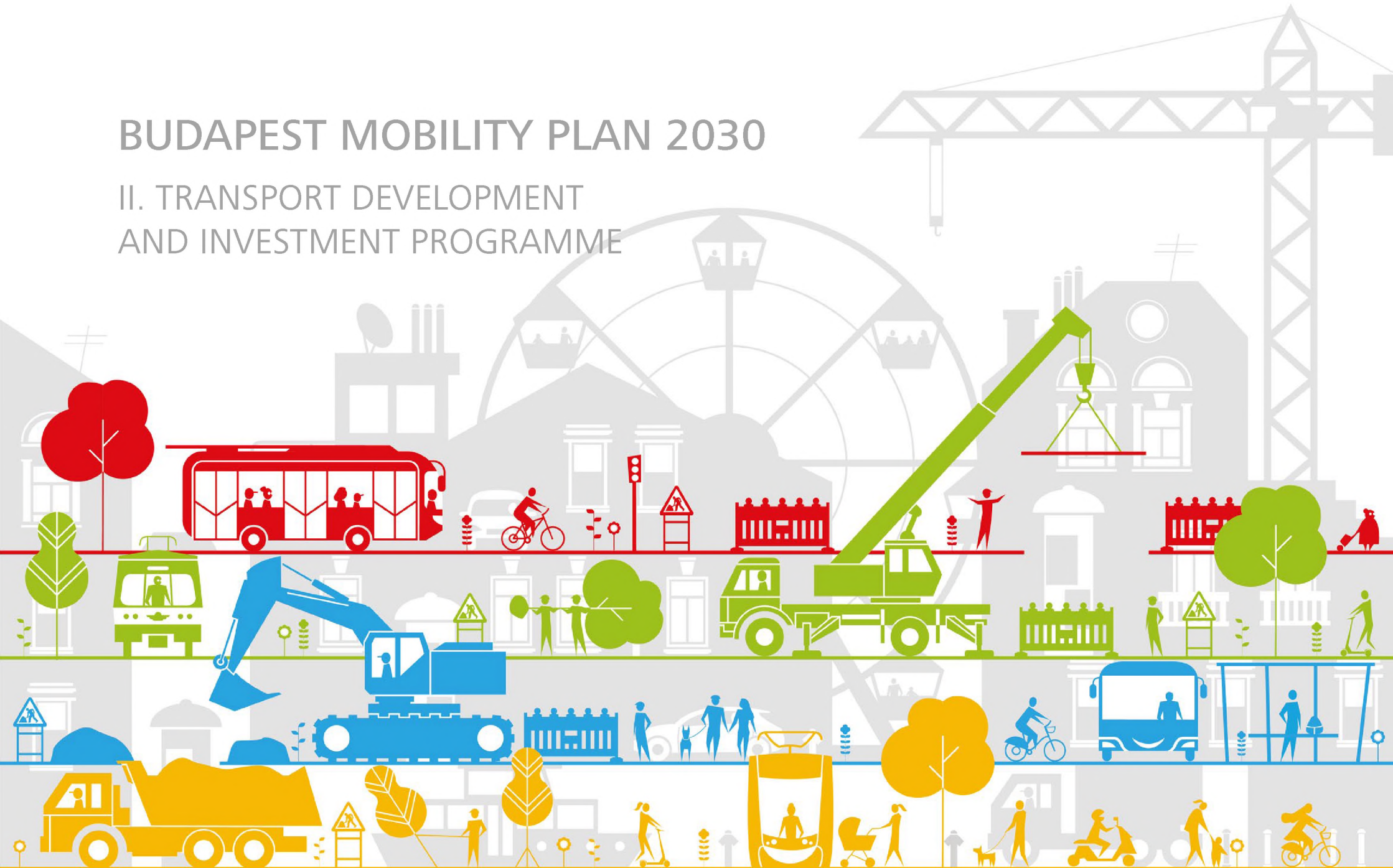


BUDAPEST MOBILITY PLAN 2030

II. TRANSPORT DEVELOPMENT AND INVESTMENT PROGRAMME





TARTALOM

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1

INTRODUCTION



1.1 AIM AND STRUCTURE OF THE 2019 BMT TRANSPORT DEVELOPMENT AND INVESTMENT PROGRAMME

Budapest's transport development strategy for the period 2019-2030, the Budapest Mobility Plan (abbreviated as BMT), the Objectives and Measures volume, was adopted by the General Assembly of the Municipality of Budapest in 2019. This document sets out the objectives and measures of the strategy based on the European Union's Sustainable Urban Mobility Planning (SUMP) methodology. The overall objective is to improve the competitiveness of Budapest and its city region and to contribute to a sustainable, open, green and opportunity-generating urban environment. As a result of a broad institutional and societal consultation process, the set of Objectives and Measures includes 57 measures to support the implementation of the strategy, aligned with three strategic objectives.

The BMT Transport Development and Investment Programme is the second step in the process of sustainable urban mobility planning. As part of the programme, strategic guidelines derived from the set of objectives

and possible development concepts (projects) to facilitate the implementation of the measures were identified. Based on these, a transport development and investment programme proposal for the period 2019-2030 was prepared using the assessment and programming (programme design) methodology derived from the national and EU SUMP guidelines, which takes into account complex social, economic and environmental impacts, and a Strategic Environmental Assessment (SEA). The programme adopted is in line with the relevant sectoral and territorial strategies and takes into account the available funding sources. In addition, the BMT documentation included a volume of Project Data Sheets summarising the data of the projects examined in the development of the programme, a SUMP Institutional Analysis of Budapest's transport, a Monitoring and Evaluation Manual to monitor the implementation of the strategy and evaluate its implementation, and the Strategic Environmental Assessment mentioned above.

With the previous planning steps - accompanied by extensive institutional, professional and social



consultation - the Budapest SUMP process has been assembled into a complex, methodologically sound, professionally and socially consensus-based, coherent system.

Consultation forums have facilitated all stages of the planning process to ensure that both professional and societal perspectives are integrated into the programming process. In this way, a participatory planning and programming process was achieved, facilitating the development of an outcome based on professional and social consensus. The main forum for institutional and professional consultation was the Balázs Mór Committee (BMB), set up for this purpose. Its members are delegated by the Municipality of Budapest, the Centre for Budapest Transport (BKK) and the public and professional actors involved in the planning process, as well as independent experts. In addition to the more restricted technical consultations of the BMB, technical consultation forums were organised in the form of workshops for other stakeholders at key milestones in the planning process. The incorporation of public comments is ensured through consultation as part of the SEA process.



1.2 1.2 THE NEED FOR A REVIEW

The changes in transport strategy, environment, economy and society since the adoption of the BMT in 2019 have justified the launch of a review of the plan in 2021. The new revised plan builds on and revises the previous strategy. The first volume of the BMT responds to the changes that have taken place, with a set of objectives and measures that are fully in line with sustainable urban transport planning guidelines, and is designed to be flexible enough to adapt to changes as they occur, while taking into account sustainability considerations.

In the case of the transport investment and programme proposal, the assessment studies will follow the methodologies adopted in 2019 to ensure comparability with previous results, but the results of the environmental assessments will be directly reflected in the ranking process from 2022 onwards, thus reinforcing the sustainability objectives of the investment programme.

During the review period, the plan's objectives and measures, its transport development and investment programme proposal, its evaluation and monitoring system, and its strategic and environmental assessment were updated. The review process was carried out in the same way as in the past. The main steps in this process and their relationship with previous and subsequent phases of work are depicted by Figure 1.



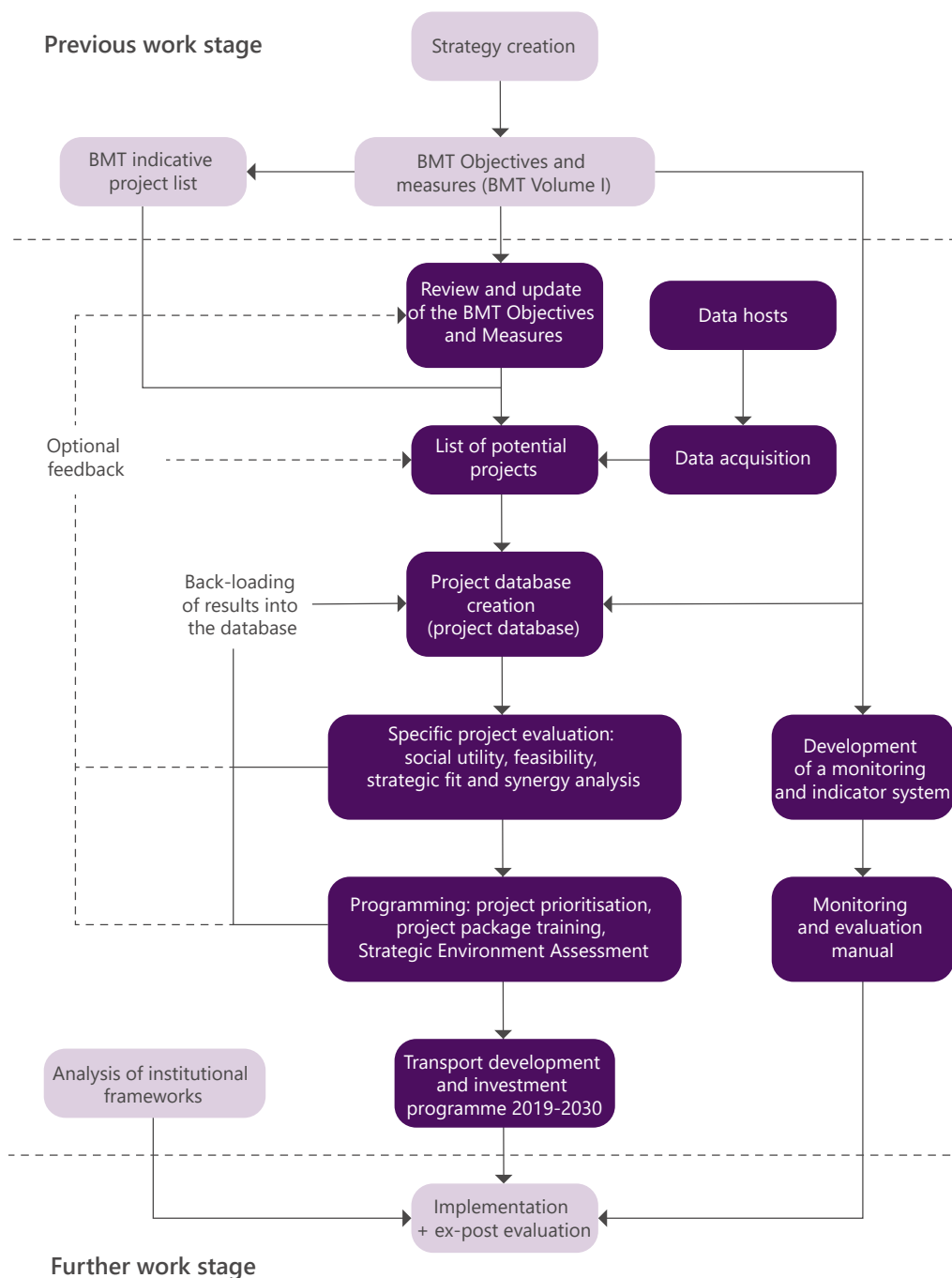


Figure 1: The process of developing tasks related to the BMT Transport Development and Investment Programme

This document is divided into three main sections:

- a methodological description of the design of the transport development and investment programme (Chapter 2),
- the Transport Development and Investment Programme 2023-2030 resulting from the programming process (Chapter 3),
- and the plans and preliminary proposals for implementing the programme (Chapter 4).

The Budapest Mobility Plan 2023-2030 is the SUMP framework document for transport development in the period 2023-2030, dynamically adapted to sustainable urban development. The scope of the projects assessed in this document may vary according to the set of objectives based on the BMT methodology laid down.



2

CHANGES IN THE METHODOLOGY FOR THE DEVELOPMENT OF THE TRANSPORT DEVELOPMENT AND INVESTMENT PROGRAMME



This chapter describes the methods used to investigate different projects. In order to ensure comparability of the evaluation results, the studies have not been fundamentally changed, only the evaluation criteria have been added for some studies.

2.1 BMT PROJECT DATABASE APPLICATION DEVELOPMENT

The starting point for the establishment of the transport development and investment programme is the identification of potential projects for the realisation of the BMT objectives and the inclusion of their data in a structured, uniform registration system.

The difficulty of negotiating with the external planning consortium and the Excel-based management of project data when preparing the Budapest Mobility Plan adopted in 2019 made it clear that further use of digitisation opportunities was needed. The use of the previous large Excel spreadsheets had become cumbersome, the evaluation of projects and their filtering according to individual needs, and the production of project data sheets was manual and lengthy. In order to improve efficiency, the internal design and IT devel-

opment of an application to make projects easier to manage started in the spring of 2021. In order to manage and evaluate project data, BKK developed an internal project data management and evaluation application (hereinafter: BMT application), which allows the management of project data and the evaluation of projects according to the SUMP methodology.

Following the design phase, the development of the application was carried out in parallel with the revision of the BMT, in order to allow BKK to develop an application that is as tailored as possible to the needs of the users, given that no specific tool for this purpose was available before.



The BMT project database application allows the following:

- transparent, user-friendly management of project data,
- screening of projects according to several criteria,
- support and semi-automation of project evaluations,
- recording of indicators monitoring the BMT objectives and tracking their changes,
- generating project datasheets,
- support data reporting processes.

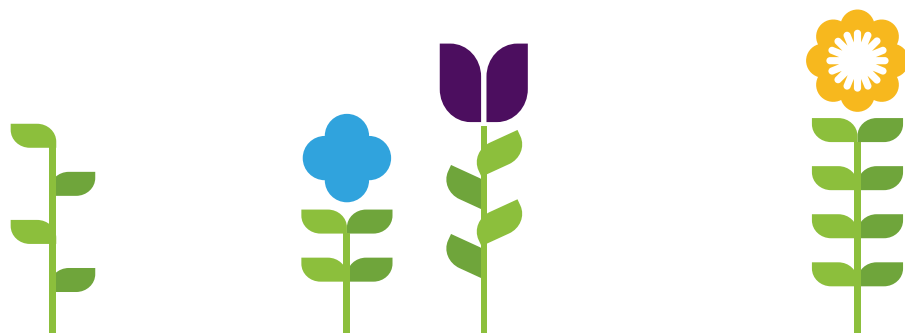
2.1.1 IMPLEMENTED PROJECTS

Following the objectives set out in the Balázs Mór Plan adopted in 2015, the BMT was supplemented for the first time in 2019 with transport development projects for the capital and the agglomeration. In the revised BMT 2023, the previous six project types will be supplemented by a new type of project, the implemented projects, to ensure that the project objectives set out in the plan can be meaningfully monitored.

2.1.2 SYSTEM OF DATA DESCRIBING PROJECTS, PROJECT DATASHEETS

The BMT application is used to record project-related data, allowing for a uniform and transparent management of information. This is facilitated by simplified project datasheets, which summarise the data of each project (e.g. project name, technical content, project owner organisation, districts concerned, transport modes involved) in a standardised structure. The project database also provides the flexibility to manage possible requests for modifications and the addition of new project proposals.

The starting point in the process of populating the project database with data is the identification of the data owners for each project. Data acquisition and processing for each project is always done after consultation with the project owners, based on the available information and documentation. If some kind of planning documentation or feasibility study is available for the project, the data that can be identified on the basis of the documentation will be taken into account in agreement with the project owner. If no such project



documentation is available, project data will be collected through interviews with the project owner.

From 2022 onwards, the Project ID will be defined as a four-digit number instead of the previous three, but the ID numbers of the projects included in the previous and current BMT have not changed substantially, a new digit ("0") has been added to their previous ID.

CONTENT OF THE PROJECT DATASHEET:

- Project ID: a four-digit identification number (in Pxxxx format) used to identify the project, unlike in the BMT adopted in 2019
- Project name: name of the project
- Project owner institution(s): list the organisation or organisations managing and implementing the project (e.g. BFFH, BKK, MÁV)
- Project type: classification according to the project evaluation methodology
- Map of Budapest: illustration of the spatiality of the project based on the districts concerned
- Area of intervention: a visual representation of the

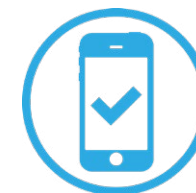
project's fit with the areas of intervention defined by the BMT Objectives and Measures:



*improving
network
connections*



attractive vehicles



*customer experience
enhancing services*



*effective
governance*

- Transport mode concerned: visual representation of the transport modes concerned by the project:



pedestrian



active and micromobility



passenger car



city logistics



public transport

- Image/map: image, map or site plan related to the project
- Project status: classification of the implementation status of a given project into one of the following categories: project concept developed; decision preparation in progress (MT, RMT, pre-decision study, study plan, prepared or in progress); decision taken (government decision, decision of the General Assembly of the Municipality of Budapest); detailed design in progress (permit and construction plan prepared or in progress); construction in progress (construction or procurement started); completed
- Project description: a textual description of the project content
- Project objective: to define the main objectives to be achieved through the implementation of the project


BMT ID
P0092

M3 metróvonal infrastruktúra rekonstrukció

Projektgazda intézmény(ek)


BKV


☐ Nem konkrét
 ☐ Konkrét, nem modellezhető
 ☐ Konkrét és modellezhető
 ☐ Feladat
 ☐ Projektötlet
 ☐ Eldöntött
 ☒ Megvalósult



Elsődlegesen érintett beavatkozási területek

Érintett közlekedési módok





PROJEKT STÁTUSZ

Projekt koncepció kialakítása

Döntés előkészítés folyamatban

Döntés megszületett

Részletes tervezés folyamatban

Kivitelezés folyamatban

Elkészült

CÉLOK

A projekt átfogó célja a főváros térségi intergrációjának megvalósítása. A projekt stratégiai célja a fővárosi kötőtpályás közlekedés, azon belül is agyorsvasúti hálózat részét képező M3 (észak-déli) metró (és így a közösségi közlekedés) versenyképességének javítása az egyéni közlekedéssel szemben a városban belül és térégebén. Cél ezáltal a közösségi közlekedés térvesztésének lassítása, a közösségi közlekedési rendszer pénzügyi és környezeti fenntarthatóságának biztosítása.

LEÍRÁS

A vonalszakasz fejlesztési munkái során alapkövetelmény a 80 km/h tervezési sebesség biztosítása. Megtörténik a felépítmény egységesítése, lehetővé válik az igénybevételnek megfelelő 75 cm-es alátámasztási távolság szerinti leeresztés kialakítása. Edzett fejű sínek épülnek be. A 3-as metró szerelvényei 1990 óta automatikus vonatvezérlő rendszer (AVR) felügyelete alatt, egyvezetős üzemmódban közlekednek, a felújítás során az AVR rendszer korszerűsítése is megtörténik. Komplex gépészeti felújítás történik. Alapvető műszaki fejlesztések valósulnak meg az utasok biztonsága érdekében, melynek részeként a legújabb előírásoknak megfelelő tűzvédelmi rendszer épül, és korszerű szellőzőrendszer létesül, mely vízködoltó berendezés telepítésével egészül ki. Az utazóközönség számára segélykérő berendezések kerülnek telepítésre, az állomási és központi diszpécser munkáját 160 darab monitor és 500 darab korszerű IP kamera segíti, ami szükség esetén gyorsabb és hatékonyabb beavatkozást tesz lehetővé. Megújulnak az állomások, az utasforgalmi terek. A rekonstrukció építészeti tervezésének fő célkitűzése az állomások egyedi jellegének megtartása, a jellemző színek átmentése, a vonalon található művészeti alkotások megőrzése. Kiemelten fontos az akadálymentesítés lehetőség szerint megoldása, a fogyatékkal élők utazásának segítése, a látássérültek közlekedését taktilis vezetésávok teszik könnyebbé. A mozgólépcsők felújításán és cseréjén túlmenően új, kényelmi mozgólépcsők beépítése is megtörtént. A hagyományos világítóberendezéseket LED-es lámpatestek váltják fel. A tájékozódásban új hangszórók és vizuális utastájékoztató táblák, valamint 300 darab központi vezérlésű óra nyújt segítséget. A felújítás során minden állomáson megújulnak, illetve cserére kerül padlóburkolat cseréje történik. A metróvonal kommunikációs és felügyeleti rendszerei számára 10 Gbit/s sávszélességű adatátviteli hálózat létesül. Akadálymentesítés: Északi vonalszakasz: A metrófelújítást megelőzően is akadálymentes volt: Újpest-városkapu állomáson más beruházás

Figure 2: Project datasheet structure

2.2 PROJECT EVALUATION METHODOLOGIES

2.2.1 DEFINITION OF EVALUATION METHODOLOGY BY PROJECT TYPE

Individual project appraisals are designed to assess the strategic fit, environmental and sustainability adequacy, social utility, feasibility and interrelationship with other projects.

The methods used in the project evaluation are:

- the assessment of the fit with the measures of the objectives of the BMT (ILL);
- assessing compliance with environmental and sustainability objectives (ESIA/KÖR);
- social utility (effectiveness) assessment (MCA)
- feasibility assessment, which assesses the project's preparation, technical feasibility and social support (MEG);
- the synergy with other projects (SZIN).

The relationship between project types and evaluation methods is illustrated in Figure 3.

Evaluation method	Rankable project			Task	Project idea	Decided project	Implemented
	Concrete, modellable project	Concrete, non-modellable project	Not concrete project				
Fit assessment (ILL)	+	+	+	+	+	+	—
Environmental and Sustainability Impact Assessment (KÖR)	+	+	+	+	+	—	—
Multi-Criteria Assessment (MCA)	+	+	+	—	—	—	—
Feasibility assessment (MEG)	+	+	+	—	—	—	—
Synergy assessment (SZIN)	+	+	+	+	+	+	—



method used to assess the project type



method not used to assess the project type

Figure 3: Evaluation methods used for each project type



2.2.2 CHANGES IN THE FIT TEST (ILL)

The aim of the assessment is to quantitatively rate the fit of each project with the measures defined in the BMT objectives on a scale of 0 to 2, where 0 indicates no fit, 1 indicates partial fit and 2 indicates a close fit. A score of 0.5 points can be added between each score to refine the values.

For each measure in the scheme of objectives, it is expected that there will be a project supporting that measure. In line with this, each project on the long list should be matched to at least one measure. The review has identified new measures in the BMT objectives, in line with recent developments and expected future challenges. Instead of the previous 57 measures, 44 more complex measures have been identified by BMT and projects have been assessed on the basis of their fit with the new measures.

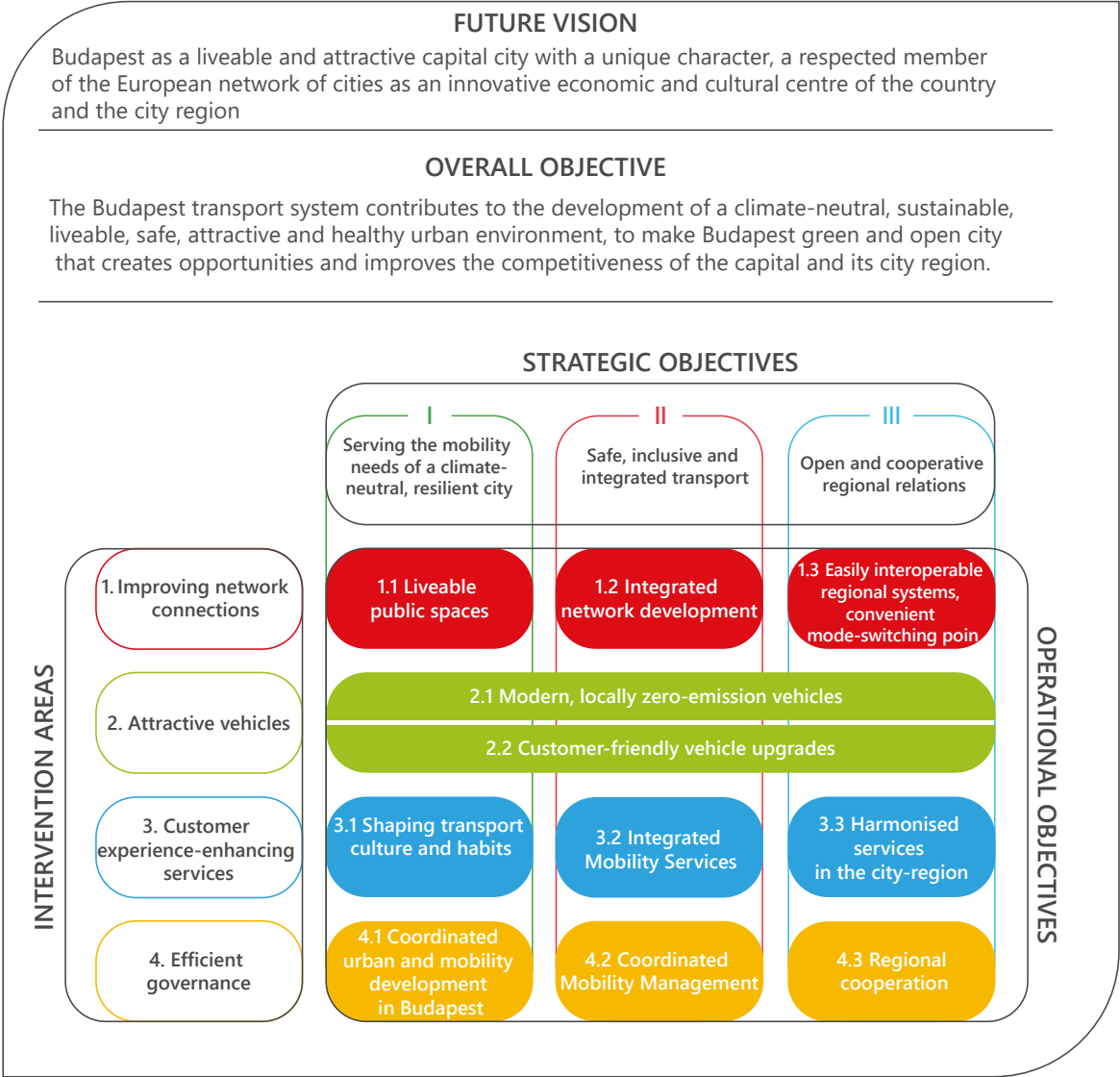


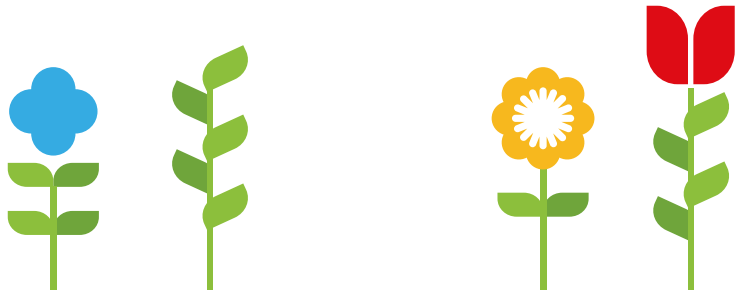
Figure 4: BMT I. Objectives and measures - objectives matrix

2.2.3 ENVIRONMENTAL AND SUSTAINABILITY IMPACT ASSESSMENT (ESIA)

The purpose of the ESIA is to assess the compliance of BMT projects with environmental and sustainability objectives.

As a first step, the projects were classified into 23 types of SEA projects based on their development focus. Each of these types was assigned a baseline environmental rating, i.e. a base score. The base score was assigned a value between 1 and 10, where 10 points represent the project type with the highest environmental and quality of life benefits and 1 point represents the type considered to be of no benefit from the given perspectives. The base scores were independently prepared by several environmental experts individually and the final base score was determined by averaging the highest and lowest scores for each SEA project type and then cancelling the lowest score.

No.	SEA project type			Base score*
1.	Road - bridge		New road bridge, track, overpass, tunnel, extension of existing road	4
2.			Reconstruction of existing road, bridge, tunnel, creation of new bicycle lane	6
3.			Provision of existing road with noise protection facilities	7
4.	Motor vehicle		Developing the capital's electric charging infrastructure	7
5.			Developing new cycling network elements, upgrading existing ones, creating cycling-friendly public spaces, networking the system, developing an international cycling route along the Danube	9
6.			Installation of B+R bicycle storage facilities, further development of the Bubi bike-sharing programme	8
7.	Cycling		Construction and development of bike-highways and key cycling core network elements	8
8.			Improving pedestrian accessibility, comprehensive renovation of pedestrian underpasses, creation of a network of pedestrian-friendly public spaces, development of urban greenways	7



No.	SEA project type			Base score*
9.	Public	Water-borne	Development of scheduled waterborne transport	6
10.		Tram, cogwheel railway, HÉV suburban railway	Construction of new line, extension of existing line	7
11.			Reconstruction of existing line	7
12.			Design reconstruction of vehicle depot	5
13.			Reconstruction of platforms, improvement of accessibility	6
14.		Metro	Extension of existing lines, connection to the HÉV lines	7
15.			Reconstruction of existing line with associated facilities	7
16.		Rail	Construction of a new railway line section, relocation of existing lines, creation of new MÁV State Railways connections	7
17.			Upgrading of railway line section, railway bridge, electrification, replacement of bottlenecks, construction of separate road-rail crossings	7
18.			Modernisation of stations and railway stations	6
19.	Complex		Renewal of roads and squares, construction of P+R car parks, loading bays, etc.	6
20.			Complex traffic calming of emblematic axes with type definition	7
21.	Not construction		Vehicle replacement, purchase	7
22.			Information technology, information service development	6
23.			Regulation, development and change of governance	5

Table 1: KÖR/ESIA assessment SEA project types and their base scores

In a second step, the base score of projects per project was adjusted by the factors described below, based on the available content characteristics of the projects:

- Geographical location, importance. In which areas will the project improve the transport situation, how much of the area is considered to be a problem for transport and how well located is the proposed solution from an environmental and sustainable transport point of view (e.g. routing).
- Directly tangible positive impacts on the population. The question is to what extent the project will improve (or possibly worsen) the quality of life and comfort of the population concerned. Does it reduce the stress caused by traffic? How large is the number of people affected, and how might the number of people affected by positive and negative changes relate to each other? The impact of the project on the number of accidents will be assessed under the MCA in the context of road safety.



- Adapting to climate change. How vulnerable is the project to the risks of climate change? A further question is whether or not climate change adaptation is a primary objective of the project and, if not, whether or not a climate vulnerability and risk assessment has been carried out as part of the project, commensurate with the scale of the activity? Are adaptation solutions capable of reducing physical climate risk likely to be assessed and incorporated into the project, and can the project itself contribute to adaptation?
- Mitigating climate change. The question is: is the project likely to reduce greenhouse gas emissions?
- Potential impact on natural and built environmental assets. The question is whether there are any protected assets in or around the project area and, if so, whether they could be affected by the implementation or operation of the project. This can only be finalised by a precise knowledge of the areas of intervention and can only be answered by an impact assessment of subsequent investments. It is therefore at this planning level that the potential

impact of the installation and its surroundings is assessed.

- Increase of built-up and biologically inactive areas, reduction of green spaces and surfaces. This applies to projects involving occupation and land use and, as in the previous point, is still a risk issue. Positive effects can be the opposite, i.e. where the planned activity includes green space management, increasing the proportion of biologically active areas.
- Significant reductions, increases or changes in environmental emissions (air, water, soil, noise, vibration). The question is how the operation of the project will change environmental emissions, whether it will cause a new environmental problem or remedy an existing one.
- The transition to a circular economy. The question is whether the project is expected to lead to a significant increase in waste generation, incineration or disposal (except for the incineration of hazardous waste that cannot be reprocessed) and whether measures are foreseen to manage the waste gener-



ated in line with the waste hierarchy. The question also covers the use phase of the project and its end of life.

Scores for each factor could be between -2 and +2, using only integers. A value of +2 or -2 indicates a significant improvement or deterioration, increase or decrease respectively. A value of 1 does not necessarily indicate a weaker effect, but may also indicate a more uncertain estimate. A project could also be assigned a value of zero: firstly, if the factor is irrelevant to the project, e.g. a vehicle purchase has no "Increase of built-up and biologically inactive areas, reduction of green spaces and surfaces" impact; secondly, if the positive and negative impacts are of roughly equal importance and thus cancel each other out; and thirdly, if there was insufficient information to assess the impacts.

The overall score of the KÖR/ESIA evaluation for a project was calculated as the sum of the base score and the scores for each evaluation factor, as described above.

Based on the above, a project was allowed a maximum of 10 base points and a maximum of 16 factor points.

2.2.4 CHANGES MADE TO THE ECONOMIC COST-BENEFIT ANALYSIS (CBA)

In contrast to the methodology used in 2019, based on previous experience, the Multi-Criteria Assessment (MCA) scores for concrete and mod-ellable projects are taken into account in the overall score for the analysis of social utility.

In the 2019 evaluation, for the specific and modella-ble projects that were possible due to their nature and preparation - which can be modelled with the Unified Traffic Model - an economic cost-benefit analysis was carried out, which was possible



for approximately 40% of the projects in Budapest of the total investment programme. However, in the current review, only 18 percent of the projects in the Capital can be analysed using this method.

The decrease in the number of concrete and mod-ellable projects is mainly due to changes in project owners - the increasing number of projects trans-ferred from the competence of the Municipality of Budapest to the Hungarian state - and changes in type. As in the past, no cost-benefit analysis is carried out for projects under state/government jurisdiction, due to, inter alia, data gaps and uncer-tainties in estimating project costs.

In the Budapest Mobility Plan, the assessment of the social benefits of projects was previously carried out by means of a cost-benefit analysis (CBA) for those projects where this was possible, and by means of a multi-criteria expert assessment (MCA) for the other projects. The criteria of the two evaluations are con-sistent, therefore, in our opinion, the MCA method

can be an adequate substitute for the evaluation of the utility of the few projects that can be evaluated with CBA when comparing projects at the strategic level. In the present case, the advantage of the MCA analysis is that the evaluation of the usefulness will be based on a uniform basis for all projects.

For concrete and modellable projects, the current BMT (adopted in 2019) provides data for cost-ben-efit analysis, but these are not included in the final score for this review and are therefore not taken into account in the final ranking, the MCA score will be used for these projects.



The reliability of the CBA calculations is hampered by the fact that in the current economic environment, the magnitude of investment costs can be estimated with a significant margin of error, which is compounded by the assumed obsolescence of financial data from plans made years ago. Taking these into account, the economic cost-benefit analysis could currently be carried out for the projects that can be modelled only with a similar margin of error as the uncertainties inherent in multi-criteria evaluations.

During the preparation, detailed design and updating of projects, an economic and financial cost-benefit analysis is carried out for each project, covering several project variants, so that the CBA helps to verify the studies at the strategic planning stage and supports the decisions needed to implement the projects at the detailed project preparation stage.



2.2.5 MULTI-CRITERIA ASSESSMENT (MCA)

From 2022, the 2019 assessment criteria have been extended by one additional aspect, the scoring of the estimated proportion of the population affected, while new cost intervals have been defined for the investment cost assessment, aligned with the cost data of the projects identified in the review.

The social utility test is based on an expert assessment of eight pre-defined test criteria:

1. investment cost,
2. the impact on net operating costs,
3. transport safety,
4. environmental impacts,
5. changes in availability (including changes in travel time),
6. changes in service standards and/or the built environment,
7. urban development aspects,
8. proportion of the population affected.



These eight criteria are scored on a scale of 1 to 5, where a score of 1 indicates that the implementation of the project (compared to the pre-implementation situation) has a significant negative impact on the criterion, while a score of 5 indicates that the implementation of the project has a significant positive impact on the criterion, except for the investment cost used as a divisor for the specificity ranking in the procedure, where high-cost projects score higher and lower-cost projects score lower.

The projects will be evaluated by summing up the scores under criteria 2 to 8.

For the projects examined, the total score for the evaluation criteria other than investment cost, which is an integer between 21 and 35 points, is divided by the score for the investment cost evaluation criterion. This quotient constitutes the MCA score of the project.

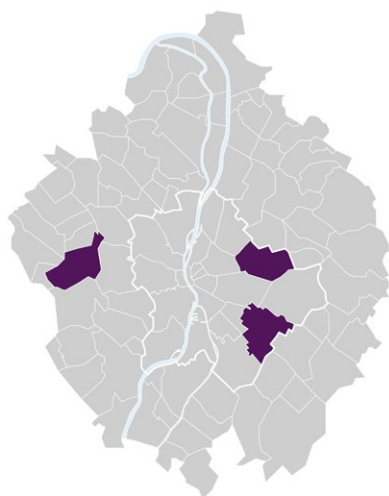
Changes to the system of concepts:

Investment cost: the expected net investment cost of the intervention, based on actual and estimated cost data for the projects:

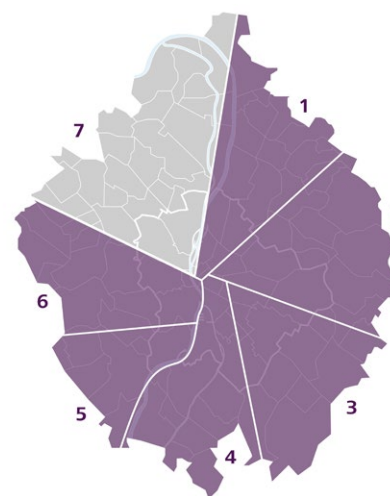
- 1 point: less than 10 billion HUF
- 2 points: 10-20 billion HUF
- 3 points: 20-40 billion HUF
- 4 points: 40-100 billion HUF
- 5 points: more than 100 billion HUF

The social impact assessment for each ranked project considered the likely proportion of the population affected in the area or catchment area, also assessed on a scale of 1 to 5, as follows:

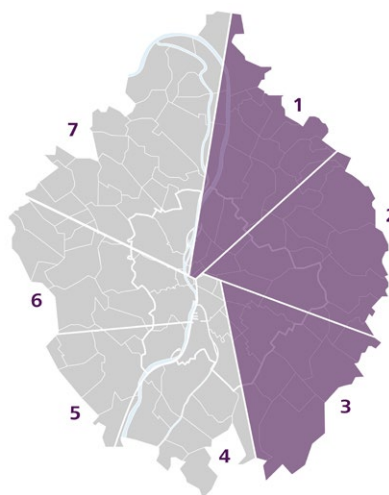




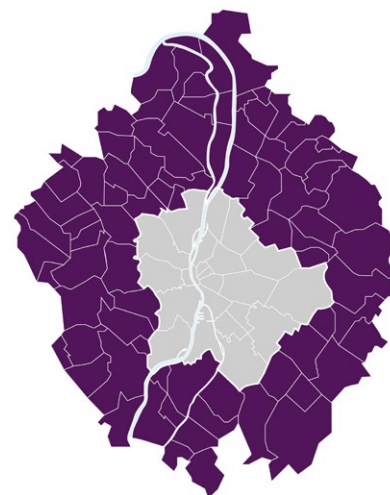
1 point: local relevance (e.g. municipality, district)



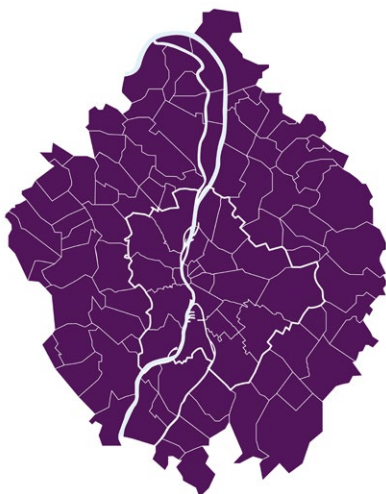
3 points: any 4-6 sectors are concerned



2 points: 3 or fewer sectors are involved



4 points: the whole administrative territory of Budapest/
the agglomeration is concerned



5 points: *the whole city-region is concerned*

- technical/environmental permit approval,
- land acquisition,
- the existence of organisational background/IT tools,
- other,

technical feasibility (30% weight),

- the risk of implementation complexity,
- dependence on weather conditions (during implementation/operation),
- maintaining operations during construction,

social support (30% weight),

- o the existence of social consensus.

2.2.6 FEASIBILITY ASSESSMENT (MEG)

As in the MCA analysis, the feasibility of the prioritised projects is assessed by peer review. Based on the following criteria:

The feasibility assessment is based on the following three main criteria:

- preparedness (40% weight),
 - the legal/regulatory background,

For the three main criteria, the sum of the scores for the sub-criteria is calculated on the basis of the weights set for 2019, for comparability, where preparation is weighted at 40, feasibility of the operation at 30 and social support at 30%.

Sub-criteria	0 points	1 point	2 point
1. Preparedness: 40% weight			
Legal/regulatory background (development and management tool projects)	Inappropriate, risky change needed	change needed	appropriate
Technical, environmental approval of the project (development projects)	project idea only	may be of concern	available or no risk
Land acquisition (development projects)	unforeseen	risky	not risky or not relevant
Difficulties in obtaining specialised equipment (development projects)	high risk, no go	risky, but can be done	not risky or not relevant
Organisational background/ IT tools available (management projects)	none, and realisation is very risky	none and realisation is risky	realisation not risky
Other material preparation risks not covered above (development and management tool projects)	solution not proposed	risky	no risk
2. Technical feasibility: 30% weight			
Risk of implementation complexity (technical content of the project is complex, new technology, new IT technology)	Highly complex and risky	significant risks are expected	not complex/ no risk
Dependence on weather conditions during implementation and operation	highly exposed to weather conditions	exposed to weather conditions, but manageable	not significant
Maintenance of operation during the construction period	impossible or very difficult	risky	not problematic
3. Social support: 30% weight			
Existence of social consensus (development and management tool projects)	Dangerously high resistance	expected resistance, but manageable	Virtually no resistance or supported

Figure 5: Feasibility assessment (MEG) criteria

Projects are rated on a scale of 0-2, taking into account the sub-criteria listed. Where 0 indicates a significant risk for the sub-criterion, and 2 indicates no or low expected risk. Based on expert recommendation, projects with the lowest score of 0 for at least four relevant sub-criteria in the MEG assessment are scored as 0, meaning that significant risks are likely to occur for the given criteria.

2.2.7 SYNERGY ANALYSIS

In addition to the above analyses, projects should also be examined in terms of the relationships and interactions between projects. The assessment does not give a score to each project, but identifies the interactions between projects, which will be taken into account when preparing the proposal. The synergy analysis has identified the following relationships:

- sequential: projects whose implementation is a precondition for another project. Such projects include the development of (maintenance) infrastructure for vehicle procurement

- mutually exclusive: projects whose implementation would make the implementation of other projects impossible or superfluous, for example, projects with an equivalent impact on transport development. These include, for example, road capacity expansion and traffic calming projects.
- synergistic projects: projects that complement each other and have a positive, reinforcing effect on each other.

2.2.8 CHANGES IN THE "KO" CRITERION

Projects for which

- in a Multi-Criteria Assessment (MCA)
 - the total score for criteria 2 to 7 is less than 18 points, or
 - for evaluation criteria 2 to 7, the score is less than 3 for more than three criteria (negative change),
- or during the feasibility assessment (MEG)
 - at least four of the relevant sub-criteria are given the lowest score, i.e. 0 point

unlike in the past, they are not excluded from the programming process, but they receive 0 point for the studies concerned, thus moving them down in the ranking of the projects evaluated.



2.3 PROGRAMMING METHODOLOGY

2.3.1 OVERVIEW OF THE PROGRAMMING PROCESS

The programming process aims to establish a timely investment programme in line with the objectives of the BMT, ensuring that the most socially beneficial projects are selected to achieve the strategic objectives, taking into account the available funding and the timing of the developments. The investment programme did not include projects that conflict with the stated objectives, and this was examined during the identification of projects, in discussions with project owners and in the project fit assessment. This process consists of the following steps:

- 1. ranking projects according to the results of the project evaluation,**
- 2. the production of prioritised thematic packages of projects in the capital:**
 - Investments in trolleybus and bus network
 - Investments related to the development of the tram network
 - Investments related to the development of the metro network

- Complex investments in public space, road transport improvements
- Investments in the cycling network
- Investments in general service development

3. the production of a proposed list of public projects,

4. to develop a two-phase and a complementary proposed project package of projects from the capital city, taking into account possible national and EU funding, modal balance, priorities and synergies

The flow of the programming process and its location within the overall methodology is illustrated in Figure 6. Only projects coordinated by the Budapest governance system (or previously by the Municipality of Budapest) are included in the programming process, given that the General Assembly has decision-making power only over the implementation of projects within its own remit. For projects that do not fall under the competence of the General Assembly (public projects), a proposed list



is drawn up without a resource envelope or timetable, based on the criteria of the BMT, but without any decision on the concrete implementation of the projects.

The timeframe of the investment programme can be defined in line with the objectives and measures. Unlike in the past, the programming process will also include the projects implemented to monitor the achievement of the objectives set out in the strategy. The programming process identifies a set of projects for the next two timeframes (resource envelopes):

Phase I: the short term (2023-2026) within the investment programme, with a budget in the region of 110 billion HUF,

Phase II: medium term (2025-2030) within the investment programme, with a budget in the region of 350 billion HUF,

Complementary Package III: projects planned to be prepared and/or implemented, subject to the availability of additional funding, with a budget in

the region of 550 billion HUF (2023-2030).

Due to the uncertainty of the level of funding expected to be available - government, community and own resources available to the Municipality and its organisations - a single resource scenario has been defined, unlike before.

Based on the foregoing, the proposal for the Transport Development and Investment Programme consists of the programmed (proposed project list, i.e. the short list), decided and task-oriented projects to be implemented by the Budapest governance system, and it is supplemented by proposals for project ideas, implemented projects and a list of public projects.

Project ideas and tasks falling within the competence of the Municipality of Budapest are classified into three categories as follows:

1. Highly recommended projects: the most socially effective projects that are well prepared or can be easily prepared to achieve the BMT objectives, and that are justified and realistic to be implemented by 2030,



2. Proposed project: projects with medium social effectiveness or high effectiveness requiring longer preparation to achieve the BMT's objectives, proposed to be implemented over a 5–10-year time-frame,

3. Proposed long-term projects: socially beneficial projects that contribute to the objectives of the BMT and are proposed to be implemented within a time-frame of 10-20 years. The proposed implementation timetable for these projects can be further defined in the SUMP reviews in the light of future study results.

The technical proposal for the Transport Development and Investment Programme will be the basis for institutional and district consultations through the Balázs Mór Committee and for public consultation on the proposal.

The necessary amendments based on the consultations will be submitted to and approved by the General Assembly of the Municipality of Budapest.

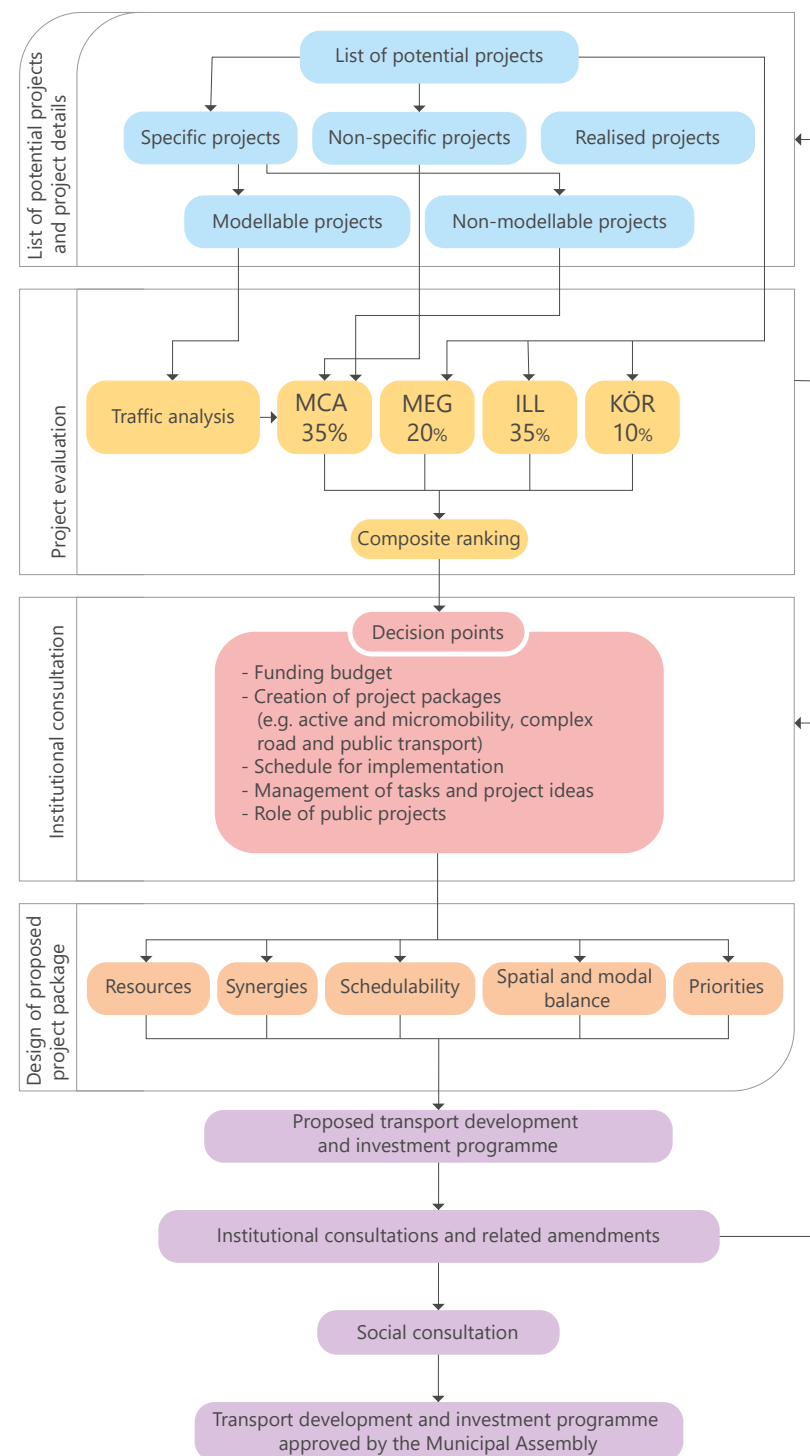
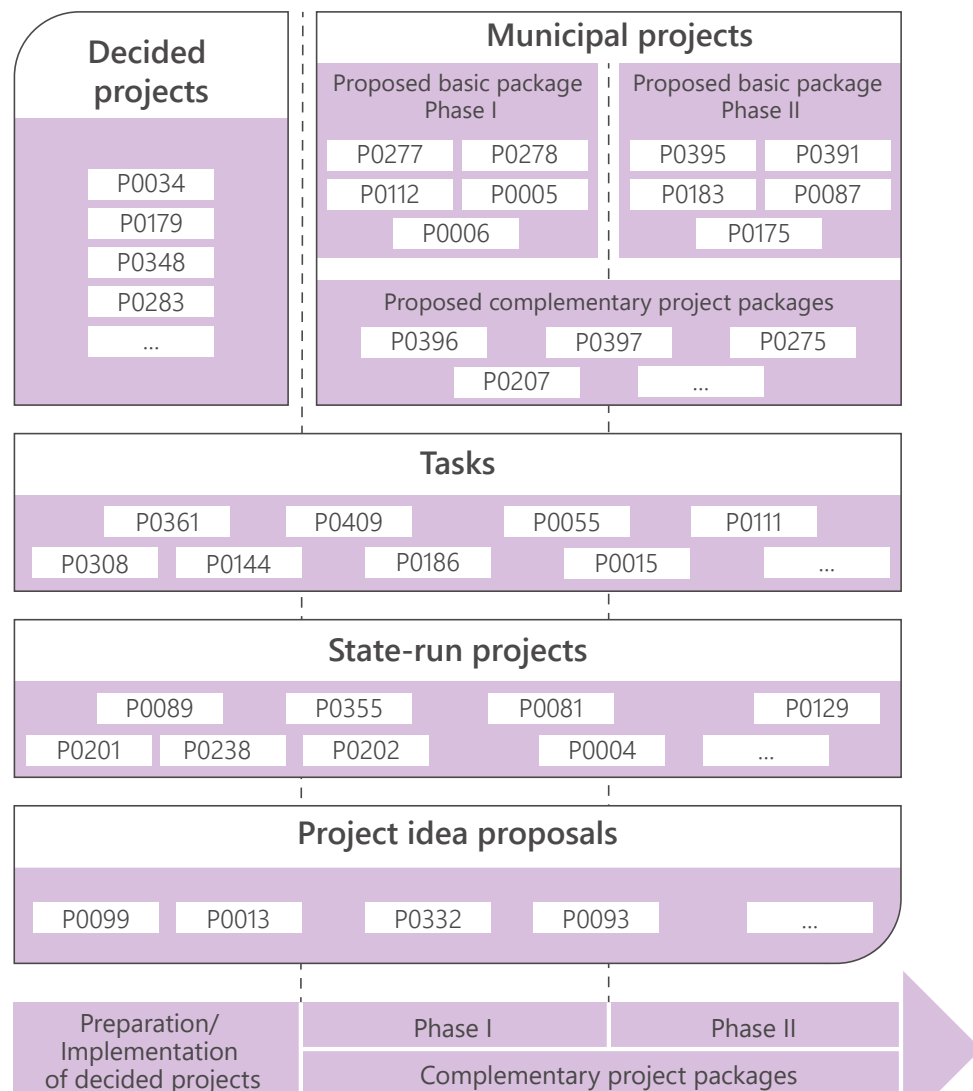


Figure 6: Overview of the project evaluation and programming methodology



2.3.2 CALCULATION OF CONVERTED SCORES

There have been no changes in the final scores compared to the methodology adopted in 2019. With the exception of the Synergy Assessment (SZIN), all scores (for projects that make up the investment programme, ranked projects) are sorted (converted) to a scale of 0-100 for comparison between each assessment and the scores in the previous BMT. The converted scores are calculated using the following general formula:

$$P_{X_i} = \frac{X_i - \min_{i \in [1, n]} X_i}{\max_{i \in [1, n]} X_i - \min_{i \in [1, n]} X_i} \cdot 100$$

$\min_{i \in [1, n]} X_i$: the score of the ranked project with the lowest score in the given assessment

$\max_{i \in [1, n]} X_i$: the score of the ranked project with the highest score in the given assessment

Figure 7: Elements of the Transport Development and Investment Programme (example)

For all ranked projects, the above formula is used to calculate the converted scores for all assessments. These converted scores form the basis for the final ranking, and the converted scores are weighted by the corresponding weighting for the assessment in question.

2.3.3 WEIGHTING OF ASSESSMENT VALUES

Converted scores from the project evaluation results are used in the ranking process for projects that are eligible for ranking. Based on the assessment results, a composite ranking of the projects under the jurisdiction of the Municipality of Budapest is established. The ranking is based on the composite score, which is determined by expert weighting of the converted scores of the projects (P_{ILL_i} , P_{MCA_i} , P_{MEG_i} , $P_{KÖR_i}$) as shown in Figure 8:

Evaluation method	Fit test (ILL)	Social utility (MCA)	Feasibility (MEG)	Environmental and sustainability assessment (KÖR)
Weights taken into account in the composite score	35%	35%	20%	10%

Figure 8: Assessment weights used to calculate the composite score

The primary criterion for setting the expert weights is to support the achievement of the social, sustainability and responsiveness to global change objectives set out in the BMT. With environmental considerations in mind, the scores for the environmental and sustainability assessment will be directly incorporated into the overall score, unlike in the 2019 methodology. The relatively low weight of the environmental scores (10%) is due to the fact that the other criteria also include environmental aspects, and the aim was to avoid duplication of criteria in the development of the weighting of the ESIA/KÖR.



2.4 METHODOLOGY OF THE STRATEGIC ENVIRONMENTAL ASSESSMENT

The SEA process is derived from the Government Decree 2/2005 (I. 11.) on the implementation of the information obligations laid down in Directive 2001/42/EC of the European Parliament and of the Council on the assessment of the effects of certain plans and programmes on the environment and on the environmental assessment of certain plans and programmes (hereinafter referred to as the SEA Decree). The SEA has been developed in parallel with and in line with the revision of the BMT. During the SEA procedure, the documentation of the environmental assessment had to be available for consultation with the environmental authorities, in addition to the documentation of the environmental assessment, as well as the documentation of the same planning level of the review of the SEA.

The SEA process consists of two main steps:

1. Developing a SEA theme,
 2. Environmental assessment,
- which include consultation with the bodies responsible for environmental protection and information to the public.



The studies carried out in the environmental assessment were based in part on the revised BMT itself and on data sources that contain the results of research and assessments carried out in the context of the environmental assessment topics under consideration.

The basic document of the environmental assessment is the revised BMT Objectives (June 2022, September 2022 and January 2023 consultation versions) and the full BMT project list, where the accuracy, detail and reliability of the data contained therein have essentially determined the reliability of the assessments. The availability and reliability of the data available at the time of the environmental and sustainability assessment of the projects, e.g. spatial location information, site plans were not available for many projects. In these cases, the information provided in the project name and project description was used to infer the spatial relevance and potential impacts on the site and its surroundings.

The data sources used for the studies carried out in the environmental assessment include EU, national and

municipal plans and strategies for the protection of the environment and nature, which are listed in the SEA document.

The methodology of the environmental assessment is based on the methodology of the SEA report for the BMT in 2019, as the BMT's SEA methodology is the methodology already accepted by the environmental authorities and the public. Changes to the methodology have been made only where justified (to reflect changes in the legislative and strategic planning environment).

The methodology was based on three pillars:

1. the alignment of the revised BMT objectives with EU and national environmental policy objectives,
2. assessment according to sustainability values,
3. environmental performance assessment.

An essential step in the SEA process is the integration of the views and comments of environmental bodies and the public into the revised BMT.



Alignment of the revised BMT objectives with the environmental policy objectives

The fit with the environmental policy objectives was assessed by analysing the plans and strategies listed above, defining the objectives and evaluating their inclusion in the revised BMT.

Assessment according to the sustainability value system

The sustainability agenda has been developed along the initiatives of the EU's Sustainable and Smart Mobility 2020 strategy. The aim of the assessment is to ensure that the principles of social, economic and environmental sustainability are implemented and to promote the best possible alignment with the sustainability value system.

Environmental performance assessment

To build the environmental performance assessment system, the first step was to identify the environmental drivers and the environmental elements, systems, agents and threats they affect.



Taking into account the characteristics and specificities of the revised BMT, the environmental performance assessment of the revised BMT examined the direct and indirect impacts on the following environmental elements and systems:

- environmental elements: agents, threats: geological media (earth's surface, soil, rocks), air, water (with particular attention to the impact on thermal springs, spa water sources), wildlife, built environment (including architectural and archaeological heritage), noise and vibration,
- the systems, processes and structure of the environmental elements, in particular the settlement, climate and landscape (landscape structure, land use, landscape) and the green space network of the immediate/indirect area of influence, and
- an improvement in the quality of life and health of the people concerned as a result of the above impacts.

In the first phase of the studies, the current state of the environmental elements and systems described above was assessed, and current problems and conflicts were identified. The revised BMT's stage of identifying impacts on the environment concerned, the environmental assessment distinguishes between adverse and beneficial effects, short-, medium- and long-term effects, temporary and permanent effects, direct and indirect effects, co-benefits (including co-benefits of burden shifting), cumulative and synergistic effects. Environmental conflicts that may arise or increase in the event of non-implementation of the revised BMT have also been considered in the environmental impact assessment.

Another important step in the environmental assessment process is the commenting process, i.e. collecting comments on the revised BMT and SEA from the environmental authorities and the public and integrating them into the revised BMT and SEA.



3

TRANSPORT DEVELOPMENT AND INVESTMENT PROGRAMME 2023-2030



This chapter describes the project appraisal and programming process carried out during 2021-2023 and the resulting transport development and investment programme. Tables with the full project portfolio, aggregated scores, project categories and project types are available in the "Project Evaluation Results" Annex.

3.1 LIST OF POSSIBLE PROJECTS

In the framework of the planning, the list of possible projects (long list) was defined based on the so-called indicative list of projects prepared as part of the BMT's Objectives and Measures, in consultation with the actors of the capital's institutional system (Municipality of Budapest, BKK Zrt., BKV Zrt., Budapest Közút Zrt.) and other partner organisations (Ministries, Prime Minister's Office, former BFK-NKK, former NIF Zrt., MÁV-Volán Group companies). The Budapest Mobility Plan includes transport development projects on the scale of Budapest that affect the transport network system of the capital and/or its agglomeration and that can be derived from the objectives of the BMT and support the achievement of these objectives.



A total of 336 projects were identified as a result of the data collection carried out in 2021-2022 (end of data collection period: 30 April 2023). The distribution of these projects by type is shown in Table 2.

Project type		Projects coordinated by the Budapest institutional system or a district	Public projects	Total
Rankable project	Concrete, modellable project	10	-	10
	Concrete, non-modellable project	48	-	48
	Non-specific project	2	44	46
Task-oriented project		48	6	54
Decided project		23	7	30
Project idea		42	19	61
Implemented (total %)		28 (13.9%)	8 (9.6%)	36
Cancelled project		33	20	53
Total (without cancelled projects)		201 (234)	84 (104)	285 (336)

Table 2: Breakdown of projects by type in the 2021-2023 programming period

During the development of the long list, the project owner organisations also formulated new project proposals, some projects were split, others merged, and projects were cancelled (in addition to the technical management of project changes, for instance due to the obsolescence of proposed interventions or the lack of relevance for the BMT). For traceability reasons, the project database also includes cancelled projects (53 projects in total). Excluding cancelled projects, a total of 285 projects were involved in the programming process, the breakdown of which by type is shown in Figure 9. A long list of projects is given in detail in the BMT Volume III Project Datasheets.

About one third of the projects can be ranked (104). More than half of these fall within the remit of the Budapest municipal institutions (60). The public projects not falling within the remit of the municipal institutions were treated as technically non-specific projects. The number of rankable state-run projects is 44.

The three groups of unranked projects are 55 task-oriented projects, 34 decided projects and 61 project

ideas. All but 6 of the task-oriented projects fall within the remit of the Municipality of Budapest. The decided projects include 7 public projects which are important for programming. The project ideas include 19 state-run projects.

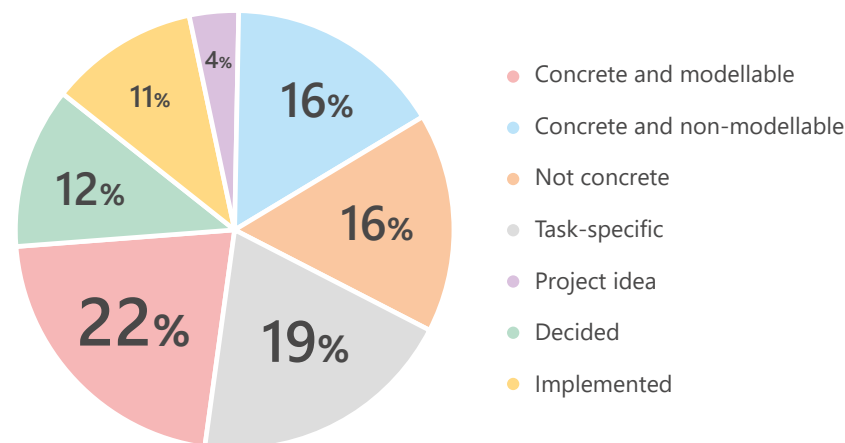


Figure 9: Number of projects involved in programming by project type [%]

The total investment value of the projects on the long list, excluding project ideas and task-oriented projects, is about HUF 4,500 billion (about 8-9% of Hungarian GDP), of which about 80%, about HUF 3,560 billion, is the value of public projects, HUF 940 billion is the value of projects that have been decided and about HUF 940

billion is the value of projects coordinated by Budapest municipal institutions and districts. The approximate cost demand on Budapest's side for the task-oriented projects up to 2030 is a further HUF 270 billion. The development concepts that could be formulated to achieve the objectives set by the BMT, including project ideas, would require investment resources of the order of HUF 6,600 billion, which is the estimated investment resource requirement for transport in the Budapest region at present.



3.2 PRIORITISED PROJECTS PROPOSED FOR IMPLEMENTATION WITHIN THE REMIT OF THE BUDAPEST MUNICIPAL INSTITUTIONAL SYSTEM

The entire portfolio of projects included in the BMT meets the criteria of the plan and supports the objectives set out in the Objectives and Measures.

In developing the packages and sequences, particular attention has been paid to highlighting potential synergies between projects, strengthening the links between individual projects, emphasising the humanisation of public spaces in infrastructure projects, and creating and improving conditions for liveability, equal opportunities and competitiveness with a transport focus.

The following are the prioritised projects under the responsibility of the Municipality of Budapest and certain districts, which are part of the investment programme. For some projects, the same score is given for each of the projects concerned in a merged cell to show the close link (synergy) between the projects (e.g. vehicle acquisition related to infrastructure development).

3.2.1 BASE PACKAGE: SCENARIO FOR PHASE I

The scenario for Phase I (2023-2026) foresees the availability of approximately HUF 110 billion for the preparation of 4 projects and the implementation of 12 projects.

#	ID	Project title	Expected funding	Aggregate score
Investments in trolleybus and bus network				
1.	P0277	Upgrading the existing trolleybus network	IKOP+ / realisation	57
2.	P0276	with network extension, small-scale power supply and overhead line installation - Phase I		
Investments related to the development of the tram network				
3.	P0112	Interconnected tram network in Pest-tram line linking between Deák tér and Lehel tér (via Bajcsy-Zsilinszky and Váci út) - preparation	IKOP+ / realisation	44

Investments related to the development of the tram network				
4.	P0409	infrastructure developments (depots, line infrastructure and power supply improvements) related to CAF tram procurement	IKOP+ / preparation	43
5.	P0005	Extension of tram line 3 from the Gubacsi út/Határ út terminus via Topánka utca to Gubacsi Bridge (Pesterzsébet section) -	IKOP+ / preparation	40
6.	P0006	Tram line 42 extension - preparation	IKOP+ / preparation	34
Investments related to the development of the metro network				
7.	P0086	M1 metro line upgrade and two-way extension (Vörösmarty tér-Vigadó tér, Mexikói út - Marcheggi híd) - preparation	IKOP+ / preparation	45
Complex investments in public space, road transport improvements				
8.	P0407	Accessibility of Göncz Árpád városközpont station pedestrian underpass and surface exits related to M3 metro line reconstruction	IKOP+ / realisation	61
9.	P0216	Complex renovation of the lower embankment between Kossuth Lajos tér - Havas utca (RAK-PARK)	TOP+ / realisation	55

Investments in active and micromobility				
10.	P0297	Cyclist-friendly development of the Üllői út - Váci út axis with sections of the B3 bike highway	TOP+ / realisation	67
11.	P0340	EuroVelo 6 International Cycle Route Development Phase II - South Buda, North Pest	IKOP+ / realisation	67
12.	P0341	EuroVelo 14 International Cycle Route development - Rákospatak, Budapest- Lake Balaton	IKOP+ / realisation	66
13.	P0388	Cyclist-friendly development of Budapest's inner-city areas - Phase I	Own funds	63
Investments related to service development				
14.	P0417	Mobility data warehouse - developing predictive traffic intelligence	RRF	54
15.	P0258	FUTÁR 2.0 – upgrade of BKK public transport traffic management and passenger information system	RRF	50
16.	P0418	Development of the Budapest tram network - fitting of vehicles with radio-controlled switch control equipment	RRF	44

From a scheduling point of view, the infrastructure development related to the 2022 trolleybus procurement (Phase III): the installation of a power converter at the Pongrác út depot, with the possibility of an e-bus charger extension, and the upgrading of the line power supply in the area (P0276) is linked to the ongoing trolleybus procurement and is therefore included in the first phase. Furthermore, also from a scheduling perspective, the preparation and implementation of major fixed-rail infrastructure investments have been separated with the preparation of projects in the first phase and their implementation in the second phase.



Table 3: Projects within the scope of the Budapest municipal institutions proposed to be prepared and implemented in Phase I (2023-2026)

3.2.2 BASE PACKAGE: SCENARIO FOR PHASE II

The scenario for Phase II (2025 - 2030) envisages a budget of around HUF 350 billion and the implementation of 24 projects. Phase II will mainly build on the implementation of the major infrastructure projects started in Phase I, complemented by other priority projects up to 2030.



#	ID	Project title	Expected funding	Aggregate score
Trolí-, autóbusz-hálózattal kapcsolatos beruházások				
1.	P0398	Development of the trolleybus network by converting the Rákóczi-Thököly út bus lines into trolleybus lines - Phase I	Suitable for RRF / IKOP+	57
2.	P0394	Trolleybus vehicle procurement for the Rákóczi-Thököly út network development (56 articulated and 11 single trolleybuses) – Phase I	Suitable for RRF / IKOP+	
3.	P0420	Development of the trolleybus network by converting the Rákóczi-Thököly út bus lines into trolleybus lines - Phase II	Suitable for RRF / IKOP+	
4.	P0419	Trolleybus vehicle procurement for the Rákóczi-Thököly út network development (56 articulated and 11 single trolleybuses) – Phase II	Suitable for RRF / IKOP+	
5.	P0277	Upgrading of the existing trolleybus network by network extension, small-scale power supply and overhead line installation Phase II.	Suitable for RRF / IKOP+	57
6.	P0414	Kőbánya-Belváros-Óbuda new trolleybus network-infrastructure (replacement of bus 9)	own funding	55
7.	P0415	purchase of trolleybuses - 25 pc for the construction of a new Kőbánya-Belváros-Óbuda trolleybus network (replacement of bus 9)	RRF	
8.	P0278	Procurement of electric buses (40 single electric buses with charging infrastructure)	RRF + own funding	54

Investments related to the development of the tram network

9.	P0112	Interconnected tram network in Pest- tram line linking between Deák tér and Lehel tér (via Bajcsy-Zsilinszky and Váci út) implementation	Can be integrated into IKOP+	44
10.	P0005	Extension of tram line 3 from the Gubacsi út/Határ út terminus via Topánka utca to Gubacsi Bridge (Pesterzsébet section) implementation	Can be integrated into IKOP+	40
11.	P0006	Tram line 42 extension - implementation	Can be integrated into IKOP+	34

Investments related to the development of the metro network

12.	P0087	M1 metro line vehicle procurement (22 + 5 trains)	Can be integrated into IKOP+	45
13.	P0086	M1 metro line upgrade and two-way extension (Vörösmarty tér-Vigadó tér, Mexikói út - Marcheggi híd) -	Can be integrated into IKOP+	

Complex investments in public space, road transport improvements

14.	P0208	Renovation of Orczy tér, dismantling of disused tram tracks, increasing green space, replacement of paving in public spaces, relocation of trolleybus turn	Can be fitted to TOP+	54
15.	P0362	Complex renewal of Clark Ádám tér and other public spaces along the Danube	Can be fitted to TOP+	54
16.	P0113	Complex renewal of Városháza tér in District 22 (roundabout, green space, tram platform and terminus accessibility)	Can be fitted to TOP+	50
17.	P0175	Redevelopment of public spaces on the Buda upper embankment: Fő utca and its squares, Felhévíz; renewal of Bem József tér in several phases (DUNA-BUDA)	Can be fitted to TOP+	50
18.	P0067	Complex renewal of Kossuth Lajos utca - Rákóczi út in 2 phases: Phase I - creation of a bus corridor, consideration of a tram line; Phase II- independent cycling infrastructure between Március 15. tér and Baross tér, complex renewal of the axis	Can be fitted to TOP+	34
19.	P0098	Budapest, District 14, Nagy Lajos király útja development preparation (on the existing route, between Kassai tér and Bosnyák tér), with the creation of cycle	Can be fitted to TOP+	32

Investments in active and micromobility				
20.	P0304	Design of some elements of the East Pest Bicycle Highways (B2, B9, B30)	Can be fitted to TOP+	60
21.	P0303	Development of the main cycling network in South Pest and Csepel and elements of the B7 Bicycle Highway	Can be fitted to TOP+	59
22.	P0298	Construction of sections of the North Pest Bicycle Highways (B1, B3, B4)	Can be fitted to TOP+	59
23.	P0302	Development of the main cycle network in South Buda and elements of the B4 Bicycle Highway	Can be fitted to TOP+	58
24.	P0153	Construction of elements of the Budapest Hungária Ring (B20) bicycle highway	Can be fitted to TOP+	55

Table 4: Projects under the jurisdiction of the Municipal Institutions proposed for implementation in Phase II (2025-2030)



3.2.3 COMPLEMENTARY PROJECT PACKAGE

The complementary project package assumes a financing need of around HUF 520 billion.

The supplementary project package includes transport development projects that are proposed to be implemented if additional funding is available, these projects are proposed for later implementation in the phasing process, taking into account potential funding, modal balance, geographical distribution, etc.

The complementary package of projects proposes the implementation of a further 26 projects, provided that the financial conditions for their implementation are met.

#	ID	Project title	Aggregate score
Troli-, autóbusz-hálózattal kapcsolatos beruházások			
1.	P0396	Development of the East Pest trolleybus network by converting part of the Jászberényi út bus line into a trolleybus	54
2.	P0392	Budapest trolleybus procurement for the East Pest network development (35 articulated and 12 single vehicles)	
3.	P0395	Trolleybus network development in Buda with the conversion of the Istenhegyi út and Bimbó út bus lines into trolleybus lines	54
4.	P0391	Trolleybus procurement for the Buda network development (50 single trolleybuses)	
5.	P0397	Development of the trolleybus network in North Pest by converting the Reitter Ferenc utca and Árpád út bus lines into trolleybus lines	53
6.	P0393	Budapest trolleybus procurement for the North Pest network development (64 articulated and 16 single vehicles)	
7.	P0171	Procurement of trolleybuses, Phase IV (40 vehicles)	38
Investments related to the development of the tram network			
8.	P0183	Upgrading of the existing section of tram line 2 (between Jászai Mari tér and Közvágóhíd)	36
9.	P0080	Extension of the tram line along Külső Bécsi út (Vörösvári út - Aranyvölgy section)	21
10.	P0275	Procurement of Cogwheel Railway (tram line 60) vehicles (1 prototype and 7 production vehicles)	21
11.	P0046	Upgrading and extension of the Cogwheel Railway (tram line 60) in both directions: from Széchenyi hegy to Normafa and from Városmajor to Széll Kálmán tér	20

Investments related to the development of the metro network			
12.	P0207	Extension of the Budapest M3 metro line from Újpest-központ to Káposztásmegyer, with related interventions	42
13.	P0386	Purchase of 8 new 6-car metro trainsets for the extension of the M3 metro line to Káposztásmegyer	42
Complex investments in public space and road transport improvements			
14.	P0119	Reconstruction of pedestrian underpasses and surface exits connected to the stations of the M3 metro line (except Göncz Árpád vk. and Határ út stations)	40
15.	P0118	District 17, connection of Cinkotai út and Keresztúri út	28
16.	P0162	Renovation of the Gubacsi út bridge (with the possibility of tram tracks and cycle lanes) and the complex renovation of related road network on both sides (Pest bridgehead-Topánka utca-Baross utca, District 21 Ady Endre út section between Duna utca and bridgehead)	18
17.	P0035	District 21, Csepel trunk road (Teller Ede út) development, Phase II (Salak utca - Cseresznyefa utca)	16

Investments in active and micromobility			
18.	P0388	Cycling-friendly development of Budapest's inner-city areas - Phase II	63
19.	P0305	Development of some elements of the main East Pest cycle network	61
20.	P0300	Construction of sections of the Buda Ring (B10) Bicycle Highway	60
21.	P0299	Development of some elements of the main cycling network in North Pest	59
22.	P0301	Development of some elements of the main cycling network in North Buda	57
23.	P0172	Development of about 13 km of cycle path along the Szilas stream	54
Investments related to service development			
24.	P0063	Developing a sustainable city logistics system	51
25.	P0051	Development of demand-driven public transport services (Telebusz)	48
26.	P0018	Developing a comprehensive network of city logistics loading areas	44

Table 5: Projects proposed to be implemented by the Municipality of Budapest and its districts if additional funding becomes available (2023-2030)

3.3 LIST OF STATE-RUN PROJECTS

A total of 44 public investments (not coordinated by the Budapest municipal institutions) have been identified for the BMT during the programming period 2021-2023.

For projects that do not fall within the competence of the Municipal Assembly (public projects), a proposed list is drawn up without a resource framework or timetable, based on the BMT's criteria, but this does not imply a decision on the concrete implementation of the projects.

On this basis, the Municipality of Budapest - as a stakeholder - can develop its professional position and represent its interests during the preparation and implementation of the relevant developments.



We have classified the transport projects under public responsibility into three categories (highly recommended, recommended, recommended long-term) according to our proposal for implementation. The main considerations for the categorisation were to build on the results obtained by the evaluation methodology, to link with projects under the competence of the Municipality of Budapest, to strengthen synergies and to enhance social utility.



#	ID	Project name
Highly recommended		
1.	P0004	Extension of tram line 3 westwards through Kassai tér (Angyalföld, Árpád bridge) and construction of Szegedi út overpass
2.	P0008	Rákospalota-Újpest - Veresegyház - Vác railway line bottleneck replacement
3.	P0038	Renovation of the H6/H7 HÉV suburban railway lines, connection to Kálvin tér (southern section of the north-south regional rapid railway)
4.	P0039	Connection of H5 and H6/H7 HÉV lines between Kaszásdűlő - Kálvin tér (north-south regional rapid railway city-centre section)
5.	P0040	H5 HÉV line renewal (Batthyány tér - Szentendre) (northern section of the north-south regional rapid railway)
6.	P0045	Improving road access to Budapest Liszt Ferenc International Airport
7.	P0050	Purchase of HÉV suburban railway vehicles (59 trainsets)
8.	P0068	Kőbánya-Kispest - Lajosmizse - Kecskemét railway line bottleneck replacement and electrification
9.	P0081	Implementation of transport improvements in the City Park
10.	P0089	Connection of metro M2 and H8/H9 HÉV at Örs vezér tér, renovation of H8/H9 HÉV lines (between Örs vezér tere and Cinkota)

11.	P0129	Buda Interconnected Tram Network, Phase II - Construction of the line linking Gellért tér to Budafoki út
12.	P0200	Reconstruction of railway facilities related to the development of the Gubacsi railway bridge and the Danube Free Port of Csepel Island
13.	P0221	Provision of P+R and B+R parking spaces at stops and stations of commuter railway lines to facilitate modal shift
14.	P0224	Kelenföld intermodal junction: implementation of the bus terminal at the Kelenföld intermodal junction and extension of the P+R parking facilities
15.	P0225	Design and construction of a pedestrian and cycle bridge between Gróf Esterházy János rakpart and Óbuda Island and the design of a double-deck road bridge between Mozaik utca- Óbuda Island, with demolition of the existing H-bridge
16.	P0226	Renewal of the public space of the lower embankment in Pest: renewal of Salkaházi Sára rakpart and Közraktár utca
17.	P0227	Introduction of an integrated metropolitan area fare system
18.	P0261	Modernisation of the passenger areas at Kőbánya alsó station
19.	P0262	Modernisation of the passenger areas of Kőbánya-Kispest railway station

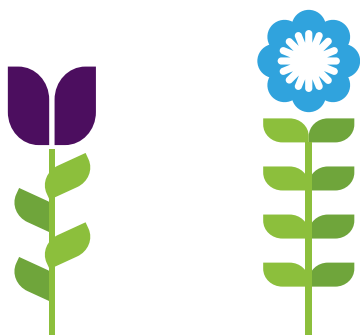


Highly recommended

20.	P0263	Conversion of the Kis-Gellért Hill tunnel (for double-decker motorised trains) and improvements to increase capacity and accessibility and raise service levels at Déli Railway Station
21.	P0265	Central traffic management on TEN-T railway lines (sections of lines 70, 80, 100a, 140)
22.	P0266	Short-term development of Budapest-Nyugati railway station and its access sections
23.	P0268	Competitive rail infrastructure development, Phase II, simplified modernisation of Városliget - Kőbánya-Kispest section, Vecsés station and Monor -Albertirsa sections
24.	P0355	Additional environmental planning tasks for the Southern Railway Ring Phase II (along the railway track between Kelenföldi út and the Buda bridgehead)
25.	P0375	Construction of the Transport Museum train station

Recommended

26.	P0030	Development of a rail link to Budapest Liszt Ferenc International Airport
27.	P0083	M0 ring road, northern sector (between main roads 10 and 11, 2x2 lanes)
28.	P0177	Budapest-Kelenföld admission building renovation
29.	P0222	Redevelopment of Budapest-Nyugati railway station, building construction and environmental planning tasks
30.	P0223	Kőbánya felső - Rákosliget reconstruction and bottleneck replacement
31.	P0228	Construction of missing railway stops and interchanges on Budapest agglomeration rail network (Pestújhely, Újpalota, Rákosszentmihály, Rákosfalva, Albertfalva)
32.	P0264	Reconstruction of the section of railway line 150 between Soroksár (excl.) and Ferencváros (excl.)
33.	P0272	Southern Railway Ring, Phase III - construction of Népliget station and Ferencváros endpoint with separate railway level crossing
34.	P0274	Kelenföld - Törökbálint railway line section bottleneck replacement
35.	P0292	Purchase of railway traction vehicles (90 dual-current and 25 triple-current electric locomotives)
36.	P0374	Reconstruction of the access section of railway line 70 to Budapest-Nyugati railway station



Recommended long-term		
37.	P0047	Construction of the new Danube bridge on Galvani út and the associated transport network
38.	P0085	M0 ring road, western sector (between main roads 1 and 10, 2x2 lanes)
39.	P0090	M2 metro - construction of a branch line from the H8/H9 HÉV line in Rákoskeresztúr
40.	P0187	Improving access to the South Buda Central Hospital (DBC)
41.	P0199	Construction of a through railway station and a railway tunnel between Kelenföld and Nyugati stations
42.	P0209	Renewal of H8 HÉV suburban railway Budapest-Cinkota - Gödöllő and H9 HÉV line Budapest-Cinkota - Csömör – Kavicsbánya-elágazás sections
43.	P0220	Improving bus transport in the Zsámbék Basin -
44.	P0342	Budakeszi bus lane and related infrastructure interventions
		Construction of the new Transport Museum

Table 6: Public (state-run) projects related to the BMT



3.4 LIST OF DECIDED PROJECTS

The following table shows the list of 23 projects under implementation, with funding sources, with a decided status, under the responsibility of the Municipality of Budapest, which are part of the transport development and investment programme.

#	ID	Project name
Public transport projects		
1.	P0034	Tram procurement Phase III (optional 51 CAF trams)
2.	P0371	The Budapest public transport vehicle strategy
3.	P0390	Network strategy for public transport in Budapest
Complex public space, road transport improvement projects		
4.	P0364	District 18, Üllői út (Szarvas csárda tér - Béke tér) renovation
5.	P0370	Budapest Road Safety Strategy and Road Network Plan

Investments in active and micromobility		
6.	P0024	Development of modal shift options - B+R parking
7.	P0295	Pedestrian and cycling network plan and related IT developments (GIS, database, service management)
8.	P0311	VEKOP 01/17: Development of infrastructure related to the Budapest public bike-sharing system in Districts 3 and 13
9.	P0314	VEKOP 04: Road safety improvements in District 20 of Budapest
10.	P0316	VEKOP 07: Road safety and bicycle-friendly improvements in District 11 of Budapest
11.	P0317	VEKOP 08/18: Bicycle-friendly infrastructure improvements in District 4 of Budapest
12.	P0318	VEKOP 10/19: Road safety improvements in District 15 of Budapest
13.	P0319	VEKOP 11/14: Bicycle-friendly infrastructure improvements in District 10 of Budapest
14.	P0320	VEKOP 12/15: Construction of a cycle path along the Rákosszentmihály stream in District 13 of Budapest

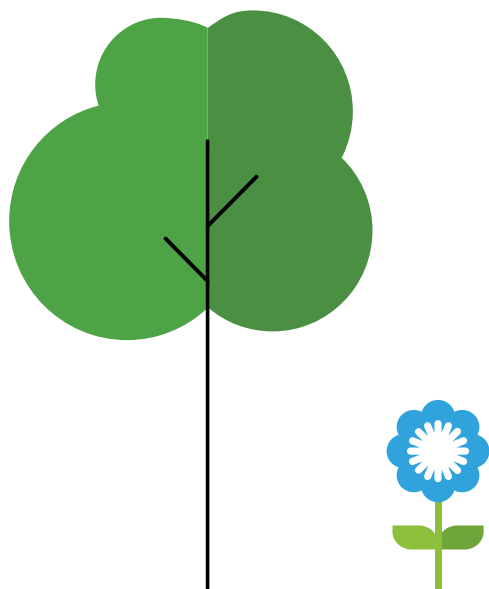
Investments in active and micromobility

15.	P0321	EuroVelo 6 International Cycle Route Development Phase I - North Buda (13.3 km between the city border and the Chain Bridge)
16.	P0339	Budapest active and micromobility strategy
17.	P0377	Developing modal shift options - deployment of micromobility points, mobility points, mobility stations, bicycle stands
18.	P0412	Módváltási lehetőségek fejlesztése – mikromobilitási pontok, mobilitási pontok, mobilitási állomások, kerékpártámaszok kiépítése

Investments related to service development

19.	P0287	BudapestGO app II - integration of regional bus services (Volánbusz), introduction of NFC ticket validation, fine-tuning of journey planning, further development of accessibility
20.	P0288	BudapestGO app III - enhancing customer experience and functionality, improving ticketing, integrating micromobility equipment, improving agglomeration and car functions, improving trip planning, better customer access and Information
21.	P0406	Pilot introduction of contactless (NFC) payment in Budapest public transport
22.	P0410	Full digitisation of ticket inspection activity
23.	P0411	Dynamic IT in urban transport management - IT system developments for digital management of service and traffic planning data

Table 7: List of decided projects under the competence of the Municipality of Budapest



#	ID	Project name
1.	P0043	Southern Railway Ring Phase II - Kelenföld and Ferencváros line capacity extension, development of suburban stops and construction of new stops
2.	P0096	Purchase of MÁV-START motor train (IKOP-2.1.0-15-2017-00039 and IKOP- 2.1.0-15-2018-00051)
3.	P0259	Improving passenger traffic at Budapest-Keleti and Budapest-Nyugati railway stations
4.	P0267	Removing bottlenecks and improving interoperability on the Budapest (Kelenföld) - Hegyeshalom line (CEF project)
5.	P0293	Purchase of MÁV ticket vending machines (275 +100 units)
6.	P0327	Green Bus Fleet and Infrastructure Development Project in Budapest agglomeration
7.	P0337	Development of integrated passenger information, ticketing and traffic control services to improve the efficiency of public passenger transport services (HKIR)

Table 8: List of decided projects falling under the competence of state-run institutions

The list of 7 projects with a decided status under the responsibility of a public institution system that is not part of the Transport Development and Investment Programme is presented in Table 8.



3.5 LIST OF TASK-ORIENTED PROJECTS

The list of 48 task-oriented projects that are part of the transport development and investment programme and fall within the competence of the Municipality of Budapest or individual districts is presented in Table 9.

#	ID	Project name	Priority
Public transport tasks			
1.	P0144	Accessibility of tram line 50 stops	Highly recommended
2.	P0186	Accessibility of tram stops on line 56-56A (between Dózsa György tér - Hűvösvölgy terminus)	Highly recommended
3.	P0015	Prioritisation of public transport vehicles with traffic management solutions	Suggested
4.	P0111	Scheduled improvement of accessibility of tram stops	Suggested

Active and micromobility tasks			
5.	P0012	Making the road network in urban areas more bicycle-friendly, increasing road safety	Highly recommended
6.	P0296	City-wide awareness-raising campaigns to promote sustainable and safe mobility	Highly recommended
7.	P0307	Improving the cycleability of Elisabeth Bridge, Liberty Bridge	Highly recommended
8.	P0308	Expanding the possibility to transport bicycles on Budapest fixed-rail public transport vehicles	Suggested

Complex tasks related to the development of public spaces and road transport

9.	P0100	Reconstruction of the Petőfi Bridge	Highly recommended
10.	P0190	Renovation of the Castle Tunnel	Highly recommended
11.	P0210	Road Rehabilitation Programme 2022-2023 of Budapest Közút Zrt.	Highly recommended
12.	P0212	Traffic engineering measures - improving pedestrian crossings, increasing traffic safety, traffic alignment corrections, new bus lanes	Highly recommended
13.	P0214	Complex renovation of the Szilágyi Erzsébet fasor on the border of Districts 2 and 12	Highly recommended
14.	P0284	Renovation of the tram and road underpass on the Pest side of the Széchenyi Chain Bridge with interventions for flood protection and accessibility	Highly recommended
15.	P0349	Complex development of Healthy Streets - creating human-centred, humanised public spaces through traffic calming, reallocation of public space, active transport modes, significant improvement of walking conditions	Highly recommended
16.	P0350	Creating safe roads in Budapest - eliminating accident blackspots	Highly recommended
17.	P0357	Long-term spatial planning of the Népliget junction (Üllői út-Könyves Kálmán körút)	Highly recommended

18.	P0213	Bridge and structure renovations 2021-2025	Suggested
19.	P0404	Preparation of BKK's road and infrastructure renovations planned between 2024-2030	Suggested
20.	P0019	Development of a comprehensive concept for the regulation of public space use for transport purposes in Budapest	Suggested
21.	P0138	Districts 10-17, Keresztúri út overpass reconstruction	Suggested
22.	P0178	Implementation of P+R parking in phases within the administrative boundaries of Budapest	Suggested
23.	P0219	District 9: Complex renovation of Mester utca (Ferenc krt. - Haller utca)	Suggested
24.	P0356	Renovation of the K-bridge to Óbuda Island	Suggested
25.	P0358	Renovation of the Ferdinand Bridge between Districts 6 and 13, with cycle lanes	Suggested
26.	P0360	District 3: Flórián tér flyover renovation	Suggested
27.	P0079	Road upgrades to overcome the railways' effect of land separation, and to improve transport links between settlement areas	Proposed long-term
28.	P0154	District 11: Replacement of existing noise barrier wall on Szerémi út (between Budafoki út and Dombóvári út)	Proposed long-term
29.	P0211	Road Rehabilitation Programme 2024-2029 of Budapest Közút Zrt.	Proposed long-term
30.	P0405	BKK road and infrastructure renovations planned between 2024-2030	Proposed long-term

Further tasks			
31.	P0053	Further development of cooperation in Budapest and agglomeration transport management (BKK - Budapest Municipality - Ministry of Transport)	Highly recommended
32.	P0202	Operation and development of the Unified Traffic Model	Highly recommended
33.	P0294	Further development of public bicycle-sharing system, Phase II (additional bike purchases, further expansion of service area)	Highly recommended
34.	P0376	Budapest MaaS Strategy and Action Plan	Highly recommended
35.	P0379	Free taxi control - public fare meter, license plate check and complaint reporting application	Highly recommended
36.	P0033	Establishment of a Budapest road traffic accident data collection, processing and storage system	Highly recommended
37.	P0052	Dynamic IT system in urban transport management - IT system development for digital transport service change management	Highly recommended
38.	P0367	BKK's Equal Opportunities Plan (EET) for 2021-2024	Highly recommended

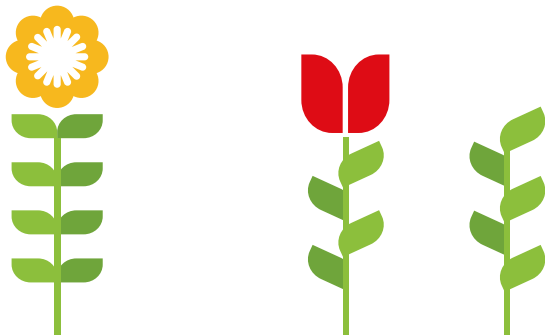
39.	P0372	Budapest shared mobility concept	Proposed long-term
40.	P0381	Continuous updating of the Budapest SUMP	Suggested
41.	P0022	Regulation and complex management of public transport and shared mobility services, integration of shared mobility into public transport	Suggested
42.	P0023	Improvement of uniform taxi services in Budapest (emission reduction, taxi rank use)	Suggested
43.	P0110	Regulation of traffic and parking arrangements for tourist buses and related interventions (creation of drop-off and pick-up points, waiting and storage areas, preparation of regulation)	Suggested
44.	P0309	Development of an online platform for social participation	Suggested
45.	P0361	Zugliget Chairlift refurbishment	Suggested
46.	P0368	Training programme on equal opportunities at BKK based on the Equal Opportunities Plan	Suggested
47.	P0369	Development of the IT system for the Budapest Mobility Plan	Suggested
48.	P0380	Real-time taxi service data processing IT system	Suggested

Table 9: List of task-oriented projects falling within the remit of the Municipality of Budapest

Of the projects under the Hungarian state's responsibility, the project P0343, entitled Agglomeration Cycling Network Development Strategy (Cycling Suburb), is under the responsibility of the Ministry of Construction and Transport, while the other projects are under the responsibility of Volánbusz Zrt. A list of the task-oriented projects that do not form part of the transport development and investment programme and fall within the remit of the State is presented in Table 10.

#	ID	Project name
1.	P0343	Agglomeration Cycling Network Development Strategy (Cycling Suburb)
2.	P0322	Timetable interventions related to the Budakeszi út bus lane
3.	P0323	Timetable interventions in the Budapest public transport service due to the new road connections in the Zsámbék Basin
4.	P0324	Improvement of the connection of Dabas and its region to the capital by means services using the M5 motorway
5.	P0325	Reconstruction and upgrading of the existing public bus network along the 80a Budapest - Hatvan railway line
6.	P0326	Review of the bus services on Csepel Island following the completion of the renovation works on the H6 HÉV suburban railway line to Ráckeve

Table 10: List of projects under the responsibility of the Hungarian State



3.6 PROPOSALS FOR PROJECT IDEAS

A total of 61 project ideas have been identified in the programming for 2021-2023, 42 of which are the responsibility of Budapest municipal institutions and 19 of which are the responsibility of the Hungarian State. The project ideas within the scope of the Municipality are grouped by the main transport mode concerned in Table 11.

#	ID	Project name	Priority
Public transport project ideas			
1.	P0217	Eastern extension of M4 metro line - Budapest-Keleti railway station - M3 motorway area, P+R construction	Highly recommended
2.	P0385	300 new buses in Budapest with at least EURO 6 emission classification or alternative propulsion by 2026	Highly recommended
3.	P0387	Tram depot upgrades for modern storage and maintenance	Highly recommended

4.	P0400	Tram procurement, Phase IV - (5-)23 long trams, if no long tram is called from the CAF option	Highly recommended
5.	P0401	Tram procurement, Phase V - 65 short trams (Ganz replacement)	Highly recommended
6.	P0402	Tram procurement, Phase VI - Purchase of 50 short trams (replacement of remaining Hanover trams)	Highly recommended
7.	P0408	Improving storage capacity related to trolleybus procurements	Highly recommended
8.	P0021	300 electric buses in Budapest by 2035	Suggested
9.	P0093	Western extension of M4 metro line - Budapest Kelenföld- between Budaörs, P+R construction	Suggested



Public transport project ideas

10.	P0099	Buda Interconnected Tram Network, Phase III - Construction of the tram link between Margit Bridge and Szentendrei út, with complex reconstruction of the road sections concerned, construction of a bicycle axis, humanisation of Flórián tér, development of an intermodal hub (Kaszásdűlő)	Suggested
11.	P0107	Implementation of the Újpalota tram line (between Újpalota - Astoria)	Suggested
12.	P0218	Pest Interconnected Tram Network: connecting the tram lines of Népszínház utca to the Rákóczi út tram line, and the Rákóczi út tram to the inner-city ring tram lines, and improving accessibility of the Astoria junction	Suggested
13.	P0354	District 10, Kőbányai út reconstruction between Orczy tér - Mázsza tér, and the accessibility of stops along the whole length of tram line 24, the inner sections of tram lines 28, 37 and 51	Suggested

14.	P0389	Accessibility of M2 metro stations	Suggested
15.	P0403	Tram procurement, Phase VII - purchase of 50 short trams to serve the rolling stock needs of the new tram developments	Suggested
16.	P0009	Northbound extension of tram line 2	Proposed long-term
17.	P0013	Implementation of the conditions for waterborne public transport in the capital and the suburbs - development of local and agglomeration riverboat services, development of piers, improving their accessibility, acquisition of vehicles with storage and maintenance depot, procurement of boats	Proposed long-term
18.	P0165	Double-track connection of trams 2 and 51 in the area of Közvágóhíd (junction Kvassay Jenő út - Soroksári út)	Proposed long-term
19.	P0347	Improving public transport on Gellért Hill	Proposed long-term
20.	P0413	Tram development on Budafoki út	Proposed long-term



Project ideas for complex public space, road transport improvements			
21.	P0155	Complex renewal of the Grand Boulevard - traffic calming, improving conditions for active transport, greening, humanisation	Highly recommended
22.	P0282	Complex renewal of Andrásy út - traffic calming, active transport, greening, humanisation	Highly recommended
23.	P0069	Aquincum Danube bridge and associated road network (construction of the ring road along the railway ring, phase I between main road 10 - M3 motorway)	Suggested
24.	P0071	Albertfalva Danube bridge and associated road network, with tram track (construction of the ring road along the railway ring, Phase IV) between Soroksári út - M6 access road)	Suggested
25.	P0073	Development of transport infrastructure along the railway ring, Phase III (between Üllői út - Soroksári út)	Suggested

26.	P0352	Modification of the traffic regime at the junction Rottenbiller utca - Rákóczi út - Fiumei út, with the demolition of the flyover	Suggested
27.	P0382	Construction of the North-Buda road tunnel (between the bypass of the main road 10 and Hidegkúti út)	Suggested
28.	P0070	Development of transport infrastructure along the Railway Ring (M3 motorway - Üllői út)	Proposed long-term
29.	P0072	Construction of the ring road along the railway ring, Phase V (Albertfalva – Egér út)	Proposed long-term
30.	P0203	Construction of a road linking the outlying districts of Pest, connecting the M31 - M51 motorway areas	Proposed long-term
31.	P0353	Construction of noise barriers along the H5 suburban railway line in District 3	Proposed long-term
32.	P0416	Rákoskeresztúr központ, Pesti út public transport corridor development and related investments	Proposed long-term



Project ideas on active and micromobility			
33.	P0332	Improving access to green (walking and cycle) routes in Budapest, creating missing sections, building a greenway network	Highly recommended
34.	P0344	EuroVelo 6 international cycle route development, Phase III - Central Buda, Central Pest, South Pest (construction of sections not included in other projects)	Suggested
35.	P0306	Improving residential and destination bicycle storage and parking	Proposed long-term
Further project ideas			
36.	P0044	Preparation of a study to define the framework for sustainable and predictable normative funding of the Budapest transport system	Highly recommended
37.	P0108	Establishment of a regional transport management body to ensure coordination between urban and suburban transport	Highly recommended

Further project ideas			
38.	P0192	Introduction of low emission zones (LEZ), regulatory concept	Highly recommended
39.	P0285	Introduction of EMV-based e-ticketing system	Highly recommended
40.	P0206	Establishing the development and regulatory environment for the Budapest e-charging infrastructure	Suggested
41.	P0076	Establishment of a permanent exhibition venue in the capital	Proposed long-term
42.	P0193	for transport history and vintage vehicle collections	Proposed long-term

Table 11: List of BMT-related project ideas under the competence of the Municipality of Budapest

As part of the transport development and investment programme, this chapter sets out a proposal for project ideas to be prioritised. The proposals are based on the priorities of the different strategies e.g. ITS, the objectives set out in the BMT's objectives framework and the BMT's project appraisal methodology. The proposals are presented in Table 12.

#	ID	Project name	Reason for priority classification
Priority project ideas			
1.	P0044	Preparation of a study to define the framework for sustainable and predictable normative funding of the Budapest transport system	Institutional progress + significant synergies
2.	P0108	Establishment of a regional transport management body to ensure coordination between urban and suburban transport	Institutional progress + significant synergies

3.	P0155	Complex renewal of the Grand Boulevard - traffic calming, improving conditions for active transport, greening, humanisation	High fit score, humanising an emblematic urban ring road, ITS priority
4.	P0192	Introduction of low emission zones (LEZ), regulatory concept	Development justified by strategic guidelines
5.	P0217	Eastern extension of M4 metro line - Budapest-Keleti railway station - M3 motorway area, P+R construction	Long-term network development to be investigated
6.	P0282	Complex renewal of Andrásy út - traffic calming, active transport, greening, humanisation	High fit score, humanising the emblematic urban axis, ITS priority
7.	P0285	Introduction of EMV-based e-ticketing system	Preparing for the technologies of the future
8.	P0332	Improving access to green (walking and cycle) routes in Budapest, creating missing sections, building a greenway network	Related bicycle network development

Kiemelten javasolt projektötletek

9.	P0385	300 new buses in Budapest with at least EURO 6 emission classification or alternative propulsion by 2026	Vehicle strategy and its objectives, ongoing vehicle replacement to achieve average age targets
10.	P0387	Tram depot upgrades for modern storage and maintenance	Purchases related to vehicle procurement
11.	P0400	Tram procurement, Phase IV - (5-) 23 long trams, if no long tram is called from the CAF option	Vehicle development related to network development
12.	P0401	Tram procurement, Phase V - 65 short trams (Ganz replacement)	Vehicle development related to network development
13.	P0402	Tram procurement, Phase VI - Purchase of 50 short trams (replacement of remaining Hanover trams)	Vehicle development related to network development
14.	P0408	Improving storage capacity related to trolleybus procurements	Purchase related to vehicle procurement

Suggested project ideas

15.	P0021	300 electric buses in Budapest by 2035	Preparing for the technologies of the future
16.	P0069	Aquincum Danube bridge and associated road network (construction of the ring road along the railway ring, phase I between main road 10 - M3 motorway)	Development justified by strategic guidelines
17.	P0071	Albertfalva Danube bridge and associated road network, with tram track (construction of the ring road along the railway ring, Phase IV) between Soroksári út - M6 access road)	Development justified by strategic guidelines
18.	P0093	Western extension of M4 metro line between Kelenföld - Budaörs, P+R construction	Related metro network development



Suggested project ideas

19.	P0099	Buda Interconnected Tram Network, Phase III - Construction of the tram link between Margit Bridge and Szentendrei út, with complex reconstruction of the road sections concerned, construction of a cycling axis, humanisation of Flórián tér, development of an intermodal hub (Kaszásdűlő)	Kapcsolódó villamoshálózat fejlesztése
20.	P0107	Implementation of the Újpalota tram line (between Újpalota - Astoria)	Related tram network development
21.	P0206	Establishing the development and regulatory environment for the Budapest e-charging infrastructure	Preparing for the technologies of the future
22.	P0218	Pest Interconnected Tram Network: connecting the tram lines of Népszínház utca to the Rákóczi út tram line, and the Rákóczi út tram to the inner-city ring tram lines, and improving accessibility of the Astoria junction	Related tram network development

23.	P0344	EuroVelo 6 international cycle route development, Phase III -	Related cycling network development
24.	P0352	Central Buda, Central Pest, South Pest (construction of sections not included in other projects)	Development justified by strategic guidelines
25.	P0354	Modification of the traffic regime at the junction Rottenbiller utca - Rákóczi út - Fiumei út, with the demolition of the flyover	High fit score, justified junction upgrades
26.	P0382	Construction of the North-Buda road tunnel (between the bypass of the main road 10 and Hidegkúti út)	network development defined on the basis of the Budapest Settlement Structure Plan
27.	P0389	Accessibility of M2 metro stations	Building missing links, equal opportunities
28.	P0403	Tram procurement, Phase VII - purchase of 50 short trams to serve the rolling stock needs of the new tram developments	Vehicle development related to network development

Proposed project ideas for the future

29.	P0009	Northbound extension of tram line 2	Long-term network development to be investigated
30.	P0013	Implementation of the conditions for waterborne public transport in the capital and the suburbs - development of local and agglomeration riverboat services, development of piers, improving their accessibility, acquisition of vehicles with storage and maintenance depot, procurement of boats	High fit score
31.	P0070	Development of transport infrastructure along the Railway Ring (M3 motorway - Üllői út)	Network development defined on the basis of the Budapest Settlement Structure Plan, road network development to be examined
32.	P0072	Construction of a bypass along the Railway Ring, Phase V (Albertfalva – Egér út)	Development justified by strategic guidelines
33.	P0073	Development of transport infrastructure along the Railway Ring, Phase III (between Üllői út - Soroksári út)	Network development defined on the basis of the Budapest Settlement Structure Plan, road network development to be examined

34.	P0076	Establishment of a permanent exhibition venue in the capital for transport history and vintage vehicle collections	Shaping mindsets
35.	P0165	Double-track connection of trams 2 and 51 in the Közvágóhíd area (junction of Kvassay Jenő út - Soroksári út)	Related tram network development
36.	P0193	Conditions for automated vehicle traffic, definition of necessary infrastructure conditions	Preparing for the technologies of the future
37.	P0203	Construction of a road linking the outlying districts of Pest, connecting the M31 - M51 motorway areas	Development justified by strategic guidelines and on the basis of settlement structural plan
38.	P0306	Improving residential and destination cycle storage and parking	Improvements related to the cycling network
39.	P0347	Improving public transport on Gellért Hill	Active mobility, ITS priority

Proposed project ideas for the future			
40.	P0353	Construction of noise barriers along the H5 suburban railway line in District 3	Project ideas based on local demand
41.	P0413	Tram development on Budafoki út	Long-term network development to be investigated
42.	P0416	Rákospesztúr központ, Pesti út public transport corridor development and related investments	Long-term network development to be investigated

Table 12: Proposal for project ideas within the scope of the Municipal Institutions, priority list



During the programming process, 19 public project ideas were identified after consultation with state-run institutions. The project ideas that do not fall under the competence of the Municipal Assembly (state project ideas) are proposed on the basis of the BMT criteria, but this does not imply a decision on the concrete implementation of the projects.

On this basis, the Municipality of Budapest - as a stakeholder - can develop its professional position and represent its interests in the preparation and implementation of the relevant developments.

We have classified the transport projects under public responsibility into three categories (highly recommended, recommended, recommended long-term) according to our proposal for implementation. The main considerations for the categorisation were to build on the results obtained by the evaluation methodology, to link with projects under the competence of the Municipality of Budapest, to strengthen synergies and to enhance social utility.

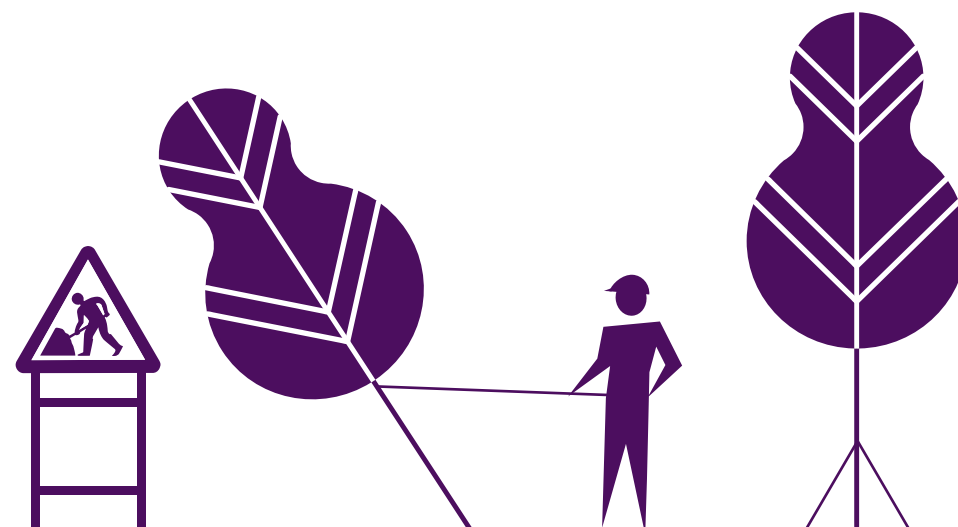
#	ID	Project name	Category
1.	P0269	Establishing a national rail freight concept and delineation of the route of the railway line V0 bypassing Budapest to the south and obtaining its environmental permit	Highly recommended
2.	P0235	Solving problems that slow down rail traffic and can be addressed with minor sectional intervention	Highly recommended
3.	P0241	Short-term development of Ferencváros station	Highly recommended
4.	P0233	Increasing the number of stations and line sections under centralised traffic management, Central Traffic Control and Monitoring extension to the whole of Budapest and the agglomeration	Highly recommended
5.	P0237	Short-term development of Keleti railway station	Recommended
6.	P0231	New urban park as part of the new urban district on the site of the Rákospuszta railway station	Recommended
7.	P0246	Long-term development of Kőbánya-Kispest station	Recommended
8.	P0230	Development of the Kelenföld Danube promenade	Recommended



9.	P0234	Creating policies and development plans for the development of railway information system and service and additional specific applications	Recommended long-term
10.	P0249	Capacity building needed in the Ferencváros area	Recommended long-term
11.	P0251	Further capacity increase on the 80a railway line	Recommended long-term
12.	P0334	South Pest green corridor and cycle path - Construction of a cycle path linking Csepel, Soroksár and District 18	Recommended long-term
13.	P0242	Long-term development of the inner railway ring	Recommended long-term
14.	P0245	Kelenföld station and area - providing turnaround capacity	Recommended long-term

15.	P0247	Horog utca junction construction, infrastructure development	Recommended long-term
16.	P0253	Further capacity increase on the 120a railway line	Recommended long-term
17.	P0256	Expanding the traction power supply system as needed to cope with growing traffic	Recommended long-term
18.	P0244	Kelenföld station and area - providing transit capacity for trains	Recommended long-term
19.	P0255	Installation of suburban vehicle preparation, maintenance and storage functions at suburban turnaround stations	Recommended long-term

Table 13: Proposal for project ideas under public (Hungarian State) competence



4

IMPLEMENTATION OF THE TRANSPORT DEVELOPMENT AND INVESTMENT PROGRAMME



4.1 ACTION PLAN FOR THE IMPLEMENTATION OF THE TRANSPORT DEVELOPMENT AND INVESTMENT PROGRAMME

The Action Plan summarises the operational steps to be taken to implement the improvements included in the transport development and investment programme. The action plan sets out the necessary actions from the perspective of the Budapest Municipality and its agencies, in line with the time-frame and pace of the investment programme. The projects coordinated by the Municipal Institutions are linked to the Municipality's departments and their preparation and implementation will depend on the nature and circumstances of the project (e.g. the project preparation organisation or funding opportunities).

In the case of public projects, the Budapest transport governance system is involved as a stakeholder in the processes, both in the preparation and implementation phases, which essentially requires continuous cooperation with governmental bodies and other partner organisations.

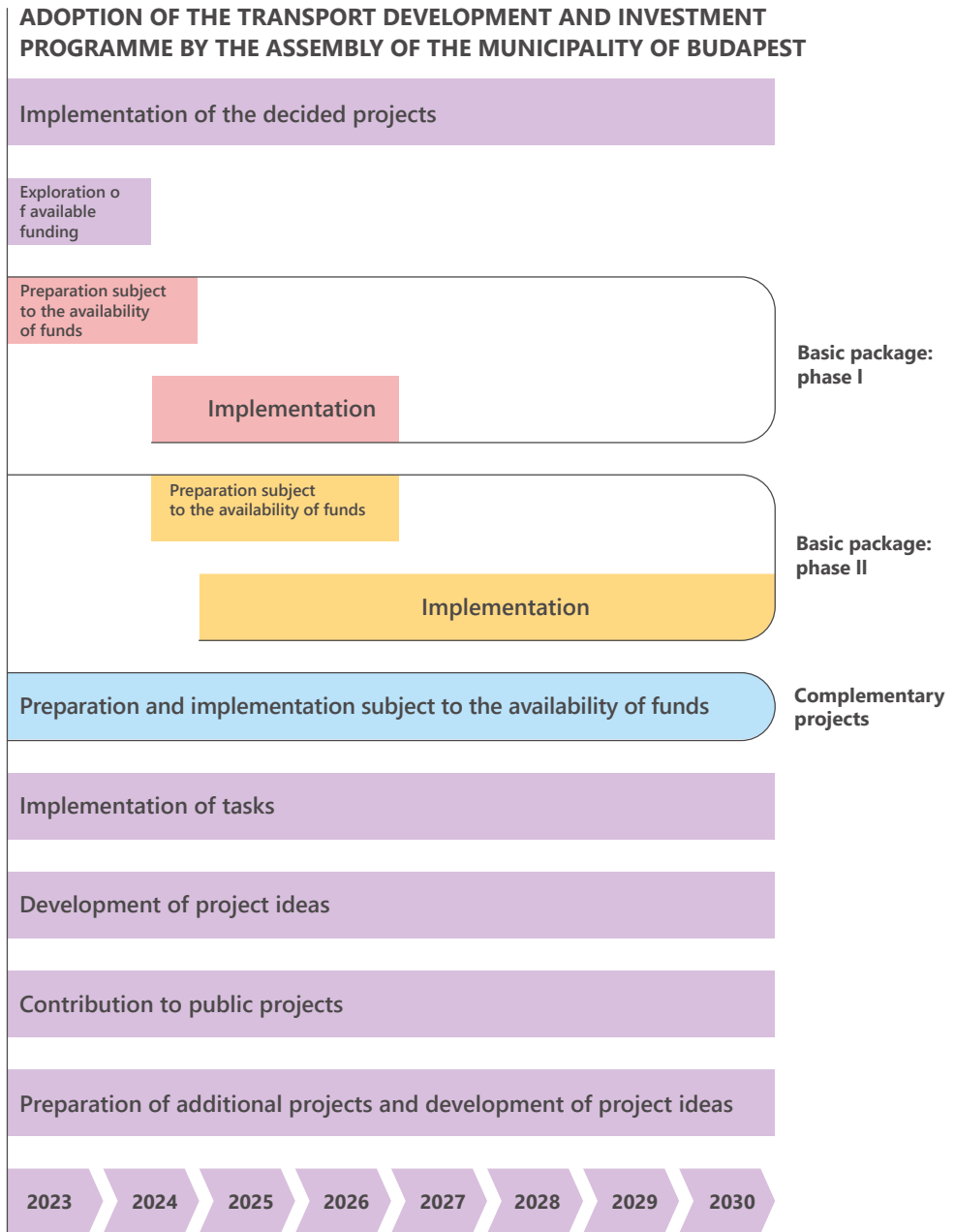


Figure 10: Implementation schedule of the Transport Development and Investment Programme

4.2 COST AND FINANCING PLAN

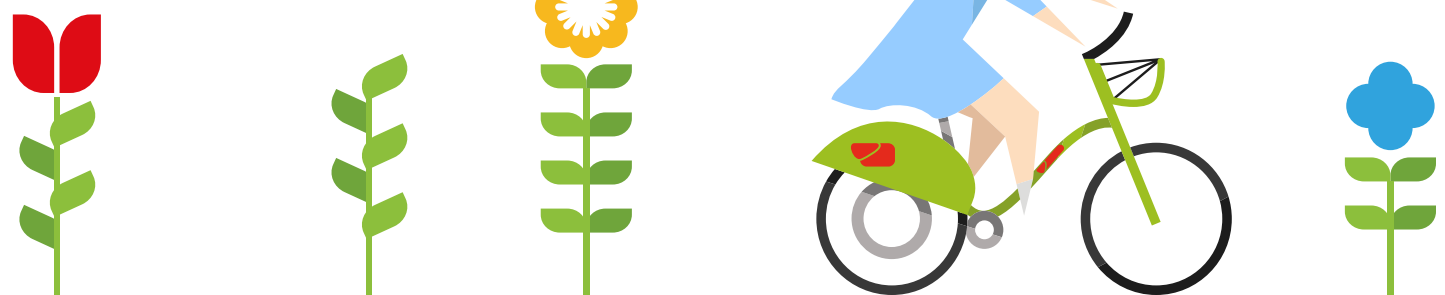
The purpose of the cost and financing plan is to summarise and evaluate the financial impact of the transport development and investment programme. This means identifying both the investment cost requirements and the impact on operating costs.

Based on the experience of the past years (2014 - 2022), the resources of the Budapest transport system specifically for development purposes were available in the order of HUF 150 billion / 5 years. This amount includes all development type national and EU funds, but excludes operation, maintenance and renovation (reconstruction) funds.

The total estimated investment cost requirements of the transport development and investment programme for the metropolitan institutional system are presented in Table 14 for the different funding packages.

	Basic package	Additional package	Full package
	[million HUF]		
Total projects decided	-	-	127 000
Total mission-oriented projects	-	-	260 000
Total for Phase I (2023-2026)	110 000	-	-
Total Phase II (2025-2030)	350 000	-	-
Total investment cost requirement	460 000	520 000	387 000

Table 14: Estimated investment cost requirements for projects in the transport development and investment programme under the responsibility of the Budapest institutions



The total investment cost of the decided Budapest projects is around HUF 130 billion. The total cost of the task-oriented projects up to 2030 is in the order of HUF 265 billion. The proposed project packages include development portfolios of HUF 110, 350 and 520 billion per phase, in line with the assumed funding envelope. The total investment costs of the decided projects, the task-oriented projects and the projects managed by the Budapest institutions proposed for implementation amount to approximately HUF 1380 billion up to 2030. This is complemented by a set of state-decided projects and additional development projects of metropolitan relevance, also managed by public institutions.

Budapest Municipality intends to use EU funding from the 2022-2027 EU budget cycle as a priority to finance the project packages. Based on the nature and content of the projects, the most relevant EU funds to be considered are the Integrated Transport Operational Programme Plus (ITS Operational Programme Plus) and the Operational Programme for Territorial Development (TOP Plus), as well as the Connecting Europe Facility (CEF) funds for transport infrastructure. The use of the

Recovery and Resilience Instrument (RRF) will depend on the future content of the calls for proposals, but the EU's adopted document indicates that this support is more focused on interurban and suburban transport development. In addition to EU grants and funds, project financing through borrowing or own resources is a possible option, especially for smaller-scale, task-oriented projects.



4.3 RISK MANAGEMENT PLAN

The purpose of the risk management plan is to identify the risk factors that could potentially threaten the achievement of the BMT's objectives, to assess them in terms of their likelihood and expected consequences, and to identify the most important steps for risk management on this basis. The risk management strategy will help to prevent impacts that could jeopardise the achievement of the objectives and to mitigate adverse impacts if they occur. The risk management plan also provides feedback to the investment programme, because if the risk event is attributable to a specific project or set of projects, and the chosen or expected risk management measure is to reject the risk event, the project may be removed from the investment programme or may need to be redesigned to reduce the risks, regardless of the programming.

The identification and assessment of potential risk factors is based on expert assessment, primarily based on the experience of previous similar metropolitan strategic

plans (e.g. the Budapest Mobility Plan adopted in 2019) and project-level developments. Considering that it is not possible to draw empirical conclusions for all risk factors, the risk management plan uses conservative, pessimistic ex-ante estimates based on the SUMP guidance, as these often prove to be realistic ex-post based on domestic experience.

The risk factors identified for BMT, their probability of occurrence, the expected impact of their occurrence and the severity level assigned to the risk elements based on these - and the risk tolerance in the Budapest institutional environment - are presented in Table 15 (Risk Element Classification) and Table 16 (Risk Matrix).



Risk event name	Impact of the occurrence of a risk	Probability of occurrence	Extent of impact	Risk level
Risk group 1: Risks related to preliminary expert estimates				
1. Investment cost increase	Threat to social returns	D	IV	high
2. Operating cost increase	Threat to social returns, need for additional operating costs	D	IV	high
3. Radical changes in socio-economic structures	Threats to social returns and strategic fit	C	IV	high
4. Radical change in transport behaviour	Threats to social returns and strategic fit	B	IV	low
Risk group 2: Legal and institutional risks				
5. Changes to the institutional system	Delay, preparation difficulties	C	III	moderate
6. Difficulties of institutional cooperation	Threat to social returns, negative impact on users	C	III	moderate
7. Human capacity, availability of competences	Delay, preparation and quality problems	B	III	moderate

Risk event name	Impact of the occurrence of a risk	Probability of occurrence	Extent of impact	Risk level
8. Changes in the legislative and regulatory background	Delay, becoming impossible	C	III	moderate
9. Changes to public procurement rules	Delay, becoming impossible	C	III	moderate
10. Changes to aid rules	Delay, becoming impossible	C	IV	high
Risk group 3: Process organisation and management risks				
11. Preparation difficulties	Delay, quality problems	B	III	moderate
12. Schedule changes, difficulties in project linkages	Delay, uncertain impact on the results of preliminary estimates, possibly failure	D	III	high
13. Difficulties in licensing procedures	Delay, becoming impossible	B	III	moderate
14. Difficulties of land acquisition and planning	Delay, becoming impossible	C	IV	high

Risk event name	Impact of the occurrence of a risk	Probability of occurrence	Extent of impact	Risk level
15. Difficulties in obtaining specialised equipment	Delay, cost increases, becoming impossible	B	IV	moderate
16. Labour shortages during construction	Delay, cost increases, quality problems	D	III	high
17. Quality problems in the execution	Delay, negative impact on users	C	III	moderate
Risk group 4: Financial and economic risks				
18. Significant changes in macroeconomic factors	Lack of resources, failure	B	IV	low
19. Changes in aid schemes	Increase in own cost requirements, inability to pay	C	IV	high
20. Availability of own funding	Delay, becoming impossible	C	IV	high
21. Difficulties in securing operating and maintenance costs	Quality problems, negative impact on users	D	III	high

Risk event name	Impact of the occurrence of a risk	Probability of occurrence	Extent of impact	Risk level
Risk group 5: Technical risks				
22. Technical difficulties due to complexity of implementation	Delay, cost increases, quality problems	C	III	moderate
23. New technology or difficulties caused by technology change	Delay, cost increases, quality problems, becoming impossible	B	III	moderate
24. Weather-related difficulties	Delay, cost increases, quality problems	B	III	moderate
25. Ensuring traffic during construction	Delay, negative impact on users	C	III	moderate
26. Slower than planned implementation of vehicle procurement	Delay, cost increases, operational problems, negative impact on users	C	III	moderate
Risk group 6: Social risks				
27. Social acceptance	Delay, becoming impossible	B	III	moderate

Table 15: Classification of risk factors according to their probability of occurrence or impact

Risk impact / probability	I negligible impact	II low impact	III moderate impact	IV critical impact	V disastrous impact
A Negligible probability (0-10%)					
B Low probability (10-33%)			7, 11, 13, 23, 24, 27	4, 15, 18	
C Medium probability (33-66%)			5, 6, 8, 9, 17, 22, 25, 26	3, 10, 14, 19, 20	
D High probability (66-90%)			12, 16, 21	1, 2	
E Regarded as a certainty (90-100%)					

To address the risks identified in the risk analysis, it is proposed to implement the measures in Table 17, which will help to prevent or mitigate risk levels.

Table 16: Risk matrix

Risks	Risk level	Risk management strategy
1. Investment cost increase	high	Mitigation/prevention: reliable and realistic quantity surveying; comparative analysis of costs of previous works of similar volume and subject matter; careful competitive tendering; sharing risks with the contractor based on their ability to control uncertainty, setting a reserve margin
2. Operating cost increase	high	Mitigation/prevention: a broad benchmark for estimation; continuous cost control during operation
3. Radical change of socio-economic structures	high	Mitigation/prevention: careful advance planning
4. Radical change of transport habits	low	Mitigation/prevention: careful advance planning
5. Institutional system changes	moderate	Adoption
6. Difficulties of institutional cooperation	moderate	Mitigation/prevention: continuous consultation with the ordering body of regional services and other stakeholders

Risks	Risk level	Risk management strategy
7. Human capacity, availability of competences	low	Adoption
8. Changes in the legislative and regulatory background	moderate	Adoption + timely preparation
9. Changes to public procurement rules	moderate	Adoption + timely preparation
10. Changes to aid rules	moderate	Adoption + timely preparation
11. Preparation difficulties	moderate	Mitigation/prevention: timely preparation, proper planning, use of an independent procurement expert, careful adherence to procedures,
12. Scheduling changes, difficulties in project linkages	high	Mitigation/prevention: identifying potential barriers; stakeholder involvement; preparation of an organisational plan, high penalty for late performance; continuous monitoring
13. Difficulties in licensing procedures	moderate	Mitigation/prevention: ongoing consultation with authorities
14. Difficulties of land acquisition and planning	high	Mitigation/prevention: proper planning and preparation, ongoing consultation with stakeholders

Risks	Risk level	Risk management strategy
15. Difficulties in obtaining specialised equipment	moderate	Mitigation/prevention: proper preparation, extensive benchmarking
16. Labour shortages during construction	high	Adoption + timely preparation
17. Quality problems in the execution	moderate	Mitigation/prevention: strict on-site supervision; checking of compliance with official standards
18. Significant changes in macroeconomic factors	low	Adoption
19. Changes in aid schemes	high	Adoption + timely preparation
20. Availability of own funding	high	Mitigation/prevention: advance financial planning
21. Difficulties in securing operating and maintenance costs	high	Mitigation/prevention: advance financial planning
22. Technical difficulties due to complexity of implementation	moderate	Mitigation/prevention: proper planning and preparation

Risks	Risk level	Risk management strategy
23. New technology or difficulties caused by technology change	moderate	Mitigation/prevention: proper planning and preparation
24. Weather-related difficulties	moderate	Adoption
25. Ensuring traffic during construction	moderate	Mitigation/prevention: proper planning and preparation
26. Slower than planned implementation of vehicle procurement	moderate	Mitigation/prevention: proper preparation, continuous exploration of funding opportunities
27. Social acceptance	moderate	Mitigation/prevention: informing the public and ensuring its maximum involvement in the process (participation)

Table 17: Risk management strategy

5

LONG LIST OF POTENTIAL PROJECTS



(without deleted projects, sorted by ID)

Project ID	Name	Type	
P0002	Extension of tram line 1 to Etele tér (IKOP-3.1.0-15-2016-00007)	Implemented project	
P0004	Extension of tram line 3 westwards through Kassai tér (Angyalföld, Árpád bridge) and construction of Szegedi út overpass	Public project	
P0005	Preparation and implementation of the southern extension of tram line 3 up to the Gubacsi híd (Pesterzsébet section)	2023-2026 Preparation	2025-2030 Realisation
P0006	Extension of tram line 42	2023-2026 Preparation	2025-2030 Realisation
P0008	Rákospalota-Újpest - Veresegyház - Vác railway line bottleneck replacement	Public project	
P0009	Northbound extension of tram line 2	Project idea	
P0012	Making the road network in urban areas more bicycle-friendly, increasing road safety	Task-oriented project	

Project ID	Name	Type
P0013	Implementation of the conditions for waterborne public transport in the capital and the suburbs - development of local and agglomeration riverboat services, development of piers, improving their accessibility, acquisition of vehicles with storage and maintenance depot, procurement of boats	Project idea
P0015	Prioritisation of public transport vehicles with traffic management solutions	Task-oriented project
P0018	Development of a network of city logistics loading areas in Budapest	Complementary project
P0019	Regulation concept for public space use for transport in Budapest	Task-oriented project
P0021	Entry into service of 300 electric buses in Budapest by 2035	Project idea
P0022	Regulation and complex management of public transport and shared mobility services, integration of shared mobility into public transport	Task-oriented project
P0023	Improvement of uniform taxi services in Budapest (emission reduction, taxi rank use)	Task-oriented project

Project ID	Name	Type
P0024	Developing modal shift options - B+R parking	Decided project
P0025	Complex renovation of public spaces in Blaha Lujza tér	Implemented project
P0026	Further development of the public bike-sharing system	Implemented project
P0030	Development of a rail link to Budapest Liszt Ferenc International Airport	Public project
P0033	Establishment of a Budapest road traffic accident data collection, processing and storage system	Task-oriented project
P0034	Procurement of trams, Phase III (optional 51 CAF-type trams)	Decided project
P0035	Budapest, District 21, Csepel trunk road (Teller Ede út)	Complementary project
P0036	Southern Railway Ring Phase I - Reconstruction of the Southern Danube railway bridge	Implemented project
P0038	Renovation of the H6/H7 HÉV suburban railway lines, connection to Kálvin tér (southern section of the north-south regional rapid railway)	Public project
P0039	Connection of H5 and H6/H7 HÉV lines between Kaszásdűlő - Kálvin tér (north-south regional rapid railway city-centre section)	Public project

Project ID	Name	Type
P0040	H5 HÉV line renewal (Batthyány tér - Szentendre) (northern section of the north-south regional rapid railway)	Public project
P0043	Southern Railway Ring Phase II - Kelenföld and Ferencváros line capacity extension, development of suburban stops and construction of new stops	Decided project
P0044	Preparation of a study to define the framework for sustainable and predictable normative funding of the Budapest transport system	Project idea
P0045	Improving road access to Budapest Liszt Ferenc International Airport	Public project
P0046	Upgrading and extension of the Cogwheel Railway (tram line 60) in both directions - implementation	Complementary project
P0047	Construction of the new Danube bridge on Galvani út and the associated transport network	Public project
P0050	Purchase of HÉV vehicles (59 trainsets)	Public project
P0051	Development of demand-driven public transport services in Budapest (BKK Telebusz)	Complementary project

Project ID	Name	Type
P0052	Dynamic IT system in urban transport management - IT system development for digital service change management	Task-oriented project
P0053	Further development of cooperation in Budapest and agglomeration transport management (BKK - Budapest Municipality - Ministry of Transport)	Task-oriented project
P0057	Kelenföld - Pusztaszabolcs railway line Phase I (Kelenföld - Százhalombatta section upgrade)	Implemented project
P0063	Developing a sustainable city logistics policy for Budapest	Complementary project
P0064	BKK's complex road and infrastructure renewal programme 2022-2023	Implemented project
P0067	Budapest, Kossuth Lajos utca - Rákóczi út complex renewal Phase I - reallocation of public spaces, bus corridor, tram line study	2025-2030
P0068	Kőbánya-Kispest - Lajosmizse - Kecskemét railway line bottle-neck replacement and electrification	Public project
P0069	Aquincum Danube bridge and associated road network (construction of the ring road along the railway ring, phase I between main road 10 - M3 motorway)	Public project

Project ID	Name	Type
P0070	Development of transport infrastructure along the railway ring (M3 motorway - Üllői út)	Project idea
P0071	Albertfalva Danube bridge and associated road network, with tram track (construction of the ring road along the railway ring, Phase IV) between Soroksári út - M6 access road)	Project idea
P0072	Construction of the ring road along the railway ring, Phase V (Albertfalva – Egér út)	Project idea
P0073	Development of transport infrastructure along the railway ring, Phase III (between Üllői út - Soroksári út)	Project idea
P0075	Implementation of BKK customer service centres	Implemented project
P0076	Establishment of a permanent exhibition venue in the capital	Project idea
P0079	for transport history and vintage vehicle collections	Task-oriented project
P0080	Road upgrades to overcome the railways' effect of land separation, and to improve transport links between settlement areas	Complementary project
P0081	Extension of the tram line along Külső Bécsi út (Vörösvári út - Aranyvölgy section) Implementation of transport improvements in the City Park	Public project

Project ID	Name	Type	
P0083	M0 ring road, northern sector (between main roads 10 and 11, 2x2 lanes)	Public project	
P0085	M0 ring road, western sector (between main roads 1 and 10, 2x2 lanes)	Public project	
P0086	Budapest, M1 metro line upgrade and two-way extension (Vörösmarty tér-Vigadó tér, Mexikói út-Marcheggi híd)	2023–2026 Preparation	2025–2030 Realisation
P0087	M1 metro line vehicle procurement (22 + 5 trains)	2025–2030	
P0088	M2 motorway (between Budapest and Vác, 2x2 lanes)	Public project	
P0089	Connection of metro M2 and H8/H9 HÉV at Örs vezér tér, renovation of H8/H9 HÉV lines (between Örs vezér tere and Cinkota)	Public project	
P0090	M2 metro - construction of a branch line from the H8/H9 HÉV line in Rákoskeresztúr	Public project	
P0092	M3 metro line infrastructure reconstruction	Implemented project	
P0093	Western extension of M4 metro line between Kelenföld - Budaörs, P+R extension	Project idea	

Project ID	Name	Type
P0096	Purchase of MÁV-START motor trains (IKOP-2.1.0-15-2017- 00039 and IKOP-2.1.0-15-2018-00051)	Decided project
P0098	Budapest, District 14, Nagy Lajos király útja development preparation (on the existing route, between Kassai tér and Bosnyák tér)	2025-2030
P0099	Buda Interconnected Tram Network, Phase III - Construction of the tram link between Margit Bridge and Szentendrei út, with complex reconstruction of the road sections concerned, construction of a bicycle axis, humanisation of Flórián tér, development of an intermodal hub (Kaszásdűlő)	Project idea
P0100	Reconstruction of the Petőfi Bridge	Task-oriented project
P0106	STARS project implementation	Implemented project
P0107	Implementation of the Újpalota tram line (between Újpalota - Astoria)	Project idea
P0108	Establishment of a regional transport management body to ensure coordination between urban and suburban transport	Project idea

Project ID	Name	Type	
P0110	Regulation of traffic and parking arrangements for tourist buses and related interventions (creation of drop-off and pick-up points, waiting and storage areas, preparation of regulation)	Task-oriented project	
P0111	Scheduled improvement of accessibility of tram stops	Task-oriented project	
P0112	Connecting tram lines between Deák Ferenc tér and Lehel tér, preparation and implementation	2023–2026 Preparation	2025–2030 Realisation
P0113	Budapest, District 22, complex renewal of Városháza tér	2025–2030	
P0114	Complex renovation of Széna tér in the area of the discontinued bus station	Implemented project	
P0118	District 17, connection of Cinkotai út and Keresztúri út	2025–2030	
P0119	Reconstruction of pedestrian underpasses and surface exits connected to the stations of the M3 metro line	2025–2030	
P0129	Buda Interconnected Tram Network, Phase II - Construction of the line linking Gellért tér to Budafoki út	Public project	

Project ID	Name	Type
P0132	Refurbishment of District 11, Péterhegyi út (Egér út - Neszmélyi út) and Neszmélyi út (Péterhegyi út - Balatoni út)	Implemented project
P0133	District 6, Podmaniczky utca (Bajcsy Zsilinszky út - Teréz körút) complex renovation	Implemented project
P0138	Districts 10-17, Keresztúri út overpass reconstruction	Task-oriented project
P0144	Accessibility of tram line 50 stops (District 18, between Kossuth tér - Ungvár utca)	Task-oriented project
P0145	Selmeci utca, Margit hospital platform accessibility	Implemented project
P0153	Construction of elements of the Budapest Hungária Ring (B20) bicycle highway	2025–2030
P0154	XI. district Replacement of existing noise barrier wall on Szerémi út (between Budafoki út and Dombóvári út)	Task-oriented project
P0155	Complex renewal of the Grand Boulevard - traffic calming, improving conditions for active transport, greening, humanisation	Project idea
P0162	Budapest Gubacsi road bridge reconstruction	Complementary project
P0163	District 2, complex reconstruction of Pasaréti út	Implemented project

Project ID	Name	Type
P0165	Double-track connection of trams 2 and 51 in the Közvágóhíd area (junction of Kvassay Jenő út - Soroksári út)	Project idea
P0167	Construction of M3 Motorway noise barrier wall	Implemented project
P0171	Budapest trolleybus procurement phase IV (40 vehicles)	Complementary project
P0172	Development of about 13 km of cycle path along the Szilas stream	Complementary project
P0175	Redevelopment of public spaces on the Buda upper embankment: Fő utca and its squares, Felhéz; renewal of Bem József tér in several phases (DUNA-BUDA)	2025–2030
P0177	Budapest-Kelenföld station-house renovation	Public project
P0178	Implementation of P+R parking in phases within the administrative boundaries of Budapest	Task-oriented project
P0179	Budapest tram and trolleybus rolling stock project, Phase II (acquisition of 26 CAF trams + equipping of 73 trams with radio switch-control + accessibility of 4 tram stops on line 50)	Implemented project
P0183	Modernisation of the existing section of Budapest tram line 2 (between Jászai Mari tér and Közvágóhíd)	Complementary project

Project ID	Name	Type
P0186	Accessibility of tram stops on line 56-56A (between Dózsa György tér - Hűvösvölgy terminus)	Task-oriented project
P0187	South Buda Central Hospital (DBC) accessibility development	Public project
P0190	Renovation of the Castle Tunnel	Task-oriented project
P0192	Introduction of low emission zones (LEZ), regulatory concept	Project idea
P0193	Conditions for automated vehicle traffic, definition of necessary infrastructure conditions	Project idea
P0199	Construction of a through railway station and a railway tunnel between Kelenföld and Nyugati stations	Public project
P0200	Reconstruction of railway facilities related to the development of the Gubacsi railway bridge and the Danube Free Port of Csepel Island	Public project
P0202	Operation and development of the Unified Traffic Model	Task-oriented project
P0203	Construction of a road linking the outlying districts of Pest, connecting the M31 - M51 motorway areas	Project idea
P0206	Establishing the development and regulatory environment for the Budapest e-charging infrastructure	Project idea

Project ID	Name	Type
P0207	Extension of the Budapest M3 metro line from Újpest-központ to Káposztásmegyer, with related interventions	Complementary project
P0208	Renovation of Orczy ér, improvement of public spaces	2025-2030
P0209	Renewal of H8 HÉV suburban railway Budapest-Cinkota - Gödöllő and H9 HÉV line Budapest-Cinkota - Csömör – Kavicsbánya-elágazás sectionsl	Public project
P0210	Road Rehabilitation Programme 2022-2023 of Budapest Közút Zrt.	Task-oriented project
P0211	Road Rehabilitation Programme 2024-2029 of Budapest Közút Zrt.	Task-oriented project
P0212	Traffic engineering measures - improving pedestrian crossings, increasing traffic safety, traffic alignment corrections, new bus lanes	Task-oriented project
P0213	Bridge and structure renovations 2021-2025	Task-oriented project
P0214	Complex renovation of the Szilágyi Erzsébet fasor on the border of Districts 2 and 12	Task-oriented project
P0215	Renovation of Rózsa utca	Implemented project

Project ID	Name	Type
P0216	Complex renovation of the lower embankment between Kossuth Lajos tér - Havas utca (RAK-PARK)	2023-2026
P0217	Eastern extension of M4 metro line - Budapest-Keleti railway station - M3 motorway area, P+R construction	Project idea
P0218	Pest Interconnected Tram Network: connecting the tram lines of Népszínház utca to the Rákóczi út tram line, and the Rákóczi út tram to the inner-city ring tram lines, and improving accessibility of the Astoria junction	Project idea
P0219	District 9: Complex renovation of Mester utca (Ferenc krt. - Haller utca)	Task-oriented project
P0220	Improving bus transport in the Zsámbék Basin - Budakeszi bus lane and related infrastructure interventions	Public project
P0221	Provision of P+R and B+R parking spaces at stops and stations of commuter railway lines to facilitate modal shift	Public project
P0222	Redevelopment of Budapest-Nyugati railway station, building construction and environmental planning tasks	Public project

Project ID	Name	Type
P0223	Kőbánya felső - Rákosliget reconstruction and bottleneck replacement	Public project
P0224	Kelenföld intermodal junction: implementation of the bus terminal at the Kelenföld intermodal junction and extension of the P+R parking facilities	Public project
P0225	Design and construction of a pedestrian and cycle bridge between Gróf Esterházy János rakpart and Óbuda Island and the design of a double-deck road bridge between Mozaik utca - Óbuda Island, with demolition of the existing H-bridge	Public project
P0226	Renewal of the public space of the lower embankment in Pest: renewal of Salkaházi Sára rakpart and Közraktár utca	Public project
P0227	Introduction of an integrated metropolitan agglomeration fare system	Public project
P0228	Construction of missing railway stops and interchanges on the Budapest agglomeration railway network (Pestújhely, Újpalota, Rákosszentmihály, Rákosfalva, Albertfalva)	Public project
P0230	Development of the Kelenföld Danube promenade	Project idea

Project ID	Name	Type
P0231	New urban park as part of the new urban district on the site of the Rákosrendező railway station	Project idea
P0233	Increasing the number of stations and line sections under centralised traffic management, , Central Traffic Control and Monitoring extension to the whole of Budapest and the agglomeration	Project idea
P0234	Creating policies and development plans for the development of railway information system and service and additional specific applications	Project idea
P0235	Solving problems that slow down rail traffic and can be addressed with minor sectional intervention	Project idea
P0237	Short-term development of Keleti railway station	Project idea
P0241	Short-term development of Ferencváros station	Project idea
P0242	Long-term development of the inner railway ring	Project idea
P0244	Kelenföld station and area - providing capacity for through trains	Project idea
P0245	Kelenföld station and area - providing turnaround capacity	Project idea
P0246	Long-term development of Kőbánya-Kispest station	Project idea

Project ID	Name	Type
P0247	Horog utca junction construction, infrastructure development	Project idea
P0249	Capacity building needed in the Ferencváros area	Project idea
P0251	Further capacity increase on the 80a railway line	Project idea
P0253	Further capacity increase on the 120a railway line	Project idea
P0255	Installation of suburban vehicle preparation, maintenance and storage functions at suburban turnaround stations	Project idea
P0256	Expanding the traction power supply system as needed to cope with growing traffic	Project idea
P0258	Renewal of Budapest public transport traffic management and passenger information system (FUTÁR 2.0)	2023–2026
P0259	Improving passenger traffic at Budapest-Keleti and Budapest-Nyugati railway stations	Decided project
P0260	Budapest-Nyugati railway station building roof renovation	Implemented project
P0261	Modernisation of the passenger areas at Kőbánya also station	Public project

Project ID	Name	Type
P0262	Modernisation of the passenger areas of Kőbánya-Kispest railway station	Public project
P0263	Conversion of the Kis-Gellért Hill tunnel (for double-decker motorised trains) and improvements to increase capacity and accessibility and raise service levels at Déli Railway Station	Public project
P0264	Reconstruction of the section of railway line 150 between Soroksár and Ferencváros	Public project
P0265	Central traffic management on TEN-T railway lines (sections of lines 70, 80, 100a and 140)	Public project
P0266	Short-term development of Budapest-Nyugati railway station and its access sections	Public project
P0267	Removing bottlenecks and improving interoperability on the Budapest (Kelenföld) - Hegyeshalom line (CEF project)	Decided project
P0268	Competitive rail infrastructure development, Phase II, simplified modernisation of Városliget - Kőbánya-Kispest section, Vecsés station and Monor -Albertirsa sections	Public project

Project ID	Name	Type
P0269	Establishing a national rail freight concept and delineation of the route of the railway line V0 bypassing Budapest to the south and obtaining an environmental permit	Project idea
P0272	Southern Railway Ring, Phase III - construction of Népliget station and Ferencváros endpoint with separate railway level crossing	Public project
P0274	Kelenföld - Törökbálint railway line section bottleneck replacement	Public project
P0275	Procurement of Cogwheel Railway (tram line 60) vehicles (1 prototype and 7 production vehicles)	Complementary project
P0276	Infrastructure development for the 2022 trolleybus procurement (Phase III): power converter at the Pongrác út depot installation of an e-bus charging station with expansion capacity and upgrading of the power supply to the surrounding lines (BKV)	2023–2026
P0277	Upgrading of the existing trolleybus network with network extension, small-scale installation of power supply and overhead lines (BKV)	2023–2030
P0278	Purchase of BKV electric buses (40 single electric buses with charging infrastructure)	2025–2030

Project ID	Name	Type
P0282	Andrássy út komplex megújítása: forgalomcsillapítása, aktív közlekedés feltételeinek javítása, zöldítése, humanizálása	Project idea
P0283	Széchenyi láncíd felújítása	Implemented project
P0284	Széchenyi láncídhhoz kapcsolódó pesti oldali villamos- és közúti aluljáró felújítása árvízvédelmi és akadálymentesítési beavatkozásokkal	Task-oriented project
P0285	EMV alapú e-ticketing rendszer bevezetése	Project idea
P0286	BudapestGO I. – FUTÁR teljes körű megújításával egy integrált közlekedési app (utazástervezés, jegyvásárlás, aktuális járatinformációk), a BudapestGO bevezetése, MÁV-HÉV és MÁV-START integrációja és új típusú jegyek bevezetése	Implemented project
P0287	BudapestGO II. – Volánbusz-járatok integrációja, NFC-s jegyérvényesítés bevezetése, utazástervezés finomhangolása, akadálymentesség továbbfejlesztése	Decided project

Project ID	Name	Type
P0288	BudapestGO app III - enhancing customer experience and functionality, improving ticketing, integrating micromobility equipment, improving agglomeration and car functions, improving trip planning, better customer access and Information	Decided project
P0290	Renewal of the Budapest ticket vending machine (TVM) network	Implemented project
P0291	Budapest trolleybus procurement and related infrastructure development (IKOP-3.1.0-15-2017-00016)	Implemented project
P0292	Purchase of railway traction vehicles (90 dual-current and 25 triple-current electric locomotives)	Public project
P0293	Purchase of MÁV ticket vending machines (275+100)	Decided project
P0294	Further development of public bicycle-sharing system, Phase II (additional bike purchases, further expansion of service area)	Task-oriented project
P0295	Pedestrian and cycling network plan and related IT developments (GIS, database, service management)	Decided project

Project ID	Name	Type
P0296	City-wide awareness-raising campaigns to promote sustainable and safe mobility	Task-oriented project
P0297	Budapest, Üllői út - Váci út axis cyclist-friendly development with the construction of sections of the B3 bike highway	2023–2026
P0298	Construction of sections of the North Pest Bicycle Highways (B1, B3, B4)	2025–2030
P0299	Development of some elements of the main cycling network in North Pest	Complementary project
P0300	Construction of sections of the Buda Ring (B10) Bicycle Highway	Complementary project
P0301	Development of some elements of the main cycling network in North Buda	Complementary project
P0302	Development of the main cycle network in South Buda and elements of the B4 Bicycle Highway	2023–2026
P0303	Development of the main cycling network in South Pest and Csepel and elements of the B7 Bicycle Highway	2023–2026
P0304	Design of some elements of the East Pest Bicycle Highways (B2, B9, B30)	2023–2026

Project ID	Name	Type
P0305	Development of some elements of the main East Pest cycle network	Complementary project
P0306	Improving residential and destination cycle storage and parking	Project idea
P0307	Improving the cycleability of Elisabeth Bridge, Liberty Bridge	Task-oriented project
P0308	Expanding the possibility to transport bicycles on Budapest fixed-rail public transport vehicles	Task-oriented project
P0309	Development of an online platform for social participation	Task-oriented project
P0311	VEKOP 01/17: Development of infrastructure related to the Budapest public bike-sharing system in Districts 3 and 13	Decided project
P0312	VEKOP 02/13: Bicycle-friendly infrastructure improvements in District 19 of Budapest	Implemented project
P0313	VEKOP 03: Road safety and bicycle-friendly improvements in District 2 of Budapest	Implemented project
P0314	VEKOP 04: Road safety improvements in District 20 of Budapest	Decided project
P0315	VEKOP 06: Road safety and bicycle-friendly improvements in District 16 of Budapest	Implemented project

Project ID	Name	Type
P0316	VEKOP 07: Road safety and bicycle-friendly improvements in District 11 of Budapest	Decided project
P0317	VEKOP 08/18: Bicycle-friendly infrastructure improvements in District 4 of Budapest	Decided project
P0318	VEKOP 10/19: Road safety improvements in District 15 of Budapest	Decided project
P0319	VEKOP 11/14: Bicycle-friendly infrastructure improvements in District 10 of Budapest	Decided project
P0320	VEKOP 12/15: Construction of a cycle path along the Rákosszentmihály stream in District 13 of Budapest	Decided project
P0321	VEKOP 12/16: Construction of a cycle path along the Rákosszentmihály stream in Districts 14, 10 and 17 of Budapest	Decided project
P0322	Timetable interventions related to the Budakeszi út bus lane	Task-oriented project
P0323	Timetable interventions in the Budapest public transport service due to the new road connections in the Zsámbék Basin	Task-oriented project
P0324	Improvement of the connection of Dabas and its region to the capital by means services using the M5 motorway	Task-oriented project

Project ID	Name	Type
P0325	Reconstruction and upgrading of the existing public bus network along the 80a Budapest - Hatvan railway line	Task-oriented project
P0326	Review of the bus services on Csepel Island following the completion of the renovation works on the H6 HÉV suburban railway line in Ráckeve	Task-oriented project
P0327	Green Bus Fleet and Infrastructure Development Project in Budapest agglomeration	Decided project
P0328	Construction of third track between Keleti pu. - Kőbánya felső	Implemented project
P0329	Construction of Rákosszentmihály - Gödöllő railway and related facilities	Implemented project
P0330	Gödöllő - Hatvan railway line section track construction and related works	Implemented project
P0331	Rákosszentmihály - Hatvan railway line section construction works for signalling, telecommunications and ETCS2	Implemented project
P0332	Improving access to green (walking and cycle) routes in Budapest, creating missing sections, building a greenway network	Project idea

Project ID	Name	Type
P0334	South Pest green corridor and cycle path - Construction of a cycle path linking Csepel, Soroksár and District 18	Project idea
P0335	Construction of trolleybus overhead line network and power supply on the Baross utca - Üllői út - Kálvin tér route	Implemented project
P0337	Development of integrated passenger information, ticketing and traffic control services to improve the efficiency of public passenger transport services (HKIR)	Decided project
P0338	North-bound redevelopment of Pest embankment, Phase I: Kossuth tér - Jászai Mari tér	Implemented project
P0339	Development of EuroVelo 6 international cycle route, phase I - North Buda (13.3 km between the city border and the Chain Bridge)	Decided project
P0340	EuroVelo 6 international cycle route to Budapest, Phase II - South Buda, North Pest	2023-2026
P0341	Development of the Budapest section of the EuroVelo 14 international cycle route Budapest- Lake Balaton	2023-2026

Project ID	Name	Type
P0342	Construction of the new Transport Museum	Public project
P0343	Agglomeration Cycling Network Development Strategy (Cycling Suburb)	Task-oriented project
P0344	EuroVelo 6 international cycle route development, Phase III -Central Buda, Central Pest, South Pest (construction of sections not included in other projects)	Project idea
P0346	P+R+S - Establishing Park & Ride & Shop partnerships	Implemented project
P0347	Improving public transport on Gellért Hill	Project idea
P0348	Trolleybus procurement, Phase III (12 single + 36 articulated vehicles) 2021-2023	Implemented project
P0349	Complex development of Healthy Streets - creating human-centred, humanised public spaces through traffic calming, reallocation of public space, active transport modes, significant improvement of walking conditions	Task-oriented project
P0350	Creating safe main roads in Budapest - eliminating accident blackspots	Task-oriented project

Project ID	Name	Type
P0352	Modification of the traffic regime at the junction Rottenbiller utca - Rákóczi út - Fiumei út, with the demolition of the flyover	Project idea
P0353	Construction of noise barriers along the H5 suburban railway line in District 3	Project idea
P0354	District 10, Kőbányai út reconstruction between Orczy tér - Mázsza tér, and the accessibility of stops along the whole length of tram line 24, the inner sections of tram lines 28, 37 and 51	Project idea
P0355	Additional environmental planning tasks for the Southern Railway Ring, Phase II (along the railway line between Kelenföldi út and the Buda bridgehead)	Public project
P0356	Renovation of the K-bridge to Óbuda Island	Task-oriented project
P0357	Long-term spatial planning of the Népliget junction (Üllői út-Könyves Kálmán körút)	Task-oriented project
P0358	Renovation of the Ferdinand Bridge between Districts 6 and 13, with cycle lanes	Task-oriented project
P0360	District 3: Flórián tér flyover renovation	Task-oriented project
P0361	Zugliget Chairlift refurbishment	Task-oriented project
P0362	Budapest, Renovation of Clark Ádám tér	2025-2030

Project ID	Name	Type
P0363	District 13, Göncöl utca renovation	Implemented project
P0364	District 18, Üllői út (Szarvas csárda tér - Béke tér) renovation	Decided project
P0365	Awareness raising / Customer experience enhancement	Implemented project
P0367	BKK's Equal Opportunities Plan (EET) for 2021-2024	Task-oriented project
P0368	Training programme on equal opportunities at BKK based on the Equal Opportunities Plan	Task-oriented project
P0369	Development of the IT system for the Budapest Mobility Plan	Task-oriented project
P0370	Budapest Road Safety Strategy and Road Network Plan	Decided project
P0371	The Budapest public transport vehicle strategy	Decided project
P0372	Budapest shared mobility concept	Task-oriented project
P0374	Reconstruction of the access section of railway line 70 to Budapest-Nyugati railway station	Public project
P0375	Construction of the Transport Museum train station	Public project

Project ID	Name	Type
P0376	Budapest MaaS Strategy and Action Plan	Task-oriented project
P0377	Budapest active and micromobility strategy	Decided project
P0379	Free taxi control - public fare meter, license plate check and complaint reporting application	Task-oriented project
P0380	Real-time taxi service data processing IT system	Task-oriented project
P0381	Continuous updating of the Budapest SUMP	Task-oriented project
P0382	Construction of the North-Buda road tunnel (between the bypass of the main road 10 and Hidegkúti út)	Project idea
P0385	300 new buses in Budapest with at least EURO 6 emission classification or alternative propulsion by 2026	Project idea
P0386	Purchase of 8 new metro trains with 6 cars for the line extension of M3 metro line to Káposztásmegyer	Complementary project
P0387	Tram depot upgrades for modern storage and maintenance	Project idea
P0388	Bicycle-friendly development of Budapest's inner-city areas	2023-2030
P0389	Accessibility of M2 metro stations	Project idea

Project ID	Name	Type
P0390	Network strategy for public transport in Budapest	Decided project
P0391	Trolleybus procurement for the Buda network development (50 single trolleybuses)	Complementary project
P0392	Budapest trolleybus procurement for the East Pest network development (35 articulated trolleybuses and 12 single trolleybuses)	Complementary project
P0393	Budapest trolleybus procurement for the North Pest network development (64 articulated trolleybuses and 16 single trolleybuses)	Complementary project
P0394	Budapest trolleybus procurement for the Rákóczi-Thököly út network development (56 articulated and 11 single trolleybuses) Phase I	2025-2030
P0395	Trolleybus network development in Buda with the conversion of the Istenhegyi út and Bimbó út bus lines into trolleybus lines	Complementary project
P0396	Development of the East Pest trolleybus network by converting part of the Jászberényi út bus lines into trolleybus line	Complementary project
P0397	Development of the trolleybus network in North Pest by converting the Reitter Ferenc utca and Árpád út bus lines into trolleybuses	Complementary project

Project ID	Name	Type
P0398	Upgrading of the trolleybus network by converting the Rákóczi-Thököly út bus lines into trolleybus lines - Phase I	2025–2030
P0400	Tram procurement, Phase IV - (5-)23 long trams, if no long tram is called from the CAF option	Project idea
P0401	Tram procurement, Phase V - 65 short trams (Ganz replacement)	Project idea
P0402	Tram procurement, Phase VI - Purchase of 50 short trams (replacement of remaining Hanover trams)	Project idea
P0403	Tram procurement, Phase VII - purchase of 50 short trams to serve the rolling stock needs of the new tram developments	Project idea
P0404	Preparation of BKK road and infrastructure renovations planned between 2024-2030	Task-oriented project
P0405	BKK road and infrastructure renovations planned between 2024-2030	Task-oriented project
P0406	Pilot introduction of contactless (NFC) payment in Budapest public transport	Decided project

Project ID	Name	Type
P0407	Accessibility of pedestrian underpass and surface exits at Göncz Árpád városközpont station related to reconstruction of the M3 metro line	2023–2026
P0408	Improving storage capacity related to trolleybus procurements	Project idea
P0409	Infrastructure improvements related to tram procurement (upgrading of depots, line infrastructure and power supply)	2023–2026
P0410	Full digitisation of ticket inspection activity	Decided project
P0411	Dynamic IT in urban transport management - IT system developments for digital management of service and traffic planning data	Decided project
P0412	Developing modal shift options - deployment of micromobility points, mobility points, mobility stations, bicycle stands	Decided project
P0413	Tram development on Budafoki út	Project idea
P0414	Kőbánya-City Centre-Óbuda new trolleybus infrastructure (replacement of bus line 9)	2025–2030

Project ID	Name	Type
P0415	Purchase of trolleybuses for the construction of the new Kőbánya-City Centre-Óbuda trolleybus network (replacement of bus line 9) - 25 trolleybuses	2025–2030
P0416	Rákoskeresztúr központ, Pesti út public transport corridor development and related investments	Project idea
P0417	Mobility data warehouse - developing predictive transport intelligence	2023–2026
P0418	Improvement of the Budapest tram network - fitting of vehicles with radio switch-control equipment	2023–2026
P0419	Trolleybus procurement for the Rákóczi-Thököly út network development (56 articulated and 11 single trolleybuses), Phase II.	2025–2030
P0420	Trolleybus network development in Budapest by converting the Rákóczi-Thököly út bus lines into trolleybus lines, Phase II	2025–2030

GLOSSARY OF TERMS, ABBREVIATIONS

- BKK:** short name for BKK Centre for Budapest Transport
- BMB:** Balázs Mór Committee, the institutional consultation forum for the Mobility Plan
- BMT:** Budapest Mobility Plan (formerly known as the Balázs Mór Plan)
- EFM:** the Unified Traffic Model for the Budapest city-region
- FKT:** Budapest Council for Public Development
- IT:** information technology, a set of tools and methods for machine-based data processing
- SEA:** Strategic Environmental Assessment
- SUMP:** Sustainable Urban Mobility Planning/Plan

CONCEPTS, TERMS, EXPLANATIONS -
IN THE CONTEXT OF THE BMT:

- public (state-run) project**
a set of projects of relevance for Budapest from a transport point of view, but coordinated by state-governmental organisations rather than municipal institutions
- overarching goal**
the overarching goal of the BMT objectives
- intervention areas**
the four intervention areas of the BMT objectives
- BMT application**
a tool developed by BKK for the registration, retrieval and evaluation of transport development projects in the BMT concerning Budapest and its metropolitan area, as well as for the management of indicators measuring the achievement of the BMT objectives

city logistics

urban freight transport management, organisation of trade-related traffic to reduce environmental impact

decided project

a project with funding for implementation or in the implementation phase

liveable city

an urban environment that is considered liveable by its inhabitants; a set of criteria and requirements that encompasses the human dimension of urban planning and related transport planning

tasked-oriented project

projects that are linked to statutory obligations, maintenance or depreciation replacement activities and do not involve substantial improvements (e.g. conventional road rehabilitation works)

municipal coordinated projects

projects coordinated by the municipal transport system (Budapest Municipality and its organisations)

long list

list of all possible projects identified in principle in the context of the BMT, subject of programming

demand-driven services

a flexible transport system(s) where, unlike traditional public transport services, the timetable and/or route is determined according to the current (changing) travel needs of passengers within a predefined framework.

intermodal

a combination of different transport modes in an optimal travel chain in terms of environment, economy and travel time

indicative project list

the BMT's preliminary long list of BMT Objectives and measures produced as part of the volume

measures

a set of tasks assigned to strategic objectives in the BMT objectives framework to help achieve a given objective. A single measure may be supported by the implementation of several projects. From an operational objective perspective, a means to achieve the objective, from a project perspective, a goal.

KO criterion

a threshold value set for a given project evaluation method, below which the project is excluded from the study, and the study is counted as 0 points in the composite score

MaaS

mobility as a service, the interpretation of transport as a service in the context of the BMT, focusing on its service pillar and taking this into account in planning

completed project

projects implemented since the adoption of the BMT in 2019

modal split

share of utilisation of each mode of transport

operational objectives

11 operational objectives included in the BMT objectives framework

programming

project scheduling in line with available funding

project

a defined development concept with transport relevance for the achievement of a specific objective

project datasheet

a document that provides a single overview of project-related data, including key descriptive information on projects

project package

a scheduled set of projects, taking into account the resource envelope for each phase

project ID

a four-digit identification number used to identify projects

project idea

a project with a low level of preparation (project concept)

P+R, B+R

park/bike and ride, a parking area for cars or bicycles for combined travel near a public transport transfer point

shortlist

the contents of the proposed project package resulting from the programming

stakeholders

relevant actors (e.g. societal) with an interest in strategic planning strategic objectives: the 3 strategic objectives of the BMT's objectives

strategic guidelines

a set of strategic guidelines for the design of the transport structure

long-term developments

the range of projects scheduled for programming outside the BMT timeframe (after 2030)

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Table 17.

Risk management strategy

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IMPRESSZUM

Budapest Mobility Plan Volume II, Transport Development and Investment Programme

The plan was prepared by BKK Centre for Budapest Transport for the Municipality of Budapest on the basis and revision of the Budapest Mobility Plan Volume I (Objectives and Measures) and the Budapest Mobility Plan Volume II (Transport Development and Investment Programme) approved by the General Assembly of the Municipality in 2019. The Budapest Mobility Plan is a SUMP framework document for transport development in the period 2022-2030, dynamically aligned with sustainable urban development, in which the scope of the projects evaluated may vary according to the objectives based on the BMT methodology laid down.

Responsible publisher:

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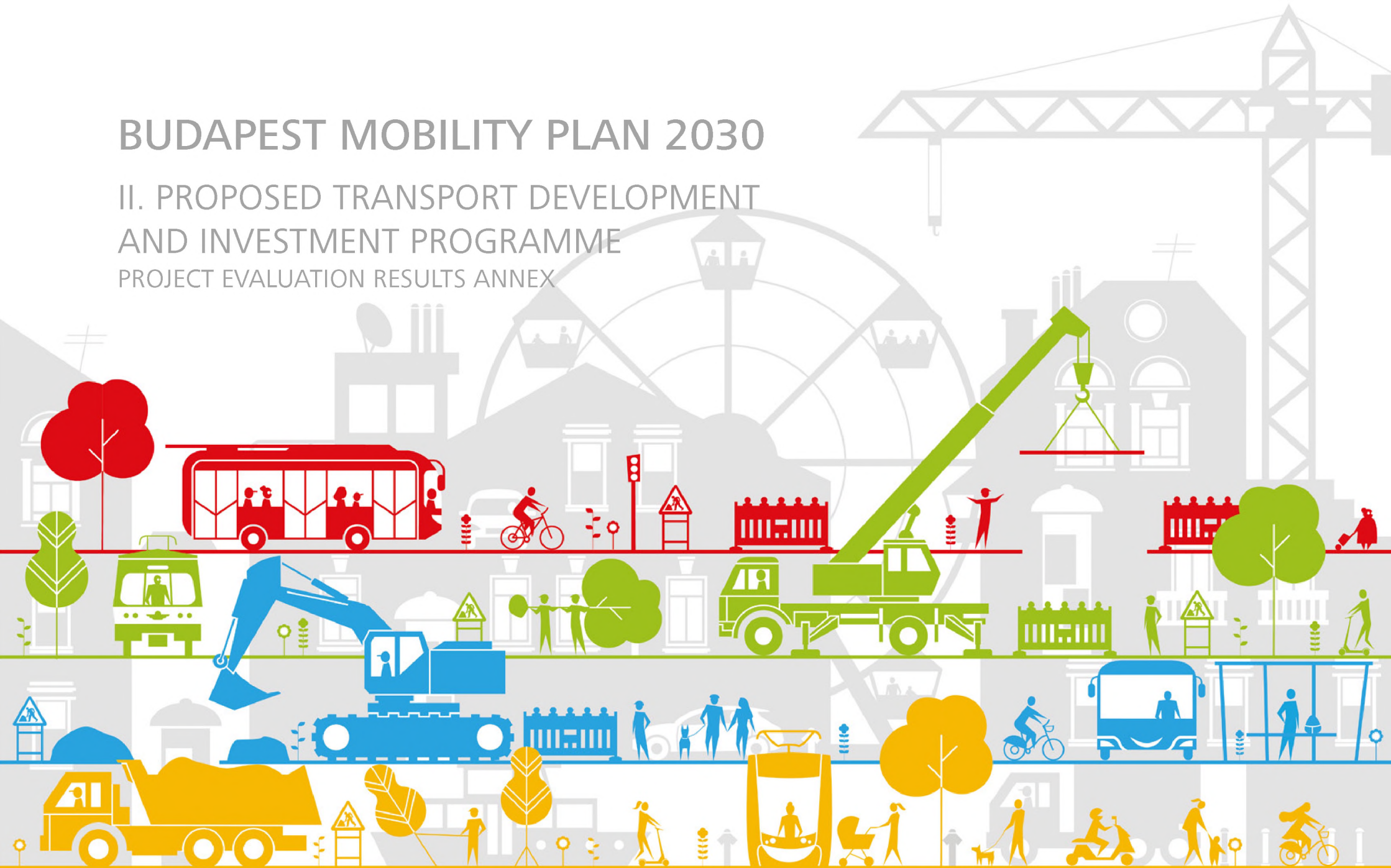
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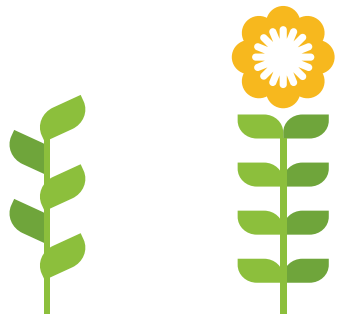
BUDAPEST MOBILITY PLAN 2030

II. PROPOSED TRANSPORT DEVELOPMENT AND INVESTMENT PROGRAMME PROJECT EVALUATION RESULTS ANNEX





The following tables summarise the results of the studies of the projects included in the BMT. In all cases, projects are sorted by project ID. The overall score does not necessarily represent the project ranking, given that a number of other aspects had to be taken into account in the preparation of the final proposal following the appraisals, e.g. available funding opportunities, links to ongoing projects, etc. The projects implemented have not been evaluated and their impact will be measured back through the indicators of the BMT Monitoring and Evaluation System. A more detailed description of the assessments is provided in Chapter 2.2 of the BMT Investment Programme.



1

RANKABLE PROJECTS



1.1 PROJECTS UNDER THE JURISDICTION OF THE MUNICIPALITY OF BUDAPEST OR INDIVIDUAL DISTRICTS

The specific rankable projects planned to be implemented by 2030 were assessed on the basis of four screening methods (Impact Assessment (ILL), Feasibility Study (MEG), Multi-Criteria Assessment (MCA), Environmental Assessment (KÖR)). The scores given by the experts are converted to a scale from 0 to 100 (converted score), where 0 is the lowest score and 100 is the highest score, according to the previous methodology. These converted scores are weighted by the specific weights of the respective studies and the sum of the weighted converted scores gives the total score of the projects. The table below shows the converted scores, estimated funding requirements, preparation and implementation time requirements, while the last column shows the categorisation of projects.



#	ID	Address	Investment cost (HUF million)	Preparation expected time needed (month)	Implementation expected time needed (month)	Aggregate score	Category
1.	P0005	Preparation and implementation of the southern extension of tram line 3 to the Gubacsi híd (Pesterzsébet section)	40 800	30	16	40	Basic package: Phase I - preparation, Phase II - implementation
2.	P0006	Extension of tram line 42	33 000	30	30	34	Basic package: Phase I - preparation, Phase II - implementation
3.	P0018	Development of a network of city logistics loading areas in Budapest	3 000	12	36	44	Complementary project package
4.	P0035	Budapest, District 21, Csepel trunk road (Teller Ede út) development, preparation of Phase II (Salak utca - Cseresznyefa utca)	20 000	40	36	16	Complementary project package
5.	P0046	Upgrading and extension of the Cogwheel Railway (tram line 60) in both directions - implementation	50 000	12	36	20	Complementary project package
6.	P0051	Development of demand-driven public transport services in Budapest (BKK Telebusz)	1 800	-	-	48	Complementary project package
7.	P0063	Developing a sustainable city logistics policy for Budapest	500	12	24	51	Complementary project package
8.	P0067	Budapest, Kossuth Lajos utca - Rákóczi út complex renewal Phase I - reallocation of public spaces, creation of a bus corridor, tram line study	10 000	24	18	34	Basic package: Phase II

#	ID	Address	Investment cost (HUF million)	Preparation expected time needed (month)	Implementation expected time needed (month)	Aggregate score	Category
9.	P0080	Extension of the tram line along Külső Bécsi út (Vörösvári út - Aranyvölgy section)	35 000	24	24	21	Complementary project package
10.	P0086	Budapest, M1 metro line upgrade and two-way extension (from Vörösmarty tér to Vigadó tér and from Mexikói út to Marcheggi híd)	77 000	24	40	45	Basic package: Phase I - preparation, Phase II - implementation
11.	P0087	M1 metro line vehicle procurement (22+5 trainsets)	29 000	5	54	45	Basic package: phase II
12.	P0098	Budapest, District 14, Nagy Lajos király útja development preparation (on the existing route, between Kassai tér and Bosnyák tér)	5 000	24	12	32	Basic package: phase II
13.	P0112	Connecting tram lines between Deák Ferenc tér and Lehel tér, preparation and implementation	38 000	30	36	44	Basic package: Phase I - preparation, Phase II - implementation
14.	P0113	Budapest, District 22, complex renewal of Városháza tér	4 145	96	12	50	Basic package: phase II
15.	P0118	District 17, connection of Cinkotai út and Keresztúri út	1 600	48	12	28	Complementary project package

#	ID	Address	Investment cost (HUF million)	Preparation expected time needed (month)	Implementation expected time needed (month)	Aggregate score	Category
16.	P0119	Reconstruction of pedestrian underpasses and surface exits connected to the stations of the M3 metro line	32 000	18	18	40	Complementary project package
17.	P0153	Construction of elements of the Budapest Hungária Ring (B20) bicycle highway	3 800	24	84	55	Basic package: phase II
18.	P0162	Budapest Gubacsi road bridge reconstruction	16 900	48	24	18	Complementary project package
19.	P0171	Budapest trolleybus vehicle procurement phase IV (40 vehicles)	15 000	18	60	38	Complementary project package
20.	P0172	Development of about 13 km of cycle path along the Szilas stream	3 200	24	12	54	Complementary project package
21.	P0175	Redevelopment of public spaces on the Buda upper embankment: Fő utca and its squares, Felhévíz; renewal of Bem József tér in several phases (DUNA-BUDA)	12 441	30	18	50	Basic package: phase II
22.	P0183	Modernisation of the existing section of Budapest tram line 2 (between Jászai Mari tér and Közvágóhíd)	22 000	18	24	36	Complementary project package
23.	P0207	Extension of the Budapest M3 metro line from Újpest-központ to Káposztásmegyer, with related interventions	131 800	18	60	42	Complementary project package
24.	P0208	Renovation of Orczy ér, improvement of public spaces	2 900	6	24	54	Basic package: phase II
25.	P0216	Complex renovation of the lower embankment between Kossuth Lajos tér - Havas utca (RAK-PARK)	15 110	18	10	55	Basic package: phase I

#	ID	Address	Investment cost (HUF million)	Preparation expected time needed (month)	Implementation expected time needed (month)	Aggregate score	Category
26.	P0258	Renewal of Budapest public transport traffic management and passenger information system (FUTÁR 2.0)	9 000	21	24	50	Basic package: phase I
27.	P0275	Procurement of Cogwheel Railway (tram line 60) vehicles (1 prototype and 7 production vehicles)	50 000	12	36	21	Complementary project package
28.	P0276	Infrastructure development for the 2022 trolleybus procurement (Phase III): power converter at the Pongrác út depot: installation of an e-bus charging station with expansion capacity and upgrading of the power supply to the lines in the area (BKV)	8 000	9	24	57	Basic package: phase I
29.	P0277	Upgrading of the existing trolleybus network with network extension, small-scale installation of power supply and overhead lines (BKV)	5 128	6	28	57	Basic package: phase I
30.	P0278	Purchase of BKV electric buses (40 single electric buses with charging infrastructure)	9 590	6	24	54	Basic package: phase II
31.	P0297	Budapest, Üllői út - Váci út axis cyclist-friendly development with the construction of sections of the B3 bike highway	5 000	24	84	67	Basic package: phase I
32.	P0298	Construction of sections of the North Pest Bicycle Highways (B1, B3, B4)	5 000	24	84	59	Basic package: phase II
33.	P0299	Development of some elements of the main cycling network in North Pest	16 000	24	84	59	Complementary project package

#	ID	Address	Investment cost (HUF million)	Preparation expected time needed (month)	Implementation expected time needed (month)	Aggregate score	Category
34.	P0300	Construction of sections of the Buda boulevard (B10) cycle lane	600	24	18	60	Complementary project package
35.	P0301	Development of some elements of the main cycling network in North Buda	15 000	24	84	57	Complementary project package
36.	P0302	Development of the main cycle network in South Buda and elements of the B4 Bicycle Highway	13 500	24	84	58	Basic package: phase II
37.	P0303	Development of the main cycling network in South Pest and Csepel and elements of the B7 Bicycle Highway	16 500	24	84	59	Basic package: phase II
38.	P0304	Design of some elements of the East Pest Bicycle Highways (B2, B9, B30)	6 000	24	84	60	Basic package: phase II
39.	P0305	Development of some elements of the main East Pest cycle network	26 000	24	84	61	Complementary project package
40.	P0340	EuroVelo 6 international cycle route to Budapest, Phase II - South Buda, North Pest	5 300	30	18	67	Basic package: phase I
41.	P0341	Development of the Budapest section of the EuroVelo 14 international cycle route Budapest- Lake Balaton	5 250	26	18	66	Basic package: phase I
42.	P0362	Budapest, Renovation of Clark Ádám tér (square)	1 300	24	20	54	Basic package: phase II
43.	P0386	Purchase of 8 new 6-car metro trainsets for the extension of the M3 metro line to Káposztásmegyer	12 000	48	12	42	Complementary project package

#	ID	Address	Investment cost (HUF million)	Preparation expected time needed (month)	Implementation expected time needed (month)	Aggregate score	Category
44.	P0388	Bicycle-friendly development of Budapest's inner-city areas	3 000	-	84	63	Basic package: phase I
45.	P0391	Trolleybus procurement for the Buda network development (50 single trolleybuses)	11 000	36	12	54	Complementary project package
46.	P0392	Budapest trolleybus procurement for the East Pest network development (35 articulated trolleybuses and 12 single trolleybuses)	12 000	36	18	54	Complementary project package
47.	P0393	Budapest trolleybus procurement for the North Pest network development (64 articulated trolleybuses and 16 single trolleybuses)	20 000	36	12	53	Complementary project package
48.	P0394	Budapest trolleybus procurement for the Rákóczi-Thököly út network development (56 articulated and 11 single trolleybuses) Phase I	16 500	36	24	57	Basic package: phase II
49.	P0395	Trolleybus network development in Buda with the conversion of the Istenhegyi út and Bimbó út bus lines into trolleybus lines	5 000	30	12	54	Complementary project package
50.	P0396	Development of the East Pest trolleybus network by converting part of the Jászberényi út bus lines into a trolleybus lines	8 000	30	18	54	Complementary project package
51.	P0397	Development of the trolleybus network in North Pest by converting the Reitter Ferenc utca and Árpád út bus lines into trolleybuse lines	8 000	30	18	53	Complementary project package
52.	P0398	Upgrading of the trolleybus network by converting the Rákóczi-Thököly út bus lines into trolleybus lines - Phase I	9 700	30	24	57	Basic package: phase II

#	ID	Address	Investment cost (HUF million)	Preparation expected time needed (month)	Implementation expected time needed (month)	Aggregate score	Category
53.	P0407	Accessibility of pedestrian underpass and surface exits at Göncz Árpád városközpont station related to reconstruction of the M3 metro line	8 000	10	18	61	Basic package: phase I
54.	P0409	Infrastructure improvements related to tram procurement (upgrading of depots, line infrastructure and power supply)	23 000	-	-	43	Basic package: phase I
55.	P0414	Kőbánya-City Centre-Óbuda new trolleybus infrastructure (replacement of bus line 9)	5 000	-	-	55	Basic package: phase II
56.	P0415	Purchase of trolleybuses for the construction of the new Kőbánya-City Centre-Óbuda trolleybus network (replacement of bus line 9) - 25 trolleybuses	8 500	-	-	55	Basic package: phase II
57.	P0417	Mobility data warehouse - developing predictive traffic intelligence	3 700	12	24	54	Basic package: phase I
58.	P0418	Improvement of the Budapest tram network - fitting of vehicles with radio switch-control equipment	2 200	6	24	44	Basic package: phase I
59.	P0419	Trolleybus procurement for the Rákóczi-Thököly út network development (56 articulated and 11 single trolleybuses), Phase II.	16 500	36	24	57	Basic package: phase II
60.	P0420	Trolleybus network development in Budapest by converting the Rákóczi-Thököly út bus lines into trolleybus lines Phase II	9 700	30	24	57	Basic package: phase II

1.2 PROJECTS UNDER THE RESPONSIBILITY OF STATE-RUN PUBLIC INSTITUTIONS

The table below shows the list of public projects based on the BMT evaluation criteria and objectives, the scores of the projects do not represent the order of implementation. For projects that do not fall under the jurisdiction of the Municipal Assembly (public projects), a proposed list is drawn up without resources or timetables, based on the BMT criteria, but this does not imply a decision on the concrete implementation of the projects. On this basis, the Municipality of Budapest - as a stakeholder - can develop its professional position and represent its interests in the preparation and implementation of the relevant developments. The evaluation of the projects was carried out according to the same methodology as for the projects under the competence of the Municipality of Budapest, after several rounds of consultations with the project owners.



#	ID	Address	Aggregate score	Category
1.	P0004	Extension of tram line 3 westwards through Kassai tér (Angyalföld, Árpád bridge) and construction of Szegedi út overpass	35	Highly recommended
2.	P0008	Rákospalota-Újpest - Veresegyház - Vác railway line bottleneck replacement	25	Highly recommended
3.	P0030	Development of a rail link to Budapest Liszt Ferenc International Airport	28	Suggested
4.	P0038	Renovation of the H6/H7 HÉV suburban railway lines, connection to Kálvin tér (southern section of the north-south regional rapid railway)	23	Highly recommended
5.	P0039	Connection of H5 and H6/H7 HÉV lines between Kaszásdűlő - Kálvin tér (north-south regional rapid railway city-centre section)	27	Highly recommended
6.	P0040	H5 HÉV line renewal (Batthyány tér - Szentendre) (northern section of the north-south regional rapid railway)	27	Highly recommended
7.	P0045	Improving road access to Budapest Liszt Ferenc International Airport	20	Highly recommended
8.	P0047	Construction of the new Danube bridge on Galvani út and the associated transport network	18	Recommended long-term
9.	P0050	Purchase of suburban railway (HÉV) vehicles (59 trainsets)	30	Highly recommended
10.	P0068	Kőbánya-Kispest - Lajosmizse - Kecskemét railway line bottleneck replacement and electrification	18	Highly recommended
11.	P0081	Implementation of transport improvements in the City Park	38	Highly recommended
12.	P0083	M0 ring road, northern sector (between main roads 10-11, 2x2 lanes)	4	Suggested
13.	P0085	M0 ring road, western sector (between main roads 1-10, 2x2 lanes)	2	Recommended long-term
14.	P0089	Connection of metro M2 and H8/H9 HÉV at Örs vezér tere, renovation of H8/H9 HÉV lines (between Örs vezér tere and Cinkota)	49	Highly recommended
15.	P0090	M2 metro - construction of a branch line from the H8/H9 HÉV line in Rákoskeresztúr	34	Recommended long-term

#	ID	Address	Aggregate score	Category
16.	P0129	Buda Interconnected Tram Network, Phase II - Construction of the line linking Gellért tér to Budafoki út	41	Highly recommended
17.	P0177	Budapest-Kelenföld station-house renovation	26	Suggested
18.	P0187	Improving accessibility to the South Buda Central Hospital (DBC)	11	Recommended long-term
19.	P0199	Construction of a through railway station and a railway tunnel between Kelenföld and Nyugati stations	21	Recommended long-term
20.	P0200	Reconstruction of railway facilities related to the development of the Gubacsi railway bridge and the Danube Free Port of Csepel Island	21	Highly recommended
21.	P0209	Renewal of H8 HÉV suburban railway Budapest-Cinkota - Gödöllő and H9 HÉV line Budapest-Cinkota - Csömör – Kavicsbánya-elágazás sections	45	Recommended long-term
22.	P0220	Improving bus transport in the Zsámbék Basin - Budakeszi bus lane and related infrastructure interventions	31	Recommended long-term
23.	P0221	Provision of P+R and B+R parking spaces at stops and stations of commuter railway lines to facilitate modal shift	28	Highly recommended
24.	P0222	Redevelopment of Budapest-Nyugati railway station, construction and environmental planning tasks	29	Suggested
25.	P0223	Kőbánya upper - Rákosliget reconstruction and bottleneck replacement	28	Suggested
26.	P0224	Kelenföld intermodal hub: implementation of the bus terminal at the Kelenföld intermodal junction and extension of the P+R parking facilities	24	Highly recommended
27.	P0225	Design and construction of a pedestrian and cycle bridge between Gróf Esterházy János rakpart and Óbuda Island and the design of a double-deck road bridge between Mozaik utca - Óbuda Island, with demolition of the existing H-bridge	40	Highly recommended
28.	P0226	Renewal of the public space of the lower embankment in Pest: renewal of Salkaházi Sára rakpart and Közraktár utca	39	Highly recommended
29.	P0227	Introduction of an integrated metropolitan agglomeration fare system	47	Highly recommended

#	ID	Address	Aggregate score	Category
30.	P0228	Construction of missing railway stops and interchanges on the Budapest agglomeration railway network (Pestújhely, Újpalota, Rákosszentmihály, Rákosfalva, Albertfalva)	32	Suggested
31.	P0261	Modernisation of the passenger areas at Kőbánya also station / construction, design	58	Highly recommended
32.	P0262	Kőbánya-Kispest railway station passenger facilities modernisation / design	41	Highly recommended
33.	P0263	Upgrading of the Kis-Gellért Hill tunnel (for double-decker motorised trains) and increasing capacity, accessibility and service levels at Déli Railway Station	35	Highly recommended
34.	P0264	Reconstruction of the section of railway line 150 between Soroksár (excl.) and Ferencváros (excl.)	23	Suggested
35.	P0265	Central traffic management on TEN-T railway lines (sections of lines 70, 80, 100a, 140)	37	Highly recommended
36.	P0266	Short-term development of Budapest-Nyugati railway station and its access sections	30	Highly recommended
37.	P0268	Competitive rail infrastructure development, Phase II, Városliget (excl.) - Kőbánya-Kispest (excl.) section, simplified modernisation of Vecsés station and Monor (excl.) -Albertirsa (excl.) section	34	Highly recommended
38.	P0272	Southern Railway Ring, Phase III - construction of Népliget station and Ferencváros endpoint with separate railway level crossing	25	Suggested
39.	P0274	Kelenföld - Törökbálint railway line section bottleneck replacement	24	Suggested
40.	P0292	Purchase of railway traction vehicles (90 dual-current and 25 triple-current electric locomotives)	26	Suggested
41.	P0342	Construction of the new Transport Museum	22	Recommended long-term
42.	P0355	Additional environmental planning tasks for the Southern Railway Ring Phase II (along the railway line between Kelenföldi út and the Buda bridgehead)	33	Highly recommended
43.	P0374	Reconstruction of the section of railway line 70 leading to Budapest-Nyugati station	24	Suggested
44.	P0375	Construction of the Transport Museum railway station	38	Highly recommended

2

DECIDED PROJECTS



The selected projects will be assessed solely on the basis of their fit with the objectives and measures of the BMT (ILL assessment).

2.1 DECIDED PROJECTS UNDER THE COMPETENCE OF THE MUNICIPALITY OF BUDAPEST

#	ID	Address
1.	P0024	Developing modal shift options - B+R parking
2.	P0034	Procurement of trams, Phase III (optional 51 CAF-type trams)
3.	P0287	BudapestGO app II - integration of regional bus services (Volánbusz), introduction of NFC ticket validation, fine-tuning of journey planning, further development of accessibility
4.	P0288	BudapestGO app III - enhancing customer experience and functionality, improving ticketing, integrating micromobility equipment, improving agglomeration and car functions, improving trip planning, better customer access and information
5.	P0295	Pedestrian and cycling network plan and related IT developments (GIS, database, service management)
6.	P0311	VEKOP 01/17: Development of infrastructure related to the Budapest public bike-sharing system in Districts 3 and 13
7.	P0314	VEKOP 04: Road safety improvements in District 20 of Budapest
8.	P0316	VEKOP 07: Road safety and bicycle-friendly improvements in District 11 of Budapest
9.	P0317	VEKOP 08/18: Bicycle-friendly infrastructure improvements in District 4 of Budapest
10.	P0318	VEKOP 10/19: Road safety improvements in District 15 of Budapest
11.	P0319	VEKOP 11/14: Bicycle-friendly infrastructure improvements in District 10 of Budapest
12.	P0320	VEKOP 12/15: Construction of a cycle path along the Rákosszentimre stream in District 13 of Budapest
13.	P0321	VEKOP 12/16: Construction of a cycle path along the Rákosszentimre stream in Districts 14, 10 and 17 of Budapest
14.	P0339	Development of EuroVelo 6 international cycle route, phase I - North Buda (13.3 km between the city border and the Chain Bridge)
15.	P0364	District 18, Üllői út (Szarvas csárda tér - Béke tér) renovation

#	ID	Address
16.	P0370	Budapest Road Safety Strategy and Road Network Plan
17.	P0371	The Budapest public transport vehicle strategy
18.	P0377	Budapest active and micromobility strategy
19.	P0390	Network strategy for public transport in Budapest
20.	P0406	Pilot introduction of contactless (NFC) payment in Budapest public transport
21.	P0410	Full digitisation of ticket inspection activity
22.	P0411	Dynamic IT in urban transport management - IT system developments for digital management of service and traffic planning data
23.	P0412	Developing modal shift options - deployment of micromobility points, mobility points, mobility stations, bicycle stands

2.2 PROJECTS UNDER THE RESPONSIBILITY OF STATE-RUN PUBLIC INSTITUTIONS

#	ID	Address
1.	P0043	Southern Railway Ring Phase II - Kelenföld and Ferencváros line section capacity extension, development of suburban stops, new stops
2.	P0096	Purchase of MÁV-START motor train (IKOP-2.1.0-15-2017-00039 and IKOP-2.1.0-15-2018-00051)
3.	P0259	Improving passenger traffic at Budapest-Keleti and Budapest-Nyugati railway stations
4.	P0267	Removing bottlenecks and improving interoperability on the Budapest (Kelenföld) - Hegyeshalom line (CEF project)
5.	P0293	Purchase of MÁV ticket vending machines (275 + 100)
6.	P0327	Green Bus Fleet and Infrastructure Development Project in Budapest agglomeration
7.	P0337	Development of integrated passenger information, ticketing and traffic management systems for more efficient provision of public passenger transport services (HKIR)

3

TASK-ORIENTED PROJECTS



Projects of a functional nature are mainly those which are legally required to be carried out for conservation purposes and which do not involve substantial improvements. The classification of tasks is based on their relevance to the objectives of the BMT, taking into account the environmental scores. However, the implementation of some projects may be given a higher priority than the fit score would justify, due to the significant differences in the technical condition of the infrastructure.

3.1 PROJECTS WITHIN THE SCOPE OF THE MUNICIPALITY OF BUDAPEST

#	ID	Address	Category
1.	P0012	Making the road network in urban areas more bicycle-friendly, increasing road safety	Highly recommended
2.	P0015	Prioritisation for public transport vehicles with traffic management solutions	Suggested
3.	P0019	Metropolitan comprehensive concept for regulating the use of public space for transport purposes	Suggested
4.	P0022	Regulation and complex management of public transport and shared mobility services, integration of shared mobility into public transport systems	Suggested
5.	P0023	Improvement of uniform taxi services in Budapest (emission reduction, taxi rank use)	Suggested
6.	P0033	Establishment of a Budapest road traffic accident data collection, processing and storage system	Recommended long-term
7.	P0052	Dynamic IT system in urban transport management - IT system development for digital transport service change management	Recommended long-term
8.	P0053	Further development of cooperation in Budapest and agglomeration transport management (BKK - Budapest Municipality - Ministry of Transport)	Highly recommended
9.	P0079	Road upgrades to reduce the railways' land-separation effect and to improve transport links between settlements	Suggested remote

#	ID	Address	Category
10.	P0100	Reconstruction of the Petőfi Bridge	Highly recommended
11.	P0110	Regulation of traffic and parking arrangements for tourist buses and related interventions (creation of drop-off and pick-up points, waiting and storage areas, preparation of regulation)	Suggested
12.	P0111	Phased improvement of accessibility of tram stops	Suggested
13.	P0138	X-XVII. district Keresztúri road overpass reconstruction	Suggested
14.	P0144	Accessibility of tram line 50 stops	Highly recommended
15.	P0154	Replacement of existing noise barrier wall on Szerémi út in District 11 (between Budafoki út and Dombóvári út)	Recommended long-term
16.	P0178	Implementation of P+R parking in phases within the administrative boundaries of Budapest	Suggested
17.	P0186	Accessibility of the tram line 56-56A stops (between Dózsa György tér - Hűvösvölgy terminus)	Highly recommended
18.	P0190	Renovation of the Castle Tunnel	Highly recommended
19.	P0202	Operation and development of the Unified Traffic Model	Highly recommended
20.	P0210	Road Rehabilitation Programme 2022-2023 of Budapest Közút Zrt.	Highly recommended
21.	P0211	Road Rehabilitation Programme 2024-2029 of Budapest Közút Zrt.	Recommended long-term
22.	P0212	Traffic engineering measures - improving pedestrian crossings, increasing traffic safety, traffic alignment corrections, new bus lanes	Highly recommended
23.	P0213	Bridge and structure renovations 2021-2025	Suggested

#	ID	Address	Category
24.	P0214	Complex renovation of the Szilágyi Erzsébet fasor on the border of Districts 2 and 12	Highly recommended
25.	P0219	District 9: Complex renovation of Mester utca (Ferenc krt. - Haller utca)	Suggested
26.	P0284	Renovation of the tram and road underpass on the Pest side of the Széchenyi Chain Bridge with interventions for flood protection and accessibility	Highly recommended
27.	P0294	Further development of public bicycle-sharing system Phase II (additional bike purchases, further expansion of service area)	Highly recommended
28.	P0296	City-wide awareness-raising campaigns to promote sustainable and safe mobility	Highly recommended
29.	P0307	Improving the cycleability of Elisabeth Bridge, Liberty Bridge	Highly recommended
30.	P0308	Expanding the possibility to transport bicycles on Budapest fixed-rail transport vehicles	Suggested
31.	P0309	Development of an online platform for social participation	Suggested
32.	P0349	Complex development of Healthy Streets - creating human-centred, humanised public spaces by calming traffic, reallocating public space, promoting active transport modes and significantly improving walking conditions	Highly recommended
33.	P0350	Creating safe highways in Budapest - eliminating accident blackspots	Highly recommended
34.	P0356	Renovation of the K-bridge to Óbuda Island	Suggested
35.	P0357	Long-term spatial planning of the Népliget junction (Üllői út-Könyves Kálmán körút)	Highly recommended
36.	P0358	Renovation of the Ferdinand Bridge between Districts 6 and 13, with cycle lanes	Suggested
37.	P0360	District 3: Flórián tér flyover renovation	Suggested
38.	P0361	Zugliget Chairlift refurbishment	Suggested

#	ID	Address	Category
39.	P0367	BKK's Equal Opportunities Plan (EET) for 2021-2024	Highly recommended
40.	P0368	Training programme on equal opportunities at BKK based on the Equal Opportunities Plan	Suggested
41.	P0369	Development of the IT system for the Budapest Mobility Plan	Suggested
42.	P0372	Budapest shared mobility concept	Recommended long-term
43.	P0376	Metropolitan MaaS Strategy and Action Plan	Highly recommended
44.	P0379	Free taxi control - public fare meter, number plate check and complaint reporting app	Highly recommended
45.	P0380	Real-time taxi service data processing IT system	Suggested
46.	P0381	Continuous updating of the Budapest SUMP	Suggested
47.	P0404	Preparation of BKK's road and infrastructure renovations planned between 2024-2030	Suggested
48.	P0405	BKK road and infrastructure renovations planned between 2024-2030	Recommended long-term

3.2 PROJECTS UNDER THE RESPONSIBILITY OF STATE-RUN PUBLIC INSTITUTIONS

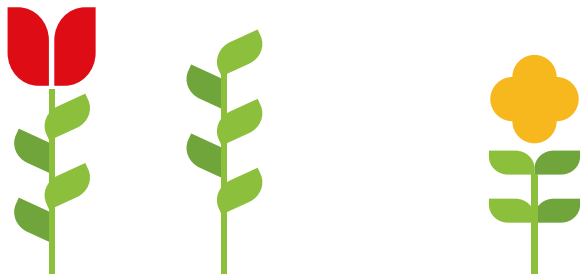
#	ID	Address
1.	P0322	Timetable interventions related to the Budakeszi út bus lane
2.	P0323	Timetable interventions in the public transport service of the capital due to the new road connections in the Zsámbék Basin
3.	P0324	Improving the connection of Dabas and its region to the capital by means of transport services via the M5 motorway
4.	P0325	Reconstruction and upgrading of the existing public bus network along the 80a Budapest - Hatvan railway line
5.	P0326	Review of the bus service on Csepel Island following the completion of the H6 Ráckeve HÉV suburban railway line renovation works
6.	P0343	Agglomeration Cycling Network Development Strategy (Cycling Suburb)

4

PROJECT IDEAS



As with the tasks, project ideas are assessed on the basis of a fit and environment analysis, based on the information available at the current stage of the projects. A significant number of these projects are at an early stage of technical preparation and justify further development and/or revision, and therefore the other assessment methods cannot be applied at this stage of the projects. Once the projects have been specifically prepared, it will be possible to assess them according to several assessment methods, and the development of the projects and changes to their technical content may change the results of the assessment of their fit and environmental impact.



4.1 PROJECT IDEAS WITHIN THE SCOPE OF THE MUNICIPALITY OF BUDAPEST

#	ID	Address	Category
1.	P0009	Northbound extension of tram line 2	Recommended long-term
2.	P0013	Implementation of the conditions for waterborne public transport in the capital and the suburbs - development of local and agglomeration riverboat services, development of piers, improving their accessibility, acquisition of vehicles with storage and maintenance depot, procurement of boats	Recommended long-term
3.	P0021	Entry into service of 300 electric buses in Budapest by 2035	Suggested
4.	P0044	Preparation of a study defining sustainable and predictable normative government subsidies for the Budapest transport system	Highly recommended
5.	P0069	Aquincum Danube bridge and associated road network (construction of the ring road along the railway ring, phase I between main road 10 - M3 motorway)	Suggested
6.	P0070	Development of transport infrastructure along the Railway Ring (M3 motorway - Üllői út)	Recommended long-term
7.	P0071	Albertfalva Danube bridge and associated road network with tram track (construction of the ring road along the railway ring, Phase IV) between Soroksári út - M6 access road)	Suggested
8.	P0072	Construction of the ring road along the railway ring, Phase V (Albertfalva – Egér út)	Recommended long-term
9.	P0073	Development of transport infrastructure along the railway ring Phase III (between Üllői út - Soroksári út)	Suggested
10.	P0076	Establishment of a permanent exhibition venue in the capital for transport history and vintage vehicle collections	Recommended long-term
11.	P0093	Western extension of M4 metro line - Budapest between Kelenföld - Budaörs, P+R extension	Suggested
12.	P0099	Buda Interconnected Tram Network, Phase III - Construction of the tram link between Margit Bridge and Szentendrei út, with complex reconstruction of the road sections concerned, construction of a bicycle axis, humanisation of Flórián tér, development of an intermodal hub (Kaszásdűlő)	Suggested
13.	P0107	Implementation of the Újpalota tram line (between Újpalota - Astoria)	Suggested
14.	P0108	Establishment of a regional transport management body to ensure coordination between urban and suburban transport	Highly recommended

#	ID	Address	Category
15.	P0155	Complex renewal of the Grand Boulevard - traffic calming, improving conditions for active transport, greening, humanisation	Highly recommended
16.	P0165	Double-track connection of trams 2 and 51 in the area of Közvágóhíd (junction of Kvassay Jenő út - Soroksári út)	Recommended long-term
17.	P0192	Introduction of low emission zones (LEZ), regulatory concept	Highly recommended
18.	P0193	Conditions for automated vehicle traffic, definition of the necessary infrastructure conditions	Recommended long-term
19.	P0203	Construction of a road linking the outlying districts of Pest, connecting the M31 - M51 motorway areas	Recommended long-term
20.	P0206	Establishing the development and regulatory environment for the Budapest e-charging infrastructure	Suggested
21.	P0217	Eastern extension of M4 metro line - Budapest-Keleti railway station - M3 motorway area, P+R construction	Highly recommended
22.	P0218	Pest Interconnected Tram Network: connecting the tram lines of Népszínház utca to the Rákóczi út tram line, and the Rákóczi út tram to the inner-city ring tram lines, and improving accessibility of the Astoria junction	Suggested
23.	P0282	Complex renewal of Andrássy út - traffic calming, active transport, greening, humanisation	Highly recommended
24.	P0285	Introduction of EMV-based e-ticketing system	Highly recommended
25.	P0306	Improving residential and destination-based bicycle storage and parking	Recommended long-term
26.	P0332	Improving access to green (walking and cycle) routes in Budapest, creating missing sections, building a greenway network	Highly recommended
27.	P0344	Development of EuroVelo 6 international cycle route, Phase III - Central Buda, Central Pest, South Pest (construction of sections not included in other projects)	Suggested
28.	P0347	Improving public transport on Gellért Hill	Recommended long-term
29.	P0352	Modification of the traffic regime at the junction Rottenbiller utca - Rákóczi út - Fiumei út, with the demolition of the flyover	Suggested

#	ID	Address	Category
30.	P0353	Construction of noise barriers along the H5 suburban railway line in District 3	Recommended long-term
31.	P0354	District 10: Kőbányai út reconstruction between Orczy tér - Mázsza tér, and the accessibility of stops along the whole length of tram line 24, and the inner sections of tram lines 28, 37 and 51	Suggested
32.	P0382	Construction of the North-Buda road tunnel (between the bypass of main road 10 and the Hidegkúti út)	Suggested
33.	P0385	300 new buses with at least EURO 6 emission classification or alternative propulsion in Budapest by 2026	Highly recommended
34.	P0387	Tram depot upgrades for modern storage and maintenance	Highly recommended
35.	P0389	Accessibility of M2 metro stations	Suggested
36.	P0400	Tram procurement , Phase IV - (5-)23 long trams, if no long tram is called from the CAF option	Highly recommended
37.	P0401	Tram procurement, Phase V - 65 short trams (Ganz replacement)	Highly recommended
38.	P0402	Tram procurement, Phase VI - Purchase of 50 short trams (replacement of remaining Hanover trams)	Highly recommended
39.	P0403	Tram procurement, Phase VII - purchase of 50 short trams to serve the rolling stock needs of the new tram developments	Suggested
40.	P0408	Improving storage capacity related to trolleybus procurements	Highly recommended
41.	P0413	Tram development on Budafoki út	Recommended long-term
42.	P0416	Rákoskeresztúr centre, Pesti út public transport corridor development and related investments	Recommended long-term



4.2 PROJECT IDEAS WITHIN THE REMIT OF PUBLIC INSTITUTIONS

#	ID	Address	Category
1.	P0230	Development of the Kelenföld Danube promenade	Suggested
2.	P0231	New urban park as part of the new urban district on the site of the Rákosrendező railway station	Suggested
3.	P0233	Increasing the number of stations and line sections under centralised traffic management, extending Central Traffic Control and Monitoring to the whole of Budapest and the agglomeration	Highly recommended
4.	P0234	Establishment of policies and development plans for the development of the railway IT system, railway IT service and additional specific applications	Recommended long-term
5.	P0235	Solving problems that slow down rail traffic and can be addressed with minor sectoral intervention	Highly recommended
6.	P0237	Short-term development of Keleti railway station	Suggested
7.	P0241	Short-term development of Ferencváros station	Highly recommended
8.	P0242	Long-term development of the inner railway ring	Recommended long-term
9.	P0244	Kelenföld station and area - providing capacity for through trains	Recommended long-term
10.	P0245	Kelenföld station and area - providing turnaround capacity	Recommended long-term
11.	P0246	Long-term development of Kőbánya-Kispest station	Suggested
12.	P0247	Horog utca junction construction and infrastructure development	Recommended long-term
13.	P0249	Capacity building needed in the Ferencváros area	Proposed outlook
14.	P0251	Further capacity increase on the 80a line	Proposed outlook
15.	P0253	Further capacity increase on the 120a line	Proposed outlook
16.	P0255	Installation of suburban vehicle preparation, maintenance and storage functions at suburban translation stations	Proposed outlook

#	ID	Address	Category
17.	P0256	Expanding the traction power supply system as needed to cope with growing traffic	Proposed outlook
18.	P0269	Establishing a national rail freight concept and defining the route of the V0 railway line bypassing Budapest to the south and obtaining the related environmental permit	Highly recommended
19.	P0334	South Pest Green Corridor and Cycle Path - Construction of a cycle path connecting Csepel, Soroksár and District 18	Recommended long-term

IMPRINT

Budapest Mobility Plan Volume II, Transport Development and Investment Programme - Project Evaluation Results Annex

The plan was prepared by BKK Centre for Budapest Transport for the Municipality of Budapest on the basis and revision of the Budapest Mobility Plan Volume I (Objectives and Measures) and the Budapest Mobility Plan Volume II (Transport Development and Investment Programme) approved by the General Assembly of the Municipality in 2019. The Budapest Mobility Plan is a SUMP framework document for transport development in the period 2022-2030, dynamically aligned with sustainable urban development, in which the scope of the projects evaluated may vary according to the objectives based on the BMT methodology laid down.

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