

## Summary

### Introduction

Project “Sharing of the Best Practices and Experiences on Data Collection and Processing, and User Engagement to Improve the Planning of Travelling by Bike and on Foot as One of Methods of Mobility in Urban Areas (abbreviation - CYCLEwalk)” aims to improve knowledge of decision-makers in charge of cycling and pedestrian policy about practice and standards implemented in partner countries, and to promote consultation advice, as well as improve the conditions for cycling and pedestrian mobility and active mobility in general.

During the implementation of CYCLEWALK project, five exploratory visits to different cities of project participants took place: In Amsterdam (The Netherlands), Burgenland (Vienna), Gorizia-Nova & Sempeter pri Gorici (Slovenia-Italy), Oradea (Romania), Cagliari and Olbia (Italy), and Vilnius. The participants of the exploratory visits shared their experiences at meetings of the informal working group of interested institutions organized by the ME “Susisiekimo paslaugos” and filled out good practice reports. The Action Plan is based on the best practices of the CYCLEWALK project, the actions most acceptable to the partner and the most appropriate for the current situation have been crystallized and are outlined in this Action Plan.

### Status of PI

The Policy Instrument (hereinafter – the PI) stated in the project application is the Operational Programme for Investments of the European Union Funds for 2014–2020. Unfortunately, during the preparation of the Action Plan, it has been identified that the PI selected does not meet the project objectives – the CYCLEwalk project is locally oriented, and actions at this scale cannot have any impact on the document of the national scale. Another PI – Vilnius Strategic Plan for 2010–2020 was chosen in order to ensure maximum implementation of the project objectives. The best practices of the Cyclewalk project and the resulting Action Plan presented below can be used as a basis for updating the next financial period of the PI.

### Vision and goals

The vision of this document is to improve the mobility situation in Vilnius step by step. Priority directions / objectives of the Action Plan:

- a. Education;
- b. Improvement of pedestrian and cyclist traffic conditions;
- c. Increasing of pedestrian and cyclist traffic safety;
- d. Collection of data related to mobility.

### Actions described in the Action Plan

#### **ACTION No. 1. Vileišis bicycle street**

The implementation of the action focuses on the gradually increasing flows of users of motorless transport and electric scooters.

The plan is to build the missing connection from the existing bicycle street to the downtown infrastructure of motorless transport by redistributing the space of the existing car street.

#### **ACTION No. 2. Humanization of a part of the Old Town (street)**

It is planned to redesign the pedestrian and cyclist space of the street, located in the Old Town area, for their comfortable and safe movement. The first step would be to carry out a public education process, and then a detailed analysis. After that, specific measures are determined and implemented.

## **ACTION No. 3. School travel plan (Antakalnis district)**

A travel plan for school staff and pupils and their parents could serve as a pilot model for the development of other plans. It is an educational and training measure of traffic management for the publication of alternative means of travel, which does not require much investment and is successful in foreign cities.

The interviews will be conducted first with staff and pupils (their parents), followed by a detailed analysis thereof, which will identify the specific actions to be taken and suggestions for alternative ways of arrival at the object of interest. The next step is to involve staff and visitors from other educational facilities, presenting the key points of the travel plan and its positive environmental and social implications of its implementation, as well as promotion of cooperation by proposing the development of individual travel plans.

### **Monitoring process**

Monitoring consists of laboratory and field research (i.e. flow monitoring, analysis of public transport passenger flow data, accident analysis, etc.) and a small-scale survey. These measures in the monitoring plan shall be implemented twice, before and after implementation of the actions of the Action Plan.

### **Conclusions and recommendations**

Actions have been selected by assessing the impact of several forms of travel and with respect to the positive complex effect. They focus on the inclusion of society into the concept of urban mobility and possibilities of diversity and the concept of the impact on environmental change, as well as in the improvement of conditions for pedestrians and cyclists.

Continuity and synergy between all relevant actions and documents are key elements for the effective implementation of this Action Plan.

## **Introduction**

### **General information**

Partner organization: ME "Susisiekimo paslaugos"

Other participating organizations of the partner (if relevant): Administration of Vilnius City Municipality

Country: Lithuania

NUTS2 region - Lithuania

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### **About the project**

Project title is "Sharing of the Best Practices and Experiences on Data Collection and Processing, and User Engagement to Improve the Planning of Travelling by Bike and on Foot as One of Mobility in Urban Areas (abbreviation – CYCLEwalk)", hereafter referred to as the project.

The project aims to:

- improve knowledge of decision-makers in charge of cycling and pedestrian policy about practice and

- standards implemented in partner countries, and to promote consultation advice;
- improve the quality of walking and cycling measures implemented through the policy measures in question, by improving the benchmark and selection criteria and the capacity for potential investment, vis-à-vis the specific objective, i.e. the improvement of cycling and pedestrian capabilities and active mobility in general.

## Policy Instrument

The Policy Instrument (hereinafter – the PI) identified in the Project application is the Operational Programme for Investments of the European Union Funds for 2014–2020, which is consistent with the principles and essential strategic provisions of the EU and national strategic documents. This Programme reflects the key challenges of the country's development and is based on the concentration of investment for the thematic objectives set out in the EU Common Strategic Framework and their specific investment priorities. Priority No. 4 “Promotion of energy efficiency and production and use of energy from renewable energy sources” and investment priority No. 4.5. The promotion of sustainable mobility and the development of environmentally friendly transport to reduce carbon dioxide emissions is a key objective of “Promoting the implementation of low-carbon strategies for all types, especially urban, areas, promotion of sustainable and multi-type urban mobility, and measures to mitigate the environmental impact” through activities such as:

- Preparation of Sustainable Mobility Plans (SUMP) and their implementation in municipalities of cities and regions;
- Purchase of environmentally friendly local public and/or private transport (urban and suburban) vehicles. Deployment of public transport services and equipment intended for the needs of people with reduced mobility and with physical disabilities by adapting universal design solutions;
- Adaptation of city streets to the needs of public and/or private transport (implementation of high-speed bus system, etc.); implementation of modern engineering measures for traffic safety (e.g. crossings, barriers, roundabouts, etc.) and security (e.g. surveillance systems); reconstruction and development of bicycle and/or pedestrian paths and/or trails;
- Deployment of Intelligent Transport Systems to improve the efficiency of public and/or private transport systems (public transport priority systems, intermodal transport systems, electronic ticket systems, travel continuity assurance and quality improvement by implementing multimodal route planning and search systems, public and/or private transport information search and dissemination systems, increasing of the accessibility of the transport system for people with special needs, etc.);
- Development of public-private transport interoperability and sustainable mobility systems (Park&Ride, Bike&Ride, etc., Bike Sharing);
- Expansion of electric vehicle charging/battery replacement infrastructure/station network.

During the preparation of the action plan, it was identified that not entirely correct PI was selected at the time of the preparation of the project application, i.e. the chosen PI did not meet the objectives of the project - the Cyclewalk project is focussed on local solutions and is implemented at city/municipal level, and actions at this scale cannot have any impact on the document of the national scale. It is appropriate for the applicant to choose another PI – Vilnius Strategic Plan for 2010–2020, in order to ensure maximum implementation of the project objectives. This document is closely related not only to the original PI but also to other policy instruments that complement the documents analysed below.

The best practices of the Cyclewalk project and the resulting Action Plan presented below can be used as a basis for updating the next financial period of the PI.

**Vilnius Strategic Plan 2010–2020** is a long-term strategic planning document, which defines the areas, goals, objectives of the administrative territory development at the local administrative level based on a future vision, and specific actions for the achievement of objectives. In order to monitor the

implementation of the policy instrument and to ensure its viability, the management and monitoring system for Vilnius City Strategic Plan for 2010–2020 was developed and approved. It is used as a basis for periodic evaluation of the situation and preparation of annual reports. The actions outlined in the Strategic Plan shall be transferred to the city's operational programmes based on a principle of continuity, in order to ensure a continuous process of action implementation.

The objectives of the policy instrument are focused on four areas:

1. Creating of quality living conditions for society;
2. Creating a competitive urban economy;
3. Balanced expansion of urban areas and infrastructure;
4. Improving the quality of urban management.

Only 10% of the actions outlined in the strategic plan are directly linked to the promotion of principles of sustainable urban mobility. About 60% of the actions and measures of the policy instrument are actions for the implementation of the principles of sustainable urban mobility and are mainly related to the implementation of infrastructure measures. 40% of the measures can be attributed to relatively low-budget, low-investment measures, which, although significant but are difficult to measure in terms of benefits and efficiency: actions for public education (events, advertising, media), actions for infrastructure adaptation for people with special needs (hereinafter – PWSN) (network of tactile surfaces and means of information, city maps, etc., improvement of passenger information system; training of public transport drivers on the provision of services to people with special needs, etc.).

After analysing territorial planning principles based measures allocated for the implementation of principles of sustainable urban mobility (e.g. the localization of basic essential social infrastructure objects in the living environment), it is clear that they are too abstract (e.g. “Establish a network of pre-school education facilities and general education schools meeting efficiency, accessibility, and quality requirements”).

The policy instrument does not programme actions, expressed through the mobility dimension, that can have a major impact on the formation of mobility habits.

Certain very important actions formulated in the policy instrument, and the steps that detail them, are directed to the details that state the consequences, rather than the causes that cause them.

Many changes have taken place in the city over the years since the implementation of the policy instrument, one of which has been an improvement in the awareness of city residents, officials, and politicians about sustainable urban mobility. Thanks to this change, Vilnius City Municipality has prepared, and Vilnius City Council approved on 19 December 2019 the Sustainable Mobility Plan for the City of Vilnius (hereinafter referred to as the Vilnius SUMO). The main goals of this plan are multimodality and reduction of the use of private transport.

The policy instrument pays little attention to pedestrian traffic. The improvement of pedestrian traffic is focussed to tourist-friendly areas: Action 3.3.1.4 – Design and built pedestrian zones and tracks in the central part of the city by integrating Gedimino pr., Pilies, Vokiečių, Vilniaus, and Aušros vartų streets and Stoties, Rotušės, Europos, and Arkikatedros squares. There is a lack of actions to improve conditions of pedestrian traffic and encourage people to travel on foot in residential areas and in the areas of the main objects of interest. There is also a lack of actions for the construction of pedestrian paths between residential areas and objects of interest. There are also no actions to improve the possibilities of mobility of people with special needs. The steps envisaged in the policy instrument include the adaptation of the home environment and transport infrastructure for people with various needs of all social groups (disabled people, the elderly, mothers with children, etc.), and actions of public transport fleet refurbishment, as well as driver training to provide services for people with special needs. Unfortunately, the policy instrument does not foresee actions to improve possibilities of people with special needs to reach objects of interest, locations of public transport services, adaptation of leisure facilities, and to ease mobility within them.

In the document “Vilnius City Traffic Safety Programme for 2011-2020” (No. 30-1379), the proposals aimed at pedestrian safety include:

- i. proposals for the level of existing pedestrian crossings, to improve visibility and illumination of the crossings at night;
- ii. the expansion of pedestrian and cycling paths, separating such paths from road traffic, and construction of special lanes for pedestrians and cyclists on streets and roads which do not have a sidewalk; by creating pedestrian zones or priority pedestrian streets with or without public transport; by employing the road sign “Residential Area” in urban residential districts and in the streets of the Old Town;
- iii. rational layout of related pedestrian crossings corresponding to the categories of public transport stops and streets;
- iv. implementation of traffic management measures (reduction of vehicle speed on Category D streets close to schools, kindergartens and other public gathering places where there is no public transportation, vehicle traffic is less than 700 cars per hour in both directions, by installing elevated pedestrian crossings and bumps, or by reducing the width of driving lane or changing its planned solution).

At present, with a particularly rapid increase in the level of automation (average annual increase in registered cars is around 4%), the increasing use of cars and the rapid increase in road traffic intensity in streets, including those in category D, it is no longer sufficient to implement traffic safety measures alone. Actions to improve road safety must focus not only on implementing measures to alleviate the consequences of traffic intensity situations, but also on measures to change the traffic situation. Unfortunately, these actions are missing in the policy instrument. For example, in the kindergarten and school environment, car traffic or public transport should no longer be the main leverage when deciding on the pedestrian traffic safety. Creation of a safe environment in the immediate vicinity of kindergartens and schools should, in individual cases, include not only speed limits or the installation of elevated crossings, but also the reduction of traffic intensity in general, or even the elimination of traffic. This is the only way to ensure maximum traffic safety in the environment of the objects in question. Such an approach to safety would also enable noise and pollution to be dealt with more effectively in the area of educational and training facilities.

One of the most important observations is the negative implications of the long-term of the Vilnius strategic plan (10-year period). Much of the action is already out of date, and in reality, some progressive actions are being implemented outside the framework of the strategic plan, so it is desirable that the strategy document would be drafted for 3-5 years. The overly generalized wording of some of the actions complicates the actual implementation process for the actions and often creates the preconditions for carrying out only those works which cause less public dissatisfaction and avoid implementation of politically unpopular decisions (e.g. traffic flow management, parking space reduction, etc.). However, the purpose of the strategic document should be to address the problems faced by the city (air pollution, noise experienced by residents, traffic accidents) in a complex way, and making of unpopular decisions in order to reverse the tendency is unavoidable and is being programmed at this strategic level.

Action implementation indicators during monitoring are measured by analysing the result but not the effect. However, not all measurable indicators are programmed in a policy instrument, and there is a likelihood that different specialists may have different understandings and interpretations in determining outcomes.

The policy instrument does not have a programmable correlation at the regional dimension. There is a lack of a concept of mobility in the particularly important topics of strategic plan.

**The Sustainable Mobility Plan of Vilnius City** (approved by the Council of Vilnius City Municipality on December 19, 2018) supplemented and detailed practically all areas related to transport and communication as well as envisaged measures to promote the use of alternative energy sources in transport. Therefore, during the implementation of the actions foreseen in the Action Plan, it is recommended to follow not only actions of the policy instrument but also the proposed actions detailed

in the Vilnius Sustainable Mobility Plan.

By actively participating in the implementation of the strategic documents and the Sustainable Mobility Plan approved by the Vilnius City Municipality by 2030, ME “Susisiekimo paslaugos” contributes to the development of a unified and sustainable transport system. Taking into account the constantly changing and non-homogeneous situation of public transport and traffic in Vilnius city and its region, and in accordance with the provisions approved by the strategic documents of Vilnius city, **ME “Susisiekimo paslaugos”** developed its company’s **Operational Strategy for 2019–2030** (hereafter – the SPME Strategic Plan) at the end of 2018, which identifies one of its strategic goals as “A convenient and safe cycling and pedestrian system”. The tasks and measures of the SPME Strategic Plan significantly update and further detail the measures envisaged in the Vilnius City Sustainable Mobility Plan, it is therefore appropriate to refer to Table 7 “Tasks and Measures of Strategic Objective 6” when selecting specific actions for the project Action Plan.

Based on the documents analysed above, the following priority directions of the Action Plan have been identified:

- e. Education;
- f. Improvement of pedestrian and cyclist traffic conditions;
- g. Increasing of pedestrian and cyclist traffic safety;
- h. Collection of data related to mobility.

The sought areas of direct impact are increase in resident awareness, increase of quality of walking and cycling, improvement of the living environment (reduction of noise and air pollution), direct impact on the health of residents (improvement of traffic safety, increased physical activity, etc.).

It is also sought to make an indirect impact on a policy instrument. The examples project best practices and selected actions should be evaluated during the preparation of the Vilnius Strategic Plan for the upcoming period, eliminating the deficiencies in the current plan and supplementing it with relevant information.

**The vision of this document is to improve the mobility situation in Vilnius step by step.**

## I. Action Plan

### Details of the planned actions

During the implementation of the project, five exploratory visits to different cities of project participants took place: In Amsterdam (The Netherlands), Burgenland (Vienna), Gorizia-Nova & Šempeter pri Gorici (Slovenia-Italy), Oradea (Romania), Cagliari and Olbia (Italy), and Vilnius. During the visits, best practices on solving mobility problems and implementing sustainable mobility actions, as well as bad practices in relevant areas were presented to participants. The Lithuanian project partner ME “Susisiekimo paslaugos” sent to these visits not only its representatives, but also those of several interested institutions (Vilnius City Municipality Administration, “Vilniaus planas” ME, Lithuanian Road Administration, Vilnius Gediminas Technical University, and Road Transport Research Institute). The participants of the exploratory visits shared their experiences from visits at meetings of the informal working group of interested institutions organized by ME “Susisiekimo paslaugos” and filled out good practice reports. The following three examples of best practices are the most appropriate for the Action Plan in question:

- a. **Oradea, Romania. Pedestrian streets and a people-only plaza in the city center.** In the city of Oradea, participants were introduced to the recently redesigned and pedestrian adapted streets and the downtown plaza that used to be a car park. This example has shown that proper urban infrastructure solutions can significantly improve people’s quality of life.

- b. **Burgenland, Austria. "Pedibus"**. During the visit to the Burgenland region, the Pedibus facility - gathering of children at Pedibus stops and taking them to school / kindergarten - received special attention. Such a simple measure helps to reduce the flow of traffic in the school environment and contributes to the health of children and to their mobility.
- c. **Amsterdam, the Netherlands. Bicycle Streets**. There are streets in Amsterdam that prioritize bicycle users but can also be used by cars. Such a street model is very unusual and shows that traffic management solutions may be completely different from those traditionally used in Lithuania

## **ACTION No. 1. Vileišis bicycle street**

**1. Relevance to the project** (The selection of this action was inspired by the examples presented during the outgoing seminars during the visit to Amsterdam (Netherlands) and Nova Gorica (Slovenia). The idea of Amsterdam's bicycle street was tailored to the needs of the city of Vilnius, and the solutions for adapting the scenic areas of Nova Gorica to motorless transport users suggested the potential location for the implementation of the idea. The action implementation will focus on the gradual increase in motorless transport and electric scooter user flows. The action implementation will provide a safe and uninterrupted access to the city center, the most job-concentrated area, by bicycle and other rolling means of transportation (such as electric scooters that are getting more popular throughout the city). Currently, the environment is not safe and attractive for methods travel alternative to a car.

### **2. The nature of the action**

The rearrangement of the existing Vileišio Street space is planned for the implementation of the action. The plan is to build the missing connection from the existing bicycle street to the downtown infrastructure of motorless transport. At present, this space is not safe neither for pedestrians nor motorless transport users either in terms of road safety or security (particularly dangerous at night). There is no alternative for convenient and safe connection of Antakalnis residential area with the city center to the users of motorless transport.



By redistributing the space of the existing car street, it is planned to set up a bicycle street up to 2 km long, which allows non-transit car traffic. It is planned to install pedestrian infrastructure, elements of small architecture and lighting. During the construction of pedestrian and cyclist area, infrastructure solutions based on universal design and road safety principles are used. Vehicle speed restrictions are achieved not only by road signs, but also by various horizontal infrastructure vehicle deceleration measures.

Principal solutions are presented in visualization.



This action is particularly important for the improvement of the quality of life of the local population by exploiting the recreational potential of the area and developing public spaces in it. The redistribution of street space for the priority use of motorless transport and pedestrians and the installation of infrastructure will be of great importance to all the communities involved in the area and their safety.

General steps in the implementation of the action:

- Analysis of the situation in the territory (analysis of traffic flows and accident situation) (implemented);
- Resolving land ownership issues (implemented);
- Preparation of a technical design (implemented);
- Public familiarisation with technical design solutions (implemented);
- Preparation for procurement procedures;
- Conduction of procurement procedures;
- Acceptance of the implemented project;
- Implementation of procedures of public awareness and informing of implemented project;
- Area monitoring procedures;
- Implementation of communication measures on the overall impact of the project on the area (traffic safety and security situation, changes in traffic flows).

### 3. Interested institutions

The main stakeholders that will implement the measures envisaged in the action are Vilnius City Municipality and ME "Susisiekimo paslaugos".

### 4. Period

The action is expected to be implemented in the 1<sup>st</sup> quarter of 2020. – 4<sup>th</sup> quarter of 2020

### 5. Costs

The total budget earmarked for this action is up to EUR 17.000.

### 6. Sources of funding

Funds for the implementation of the infrastructure measures – from EU and municipality. The soft measures are implemented from the funds of ME "Susisiekimo paslaugos".

## **ACTION No. 2. Humanization of a part of the Old Town (street)**

### 1. Relevance to the project

The idea of street humanisation came from the humanisation solutions for spaces observed during the project trip to Oradea. The area in which the action is to be implemented is crucial in terms of its main



function. It is an area of tourist potential, where transit traffic flows are observed today and there is a shortage of space for pedestrian traffic. In some places, area is inaccessible for people with special needs.

## 2. Nature of the action (please list and describe the actions to be implemented)

It is planned to redesign the pedestrian and cyclist space of the street, located in the Old Town, for their comfortable and safe movement. The primary actions to be taken to implement the action include processes of public and other stakeholder engagement and education: the public and the business institutions operating in the area are informed of the street humanisation process, vision, objectives, reasons for the selection of this action, its benefits for the environment, economic changes, and the welfare of tourists and visitors.



Other measures for the implementation of the third action:

1. A thorough analysis of the street and its immediate environment is carried out (identifying the priority street function and purpose in the area; analysing the traffic intensity situation (motor traffic, pedestrians, motorless, and other vehicle users); analyzing the car parking situation, and logistics processes in the territory);
2. Specific measures for redistribution of street space, creating comfortable and safe traffic conditions for pedestrians and users of motorless vehicles (other rolling vehicles) on the street are determined, as well as procedures for public involvement and introduction of solutions to be implemented are carried out;
3. Specific measures shall be implemented which may include:
  - 3.1 infrastructure solutions for pedestrian and cyclist traffic, their road safety, storage of bicycles and other vehicles;
  - 3.2 facilities for servicing business establishments (e.g. short-term stops for logistics vehicles);
  - 3.3 traffic management changes on the street and/or in the territory;
  - 3.4 implementation of information technologies for vehicle parking and traffic management;
  - 3.5 aspects of street landscaping and layout of small architecture.

In order to give meaning to the humanized territory, it is planned to organize entertainment events with the public, which would draw the public's attention to the main functional space of the territory and the meaning of its positive changes.

General steps in the implementation of the action:

1. Identification and arrangement of the street in the Old Town, whose space is to be humanized and rearranged;
2. Conduction of a process of public information and involvement in decision-making on the measures to be implemented in the street space;
3. Determination of traffic intensity research, traffic safety, and security, and functional characteristics of the area;
4. Determination of solutions and measures to be applied to humanise the space, to increase the safety and security of all road users, and to provide access for people with special needs;

5. Preparation of procurement procedures for implementation of the action;
6. Conduction of procurement procedures for the implementation of the action;
7. Monitoring of the compliance of the action implemented;
8. Monitoring of traffic safety and security, intensity, and changes in transit circumstances.

### **3. Interested institutions**

The main stakeholders involved in the implementation of the action are the municipal administration, ME “Susisiekimo paslaugos”, Old Town community organizations, residential housing associations and business institutions operating in the target area.

The role of the municipal administration is related to decision-making regarding the implementation of the action and the implementation of the infrastructure measures.

The measures implemented by the implementer of the Action Plan – ME “Susisiekimo paslaugos” include solutions of IT/programming (if applicable).

Business institutions are expected to play an indirect, voluntary, and collaborative role, contributing as much as possible to the process of humanisation of the environment.

The role of the community and organizations in the target area is based on the principle of cooperation and inclusion.

### **4. Period**

The action is expected to be implemented in the 1st quarter of 2020. – 2<sup>nd</sup> quarter of 2021

### **5. Costs**

The total budget earmarked for this action is up to EUR 20.000.

### **6. Sources of funding**

It is planned to fund the implementation of the infrastructure measures from municipal funds. The funds of ME “Susisiekimo paslaugos” are allocated for the implementation of IT/ programming (if applicable).

## **ACTION No. 3. School travel plan (Antakalnis district)**

### **1. Relevance to the project**

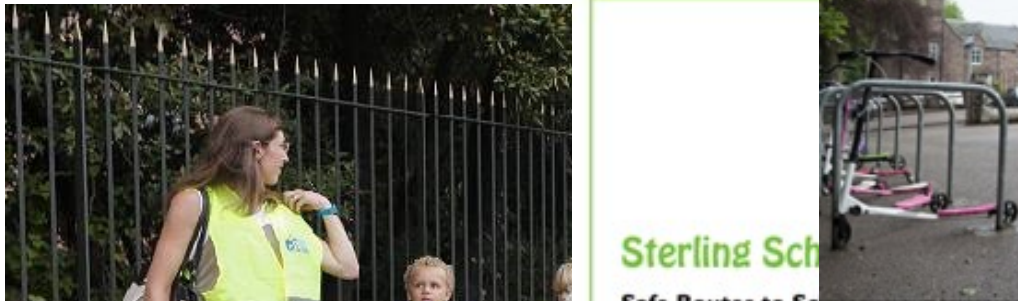
During the visit to Austria (Burgenland), an innovative mobility management tool, Pedibus, was presented, which brings children into groups and then walked on foot to schools/kindergartens. The action to be implemented is not directly linked to the experience gained from participating in the Cyclewalk project, but the measure implemented in Austria could be a component of this action - one of the measures of the travel plan. It is expected to develop a travel planning tool for an urban education institution, which could serve as a model for implementing an untested traffic management method in the city and during introduction of new tools, as well as adapt this method to other urban areas.

### **2. The nature of the action**

First and foremost, it is intended to carry out a detailed analysis of the travel habits of school staff and pupils, the structure of travel, the matrix of travel, and the causation for the implementation of the action. It is planned to conduct surveys of the staff and students (their parents), which will help to identify the reasons that determine the choice of travelling to school by private vehicles and to identify the needs which could create preconditions for changing the travelling habits. A detailed causal analysis identifies the specific actions required and suggestions for alternative ways of arriving at the object of attraction. A meeting is organized with the staff of the object of attraction and parents of students/students to present the analysis and suggestions, they are informed about alternative possibilities of transportation and actions to be taken to improve the accessibility of the object of attraction. The actions to be set out in the travel plan may include changes in the schedules of public transport routes, measures for building the missing public

transport, motorless transport, pedestrian infrastructure, prioritization of actions to be performed. Additionally, the object may be equipped with a staff and student information system (e.g., devices informing of public transport arrivals to nearest stops in real-time (lightboard, interactive information device describing the mobility capabilities in the vicinity of the object of attraction, etc.).

Monitoring is performed over the course of six months or one year (re-survey), the influence of the travel plan on changes in the travel habits to the chosen object is analysed, causation is analysed and possible actions for the introduction of sustainable mobility principles in the area of attraction are determined. Next steps performed by involving the staff from other daily attraction objects located in the territory of attraction, and presenting the key points of the travel plan and its positive environmental and social implications of its implementation, as well as promotion of cooperation by proposing the development of individual travel plans. It is sought that in the future, one of the educational measures designed to raise awareness of how society can contribute to the well-being of the city by reducing traffic jams and pollution throughout the city by choosing more sustainable ways of travelling and saving time on the road.



General steps in the implementation of the action:

1. Identification and coordination of the target audience for which the Travel Plan is being prepared;
2. Getting ready for the procurement of travel plan preparation services;
3. Ordering of travel plan preparation services;
4. Presentation of a travel plan to a target audience;
5. Implementation of measures provided in the travel plan;
6. Performance of periodic monitoring;
7. Presentation of the travel plan to other target groups (e.g. other schools).

### 3. Interested institutions

The main stakeholders involved in the action are the following: the public, school staff and pupils/parents of pupils, the municipal enterprise "Susisiekimo paslaugos". The role of the staff of the educational establishment and of the pupils/their parents (in the preparation of the travel plan) would be direct and essential as it is the main institution changing the travel habits. As part of the implementation of the measures to be included in the travel plan, the role of the Municipal Enterprise "Susisiekimo paslaugos", the implementing institution, is related to the implementation of some of the measures (particularly in the areas of improving public transport services and the use of motorless transport), which will be provided for in the travel plan.

### 4. Period

The action is expected to be implemented in the 1st quarter of 2020. – 4<sup>th</sup> quarter of 2020

### 5. Costs

The action is classified as a low-budget measure. The action will include funding for the implementation of the travel plan, the measures foreseen in the travel plan, and stakeholder involvement procedures.

The total budget earmarked for the preparation of travel plan is up to EUR 10.000.

The total budget earmarked for the implementation of measures of travel plan is up to EUR 15.000.

#### 6. Sources of funding

For the implementation of the action, the funding of the soft measures will be provided from the funds of ME "Susisiekimo paslaugos", the implementation of infrastructure measures - from the funds of municipality.

## II. Process to monitor of actions that are being implemented

### Monitoring methodology

The action plan sets out three actions, the results, effects and impact of which on the mobility situation and other determinants of quality of life in the city (individually and collectively) must be properly assessed after two years of monitoring. The general objectives of monitoring are:

- Evaluation of changes in modal distribution of travel;
- Evaluation of changes in transit traffic flows;
- Evaluation of the effective use of Action Plan services;
- Evaluation of population experience and the level of satisfaction;
- Evaluation of changes in population awareness level (population knowledge of sustainable mobility, multimodal travel, etc.).

The implementation of the Action Plan will be assessed through:

- The results of the action implementation (quantity of new infrastructure);
- Results of these results (changes in flows, etc.);
- Impact (effect) on other areas (changes in public opinion, etc.).

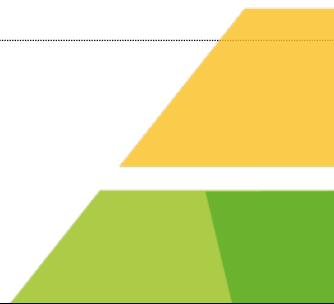
The following monitoring process is proposed:

Target audience:

- Action No. 1 (Missing bicycle and pedestrian infrastructure in Vileišio g.): Residents, visitors, and cyclists of Antakalnis adjacent area;
- Action No. 2 (Humanisation of the part of the Old Town area (street)): Old Town residents and guests;
- Action No. 3 (Travel Plan for Antakalnis School): School staff and pupils / their parents.

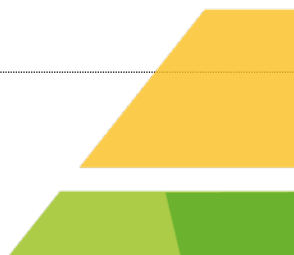
Monitoring methodology:

- Laboratory, instrumental, and field research:
  - Before the implementation of actions
  - After implementation of actions.
- A small-scale survey (100 respondents) to find out the opinion of residents and users about planned and implemented activities:
  - Before the implementation of actions;
  - After implementation of actions.
- Indicators and data recommended for monitoring analysis are provided in the table proposed for filling out during monitoring;
- The detailed monitoring programme, its scope, the list of indicators and indicators to be monitored must be specified after detailing of the solutions of the action plan.

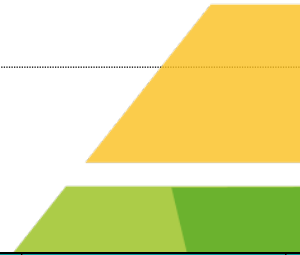


## Results of the Action Plan monitoring

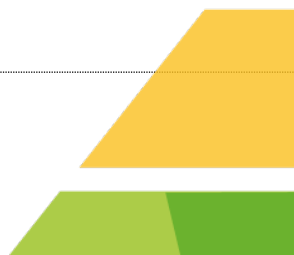
Indicator	Unit of measurement	Corresponding objectives of the Action Plan	Method of assessment	Territory/ target audience	Results before the implementation of the action	Results after the implementation of the action	Change (%)
<b>ACTION No. 1. Vileišis bicycle street</b>							
<b>Result indicators</b>							
<b>1. Measures implemented</b>	pcs.	<ul style="list-style-type: none"> <li>• Improve mobility for pedestrians and cyclists</li> <li>• Improve services of public transportation (hereinafter - PT)</li> <li>• Encourage residents and city guests to change their travel habits to more sustainable ones</li> </ul>	<ul style="list-style-type: none"> <li>• Actual implementation</li> </ul>	Vileišio g.			
<b>Result Indicators of the Result</b>							
<b>2. Cyclist Flows</b>	pcs/h	<ul style="list-style-type: none"> <li>• Improve mobility conditions for pedestrians and cyclists</li> <li>• Encourage residents and city guests to change their travel habits to more sustainable ones</li> </ul>	<ul style="list-style-type: none"> <li>• Field research (flow monitoring)</li> </ul>	Vileišio g. and its vicinity			



Indicator	Unit of measurement	Corresponding objectives of the Action Plan	Method of assessment	Territory/ target audience	Results before the implementation of the action	Results after the implementation of the action	Change (%)
<b>3. Pedestrian flows</b>	pcs/h	<ul style="list-style-type: none"> <li>• Improve mobility conditions for pedestrians and cyclists</li> <li>• Encourage residents and city guests to change their travel habits to more sustainable ones</li> </ul>	<ul style="list-style-type: none"> <li>• Field research (flow monitoring)</li> </ul>	Vileišio g. and its vicinity			
<b>4. Car flows</b>	pcs/h	<ul style="list-style-type: none"> <li>• Encouragement of residents and city guests to change their travel habits to more sustainable ones</li> </ul>	<ul style="list-style-type: none"> <li>• Field research (flow monitoring)</li> </ul>	Vileišio g. and its vicinity			
<b>Effect indicators</b>							
<b>5. Opinion and assessment of residents and visitors</b>	Qualitative Dimension (e.g., points 1-10)	<ul style="list-style-type: none"> <li>• Improve mobility conditions for pedestrians and cyclists</li> <li>• Encourage residents and city guests to change their travel habits to more sustainable ones</li> </ul>	<ul style="list-style-type: none"> <li>• Small-scale survey (100 respondents)</li> </ul>	Residents and visitors of Antakalnis			
<b>ACTION No. 2. Humanization of a part of the Old Town (street)</b>							
<b>Result indicators</b>							

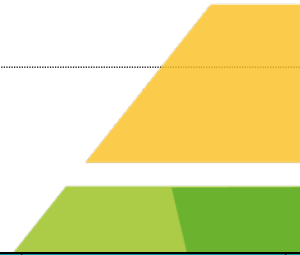


Indicator	Unit of measurement	Corresponding objectives of the Action Plan	Method of assessment	Territory/ target audience	Results before the implementation of the action	Results after the implementation of the action	Change (%)
<b>1. Humanization measures implemented</b>	pcs.	<ul style="list-style-type: none"> <li>• Improve mobility conditions for pedestrians and cyclists</li> <li>• Encourage residents and city guests to change their travel habits to more sustainable ones</li> </ul>	<ul style="list-style-type: none"> <li>• Actual implementation</li> </ul>	Part of Old Town area (street) and its vicinity			
<b>Result Indicators of the Result</b>							
<b>2. Pedestrian flows</b>	pcs/h	<ul style="list-style-type: none"> <li>• Improve mobility conditions for pedestrians and cyclists</li> <li>• Encourage residents and city guests to change their travel habits to more sustainable ones</li> </ul>	<ul style="list-style-type: none"> <li>• Field research (flow monitoring)</li> </ul>	Part of Old Town area (street) and its vicinity			
<b>3. Cyclist Flows</b>	pcs/h	<ul style="list-style-type: none"> <li>• Improve mobility conditions for pedestrians and cyclists</li> <li>• Encourage residents and city guests to change their travel habits to more sustainable ones</li> </ul>	<ul style="list-style-type: none"> <li>• Field research (flow monitoring)</li> </ul>	Part of Old Town area (street) and its vicinity			

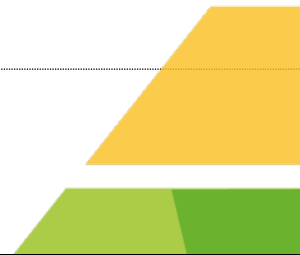


Indicator	Unit of measurement	Corresponding objectives of the Action Plan	Method of assessment	Territory/ target audience	Results before the implementation of the action	Results after the implementation of the action	Change (%)
<b>4. PT user flows</b>	pcs/h	<ul style="list-style-type: none"> <li>• Encourage residents and city guests to change their travel habits to more harmonious ones</li> <li>• Improve services of public transportation (hereafter - PT)</li> </ul>	<ul style="list-style-type: none"> <li>• Instrumental research (data from SPME)</li> </ul>	Part of Old Town area (street) and its vicinity			
<b>5. Car flows</b>	pcs/h	<ul style="list-style-type: none"> <li>• Encourage residents and city guests to change their travel habits to more harmonious ones</li> <li>• Improve services of public transportation (hereafter - PT)</li> </ul>	<ul style="list-style-type: none"> <li>• Instrumental research (data from SPME)</li> </ul>	Konstitucijos pr. and its vicinity			
<b>6. Parking space occupancy / filling</b>	%	<ul style="list-style-type: none"> <li>• Encouragement of residents and city guests to change their travel habits to more sustainable ones</li> </ul>	<ul style="list-style-type: none"> <li>• Field research (occupancy of parking spaces in yard and free parking lots)</li> <li>• Instrumental research (data available from SPME)</li> </ul>	Konstitucijos pr. and its vicinity			
<b>Effect indicators</b>							

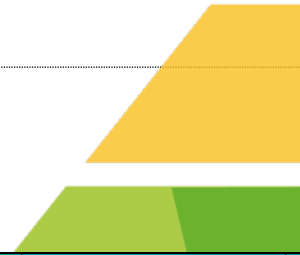




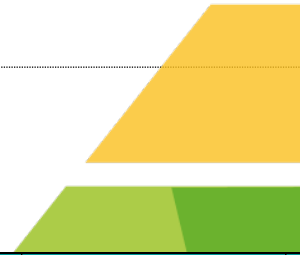
Indicator	Unit of measurement	Corresponding objectives of the Action Plan	Method of assessment	Territory/ target audience	Results before the implementation of the action	Results after the implementation of the action	Change (%)
<b>9. Opinion and assessment of residents and visitors</b>	Qualitative Dimension (e.g., points 1-10)	<ul style="list-style-type: none"> <li>• Improve mobility conditions for pedestrians and cyclists</li> <li>• Encourage residents and city guests to change their travel habits to more sustainable ones</li> </ul>	<ul style="list-style-type: none"> <li>• Small-scale survey (100 respondents)</li> </ul>	Residents and visitors of the Old Town area (street and its vicinity)			
<b>Action No. 3. School Travel Plan (ANTAKALNIS DISTRICT)</b>							
<b>Result indicators</b>							
<b>1. Measures implemented</b>	pcs.	<ul style="list-style-type: none"> <li>• Improve mobility conditions for pedestrians and cyclists</li> <li>• Encourage residents and city guests to change their travel habits to more sustainable ones</li> </ul>	<ul style="list-style-type: none"> <li>• Actual implementation</li> </ul>	Antakalnis district			
<b>Result Indicators of the Result</b>							



Indicator	Unit of measurement	Corresponding objectives of the Action Plan	Method of assessment	Territory/ target audience	Results before the implementation of the action	Results after the implementation of the action	Change (%)
<b>2. Pedestrian flows</b>	pcs/h	<ul style="list-style-type: none"> <li>• Improve mobility conditions for pedestrians and cyclists</li> <li>• Encourage residents and city guests to change their travel habits to more sustainable ones</li> </ul>	<ul style="list-style-type: none"> <li>• Field research (flow monitoring)</li> </ul>	Object of the measure and its vicinity			
<b>3. Cyclist Flows</b>	pcs/h	<ul style="list-style-type: none"> <li>• Improve mobility conditions for pedestrians and cyclists</li> <li>• Encourage residents and city guests to change their travel habits to more sustainable ones</li> </ul>	<ul style="list-style-type: none"> <li>• Field research (flow monitoring)</li> </ul>	Object of the measure and its vicinity			
<b>4. PT user flows</b>	pcs/h	<ul style="list-style-type: none"> <li>• Encourage residents and city guests to change their travel habits to more harmonious ones</li> <li>• Improve services of public transportation (hereafter - PT)</li> </ul>	<ul style="list-style-type: none"> <li>• Instrumental research (data from SPME)</li> </ul>	Object of the measure and its vicinity			



Indicator	Unit of measurement	Corresponding objectives of the Action Plan	Method of assessment	Territory/ target audience	Results before the implementation of the action	Results after the implementation of the action	Change (%)
<b>5. Car flows</b>	pcs/h	<ul style="list-style-type: none"> <li>• Encouragement of residents and city guests to change their travel habits to more sustainable ones</li> </ul>	<ul style="list-style-type: none"> <li>• Field research (flow monitoring)</li> </ul>	Object of the measure and its vicinity			
<b>6. Parking space occupancy / filling</b>	%	<ul style="list-style-type: none"> <li>• Encouragement of residents and city guests to change their travel habits to more sustainable ones</li> </ul>	<ul style="list-style-type: none"> <li>• Field research (occupancy of parking spaces in yard and free parking lots)</li> <li>• Instrumental research (data available from SPME)</li> </ul>	Object of the measure and its vicinity			
<b>7. Modal distribution of travel</b>	%	<ul style="list-style-type: none"> <li>• Improve mobility conditions for pedestrians and cyclists</li> <li>• Encourage residents and city guests to change their travel habits to more sustainable ones</li> </ul>	<ul style="list-style-type: none"> <li>• Small-scale survey (100 respondents)</li> </ul>	Antakalnis district			
<b>Effect indicators</b>							



Indicator	Unit of measurement	Corresponding objectives of the Action Plan	Method of assessment	Territory/ target audience	Results before the implementation of the action	Results after the implementation of the action	Change (%)
<b>8. Opinion and assessment of residents and visitors</b>	Qualitative Dimension (e.g., points 1-10)	<ul style="list-style-type: none"> <li>• Improve mobility conditions for pedestrians and cyclists</li> <li>• Encourage residents and city guests to change their travel habits to more sustainable ones</li> </ul>	<ul style="list-style-type: none"> <li>• Small-scale survey (100 respondents)</li> </ul>	Residents and visitors of Antakalnis			

## Conclusions and recommendations

The main deficiencies of the policy instrument are:

- Long duration (outdated actions, lack of progressive actions);
- The wording of some of the actions is too general;
- Lack of detail in the concept of mobility in the document;
- Deficiencies in the monitoring of the implementation of actions (the results are analysed but not the effect, insufficient list of indicators).

Key recommendations for developing an updated strategic plan:

- In order to keep the actions of the strategic plan up to date, the plan should be developed for a period that does not exceed 3–5 years.
- It is essential that the proposed actions have a significant impact on several forms of travel and would likely to have a positive and complex impact. For example, an action would have a positive impact on walking, using motorless transport, improvement of traffic safety, reduction of air pollution and noise, and would give meaning to and consolidate a key territorial function. These criteria could be met by actions related to the improvement of conditions for pedestrian traffic and motorless transport users in areas with potential for tourism (e.g. Old Town), and in the surroundings of other objects of daily attraction (kindergartens, schools). There is a need to apply various measures to consolidate the principles of car traffic and parking in terms of territorial sustainability;
- Actions would focus on public inclusion for the concept of urban mobility and diversity of possibilities, as well as for the concept of the impact on environmental change (in terms of air pollution, noise, traffic safety, and territorial vitality);
- The methodology for monitoring of the action implementation shall be developed at three levels: result indicators, result indicators of the result, and effect indicators. It is important to consider that certain actions interact with each other and it is appropriate to assess their overall impact;
- It is recommended to integrate relevant data and methodologies developed during the Cyclewalk project.

2 March 2020

**Date:** \_\_\_\_\_

**Signature:** Director Modesta Gusarovienė \_\_\_\_\_

**Stamp of the organisation (if available):** \_\_\_\_\_