SUSTAINABLE URBAN MOBILITY PLAN

Y-203
Lahti Direction work
2017–2020

Lahti.fi

LAHDEN SUUNTA

Lahti Master Plan 2030
and Sustainable Urban
Mobility Plan
(SUMP)

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LAHDEN SUUNTA

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Introduction

The Sustainable Urban Mobility Plan (SUMP) is an action plan based on the European Commission's guidelines and implementing the City of Lahti's strategy for urban mobility that the city uses to guide and encourage the transition towards more sustainable forms of mobility. According to the Commission's guidelines, the plan must have a clear political vision and long-term objectives, taking into account all modes of transport and user groups. The measures in the plan aim to address the problems of urban mobility in relation to traffic emissions, social and economic justice in mobility, as well as to contribute to the development of a more comfortable and healthier mobility environment.

This is the first time that a Sustainable Urban Mobility Plan has been prepared in Lahti. The development of the Sustainable Urban Mobility Plan has been combined into the same process with the master plan, with the resulting entity named the Lahti Direction work 2017–2020. The continuous work progresses in four-year cycles by City Council terms and enables continuous development work as well as continuous monitoring of the implementation of measures. The SUMP plan acts as an umbrella for more detailed action plans, thus guiding the promotion of sustainable mobility. The objective of the Sustainable Urban Mobility Plan is to contribute to the achievement of Lahti's 2025 carbon neutrality target in terms of mobility and the 2030 modal share of sustainable mobility. A SUMP working group has been set up for the work, and the steering group is the Lahti Direction steering group.

The Sustainable Urban Mobility Plan is included in decision-making as part of the Lahti Direction work. The Sustainable Urban Mobility Plan implements the strategy of the City of Lahti and describes the will with which sustainable mobility is promoted in Lahti. The financing of individual measures under the Sustainable Urban Mobility Plan will be decided separately. The more detailed contents, implementation schedule and financing of the measures in the plan's Lahti City Center component will be decided separately in connection with the decision-making of the Lahti City Center Traffic and Mobility Plan 2030 (LIISU2030).

[1] *The Sustainable Urban Mobility Plan was prepared as part of the CitiCAP project funded by the EU's Urban Innovative Actions program.*

Description of the process

The planning process for the Sustainable Urban Mobility Plan is described below. The first year involved carrying out an assessment of the current situation, considering possible future scenarios and setting the objectives of the Lahti Direction work for 2030. The second year involved organizing events for residents and other stakeholders as well as collecting, among other things, the digital material 'Everyday places and routes' (Arjen paikat ja reitit) concerning mobility. Measures were listed and prioritized through workshop work to create a clear entity for consultation in the draft phase. In the third year, a draft of the Lahti Direction work was in public consultation and feedback was collected on it. Feedback was also collected on the draft target network for cycling. In addition, an impact assessment of sustainable urban mobility was carried out based on external evaluation.

A list of measures revised on the basis of feedback as well as more detailed descriptions of the measure contents and their indicators will now be introduced into decision-making. At the end of the year, we will assess the success of the process and move our gaze towards the next round. A detailed description of the Lahti Direction work process and 2030 target status can be found in the report on the Lahti Direction work 2017–2020 and in the participation and evaluation plan for the Lahti Direction work.

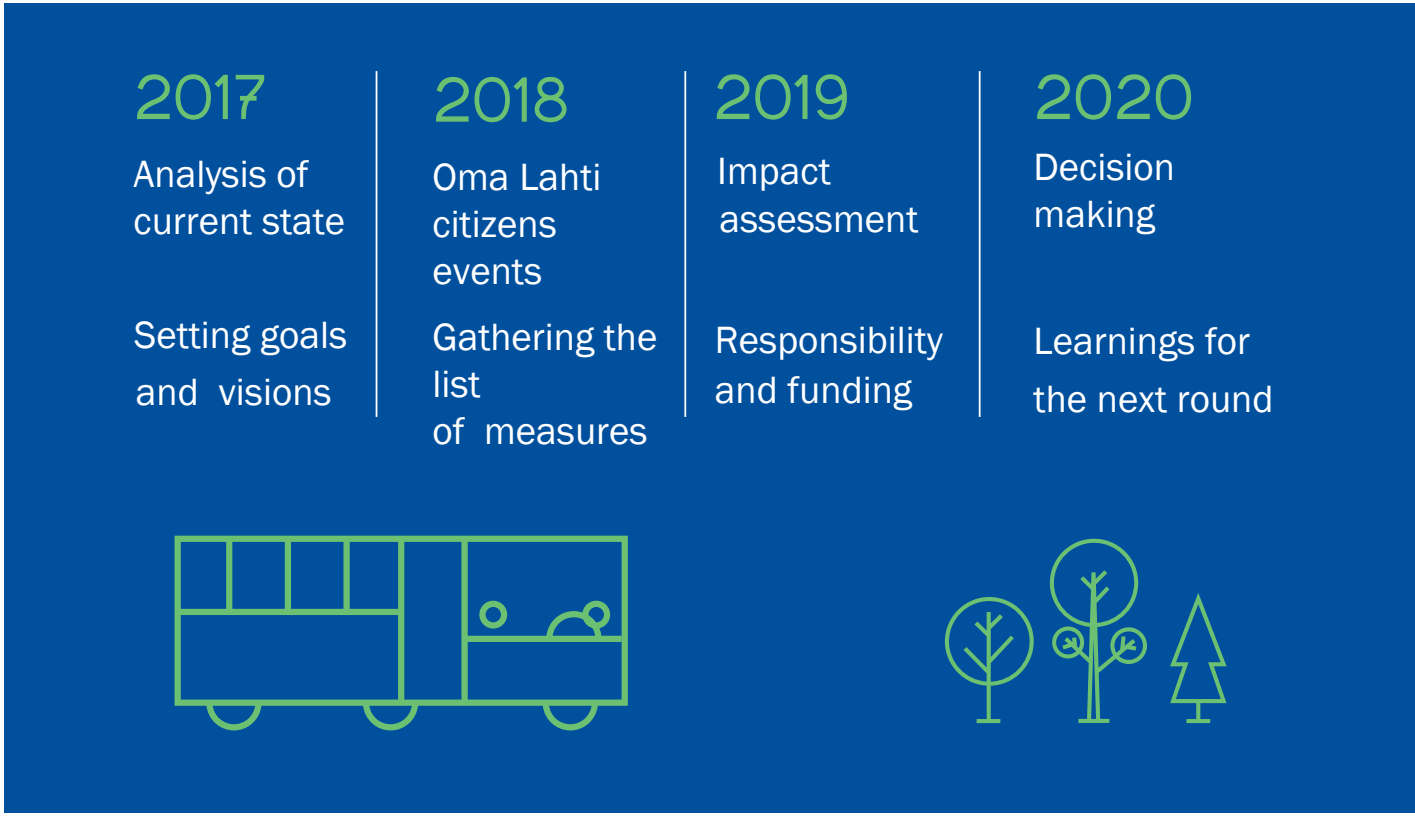


Figure 1 Process of the Sustainable Urban Mobility Plan

Breakdown and descriptions of measures

The measures of Lahti's sustainable mobility plan have been classified in accordance with the common themes defined for the Lahti Direction work, and the measures have been included in the description of the 2030 target status for Lahti Direction. The measures that have also been selected as 'Naturally in motion' (Luonnollisesti liikkeessä) measures of the flagship project implementing Lahti's strategy are marked with an asterisk (*) in the list of measures.

- **THE SUSTAINABLY GROWING LAHTI THEME INCLUDES MEASURES TO IMPROVE WALKING AND CYCLING CONDITIONS AND PROMOTING SUSTAINABLE MOBILITY THROUGH COMMUNICATION AND INTERACTION.**

- **MEASURES RELATED TO THE DEVELOPMENT OF THE LAHTI CITY CENTER CAN BE FOUND UNDER THE HEADING LAHTI CITY CENTER.**

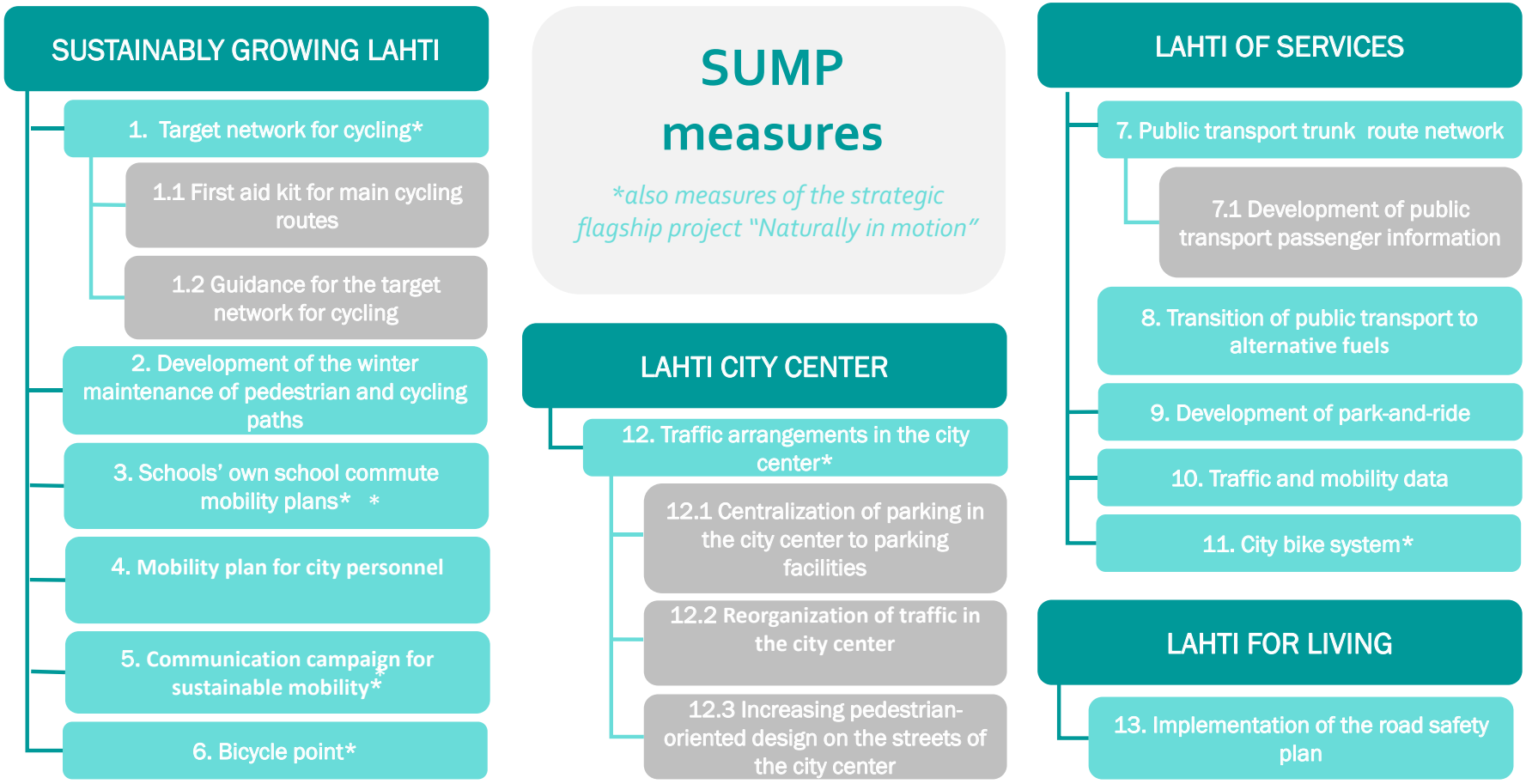
- **THE LAHTI OF SERVICES THEME INCLUDES MEASURES RELATED MAINLY TO LAHTI'S PUBLIC TRANSPORT AS WELL AS TRAFFIC AND MOBILITY DATA.**

- **LAHTI FOR LIVING IS ITS OWN SECTION AND INCLUDES THE IMPLEMENTATION OF THE ROAD SAFETY PLAN.**

A brief description, objective and time of implementation of the measure have been compiled under each measure. The classification section describes the type of the measure. The plan includes measures related to infrastructure construction, mobility management, strategic development and regulation. The implementation plan and cost estimate section defines the implementation steps in more detail. A preliminary cost estimate has also been prepared for some of the measures, especially those related to infrastructure. The responsible party is then defined. Lastly, it is explained how the implementation of the measure is monitored.

In addition, the implementation of sustainable urban mobility measures alongside master plan work is described in the Lahti Direction implementation program 2021–2024.

List of measures

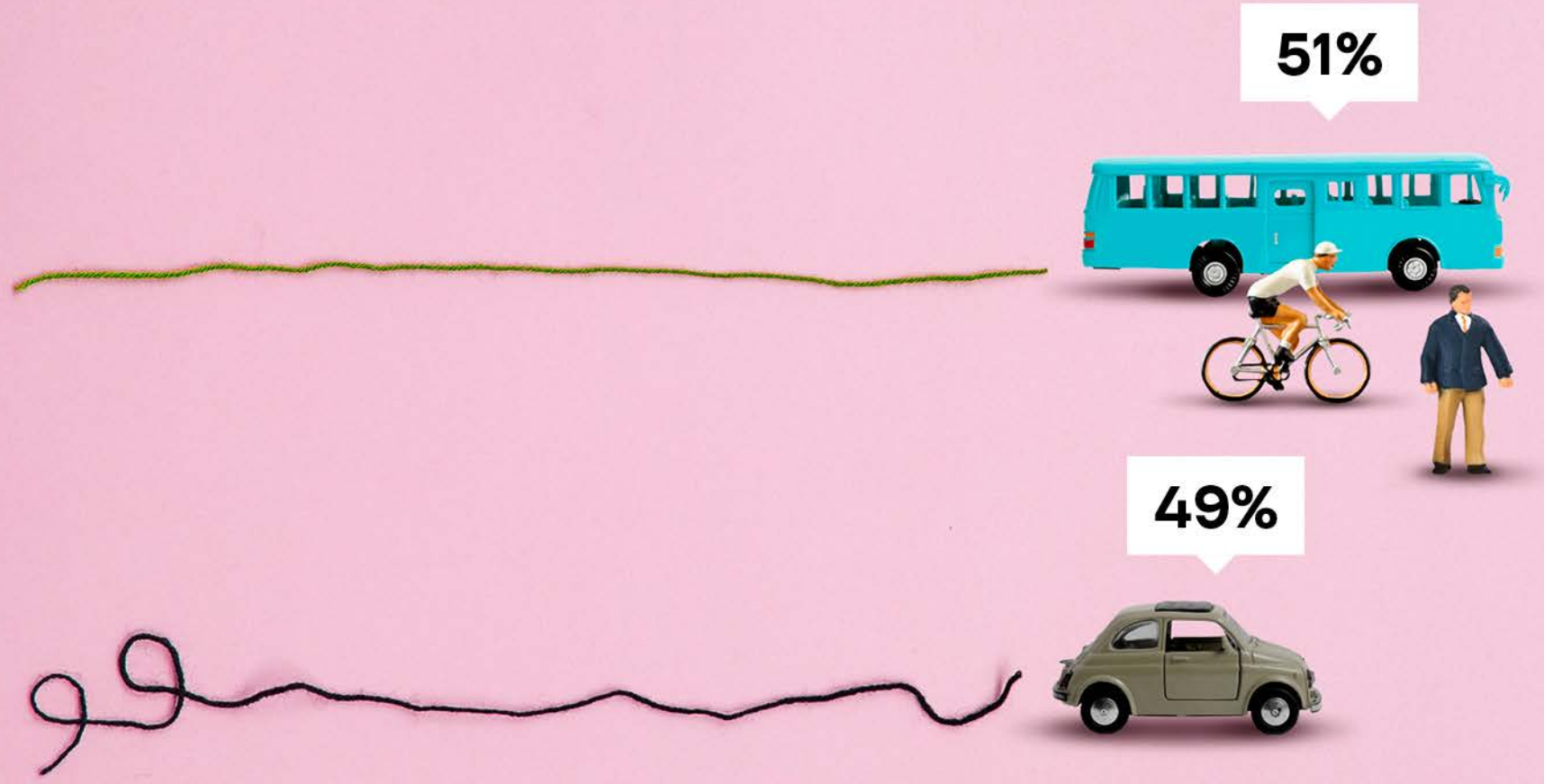


Sustainably growing Lahti

MOBILITY MANAGEMENT AND PROMOTING CYCLING AND WALKING

This section presents measures aimed at promoting walking and cycling as well as managing mobility. Background information on walking and cycling in Lahti, as well as a description of the 2030 target status with common mobility and land use monitoring indicators, can be found in the Lahti Direction work 2017–2020 report under the Sustainably Growing Lahti theme.

Share of sustainable urban mobility 2030



1.
Target network for cycling*

The aim of this measure is to enable smooth and fast bicycle traffic and low-carbon mobility in the city, and increase the safety of cycling between different residential, service and travel-to-work areas. Walking conditions are also improved at the same time: separating cycling from walking has a positive effect on walking conditions and safety.

The measure includes updating the routes of the target network for cycling, preparing an investment plan, updating the planning guidelines for bicycle traffic, as well as general planning and implementation of the target network. The target network updating work has involved preparing a map-based description of the target network for the master plan and updating routes in the master plan's street type descriptions. The investment plan of the target network for cycling defines the cost effects for the implementation of the main routes of the target network. The main routes will be implemented step by step as part of the municipal infrastructure investment plan. In addition, bicycle parking will be promoted in key locations as part of the work. The monitoring and reporting of cycling volumes will be developed by installing bicycle counters on the planned main routes in order to obtain information on the impact of infrastructure on cycling volumes. The total length of the main route network is 61 kilometers.

TIME PERIOD
2019–2030

CLASSIFICATION

Mobility management	**Strategic plans**	**Infrastructure development (physical environment, including maintenance)**	Regulation (e.g. parking charges, service provision)

ACTION PLAN AND COST ESTIMATE

TIME PERIOD	MEASURE	COST ESTIMATE
2019	Updating the target network for cycling	38 056 € (ELY maksaa 25 %)
2018–2020	Planning and construction of a CitiCAP bicycle path that implements the target network and complies with good planning guidelines.	1 600 000€[2]
2020	Prioritization, scheduling and cost estimation of the implementation of main cycling routes	-
	Updating the planning guidelines for cycling in accordance with national planning guidelines	
2020–2027	Specifying the main routes of the target network for cycling to general plan level	150 000 – 200 000 €/v
2020–2030	Implementation of main cycling routes as separate projects and in connection with other projects, and development of bicycle parking	1 000 000 – 2 000 000 €/v

MONITORING

INDICATOR	BASE DATA	OBJECTIVE
Implementation of the measure (yes/no)	-	2030: Measure implemented
Implementation rate of main routes (%)	2019: 6.5%	2030: Implementation rate of main routes 100%
Increase in the modal share of cycling	2016: Modal share of cycling 11% (trips/day) (National Travel Survey 16 2018)	2030: Modal share of cycling 16% (trips/day)
Change in cycling volumes at different measuring points	Continuous monitoring	Continuous monitoring

RESPONSIBILITY

Urban Environment service area

MORE INFORMATION IN FINNISH

-Target network for bicycle traffic in Lahti, final report
-Bicycle counters in Lahti
-CitiCAP project

[2] *Funding from the EU's Urban Innovative Actions funding*

1.1
First aid kit for main cycling routes

The aim of this measure is to implement light and rapid first aid measures on the main routes of the target network for cycling in order to improve cycling conditions. Such measures that clearly affect the smoothness of cycling include resurfacing as well as removing curbstones and replacing them with pavement. Particular attention will be paid to the safety and improvement of intersection areas. We are also examining the situation and need for underpasses. The implementation plan is based on an assessment of the current conditions of the street network.

TIME PERIOD
2020–2022

CLASSIFICATION

Mobility management	Strategic plans	**Infrastructure development (physical environment, including maintenance)**	Regulation (e.g. parking charges, service provision)

ACTION PLAN AND COST ESTIMATE

TIME PERIOD	MEASURE	COST ESTIMATE
2020	Condition assessment of main cycling routes	€100,000–150,000
2020–2022	Paving of main cycling routes	€1,000,000–1,500,000
2020–2022	Curbstone and intersection area repairs of main cycling routes	€700,000–1,200,000

MONITORING

INDICATOR	OBJECTIVE
Implementation of pavement repairs on main cycling routes (yes/no)	2022: Pavement repairs implemented
Implementation of curbstone and intersection area repairs on main cycling routes (yes/no)	2022: Curbstone and intersection area repairs implemented

RESPONSIBILITY

Urban Environment service area

1.2
Guidance
for the target network for cycling

The aim of this measure is to define guidance principles, to plan the road markings, traffic control equipment, and signage for the target network for cycling. Good cycling infrastructure is continuous and clearly guides the cyclist. Road markings and signs must be consistent and clear throughout the target network. Signage is used to improve smooth navigation to various destinations. The measure includes the planning and implementation of signposts as well as harmonizing the guidance of the bicycle traffic infrastructure on main cycling routes.

TIME PERIOD
2020–2030

CLASSIFICATION

Mobility management	Strategic plans	Infrastructure development (physical environment, including maintenance)	Regulation (e.g. parking charges, service provision)

ACTION PLAN AND COST ESTIMATE

SCHEDULE	MEASURE	COST ESTIMATE
2020	General plan for signage	€50,000–100,000
2021	Implementation plan for signage	€100,000–150,000
2022–2030	Implementation of signage on the target network for cycling	€300,000–700,000
2020–2030	Implementation of road markings and traffic control equipment as part of cycling infrastructure projects	-

MONITORING

INDICATOR	OBJECTIVE
Implementation in accordance with the guidance and signage plan (yes/no)	2030: Measure implemented

RESPONSIBILITY

Urban Environment service area

2.
Improvements on winter maintenance

The aim of this measure is to establish clear winter maintenance practices and update the maintenance categories for the target network for cycling to promote winter cycling.

New requirements will be added for the winter maintenance of main bicycle routes when re-tendering maintenance contract areas. Main cycling routes should be the first paths to be treated. The rules for snow removal will be tightened on main bicycle routes. The quality of the maintenance of main bicycle routes will also be increased by lowering the permitted upper limit for snow accumulation. Salt brushing will be introduced on some routes. The rules for also apply to pedestrian and bicycle paths that are salt brushed. Anti-skid treatment is carried out chemically on routes that are salt brushed – gritting is only allowed in exceptional cases. Anti-skid treatment is carried out by gritting on other main bicycle routes, but at the end of the winter season, additional grit removal is provided for before the actual spring grit removal. In the actual spring grit removal, main bicycle routes have been taken into account by requiring that grit be removed first from main bicycle routes.

The plan and updating work will be carried out in accordance with the target network for cycling. Other important cycling connections, such as to schools and other key destinations, will also be taken into account. In addition, attention will be paid to the maintenance of pedestrian paths on important routes.

TIME PERIOD

2019–2025

CLASSIFICATION

Mobility management	Strategic plans	**Infrastructure development (physical environment, including maintenance)**	Regulation (e.g. parking charges, service provision)

ACTION PLAN AND COST ESTIMATE

TIME PERIOD	MEASURE	COST ESTIMATE
2019	Maintenance recommendations (prepared in connection with target network work)	*Implemented as part of target network updating work*
2020	Preparation of product cards that define maintenance categories, measures, and winter maintenance priorities within a certain radius from the city center	€60,481–
2020	Winter maintenance trial on CitiCAP bicycle path	–
2021	Extension of the winter maintenance trial to a 20-kilometer area as part of the city center maintenance contract	€80,000
2020–2025	Changing the quality level of winter maintenance to match product cards in connection with tendering	€500,000–700,000/year

MONITORING

INDICATOR	OBJECTIVE
Maintenance classifications of all main route maintenance contracts A+ or A++ (yes/no)	2025: Measure implemented

RESPONSIBILITY

Urban Environment service area

3.
Schools' own sustainable mobility plans*

The aim of this measure is to implement sustainable mobility plans for Lahti schools. The development of the plans will be school driven and base on the school's needs. Measures will be defined with the pupils and teachers of each school to promote sustainable urban mobility. The sustainable mobility plan of Länsiharju school serves as a model for other schools. The school commute plans are updated and the implementation of the measure is monitored using the results of a school commute survey conducted every four years. The first school commute survey was conducted in the fall of 2018. The survey was used to determine mobility habits and, for example, things that were perceived as dangerous in the mobility environment. The survey respondents included pupils in grades 1–9 from a total of 27 schools.

TIME PERIOD
2019–2030

CLASSIFICATION

Mobility management	Strategic plans	Infrastructure development (physical environment, including maintenance)	Regulation (e.g. parking charges, service provision)

ACTION PLAN AND COST ESTIMATE

SCHEDULE	MEASURE
2018	Preparation and implementation of school commute survey
2020	Preparation of a mobility plan for Tiirismaa and Länsiharju school, creating a model for other mobility plans in Lahti
2020	Background work for the mobility plans of comprehensive schools in the City of Lahti
2020–2022	Preparation of mobility plans for comprehensive schools in the City of Lahti
2022	Preparation and implementation of school commute survey as a compulsory survey of education services based on 2018 work

MONITORING

INDICATOR	BASE DATA	OBJECTIVE
Implementation of the measure (yes/no)	-	2030: Measure implemented
Prepared sustainable mobility plans	2019: 1/28 schools have prepared a plan 2020: 2/28 schools have prepared a plan	2021: 50% of schools have prepared a plan
Change in the modal split	2018: 19% of school commutes under 3 kilometers are traveled by car	2021: almost all commutes under 3 kilometers are traveled by means other than car

RESPONSIBILITY

Education and Culture service area
Urban Environment service area
Central Administration

EXAMPLE OF PROMOTING SUSTAINABLE MOBILITY IN SCHOOLS:

Sustainable mobility plan of the Paavola campus

In 2019, a sustainable mobility plan was developed for the Paavola city center campus defining the measures for promoting sustainable mobility on the new campus. The plan supports and guides the development of the campus area in terms of facilities, traffic and parking arrangements, and the environment, among other things.

THE MEASURES ARE DIVIDED INTO THREE THEMES:

1. The school atmosphere and practices encourage wise mobility;
2. Safe and wise mobility are promoted by means of communication and campaigning; and
3. The conditions of the school and surrounding area are developed to support safe mobility on foot and by bicycle.

Tiirismaa school's plan for promoting wise mobility was implemented as part of the work to serve as a model for the sustainable mobility plans of other comprehensive schools.

4.
Sustainable mobility plan for city personnel

The aim of this measure is to increase the share of sustainable modes of transport in the commuting and business trips of city personnel. A commuting survey is conducted every two to four years and used as a basis for the planning and implementation of the mobility plan for city personnel and related measures. The commuting survey examines the current situation and changes in, among other things, the modal share distribution, as well as personnel's experiences with, for example, (bicycle) parking or the quantitative or qualitative adequacy of social premises.

In the coming years, the commuting of city personnel will be directed towards more sustainable modes of transport by, for example, regulating parking facilities, investing in the quality of social premises, providing bicycle parking, offering employer-subsidized commuter tickets, and awarding an occupational wellbeing award. In addition, the possibilities of making the city's official cars available as shared-use vehicles outside office hours, first to personnel and later to city residents, will be considered.

TIME PERIOD
2019–2030

CLASSIFICATION

Mobility management	Strategic plans	Infrastructure development (physical environment, including maintenance)	Regulation (e.g. parking charges, service provision)

ACTION PLAN AND COST ESTIMATE

TIME PERIOD	MEASURE
2019	Assessing and improving dressing and washing facilities in connection with internal occupational health and safety inspections
	Assessing the number of bicycle parking spaces and increasing the number in relation to the number of car parking spaces
	Considering bicycle spaces in connection with construction
	Reforming the principles and practices of employee parking and parking charges
2020	Introduction of employer-subsidized commuter tickets
2020–2030	Alternative contract parking pricing model for those parking in contract spaces of Lahden Pysäköinti Oy
	Implementation of annual bicycle maintenance as a benefit for all personnel
	Encouraging managers to promote smart and safe mobility with employee awards
	Providing information and encouraging remote work opportunities in suitable fields.
	Reducing the need to use one's own car for work.
	Acquiring shared-use (electric) bicycles for all larger office locations and coordinating maintenance and management.
	Making the city's official cars available as shared-use vehicles outside office hours, first to personnel and later to city residents.

MONITORING

INDICATOR	BASE DATA	OBJECTIVE
Implementation of the measure (yes/no)	–	2030: Measure implemented
Change in the modal share distribution[3] of commuting (assessed with commuting surveys)	2018: share of sustainable modes of transport in commuting 47% (Walking 11%, cycling 27%, public transport 9%)[4]	2030: Share of sustainable modes of transport in commuting has increased
Utilization rate of employer-subsidized commuter tickets	2019: 0%	2020: 50% of personnel use employer-subsidized commuter tickets and 10% of them have a monthly ticket
		2021: 55% use employer-subsidized commuter tickets and 15% have a monthly ticket

RESPONSIBILITY

Central Administration
Premises Center
Urban Environment service area

[3] *The modal share distribution indicates the distribution of trips or distances into different modes of transport. (Here N:4,694)*

5.
Communication campaign for sustainable mobility*

The aim of this measure is to develop communication and marketing for sustainable mobility. Various channels are to be used to engage in appealing communication about the possibilities of sustainable mobility, raising awareness about the climate impact of mobility and encouraging sustainable mobility by means of, for example, the CitiCAP carbon trading application. Events implemented together with stakeholders are organized annually during themed weeks, such as the National Cycling Week or the European Mobility Week. An award recognizing a pioneer in wise mobility is presented annually in connection with the 'Environmental Village' (Ympäristökylä) event. Local businesses are inspired to encourage their employees towards more sustainable mobility.

In addition, a panel of residents for sustainable mobility is convened on a regular basis to discuss current themes and plans related to mobility. The memos from the meetings of the panel of residents will be distributed to the Technical and Environmental Committee as well as the Public Transport Committee for information. Additional actions include participating in national sustainable mobility networks and sharing lessons learned and good practices.

TIME PERIOD
continuous

CLASSIFICATION

Mobility management	Strategic plans	Infrastructure development (physical environment, including maintenance)	Regulation (e.g. parking charges, service provision)

ACTION PLAN AND COST ESTIMATE

TIME PERIOD	MEASURE
2019	Launch of the CitiCAP carbon trading application
Continuous	Annual participation in Cycling Week and organizing events together with stakeholders
Continuous	Annual participation in European Mobility Week and organizing events together with stakeholders
Continuous	Establishment and meetings of panel of residents for sustainable mobility
Continuous	Communication in various channels on current issues and projects related to transport and mobility

MONITORING

INDICATOR	BASE DATA	OBJECTIVE
Implementation of the measure (yes/no)	–	2030 Measure implemented annually
Number of events during Cycling and Mobility Week	2019: Events during Cycling Week 7 2019: Events during Mobility Week 12	2021: At least 5 events/week 2021: At least 200 participants/week
CitiCAP application downloads and users	2019: 800–1,000 downloads 2019: 350 users	2021: 2,000 city residents have downloaded the application 2021: 1,300 users

RESPONSIBILITY

Urban Environment service area
Lahti Region Public Transport LSL
Central Administration
Stakeholders

MORE INFORMATION IN FINNISH

-Lahti Cycling Week
-CitiCAP project

6.
Bicycle point*

The aim of this measure is to increase the attractiveness of cycling by implementing a low-threshold bicycle point in the Lahti city center area, where cyclists can get help with bicycle maintenance or independently maintain their bicycles. In addition, bicycle maintenance and cycling courses can be arranged at the bicycle point.

TIME PERIOD
2019–2022

LAHTI OF SERVICES

PUBLIC TRANSPORT, TRAVEL CHAINS AND DIGITALIZATION

This section presents measures related to the development of public transport as well as traffic and mobility data. Background information on public transport and a description of the 2030 target status with common mobility and land use monitoring indicators can be found in the Lahti Direction work 2017–2020 report under the Lahti of Services theme.

7.
Public transport trunk route network

The aim of this measure is to make public transport a more attractive form of travel through reform of the trunk route network. The goal of the trunk route network plan is to speed up public transport travel times, improve the accessibility of the fringe areas of the city center, and provide a better level of service in areas with large numbers of potential public transport users.

The implementation of the trunk route network plan is a measure of the City of Lahti's economic rebalancing program. The aim is to reduce the City of Lahti's annual amount of public transport subsidies by EUR 1 million from 2022 onwards by increasing passenger numbers and improving cost efficiency.

TIME PERIOD
2018–2022

CLASSIFICATION

Mobility management	**Strategic plans**	Infrastructure development (physical environment, including maintenance)	Regulation (e.g. parking charges, service provision)

ACTION PLAN AND COST ESTIMATE

TIME PERIOD	MEASURE	COST ESTIMATE
2018–2020	Planning of the trunk route network	€100,000
2021	Trunk routes 1, 2, 5, 6 and 8 coming into effect	Savings for 2021 €700,000
2022	Remaining trunk routes coming into effect	Savings €1,000,000 as of 2022

MONITORING

INDICATOR	BASE DATA	OBJECTIVE
Trunk route network in use (yes/no)	-	2022: Trunk route network in use
Increase in public transport passenger numbers	2016: 7.1 million trips/year	2030: 10.9 million trips/year
Change in the modal share of public transport	2016: Modal share of public transport 4% of all trips made in Lahti (trips/day, National Travel Survey 2016)	2030: Modal share of public transport 8% (trips/day)

RESPONSIBILITY

Lahti Region Public Transport LSL
Urban Environment service area

MORE INFORMATION IN FINNISH

Trunk route network plan

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7.1
Development of public transport passenger information

The aim of this measure is to develop the utilization of public transport passenger information. Lahti Region Public Transport (LSL) has introduced a real-time passenger information system in 2019, and real-time monitoring will be introduced in all LSL buses in stages by 2022.

The real-time passenger information system allows passengers to be provided with real-time information about the bus's location and arrival at the stop. Real-time schedule information can be presented, for example, in the route planner, on the timetable displays of stops, and on the passenger compartment displays of buses. Monitoring data can also be used to plan schedules. Passenger compartment displays can also be used to present stop chains, i.e. information on the next stops the bus is arriving at.

The passenger information system also enables the introduction of a traffic light priority system. This allows traffic light priority requests to be transmitted to the central traffic light system in the case of delayed or prioritized departures, making public transport smoother and more punctual.

TIME PERIOD
2020–2022

CLASSIFICATION

Mobility management	Strategic plans	Infrastructure development (physical environment, including maintenance)	Regulation (e.g. parking charges, service provision)

ACTION PLAN AND COST ESTIMATE

TIME PERIOD	MEASURE	COST ESTIMATE
2021–2022	Purchase of passenger compartment displays	€20,000/year
2020–2022	Real-time passenger information system	€80,000/year
2020–2022	Implementation of traffic light priority	--

MONITORING

INDICATOR	BASE DATA	OBJECTIVE
Share of vehicles with passenger compartment displays in urban transport	2020: 0%	2022: 100%
Share of vehicles -time data generating real	2019: approx. 50%	2022: 100%
Traffic light priority in use (yes/no) -		2022: Measure implemented

RESPONSIBILITY

Lahti Region Public Transport LSL
Urban Environment service area

LAHDEN SUUNTA

8.
Transition of public transport to alternative fuels

Alternative fuels are used in public transport to reduce emissions from public transport. Alternative fuels include electricity, hydrogen, biogas, and biodiesel.

The update of the EU's Clean Vehicles Directive (CVD) requires that a significant share of the transport system will be electric or use biofuels in the future. In operating contracts awarded between 2021 and 2025, 41% of buses must be low-emission. At least half of these must be electric. In addition to electric buses, the other half may be buses using gas or renewable fuels. In contracts awarded in 2026–2030, the corresponding share is 59%.

A fuel report has been prepared for regional public transport, according to which transport using alternative fuels is required and scored in tendering. In urban transport starting in the summer of 2020, the fuel must be at least second-generation biodiesel. Electric or biogas vehicles earn additional points in urban transport tendering.

TIME PERIOD
2020–2030

CLASSIFICATION

Mobility management	Strategic plans	Infrastructure development (physical environment, including maintenance)	**Regulation (e.g. parking charges, service provision)**

ACTION PLAN AND COST ESTIMATE

TIME PERIOD	MEASURE	COST ESTIMATE
as of 2021	Transport service using alternative fuels	€1,000,000/year
as of 2021	Construction of charging stations	€50,000/pcs

MONITORING

INDICATOR	BASE DATA	OBJECTIVE
Number of vehicles using alternative fuels	2020: 12 buses	2030: 70 buses

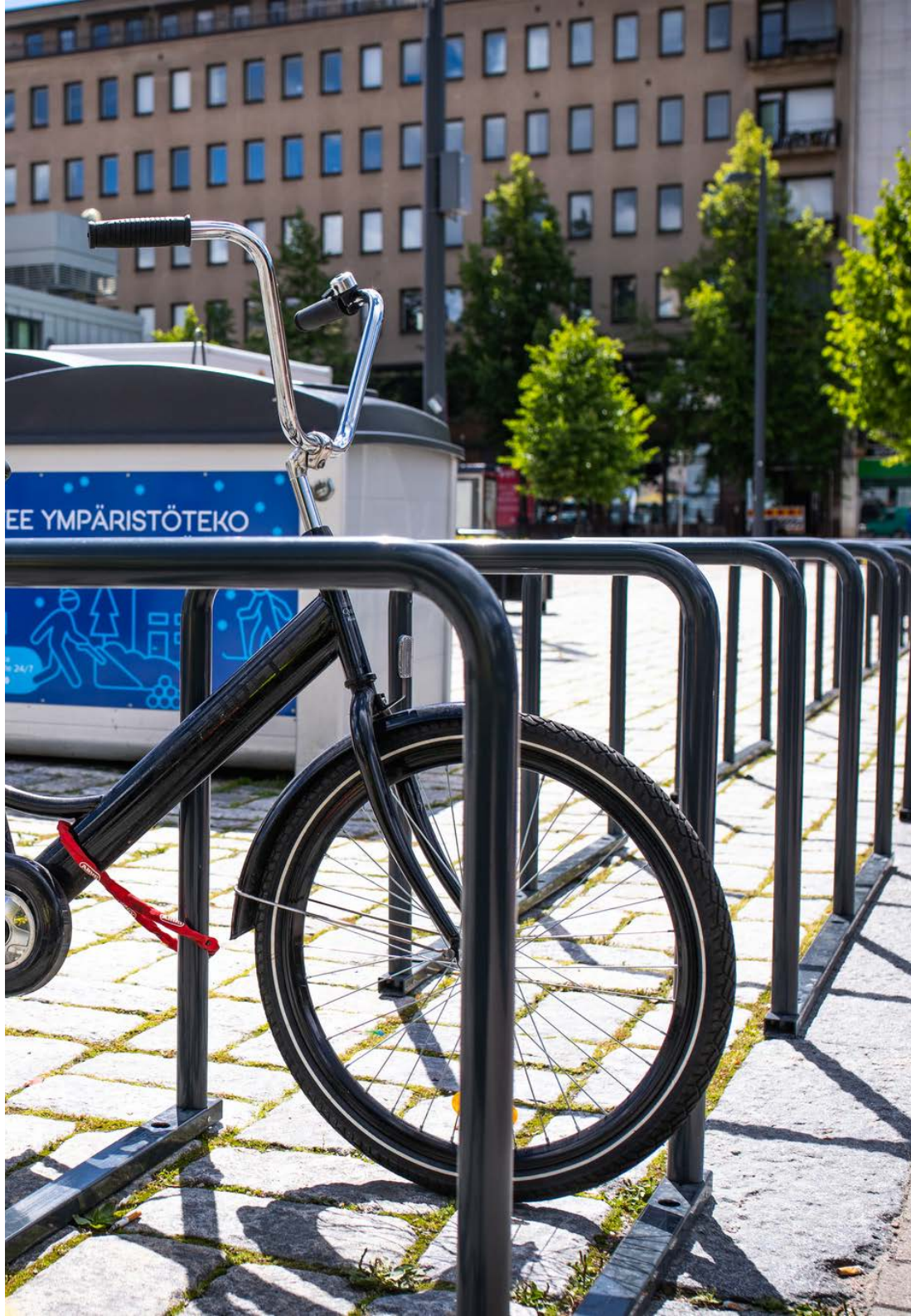
RESPONSIBILITY

Lahti Region Public Transport LSL
Urban Environment service area

9.
Development of park-and-ride

The aim of this measure is to plan and increase park-and-ride parking spaces or areas in the trunk route network area of Lahti and sub-regions. Park-and-ride enables travel chains better than before and encourages the use of public transport. The development of park-and-ride at the Travel Center is one of the city's key objectives. In the future, the aim is to increase the number of park-and-ride parking spaces at the Travel Center and to improve the safety of storing bicycles. In addition, the measure will be used to develop park-and-ride for bicycle and car traffic at other public transport hubs or at the end points of trunk routes.

TIME PERIOD
2019–2030



CLASSIFICATION

Mobility management	Strategic plans	**Infrastructure development (physical environment, including maintenance)**	Regulation (e.g. parking charges, service provision)

ACTION PLAN AND COST ESTIMATE

TIME PERIOD	MEASURE	COST ESTIMATE
2020	Park-and-ride report – potential and plan to increase park-and-ride facilities at public transport hubs (excluding Travel Center)	€32,000 (Traficom grant €26,250)
	Proposal and plans for four park-and-ride car parking areas and eight park-and-ride facilities for bicycle traffic	
2021–2030	Implementation of planned facilities in stages at public transport hubs (4 park-and-ride car parking facilities and 8 bicycle parking facilities)	approx. €600,000
2019–2030	Development of park-and-ride at the Travel Center in cooperation with various actors	approx. €30,000,000

MONITORING

INDICATOR	BASE DATA	OBJECTIVE
Implemented new park-and-ride facilities (excluding Travel Center)	2019: 0 pcs	2030: Planned park-and-ride facilities implemented - 4 for cars - 8 for bicycles
Number of parking spaces at the Travel Center	2019: 451 structural car parking spaces 2019: 468 structural bicycle spaces	2030: 600 structural car parking spaces 2030: 700 frame lock bicycle spaces

RESPONSIBILITY

Urban Environment service area

10.
Traffic and mobility data

The objectives of this measure include developing the collection of mobility and traffic data to be more systematic and making better use of data in traffic planning and control, developing the skills of city employees around the theme (identifying needs and resource requirements and improving processes) as well as creating conditions for the development of new mobility services by compiling and opening private and public transport information interfaces, or by providing reports on the mobility data collected. The aim is to make better use of traffic and mobility data (e.g. CitiCAP) to support decision-making and planning work. Cooperation on this topic will be continued with universities and companies in the area, for example, in the form of cooperation projects.

TIME PERIOD
2020–2030

CLASSIFICATION

Mobility management	**Strategic plans**	Infrastructure development (physical environment, including maintenance)	Regulation (e.g. parking charges, service provision)

ACTION PLAN AND COST ESTIMATE

TIME PERIOD	MEASURE
2020–2021	Strategy for utilizing data in traffic and mobility planning. A plan examining the availability, coverage and current utilization situation of traffic and mobility data in Lahti, the development of expertise in this area, where the data could be utilized better and what the target status is for the future.
2020	Introduction of the Traffic Now Service developed in the CitiCAP project.
as of 2020	Compiling and opening available private and public transport information interfaces.
Continuous	Planning and promotion of cooperation projects.

MONITORING

INDICATOR	OBJECTIVE
Implementation of the measure (yes/no)	2030: Measure implemented

RESPONSIBILITY

Urban Environment service area

MORE INFORMATION IN FINNISH

Open data in Lahti
Lahti traffic image service

11.
City bike system*

The aim of this measure is to promote sustainable mobility through the planning and implementation of a city bike system. A city bike system is one way for cities to increase the share of sustainable mobility and promote the role of the bicycle in urban transport as an equal means of transport alongside the car. The city bike system complements the provision of public transport services, is an important part of the travel chain, and potentially increases the modal share of cycling. Based on the feasibility study, Lahti has the preconditions for a city bike system – demand as well as a dense urban structure in terms of the area of operation.

The measure includes preparing the procurement of the city bike system on the basis of the feasibility study, the implementation of the procurement, and the implementation of the system so that it will start operations in 2021.

TIME PERIOD
as of 2019

CLASSIFICATION

Mobility management	**Strategic plans**	**Infrastructure development (physical environment, including maintenance)**	Regulation (e.g. parking charges, service provision)

ACTION PLAN AND COST ESTIMATE

SCHEDULE	MEASURE	COST ESTIMATE
2019–2020	Feasibility study	€22,000
2020	Planning and implementation of procurement by negotiation procedure	€58,000
2021	System launch 04/2021	€300,000–400,000/year
2021–	System maintenance	€300,000–400,000/year

MONITORING

INDICATOR	OBJECTIVE
Implementation of the system (yes/no)	2021: System implemented
Utilization rate of city bikes	2022: 4–6 trips/bike/day

RESPONSIBILITY

Urban Environment service area

MORE INFORMATION IN FINNISH

Feasibility study -Lahti city bikes

CLASSIFICATION

Mobility management	Strategic plans	Infrastructure development (physical environment, including maintenance)	Regulation (e.g. parking charges, service provision)

ACTION PLAN AND COST ESTIMATE

TIME PERIOD	MEASURE
2019–2020	Planning of bicycle point and looking into implementation possibilities
	Determining the bicycle point location and composition of the workforce
2020	Bicycle point space ready, responsibilities distributed and plan completed
2021	Start of bicycle point operations

MONITORING

INDICATOR	OBJECTIVE
Implementation of the measure (yes/no)	2022: Measure implemented
Bicycle point opened (yes/no)	2021: Bicycle point opened
Tracking of visitor numbers	2021 base data

RESPONSIBILITY

Education and Culture service area
Urban Environment service area

LAHTI CITICAP

LAHDEN SUUNTA

LAHTI CITY CENTER

VIBRANT LAHTI CITY CENTER

Measures to promote sustainable mobility in the city center have been compiled under the Lahti City Center component. Basic information on the development of the city center and city center traffic, as well as a description of the 2030 target status with common mobility and land use monitoring indicators, can be found in the Lahti City Center section of the Lahti Direction work 2017–2020 report.


Air quality in the city center (NO_2 annual mean µg/m^3)
1990s
34
2000s
31
2010s
26

12.
Traffic arrangements in the city center*

The aim of these measures is to create the conditions for a vibrant and lively city center that is strengthening its identity. In Lahti, vitality is the first of the top three areas in the city strategy. One of the strategic development goals for vitality (A4) is to increase the vitality of the city center and increase the comfort of residential areas, as well as to promote a sustainable community structure and mobility. The development goal for a comfortable city center has a direct connection to vitality and attractiveness. Several studies show that a pedestrian-friendly and human-scale city center stimulates and diversifies business, increases customer flows and thereby also economic activity.

The city center of the future is easily accessible by all modes of transport. Lahti's strategic goal is to be a carbon neutral city in 2025. In addition, the 2030 target is for sustainable modes of transport to account for more than 50% of mobility. Consequently, the most important planning criterion in the city center is promoting sustainable forms of travel, i.e. walking, cycling, and public transport. This will have a positive effect on the climate, environment and health, thus resulting in savings for society.

The measures will be implemented as part of the Lahti City Center Traffic and Mobility Plan 2030 (LIISU2030).

12.1
Centralization of parking in the city center to parking facilities

The aim of this measure is to promote the efficient organization of car parking in parking facilities surrounding the city center in cooperation with the actors in the area. The accessibility of car parking facilities will be improved by better connecting them to the street network. Parking for those arriving in the city center is made smooth, with smart guidance provided.

The city's parking policy has recently been updated. The parking policy defines in more detail, among other things, the principles of city center parking, the dimensioning requirements for car and bicycle parking, and the principles of parking pricing. In future the report will be updated within the schedule of the Lahti Direction work by City Council terms. In the case of future parking facilities in the city center, investigation work will be carried out as part of this measure.

TIME PERIOD
2019–2030

CLASSIFICATION

Mobility management	Strategic plans	**Infrastructure development (physical environment, including maintenance)**	**Regulation (e.g. parking charges, service provision)**

ACTION PLAN AND COST ESTIMATE

TIME PERIOD	MEASURE	COST ESTIMATE
2019 – 2020	Updating the parking policy	–
2020 – 2021	Determining the capacity of city center parking facilities and the implementation schedule of new facilities for the following years.	–
2021	Designing a smart guidance plan for city center parking facilities.	*The measure will be implemented as part of the LIISU2030 program*
2022 –2030	Construction of parking facilities and implementation of the guidance plan_	-

MONITORING

INDICATOR	OBJECTIVE
Implementation of the measure (yes/no)	2030: Measure implemented

RESPONSIBILITY

Urban Environment service area

MORE INFORMATION IN FINNISH

Lahti City Center Traffic and Mobility Plan LIISU 2030

12.2
City center circulation plan

The current thoroughfare traffic in the city center causes significant inconvenience in the heart of the city. The noise in the city center is loud. Busy traffic degrades air quality in the city center in the form of exhaust fumes and respirable fine particles.

The aim of this measure is to revitalize the city center, calm down traffic in the area and increase road safety. At the same time, the goal is to calm down traffic within the city center area to create an environment that favors pedestrians, bicycle traffic and public transport using appropriate street space, parking and traffic control measures. The planning will include, for example, child and health impact assessments, business and company impact assessments, as well as noise and emissions modeling. Stakeholders will be involved as the planning progresses. The necessary investigations and feasibility studies are to be carried out during the first phase of the planning work. The second phase will involve preparing more detailed street-specific plans and the implementation schedule.

TIME PERIOD
2019–2030

CLASSIFICATION

Mobility management	**Strategic plans**	**Infrastruktuurin kehittäminen (fyysinen ympäristö, myös ylläpito)**	**Regulation (e.g. parking charges, service provision)**

ACTION PLAN AND COST ESTIMATE

TIME PERIOD	MEASURE	COST ESTIMATE
2019	Lahti Traffic and Mobility Plan 2030 (LIISU2030) preliminary report of measures for motor vehicle traffic to make efficient use of the city center outer ring and the ring road around the city center	€27,118
	Identifying means and measures that encourage and support the use of sustainable modes of transport in the city center and when arriving there	
2020	LIISU2030 follow-up review: Updating traffic forecasts	€50,685
	Functionality and capacity assessments of city center circulation plan	
	Impact assessment: child, health, wellbeing, impact and risk assessment as well as commercial vision	
2021–2030	Implementation of traffic arrangements in the city center (ring road and public transport terminal)	Ring road: €9–14M[5] Transfer stop area: €1.5–3M

MONITORING

INDICATOR	OBJECTIVE
Implementation of the measure (yes/no)	2030: Measure implemented

RESPONSIBILITY

Urban Environment service area

MORE INFORMATION IN FINNISH

Lahti City Center Traffic and Mobility Plan LIISU 2030

[5] *€ based on prepared cost estimates*

LAHDEN SUUNTA

12.3
Increasing pedestrian-oriented design on the streets of the city center

The aim of this measure is to improve walking conditions in the Lahti city center area. At present, there are many places in the city center that are perceived as uncomfortable and noisy, as well as street crossings that are difficult from the perspective of road safety. In addition, as bicycle traffic and various shared-use micro vehicles increase, the need for separating modes of transport grows.

This measure includes increasing the comfort of walking on city center streets, for example, by clearly separating walking and cycling from each other. The measure involves updating the plans of streets within the main streets surrounding the city center and further looking into measures used to create a comfortable and safe walking environment in the city center area. A comfortable and quiet but lively walking environment attracts people to spend more time on the city center streets, and distances are also perceived as shorter.

TIME PERIOD
2019–2030

CLASSIFICATION

Mobility management	**Strategic plans**	**Infrastruktuurin kehittäminen** **(fyysinen ympäristö, myös ylläpito)**	Regulation (e.g. parking charges, service provision)

ACTION PLAN AND COST ESTIMATE

TIME PERIOD	MEASURE	COST ESTIMATE
2021–2022	Updating the street plans of the city center together with residents and actors in the area	€50,000–60,000
2023–2030	Implementation of plans and development of walking conditions in the city center	€5.5–9M[6]

MONITORING

INDICATOR	OBJECTIVE
Implementation of the measure (yes/no)	2030: Measure implemented
Change in the number of pedestrians in the city center	Continuous monitoring

RESPONSIBILITY

Urban Environment division

MORE INFORMATION IN FINNISH

Lahti City Center Traffic and Mobility Plan LIISU 2030

[6] based on cost estimates from previous separate reports

LAHTI FOR LIVING

PROMOTING ROAD SAFETY

A road safety measure has been placed under Lahti for Living. More information can be found in the Lahti for Living section of the Lahti Direction work 2017–2020 report.

The vision of Lahti's road safety work is: "Care about yourself and others. No one wants to die or be injured in traffic".

13.
Implementation of the road safety plan

The aim of this measure is to implement the Lahti road safety plan compiled in 2018–2019 in cooperation with stakeholders. A wide-ranging and comprehensive action plan has been drawn up to support road safety and education work, with both concrete means of traffic education and communication as well as those aimed at increasing the safety of the traffic environment included. The opinions of people living and moving in Lahti, as well as their experiences of traffic safety and mobility problems in their living environment, were collected via an electronic survey and the results were utilized in the preparation of the road safety plan.

The measures of the road safety plan have been compiled in a separate document. The action plan for improving the traffic environment focuses mainly on cost-effective measures that can be implemented quickly. Traffic education and communication action plans have been compiled for different target groups during the work. Going forward, administrative branches/units will prepare their road safety activities for approximately the next one year ahead. The action plans of the administrative branches form the road safety work plan of Lahti. At the end of the year or at the beginning of the following year, the administrative branches will review the implementation of the plans. The revised plans serve as a summary of the city's road safety activities for the past year.

TIME PERIOD
continuous as of 2019

CLASSIFICATION

Mobility management	**Strategic plans**	Infrastructure development (physical environment, including maintenance)	Regulation (e.g. parking charges, service provision)

MONITORING

INDICATOR	BASE DATA	OBJECTIVE
Implementation of the measure (yes/no)	–	2030: Measure implemented
Reduction target for traffic fatalities in southern Päijät-Häme	2017: 2 persons	2025: 0 persons

RESPONSIBILITY

Road safety working group

MORE INFORMATION IN FINNISH

Road safety plan

Monitoring of measures

MEASURE	INDICATOR	BASE DATA	OBJECTIVE
SUSTAINABLY GROWING LAHTI			
1. *Target network for cycling**	Implementation of the measure (yes/no)	-	2030: Measure implemented
	Implementation rate of main routes	2019: 6.5%	2030: Implementation rate of main routes 100%
	Increase in the modal share of cycling	2016: Modal share of cycling 11% (trips/day) (National Travel Survey 2018)	2030: Modal share of cycling 16% (trips/day)
	Change in cycling volumes at different measuring points	Continuous monitoring	Continuous monitoring
1.1 First aid kit for main cycling routes	Implementation of pavement repairs on main cycling routes (yes/no)	-	2022: Pavement repairs implemented
	Implementation of curbstone and intersection area repairs on main cycling routes (yes/no)	-	2022: Curbstone and intersection area repairs implemented
1.2 Guidance for the target network for cycling	Implementation in accordance with the guidance and signage plan (yes/no)	-	2030: Measure implemented
2. *Development of the winter maintenance of walking and cycling paths*	Maintenance classifications of all main route maintenance contracts A+ or A++ (yes/no)	–	2025: Measure implemented
3. *Schools' own mobility plans**	Implementation of the measure (yes/no)	–	2030: Measure implemented

LAHDEN SUUNTA

	Prepared mobility plans	2019: 1/28 schools have prepared a plan 2020: 2/28 schools have prepared a plan	2021: 50% of schools have prepared a plan
	Change in the modal share distribution of pupils	2018: 19% of school commutes under 3 kilometers are traveled by car	2021: almost all commutes under 3 kilometers are traveled by means other than car
4. *Mobility plan for city personnel*	Implementation of the measure (yes/no)	–	2030: Measure implemented
	Change in the modal share distribution[3] of commuting (assessed with commuting surveys)	2018: share of sustainable modes of transport in commuting 47% (Walking 11%, cycling 27%, public transport 9%)	2030: Share of sustainable modes of transport in commuting has increased
	Utilization rate of employer-subsidized commuter tickets	2019: 0%	2020: 50% of personnel use employer-subsidized commuter tickets and 10% of them have a monthly ticket 2021: 55% use employer-subsidized commuter tickets and 15% have a monthly ticket
5. *Communication campaign for sustainable mobility**	Implementation of the measure (yes/no)	–	2030 Measure implemented
	Number of events during Cycling and Mobility Week	2019: Events during Cycling Week 7 2019: Events during Mobility Week 12	2021: At least 5 events/week 2021: At least 200 participants/week
	CitiCAP application downloads and users	2019: 800–1,000 downloads 2019: 350 users	2021: 2,000 city residents have downloaded the application 2021: 1,300 users

6. *Bicycle point**	Implementation of the measure (yes/no)	–	2022: Measure implemented
	Bicycle point opened (yes/no)	–	2021: Bicycle point opened
	Tracking of visitor numbers	–	increased visitor numbers as of 2021
LAHTI CITY CENTER			
7. *Traffic arrangements in the city center**			
7.1 *Centralization of parking in the city center to parking facilities*	Implementation of the measure (yes/no)	–	2030: Measure implemented
7.2 *Reorganization of traffic in the city center*	Implementation of the measure (yes/no)	–	2030: Measure implemented
7.3 *Increasing pedestrian-oriented design on the streets of the city center*	Implementation of the measure (yes/no)	–	2030: Measure implemented
	Change in the number of pedestrians in the city center	–	Continuous monitoring
LAHTI OF SERVICES			
8. *Public transport trunk route network*	Trunk route network in use (yes/no)	–	2022: Trunk route network in use
	Increase in public transport passenger numbers	2016: 7.1 million trips/year	2030: 10.9 million trips/year
	Change in the modal share of public transport	2016: Modal share of public transport 4% of all trips made in Lahti (trips/day, National Travel Survey 2016)	2030: Modal share of public transport 8% (trips/day)
8.1 *Development of public transport passenger information*	Share of vehicles with passenger compartment displays in urban transport	2020: 0%	2022: 100%
	Share of vehicles generating real-time data	2019: approx. 50%	2022: 100%
	Traffic light priority in use (yes/no)	–	2022: Measure implemented

9. ***Transition of public transport to alternative fuels***	Share of vehicles using alternative fuels	2020: 12 buses	2030: 70 buses
10. ***Development of park-and-ride***	Implemented new park-and-ride facilities (excluding Travel Center)	2019: 0 pcs	2030: Planned park-and-ride facilities implemented - 4 for cars - 8 for bicycles
	Number of parking spaces at the Travel Center	2019: 451 structural car parking spaces 2019: 468 structural bicycle spaces	2030: 600 structural car parking spaces 2030: 700 frame lock bicycle spaces
11. ***Traffic and mobility data***	Implementation of the measure (yes/no)	–	2030: Measure implemented
12. ***City bike system****	Implementation of the system (yes/no)	–	2021: System implemented
	Utilization rate of city bikes	–	2022: 4–6 trips/bike/day
LAHTI FOR LIVING			
13. ***Implementation of the road safety plan***	Implementation of the measure (yes/no)	–	2030: Measure implemented
	Reduction target for traffic fatalities in southern Päijät-Häme	2017: 2 persons	2025: 0 persons

SEE ALSO IN FINNISH

All materials of the Lahti Direction work have been compiled here

Promoting sustainable mobility in Lahti can be found here

LAHDEN SUUNTA

SUMP

= SUSTAINABLE URBAN MOBILITY PLAN

LAHDEN SUUNTA