

# TALLINN REGION SUSTAINABLE URBAN MOBILITY STRATEGY 2035

## AUGUST 2019 PUBLIC DRAFT STRATEGY



















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### Dear citizen,

Estonia, especially Tallinn and Harju County, has developed rapidly and enormously over the last 15 years. After Estonia's accession to the European Union, our economy continued to grow steadily, and both Tallinn and its surroundings grew quickly to become the engine of development of northern Estonia. The city is home to nearly half of the population and traffic of Estonia, as well as major attractions and centres of science, industry, and entertainment. Tallinn receives and serves as a passageway for trade flows arriving from all corners of the globe by land, water, and air.

This rapid development has led to people spending more of their time and money on transportation, which has in turn increased transport-related environmental impacts. Every day we travel more kilometres per person and build ever more expensive infrastructure, which is increasingly costly to maintain. The number of vehicles on our roads is increasing together with fine particulates and other emissions, as is the amount of mineral resources we are using for road infrastructure. In a growing and developing densely populated city, daily travel by car is more expensive and inefficient than anywhere else, because land that is essential to the city and its people is mainly used for constructing new parking lots and expanding roads.

Tallinn, like the Nordic cities, has come to realise that better urban planning and replacing cars with other, more economical, means of transport is cheaper for society in the long run and helps reduce people's mobility costs.

Moreover, increasing car traffic is expensive for municipalities and the state and is a burden on the environment. Each additional car requires the construction of 2 to 3 new parking spaces and maintaining car traffic

Mihhail Kõlvart

Mayor of Tallinn

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brings with it the need to renovate and maintain thousands of kilometres' worth of roads each year, as well as to monitor and regulate the traffic, maintain traffic light systems, etc.

Across the Gulf of Finland, Tallinn's sister city, Helsinki, and its neighbouring municipalities have set a target of eliminating the need for daily travel by car for 70% of their population. As yet, the Tallinn region has lacked such ambitions.

If the Tallinn region were to develop a transport system and carry out urban planning aimed at ensuring 25,000–50,000 people travel daily by foot, public transport, or bicycle by eliminating their need for daily use of a personal car, it would directly save our citizens and businesses 200–700 million euros yearly in money alone.

Tallinn's vision is for its mobility services and urban space to make utilising sustainable means of transport the most convenient option for as many people as possible. This is a lifestyle that is clean, healthy, and economically viable

The Tallinn region Sustainable Urban Mobility Strategy 2035 identifies 13 challenges which affect urban transport and people's mobility the most. To solve these problems, we look at what we can do within the next 15 years to make Tallinn a comfortable place to live in and all of its areas conveniently accessible to everyone.

This will be achieved through better urban planning: the development of a network of streets and roads that are people-friendly to all types of travellers. We will build essential facilities (schools and kindergartens) near homes or areas that are easily accessible by public transport. We will create additional convenient transfer points. We will create better alternatives for carless travel, as well as safe cycle and pedestrian tracks for short-distance travel.

This public draft strategy has been prepared within the framework of the FinEstSmartMobility collaborative project of the Estonian Road Administration, the Tallinn Transport Department, Helsinki City Board, and the Helsinki Regional Transport Authority and co-funded from the Interreg Central Baltic Programme (2016–2019).

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The studies, seminars, and presentations used for preparing the Strategy can be found here:

https://www.mnt.ee/et/tee/tallinna-piirkonna-saastva-linnaliikuvuse-arengukava-tallinna-lilia-2035-eesmargid https://www.tallinn.ee/est/liikuvuskava2035/

Thank you to everyone who participated in the Tallinn region Urban Mobility Strategy 2035 workshops and seminars (2017–2019)! The participants included the following organisations, institutions, and companies.

Anija Rural Municipality Kiili Rural Municipality Government Saku Rural Municipality Government

Union of Estonian Automobile Enterprises Kohila Rural Municipality Government

Baltic Environmental Forum Kolmruut Arhitektid SPINUNIT OÜ Bolt Kose Rural Municipality Government Statistics Estonia City of Helsinki Kristiine District Administration Tallink Grupp AS

Citycon Lääne-Harju Rural Municipality GovernmeEntergy Agency of Tallinn

Citypark Eesti Linnalabor Tallinn City Enterprise Department Colliers International Linnalahendused OÜ Tallinna Kaubamaja Kinnisvara AS Doranova Baltic OÜ Luminor Bank Tallinn Environmental Department

Estonian branch of Eckerö Line Estonian Road Administration

Estonian Traders' Association Maardu City Government

Estonian Environmental Research Centre Mainor Ülemiste AS Tallinna Lennujaam AS Estonian Association of Persons with Relativistal of Economic Affairs and CommunicationsCity Office

MARH Stuudiod OÜ Tallinn Urban Planning Department Mobility

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Estonian Green Movement MTÜ Põhja-Eesti Ühistranspordikeskus (Northili-Es-City Council

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Ekspertruum OÜ Oma Maja

Elmo Rent OÜ Estonian Homeowners' Confederation

Endover KVB OÜ OÜ ASE

**ETKL** OÜ Hendrikson & Ko University of Tartu

EuroPark Estonia OÜ Pirita District Administration Tehnopol

Go Bus Police and Border Guard Board

Fleet Complete Eesti Positium Northern Tallinn District Administration Union of Harju County Municipalities

Postimees Harku Rural Municipality Government

Helsinki Region Transport (HSL) Raasiku Rural Municipality Government

Hendrikson & KO Rae Rural Municipality Viimsi Rural Municipality Government Inphysica OÜ Rapla Rural Municipality Viimsi Rural Municipality Council

Jõelähtme Rural Municipality GovernmentMinistry of Finance

K-Projekt AS RealWAY / Go Group Kantar EMOR AS Estonian Reform Party

Kaubamaja AS Ridango AS Keila Rural Municipality Government Riigi Kinnisvara AS

Keskkonnapsühholoogia uuringud OÜ Riigikogu (parliament of Estonia)

Tallinn Centre District Administration Ruum ja Maastik OÜ Saue Rural Municipality

Tallinn Municipal Engineering Services De

ment

Tallinna Linnatranspordi AS

Tallinn University of Applied Sciences

Tallinn Transport Department

Tallinn University

TalTech

Telliskivi Creative City Transport for London University College London

Ülemiste City

URBAN MANAGEMENT OÜ

Viking Line Eesti OÜ

Viru Keskus Wolt Eesti OÜ

### SUMMARY

The vision of the mobility strategy for the Tallinn region: The Tallinn region is an attractive, vibrant, and green region with a lively economy, and is home to healthy and happy people. The Tallinn region is covered with an excellent network of public transport and innovative mobility services as well as convenient cycle tracks and sidewalks, which are accessible and usable all year round to everyone from 8-year-olds to 80-year-olds.

One of the key prerequisites for achieving this is a well-planned transport system and urban space created through the close co-operation of the city, the state, and regional authorities, which provide good mobility opportunities to all residents. The goal of the Tallinn region Sustainable Urban Mobility Strategy 2035 (hereinafter 'Tallinn Mobility Plan 2035') is to analyse the causes of mobility-related problems and to provide solutions which enable good and fast mobility as well as ensure the achievement of environmental objectives. The Strategy covers the Tallinn region: the city of Tallinn and its neighbouring municipalities, which form a region that is home to Estonia's highest transport load and heaviest commuter traffic

The rapid increase of car usage and economic development in the region have now brought 50% of the country's total transport and its environmental impact to this region. The number of cars and the volume of traffic have increased rapidly throughout the region, leading to a decline in travel by foot and public transport, population and job relocations, increased dependence on personal cars, and increased transport costs for households and businesses. At present, Tallinn's traffic generates 1,400,000 tonnes of CO<sub>2</sub> emissions per year, but a target has been set to reduce the emissions to 930,000 tonnes by 2030. Achieving an attractive city, diversity of mobility, and the set environmental and health objectives requires guiding urban development, creating good opportunities for using fast public transport and travelling by foot instead of driving personal cars, as well as a much more economical fleet of vehicles. A transport system that is more diverse and aimed at the wider use of public transport is also more cost-effective,

The Mobility Plan workshops and seminars highlighted 13 major problems and challenges related to urban planning and mobility that need addressing:

- 1. Travel times and costs are increasing.
- 2. Cars are taking up more and more valuable urban space.
- 3. Dependence on personal cars and the resulting inequalities are growing. Travel by public transport and foot is decreasing.
- 4. Transport-related energy consumption and green-house gas emissions are increasing.
- 5. Road maintenance and public transport costs are increasing and the existing road network has a considerable backlog of repairs.
- 6. The independent mobility of schoolchildren is decreasing.
- 7. The negative health effects of transport (noise, pollution, low physical activity, stress) are increasing.
- 8. New densely packed developments are cropping up in areas with poor public transport links.
- 9. The public transport ticketing systems of Tallinn and Harju County are not conducive to combining multiple means of travel. Public transport services are fragmented and mutually incompatible, and there are few convenient transfer points.
- 10. The city streets are not attractive for walking and cycling. The elderly and pedestrians are still highly vulnerable in urban traffic and road safety is poor.
- 11. Data on the use of and need for different means of travel are patchy.
- 12. The potential of innovative mobility services remains untapped.
- 13. Current situation and bottlenecks in freight transport logistics.

To analyse potential and desired future trends, three development scenarios were drawn up, which were then assessed with regard to the problems that need to be addressed and the vision and objectives of the Mobility Plan.

Future trends in mobility up to the year 2035 were analysed for three possible future scenarios.

#### 1. CONTINUING ON THE SAME COURSE - continuation of current trends

We will continue on the current course. There is no active intervention from the municipalities or the state, who instead attempt to address the demand for higher capacity infrastructure resulting from increased car usage. In this scenario, the number of passenger cars in the Tallinn region will increase by up to 100,000, while the share of public transport will decrease, and each year at least 25 million euros will have to be spent on CO<sub>2</sub> emission allowances.

#### 2. Tallinn Public Transport+

Investments in public transport by Tallinn and neighbouring municipalities make it possible to primarily meet people's increasing mobility needs through public transport. The speed of urban public transport links is improved and the municipalities increase the capacity and funding of exurban public transport services. There is closer co-operation in improving the way mobility and public transport are organised. Although the number of cars will increase, people will be spending less on daily travel by car, saving them about 280 million euros annually. This is roughly equal to the volume of the public sector investments. Spending on CO2 emission allowances will be three times lower, i.e. around 8 million euros.

#### 3. Tallinn is following in Helsinki's footsteps

Tallinn, in co-operation with the state and neighbouring municipalities, works towards improved urban mobility and settlement guidance as a whole, following Helsinki's development model, which makes the entire region's public transport system and cycle and pedestrian track network so attractive that public transport and walking become the preferred means of travel. The share of travel by public transport, foot, and bicycle increases. Spending on car usage decreases.

To implement the vision and objectives of the Mobility Plan, strategic actions have been divided into four lines of action.

A complete and well-planned urban space is based on a multi-hub development model, towards which Tallinn has been moving over the last few decades. The new inner city hubs will be the areas of Sadama and Reidi tee, Kalamaja and Noblessner, Kristiine and Hipodroomi, Järve and Tammsaare tee, and Ülemiste and the airport. These hubs will be designed as densely populated and rapidly developing areas with good inter-hub public transport links, where the requirements for constructing parking spaces are reduced and short-term parking is TALLINN REGION MOBILITY PLAN

favoured. To this end, the city will, if necessary, acquire strategically important plots and prepare a detailed plan for them. Highly trafficked buildings, including institutions, will be located in the hubs and made accessible by various means of transport.

Good alternatives to cars The public transport route network will be improved to ensure that inter-hub travel by public transport takes less than 20 minutes. In order to improve the efficiency of trams as the most valuable and highest capacity type of public transport, their average speed will be increased to 18 km/h. In addition to car and public transport, short-term bicycle and car rental solutions will be developed to improve road safety and provide more options for daily travel.

Actions in the areas of the regional transport network and mobility management are aimed at facilitating inter-municipality travel and the possibilities for combining different means of transport. Establishing a common route network and managing public transport jointly will allow existing resources to be used in a more efficient manner and reduce the number of cars travelling to Tallinn daily from neighbouring municipalities. Public transport links to new developments, such as Viimsi, Peetri, and Tabasalu, will be improved. Park & Ride car parks are already being set up near public transport stops outside the city limits. Freight traffic will continue to be diverted away from the city centre.

To ensure sustainable funding, a common ticketing system and a common model and arrangement of public transport funding (subsidisation and ticket revenue) will be established. A building right fee will be introduced for highly trafficked buildings to offset the burden on municipalities of providing quality infrastructure. To cope with higher traffic loads and to finance the necessary investments, a dynamic rush hour fee will be introduced. A new parking policy and parking fee system will introduce a parking space management fee in more densely populated and highly utilised areas.

This public draft strategy has been prepared within the framework of the FinEstSmartMobility collaborative project of the Estonian Road Administration, the Tallinn Transport Department, Helsinki City Board, and the Helsinki Regional Transport Authority and co-funded from the Interreg Central Baltic Programme (2016-2019). The preparation of the Mobility Plan will continue with the collection of feedback on the draft strategy, the selection of objectives and priority actions, and the conclusion of a memorandum of co-operation between the City of Tallinn, the state, and Harju County municipalities.

## VISION: A PEOPLE-CENTERED CITY

A well-designed urban space and streamlined mobility are important prerequisites for Tallinn to be an attractive, vibrant, and green city with a lively economy, and home to healthy and happy people. The Tallinn region is covered with an excellent network of public transport and innovative mobility services as well as convenient cycle tracks and sidewalks, which are accessible and usable all year round to everyone from 8-year-olds to 80-year-olds.

#### Tallinn's vision is to be a people's city

A human-friendly, clean, and considerate Tallinn does not mean disrupting people's lifestyles and putting the brakes on the economy. The economy can grow and become more competitive at the pace of the successful capitals of the Baltic Sea, if living and working places are connected in a well-considered and space-efficient manner, and people can move around in healthy ways.

#### Enjoyable common mobility

A good user experience will lead to public transport becoming the main means of daily travel in Tallinn. It is affordable, convenient, reliable, and environment-friendly, and it allows residents to travel between Tallinn's major residential, working, and school districts in a reasonable amount of time. Most homes, workplaces, city squares, and parks have excellent public transport access, i.e. public transport stops are located within 400 metres.

#### A city of active mobility

The healthiest and cleanest means of travel which also use the least space and energy in Tallinn are walking and

cycling. Our urban space favours active mobility – especially walking and cycling – as schools, shops, and leisure facilities are no more than a short walk away. Mobility infrastructure – city streets, public transport, cycle tracks, fitness trails, squares, and parks – is designed to provide a pleasurable travel experience.

#### Safe

Pleasant urban space design and good traffic management reduce speeding and inconsiderate behaviour towards others and make cyclists and pedestrians feel more comfortable. Streets and sidewalks that are in good repair and maintained throughout the year increase safety. Streets with less traffic and lower traffic speeds are operated as a shared space and designed appropriately, while on larger streets all means of travel are clearly separated, so that even pedestrians and cyclists can travel separately from one another and safely.

#### Accessible to everyone

Accessible means that the infrastructure, especially the streets and public transport, can be used by anyone – including wheelchair users and people travelling with guide dogs and prams. Sidewalks and pedestrian crossings are unobstructed and buildings can be accessed via ramps; sidewalks and pedestrian crossings are fitted with tactile pavings to assist visually impaired pedestrians. All new streets in Tallinn meet the accessibility requirements and old streets are freed of major obstacles. All public transport stops are pram and wheelchair accessible.

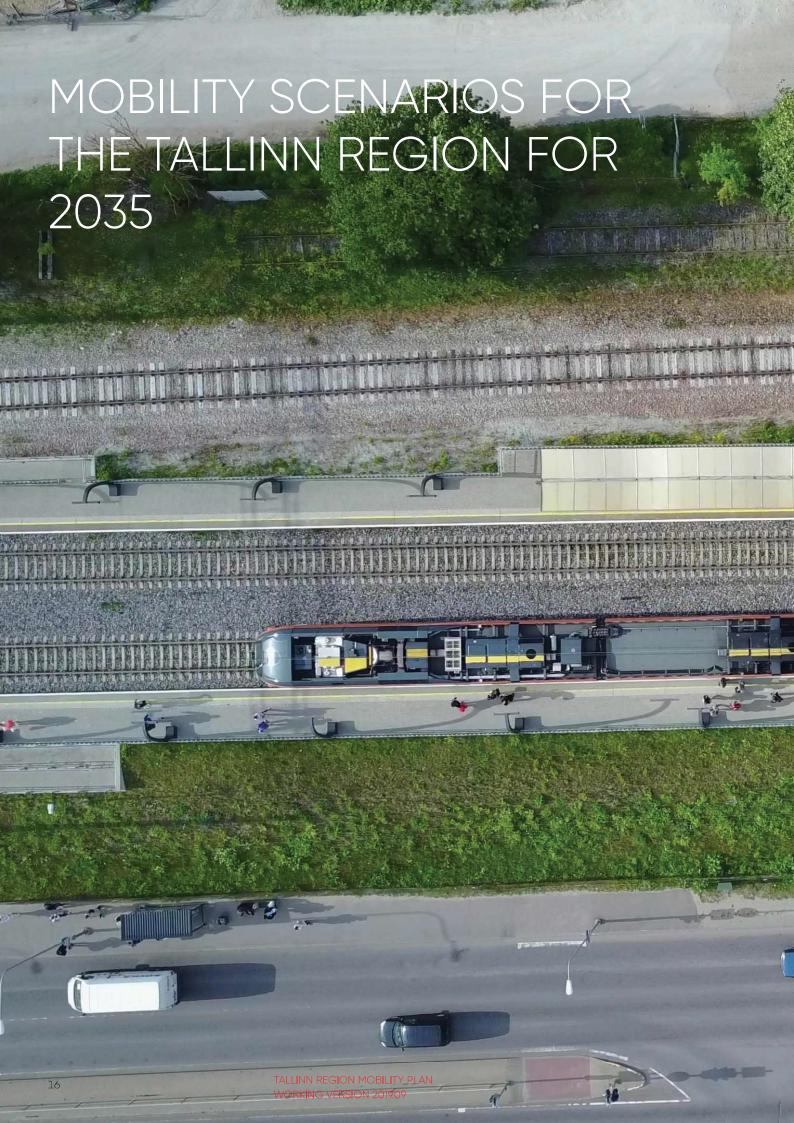
#### Common solutions across municipalities

Tallinn and the settlements of its nearest municipalities form an integral whole, where it is convenient to combine different means of travel and public transport services, which are well organised and widely available.

#### Objectives of the Tallinn Mobility Plan for 2035

Based on the vision above, the main objectives for achieving more sustainable mobility in Tallinn were defined as follows.

- 1. By 2025, at least 50% of the residents of the Tallinn region will be making their daily journeys by public transport, foot, or bicycle, and by 2035 it will be 70%.
- 2. In accordance with the Covenant of Mayors, transport-related greenhouse gas emissions in Tallinn will be reduced by at least 40% compared to 2007, i.e. to 550,000 tonnes of  $CO_2$  emissions per year by 2025 and 390,000 tonnes by 2030.
- 3. There are no fatal traffic accidents in Tallinn.
- 4. Tallinn as a multi-hub city has excellent public transport links, where it takes a maximum of 20 minutes to move between hubs. A common regional ticketing system and route network has been established in co-operation with neighbouring municipalities and the state.
- 5. Sidewalks, public transport stops, and the core cycle track network are accessible to everyone (including the elderly and disabled) throughout the year, and 90% of schoolchildren can make their own daily journeys independently.





## MOBILITY SCENARIOS FOR THE TALLINN REGION FOR 2035

During the preparation of the Tallinn Mobility Plan, three future scenarios were drawn up with the aim of assessing the impact of possible actions on mobility. The scenarios were drawn up on the basis of commuting to work being the primary driver of demand for mobility during peak hours. First, a baseline scenario, i.e. 'Continuing on the same course', was drawn up, based on the continuation of current trends. Alternative scenarios were drawn up using the so-called back-casting method: that is, key indicators for mobility and transport policy for 2035 were established according to the strategic objectives of the Mobility Plan, the desirable possible future, and the selected lines of action. Possible future scenarios

### SCENARIO 1. CONTINUING ON THE SAME COURSE

- 1.1. Transport and car traffic will continue to grow at the same rate. The number of cars per 1,000 people in the Tallinn region will increase from today's 450 cars to 550 cars. As a result, the number of vehicles in the region will increase by up to 100,000 by 2035, necessitating the construction of additional parking spaces.
- 1.2. The focus will be on creating the most suitable infrastructure for the growing number of cars; the growing investment needs can be met by taking out loans.



Figure 1.1. Main means of commuting to work of residents of Tallinn and Harju County in 2003 and 2018 and in different scenarios in 2035.

- 1.3. Increasing congestion will increase the time it takes to travel by car and reduce the competitiveness of public transport.
- 1.4. The need for repairing existing infrastructure will increase and the level of maintenance of sidewalks during the winter will decrease.
- 1.5. Transport-related taxes will not encourage drivers to opt for cleaner and more economical cars.
- 1.6. Independent mobility of children and the elderly will decrease, public transport will be used mainly by students, pensioners, and the unemployed.
- 1.7. The number of serious road accidents will increase due to a large number of people aged 65 and over, more of whom will be driving compared to the previous generation; the street environment will fail to meet the needs of those opting for increasingly popular short-distance mobility equipment (e.g., scooters, rental bicycles) and of the elderly using mobility aids.
- 1.8. Although the share of electric vehicles will increase, the increase in total transport demand will mean that emissions will not fall.
- 1.9. Traffic noise and sedentary lifestyles will become an increasing problem, and the increasingly ambitious goals of improving ambient air quality and reducing greenhouse gas emissions will not be met. Transport in the Tallinn region may require the purchasing of additional  $CO_2$  emission allowances worth, depending on the price of the allowance, 15–25 million euros per year.
- 1.9. New developments will continue to be built in areas with poor or non-existent public transport links, which will further increase the need for owning a personal car.
- 1.10. Mobility-related expenditure will grow from 1.5 billion to 2 billion euros per year at current prices.

#### SCENARIO 2. TALLINN PUBLIC TRANSPORT+

2.1. The focus will be on creating the most suitable infrastructure for the growing number of cars, while investing in increasing the share of public transport.

- 2.2. Increasing congestion will increase the time it takes to travel by car, but the increased investment in public transport will improve the average speed of public transport links.
- 2.4. Transport-related taxes will not encourage drivers to choose cleaner and more economical cars.
- 2.5 Despite population growth, active public transport development will keep peak traffic at its current level, with most of the added cars being used on weekends or off-peak hours. The number of cars per 1,000 residents will increase to 500, but in the longer term (by 2035) will begin to decrease.
- 2.6. The number of journeys made by public transport will increase by 25%. Thanks to the improved public transport speeds, downtown travel and the number of people travelling from Harju County to Tallinn's hubs by public transport will increase rapidly.
- 2.7. Infrastructure investments will mainly be aimed at ensuring good mobility and fast public transport links in new urban hubs.
- 2.8. The state will support the improvement of the competitiveness of public transport in order to achieve environmental objectives by co-financing infrastructure projects and the acquisition of rolling stock for public transport with 150 million euros until 2030.
- 2.9. Compared to the baseline scenario, society's mobility costs can be reduced by 15%, i.e. 300 million euros per year, however total transport-related expenditure in the capital and its neighbouring municipalities will still increase.

- $2.10.\ CO_2$  emissions can be reduced, but it is estimated that an additional 16 million euros per year will be needed for additional allowances.
- 2.11. New developments will continue to be built in areas with poor or non-existent public transport links, which will further increase the need for owning a personal car.

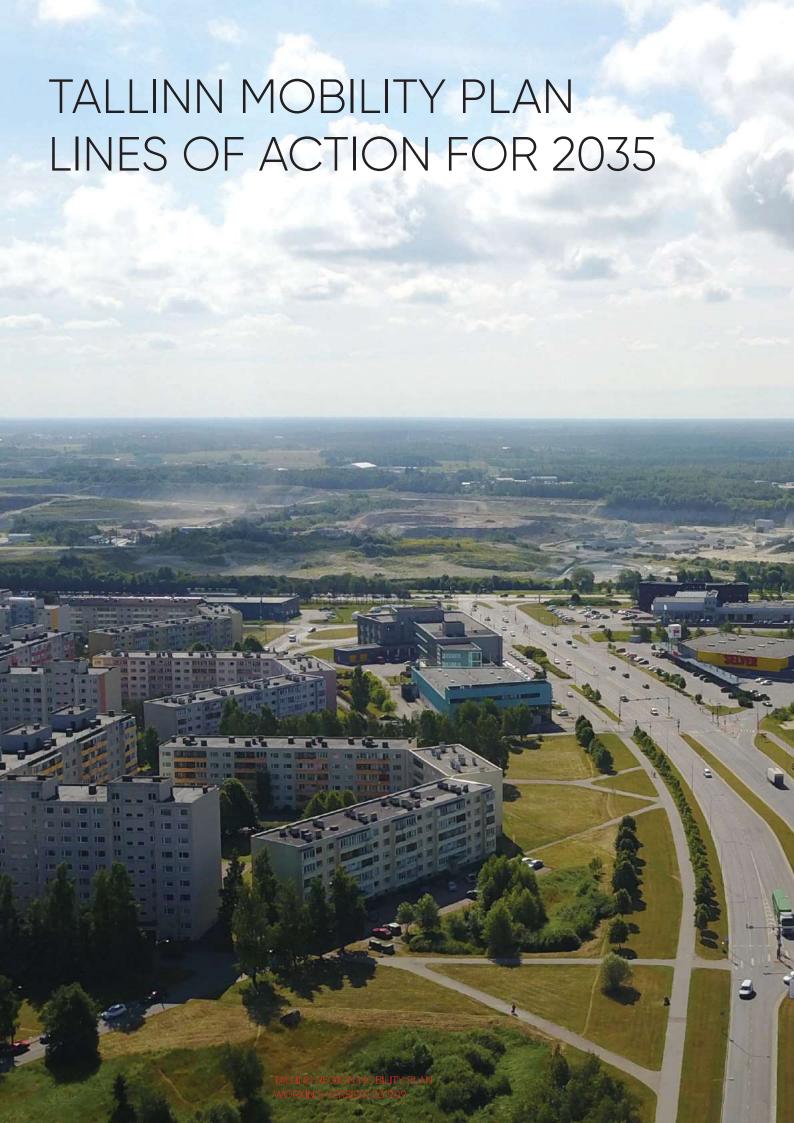
## SCENARIO 3. TALLINN IS FOLLOWING IN HELSINKI'S FOOTSTEPS

- 3.1. Transport, including car traffic, will continue to grow at an increasingly slower pace until 2025. Thereafter, the share of public transport and cycling will increase and vehicle mileage will decrease by 10%; by 2035 there will be around 360 cars per 1,000 people.
- 3.2. Mobility development and investments will be focused on meeting the increasing demand for travel by public transport, foot, and bicycle, as well as on creating the most appropriate infrastructure for this. Instead of excise duties on fuel, transport-related charges will be differentiated: rush hour,  $CO_2$ , and parking fees will cover the costs of maintaining existing high-quality infrastructure, and the need for infrastructure repairs will decrease. Working people will be willing to pay for quality regional public transport, and nearly 50% of public transport costs will be covered by ticket revenue.
- 3.3. Car travel times will not increase; the rush hour fee will eliminate uncertainties about rush hour travel times; the competitiveness of public transport compared to cars will increase both in the city centre as well as major urban hubs
- 3.4. Sidewalks and cycle tracks will be safe, attractive, and well-maintained throughout the year, which will increase the share of travel by foot and bicycle and enable students, the elderly, and people with special needs to travel independently. This will have a positive effect on both public health and the cleanliness of the urban environment.
- 3.5. Transport-related taxes as a whole will not increase, but will encourage drivers to prefer cleaner and more economical cars.

- 3.6. On the one hand, public transport will be affordable for low-income earners and, on the other, it will also be attractive to high-income earners. Businesses and institutions will prefer locations with good public transport access
- 3.7. No citizens will die in traffic accidents in Tallinn, and the number of serious accidents and amount of traffic-related damage will decrease.
- 3.8. The active development of public transport and the construction of most new developments near public transport links will create a situation whereby 70% of the residents of the Tallinn region will be making their daily journeys by public transport, bicycle, or foot, while those residing in sparsely populated areas will find it convenient to combine travel by car and bicycle with mobility services and public transport.
- 3.9. Emissions of  $CO_2$  and other pollutants from transport in the Tallinn region will decrease thanks to both increased adoption of cleaner and more economical vehicles and the increased share of light traffic. Tallinn will become a seller of  $CO_2$  allowances.
- 3.10. Traffic-related noise will decrease thanks to an increased share of electric vehicles, improved road conditions, calmer traffic, and lower car usage. People will be more physically active in their daily life and the mobility environment will support travel by foot and bicycle, reducing sedentary lifestyles.
- 3.11. New office and residential buildings will be built near excellent public transport links, housing will be affordable for young families, and the need for owning multiple cars and purchasing parking spaces will fall.
- 3.12. Mobility-related expenditure, including car usage, will decrease from 1.78 billion to 1,68 billion euros per year at current prices.
- 3.13. 90% of children will be travelling to school and hobby classes independently. This will save parents time and give children more freedom.
- 3.14. The costs of investing in and maintaining streets and roads are about 35% lower than in the baseline scenario, with the focus in road maintenance being on reducing the need for repairs, improving the quality of public spaces, developing road safety, cycle and pedestrian tracks, and improving the level of wintertime maintenance.

3.15. A joint financing mechanism will be set up for organising transport in the region; all public transport services will be planned and procured jointly.

A more detailed description of the future scenarios and a cost-benefit comparison are provided in Annex 1.





## TALLINN MOBILITY PLAN LINES OF ACTION FOR 2035

To achieve the objectives of the Mobility Plan and to realise the desired scenarios, four lines of action were set out: a complete and well-planned urban space, good alternatives to cars, a transport network encompassing the Tallinn region, and sustainable financing.

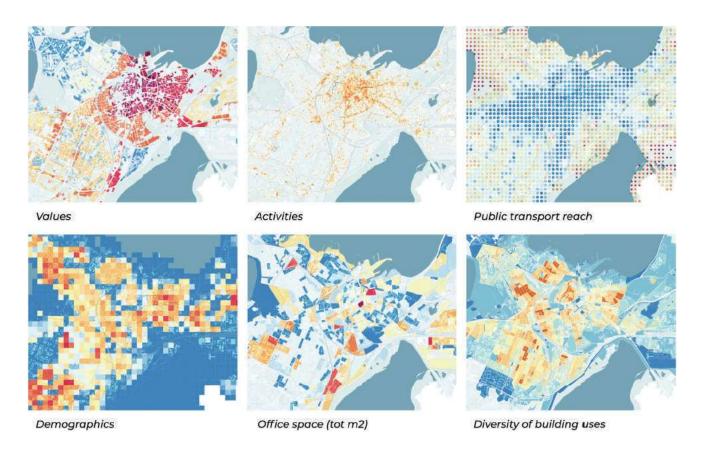


Figure 2.1. Tallinn will be transformed from a city with a single central area to a multi-hub city, where people travel more between the various hubs and less between the city centre and 'dormitory suburbs'.

## LINE OF ACTION 1: A COMPLETE AND WELLPLANNED URBAN SPACE

- 1.1. Based on the multi-hub nature of Tallinn:
- 1.1.1 the hubs of Tallinn and its neighbouring municipalities will be made easily and quickly reachable by public transport and provided with convenient transfer options;
- 1.1.2. plans will be established (acquiring land where necessary), dense population will be promoted, and requirements regarding the number of parking spaces to be built will be eased.

In addition to the city centre and the area around Viru Keskus, similar principles should be followed to establish fast transport links in the areas indicated on the map (Sadama and Reidi tee, Kalamaja and Noblessner, Kristiine and Hipodroomi, Järve and Tammsaare tee, Ülemiste and the airport) and promote sustainable inter-hub mobility (see Figure 2.2).

- 1.2. A comprehensive street and road plan which accounts for different means of travel will be developed, and standards on pedestrian, bicycle, and public transport flow capacity, road maintenance, etc. will be introduced for different types of streets.
- 1.3. New developments which are expected to receive extensive traffic will be planned, primarily near already well-functioning public transport services:
- 1.3.1. at all levels of planning (general, thematic, county, detailed planning, etc.), it will be a guiding principle to prefer and develop areas with excellent public transport services and implement economical transport solutions;
- 1.3.2. where necessary, the public sector will procure additional land in strategically important locations and will prepare a detailed plan for its development;
- 1.3.3. the preparation of a mobility solution (including public transport and travel by car, bicycle, and foot) will be made a prerequisite for granting building rights to developments and heavily trafficked sites. Institu-



Figure 2.2. In addition to the city centre and the area around Viru Keskus, similar principles should be followed to establish fast transport links in the areas indicated on the map (Sadama and Reidi tee, Kalamaja and Noblessner, Kristline and Hipodroomi, Järve and Tammsaare tee, Ülemiste and the airport) and promote sustainable interchula and home-to-bula mobility.

tions, schools, and other locations with more than 1,000 people will be required to implement a mobility plan;

1.3.4. in areas with good public transport links, requirements regarding the construction of parking spaces will be reduced, giving preference to short-term parking facilities and the 'user pays' principle (see chapter 4 for more details).

## LINE OF ACTION 2: GOOD ALTERNATIVES TO CARS

- 2.1. Developing high-speed public transport links between urban hubs. Average public transport journey time when travelling between hubs should not exceed 20 minutes:
- 2.1.1. construction of a new tramline serving the Old City Harbour development area of Tallinn;
- 2.1.2. establishment of high-speed direct links between the larger settlements and hubs of Harju County and the districts of Tallinn;
- 2.1.3. connection of new densely populated areas to the public transport network (e.g., TalTech–Mustamäe).
- 2.2. Increasing the average speed of trams (from the current 11.3 km/h to 18 km/h by 2030) in order to improve the efficiency and competitiveness of public transport:

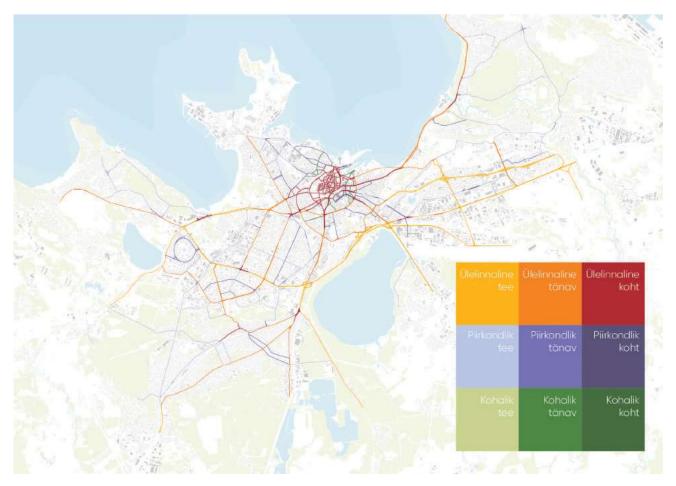


Figure 2.3. The higher the priority of the space, the more important it is to ensure fast public transport on the street, the quality of the sidewalks, and the construction of separate cycling infrastructure.

- 2.2.1. increasing the speed of public transport links passing through the Hobujaama tram stop and the Viru intersection;
- 2.2.2. giving green light priority to public transport at major intersections and in public transport corridors in the city centre;
- 2.3. designing transfer options, including planning for transfers between different means of travel (train, city and county transport, Park & Ride). Here, the priority is to enable transfers in hubs, i.e. Kristiine, Järve, Ülemiste, Kalamaja and Noblessner, Haabersti):
- 2.3.1. constructing terminals at Ülemiste and Kristiine in order to connect train and bus routes;
- 2.3.2. creating of transfer points at the intersection of Tammsaare tee and Sõpruse pst, in Mustakivi, and in Laagri.

- 2.4. Making additional investments to develop a road network that is safe and modern and accounts for all means of travel. Here, the priority is to improve the quality and safety of the existing road network in order to promote walking and cycling:
- 2.4.1. to join cycle tracks into an integrated network, a core cycle track network will be developed in accordance with the Tallinn Bicycle Strategy;
- 2.4.2. calming traffic and redistributing street space on the basis of the street type classification (residential areas, hubs, main street, Liivalaia, Endla street) discussed under Line of Action 1;
- 2.4.3. creating pick-up and drop-off points for users of ridesharing and taxi services in hubs. Restoring short-term parking spaces on the city streets.
- 2.4.4. Expanding the car sharing system and bicycle

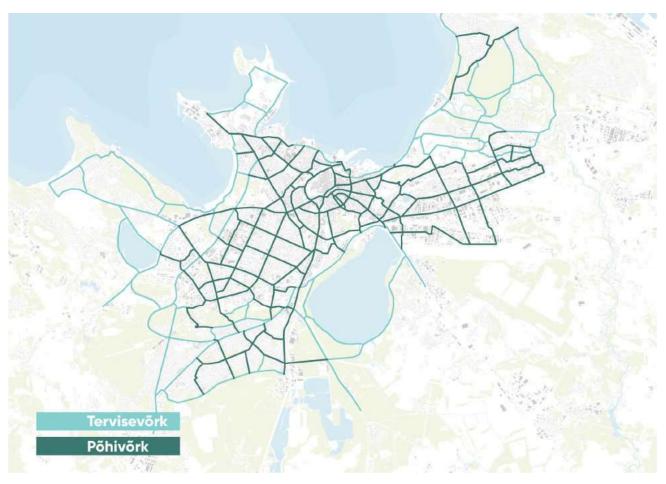


Figure 2.4. Tallinn's core cycle track network. Source: Tallinn Bicycle Strategy 2018–2027

(including electric ones) rental network across the city of Tallinn and organising it in co-operation with the private sector.

#### LINE OF ACTION 3: REGIONAL TRANSPORT NETWORK

- 3.1. Developing a common route network in co-operation with Harju County municipalities and the state. To this end, a memorandum of co-operation on mobility and settlement planning at the regional level will be concluded to bring the planning and contracting of services of all types of public transport under a single mobility organisation.
- 3.2. Switching to a common zone-based ticketing system uniting all types of public transport (train, inner city transport, county transport, commercial transport) and ticket types (including single journey tickets, hourly tickets, and period cards that are usable throughout the entire public transport system).

- 3.3. Expanding the network of high-speed and high-density public transport routes to new development areas in Harju County where it is currently unavailable: to Viimsi, Tabasalu, Peetri, and Jüri.
- 3.4. Creating Park & Ride car parks at public transport stops, train stations, and other connection points for those travelling to Tallinn from less populated exurbs.
- 3.5. Improving access to public transport (especially rail) by setting up light traffic connection points and bicycle parking facilities near public transport stops.
- 3.6. Shaping settlement patterns through planning in way that is favourable to sustainable mobility and which eliminates people's reliance on cars. Integrated planning of mobility solutions for new jobs, hubs, and social infra-

structure

3.7. Developing smart transit routes and co-operation between Helsinki and Tallinn for routing port-related freight transport out of the city.

#### LINE OF ACTION 4: SUSTAINABLE FINANCING

- 4.1. Developing a joint financing model for the development of regional public transport, infrastructure, and mobility services, involving the City of Tallinn, Harju County municipalities, and national transport organisations, including the Road Administration, Eesti Raudtee, Elron, etc.
- 4.2. Establishing a building right fee to create clear and understandable rules for all on how to mitigate and offset the impact of the transport burden created by buildings, and to cover investment needs. The building right fee will be used to finance public transport, light traffic, and road maintenance investments needed to improve accessibility and meet mobility needs.

- 4.3. Implementing a dynamic road toll: a rush hour fee that helps to provide a more even flow of traffic and make travelling by both car and public transport more reliable.
- 4.4. A fair parking policy and parking fee system that enables financing the fixed costs related to mobility and road maintenance: collection of parking management fees in densely populated and highly utilised areas (for maintaining parking infrastructure and creating solutions to improve parking), parking zones that take into account the lifestyles in the area, parking fees for using parking spaces constructed next to employers and companies (the city taxes parking spaces located next to jobs and shopping centres). Implementing fees for extended parking.

4.5. Involving state investments in the development of public transport and cycle tracks to achieve environmental objectives.

Table 2.1 lists the costs and the sources of funding of local and regional public transport in the Tallinn and Helsinki regions. The amount of subsidies and ticket revenue i.e. the total amount of public transport services per capita relative to national GDP in Harju County is 30% lower than in Helsinki. The share of public transport funding per capita granted by Harju County municipalities is almost 10 times lower than that of Tallinn.

Table 2.1. Comparison of public transport costs, revenue, and subsidies for the Tallinn and Helsinki regions

Source of financing	€1,000/ year	€/resident/ year	No. of residents / user base	
City of Tallinn public transport subsidies	66,500	148	450,000	
City of Tallinn public transport ticket revenue	4,600	10	450,000	
Harju county routes, state subsidies	3,500	23	150,000	
Harju county routes, municipality public transport costs	2,000	13	150,000	
Harju county routes, ticket revenue	3,000	20	150,000	
Elron, electric train state subsidies	10,000	17	600,000	
Elron ticket revenue (approx. 30% of total revenue)	5,000	8	600,000	
Total public transport subsidies for Harju County + Tallinn	82,000	137	600,000	
Total public transport operating costs for Tallinn + Harju County	94,600	158	600,000	
Compared to Finnish GDP per capita Tallinn could have	129,000	215	600,000	
Helsinki region public transport HSL (bus, commuter rail, tram, subway)				
HSL subsidies, City of Helsinki and other municipalities	313,000	213	1,470,000	
HSL subsidies, state and other	17,200	12	1,470,000	
HSL ticket revenue	343,000	233	1,470,000	
Total HSL public transport annual budget	673,200	458	1,470,000	

DEVELOPMENTS IN MOBILITY IN TALLINN AND HARJU COUNTY, PLUS 15 PROBLEMS





## MOBILITY AND TRANSPORT TRENDS IN THE TALLINN REGION FOR 2000–2018

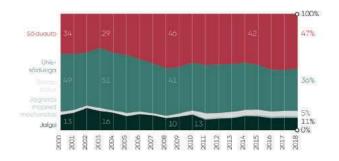


Figure 3.1. The main means of commuting for Tallinn's residents in the period 2000–2018. Source: Statistics Estonia

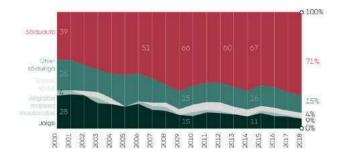


Figure 3.2. The main means of commuting for Harju County's residents in the period 2000–2018. Source: Statistics Estonia

#### CHANGES IN TRANSPORT DEMAND AND MEANS OF TRAVEL IN TALLINN AND HARJU COUNTY

In order to give a better understanding of the current status of mobility in Tallinn and Harju County and the greatest potential problems of near-future developments, we next discuss the main mobility indicators and bottlenecks. In the neighbouring municipalities of Tallinn, where many new residential and industrial areas have been built in the last 15 years, the biggest changes in the way people travel started in 2004. As a result, the residents of the rural municipalities surrounding the capital travel to Tallinn for work and school in the morning, while the residents of the so-called dormitory suburbs of Tallinn travel to offices in the surrounding industrial areas. The residents of Harju County's new settlements are particularly notable for the high percentage of car users among them. Compared to the Helsinki region, commuting in the Tallinn region is car dependent.

The traffic load and the share of car users among the residents of Tallinn and Harju County have constantly increased. As the purchasing power of the population improves, mobility in the Tallinn region has also increased steadily. New residential areas and the relocation of jobs and hubs have increased daily travel distances and have reduced foot traffic and the competitiveness of current public transport services compared to cars. As regional public transport has not been able to adapt to the increased commuter traffic between Tallinn and its

exurbs, the need for car travel has increased.

According to the Labour Force Survey of Statistics Estonia, there has been a significant decrease in the share of those commuting by public transport (from 50% to 36%) or foot in Tallinn over the last 18 years, while the share of those travelling by car among Harju County's residents has grown from 25% to nearly 60% (see Figures 3.1 and 3.2.) This is primarily due to the relocation of jobs and homes and the emergence of new developments in places where there is no proper public transport and walking and cycling distances are too long. Ownership and usage of cars (see Figure 3.5) has also increased due to higher purchasing power and better financing opportunities, which have made it possible to move both homes and jobs from Tallinn to Harju County, where buildings are modern and more affordable, but where public transport services and light traffic paths are not yet comparable in quality or the number of links. As a result, public transport is no longer an option for many in the capital region, and cars are preferred instead (Figure 3.6). In Tallinn and Harju County, the total annual vehicle mileage has increased to 2.5 times that of 18 years ago (Figure 3.3). In the last six years alone, the number of vehicles crossing the city limits daily has increased by 28,000 (Figure 3.4).

Access to good public transport links for people and jobs based in Harju County has decreased as a result of settlement becoming less dense. Convenient and fast links still exist near the main public transport and railway corridors. However, often, even living near a public transport route does not mean that people have access to good public transport links, because the route does not cover their destination or travel at suitable times.

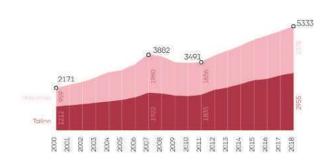


Figure 3.3. Vehicle mileage in Tallinn and Harju County in the period 2000–2018 (million kilometres). Source: Estonian Road Administration

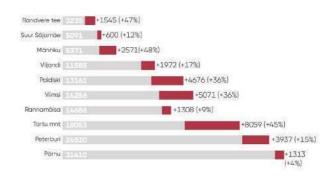


Figure 3.4. Change in traffic volume at Tallinn's city limits, 2012 and 2018. Source: Estonian Road Administration.

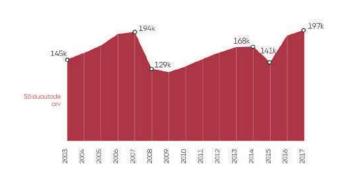


Figure 3.5. Number of passenger cars registered in Tallinn, 2010–2017. Source: Statistical Yearbook of Tallinn 2018

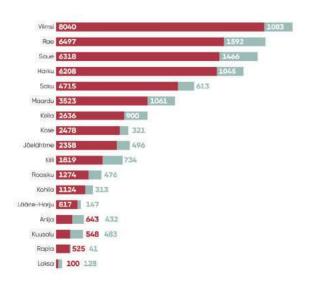


Figure 3.6. Number of people commuting by car (red) and foot (green) from rural municipalities in Harju County to Tallinn in 2017. Source: Kantar EMOR, 2017