

Public Transport in the City of Tartu: Developments & Challenges

An aerial night photograph of Tartu, Estonia. The city center is illuminated with warm yellow lights, showing a dense cluster of buildings with red-tiled roofs. A large square is visible in the center. To the right, the Emajõgi river flows through the city, with a distinctive red arch bridge in the background. The surrounding area is dark, with some streetlights and trees visible.

Raimond Tamm, Deputy Mayor

31.01.2024



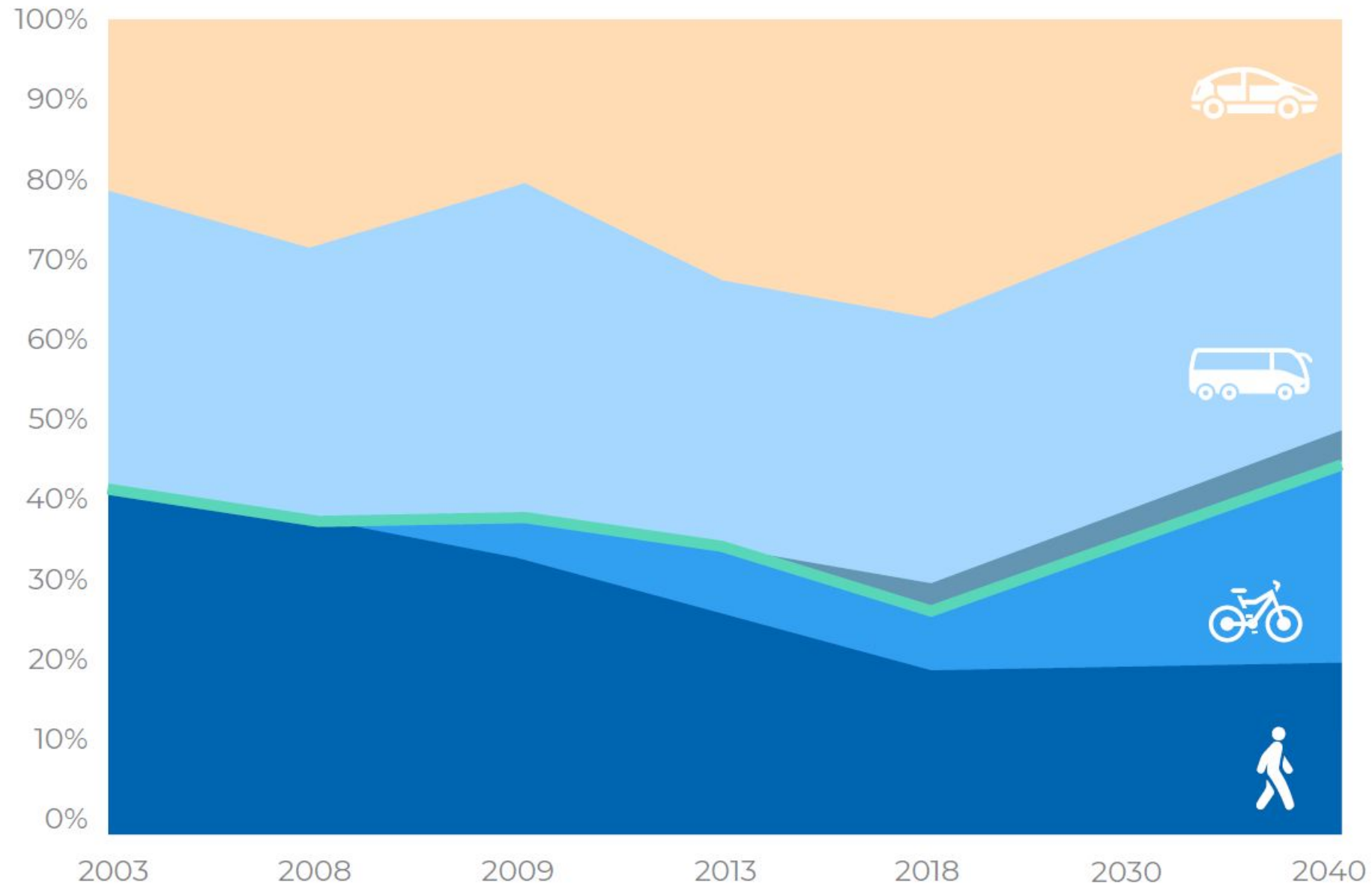
Tartu as a green city

- Energy and Climate Action Plan 2030
- Among 100 climate neutral cities in Europe by 2030!
- Green Tourism Destination 2020-2023. Achieved Platinum level in 2023.

VISION:

Tartu is a smart community with good energy and a green pioneer.

Mobility in Tartu



How could we provide the smartest & greenest urban mobility in a 153 km² city of ca 100 000 people?

Public transport in Tartu was completely redesigned in 2019



Public transport strategy (1)

1. Alluring image

Public transport has its own unique brand. The visual identity enlarged to the whole ecosystem of PT is clear, appealing and connects to the city's brand. The communication of the PT services is in line with the brand.

Citizens are actively involved in developing attractive PT services.



2. Smart Mobility

Citizens walk, cycle and take a bus instead of driving with their own cars. Bikeshare systems expand. Walking and cycling facilities are integrated with the City PT system and they are user-friendly.

City PT system is well connected to the intercity train and long-distance buses.

Multi-modal transport services produce new travel chains. Autonomous vehicles for feeder services and service traffic will be enhanced. Future PT modes are investigated to fulfill the increasing travel demand.



3. Easy to use

Integrated ticketing and real-time reliable information systems mean easy and convenient way to travel. Smart mobility information is available at one place and it offers a platform for MaaS-services.



Public transport strategy (2)

4. Fluent and fast bus routes

Faster bus connections through clear route planning provide fast and in-time service. Separate bus lanes are investigated to speed up the PT and improve its reliability. Fixed-minute schedules are introduced where possible. Simple and clear PT is easier for the users.

Traffic light control based on GPS is used to speed up the bus traffic.



5. Better quality and sustainable PT for everyone

The buses are accessible, comfortable and environmentally friendly. Gas buses will have a positive impact to the city environment. The city puts high value in investing on renewable energies.

Riding a bus has more advantages compared to driving a car.



6. Affordable PT

By implementing the latest technologies and better route planning the ticket prices for PT stay affordable and competitive compared with the private car use.



Main reasons not to use public transport (survey „Tartu ja tartlased 2023“)

- Slower compared to car – 8%
- Uncomfortable – 8%
- Bus network does not match the needs – 5%

Biogas busses

- Low floor busses
- Climate control system
- Autonomous heating system
- Voice announcements both indoor and outdoor
- Etc



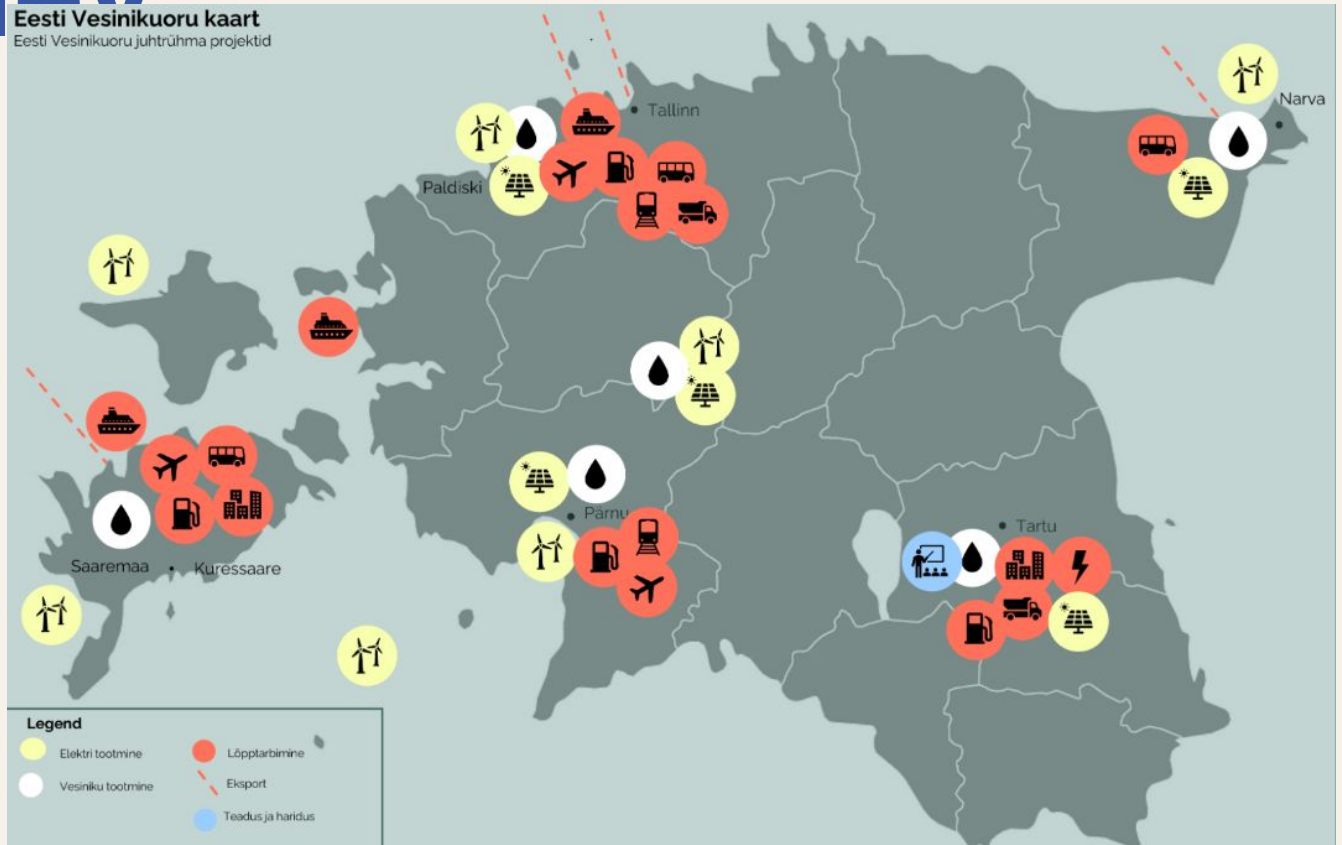
Ticketing system (since July 2019)

- New hardware into all vehicles. New validators in all busses.
- Contactless bank cards (cEMV) accepted. An hourly e-ticket will be sold directly from the validator by tapping EMV bank card. From July 2024 it is possible to personalize the bank card for PT (period tickets)!
- Ticketing system applies best price logic – after the 3rd tap on the same day a daily ticket is sold
- Benefit for occasional passengers



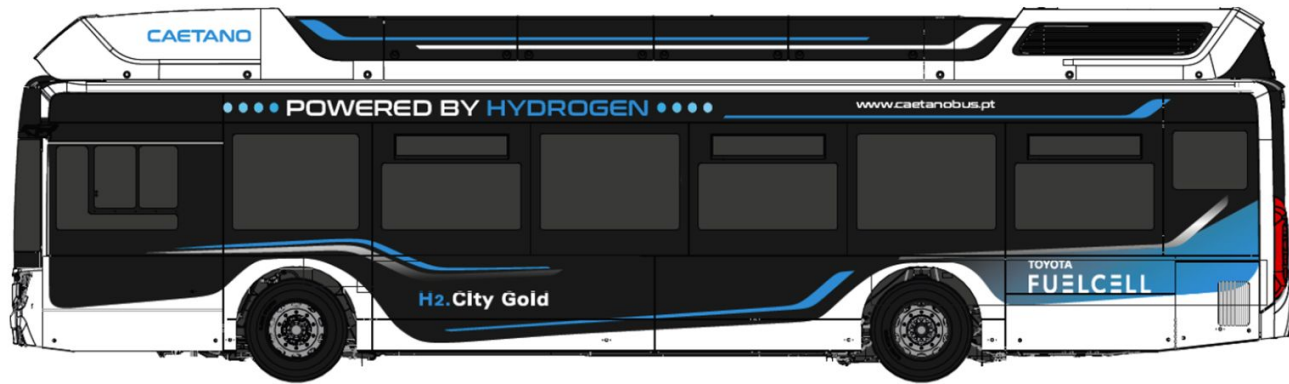
Development of Hydrogen Valley

Eesti Vesinikuuru kaart
Eesti Vesinikuuru juhurühma projektid



Powered by:

Pilot project planned for 2026-2030



Testing of self-driving vehicles



Self-driving vehicles for last-mile?



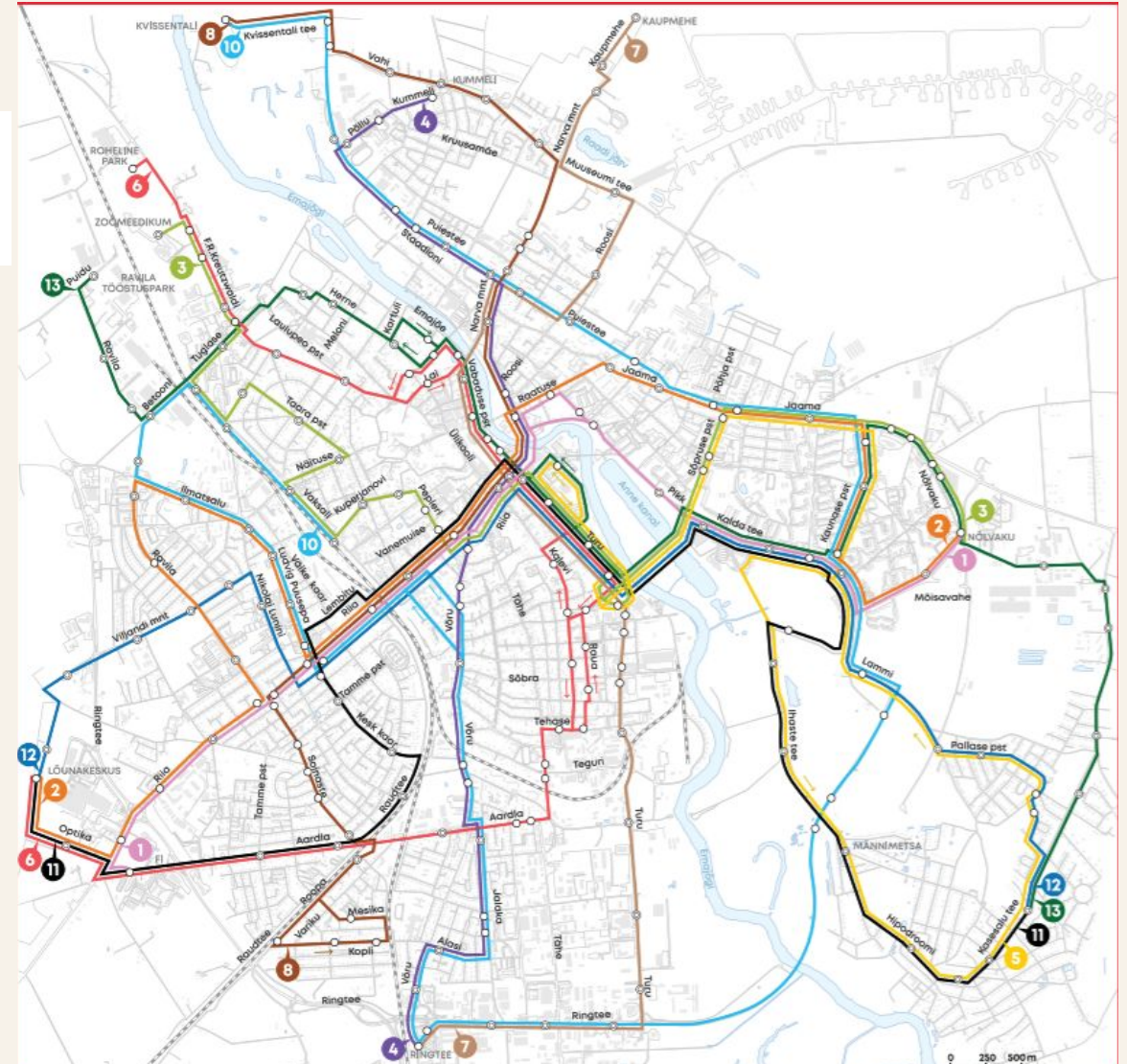
Data-based development of bus network



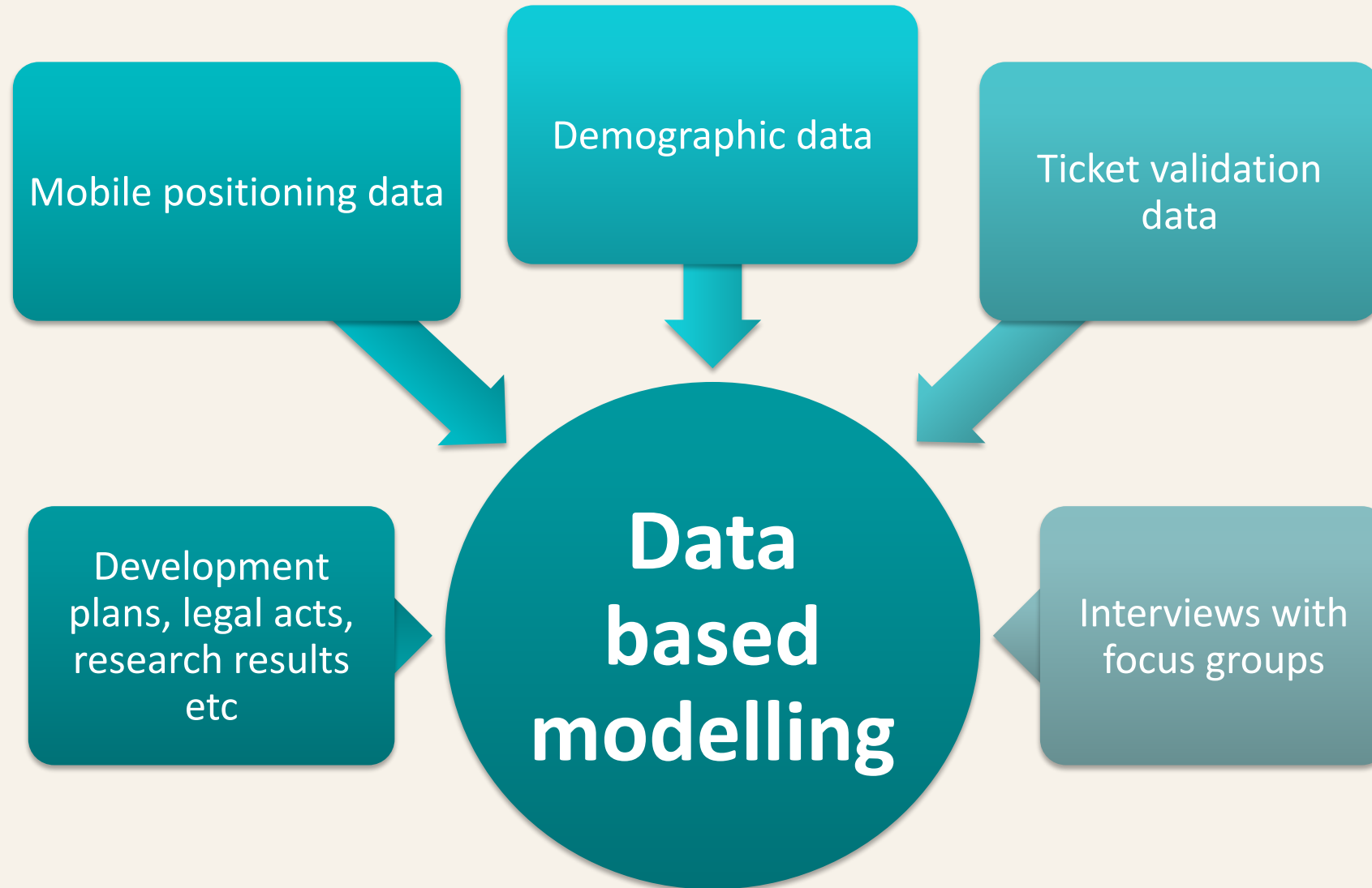
Implemented since July 2019

Goals were set:

- Decrease in the number of bus lines
- Shorter intervals
- Faster connections
- Limited budget



More than 20 data sets were used to design the new bus network

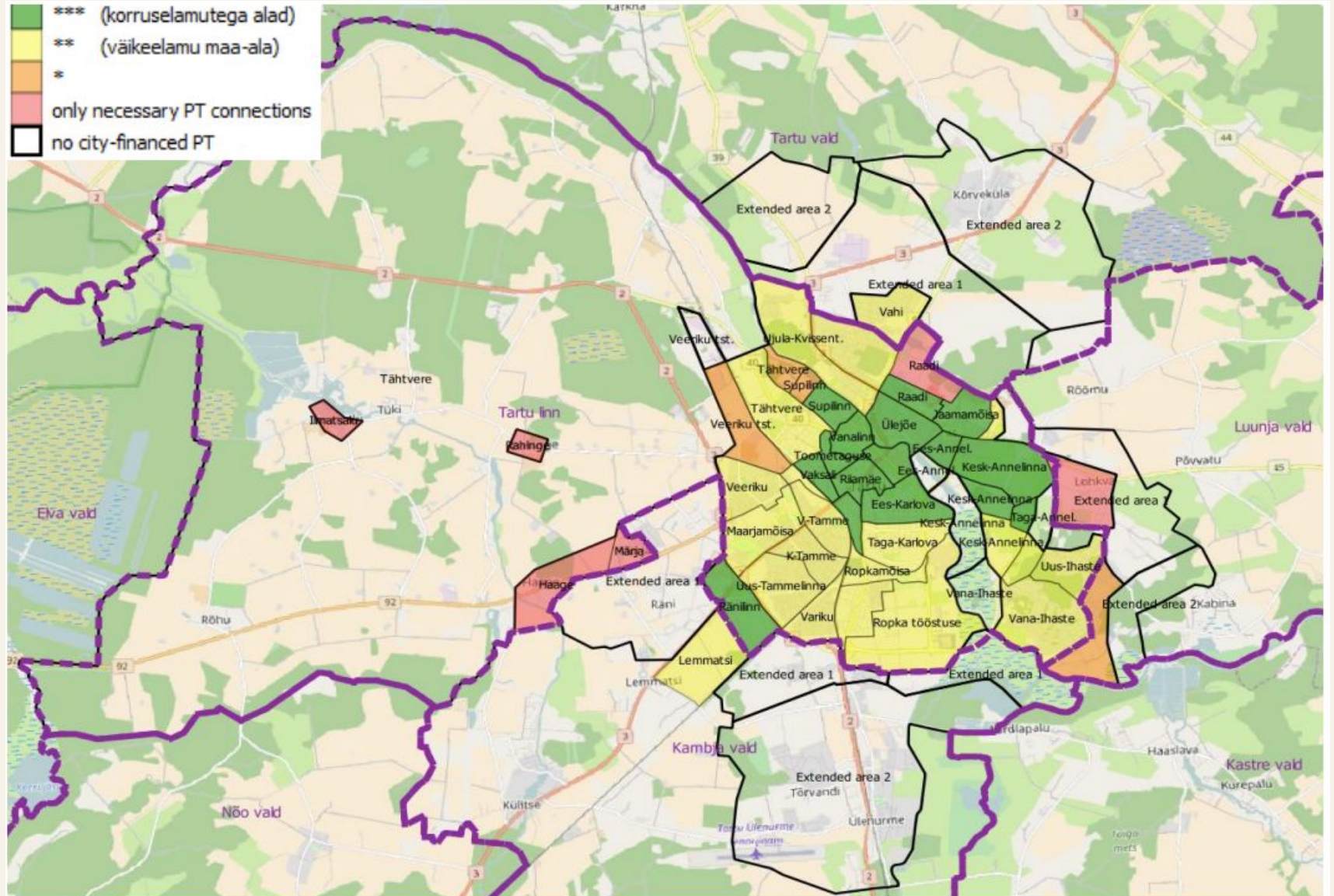
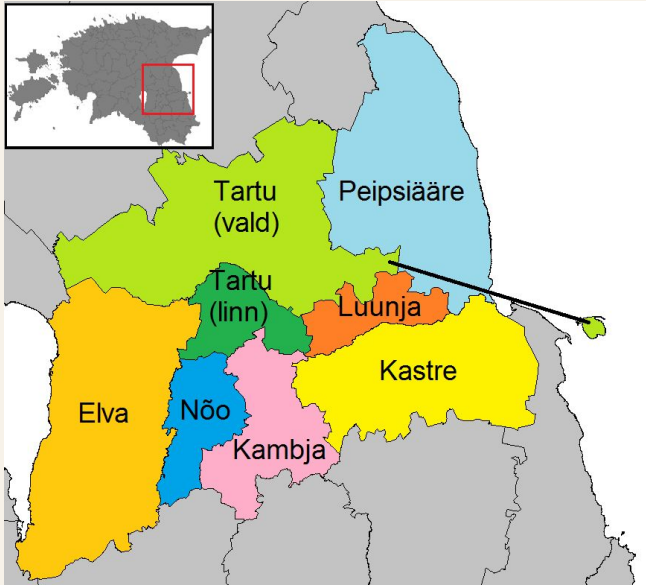


Results of data-based modelling

- Passenger waiting time was reduced by 5-20% (depending on time of day)
- More bus service on fewer and straighter lines
- Improvements in frequencies of departures
- Timetables with uniform service frequency

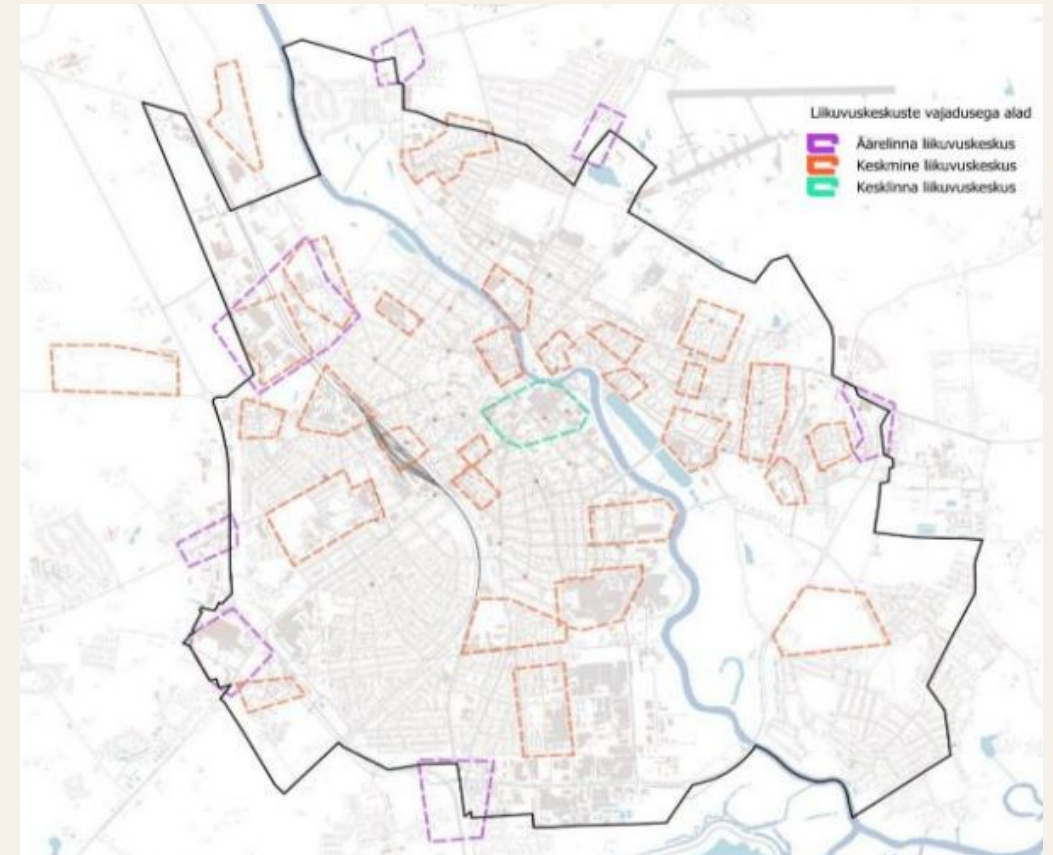


Greater Tartu area & service levels



- Tartu County Public Transport Centre
- Ltd Eesti Liinirongid - Elron
- Private services

Multimodal mobility hubs



Thank you for your attention!

Raimond Tamm
Deputy Mayor, Tartu City Government

TARTU