

E-Bike Sharing is Expected to Boost Biking in Tartu



**Marika Post,
Bike Sharing Project Manager
City of Tartu**

Tartu – city of good thoughts

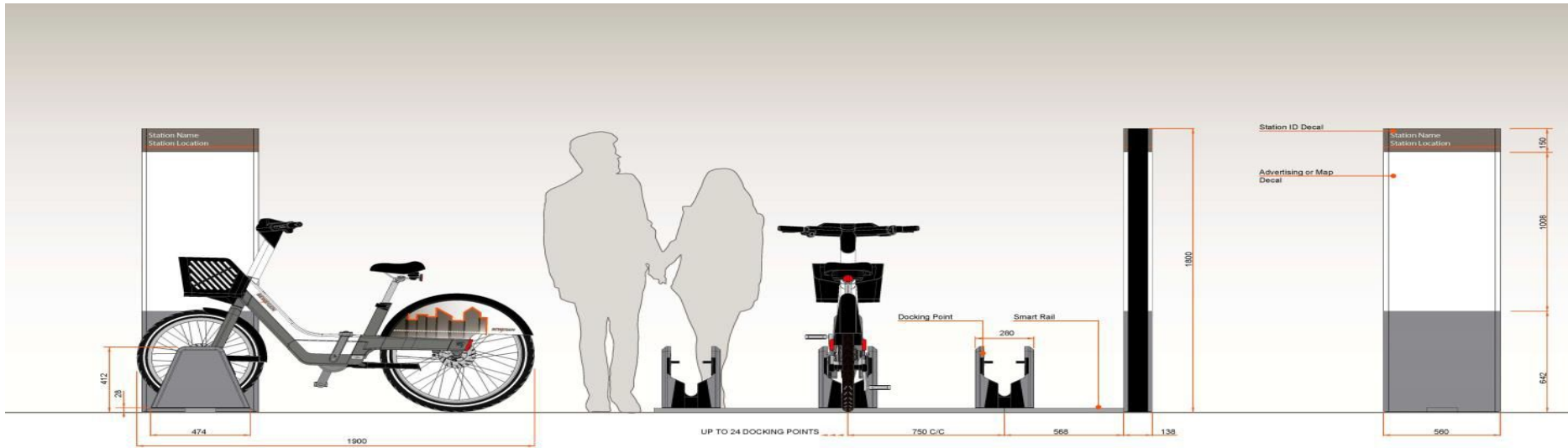
- Estonia's second largest city
- First mentioned in written: 1030
- City rights: 1253
- Tartu has a population of ca. 100,000 (total ca 150 000) and hosts one of the Europe's oldest university dating back to 17th century (ca. 15,000 (total ca 30 000) students)



Bike sharing pilot project in Tartu City

- Bike sharing system would involve ca. 75 parking stations, 750 bikes (510 electrical), ca. 10 bikes per station, costs more than 3 million euro
- Covers the city centre, university and public buildings, transport hubs (railway and bus stations), tourist attractions, etc.
- Flexible re-location of the stations and bikes (seasonal, major events)
- Expected GHG emission reduction of over 100,000 tCO₂e, replacing car transport with cycling or combination of public transport and cycling, increase of bicyclists using their own bikes due to improved infrastructure and promotion
- 64 new low floor CNG gas buses will start to run on city streets. all buses have conditioner, WIFI etc.





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Why Tartu is the best City for development bike sharing

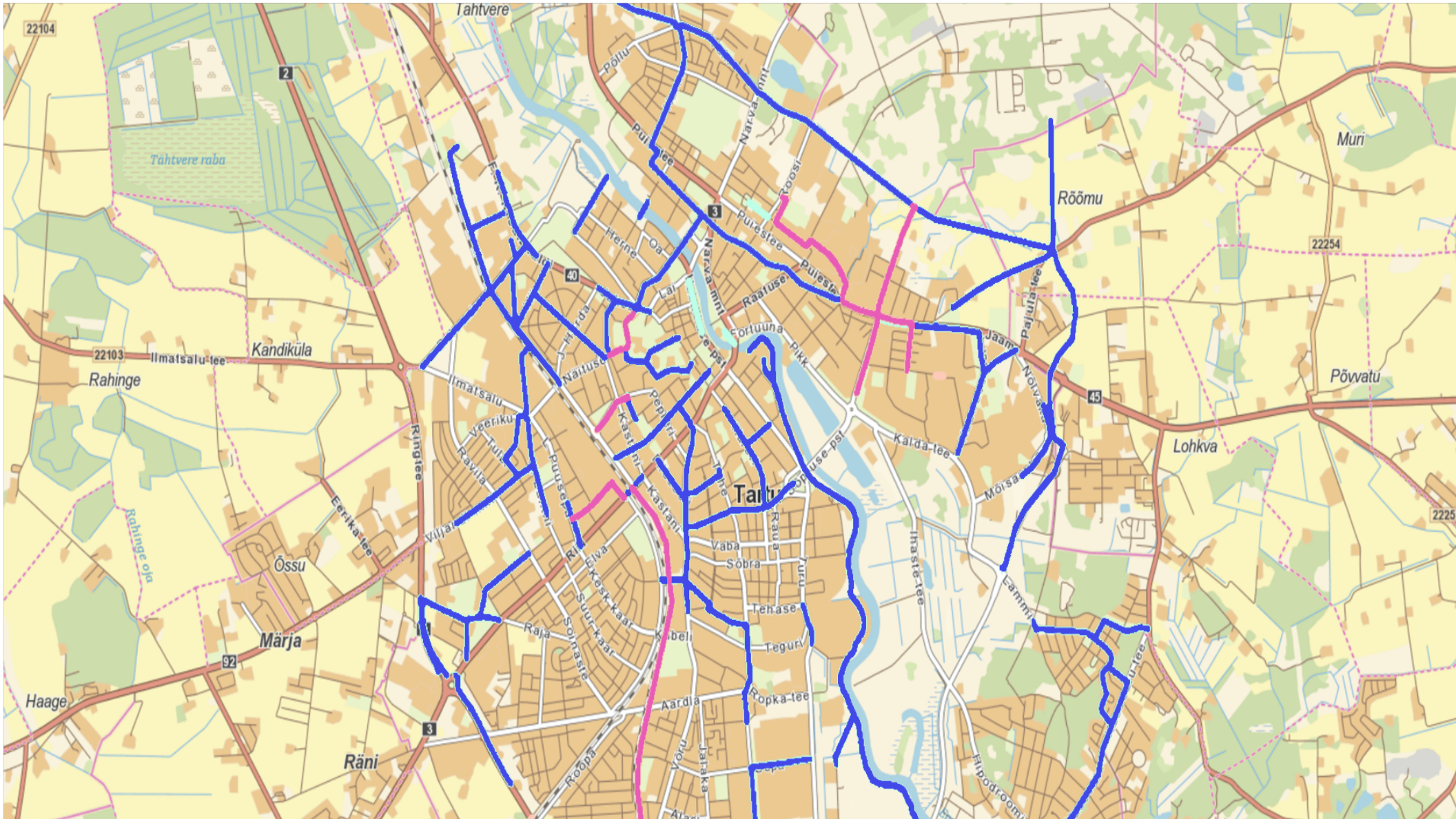
- compact city
- affordable infrastructure - light traffic routes
- environmental friendliness
- reduced CO2 emissions
- integrated public transport system - busses + bikes

6 km

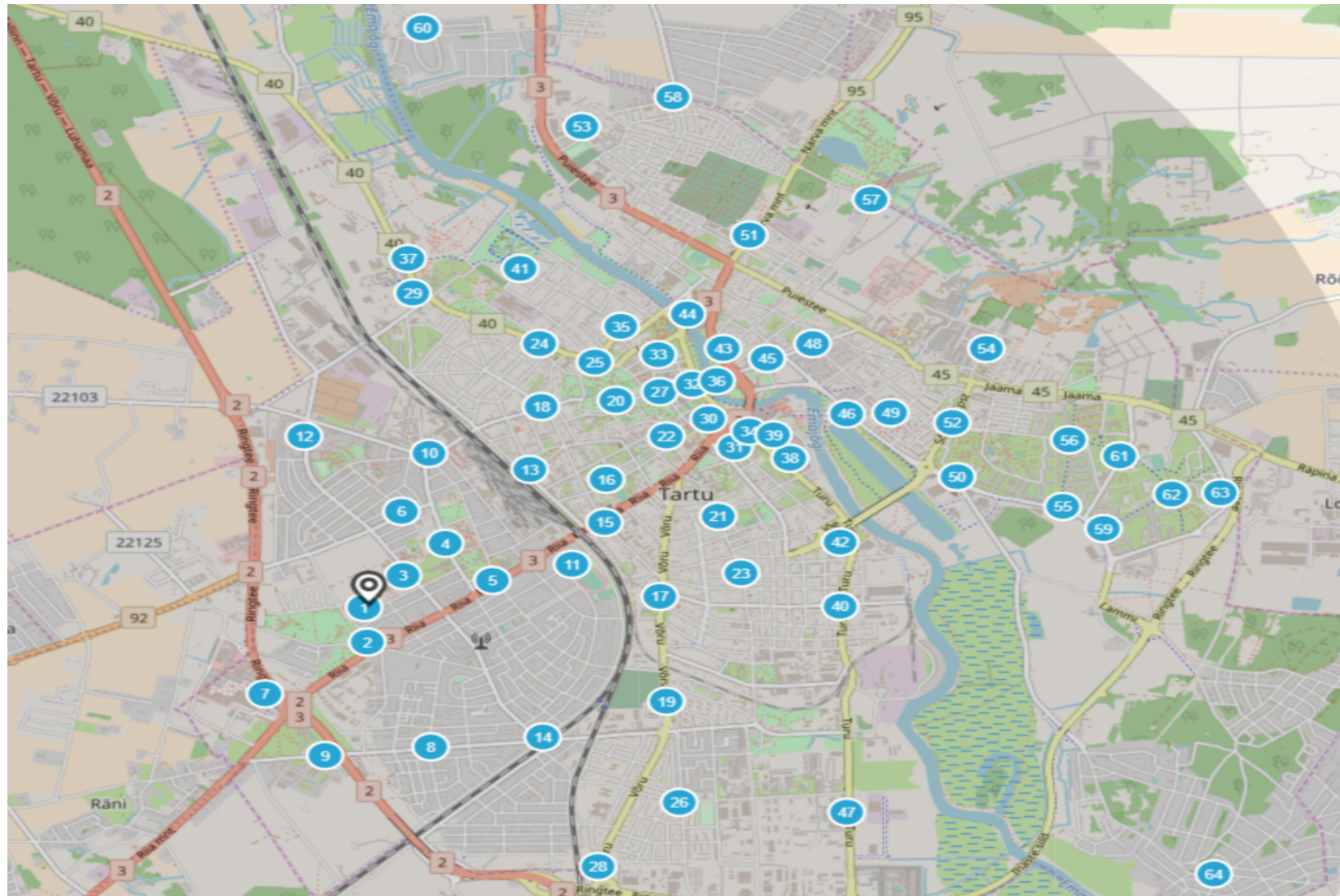


10 km

Light Traffic Roads & Bicycle Paths in Tartu

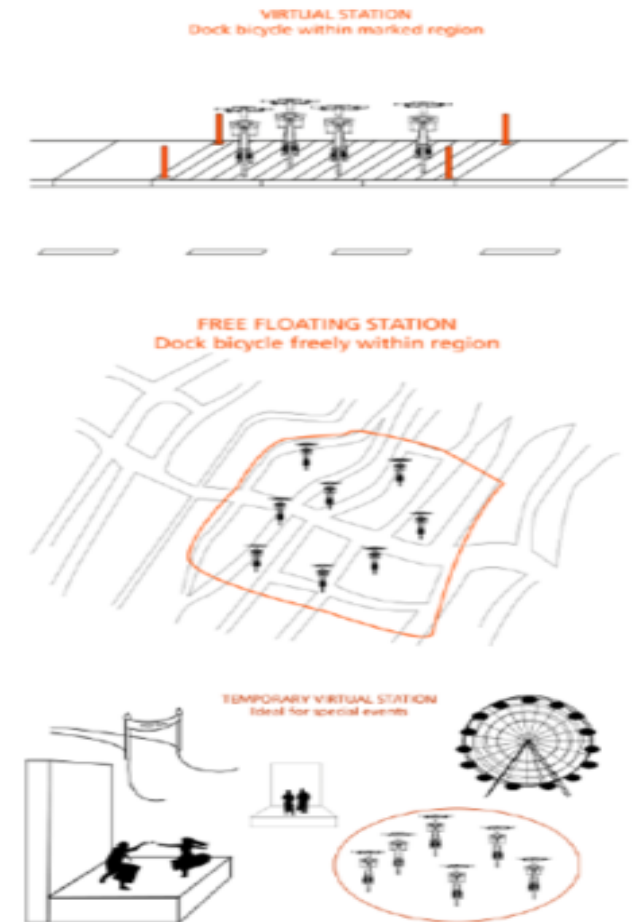


Tartu Bike sharing parking stations



Innovation in bike-sharing – virtual station technology

- GPS technology enables dockless bike-sharing
- System operator may create virtual stations within seconds
- Geo-fenced area that is GPS designated to match clearly marked region
- Secondary lock and double-sided kickstand are used for parking
- Hybrid systems using both virtual and physical stations
- Temporary virtual station is ideal for special events

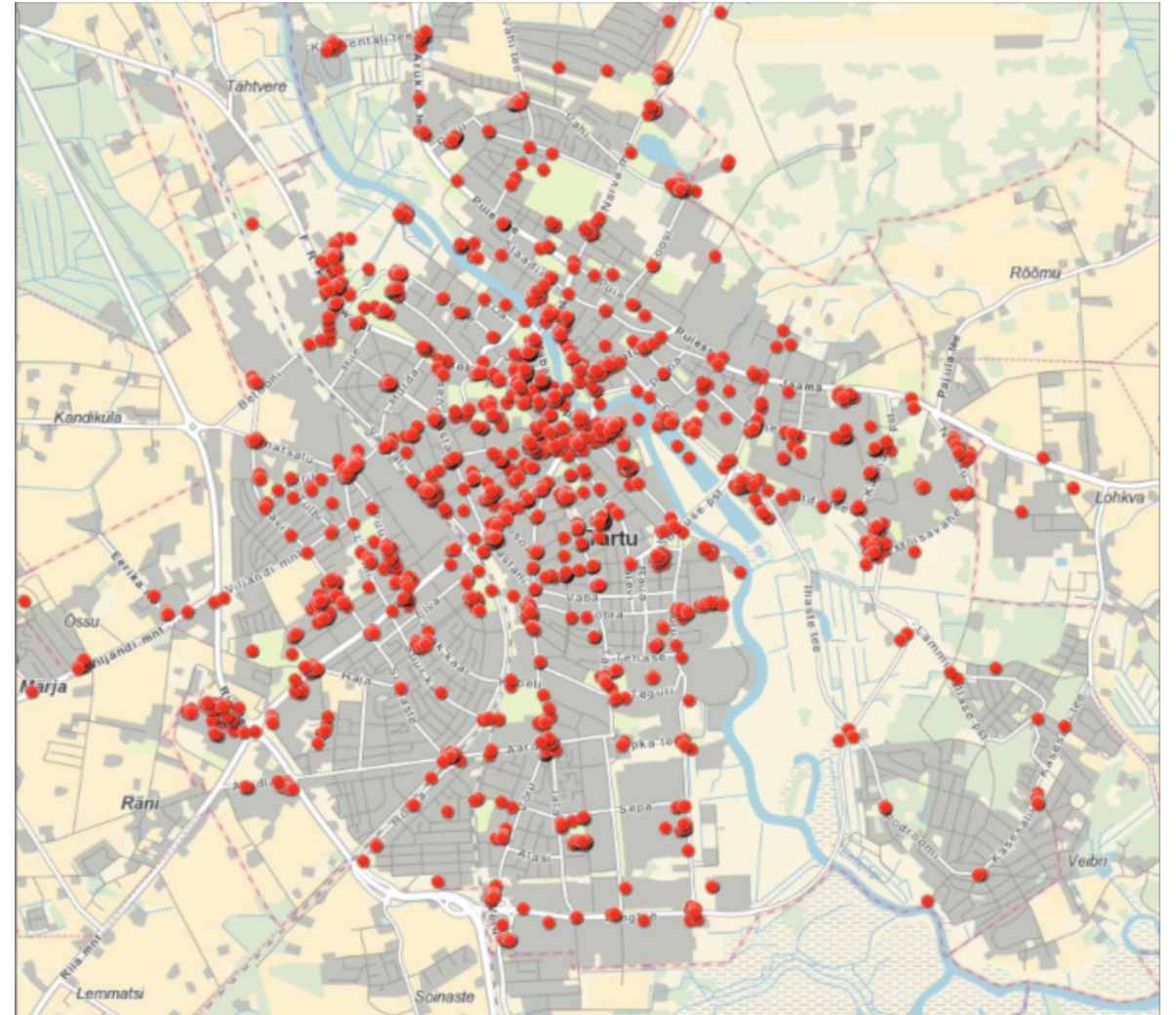


Determination of bike stations parks involving residents of Tartu city



In July-August 2017, the townspeople were able to express their opinion where bike rental points could be located in Tartu and responded to the online survey.

Approximately 247 people responded to the survey and to the city map were marked the location of 2386 possible bike stations.



A number of aspects speak in favor of an electric bike rental system in the City of Tartu as an innovative and strategic measure for the City:

- The terrain profile is well suited to the implementation of **electric bikes**, as the center of the city is situated in a shallow river dale and surrounded by elevated districts featuring primarily residential buildings (Riia Street, Narva Highway, Vanemuise Street and Jakobi Street).
- Broad, socially diverse and multifaceted range of users.
- Experiences in other cities shows that the implementation of electric bikes increases the duration of cycling sessions and the distances covered compared to regular bikes. Bikes in an electric bike rental system are used more often and the system is more efficient.



Results of online survey

- 209 people use a private car to drive the City, 28% of them agree to give up on car rides in favor for bike sharing system
- 147 people are using the public transport as a means of transport, 24% of them are ready to replace buses with bike sharing system
- Respondents find that the bike station could be an average of 536 meters from their place of residence or work and 25% of respondents are ready to use the bike sharing system year-round if the system is well-accessible.
- Of the proposed options for paying the bike rent price, turned out most popular Tartu bus card (39% of respondents), following mobile phone (32 % of respondents) and then a bank card (23% of respondents).





Thank you for the attention!

www.tartu.ee

