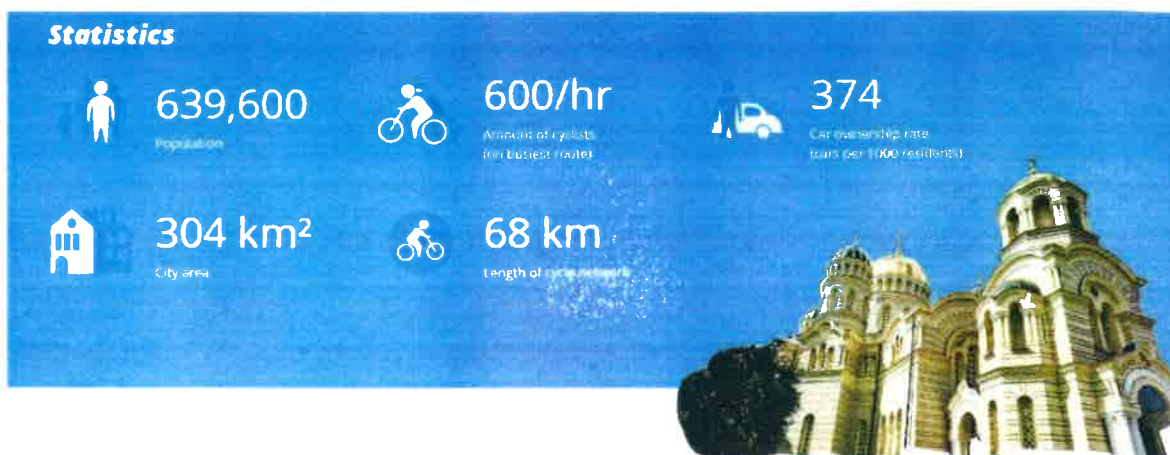


4.11 City of Riga



4.11.1 Overview of solutions

List of Handshake solutions	Type of Solution
RIG 1 (AMS 8, AMS 9, CPH 7 → 2018-2022). Improvement of city planning regarding integration of car network and bicycle network.	
RIG 2 (CPH 4, CPH 5 → 2019-2021). Improvement of modelling and traffic signalling.	
RIG 3 (CPH 4, CPH 5 → 2019-2021). Anchoring cycling traditions into everyday agenda	

Table 30: Overview of solutions for Riga

4.11.2 Detailed description of solutions

RIG 1 – Redesign of thoroughfare Bruņinieku street

Background information

Riga is working on improving the connectivity of their bicycle network. One of the streets that will be reformed for this network is Bruņinieku Street. The street will be redesigned to be more bike friendly. Important changes that will be made are the establishment of a two-way cycling lane, a reduced speed limit for cars to 30 km/h and a decrease in parking spaces for cars.



Goals to be achieved

The city's goal is thus to create a safe and comfortable cycling connections in Riga.

Groups targeted by the solution

All modes: Motorist – Bus - Cyclists – Pedestrians

Activities to be performed

To address all of the cycling issues in one pilot project, city is redesigning Bruninieku street as an example of a cycling street. Many car parking spots will be reduced while introducing two-way lanes for cycling on this one-way street.

Timeline of roll-out

Implemented, evaluation ongoing.

Risks management

Risk type	Description
Technical barriers	Due to prolonged water supply and sewerage communications reconstruction works, beginning of Bruninieku street construction works has been postponed to the middle of summer, which might mean, that it won't be finished in year 2019

Resistance from residents/shop owners	Not received yet
Political barriers	Riga city council did not elect the new city Mayor the whole summer, so many decisions had to be postponed until then
Bureaucracy/legislative	
Financial barriers	The funding has been set aside for this project and hopefully will not be relocated elsewhere

How the municipality intends to deal with risks

Barrier	Enabler
Technical barriers	As soon as all the communications reconstruction works are finished (Department is working together with communications holders to make the work more efficient), road work construction will begin aiming to finish in year 2019

Evaluation

Expected Effects

The project is expected to have a modal shift from car to bike of 5%.

- Investment and maintenance costs: Both investment and maintenance costs are known.
- Travel time: Cyclists are expected to have an improved cycle speed while cars have a reduced speed limit from 50 km/h to 30 km/h.
- Travel time reliability: Cyclists are expected to have an improved reliability of travel time due to improvements at junctions and segregated bike lanes. Cars are expected to have a reduced reliability of travel time due to a lower speed limit and reduced road space.
- Health effects: Because more people choose to cycle rather than drive, they experience positive effects on their health. Their productivity increases, health care costs are reduced, the burden of disease is reduced and life expectancy increases, which can all be valued positively.
- External effects: There is less congestion, noise, air pollution and climate emissions because there are less car trips.
- Safety effects. Safety effects occur because of a reduction in kilometres driven by car due to the modal shift towards cycling.

Discussion and further research needs

- Comfort of travelling for cyclists and pedestrians will be improved.
- Quality of public space will improve. This can have an effect on property values, profits for retailers, social security and livability of the street.
- Parking spaces for cars are removed. This may lead to longer search time for a parking spot and therefore an increase in travel time.

Input values on the project

The inputs on the project is used to perform the analysis are stated in the table below. These values where provided by the city or based on expert judgement.

Parameter	Value
<i>Investment costs</i>	€ 3.248.412
<i>Year(s) of investment</i>	2018-2019
<i>Maintenance costs per year</i>	€ 20.349
<i>Number of cycling trips per year - before</i>	238.272
<i>Number of cycling trips per year - after</i>	427.357
<i>Number of car trips per year - before</i>	3.781.692
<i>Number of car trips per year - after</i>	3.639.523
<i>Modal shift from car to bike</i>	33%
<i>Modal shift from public transport to bike</i>	53%
<i>Modal shift from walking to bike</i>	14%
<i>Average speed bike (km/h) - before</i>	14
<i>Average speed bike (km/h) - after</i>	17
<i>Average speed car (km/h) - before</i>	40
<i>Average speed car (km/h) - after</i>	30
<i>Length of project (km)</i>	2,1

Bikenomics results

The results are presented in Table 30. Values are stated in net present value in 2018 at price level of 2019 and rounded to millions.

Results	NPV in 2018, in mln 2019 EUR
<i>Financial effects</i>	
<i>Construction costs</i>	- € 3,19
<i>Maintenance costs</i>	- € 0,48
<i>Travel time effect</i>	
<i>Travel time</i>	

	<i>Bike</i>	€ 1,79
	<i>Car</i>	- € 12,05
<i>Travel time reliability (car)</i>		
	<i>Bike</i>	€ 0,45
	<i>Car</i>	- € 3,01
External effects		
<i>Congestion</i>		€ 3,11
<i>Noise</i>		€ 0,05
<i>Air pollution</i>		€ 0,07
<i>Climate change</i>		€ 0,13
<i>Health</i>		€ 1,46
<i>Safety</i>		€ 0,15
Qualitative		
<i>Comfort</i>		+
<i>Public Space</i>		+
Total costs		- € 3,7
Total benefits		- € 7,8 +PM
Balance		- € 11,5 +PM
B/C ratio		- 2,1

Table 31: Summary Bikenomics Riga

RIG 2 – Improvement of modelling and traffic signalling

Background information

Concerning cycling traffic modelling and intelligent signal management, there are no such project being held in the city and the issue is very urgent. Though there are already some privileges and separate streetlight system set up on the cycling paths ensuring some additional safety to cyclists, a lot of additional work is required to make the cycling network integrated to all the road system.

Goals to be achieved

Improvement of modelling and traffic signalling. At the present time, the objective still needs to be clarified.

Groups targeted by the solution

City planners and citizens.

Activities to be performed

Not yet fully determined.

Timeline of roll-out

Not yet fully determined.

Risks management

Not yet fully determined.

Evaluation

Not yet fully determined.

RIG 3 – Anchoring cycling traditions into everyday agenda**Background information**

Riga is aware that it is not only important to keep on with the campaigns or annual events already done by the city, but there would be a need for having some new and innovative ideas on how to create and anchor cycling traditions into everyday agenda.

Goals to be achieved

Anchoring cycling traditions into everyday agenda

Groups targeted by the solution

All citizens.

Activities to be performed

Not yet fully determined.

Timeline of roll-out

Not yet fully determined.

Risks management

Not yet fully determined.

Evaluation

Indicator	Unit	Value (2018)	Expected (2022)
New marketing techniques/ events used	Yes/no	ND	ND