

HUPMOBILE

Adaptive traffic management – minipilot in Tallinn

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Objective

- Increase the mobility flows using the electronic solutions and promoting the switch towards public and greener transport
- Work out the pre-feasibility study of adaptive traffic lights in the case of one BSR city (Tallinn) with aggregated simulation
- Investigate various adaptive traffic lights market solutions
- Audit existing adaptive traffic systems
- Develop specific hot-spot to validate technologies in real traffic conditions

Evolution of the Tallinn use case

- Market research
- Preparation of ToR
- Discussion with interested stakeholders
- Pre-feasibility study merged with mini-pilot

- Challenge:

Radical traffic behavior change

Details of the pre-feasibility study

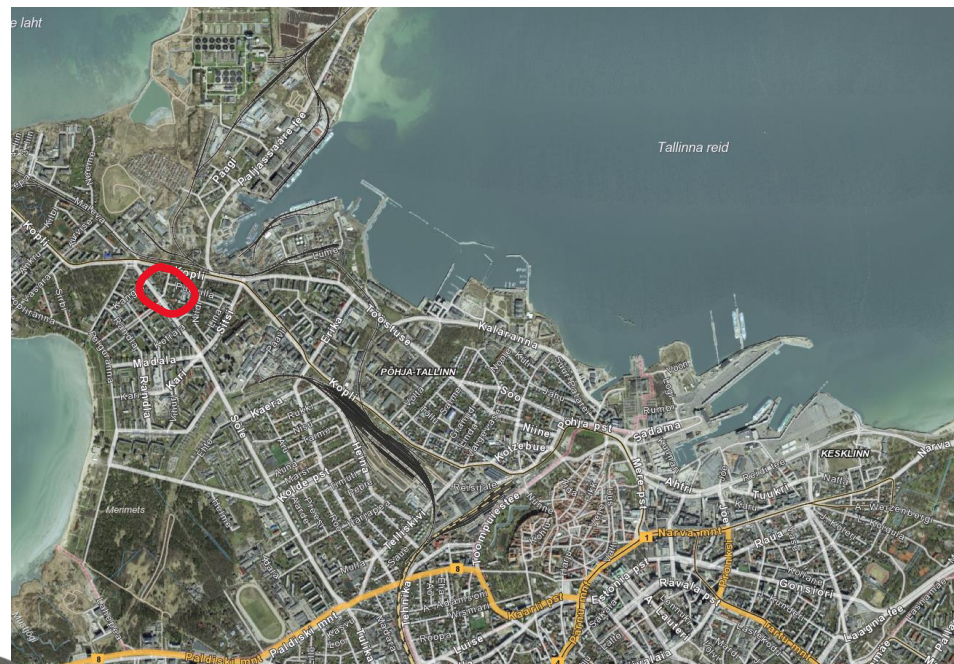
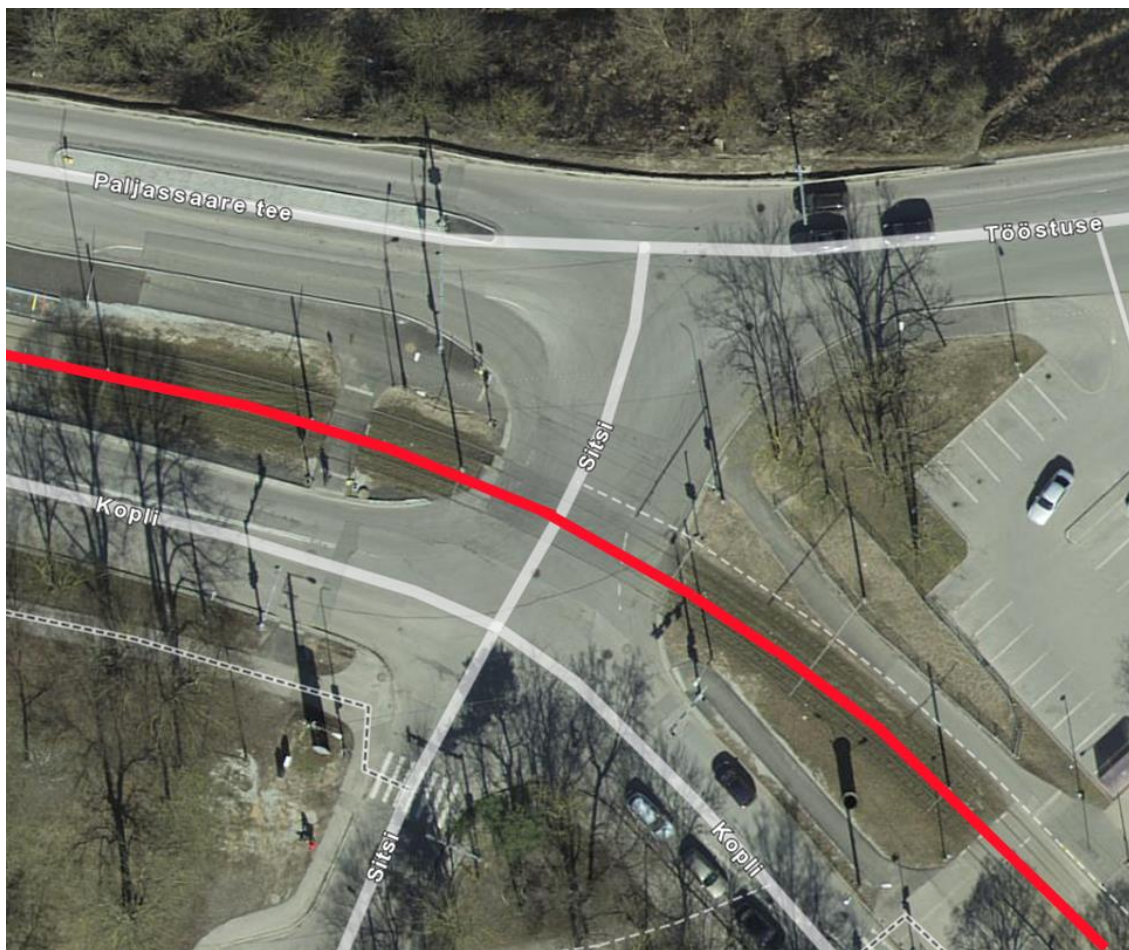
- Benchmark study
- Analyze investment and running costs, also the socio-economic cost
- Integration with new technologies and transport modes
- Audit existing Reidi road adaptive solution
- Map needed data layers
- Map potential corridors
- Technical specification for procurements

Reidi road audit

- Smart self-learning traffic lights
- Dynamic traffic management system
- Instructions to exit the port (VMS)



Results of the mini-pilot



Results of the mini-pilot

Tools:

- Different detectors (video detectors, thermal detectors, buttons etc)
- Smart Intersection software

Task:

- Public transport prioritization
- Not “wasting” green time

Results of the mini-pilot

- Total waiting time for cars smaller
- Better distribution between different direction
- Pedestrian must push the button (only negative impact)

	TRAM TRAVEL TIME BETWEEN 2 STOPS (avr.)	
	Maleva > Sitsi	
Before		2:13
After		1:49
Difference		00:24
	Sitsi > Maleva	
Before		2:04
After		1:51
Difference		00:12





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TAB JA HOOLDAB

21

Informational poster

Results in a nutshell

- Benchmark cities have long-term experience – good to follow!
- There is no „end product“ for all cities
- Sensor information is very crucial
- Feasible only in heavy traffic corridors
- No mayor increase of maintenance cost

Challenges and next steps

- How to set priorities to different user groups or mode of transport
- Impact of road traffic safety
- Impact of new technologies

- Improve tram connections between City Center-Airport



11:07





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