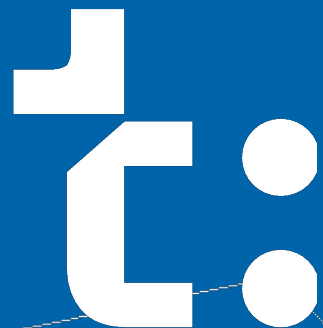
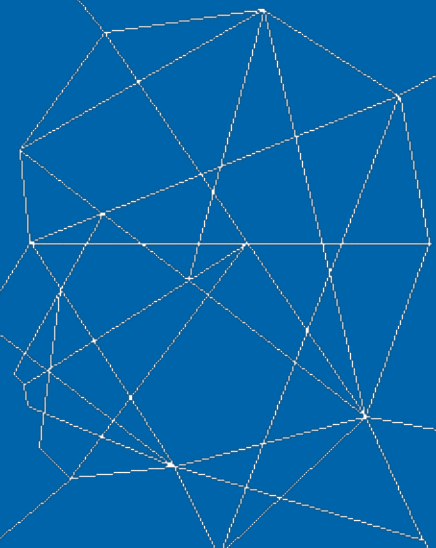


TARK TARTU
SMART CITY



Mõned nutikused Tartu linnast A few smart ideas from Tartu

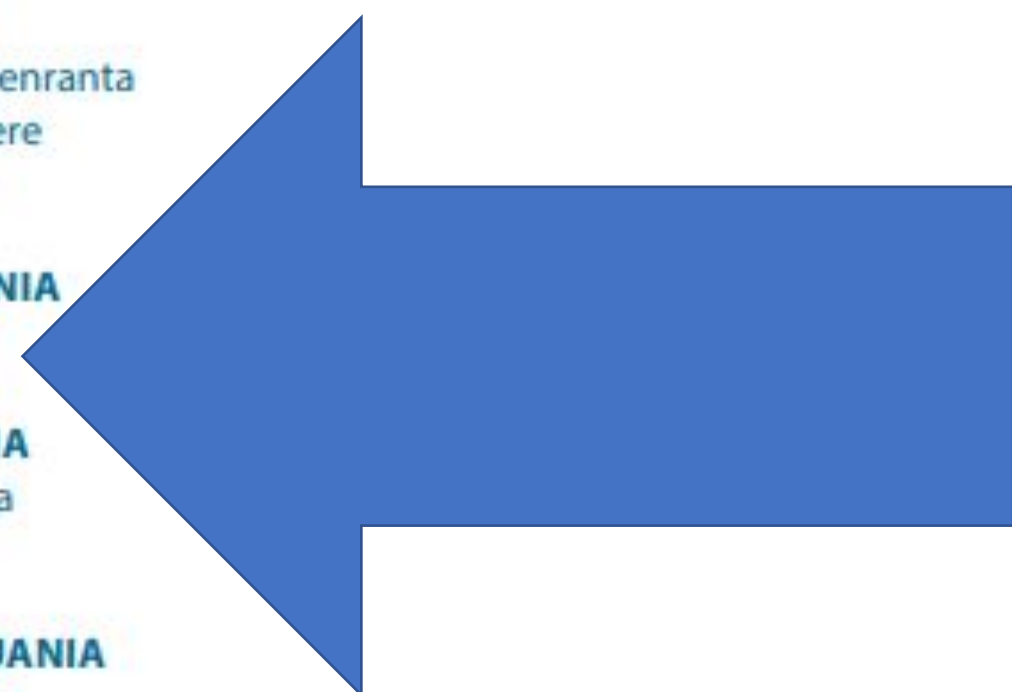
19th of May 2022



100 climate neutral and smart cities by 2030



Iceland
Liechtenstein
Norway grants





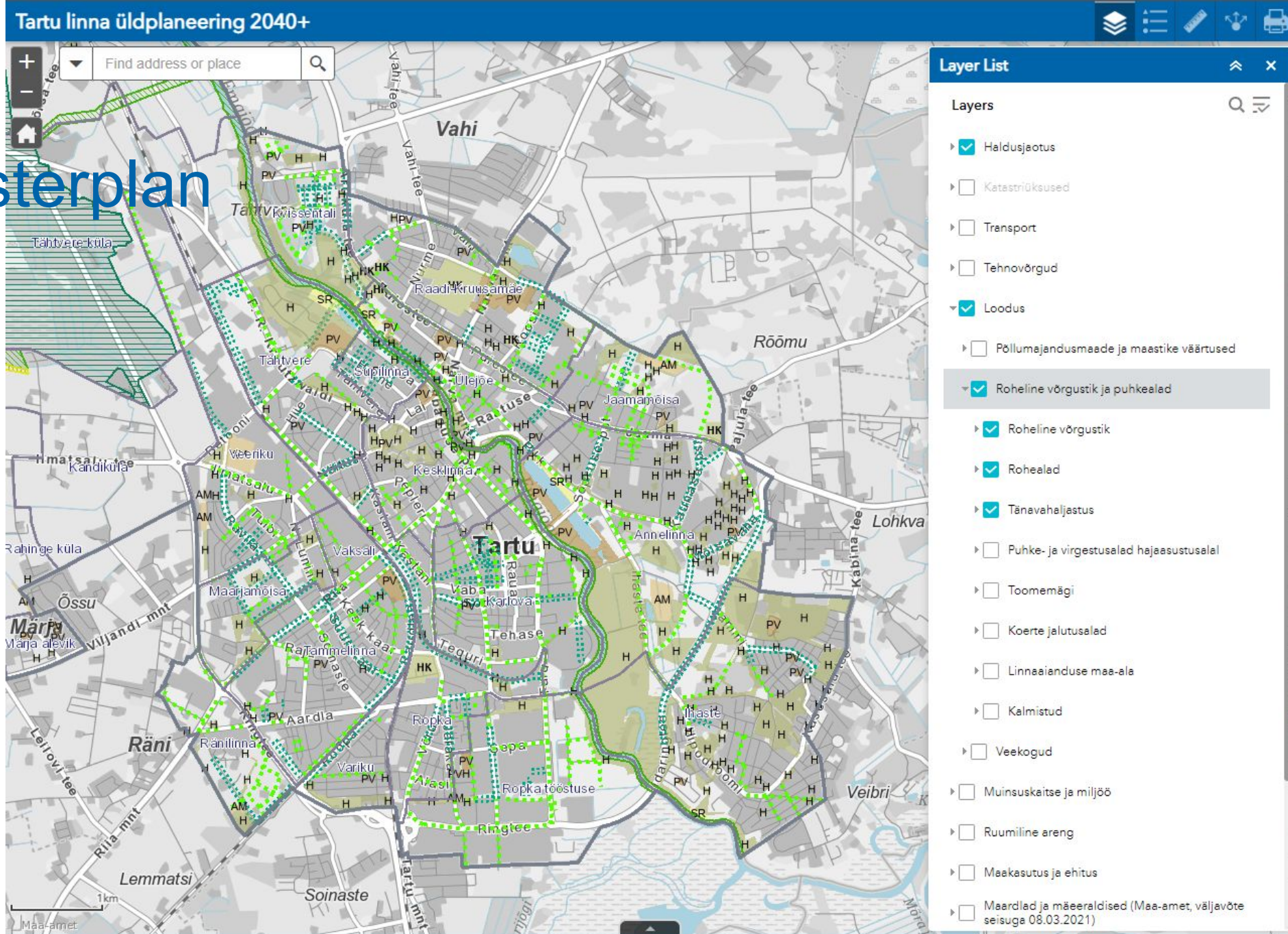
Today: about smart / nutikast
Next time: acclimate / kliimaneutraalsus



Full digital masterplan

Tartu üldplaneering 2040+

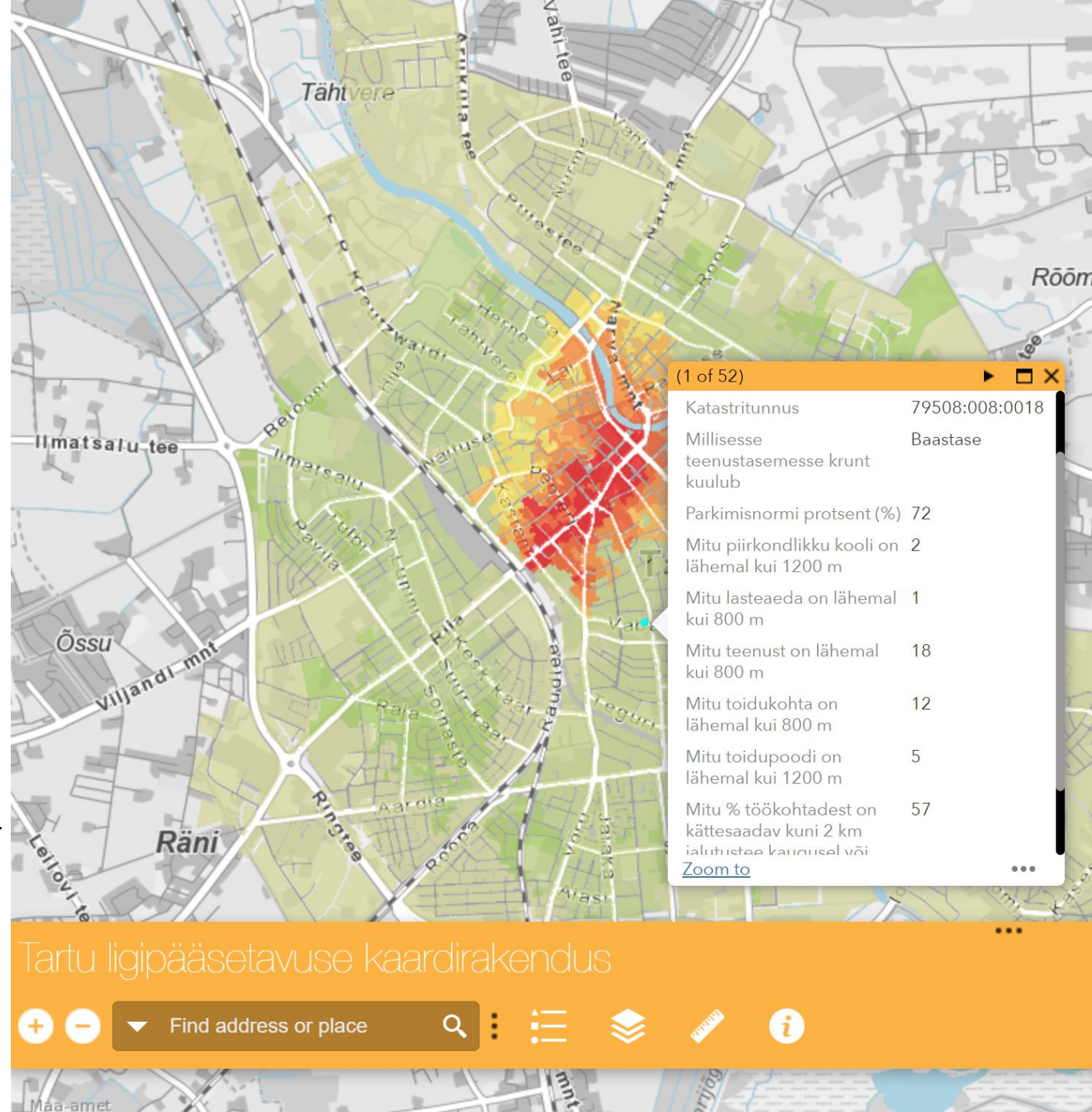
<https://tartu.ee/et/uldplaneering2040>



Walkability analysis

Kättesaadavuse analüüs

<https://gis.tartu.lv.ee/portal/apps/webappviewer/index.html?id=2a09f0e027414d13a30ccf8a4e8b2d8a#>



📌: Data ownership and sensor data

Andmete omamine ja hetkeandmed

Rarity: Obama ID card – a gift by Ilves



Andres Einmann

5. September 2014, 3:24 PM



Barack Obamale kingitud ID-kaardi näidis.

Photo: Sander Retel

During his Wednesday spent in Tallinn, Estonia, the US President Barack Obama kept asking about Estonia's e-State. Not surprisingly then, just before departure, local counterpart Toomas Hendrik Ilves slipped him a specimen of the Estonian identity card complete with the name and photo of Barack Obama.

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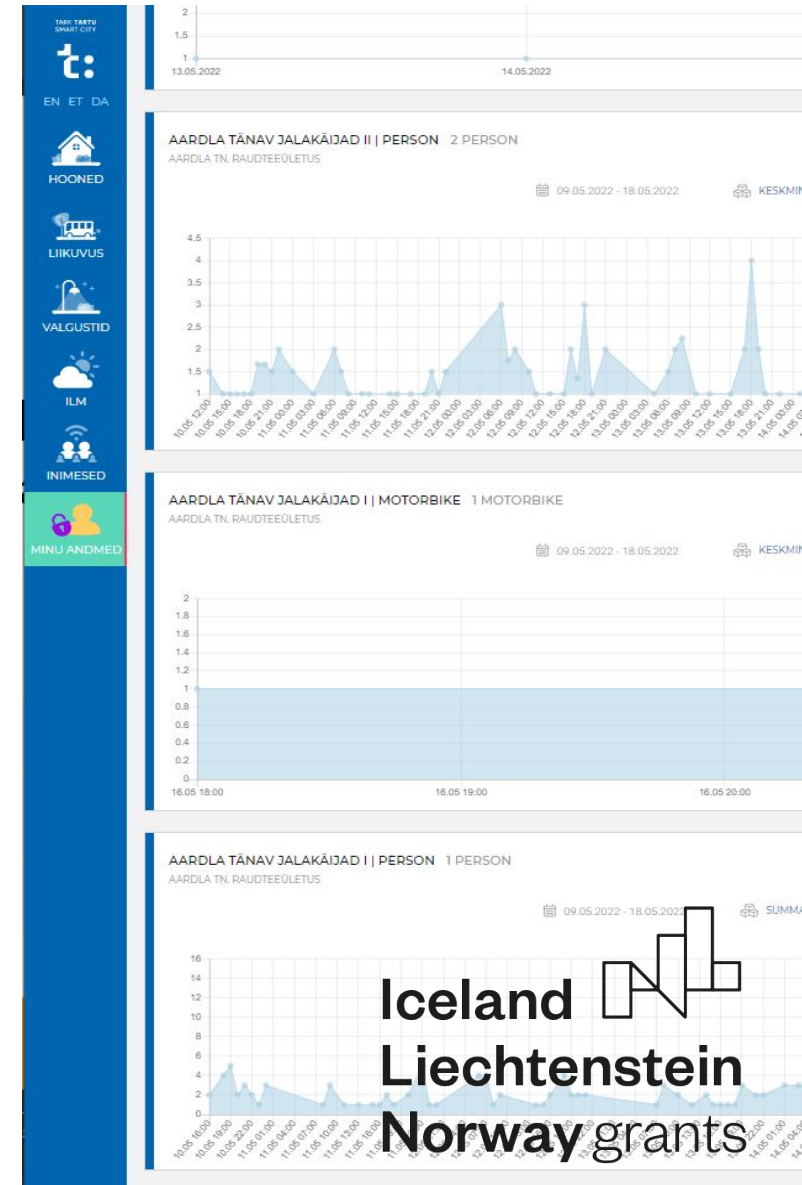
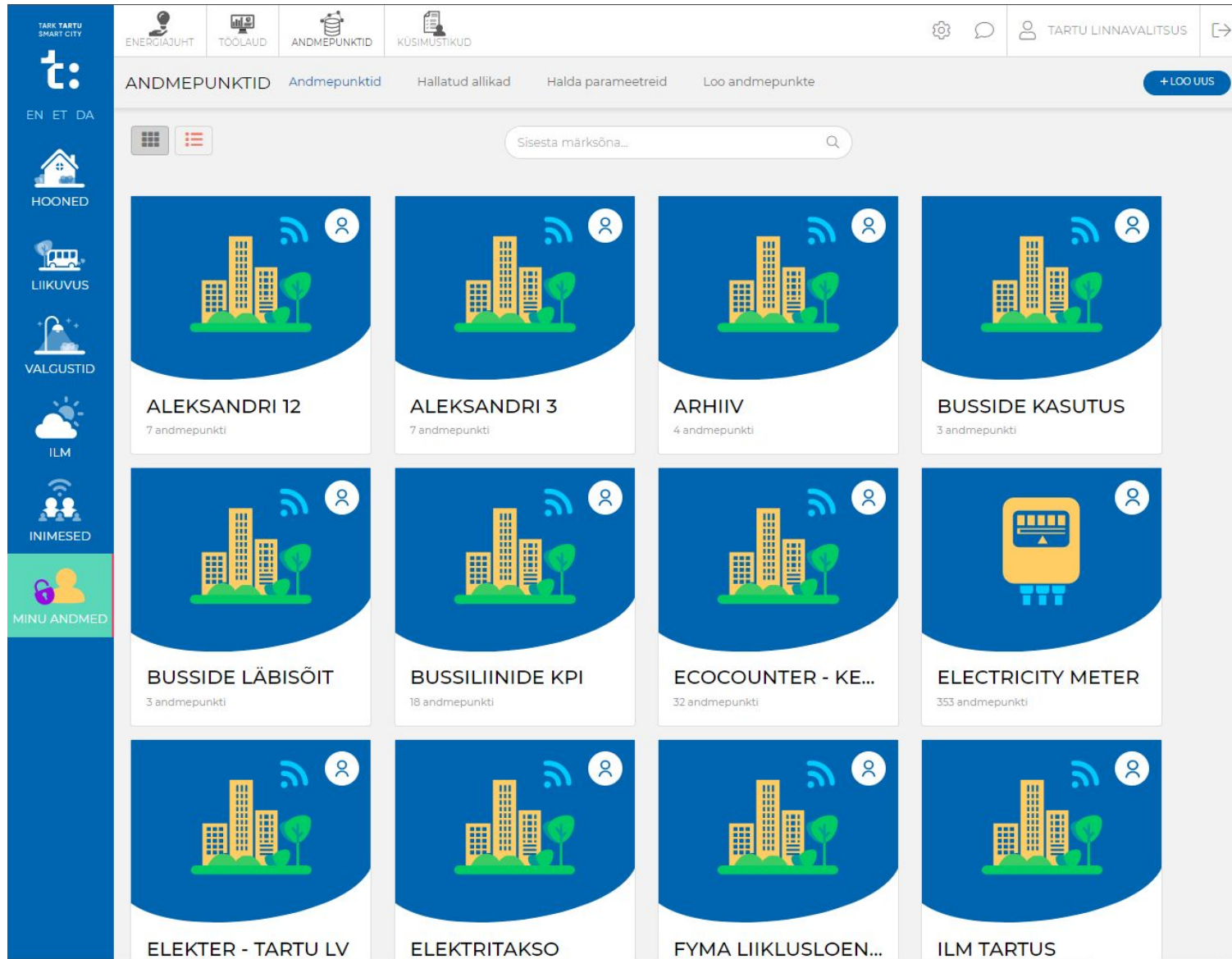
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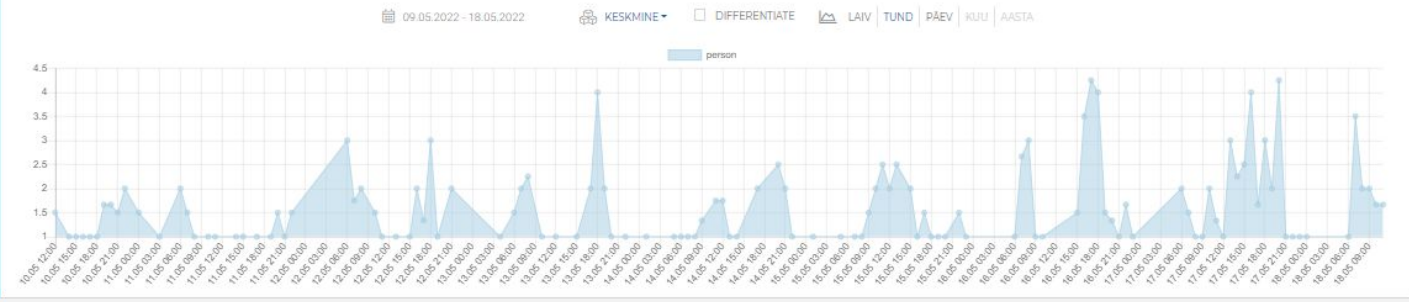
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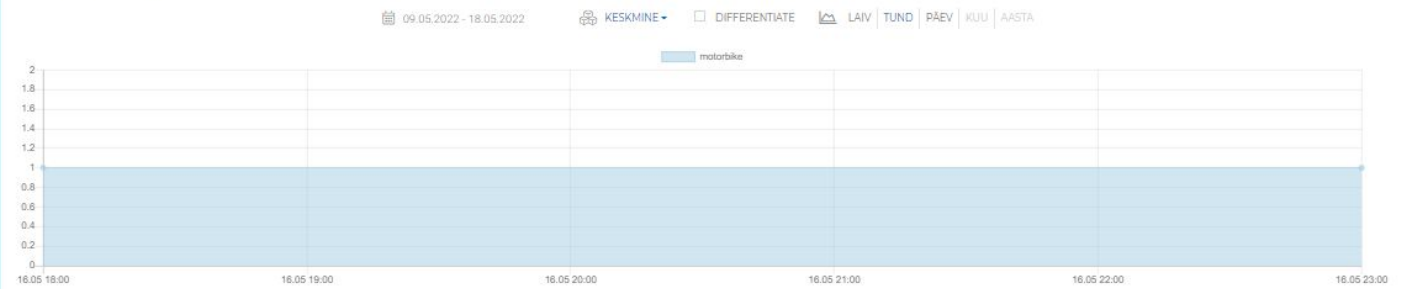
AARDLA TÄNAV JALAKÄIJAD II | PERSON 2 PERSON

AARDLA TN. RAUDTEEÜLETUS



AARDLA TÄNAV JALAKÄIJAD I | MOTORBIKE 1 MOTORBIKE

AARDLA TN. RAUDTEEÜLETUS



AARDLA TÄNAV JALAKÄIJAD I | PERSON 1 PERSON

AARDLA TN. RAUDTEEÜLETUS



Iceland
Liechtenstein
Norway grants

 <https://tarkkartu.telia.ee/et/>

What data?

Electricity
Heat
Traffic sensors
Bus validations
Bike share data
Environment sensors
Street lighting
Google maps
Other

Data for what?

Long term impact assessment
Short term analysis
Data based decisions
Quick action planning
Fun

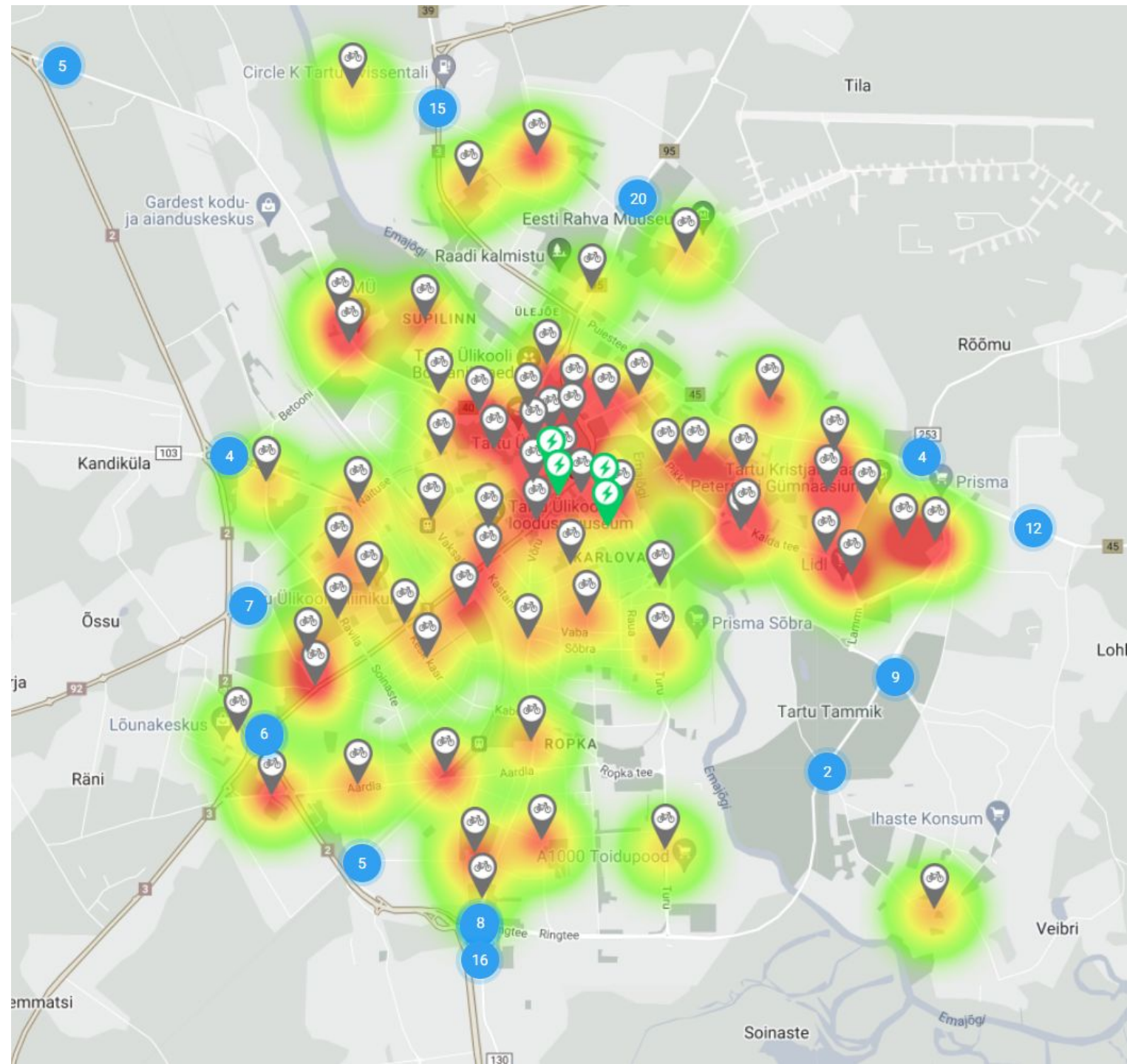


Metallica @ Tartu 2019

- Mobile devices / mobiilsed seadmed
- Traffic counters / liiklus linnas
- AI / tehisintellekt

What data?

- Liiklusloendurid
- Valideerimised
- Rattaringlus
- Google API
- Traffic counters
- Cyclist counters
- Pedestrian counters
- Bus validations
- Bike Share data
- Google API data



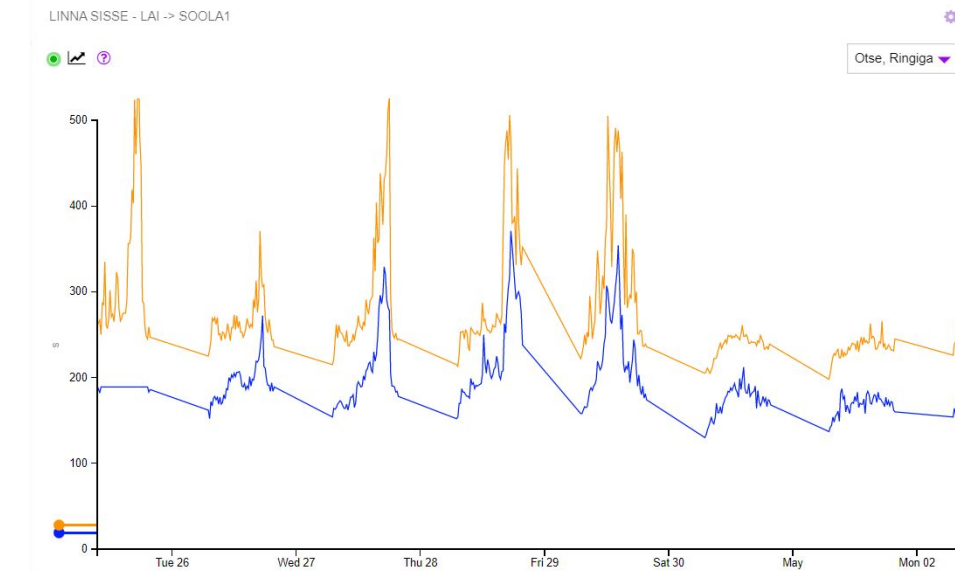
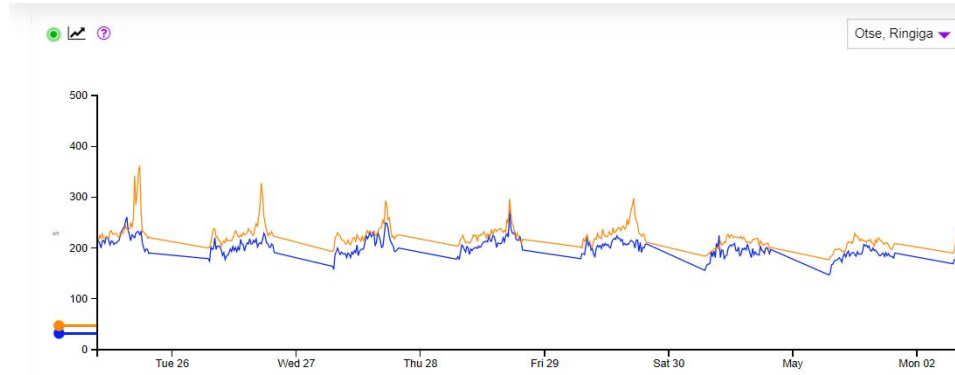
Car Freedom Avenue 2021



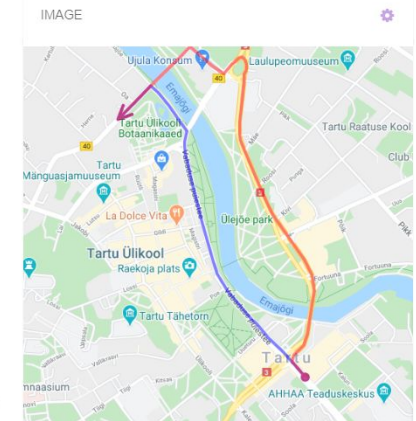
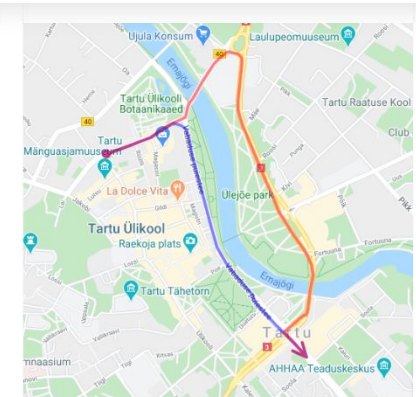
Car Freedom Avenue 2021

- Google Maps API data
- Ask every 15 minutes for predictions
- Resulted in adding on average 90 seconds on city entry
- And 30 seconds to exit

« Google API Agent - AVP ja Riia tn



» Add widget Edit



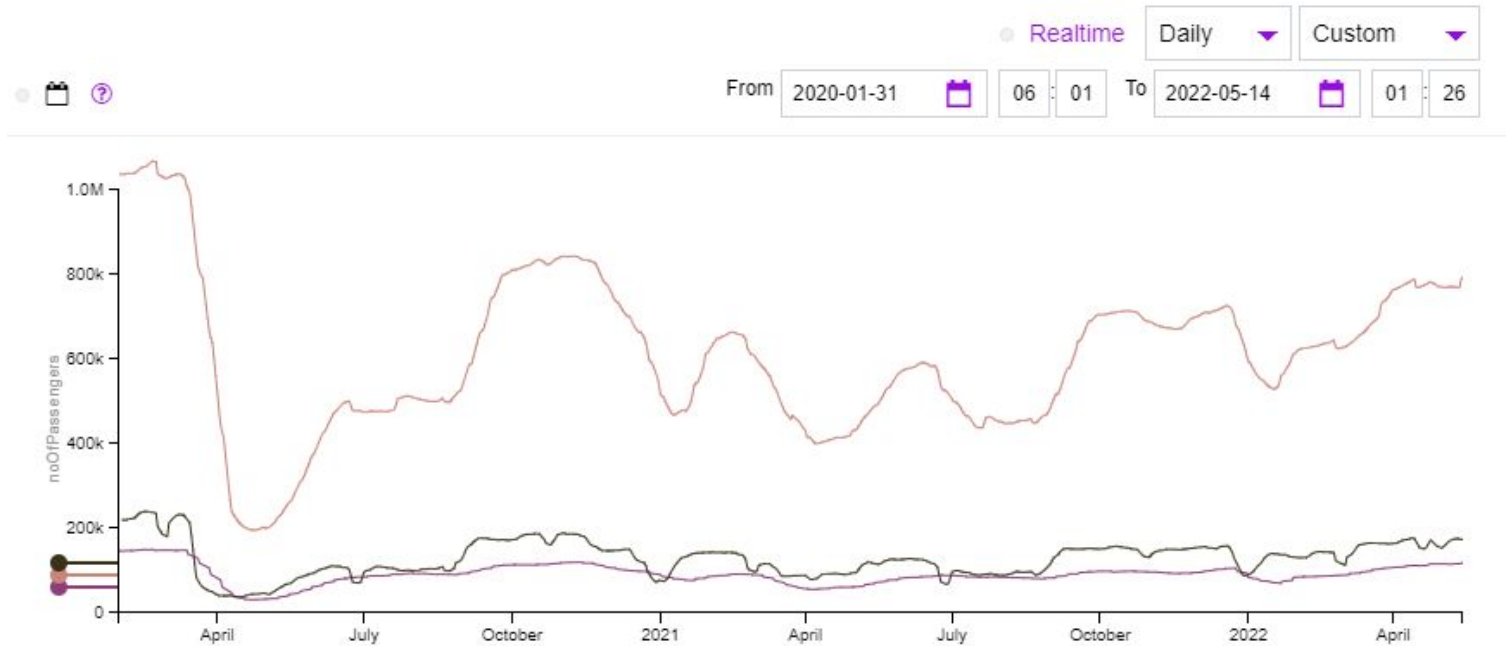


Current Trends in mobility and Traffic – BUSES



Title

Valideerimised :: 28 päeva :: päevad / tööpäevad / nädalavahetus

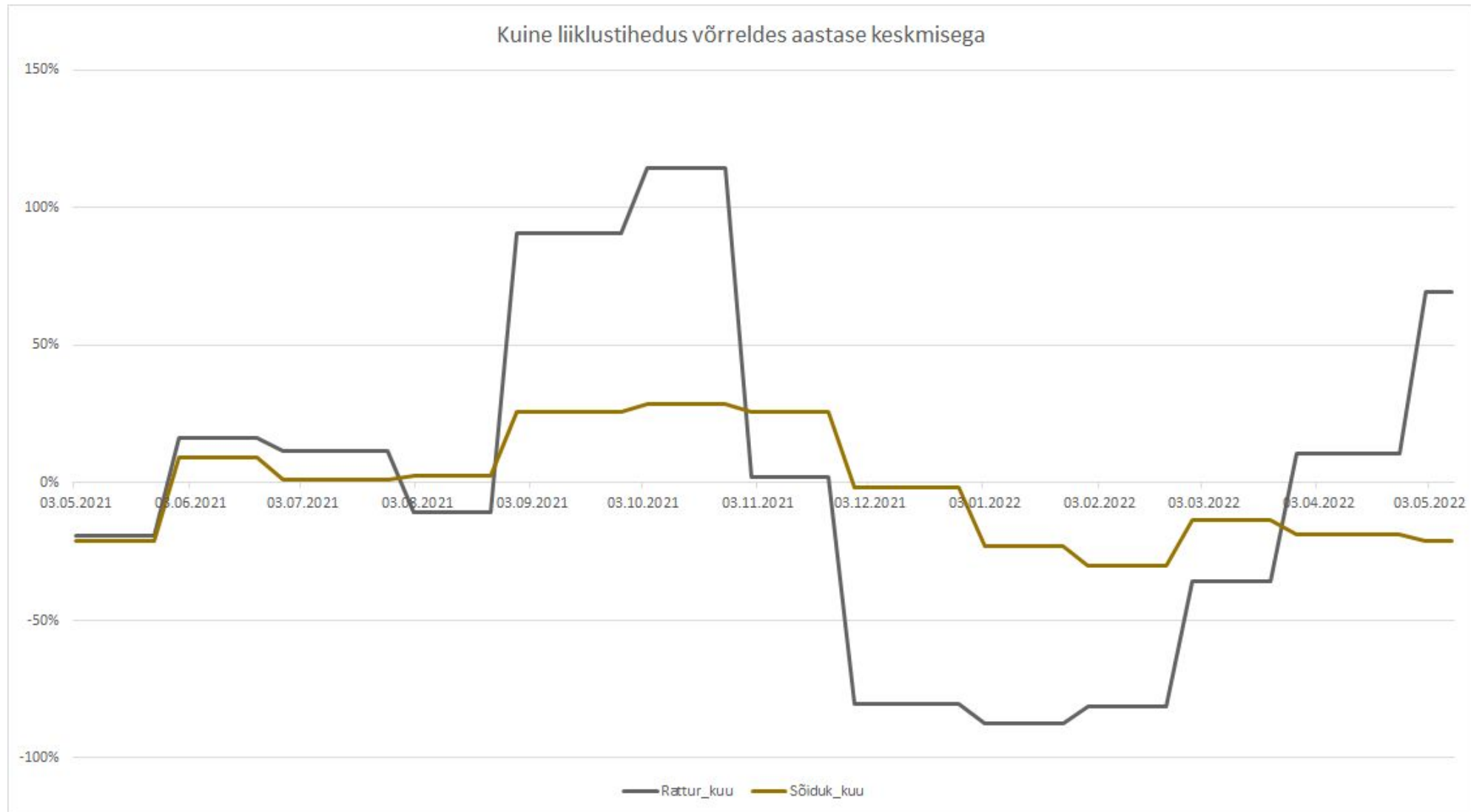


Data points

- ☒ ValidationsLast4Weeks => series
- ☒ ValidationsLast4WeekWeekends => series
- ☒ ValidationsLast4WeekWorkDays => series



Current Trends in mobility and Traffic – BIKES and CARS



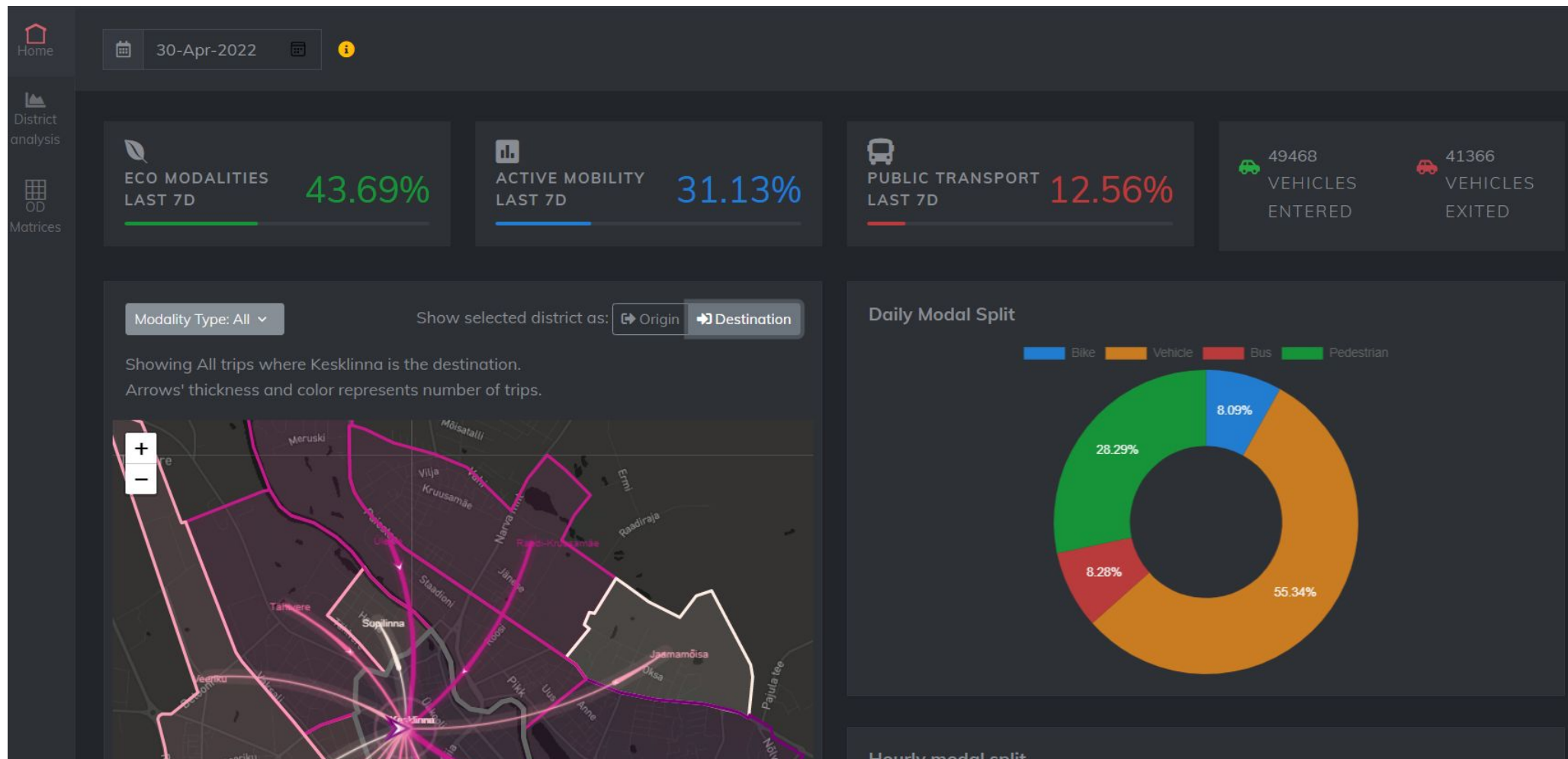
What if we put it all together

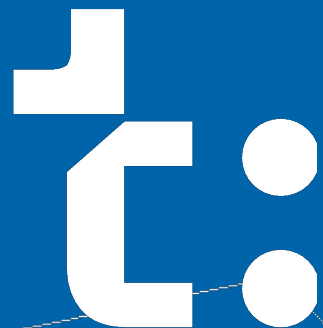




What if we put it all together

<https://its.cs.ut.ee/modsplit/#home>





Täna tähelepanu eest
Thank you for your attention

Kaspar Alev
Kaspar.alev@tartu.ee