Model of data exchange between the road administration and the travel information provider

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crocodile

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MAANTEEAMET

Estonian Road Administration:
500 employees

Responsible for state roads management
State road network 16 600 km
TEN-T roads 1 294 km

Road planning, construction and maintenance. All works are outsourced (design, construction and maintenance)

Traffic safety, National Vehicle Register and public transport management

DATA: National Road Databank

- Spatially enabled database
- UI with integrated mapping
- OGC WFS and INSPIRE connectivity for other systems

Legacy databank was replaced by new Road Databank (developed 2016-2018)

Public launch in full scale 06/2018

According to national legislation, all roads open to public access must be registered in National Road Databank

DATA: Traffic Restriction Databank

- According to national legislation (2016), all major traffic restrictions (closures and weight/hight/width limits) in publicly open roads must be registered to traffic restriction databank by road owners with map based e-solution with ID card identification (launched 2017).
- Traffic restriction databank includes also real time datasets from traffic monitoring devices, road weather stations and traffic cameras.
- Traffic restriction databank is based on ESRI services. New Accesspoint (Datex II), web portal and subsystems are currently under development, shall be launched 12/2018.

Road Administration - WAZE cooperation

- Road Administration policy: we shall not provide end user services if market works and has services. We publish data and minimal independent output by national traffic web-portal.
- 2013 first data delivery contract was signed with Google to provide Estonian public transport GTFS datasets. Feed is equally open to any data provider
- 2015 we asked Waze to share our traffic restriction data to, just in time: Waze has recently started Connected CitizensProgram (CCP)
- Via the CCP, hundreds of international cities, departments of transportation and first responders have built meaningful relationships with data sharing.

Road Administration - WAZE cooperation

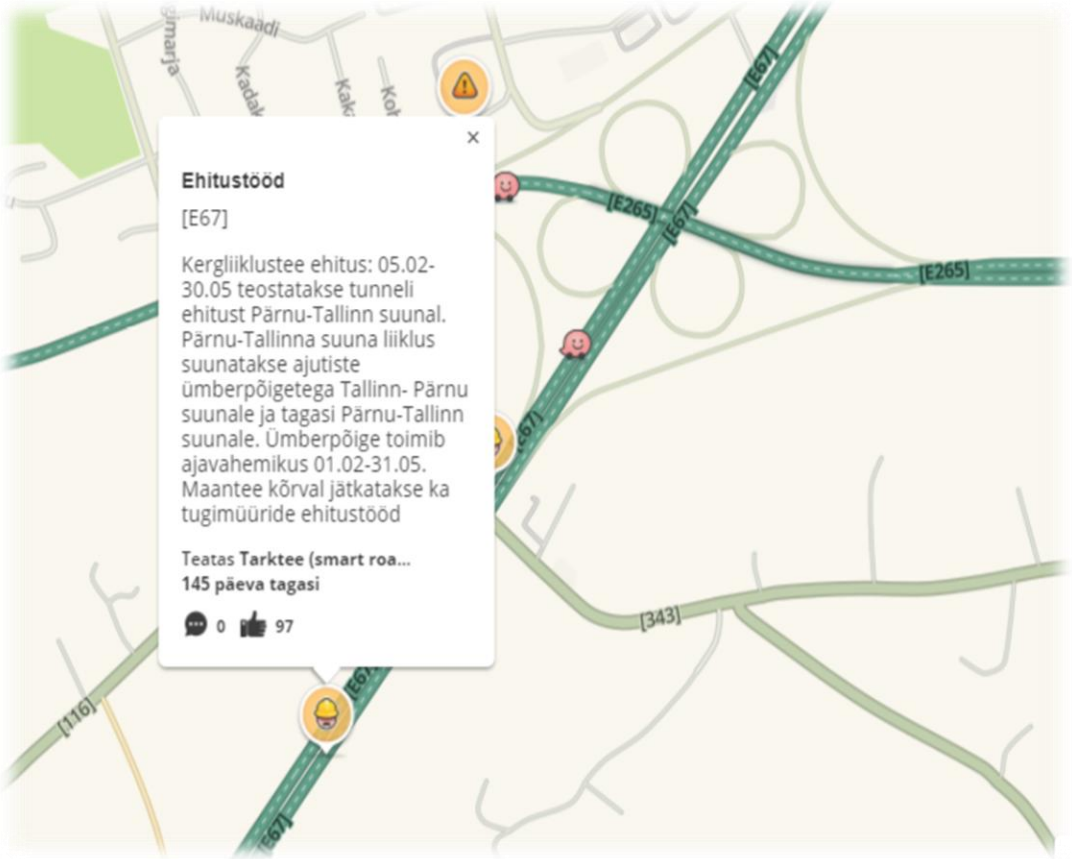
- The Waze map evolves with every driver and data point added. The Connected Citizens Program yields more data, giving Wazers a greater ability to be aware of road closures and jams.
- Data sharing: Partner allows Waze to retrive data sets and gets access to waze feed to dowload Waze live data at its territory polygon.
- Partner gets access to Waze partner portal where all partner service parameters and settings can be monitored and communicated with Waze.
- For CCP partnership online contract with Waze must be accepted.

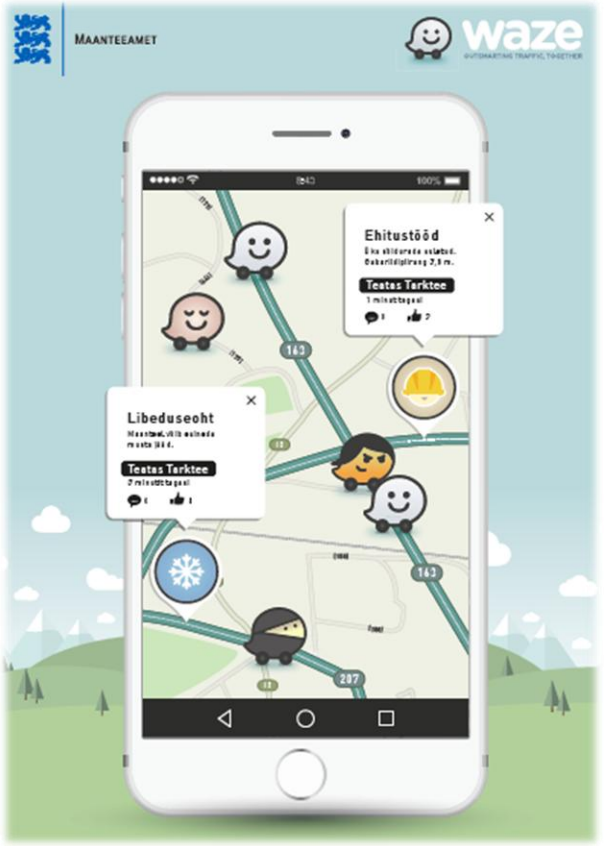
Road Administration - WAZE cooperation

- SITUATIONAL AWARENESS: Partners receive real-time incident information faster and more accurately
- TWO-WAY DRIVER COMMUNICATION: Partners use Waze to inform drivers of major traffic events
- INFRASTRUCTURE PLANNING: Insights into locations with frequent congestion or hazards yields smarter urban planning
- BRIDGING CONNECTIONS WITH OTHER PARTNERS: Waze gathers partners via in-person summits and an online forum to discuss case studies
- STREAMLINING DATA INPUTS: Partners can utilize data standards designed by Waze for closure and incident reporting

Estonian case

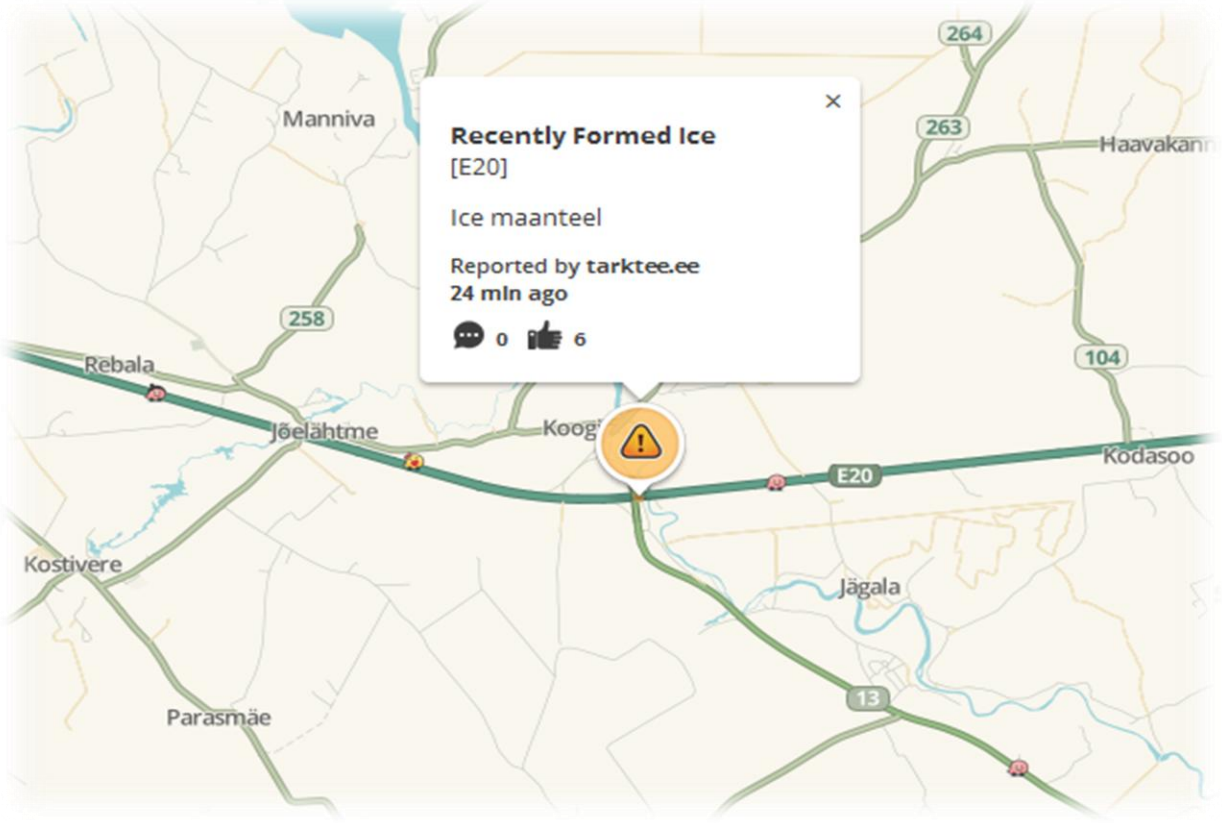
- Road restriction data (road works).
  Yearly over 1000 road work locations are forwarded to Wazers





Estonian case

- Road Weather Station ice warnings
  (warnings based by Vaisala RWS stations)

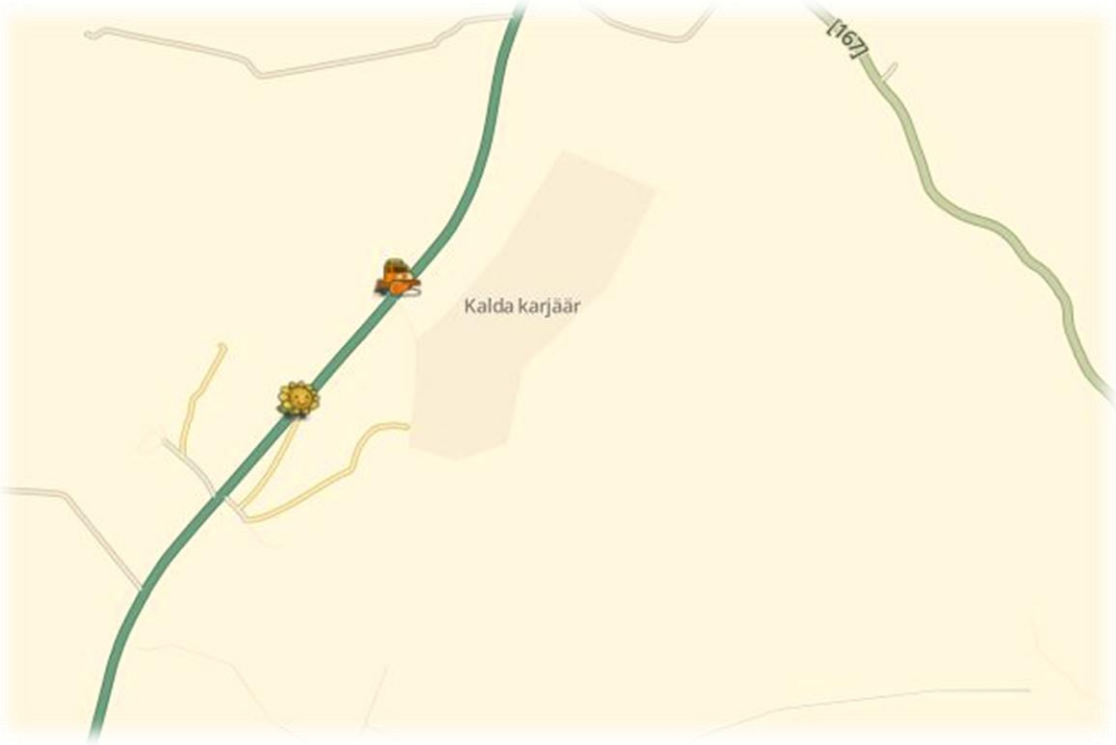


Estonian case

Push message to all Estonian Wazers about date to start use winter tires

Estonian case - available soon

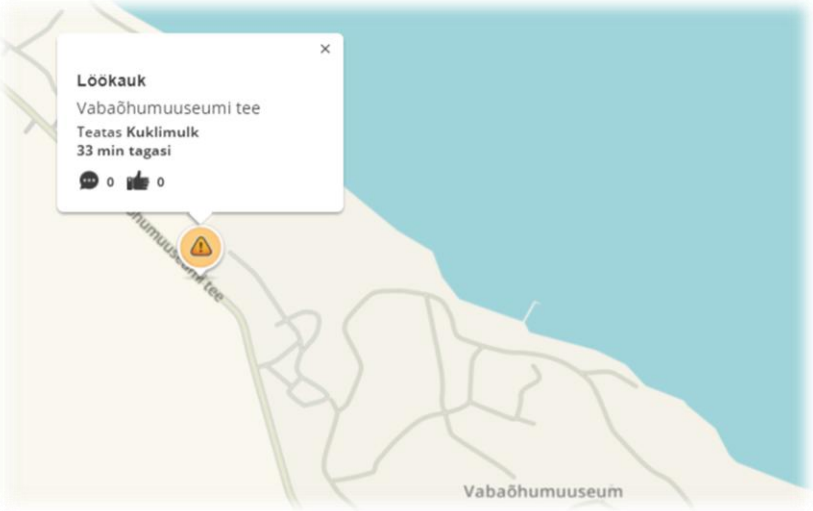
Snowplows real-time location (1 min), feed from fleetmanagement partner to Waze: only state roads, machine working with plow or salt sprayer active.



Estonian case – available soon

Waze users feedback loop to traffic magament center and central road maintenance info system to speed up fixing actions:

Potholes, warning, dangers etc



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Thank You!

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