Quick and Dirty
– do pilots and testbeds challenge research?

31.5.2018 Jan Juslén, Director Finnish Transport Agency

Smart routes and intelligent traffic - for you

Some key objectives from FTA's strategy

- anticipate future needs
- encourage open innovation and experimentation
- carry out active dialogue with private and public sectors
- promote development by pilots
- share know-how and best practices

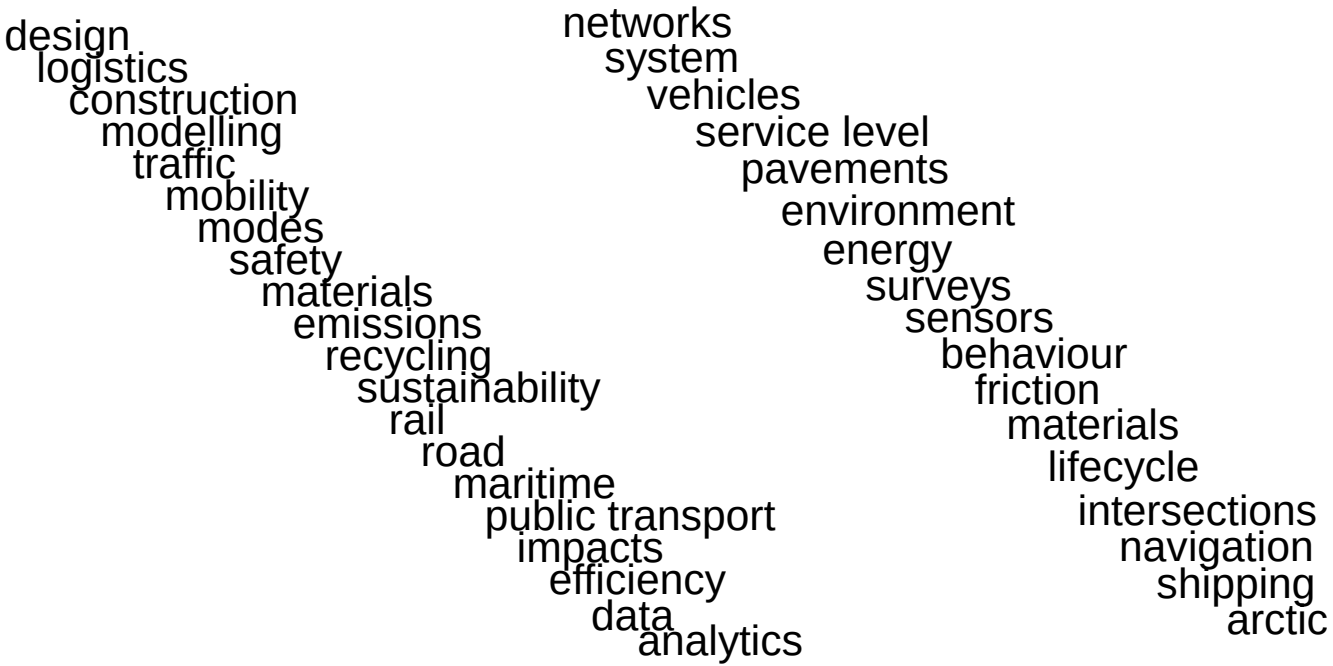
- improve efficiency in services, maintenance operations and infrastructure development
- develop intelligent infrastructure
- increase the lifecycle of infrastructure

- develop proactive traffic management
- reduce traffic emissions
- improve safety
- develop the transport system to respond to the changing needs of society
- use advanced technology for data collection and analytics

Pilots, testbeds and research are tools for getting answers to questions

- Do we know?
- Do we understand?
- Can we develop?
- Can we verify?
- Can we implement?
- What are the costs?
- What are the effects?
- What are the benefits?

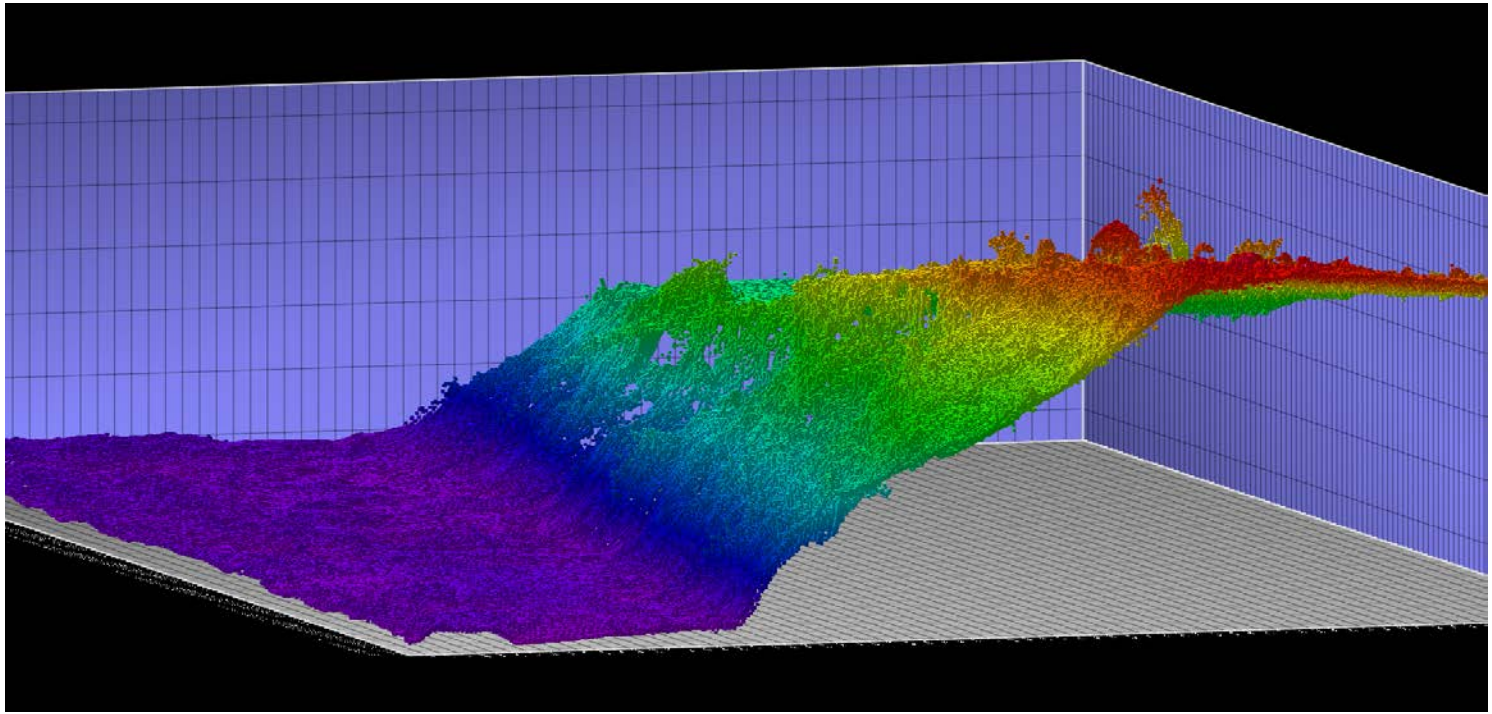
Topics of ongoing pilots, testbeds and research at FTA



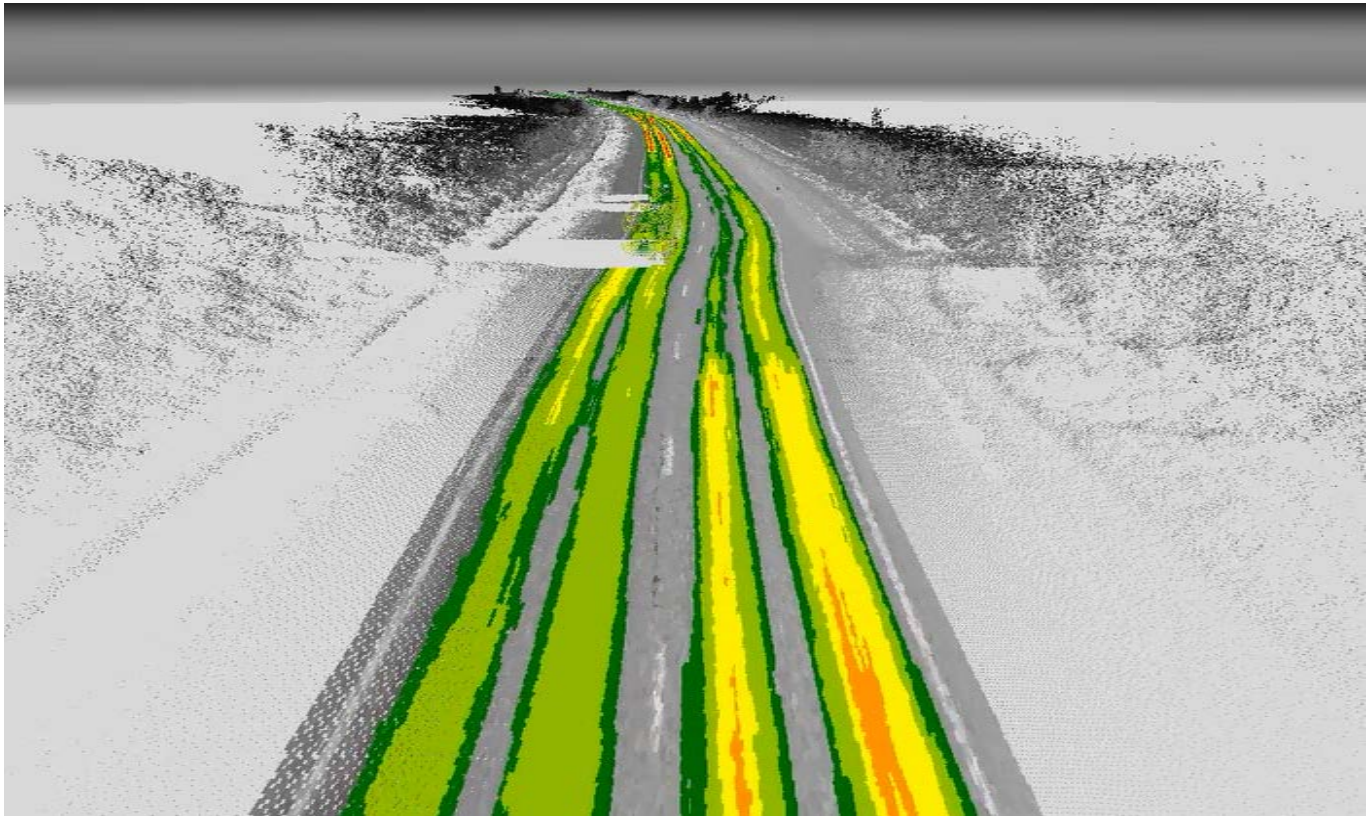
Pilots, testbeds, research, studies, POCs…

- anything goes

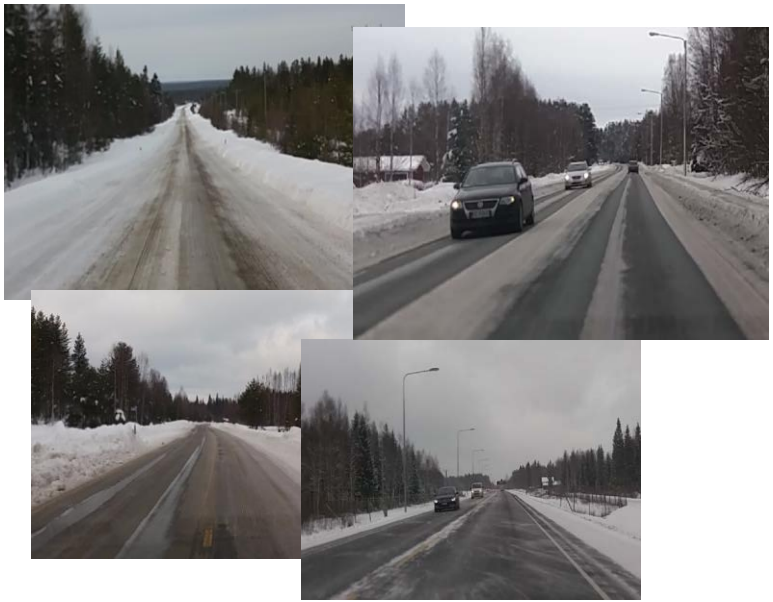
New Data

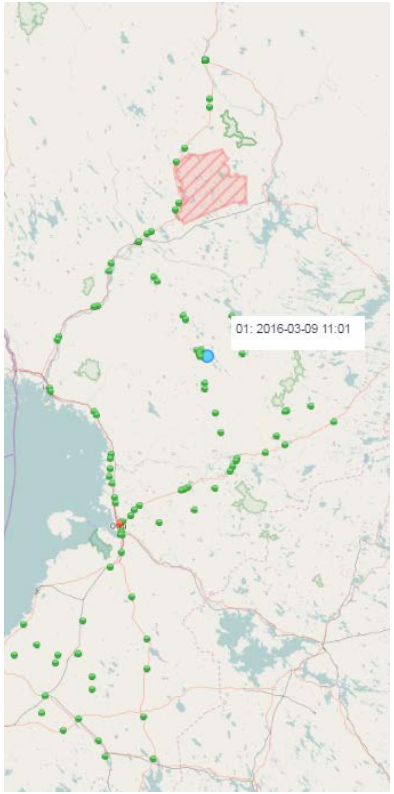


New Analytics



New Visualizations





New Specifications

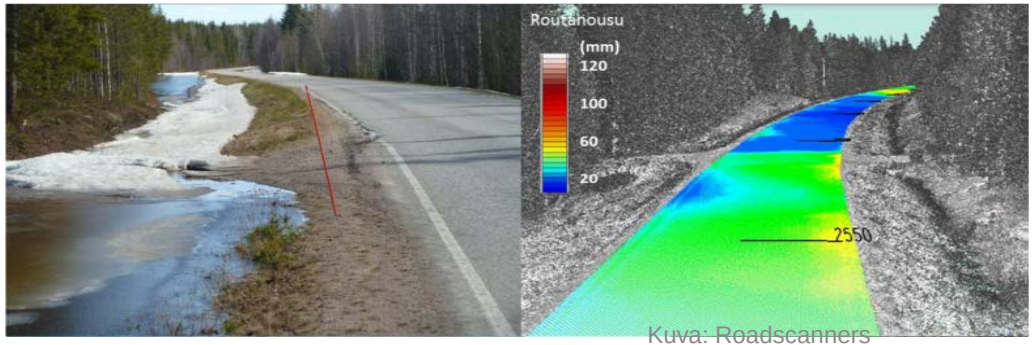
Quality Requirements

	Is	I	Ib	II	III
Friction requirement	0,30	0,28	0,25	Roughened surface, problem locations are spot sanded	Roughened surface, problem locations are spot sanded
Cycle time/anti-skid treatment	2 h / 0 h*	2 h	3-4 h	6 h	8 h
Max. snow depth when snowing	4 cm	4 cm	4 cm	8 cm	10 cm
Cycle time/snow removal	2,5 h	3 h	3 h	4 h	6 h
Evenness requirement	-	1 cm	1,5 cm	2 cm	2 cm

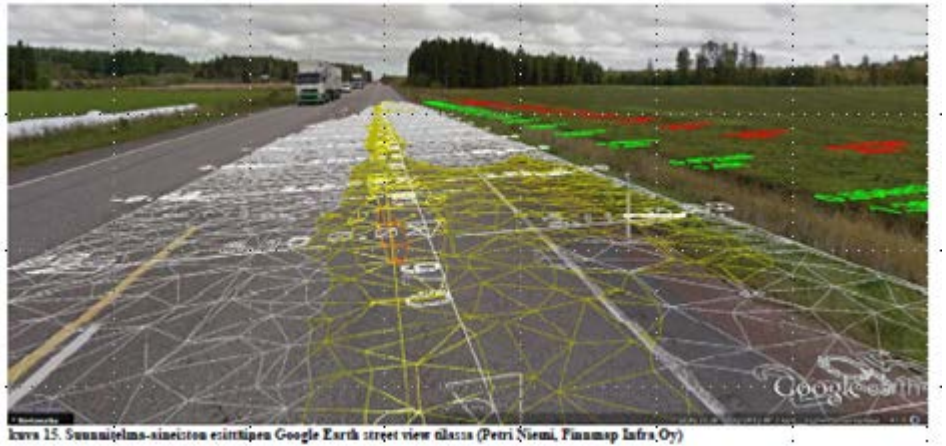
Cycle time in anti-skid treatment = the road is to be treated within the cycle time after becoming slippery.
Cycle time in snow removal = the road is to be ploughed within the cycle time after end of snowfall.

* on busy roads (ADT > 15,000) 0 hrs

New Processes (proactive maintenance)

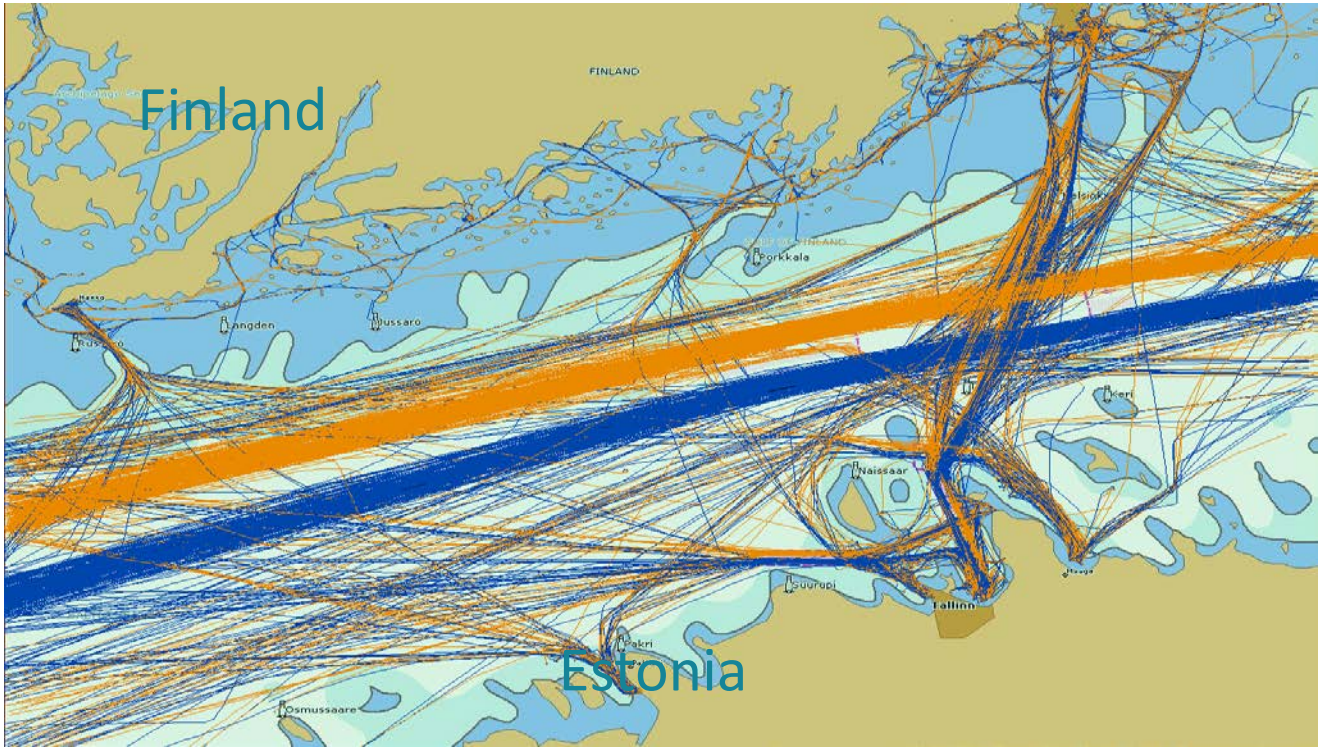


Kuva: Roadscanners

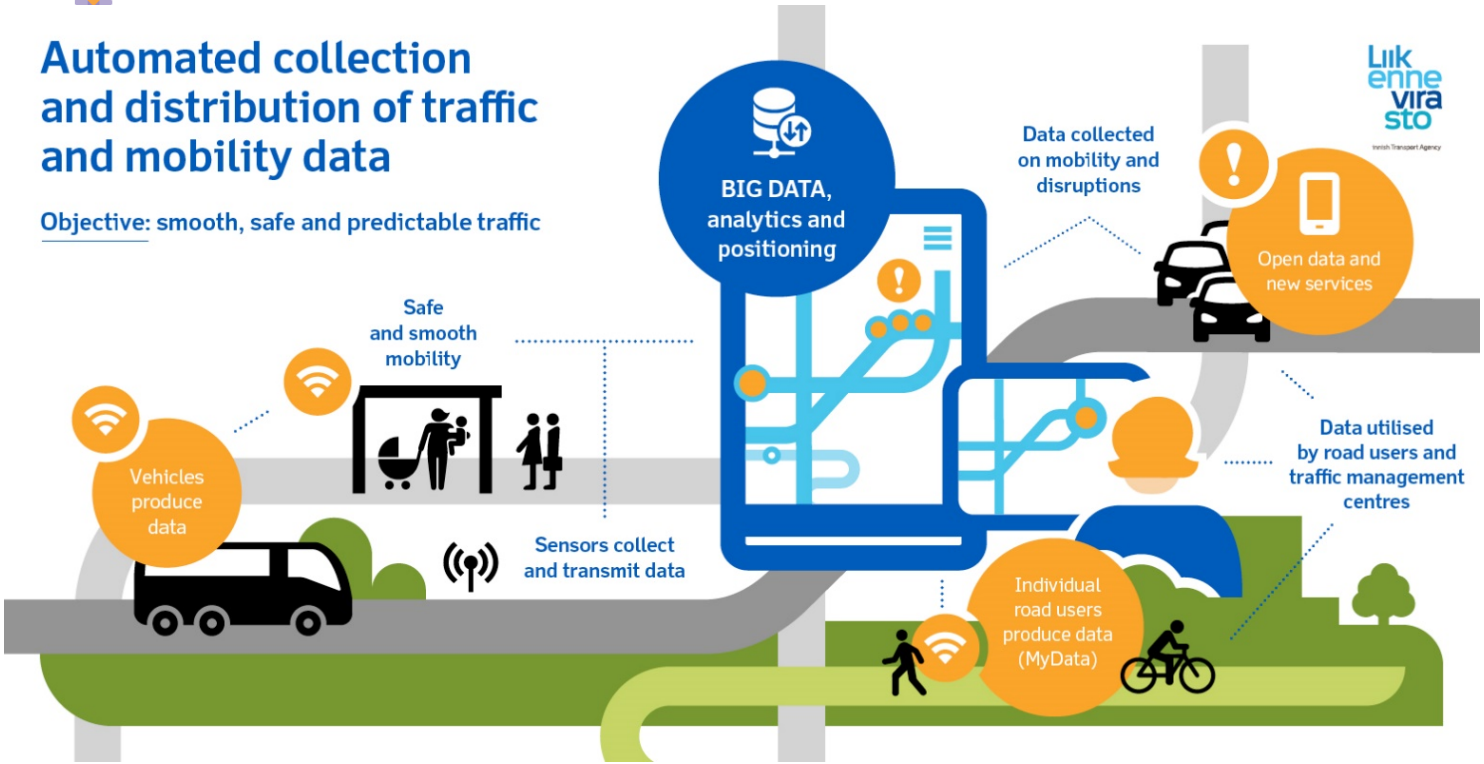


Kuva 15. Suunnitelma-aineiston esittäminen Google Earth street view tilassa (Petri Niemi, Finnmap Infra Oy)

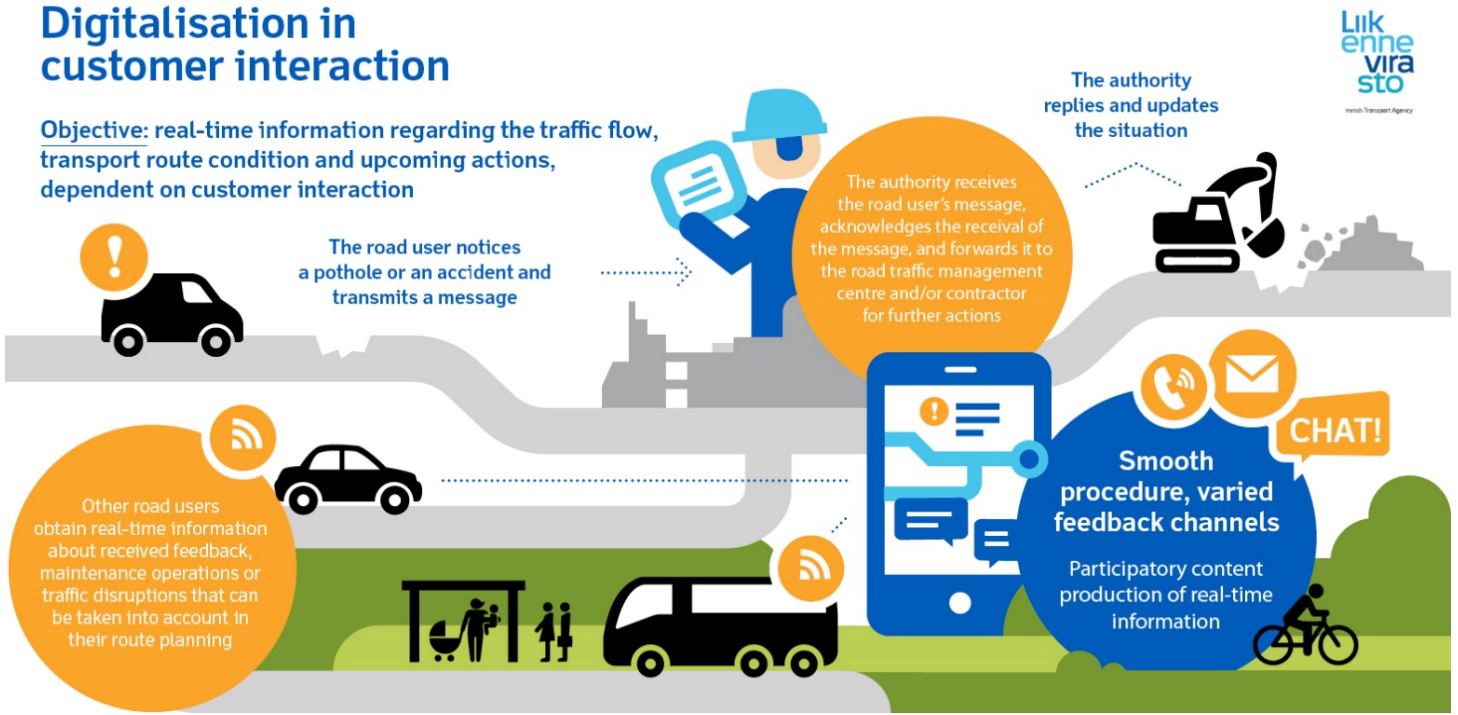
New Processes (safety)



New Policies



New Services



Digitalization at FTA

1  Traffic and mobility data

2  Railway network capacity management

3  Proactive road maintenance management

4  Proactive railway maintenance management and asset management systems

5  Smart marine fairways

6  Digitalization of customer interaction

Thank you!

- liikennevirasto.fi/web/en
- facebook.com/liikennevirasto
- twitter.com/Liikennevirasto
- youtube.com/liikennevirasto