



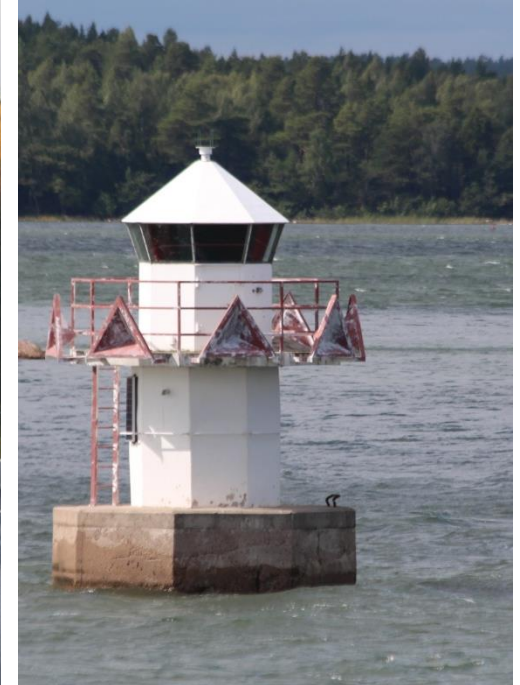
Smart routes and intelligent traffic - for you

Finnish Transport Agency (FTA)

4.10.2017 Virpi Anttila / Jukka Ronni



FTA is responsible for Finnish railways, roads and waterways





Infrastructure provides a platform for growth

€ Infrastructure assets

20 billion €

€ Current spending on ongoing projects

2.6 billion €

€ FTA's share of the total infrastructure market

1/5

€ Annual budget approximately

2.1 billion €

FTA personnel, permanent

620
experts

Number of people the FTA employs indirectly through projects

12,000



Large development projects 2016

ROAD PROJECTS

1. Ring Road III, 2nd phase
2. Main Road 19, Seinäjoki eastern bypass
3. Main Road 12, Tampereen rantaväylä
4. Road 101, Improvement of Ring Road I
5. Main Road 4 at Rovaniemi
6. Main Road 5 at Mikkeli
7. Main Road 8 Turku-Pori
8. West Metro park-and-ride facilities
9. E18 Hamina–Vaalimaa (PPP project)
10. Main Road 6 Taavetti–Lappeenranta
11. Main Road 3, Grade separated junction at Arolampi
12. Road 148, Improvement at Kerava
13. Secondary Road 77 Viitasaari-Keitele
14. Main Road 3 Tampere-Vaasa, Laihia 1st phase
15. Main Road 22 Oulu–Kajaani–Vartius
16. Main Road 8, Investments in roads to the nuclear power plant in Pyhäjoki
17. Road connections to the bio-product mill in Äänekoski

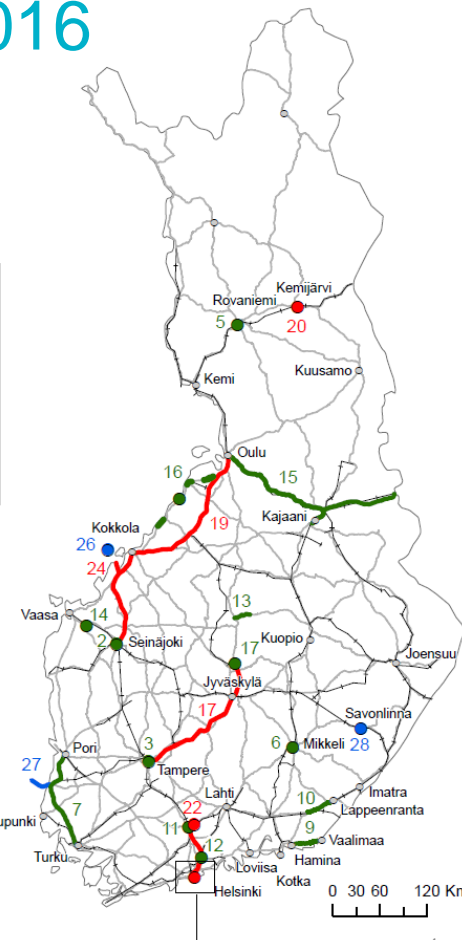
RAILWAY PROJECTS

17. Rail connections to the bio-product mill in Äänekoski
18. Ring Rail Line
19. Ostrobothnia Rail Line
20. Electrification of railway line between Rovaniemi and Kemijärvi
21. Western track in Central Pasila
22. Riihimäki triangle line
23. Helsinki–Riihimäki, increased capacity, 1st phase
24. Electrification of railway line between Pännäinen and Pietarsaari
25. Helsinki railway yard



WATERWAY PROJECTS

26. Pietarsaari channel
27. Rauma channel
28. Realignment of Savonlinna deep channel



4.10.2017 Virpi Anttila



New development projects

(General Government Fiscal Plan 2017 - 2020)

RAILWAY PROJECTS

1. Luumäki-Imatra

ROAD PROJECTS

2. Mainroad 4 Oulu-Kemi

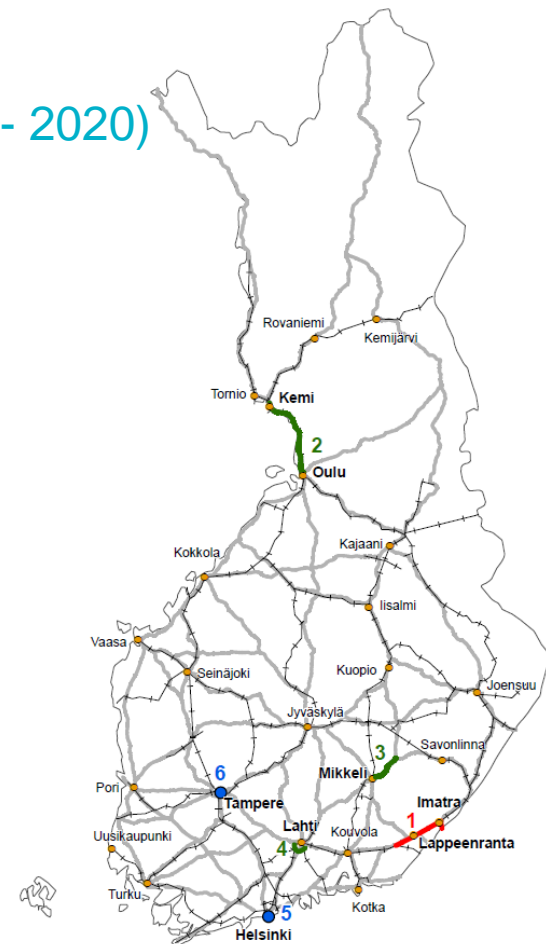
3. Mainroad 5 Mikkeli-Juva

4. Mainroad 12, Lahti southern ring road

LIGHT RAIL PROJECTS

5. Raide-Jokeri light rail (government funding)

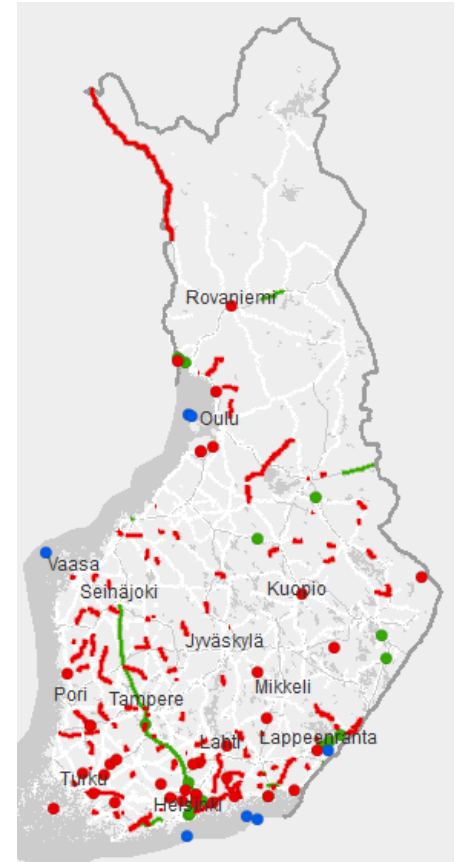
6. Tampere light rail (government funding)





Action plan to reduce the maintenance backlog of transport infrastructure 2016–2018 (600 M€)

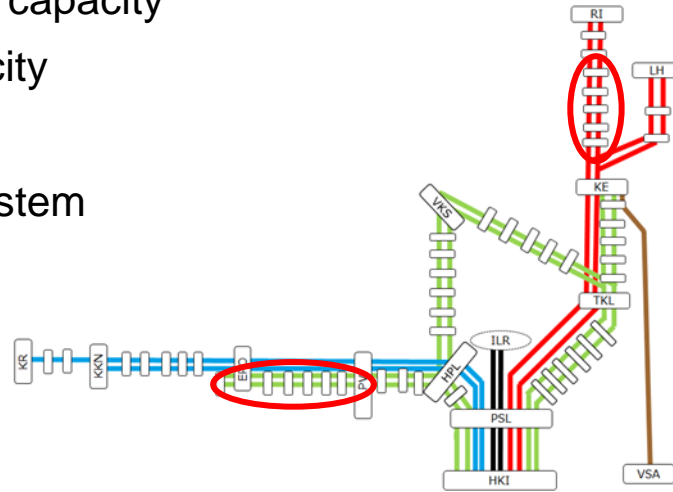
- Three-year action plan published 2/2016
- Objects are selected according to how effectively they:
 - Meet customer needs
 - Keep the maintenance backlog under control
 - Encourage digitalisation and new services
- The action plan is based on customer needs, especially those of trade and industry
- Object-specific implementation schedule posted on the website:
<http://www.liikennevirasto.fi/web/en/transport-system/maintenance-backlog>
- Procurement and market dialogue: the Finnish Transport Agency and the Centres for Economic Development, Transport and the Environment.





Planned projects in Southern Finland

- Leppävaara-Espoo, commuter train tracks
- Pasila-Riihimäki II-phase, increasing capacity
- Riihimäki-Tampere, increasing capacity
- Lengthening of some platforms
- Upgrading passenger information system
- Tampere arena



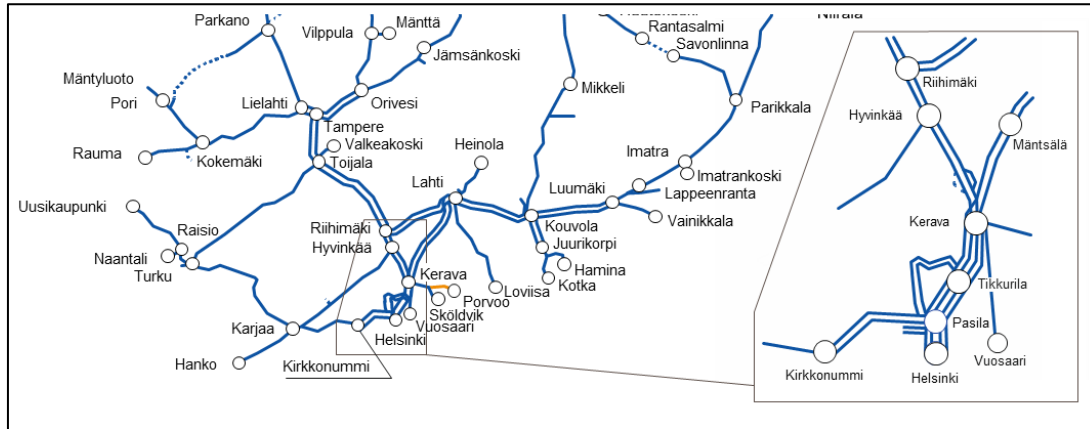


The Finnish rail network



Finnish rail network

- 90% single track
- Southern Finland mainly 2-4 tracks

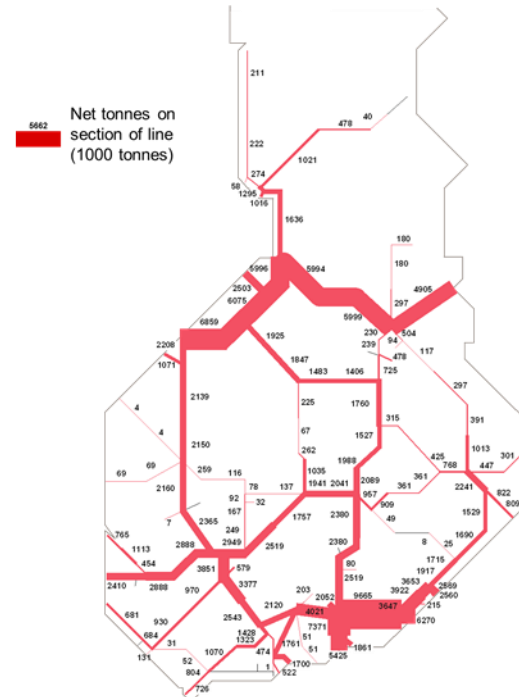
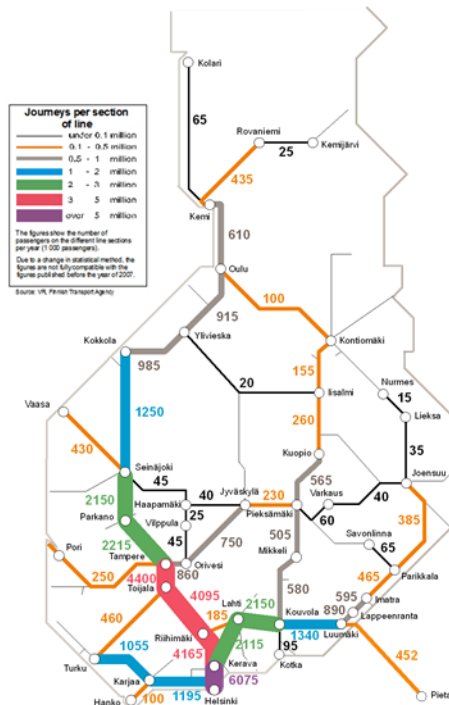




Rail network qualities

- length of the network 5900 km
- max. speed 220 km/h
- max. axle load 25 tonnes
- mostly electrified
- Interlocking system and Centralised Traffic Control
- Automatic Train Protection, ATP based on balises
- Operating language Finnish
- mixed traffic

Passenger and freight volumes 2016





Network statement

- The Network Statement describes the access conditions, the state-owned rail network, the capacity allocation process, the services supplied to railway undertakings, and the principles of determining the infrastructure charge.
- The Network Statement is published for applicants for capacity for each timetable period separately.
- The Network Statement is a legally binding document in so far as it is subject to the provisions laid down in the Railway Act.





Access contract

- Railway undertaking has to make an access contract with FTA on the use of necessary services with regard to the state rail network and operating railway traffic
- It is also possible to agree on other practical arrangements concerning railway traffic operations
- Basic services = the minimum access package (covered by basic charge)
 - Use of marshaling yards
 - Use of storage sidings, loading tracks and other tracks
 - Use of passenger platforms
 - Use of traffic control services
 - Passenger information services
 - Use of rail capacity
 - Use of FTA's electricity supply network
- Access contract is made for each timetable period. Normally the negotiations for the next period starts at September



Capacity allocation

- Timetables are planned by RUs and capacity is granted by FTA
- For regular rail traffic, capacity must be requested 8 to 12 months before the timetable period
- Can be requested during the timetable period as well as an ad hoc capacity
- Requests for rail capacity are to submitted in the LIIKE information system

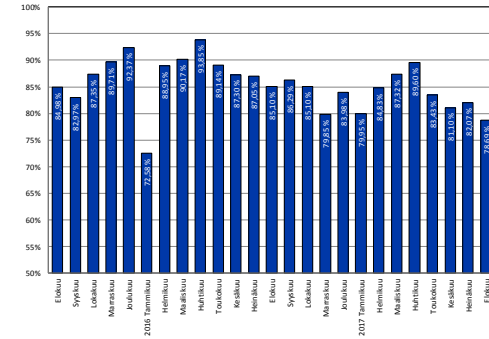




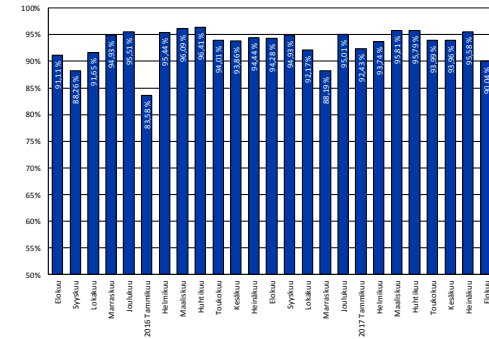
Quality of service / punctuality

- FTA and RU's are following punctuality together
- Threshold for delays for commuter trains is 2'30 and for long distance trains 5'30
- Punctuality of commuter trains is monitored at departure and at arrival. So for example if a commuter train is delayed 2'30 or more (or is canceled) when departing from its first station its calculated as 50 % punctual. If the train is delayed 2'30 or more (or is canceled) at its first and final station then the train is unpunctual (punctuality = 0 %).
- Punctuality of long distance trains is monitored only at arrival

Long distance passenger trains



Helsinki region commuter trains





Useful links

- www.rautatiemarkkinoille.fi useful general information
- <http://www.liikennevirasto.fi/web/network-statement-2018>
- https://julkaisut.liikennevirasto.fi/pdf7/radanpidon_tekniset_ohjeet_web.pdf.
Guidelines are only in Finnish.
- <http://rata.digitraffic.fi> Railway traffic data. Currently the documentation is in Finnish only, but the REST API itself is in English.
- Some railway hobbyists in Finland have already created pretty impressive applications based on our open data, see eg. <http://julia.dy.fi>

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