

Kapasiteettimalli 2026

Capacity Model 2026

TTR Suomi - Finland

28.6.2024



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Yleistä kapasiteettimallista

Introduction to Capacity Model



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Kapasiteettistrategia ja –malli ovat osa yhteiseurooppalaista rautateiden kapasiteettisuunnittelun uudistusta TTR (Timetabling and Capacity Redesign), jonka tavoitteena rautatieliikenteen kilpailukyvyn parantaminen. Euroopan komissio antoi heinäkuussa 2023 ehdotuksen [ratakapasiteetin käyttöä koskevasta asetuksesta](#), jonka myötä TTR-prosessi tulee käyttöön kaikissa EU-maissa lähivuosina. Väylävirasto julkaisi ensimmäisen [kapasiteettistrategian vuodelle 2027](#) tammikuussa 2024.

Kapasiteettimalli on kapasiteettistrategiaa seuraava ratakapasiteetin ennakkosuunnitteluvaihe, ja se julkaistaan 1,5 vuotta ennen kyseisen aikataulukauden vaihdetta.

Kapasiteettimalli kuvailee keskimääräistä arkipäivän liikennettä. Kapasiteettimallin tarkoitus on tuoda rataverkon kapasiteetin käyttö läpinäkyvämmäksi ja tuoda esiin mahdolliset kapasiteetin käytön haasteet varhaisemmassa vaiheessa.

Capacity Strategy and Capacity Model are part of new European capacity management reform called TTR (Timetabling and Capacity Redesign), which aims to expand the market share of rail. In July 2023, European commission gave a proposal for new [regulation for the use of railway infrastructure capacity](#) which will be implemented in EU in upcoming years. FTIA published their first [Capacity Strategy for 2027](#) in January 2024.

The capacity model is the second TTR advanced planning instrument, which is published 1,5 years (X-18) before the scheduled timetable change.

Capacity Model describes the average traffic on a weekday. The main benefits obtained from a Capacity Model are transparency in capacity usage and the detection of potential capacity conflicts and congestions already at an early stage, allowing for more time to mitigate the situation with suitable measures.

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Kaksiraiteisilla rataosilla kapasiteetin käyttö on esitetty suunnittain, yksiraiteisilla rataosilla molemmat suunnat samassa mallissa. Kaksiraiteiset rataosat on merkitty reittikaavioihin.

Kapasiteetinkäyttöraja (ICL) perustuu tilastodataan ja asiantuntija-arvioon siitä, kuinka monta junaa voi saapua rataosalle kyseisen tunnin aikana. Käyttöraja on niinikään luonnosvaiheessa ja sen määrittelyä kehitetään sidosryhmäyhteistyössä sekä tarkastellaan vuosittain myös infra- ja liikennerakennemuutokset huomioiden.

Kapasiteetin käyttörajan ja junamäärän erotuksesta nähdään suuntaa antavasti arvioitu vapaan kapasiteetin määrä rataosalla tunneittain. Kapasiteetin käyttörajan voi ylittää yksittäisinä tunteina, rajan ylittäminen saattaa aiheuttaa liikennehäiriötä. Kapasiteettimalli ei ole sitova päätös kapasiteetin käytöstä.

There are separate Capacity Models for two-track sections, for single-track sections both directions are visualized in the same model. Two-tracked sections are marked in the route map.

Indented capacity line (ICL) is based on statistical data and expert judgement, how many trains can enter the track section on a certain hour. The ICL is also a draft version, and it will be further developed together with the stakeholders. ICL will be revised every year and changes in infrastructure are considered.

The difference between ICL and the number of trains shows the estimated amount of free capacity on the track section hourly. ICL can be exceeded, but if during consecutive hours, it might cause traffic disruptions. Capacity Model is not a binding decision on capacity utilization.

Yleistä kapasiteettimallista

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Tämä dokumentti on kapasiteettimalli vuodelle 2026, joka perustuu historiadataan, eikä ole ennuste vuoden 2026 kapasiteetin käytöstä. Kapasiteettimallin pohjana ovat vuoden 2024 vuosikapasiteetissa arkipäiville haetut kauko- ja lähijunat sekä 1-6/2023 arkena ajetut tilastolliset tavarajunat ja veturit. Lisäksi mallia on täydennetty liikennöitsijöiltä saaduilla tulevaisuuden suunnitelmilla.

This document is the capacity model 2026. It is based on historical data, and it is not a prognosis of year 2026. Capacity model includes long distance and regional/regional express trains as they were applied for weekdays in ATT 2024 and freight trains/locomotives as they were run 1-6/2023. Additionally, model has been supplemented with information about future traffic plans given by applicants and other stakeholders.

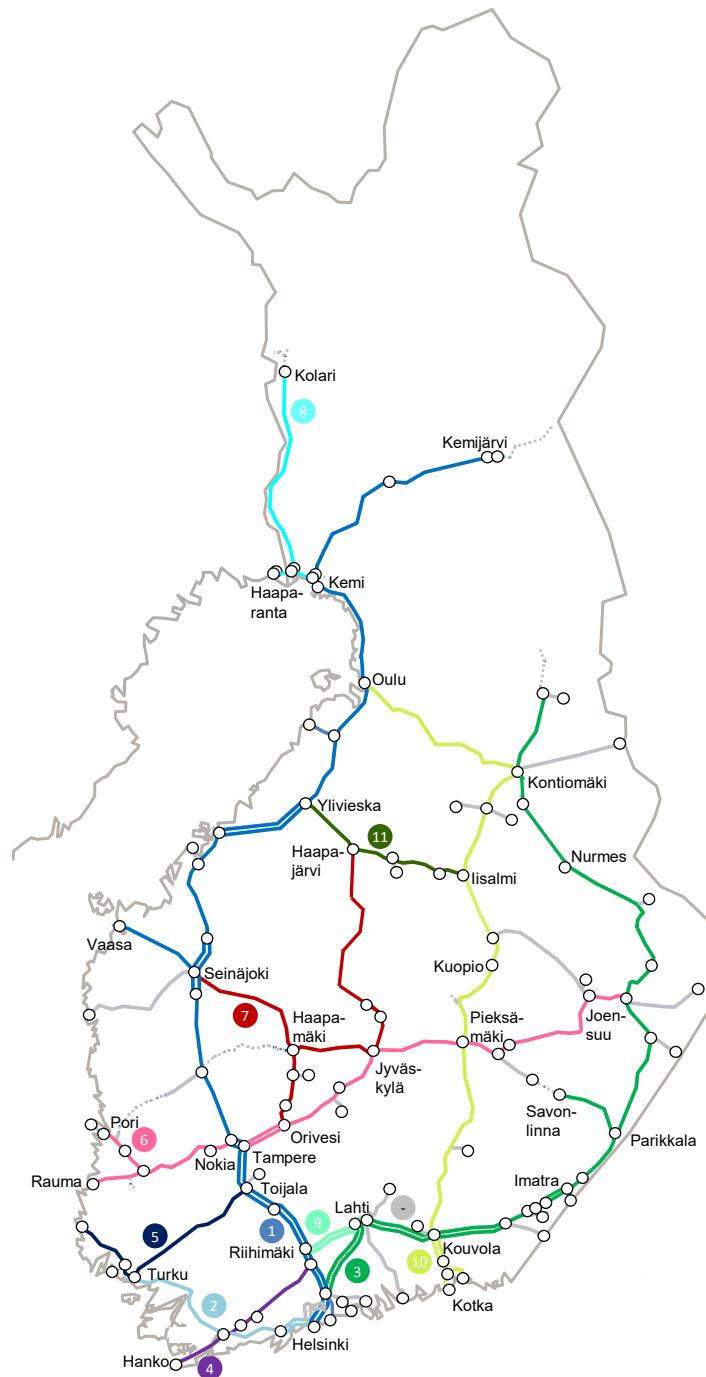
Reitit Routes



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Nro Reitti / Route

- **1** Helsinki / Vuosaari – Tampere – Seinäjoki – Vaasa / Tuomioja – Rautaruukki / Oulu – Kemi - Kemijärvi
- **2** Helsinki – Turku
- **3** (Helsinki) – Kytömaa – Lahti - Kouvolan – Parikkala – Savonlinna / Joensuu – Kontiomäki – Ämmänsaari
- **4** Hanko – Karjaa – Hyvinkää
- **5** Hangonsaari – Uusikaupunki – Turku – Toijala
- **6** Pori / Rauma – Kokemäki – Lielahdi, Tampere – Pieksämäki - Joensuu
- **7** Seinäjoki – Haapamäki – Orivesi / Jyväskylä – Haapajärvi
- **8** (Kemi) – Laurila – Haaparanta / Kolari
- **9** Riihimäki – Hakosilta – (Lahti)
- **10** Kotka / Hamina – Kouvolan – Pieksämäki – Kontiomäki – Oulu
- **11** Iisalmi - Ylivieska
- **-** Ei mukana / not included

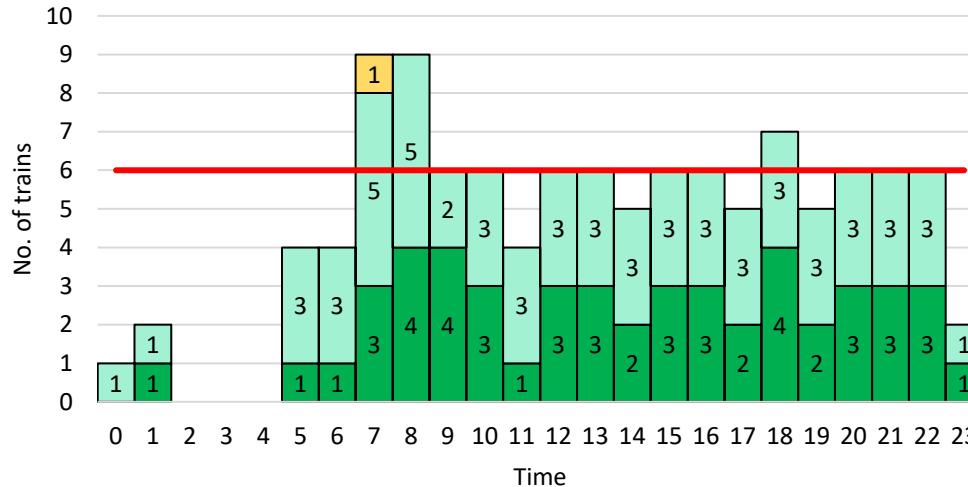


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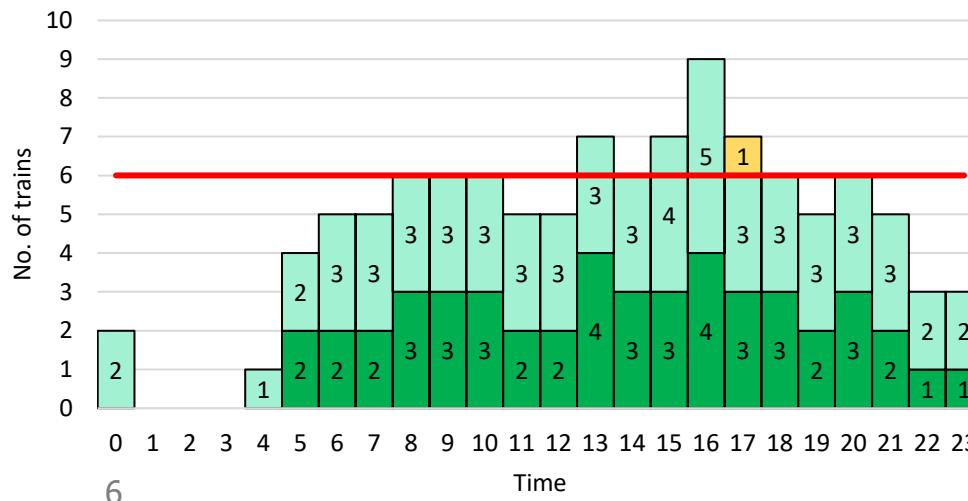


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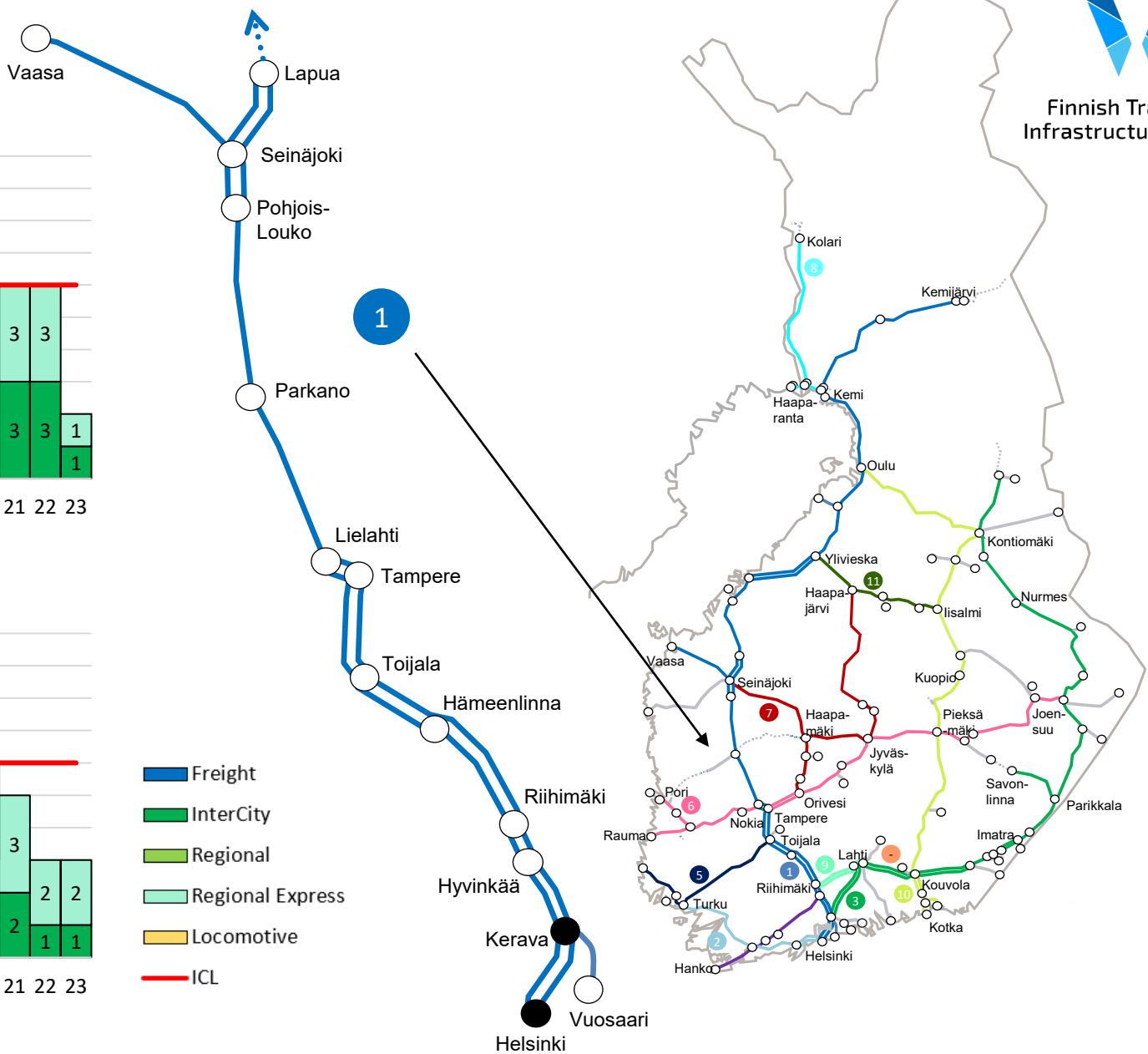
Kerava - Helsinki



Helsinki - Kerava



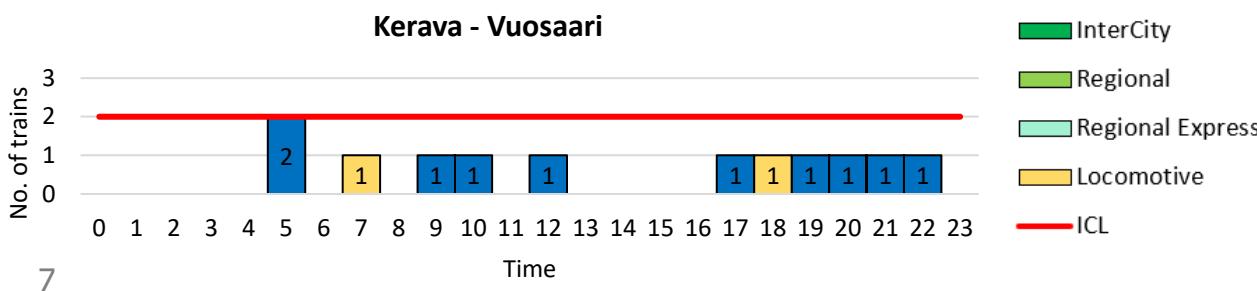
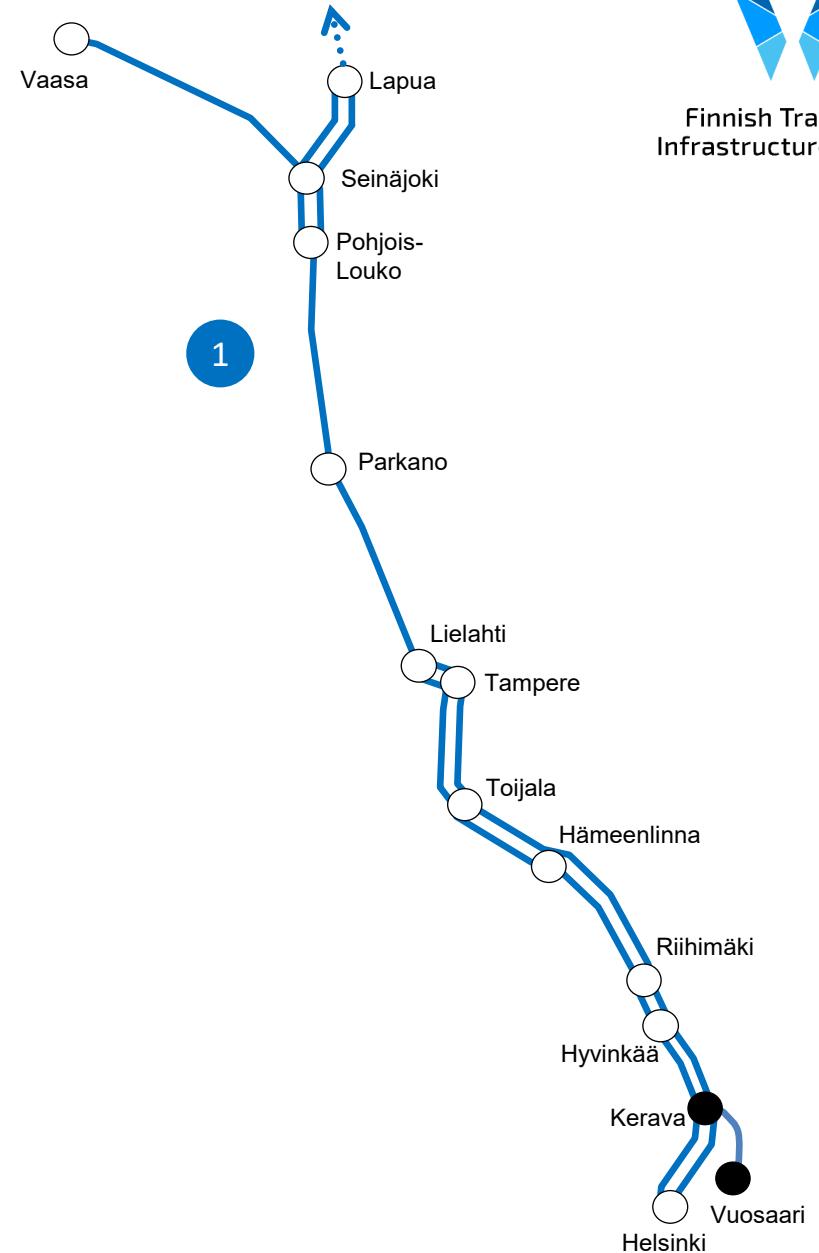
- Freight
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1: Helsinki/Vuosaari – Tampere – Seinäjoki – Vaasa/ Oulu – Kemi – Kemijärvi



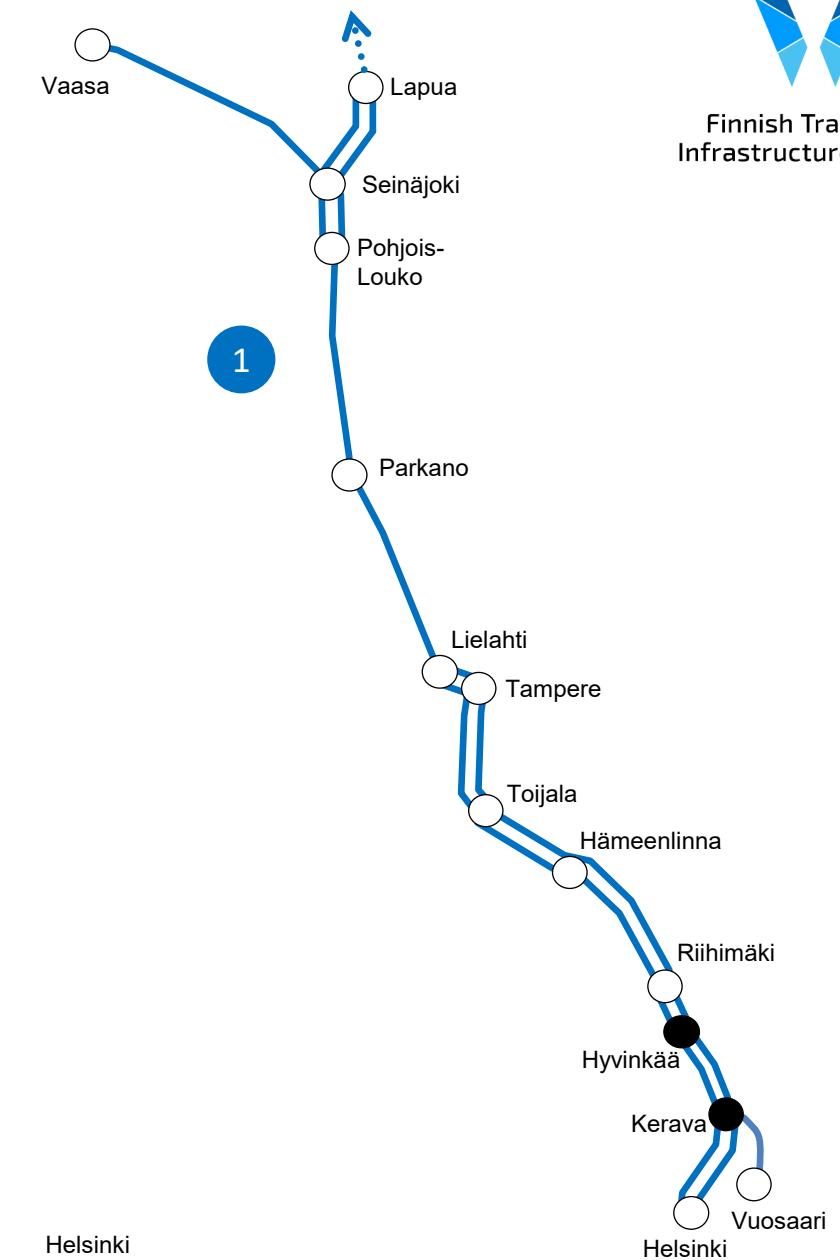
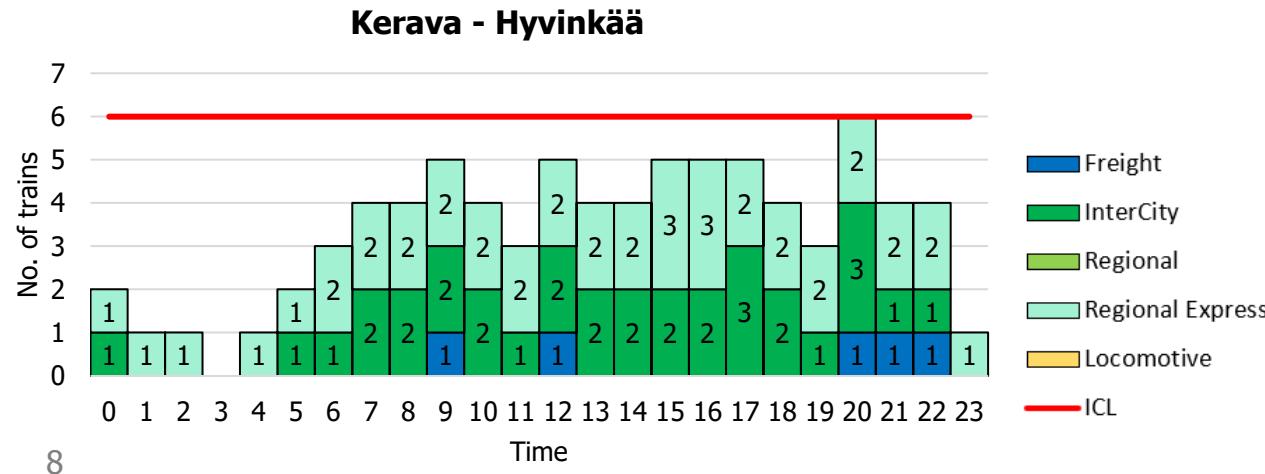
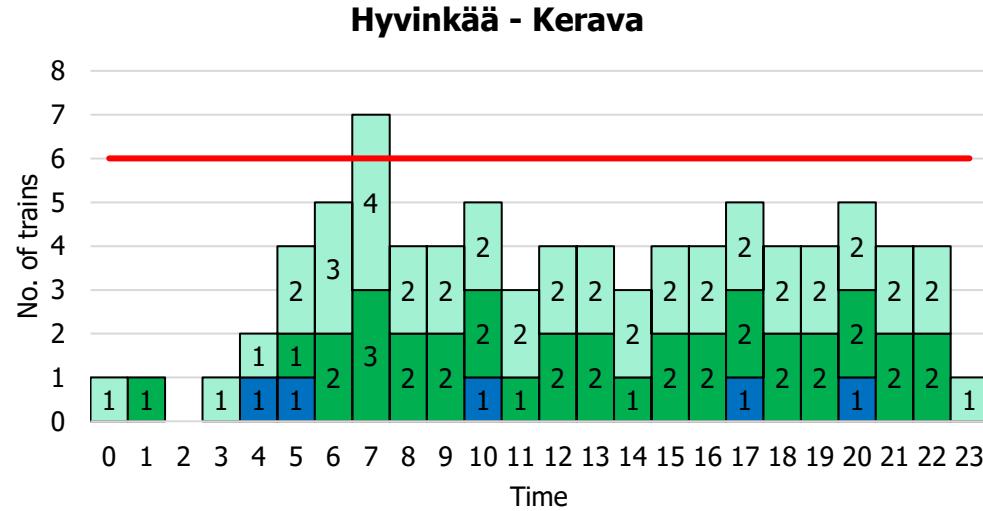
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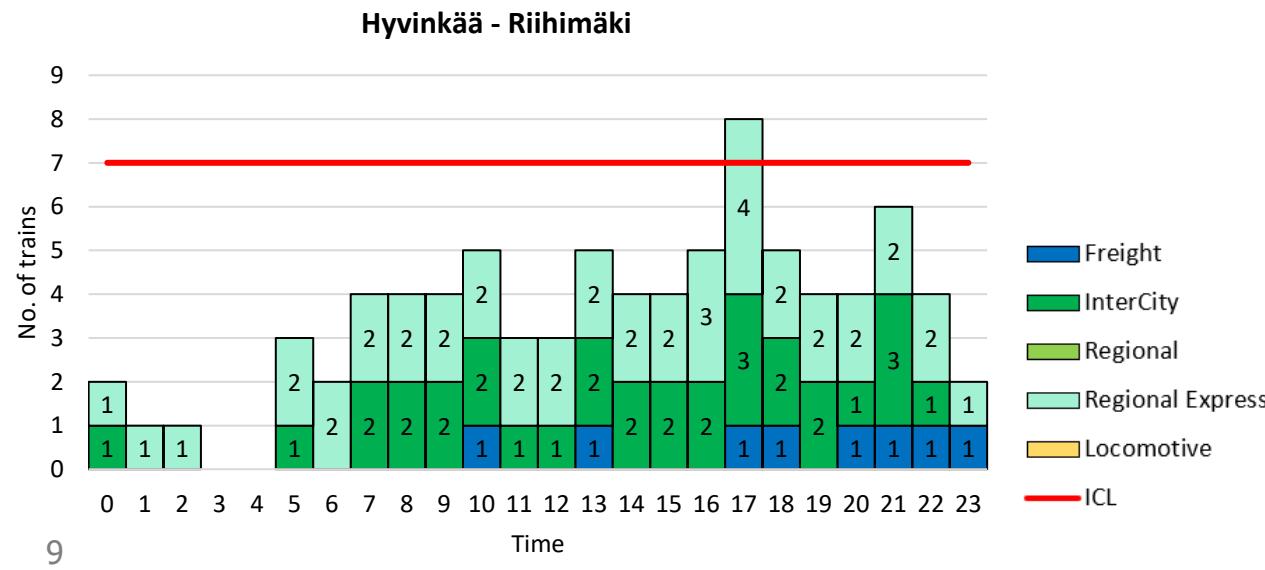
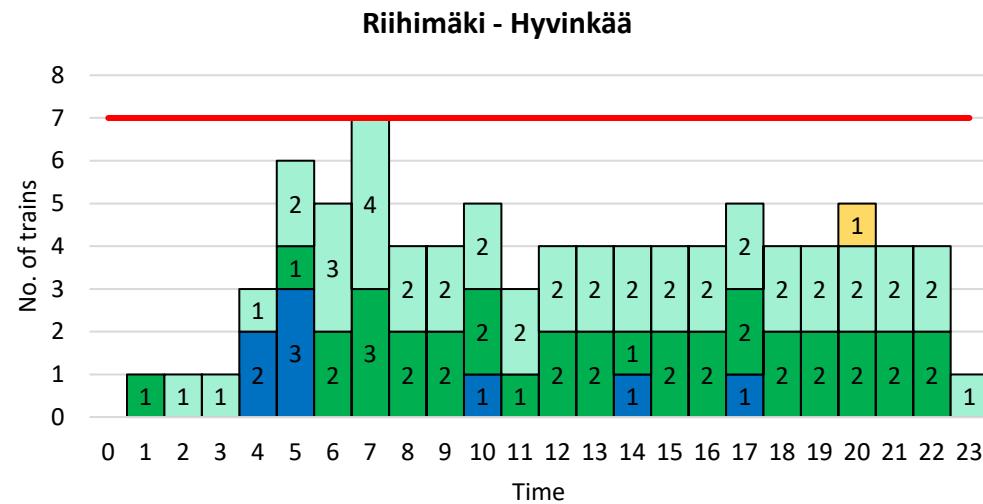
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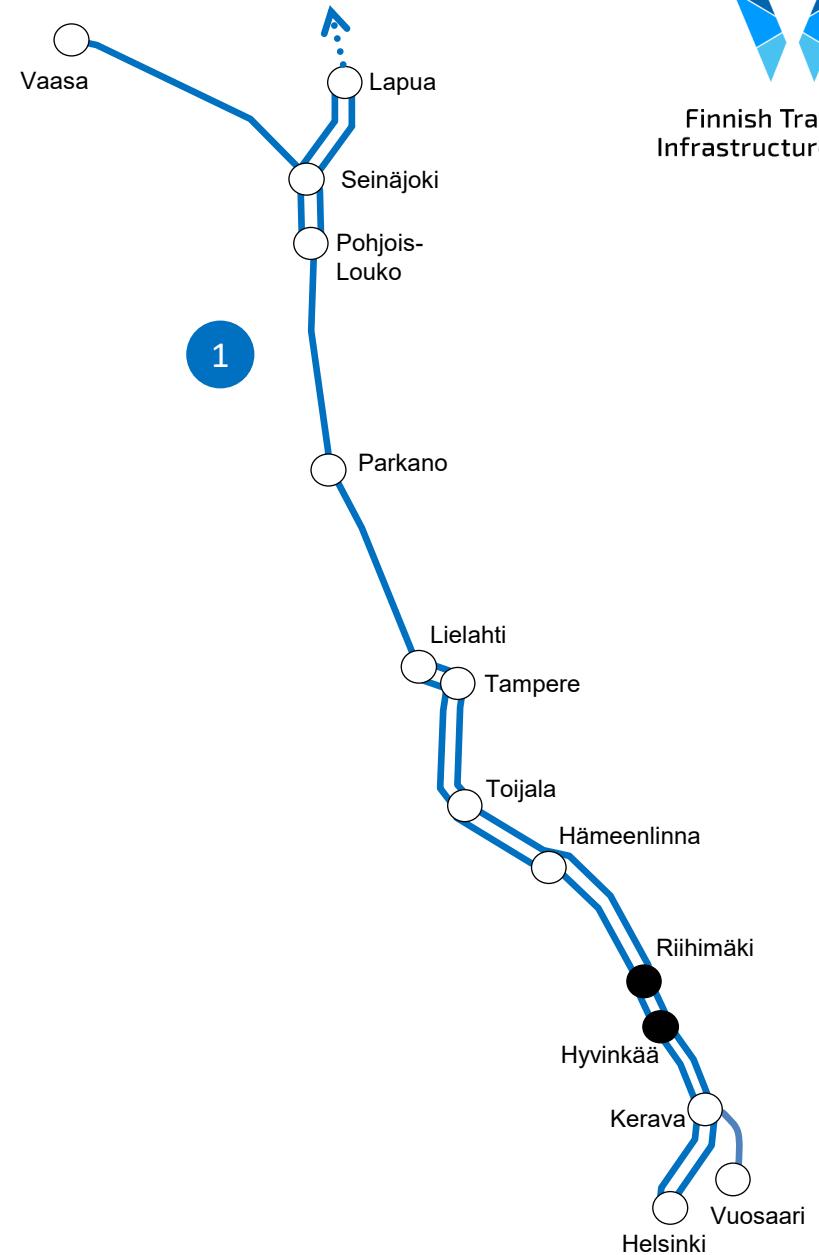
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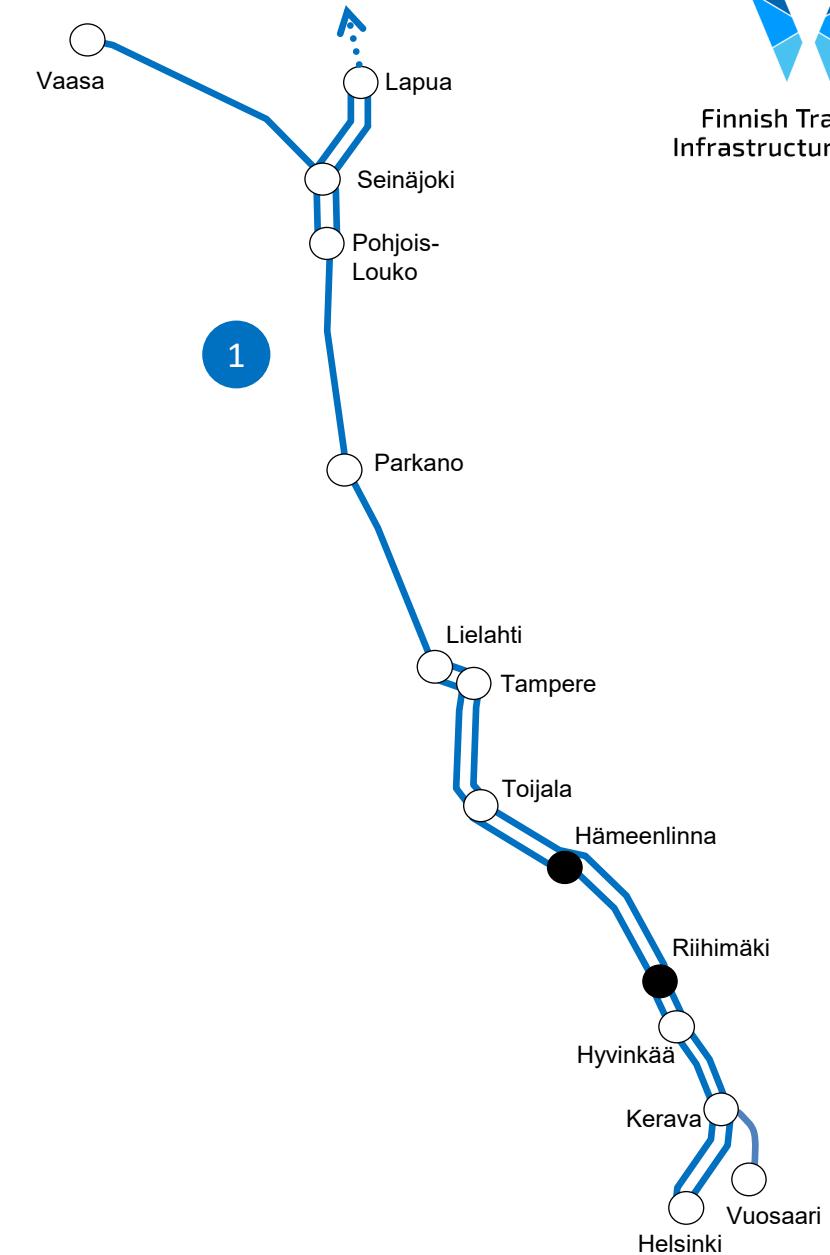
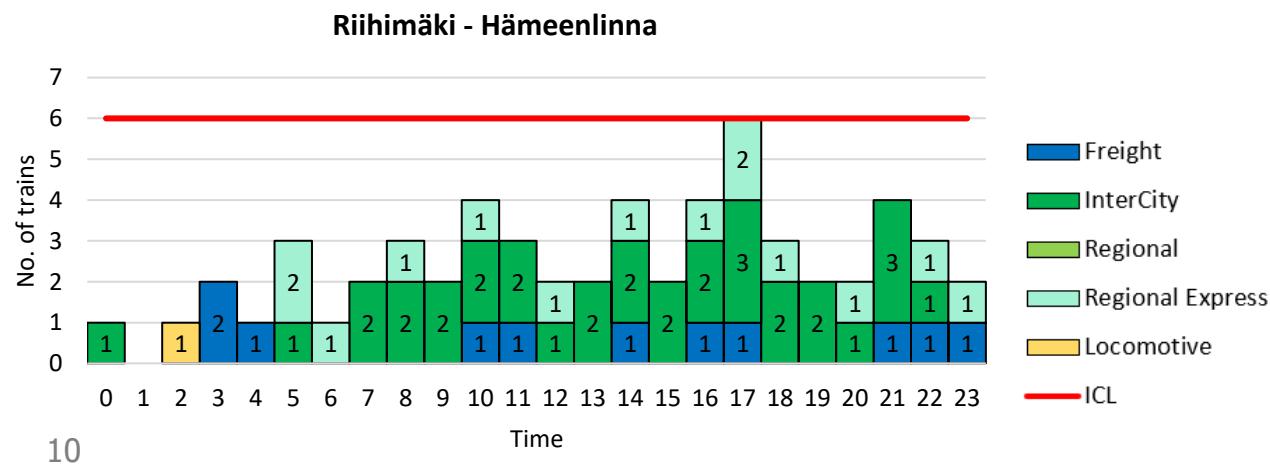
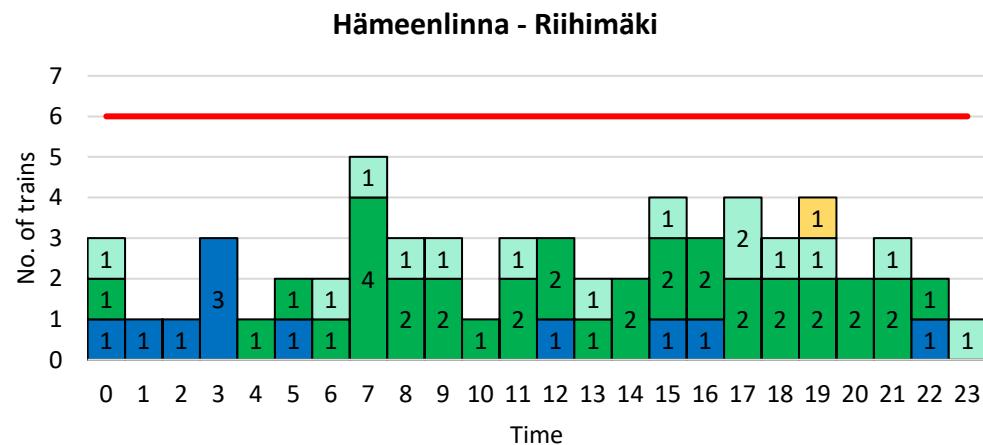
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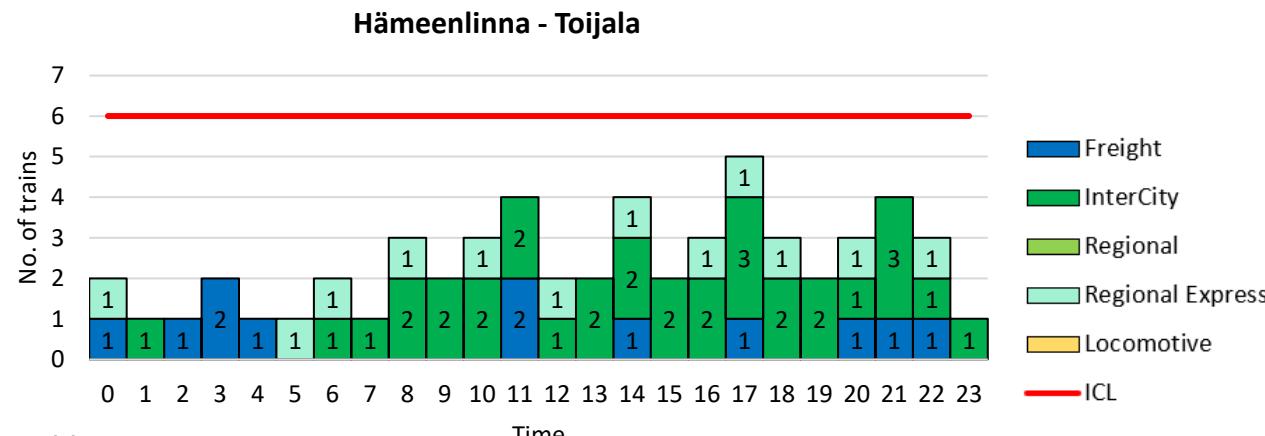
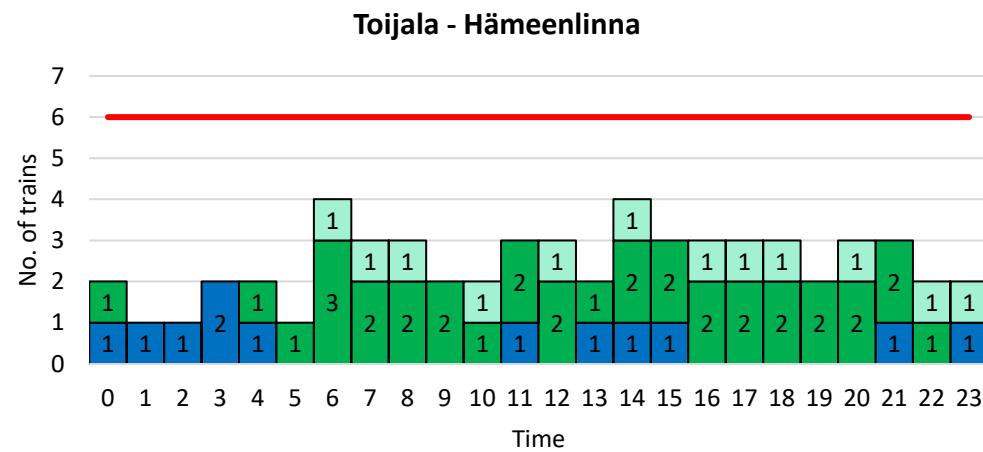
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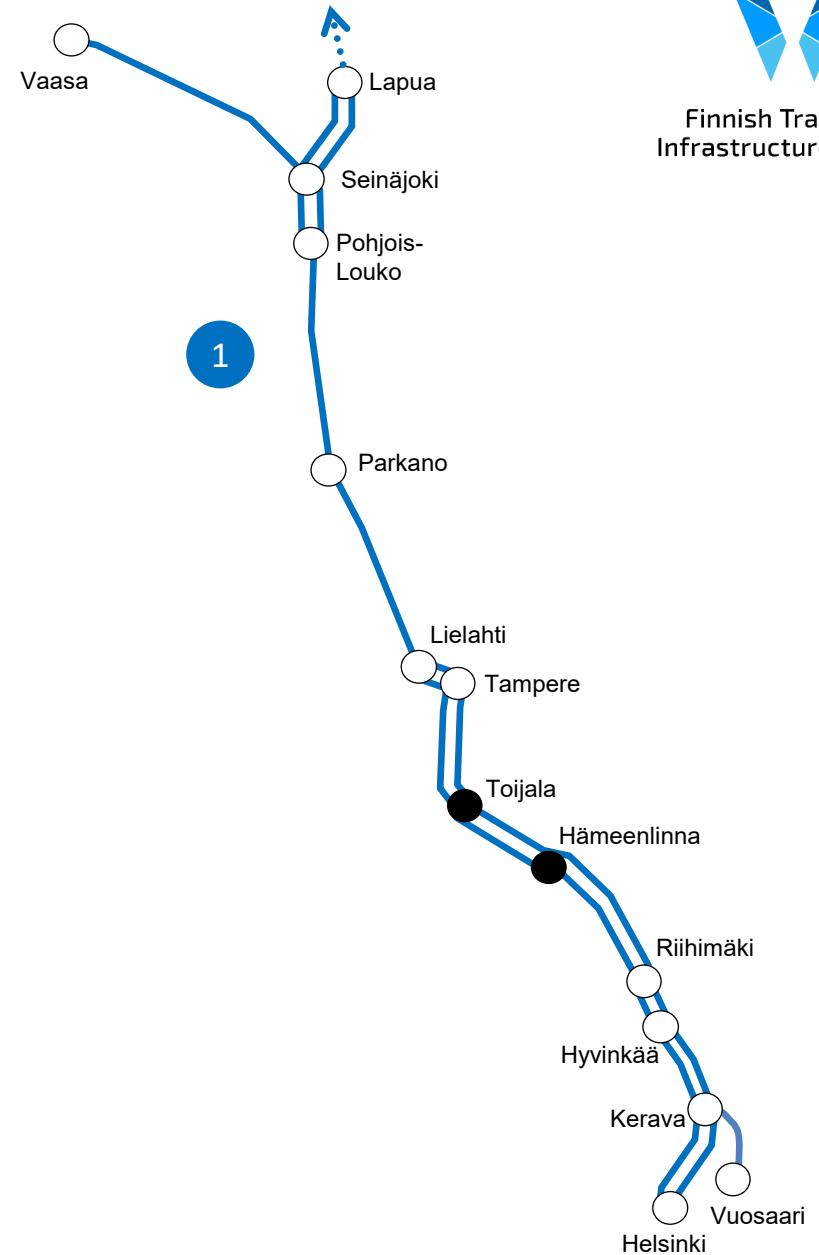
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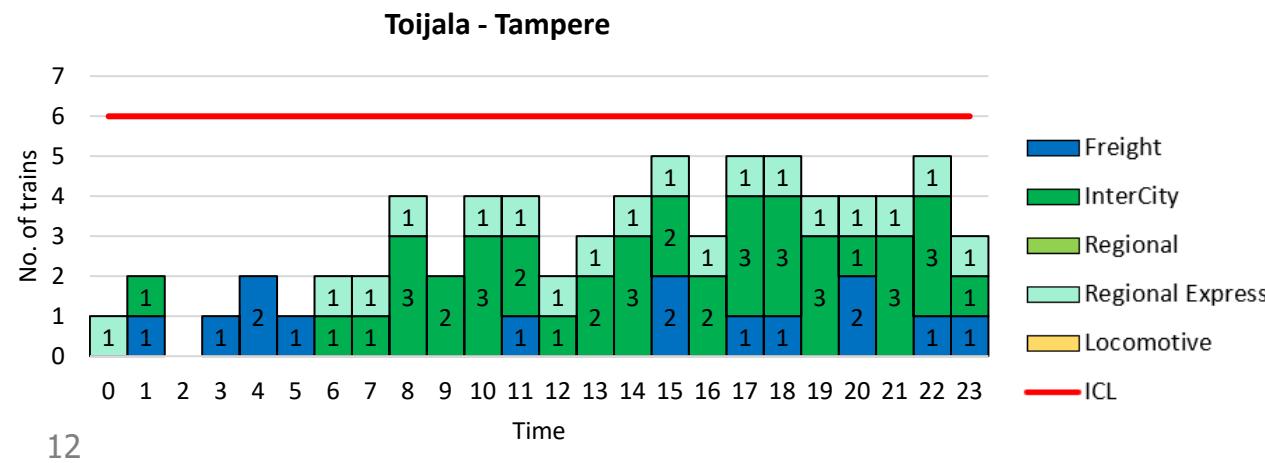
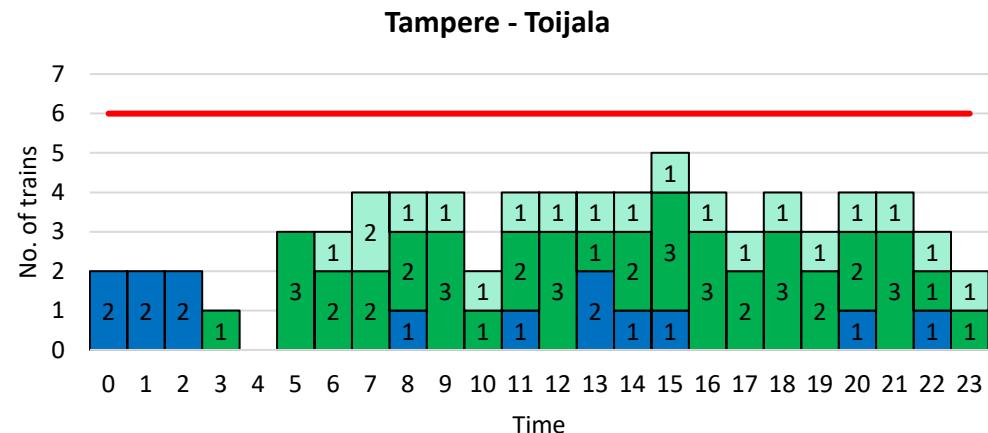
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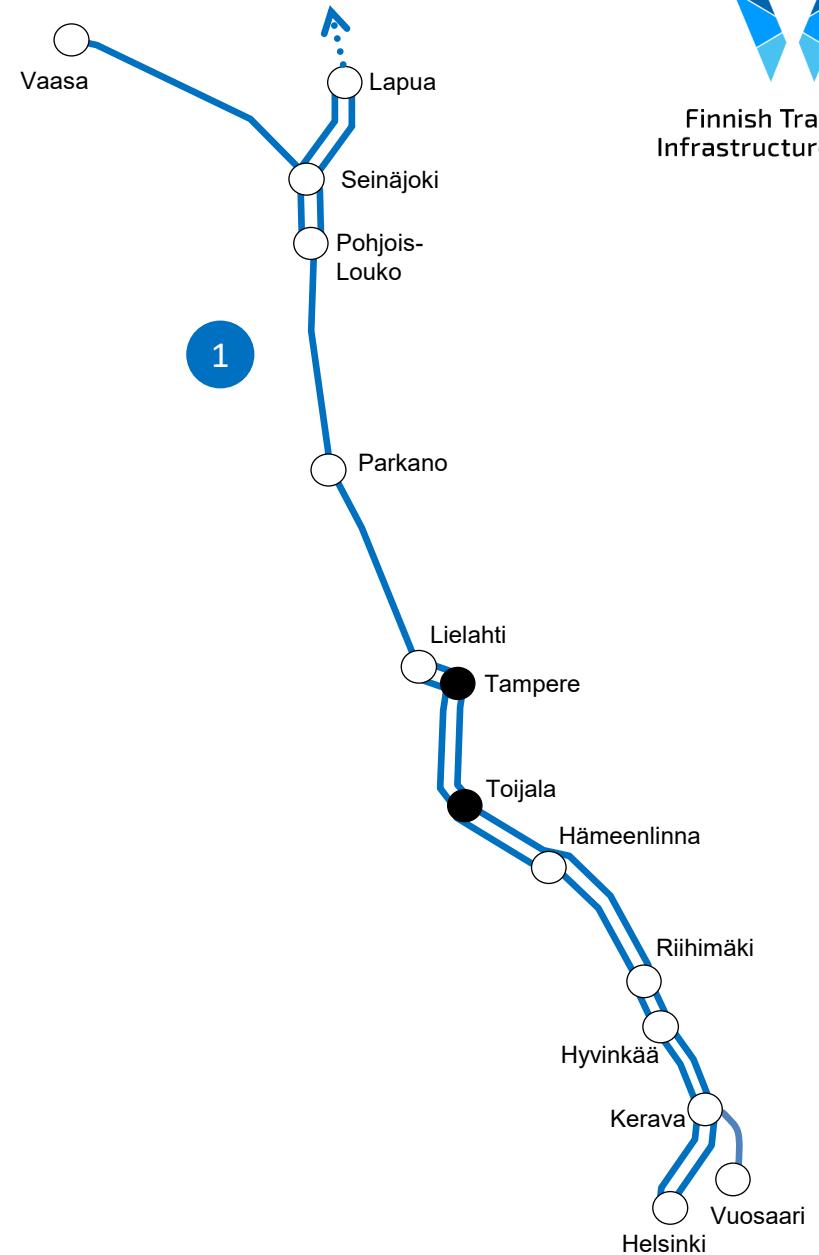
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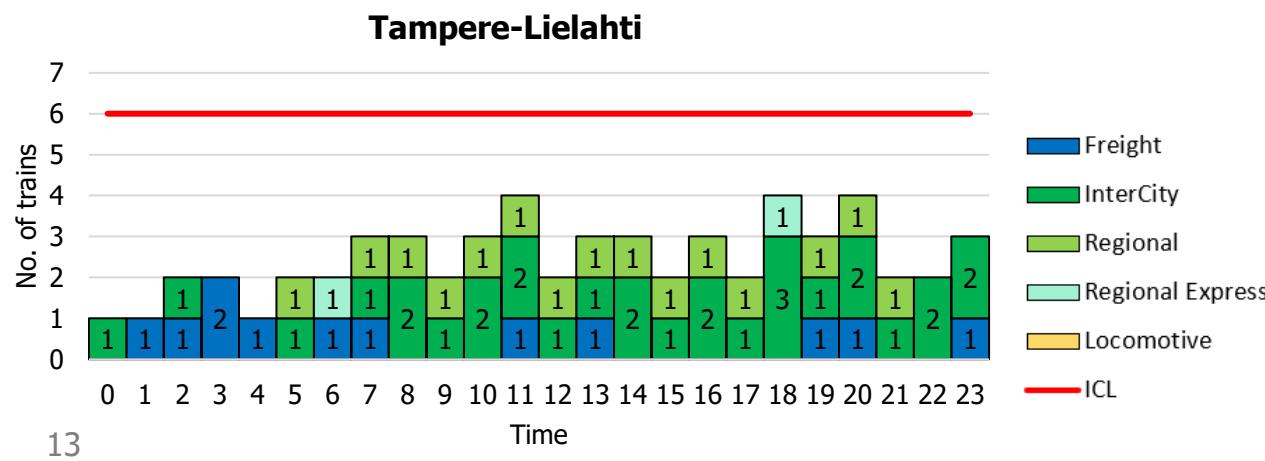
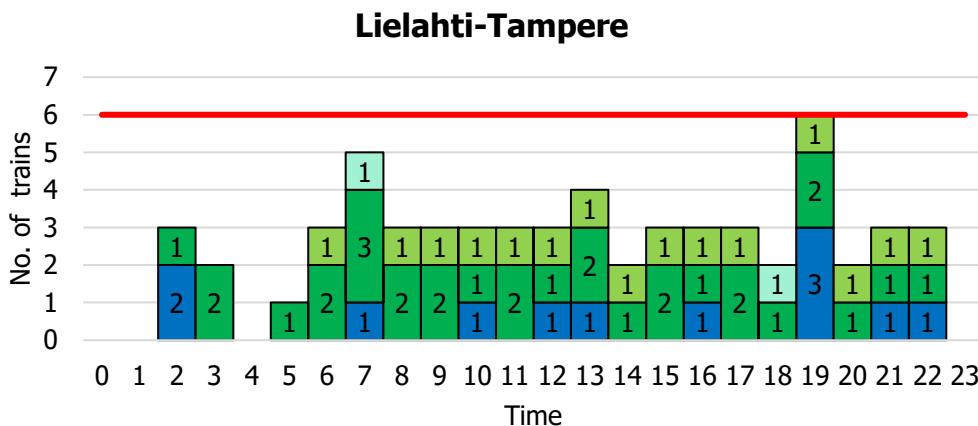
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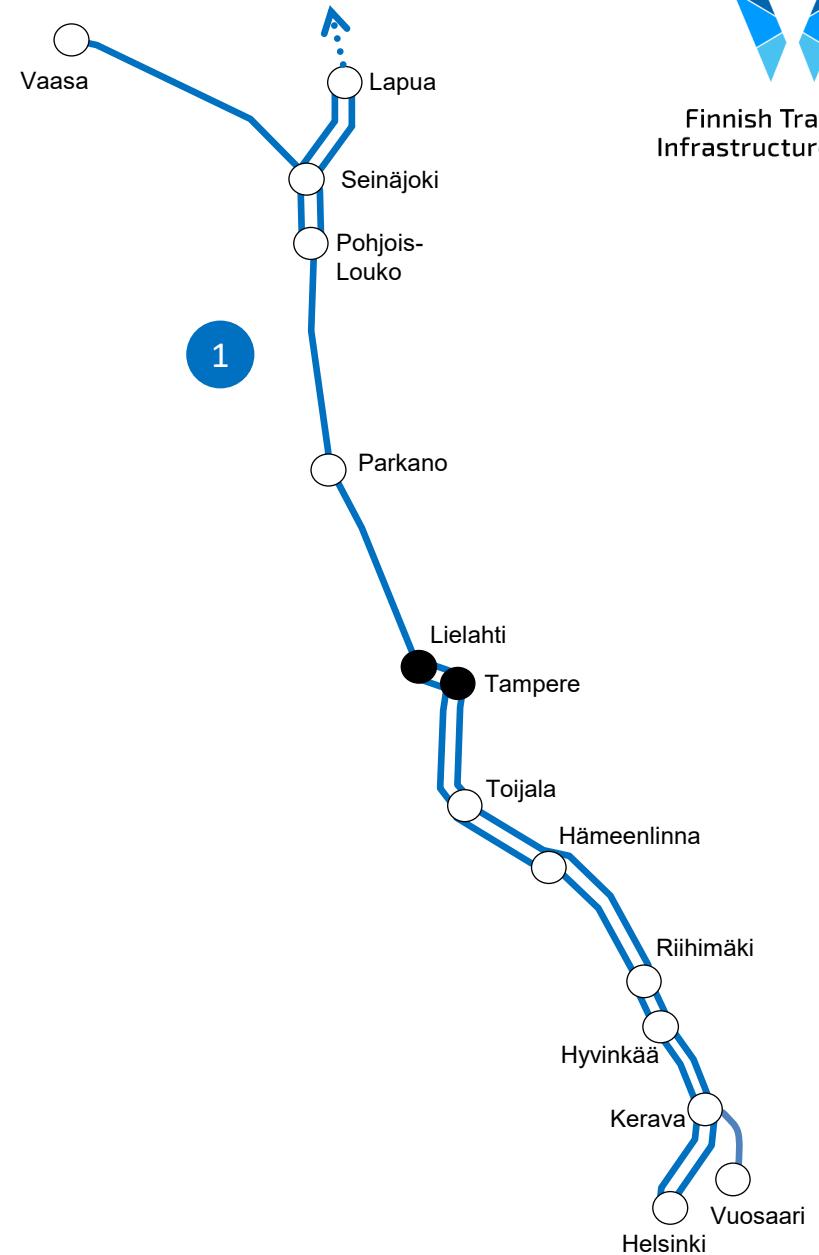
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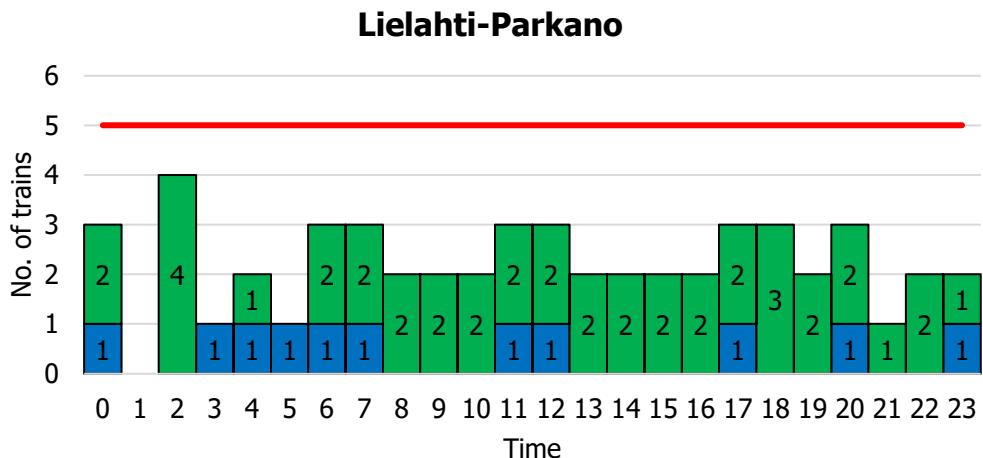
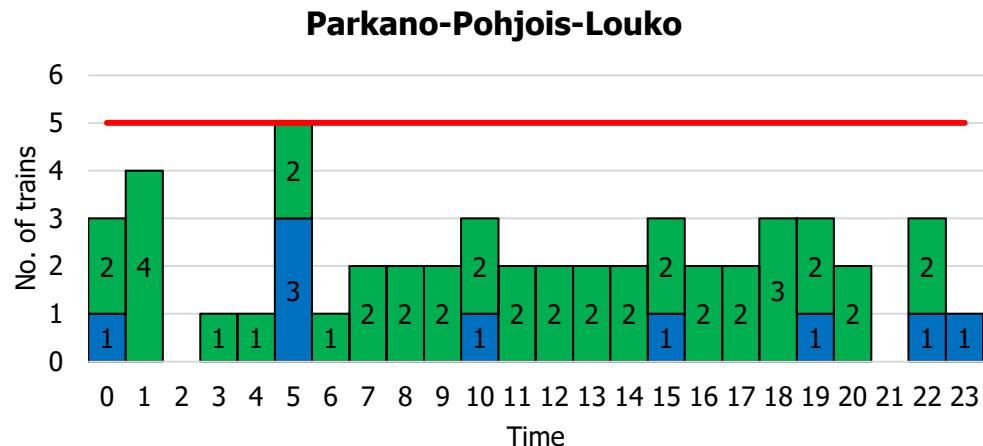
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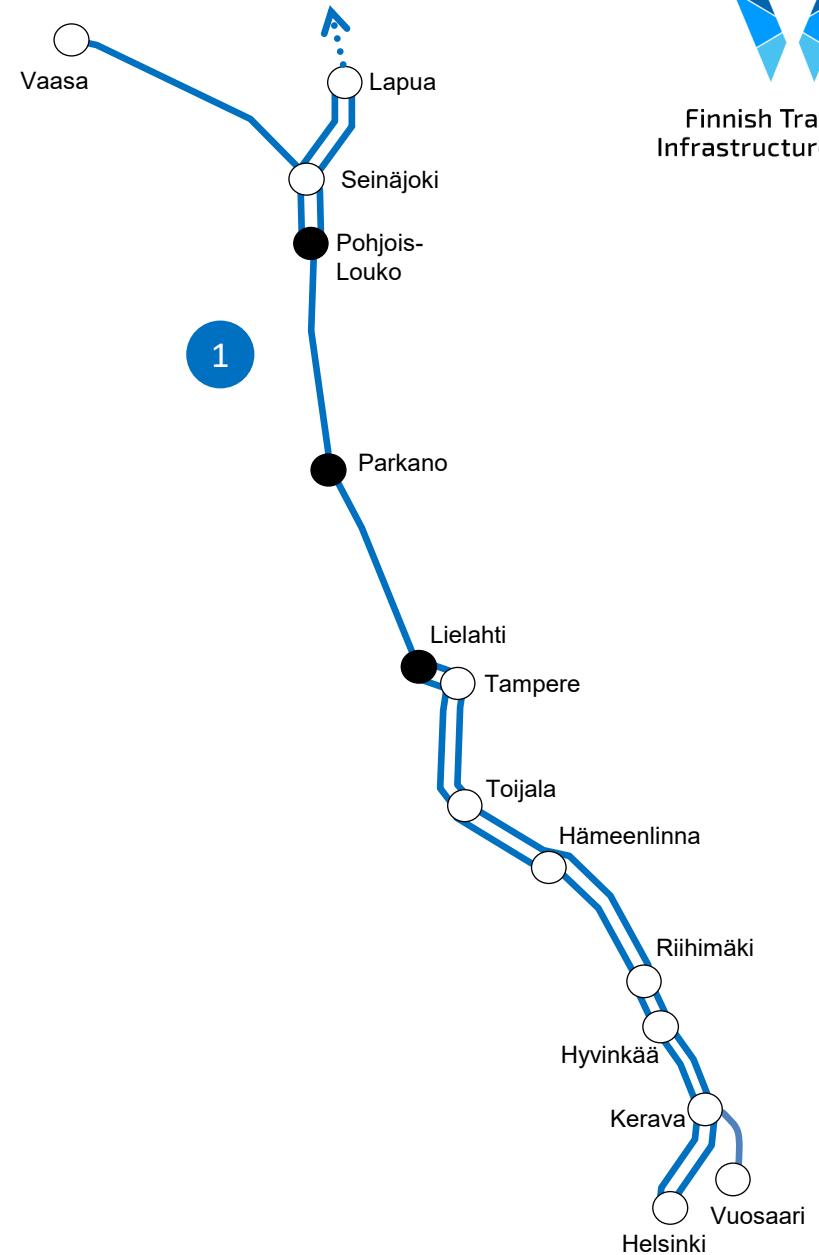
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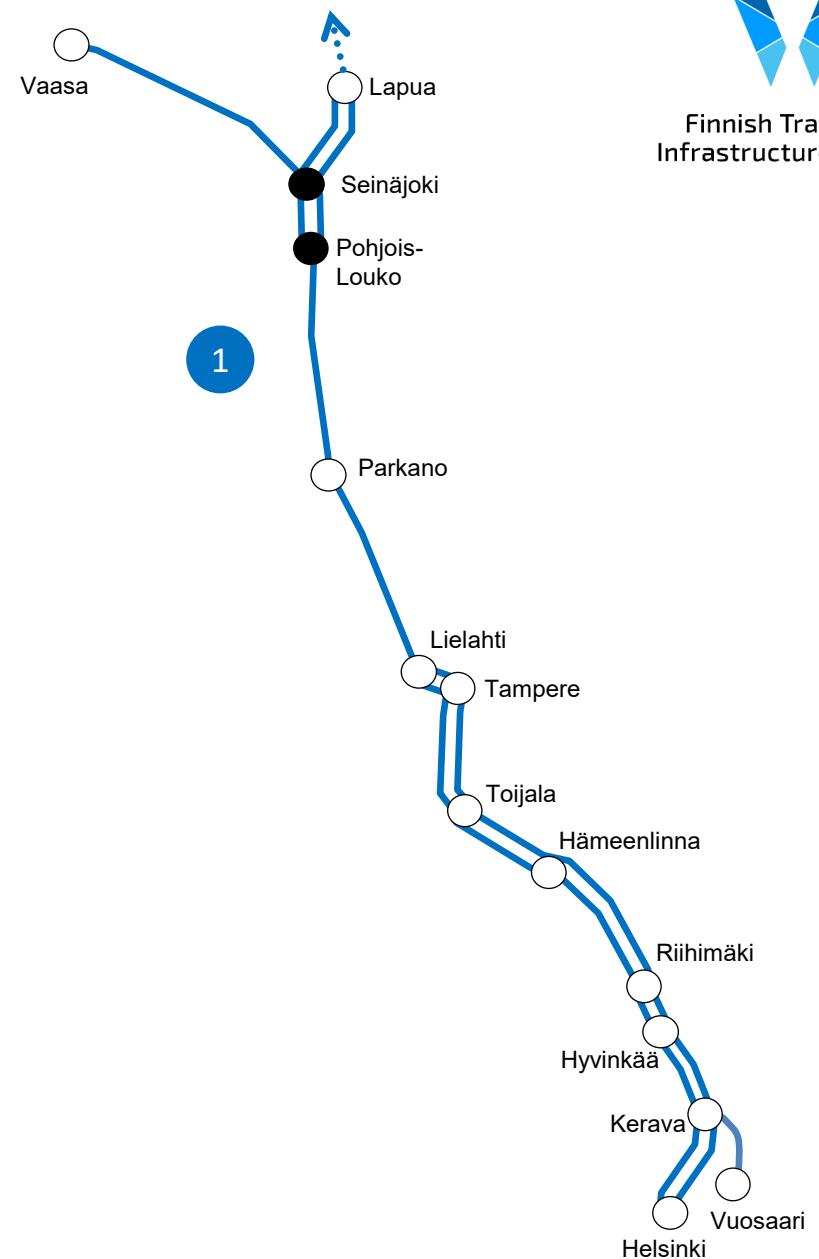
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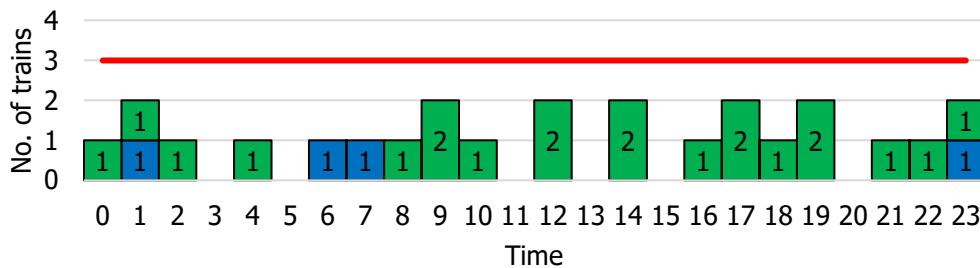
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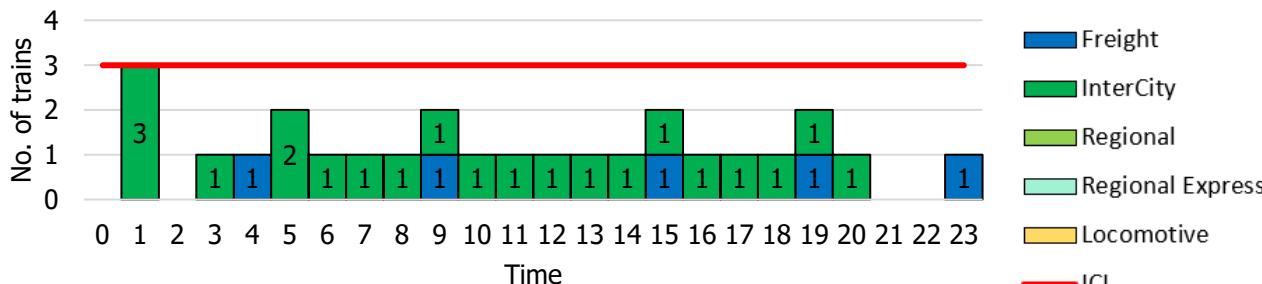
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P-Louko-Seinäjoki



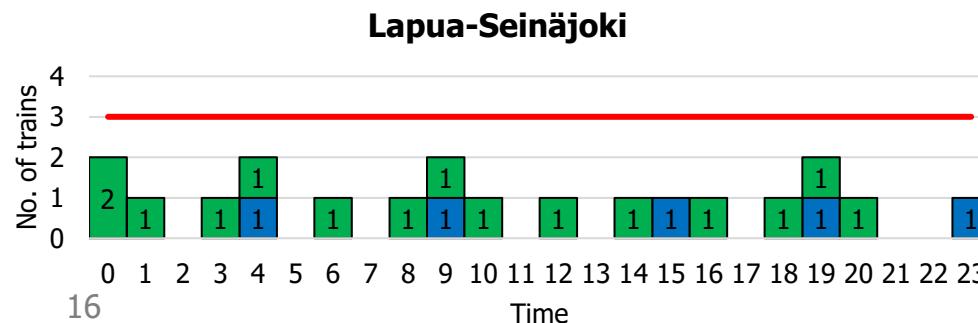
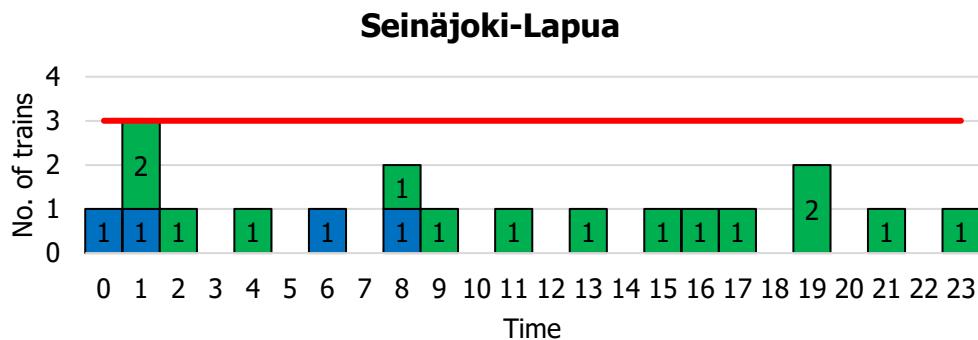
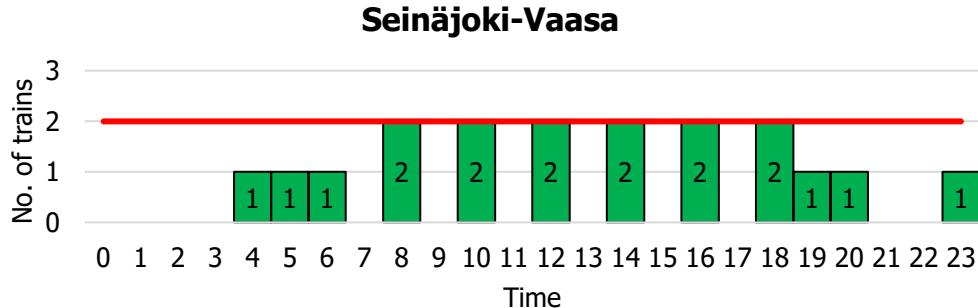
Seinäjoki-P-Louko



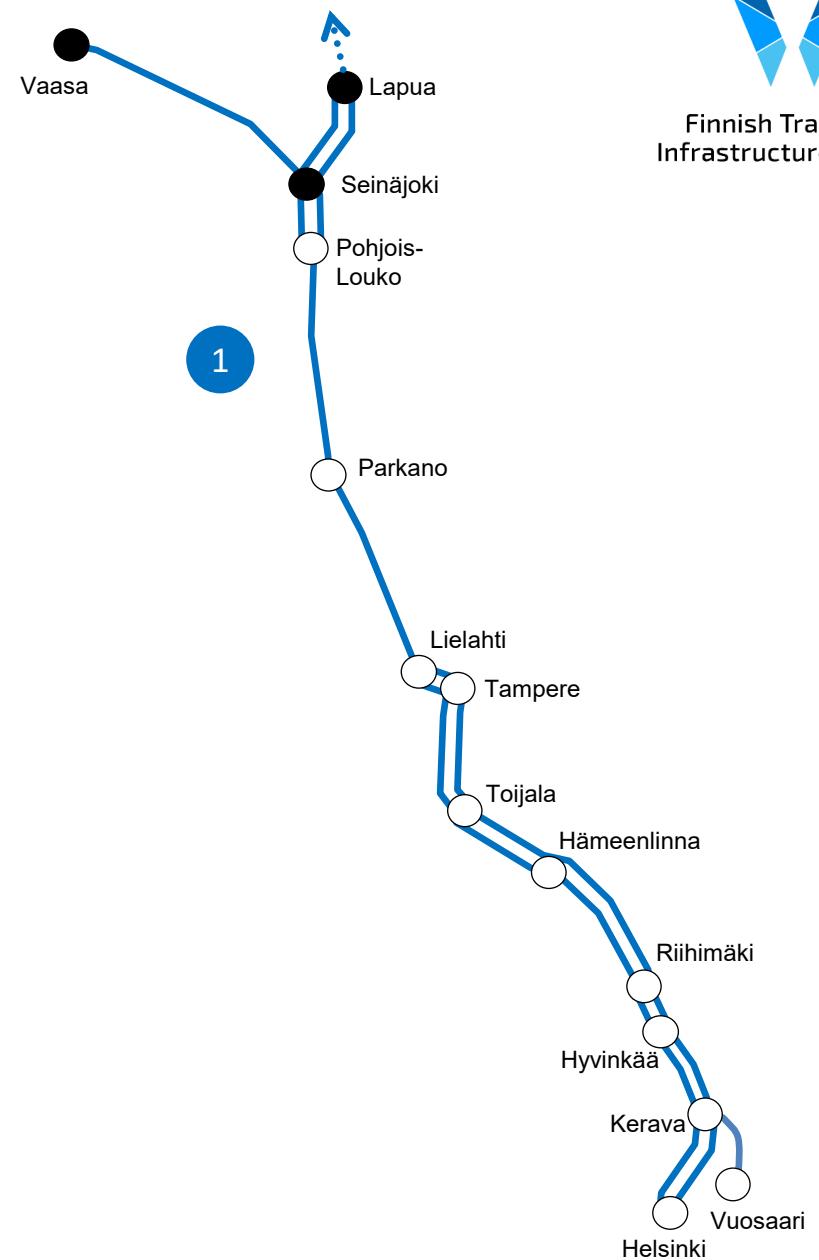
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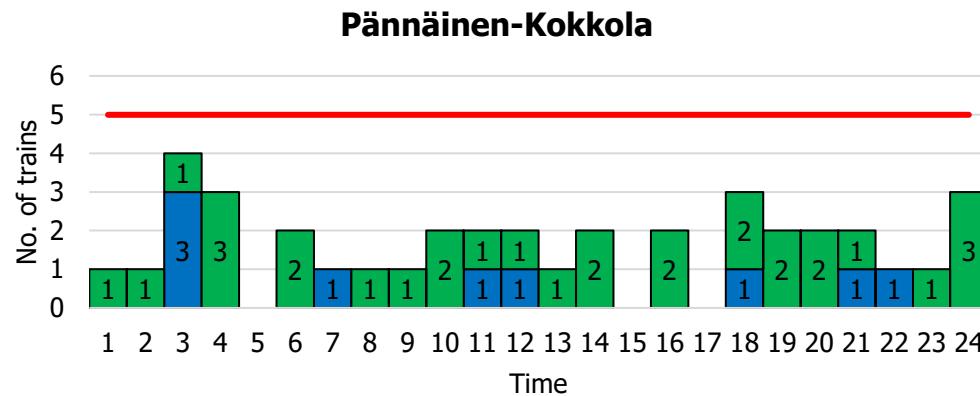
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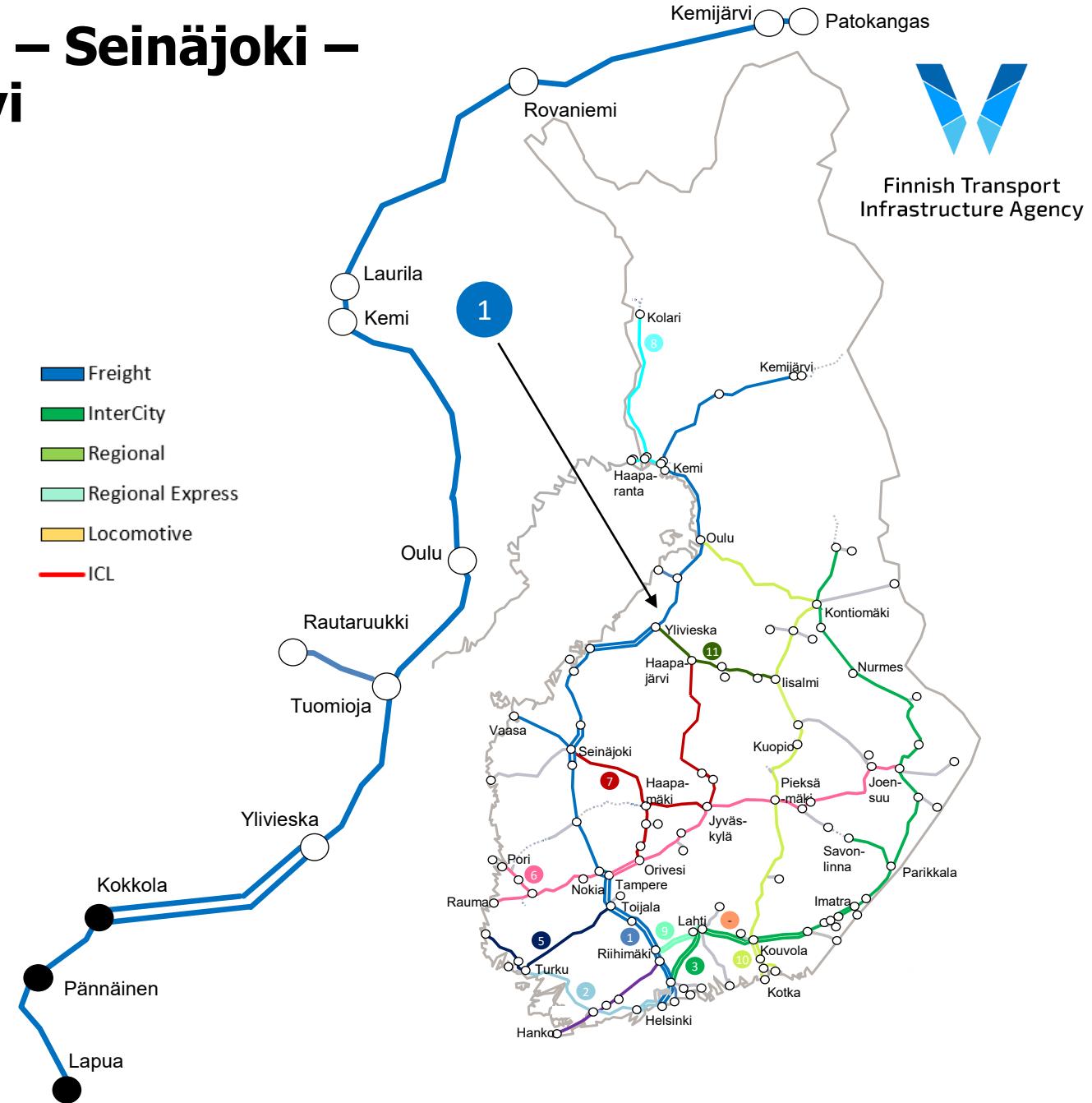
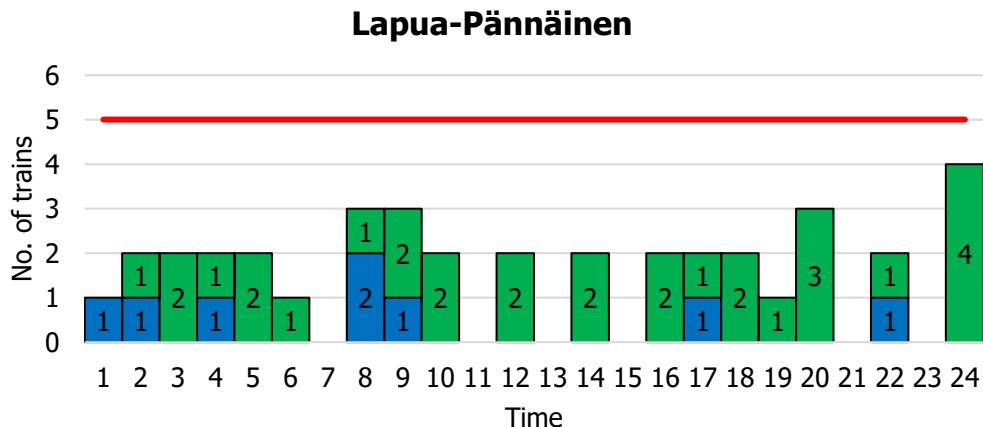
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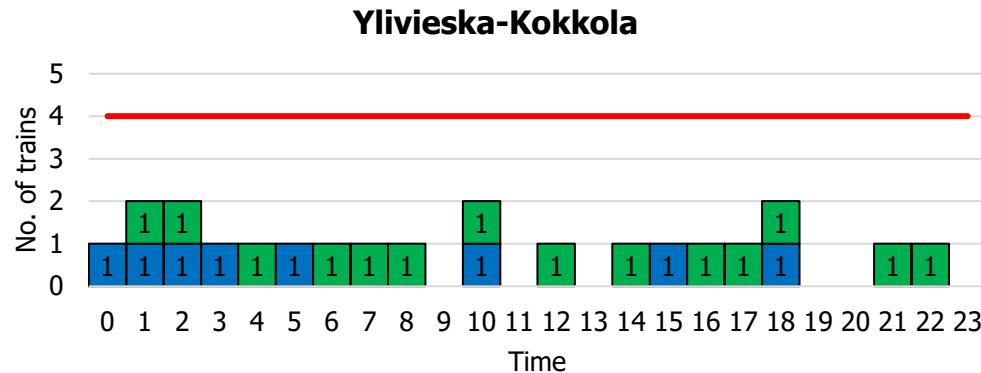


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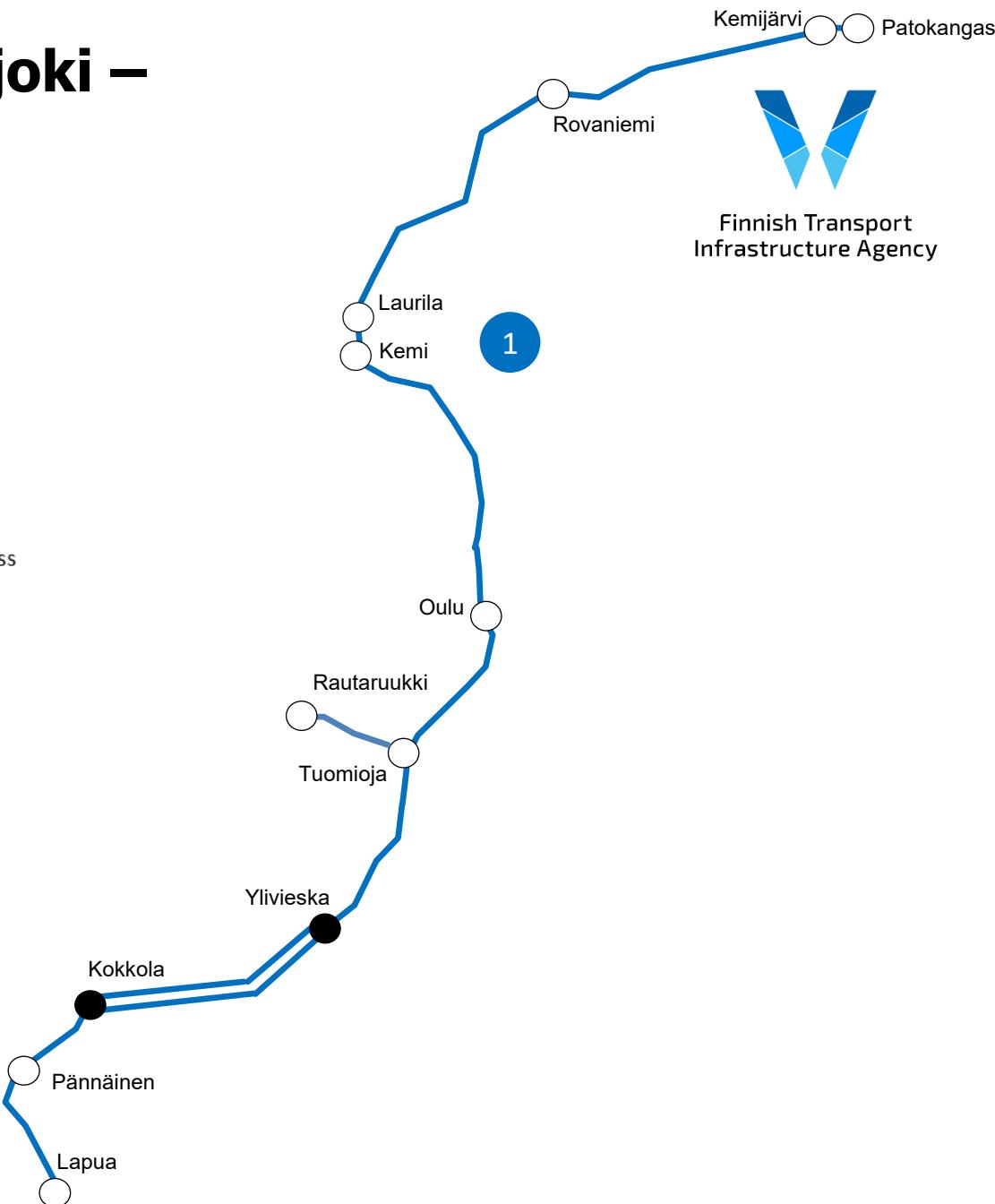
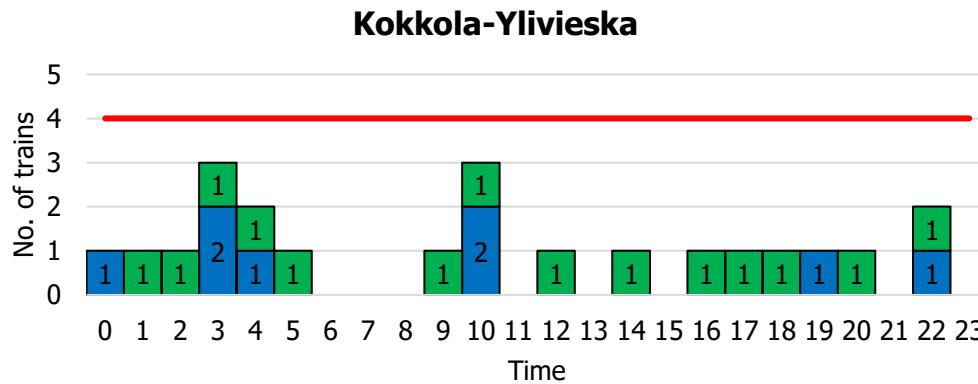
Kemijärvi Patokangas



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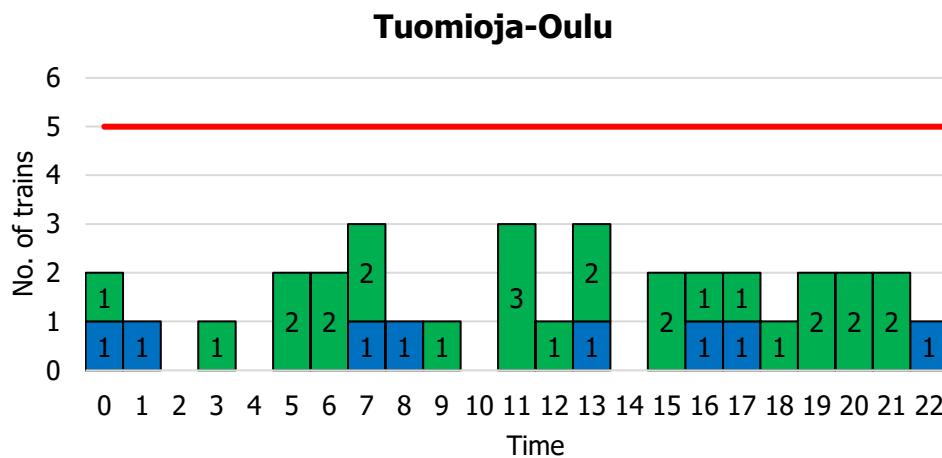


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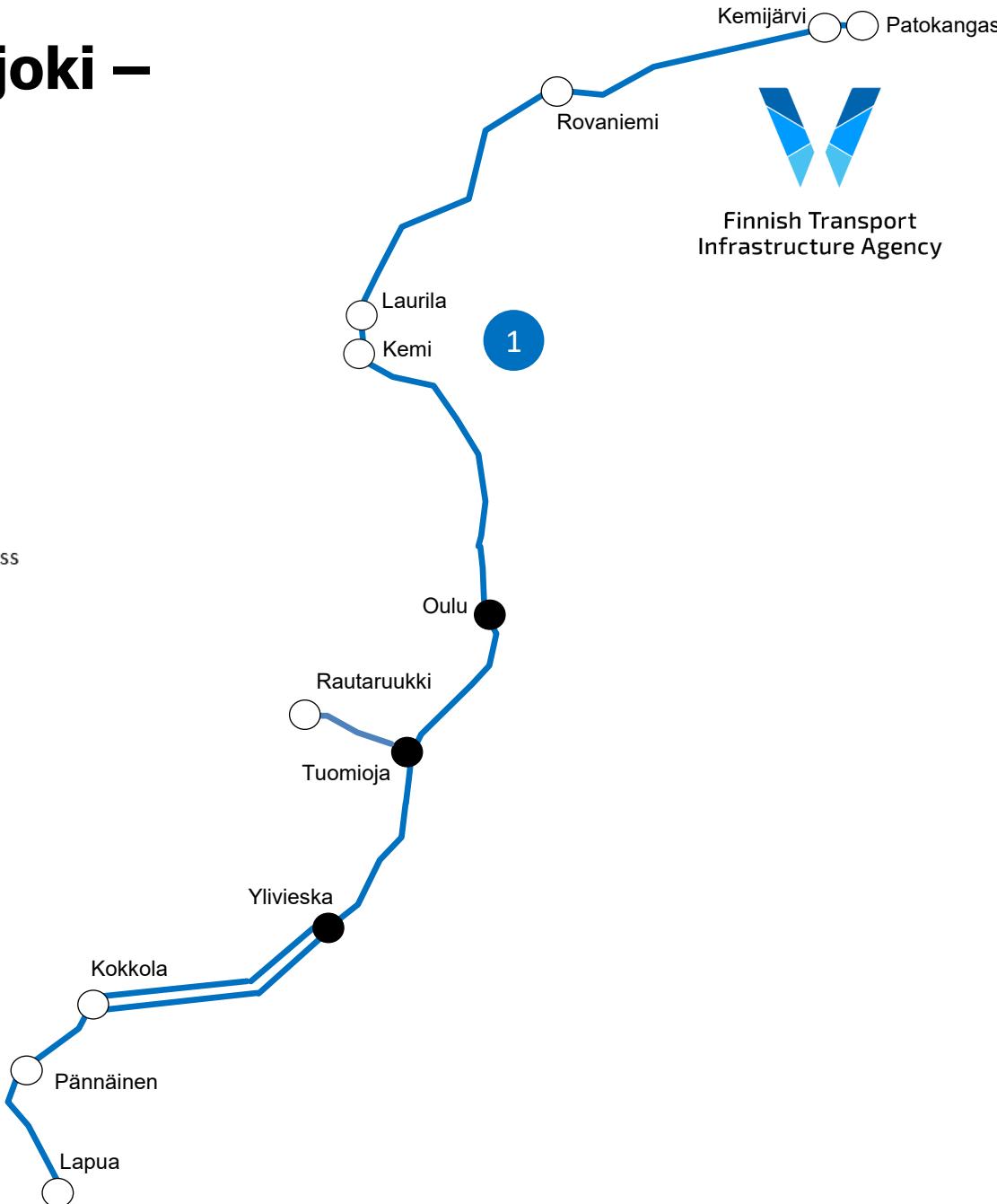
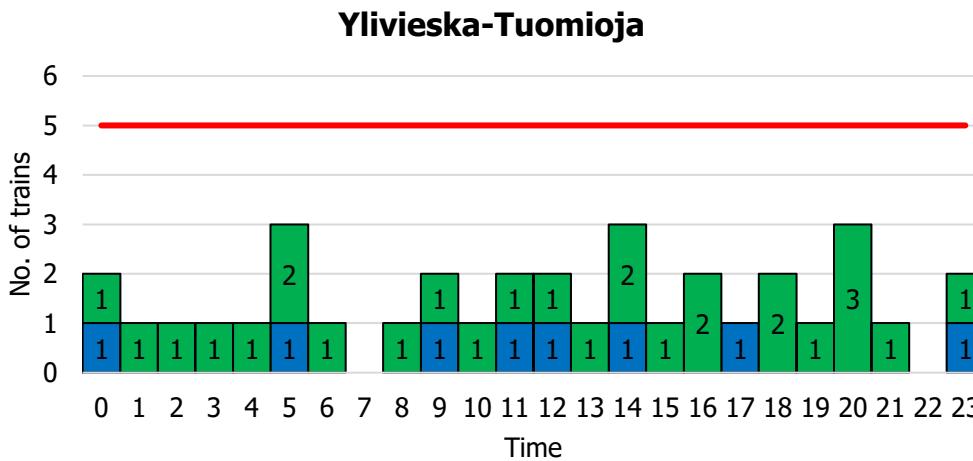
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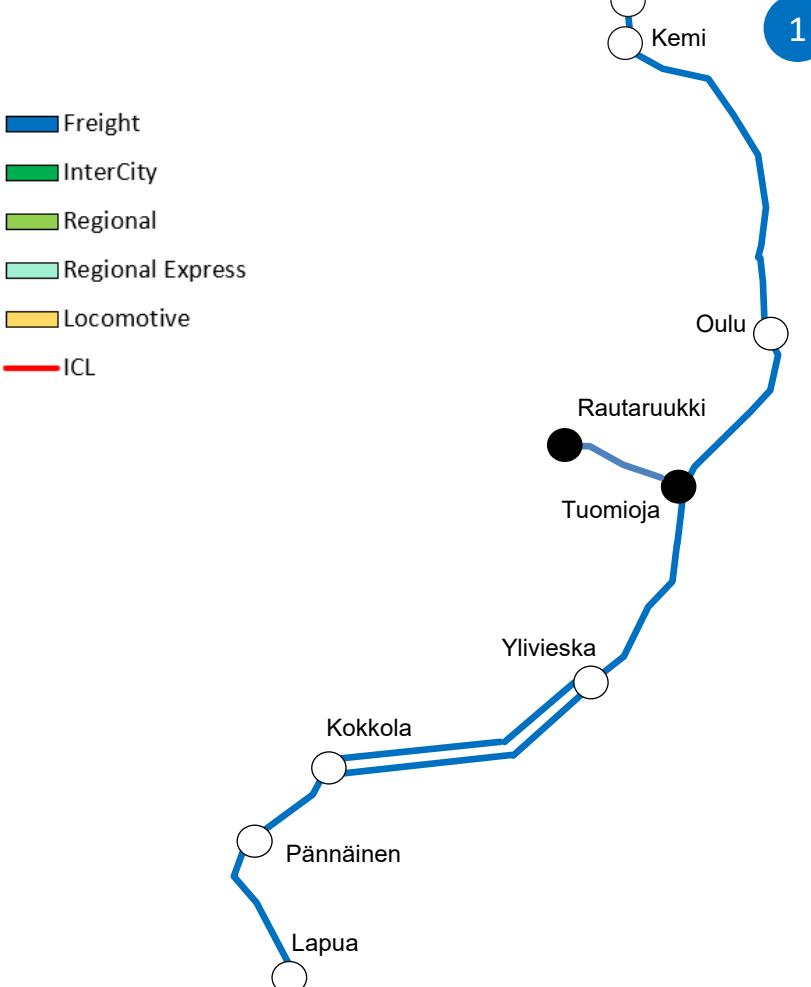
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Kemijärvi Patokangas



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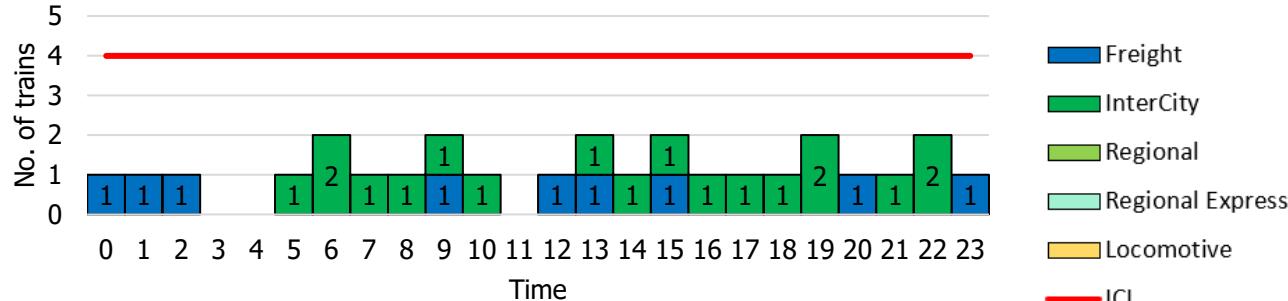
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Kemijärvi Patokangas

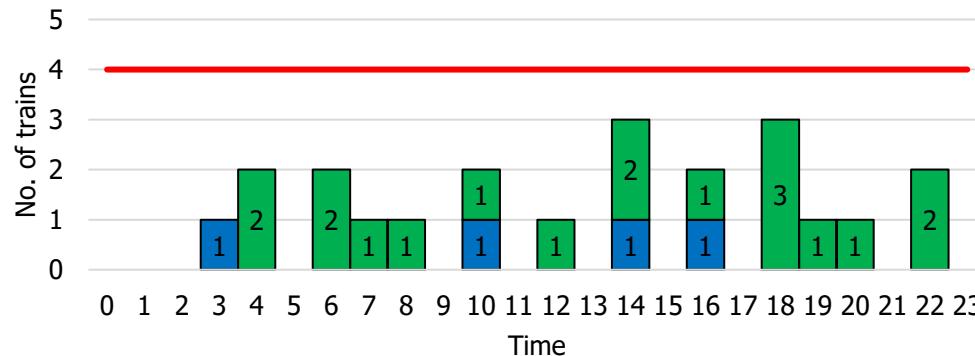


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Kemi-Laurila



Oulu-Kemi



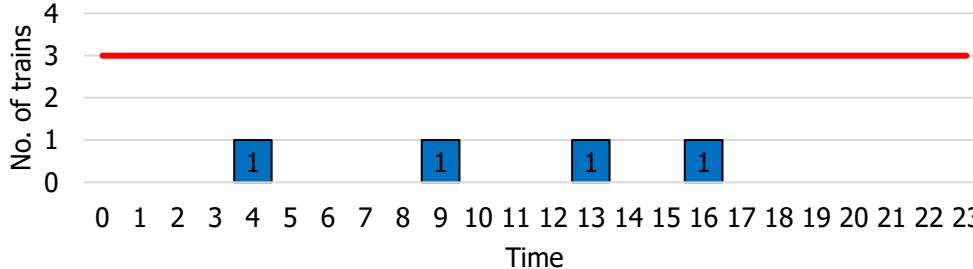
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Kemijärvi Patokangas



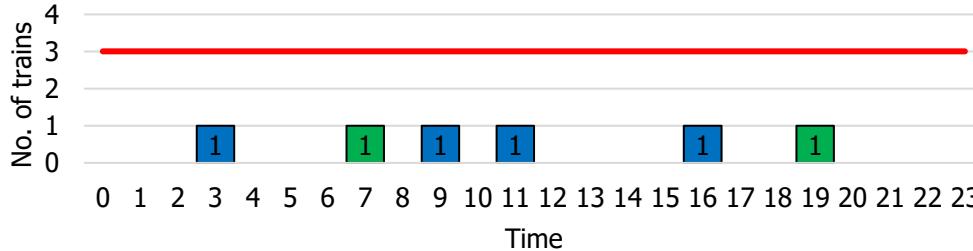
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Kemijärvi-Patokangas

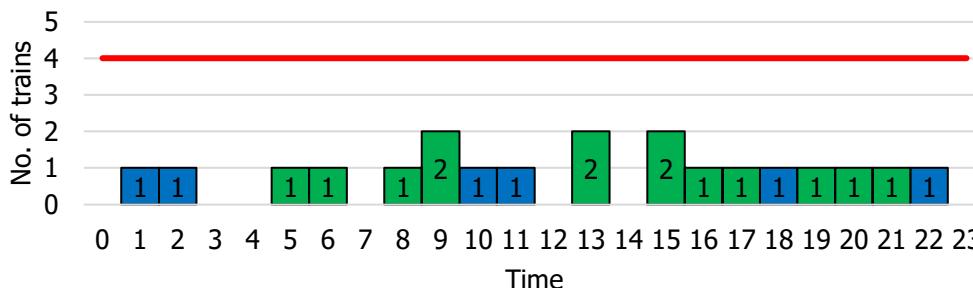


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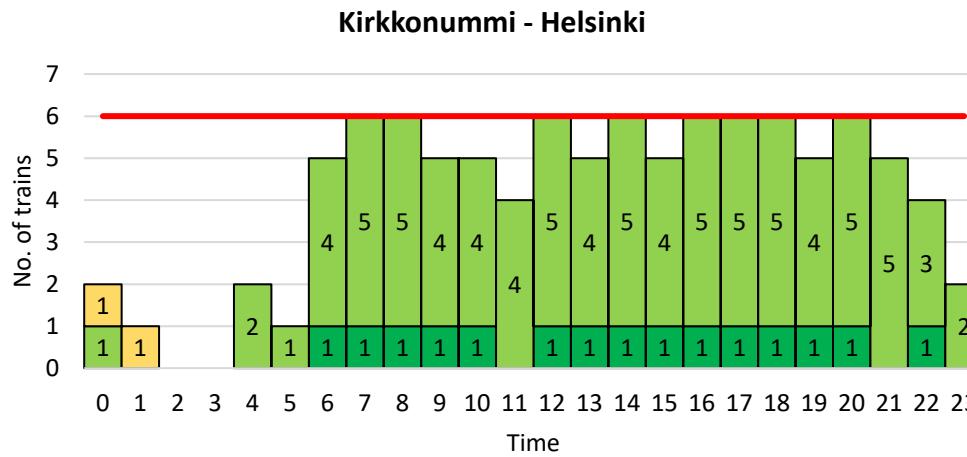
Rovaniemi-Kemijärvi



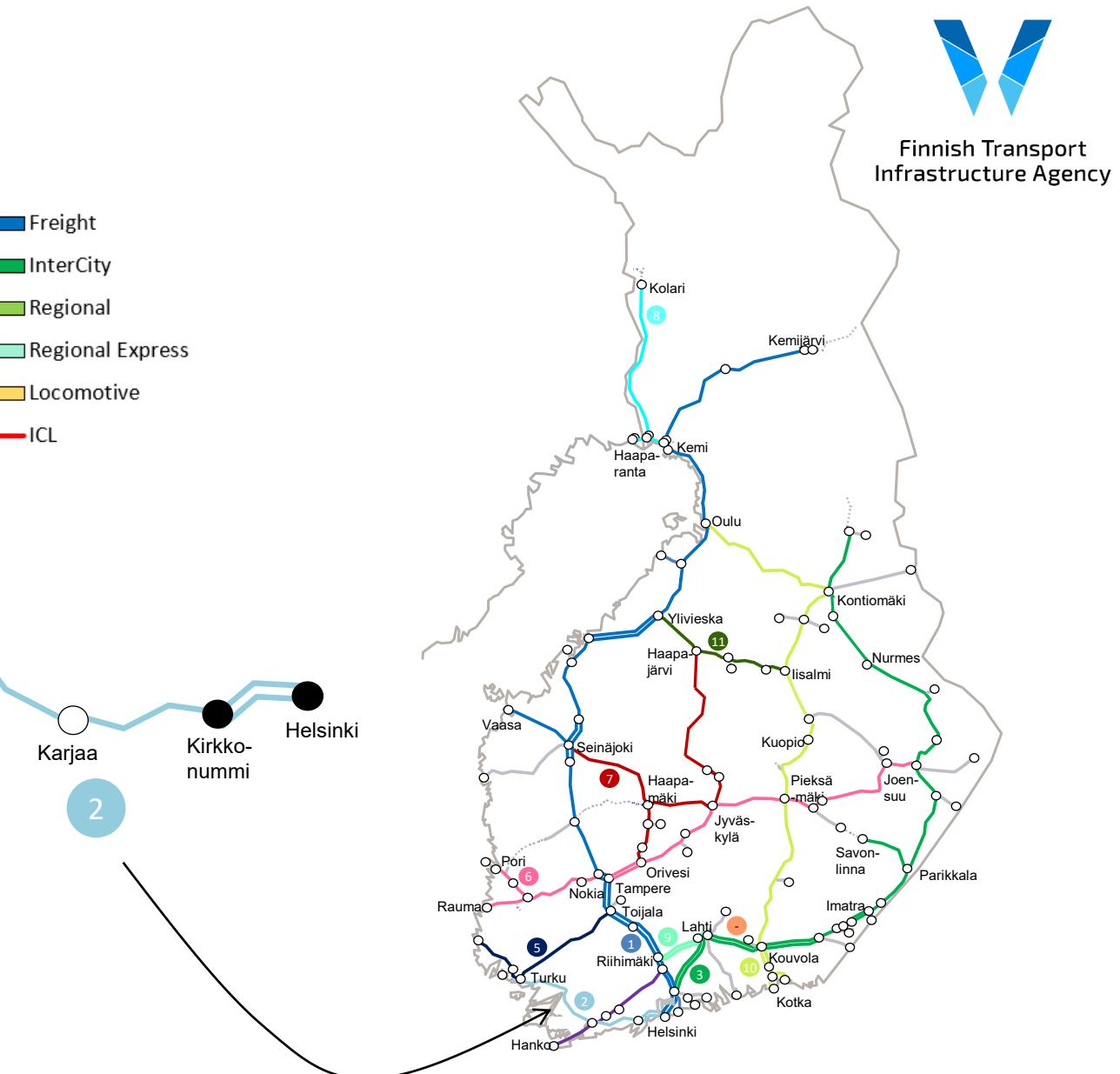
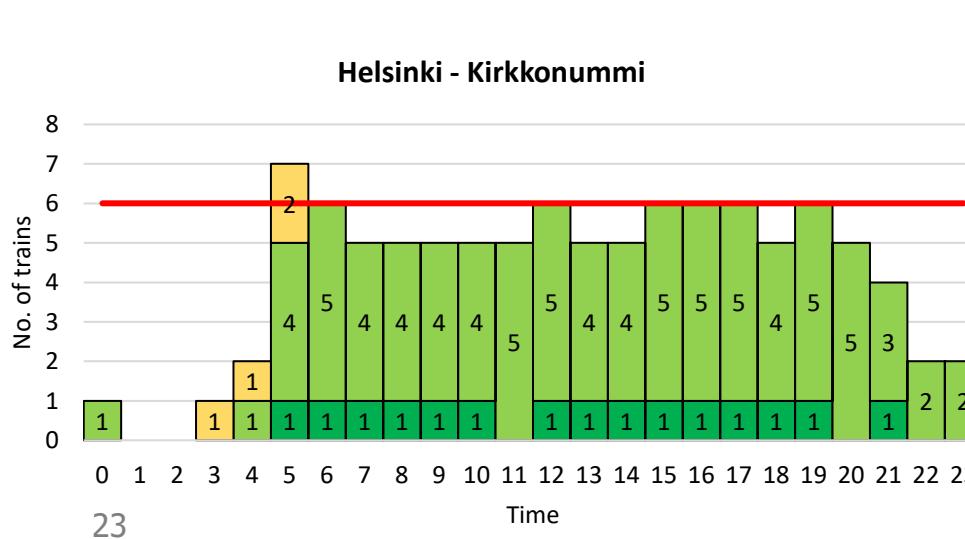
Laurila-Rovaniemi



2: Helsinki – Turku



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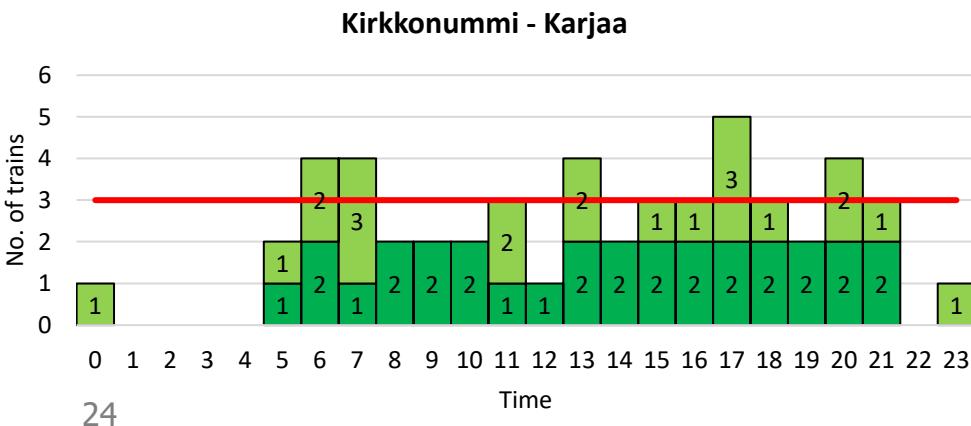
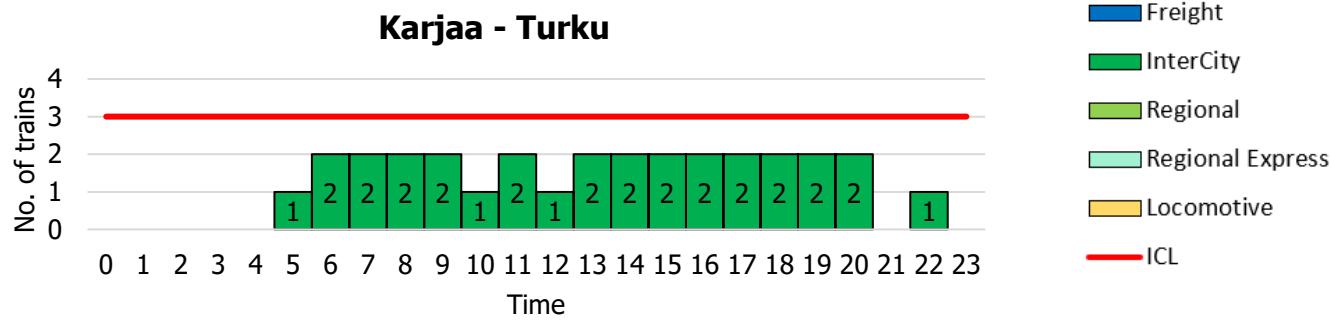


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2: Helsinki – Turku



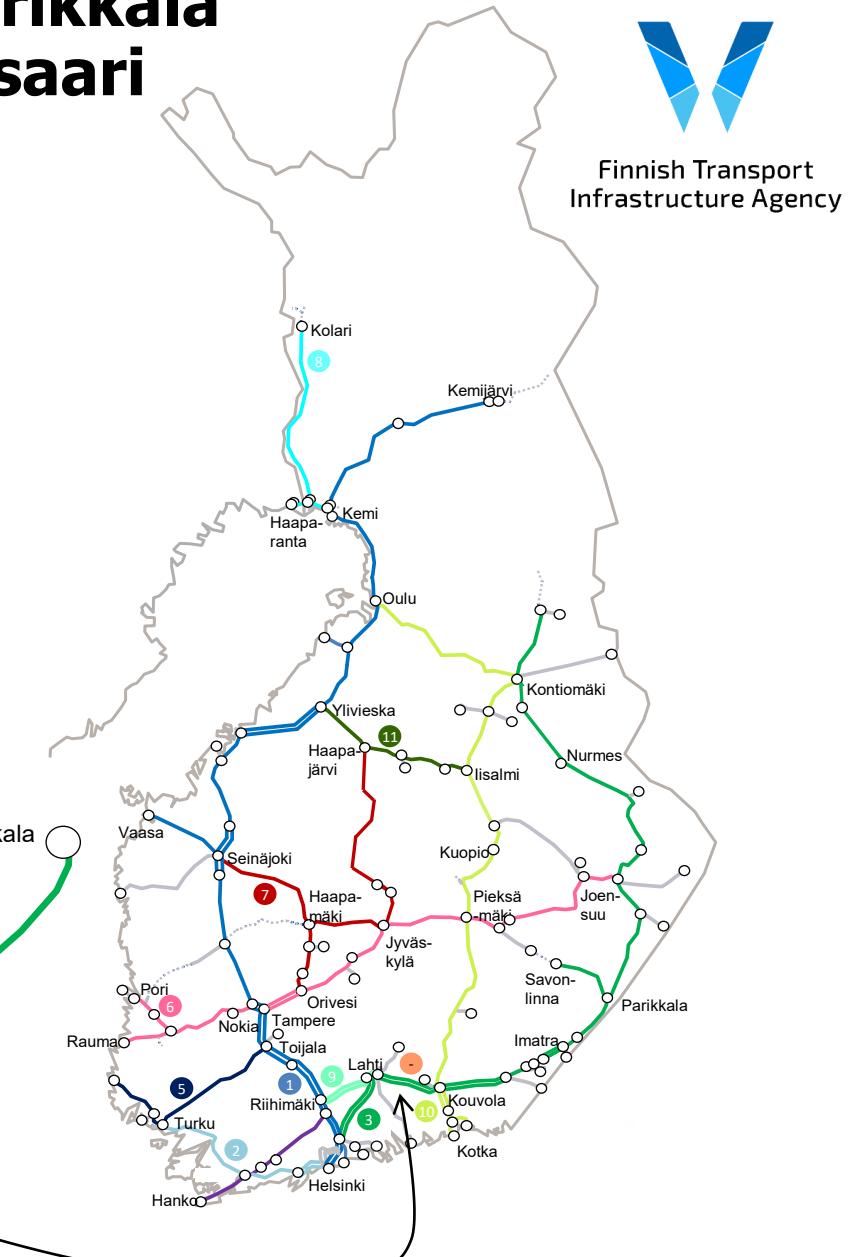
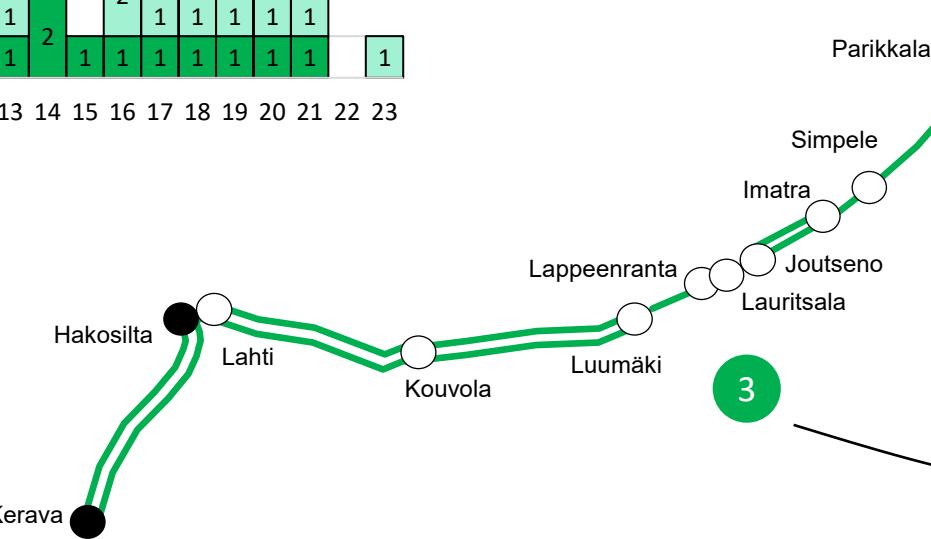
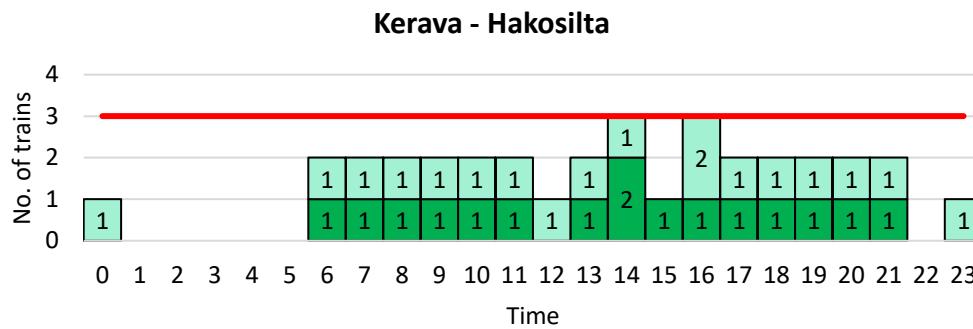
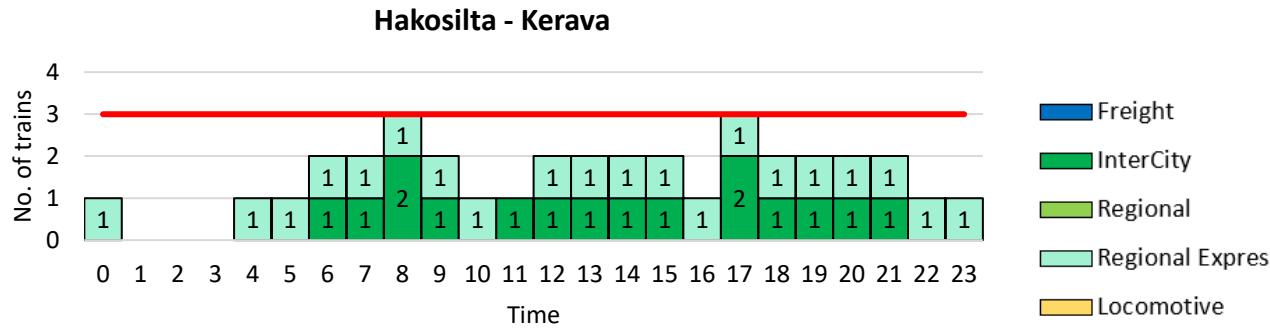
Finnish Transport
Infrastructure Agency



3: (Helsinki) – Kytömaa – Lahti – Kouvola – Parikkala – Savonlinna/Joensuu – Kontiomäki – Ämmänsaari



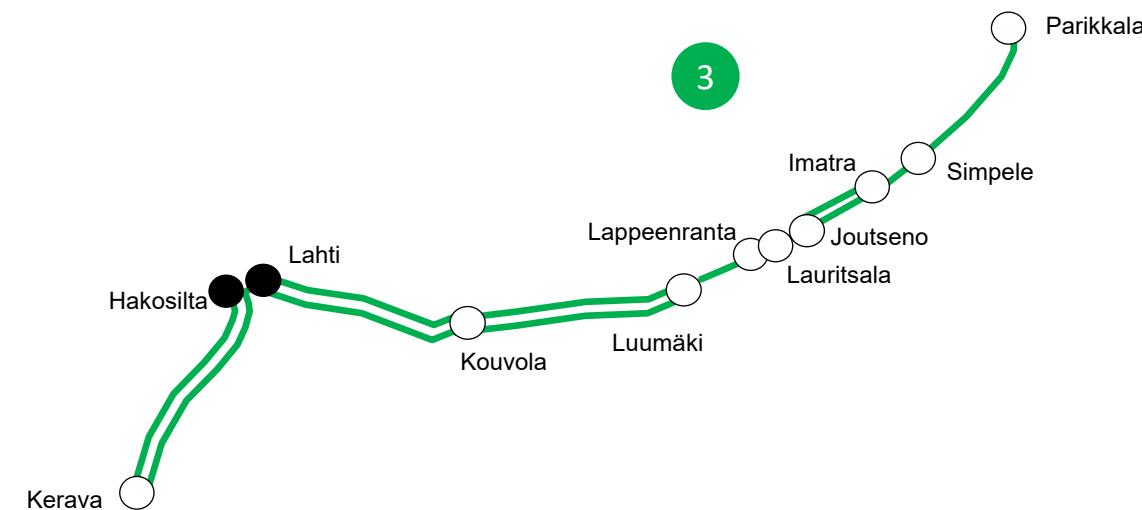
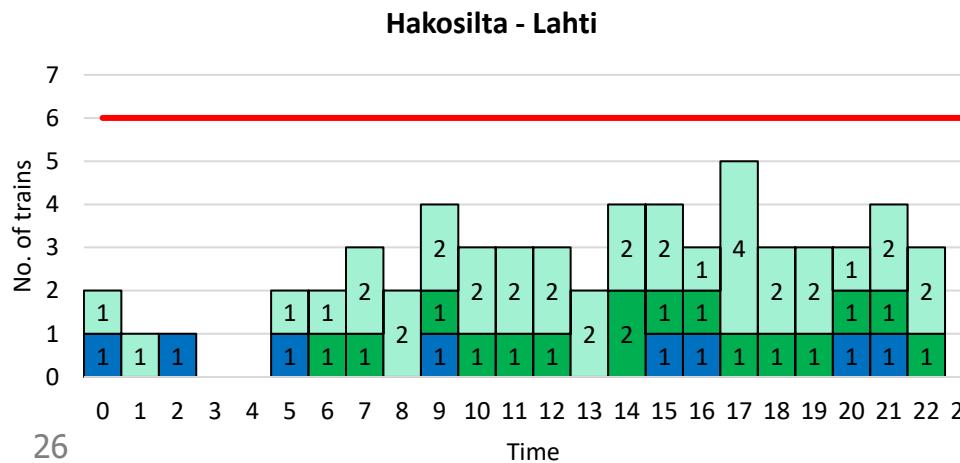
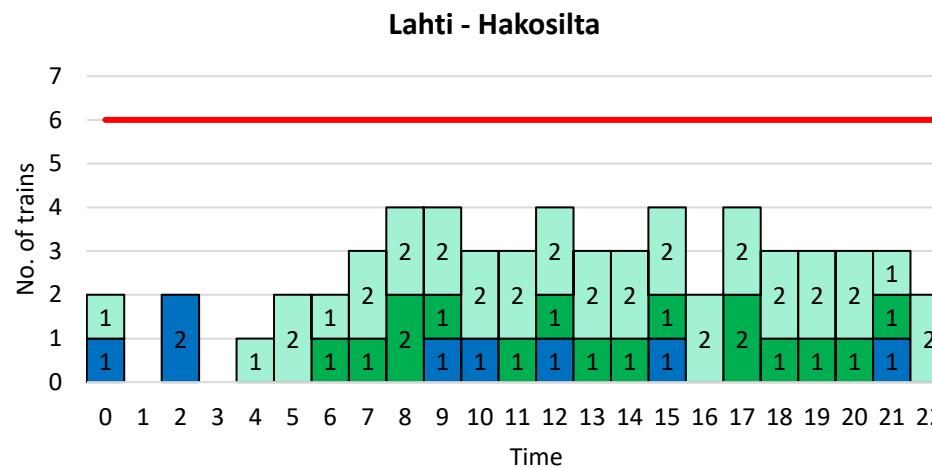
Finnish Transport
Infrastructure Agency



3: (Helsinki) – Kytömaa – Lahti – Kouvola – Parikkala – Savonlinna/Joensuu – Kontiomäki – Ämmänsaari



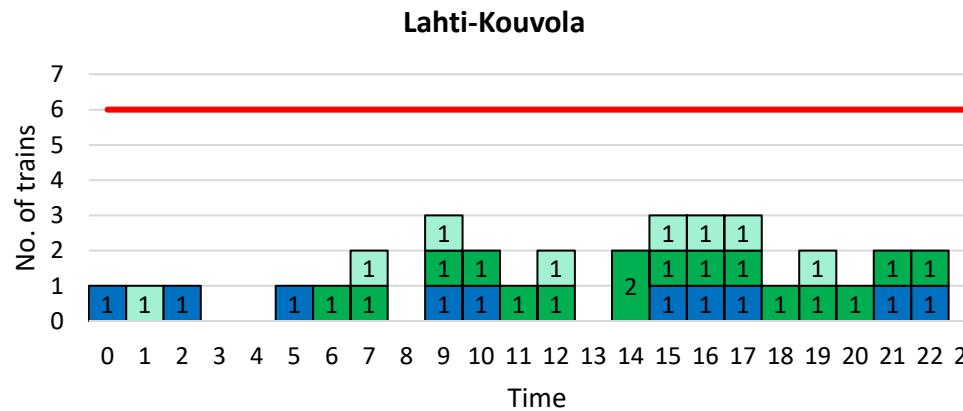
Finnish Transport
Infrastructure Agency



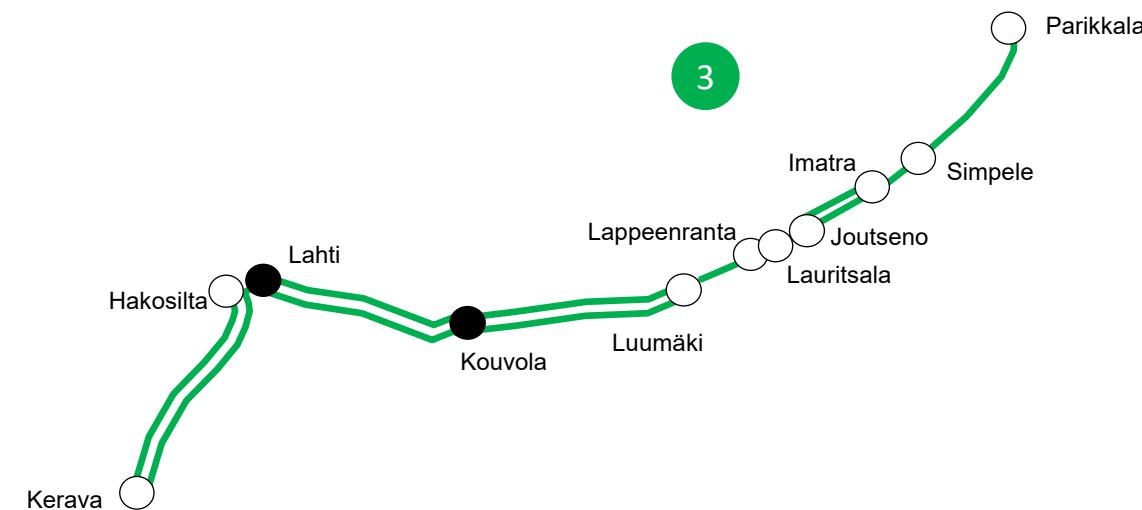
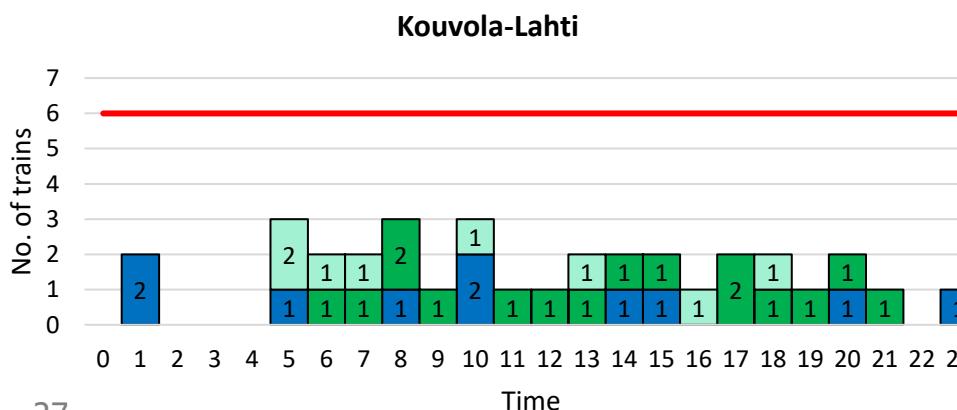
3: (Helsinki) – Kytömaa – Lahti – Kouvola – Parikkala – Savonlinna/Joensuu – Kontiomäki – Ämmänsaari



Finnish Transport
Infrastructure Agency



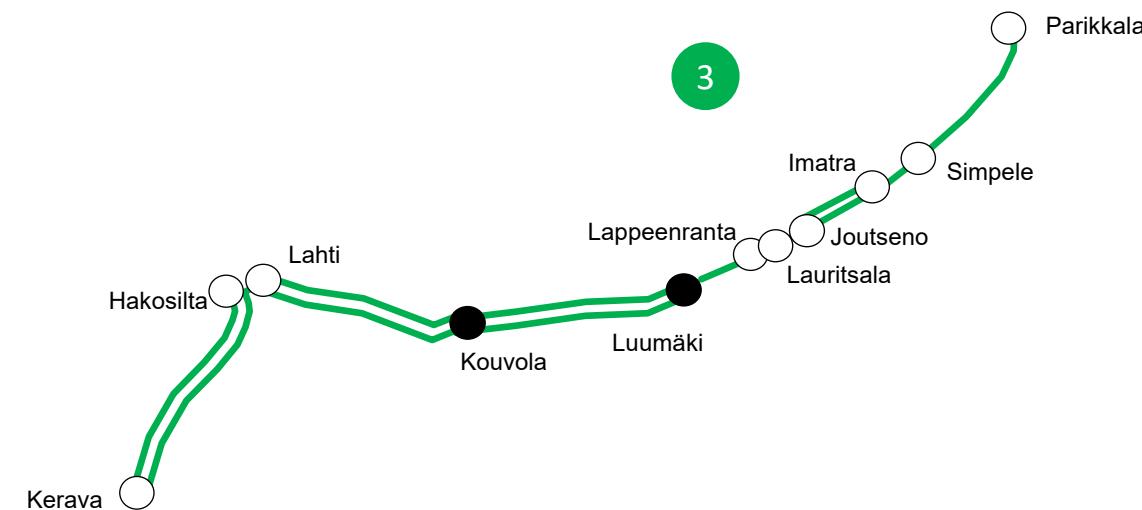
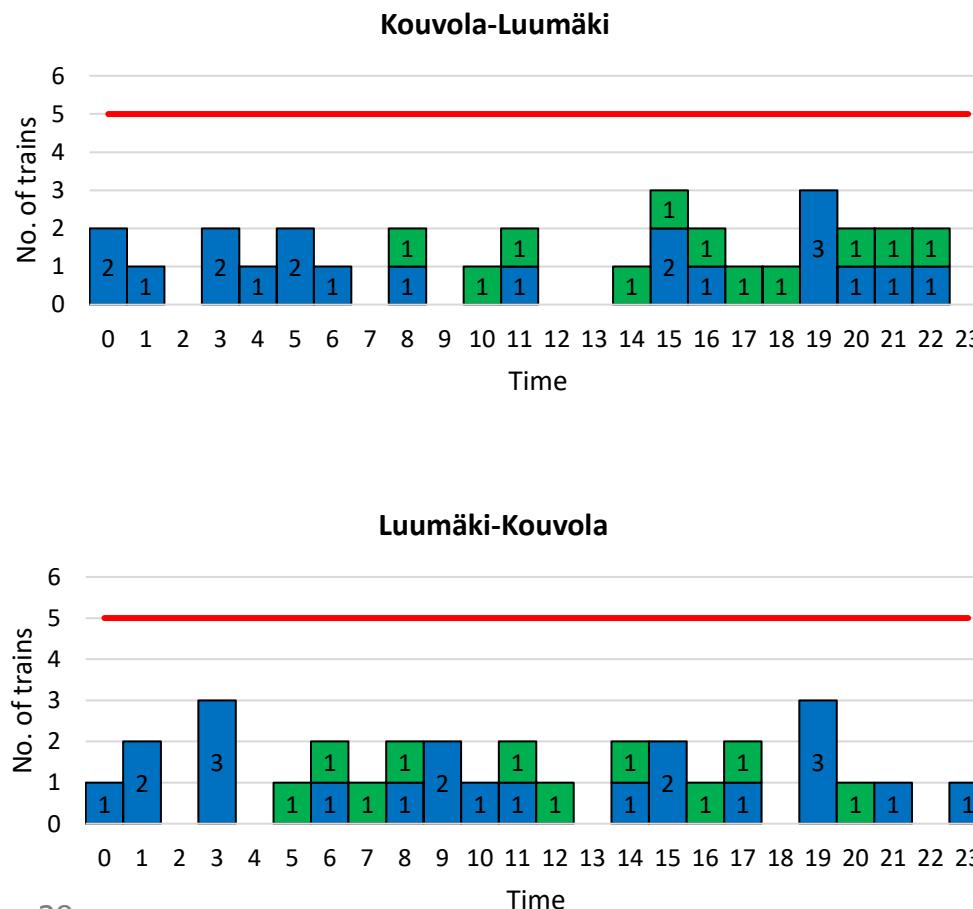
- Freight
- InterCity
- Regional
- Regional Express
- Locomotive
- ICL



3: (Helsinki) – Kytömaa – Lahti – Kouvola – Parikkala – Savonlinna/Joensuu – Kontiomäki – Ämmänsaari



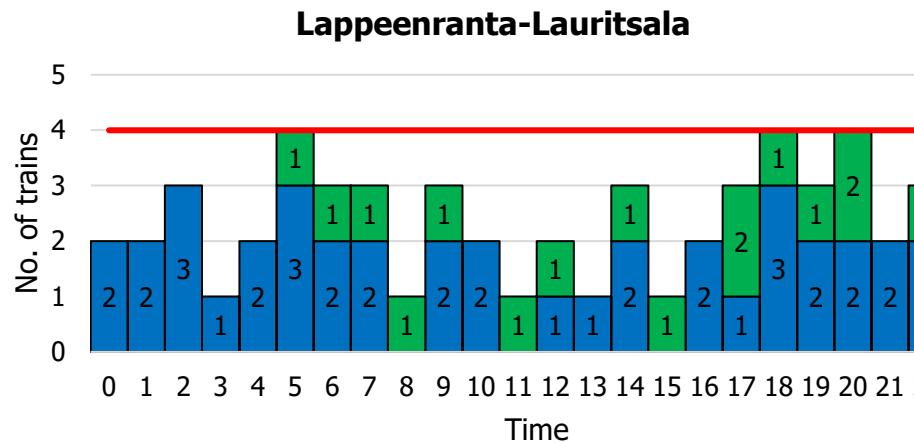
Finnish Transport
Infrastructure Agency



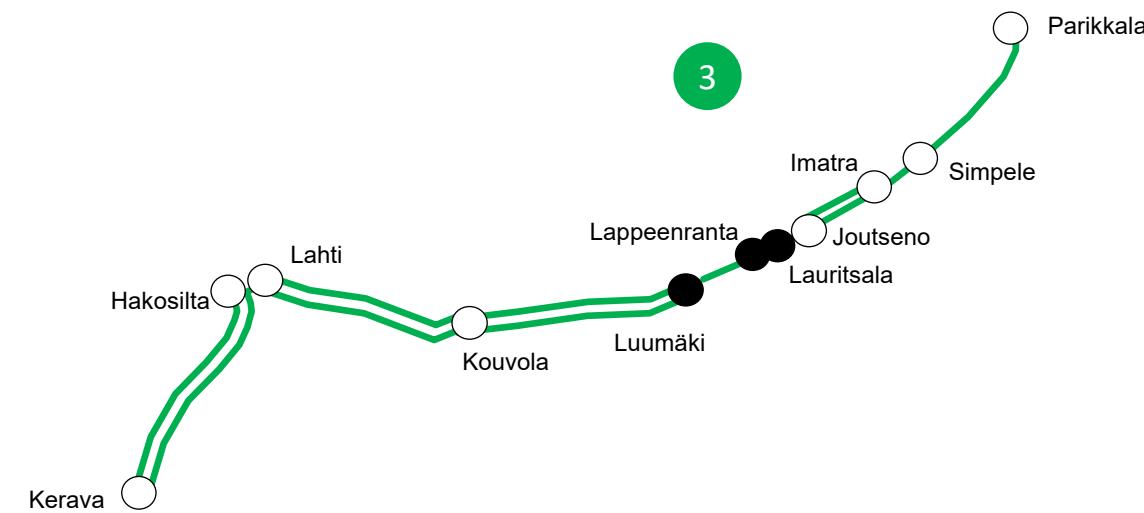
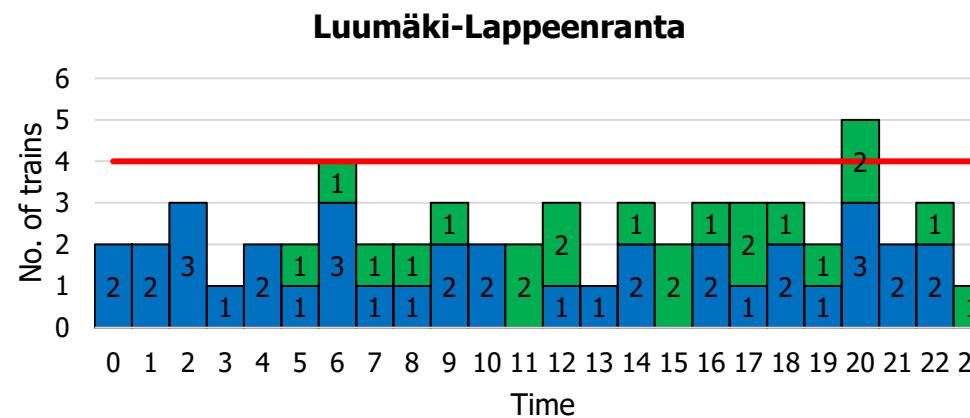
3: (Helsinki) – Kytömaa – Lahti – Kouvola – Parikkala – Savonlinna/Joensuu – Kontiomäki – Ämmänsaari



Finnish Transport
Infrastructure Agency



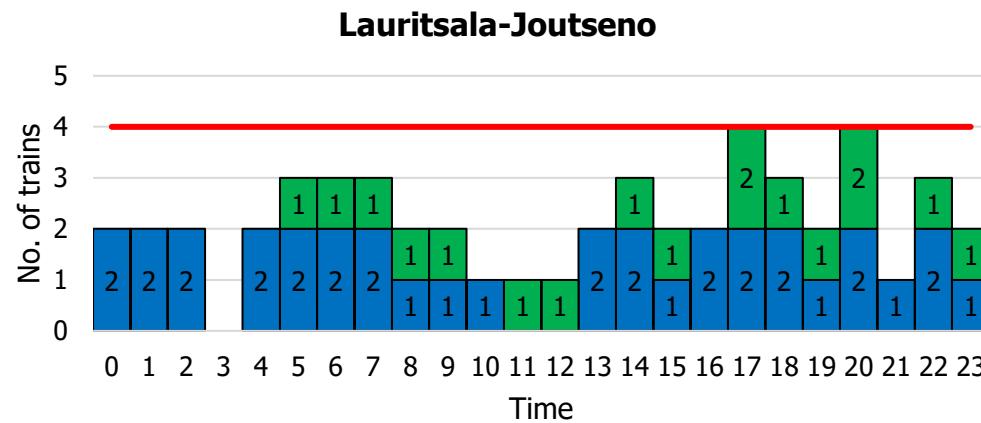
- Freight
- InterCity
- Regional
- Regional Express
- Locomotive
- ICL



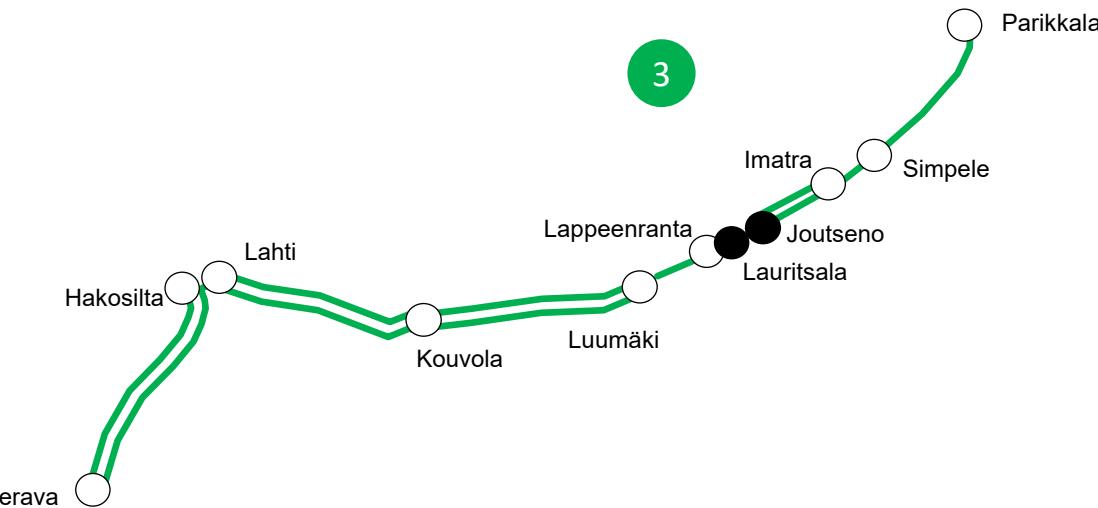
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Finnish Transport
Infrastructure Agency



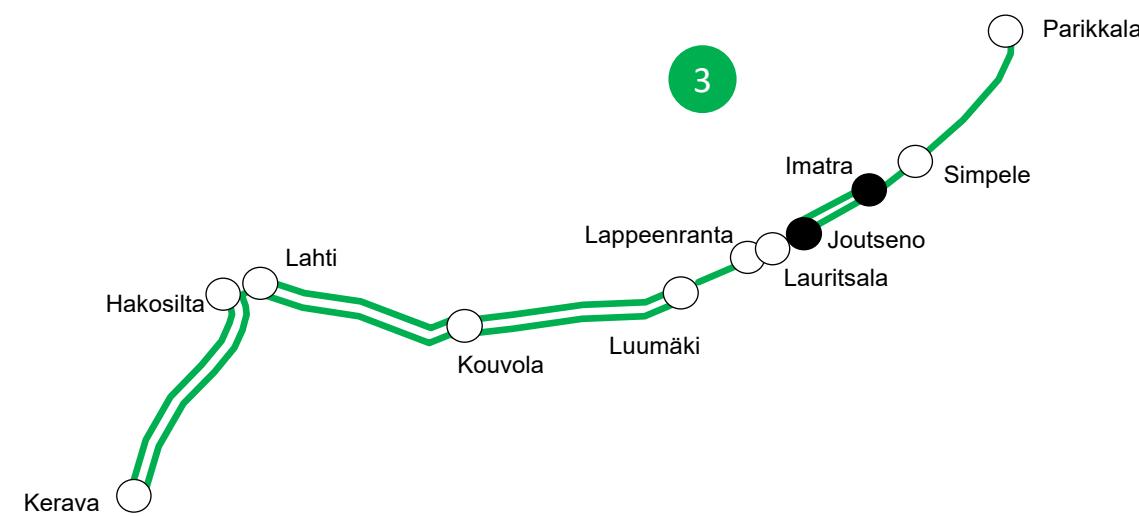
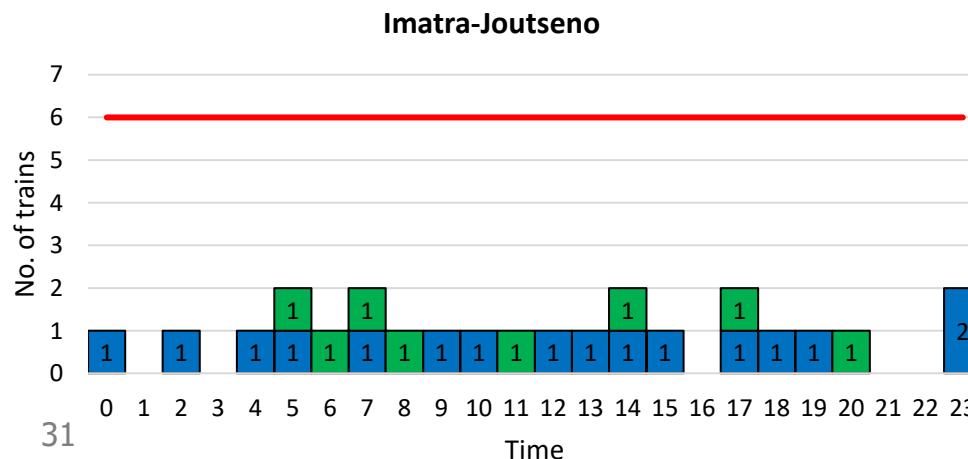
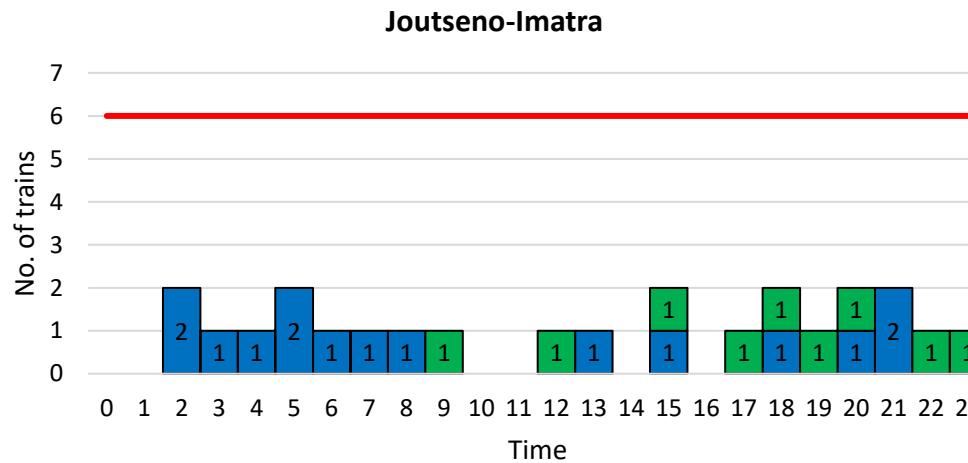
- Freight
- InterCity
- Regional
- Regional Express
- Locomotive
- ICL



3: (Helsinki) – Kytömaa – Lahti – Kouvola – Parikkala – Savonlinna/Joensuu – Kontiomäki – Ämmänsaari



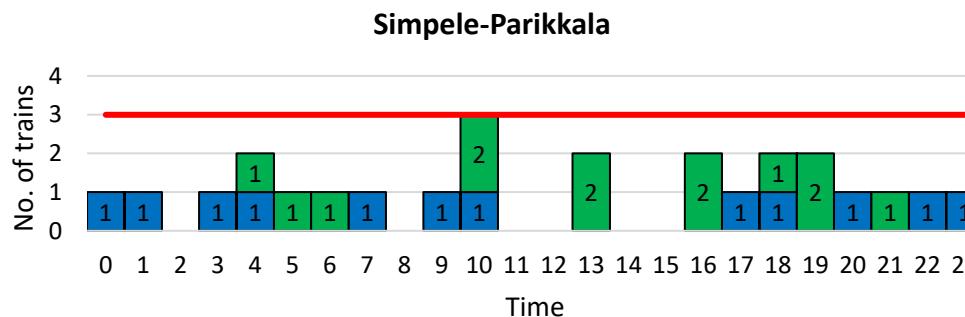
Finnish Transport
Infrastructure Agency



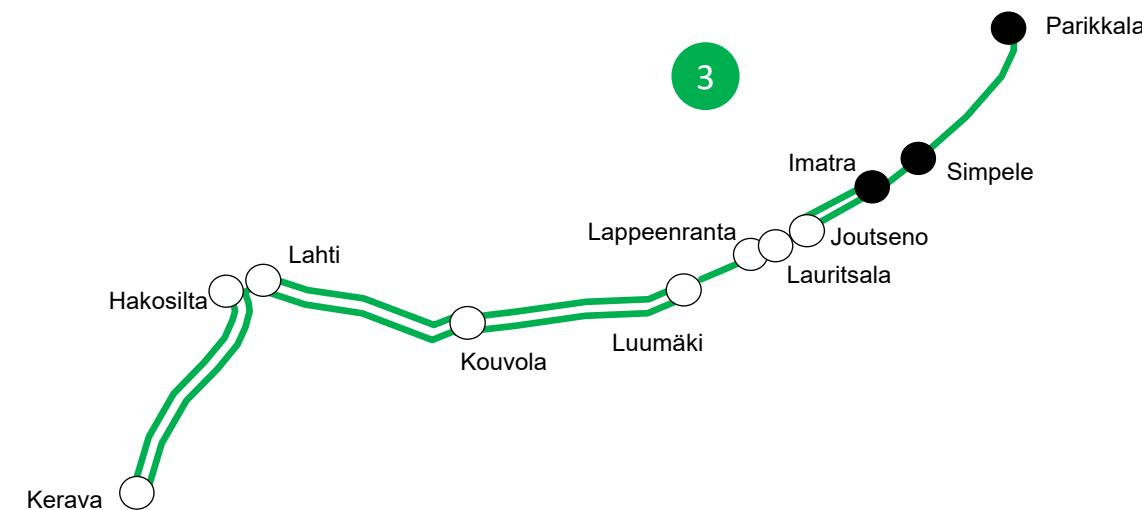
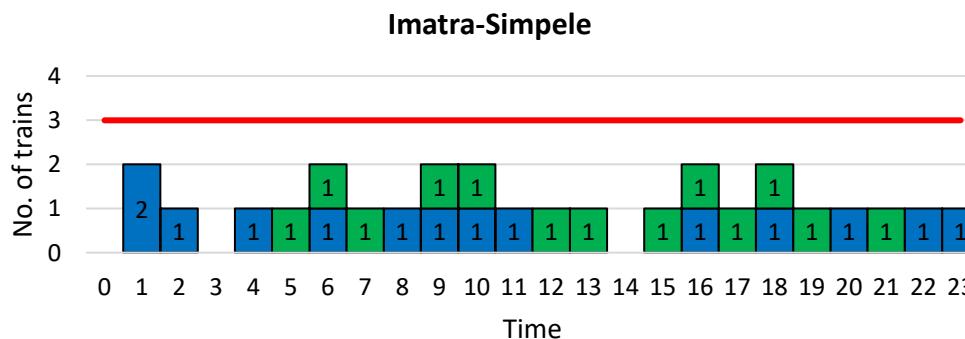
3: (Helsinki) – Kytömaa – Lahti – Kouvola – Parikkala – Savonlinna/Joensuu – Kontiomäki – Ämmänsaari



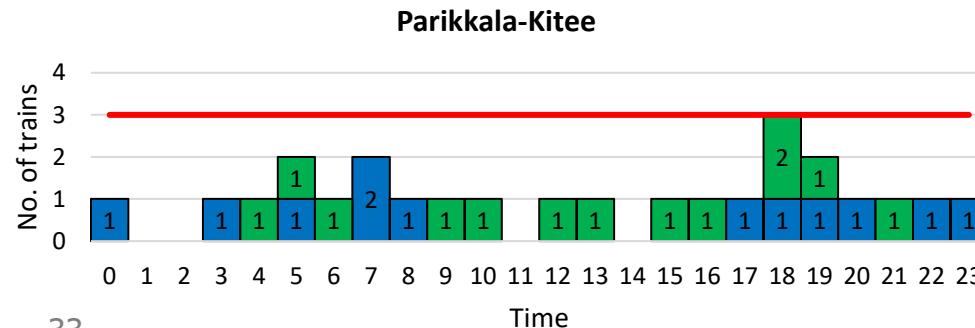
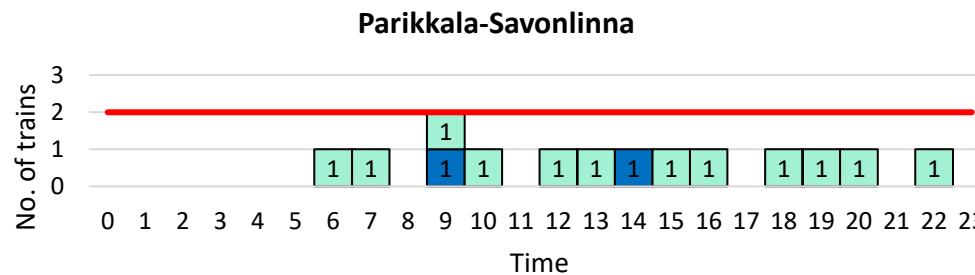
Finnish Transport
Infrastructure Agency



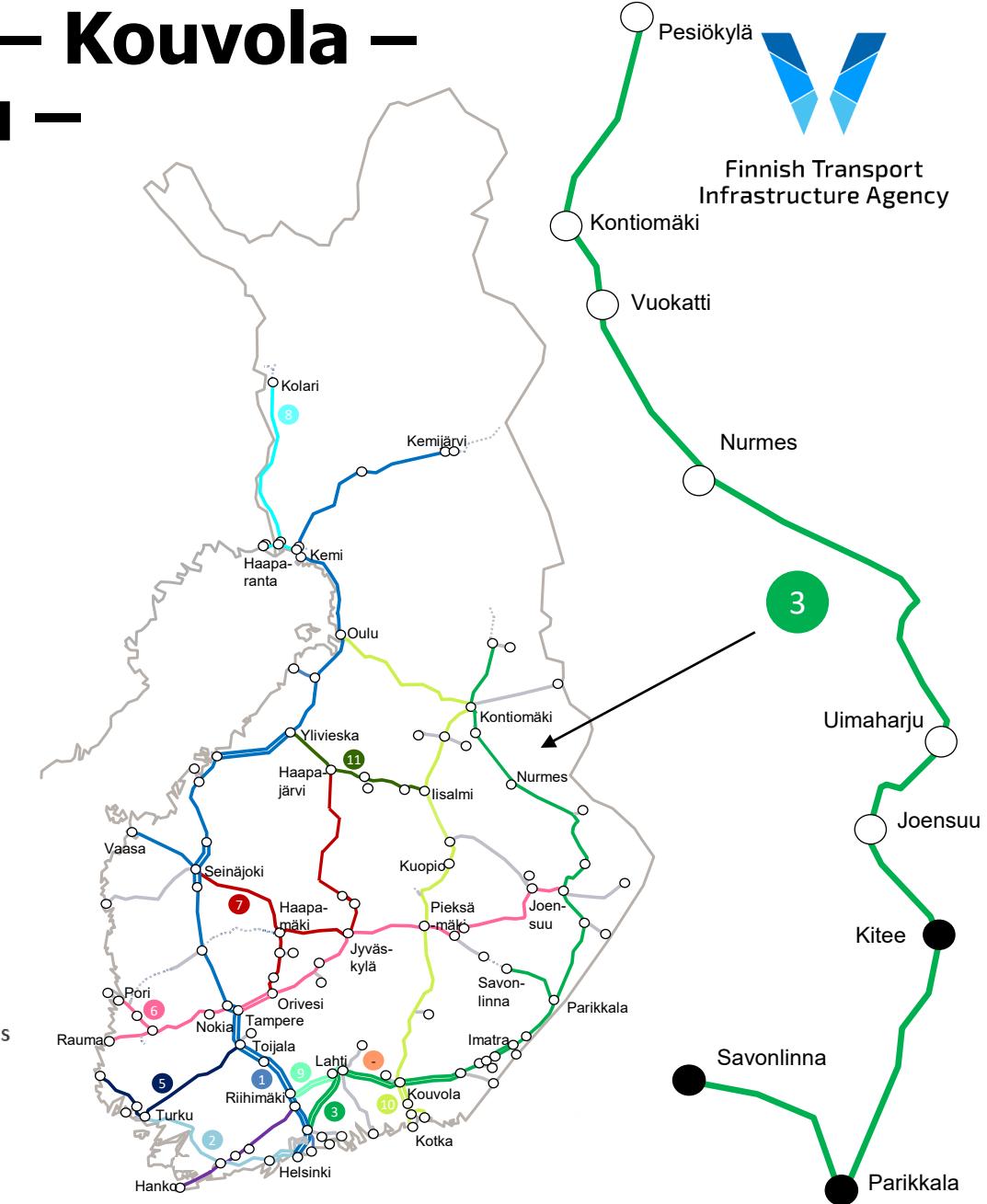
- Freight
- InterCity
- Regional
- Regional Express
- Locomotive
- ICL**



3: (Helsinki) – Kytömaa – Lahti – Kouvolan – Parikkala – Savonlinna/Joensuu – Kontiomäki – Ämmänsaari



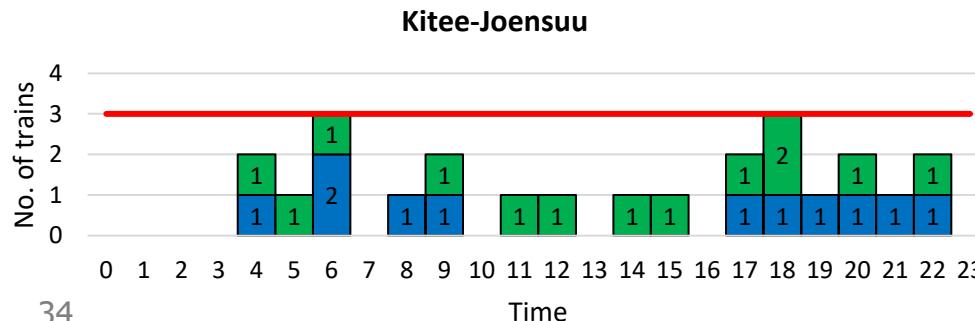
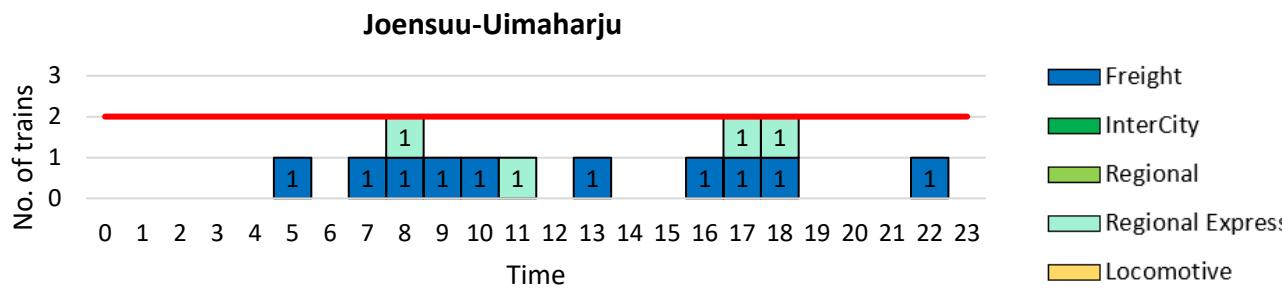
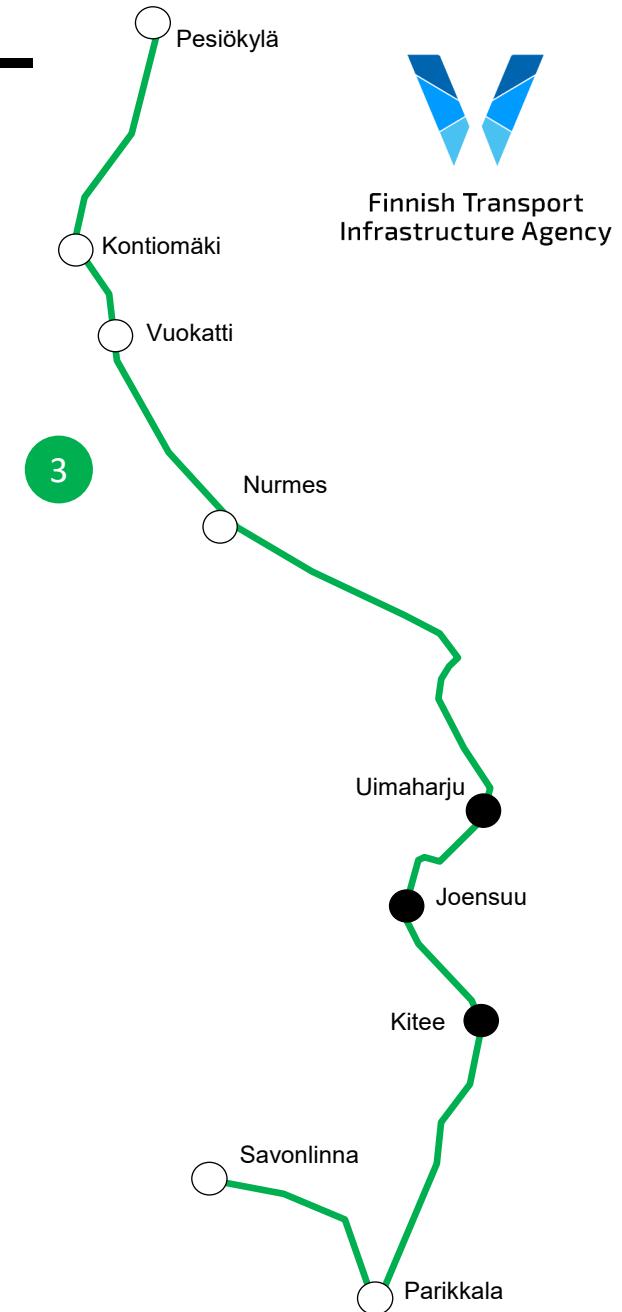
- Freight
- InterCity
- Regional
- Regional Express
- Locomotive
- ICL



3: (Helsinki) – Kytömaa – Lahti – Kouvolan – Parikkala – Savonlinna/Joensuu – Kontiomäki – Ämmänsaari



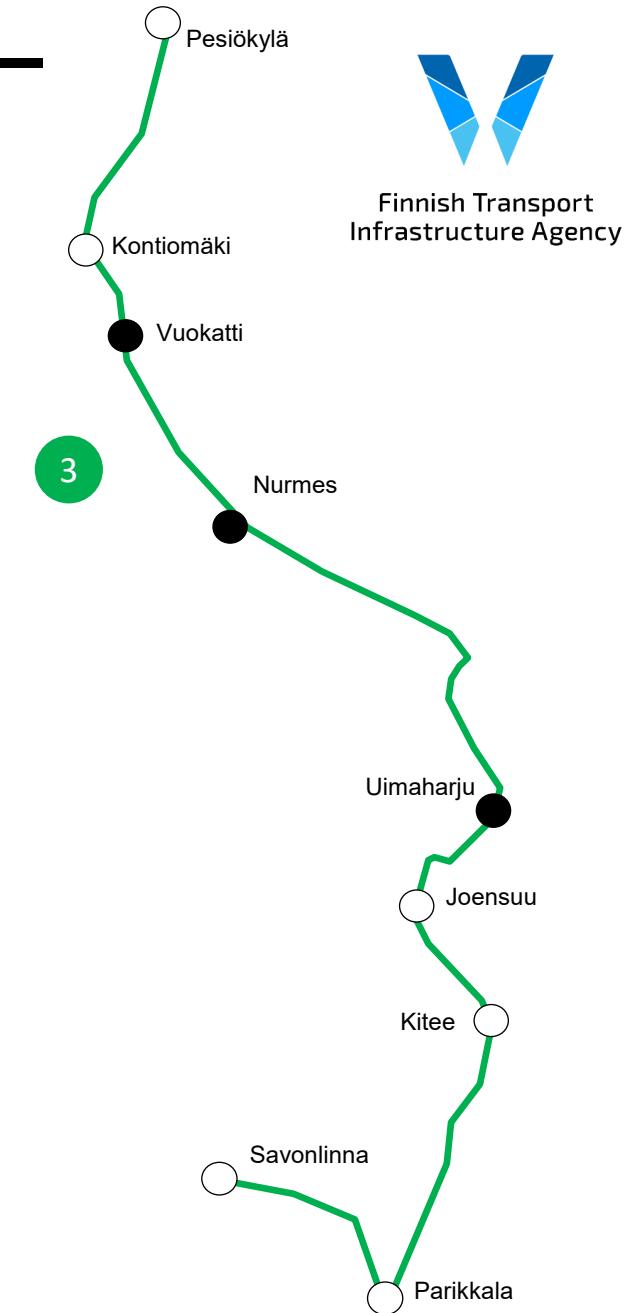
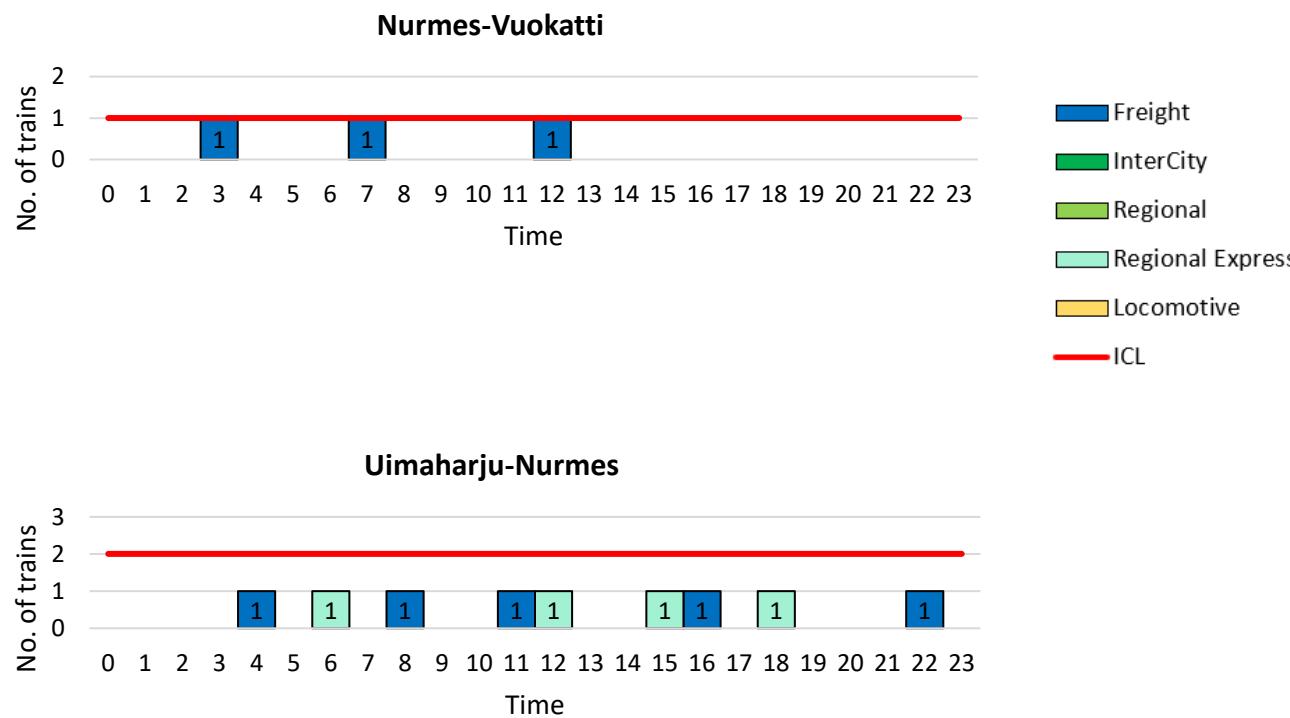
Finnish Transport
Infrastructure Agency



3: (Helsinki) – Kytömaa – Lahti – Kouvolan – Parikkala – Savonlinna/Joensuu – Kontiomäki – Ämmänsaari



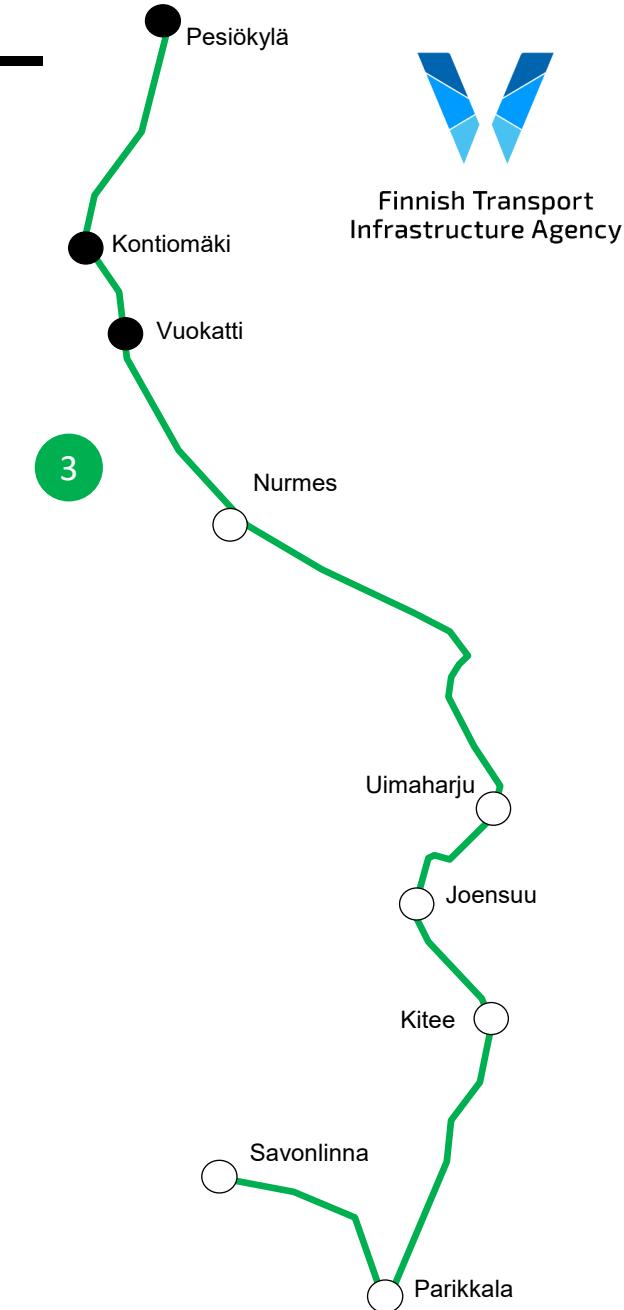
Finnish Transport
Infrastructure Agency



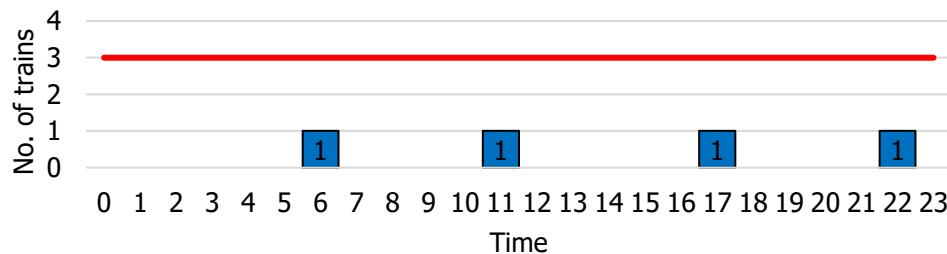
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Finnish Transport
Infrastructure Agency

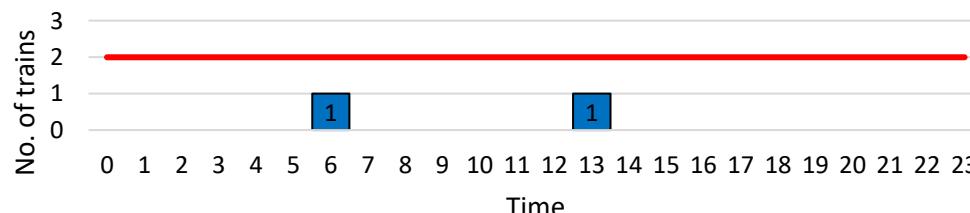


Kontiomäki-Pesiökylä



- Freight
- InterCity
- Regional
- Regional Express
- Locomotive
- ICL

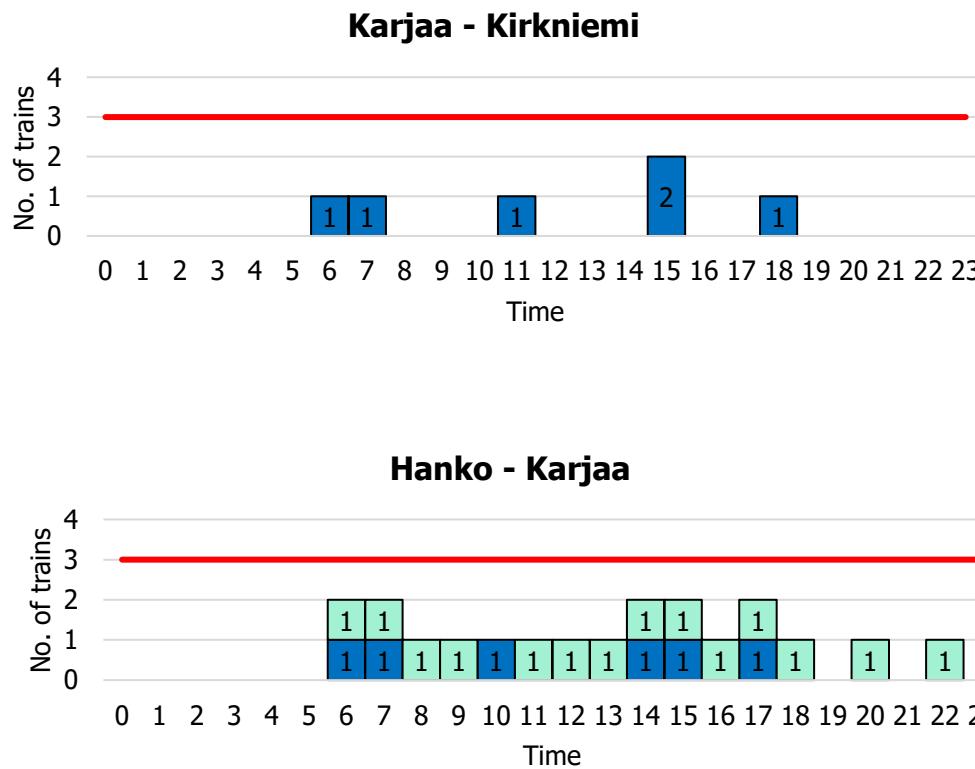
Vuokatti-Kontiomäki



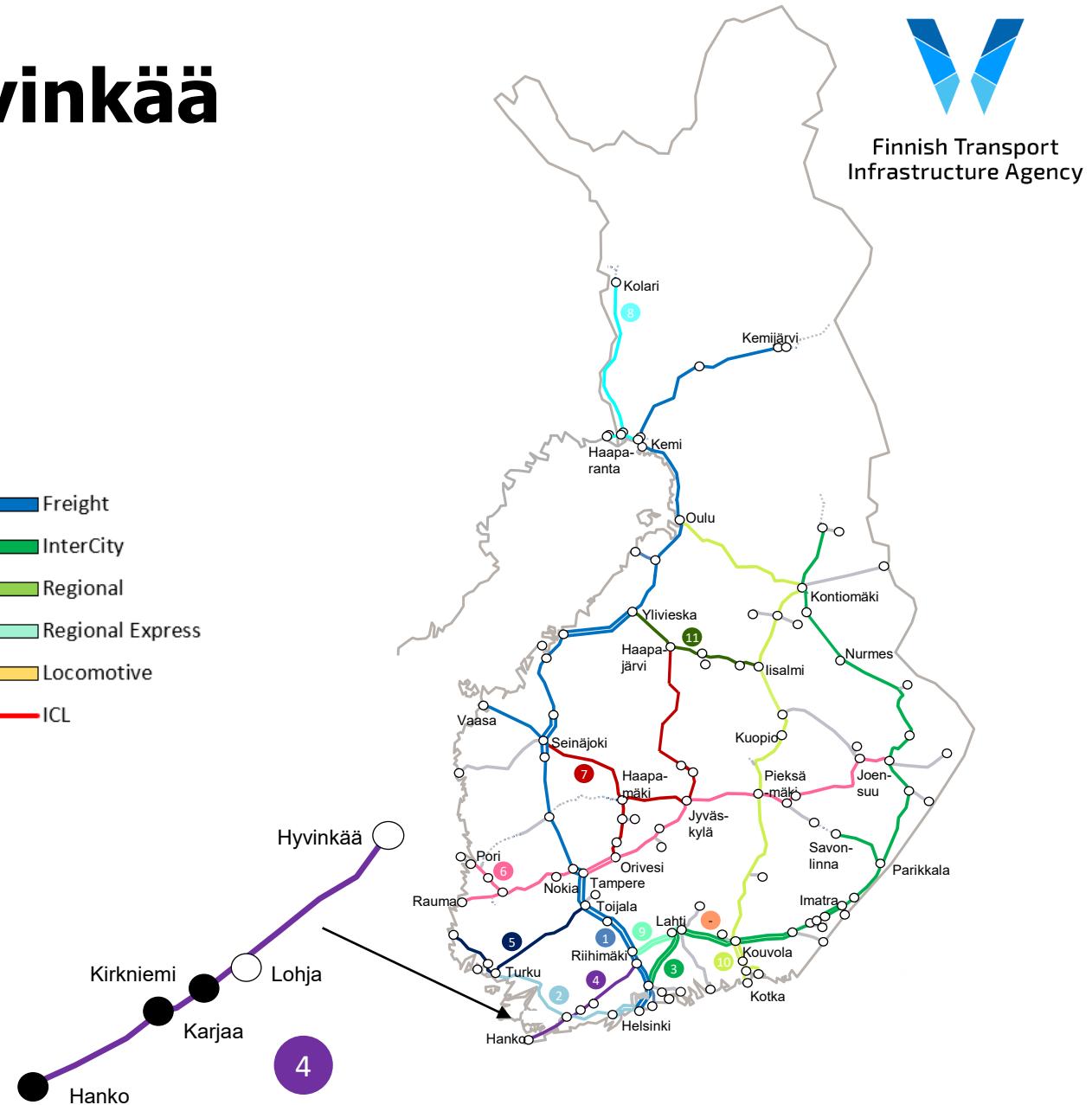
4: Hanko – Karjaa – Hyvinkää



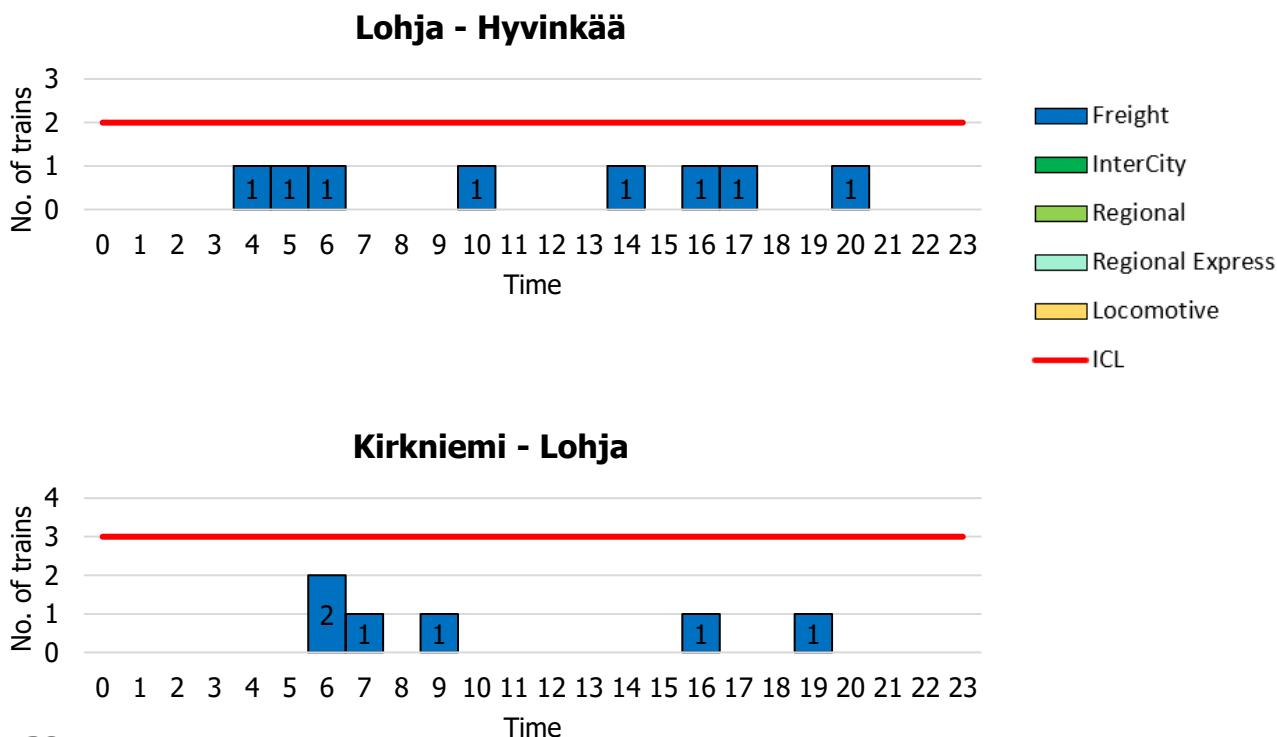
Finnish Transport
Infrastructure Agency



- Freight
- InterCity
- Regional
- Regional Express
- Locomotive
- ICL



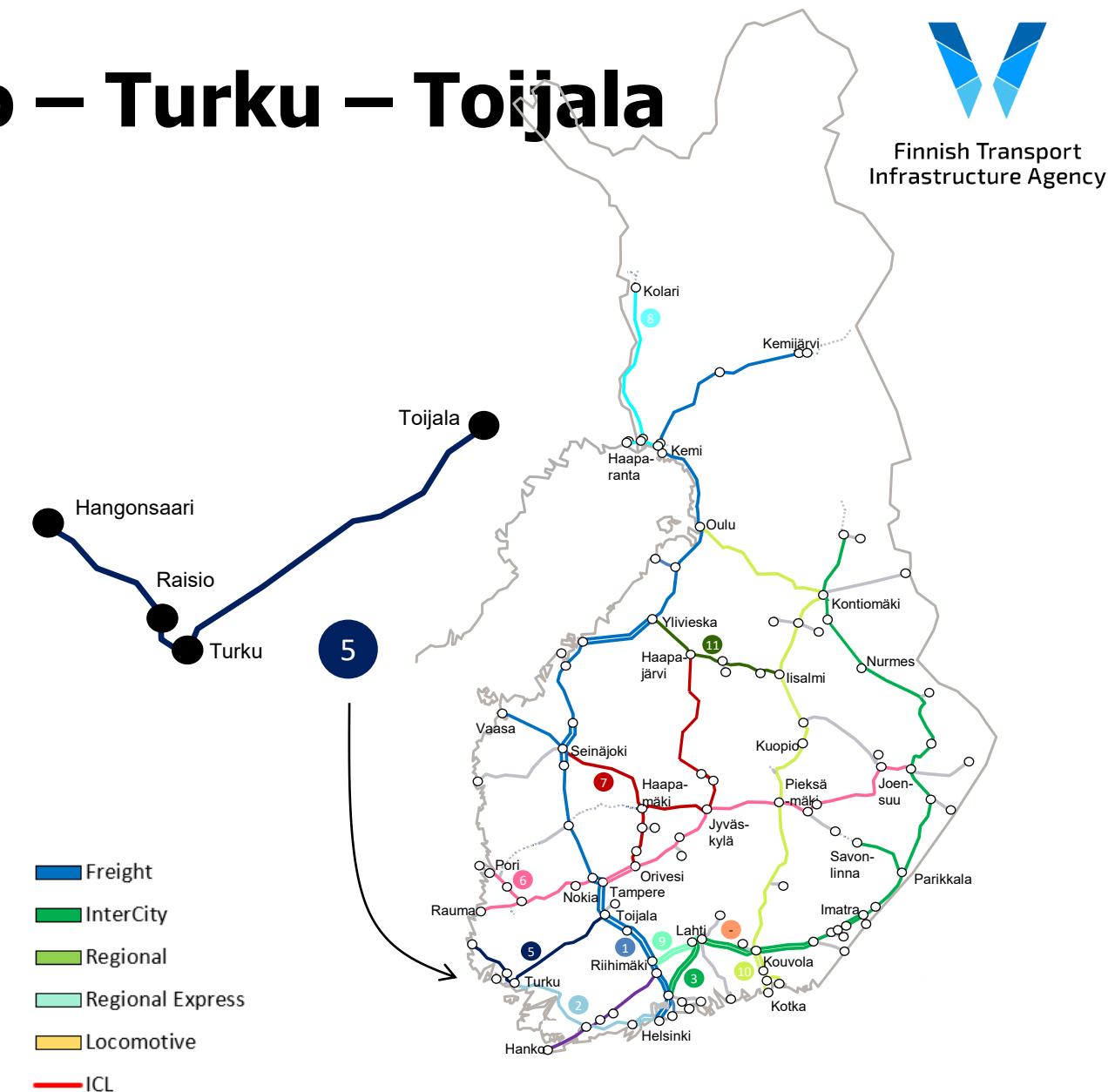
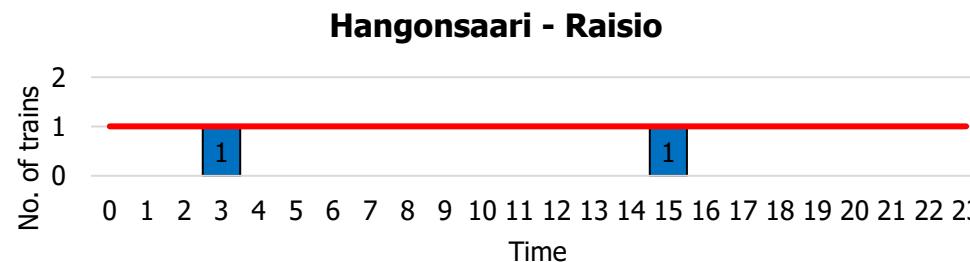
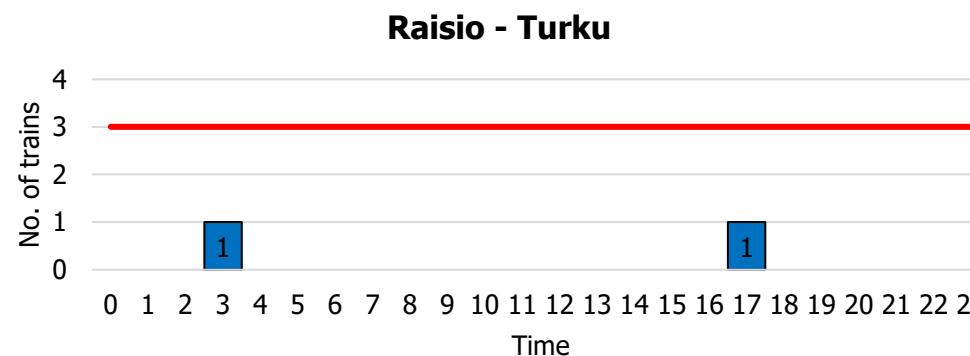
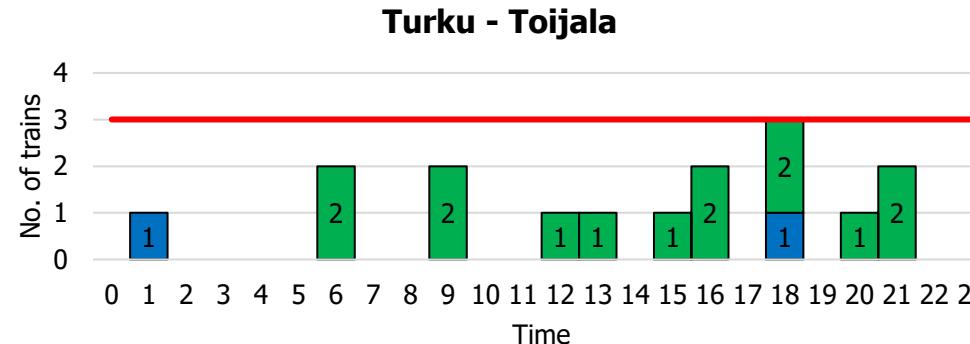
4: Hanko – Karjaa – Hyvinkää





Finnish Transport
Infrastructure Agency

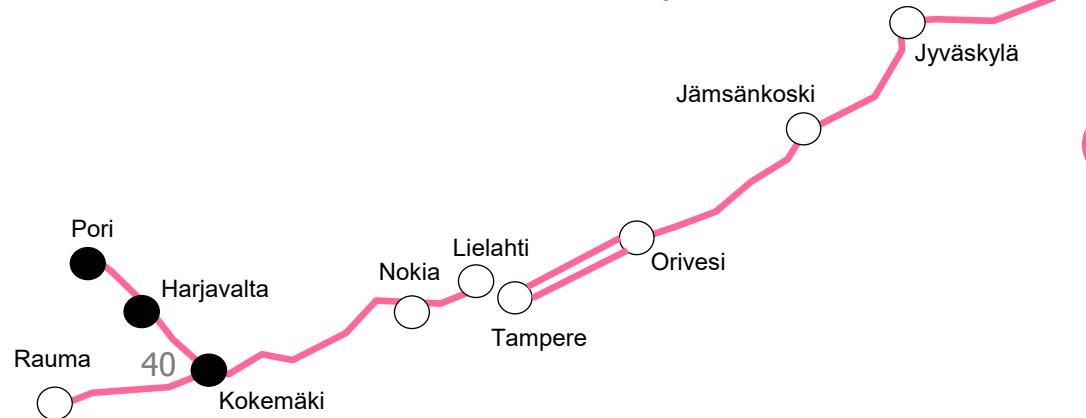
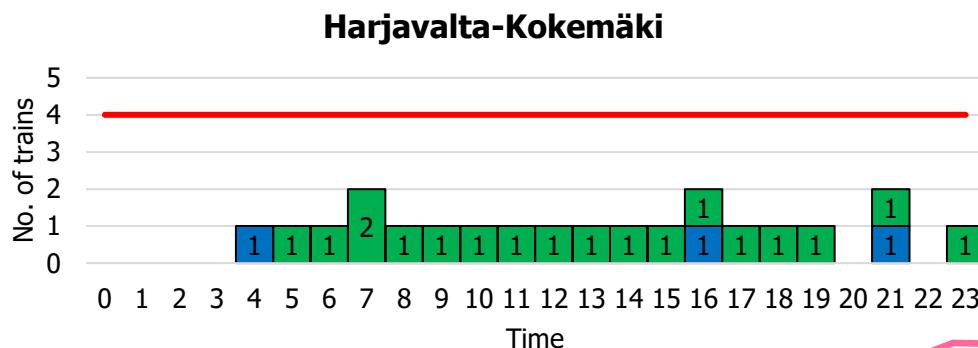
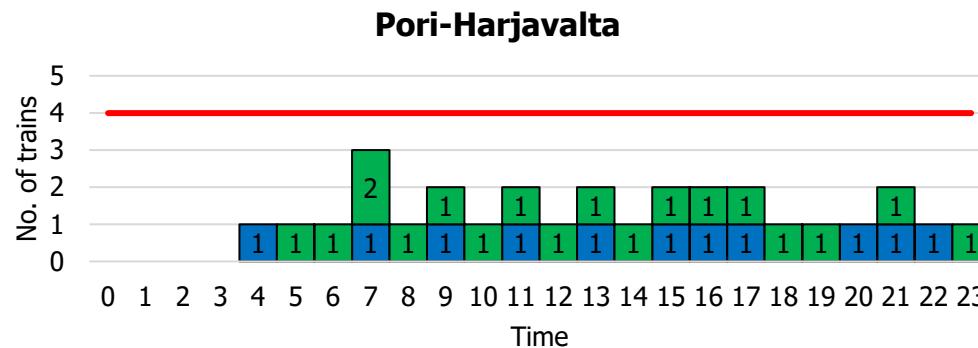
5: Hangonsaari – Raisio – Turku – Toijala



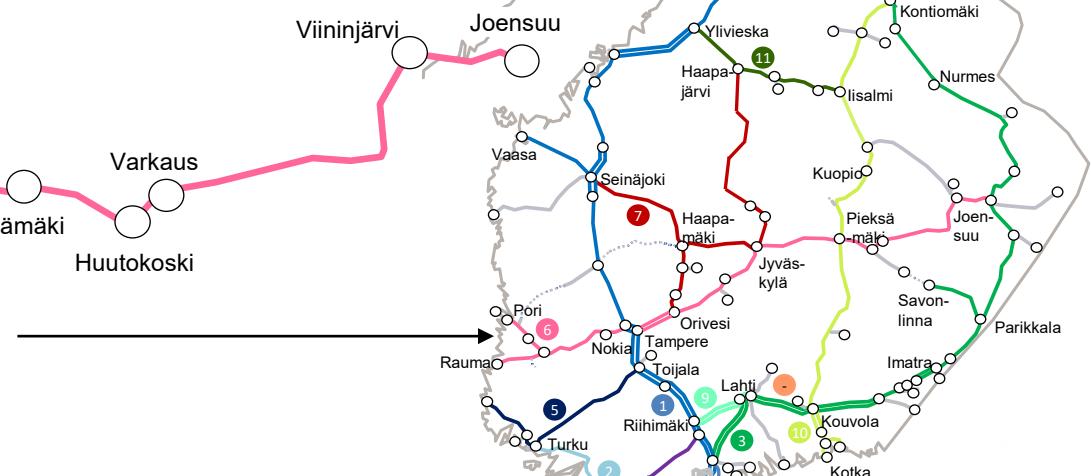
6: Pori/Rauma – Kokemäki – Lielahti – Tampere – Pieksämäki - Joensuu



Finnish Transport
Infrastructure Agency



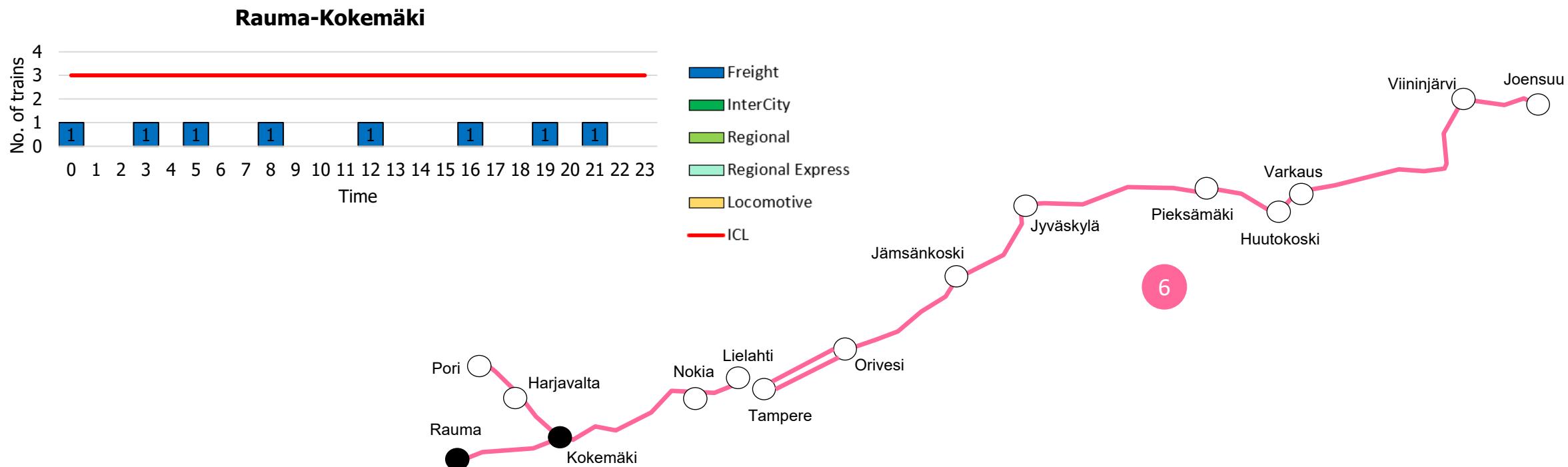
- Freight
- InterCity
- Regional
- Regional Express
- Locomotive
- ICL



6: Pori/Rauma – Kokemäki – Lielahdi – Tampere – Pieksämäki - Joensuu



Finnish Transport
Infrastructure Agency

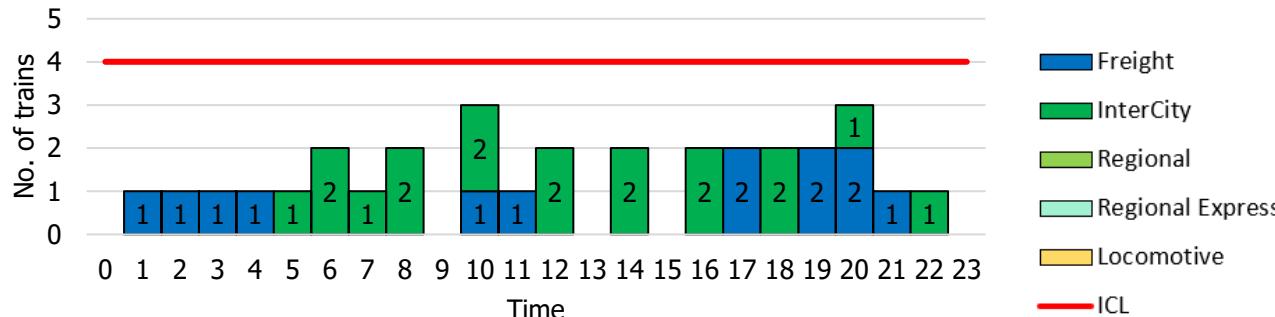


6: Pori/Rauma – Kokemäki – Lielähti – Tampere – Pieksämäki - Joensuu

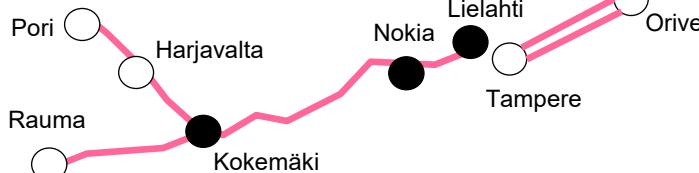
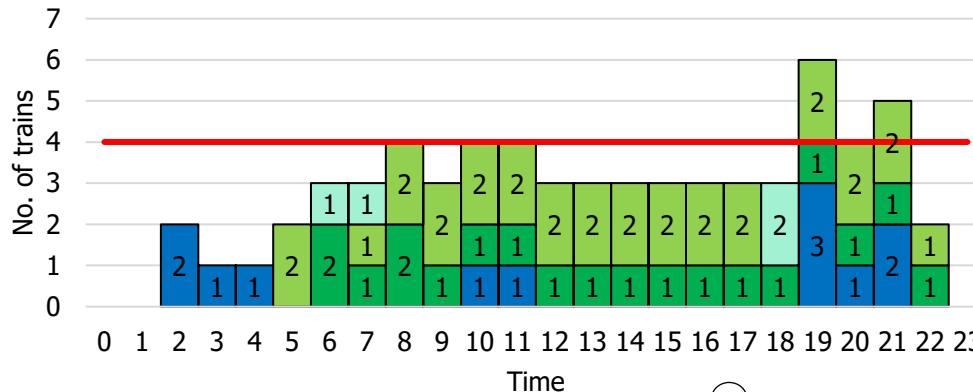


Finnish Transport
Infrastructure Agency

Kokemäki-Nokia



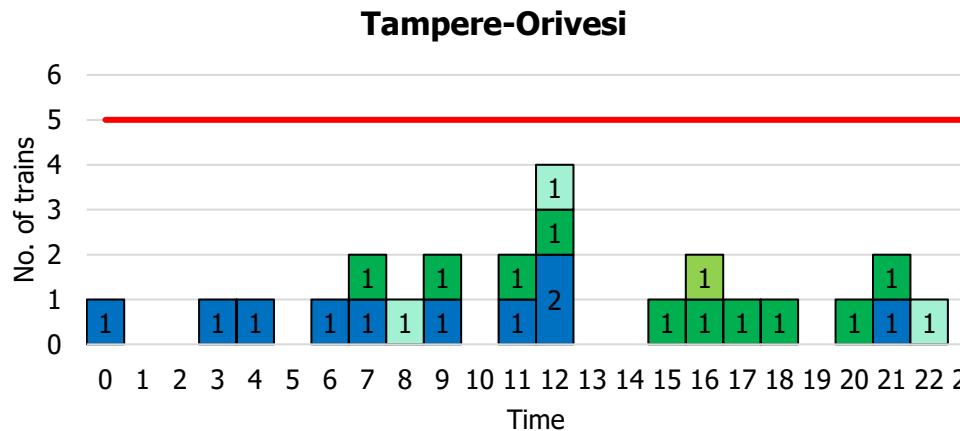
Nokia-Lielähti



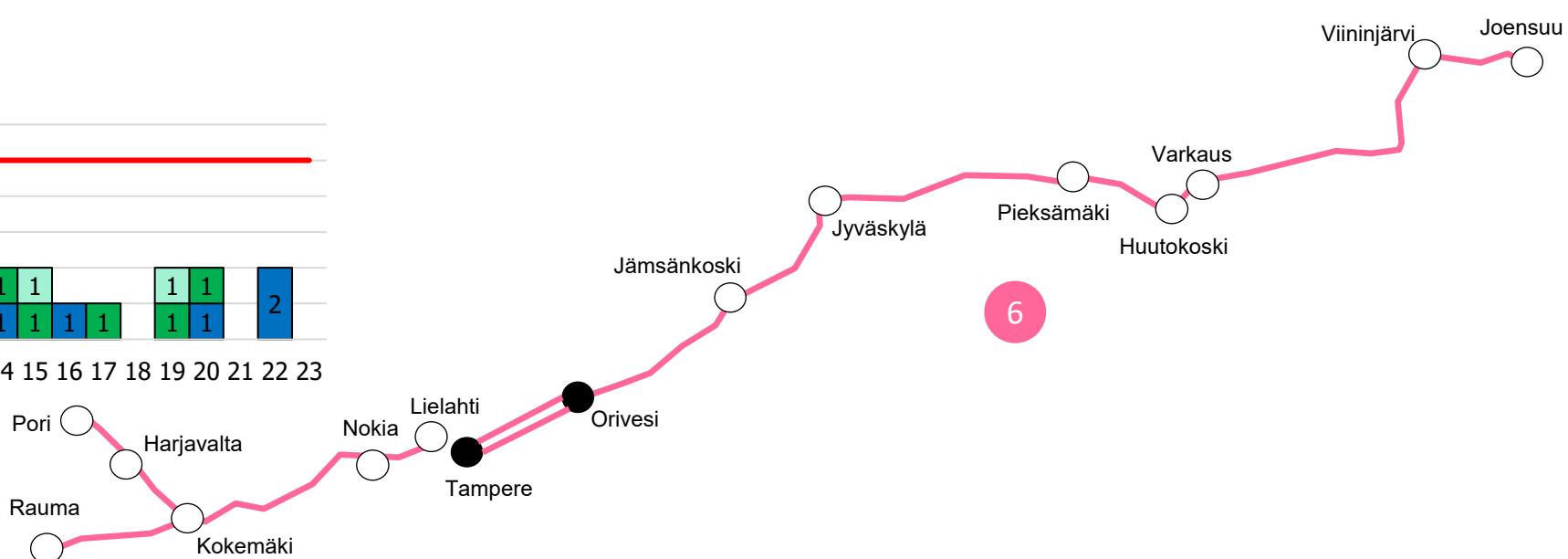
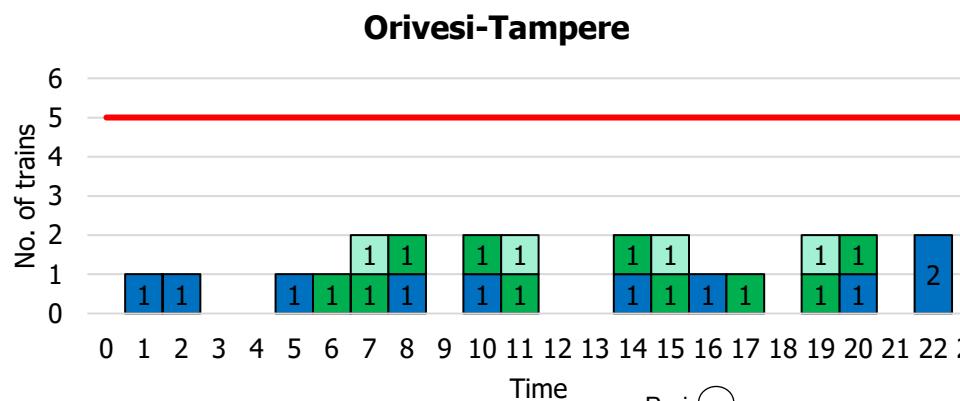
6: Pori/Rauma – Kokemäki – Lielähti – Tampere – Pieksämäki - Joensuu



Finnish Transport
Infrastructure Agency



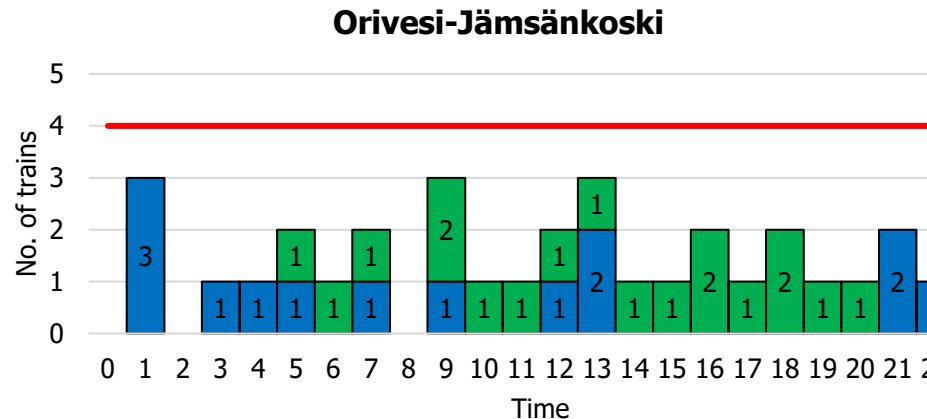
- Freight
- InterCity
- Regional
- Regional Express
- Locomotive
- ICL



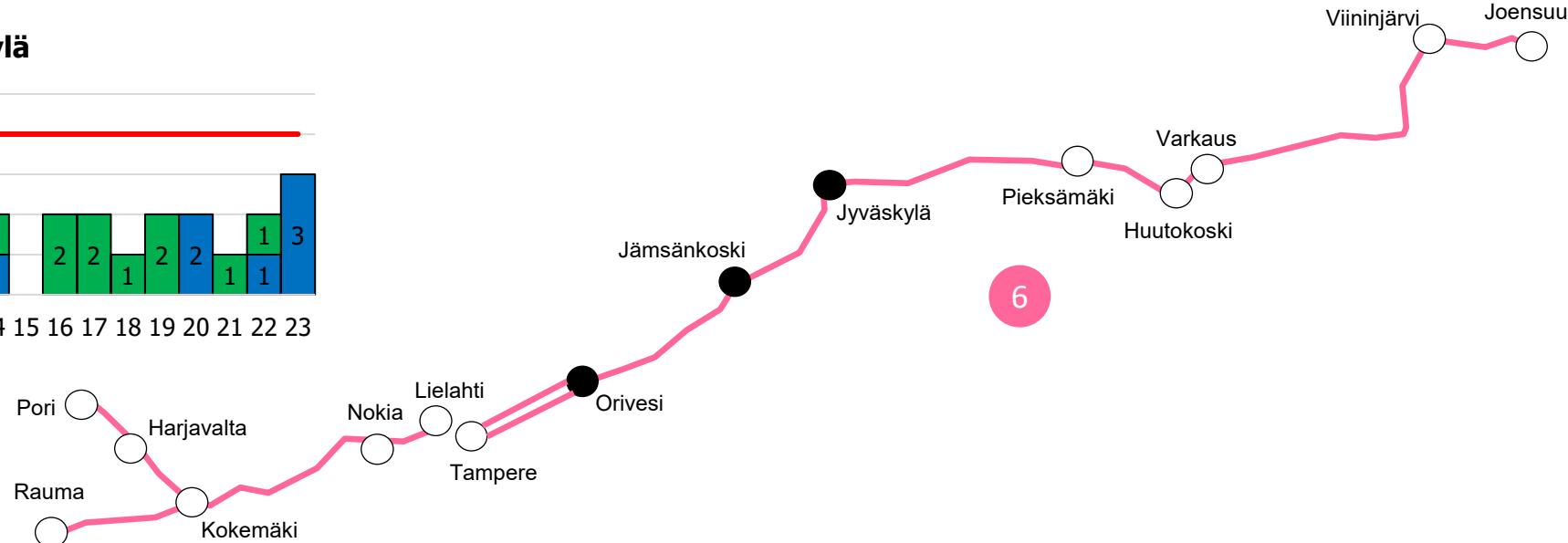
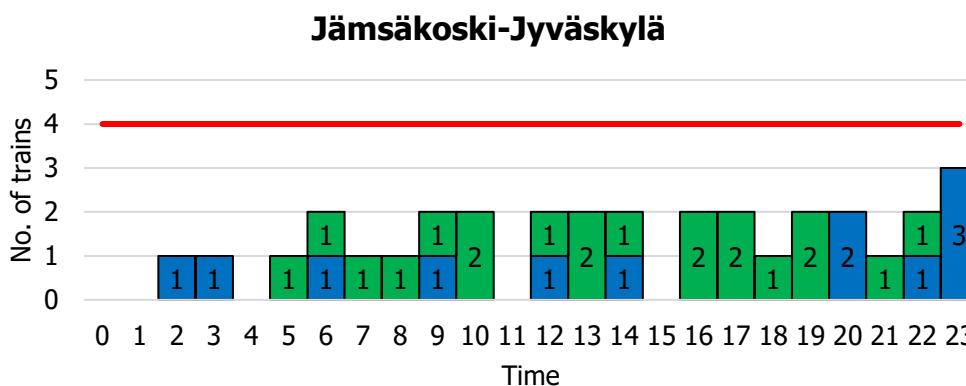
6: Pori/Rauma – Kokemäki – Lielähti – Tampere – Pieksämäki - Joensuu



Finnish Transport
Infrastructure Agency



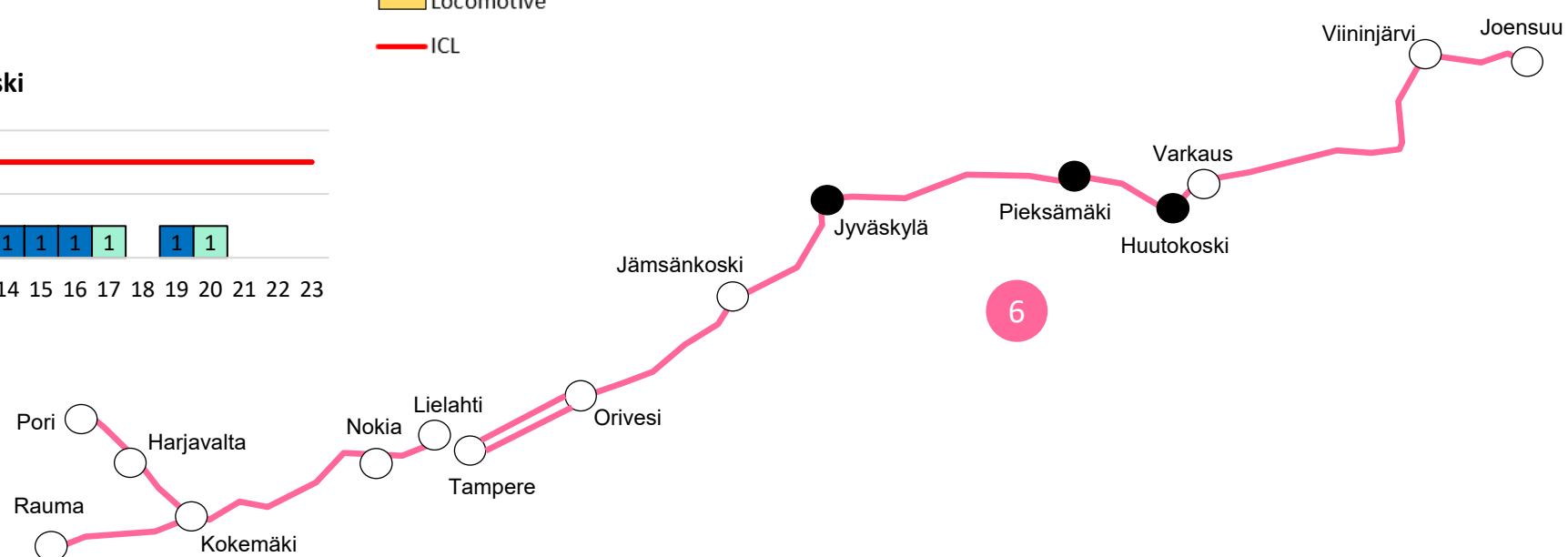
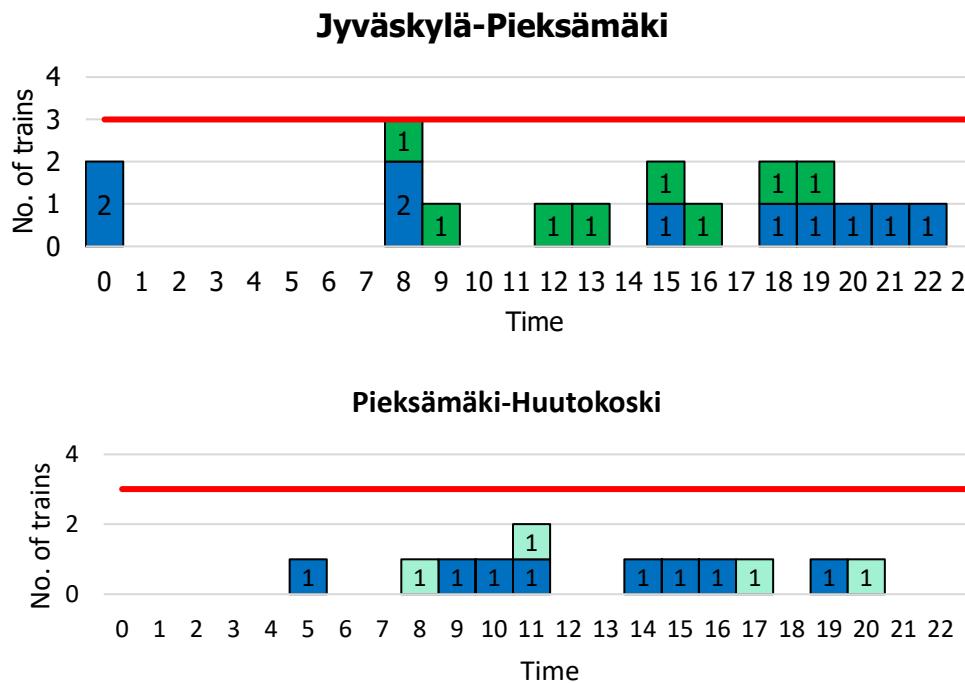
- Freight
- InterCity
- Regional
- Regional Express
- Locomotive
- ICL



6: Pori/Rauma – Kokemäki – Lielähti – Tampere – Pieksämäki - Joensuu



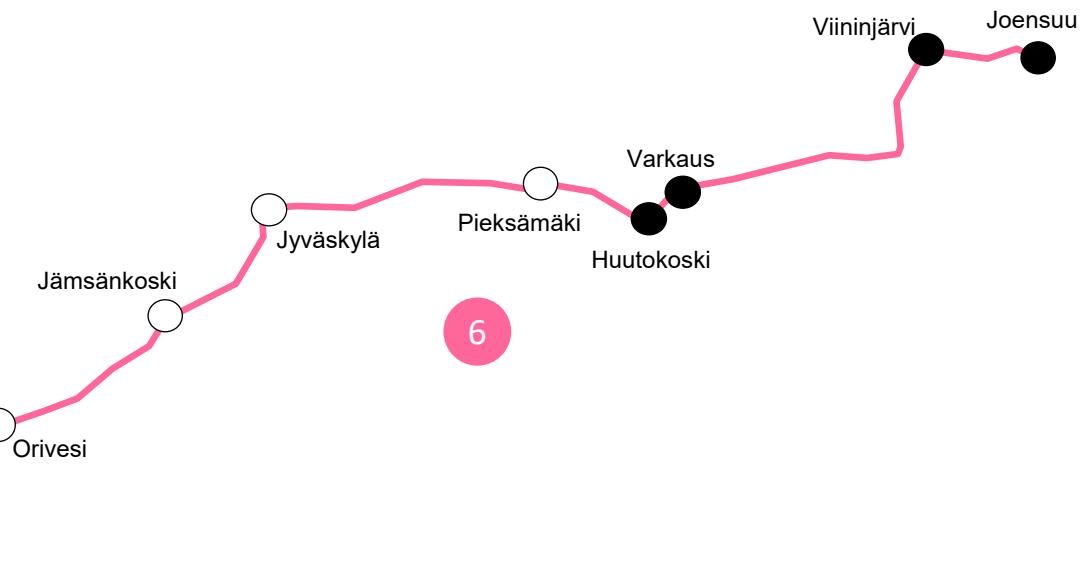
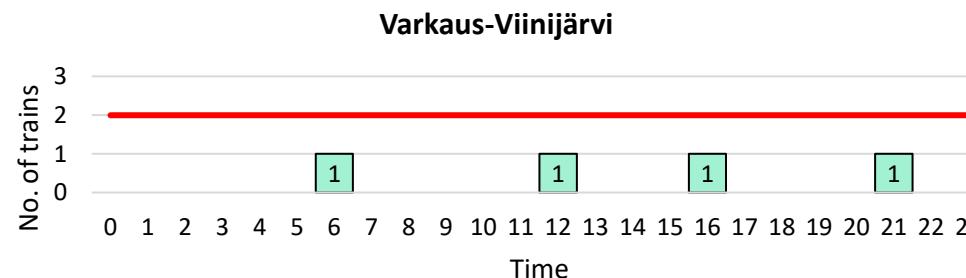
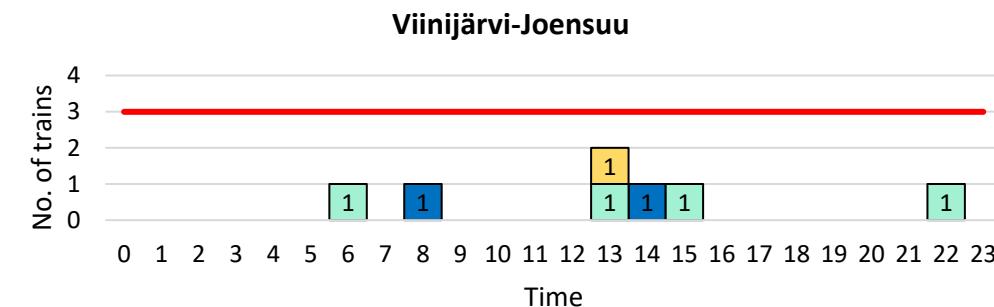
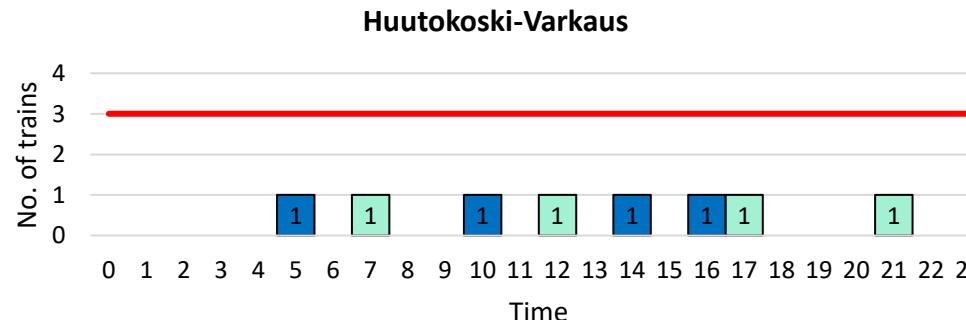
Finnish Transport
Infrastructure Agency



6: Pori/Rauma – Kokemäki – Lielähti – Tampere – Pieksämäki - Joensuu



Finnish Transport
Infrastructure Agency

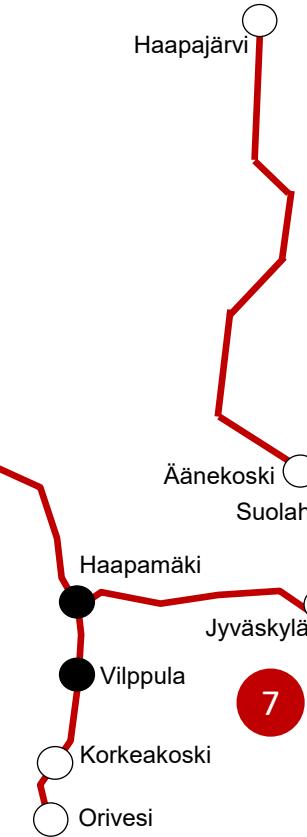
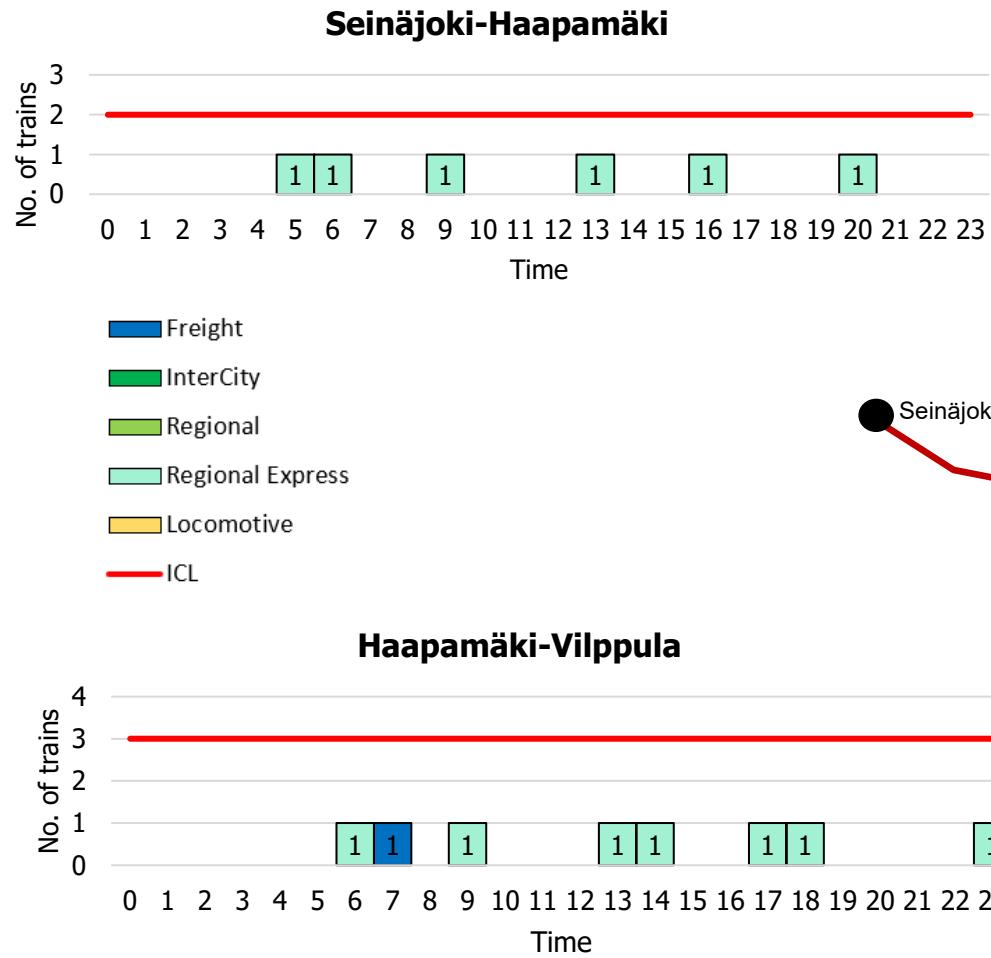


- Freight
- InterCity
- Regional
- Regional Express
- Locomotive
- ICL

7: Seinäjoki – Haapamäki – Orivesi/Jyväskylä – Haapajärvi



Finnish Transport
Infrastructure Agency

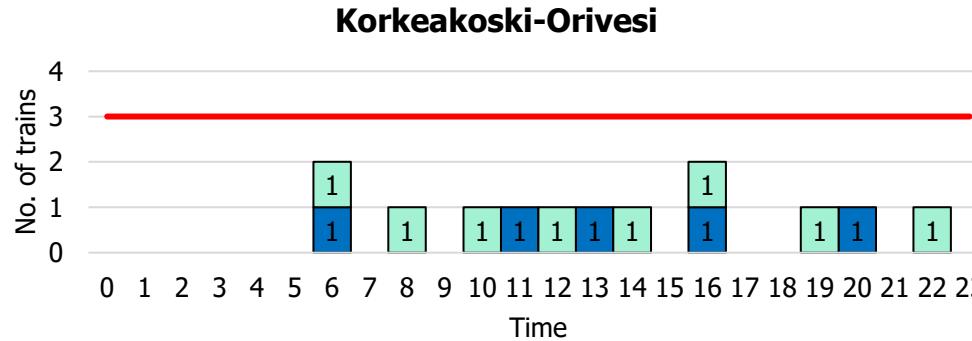
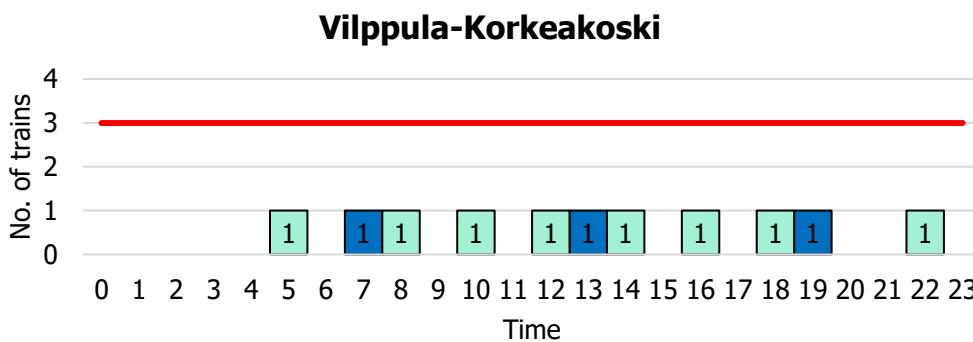


7

7: Seinäjoki – Haapamäki – Orivesi/Jyväskylä – Haapajärvi



Finnish Transport
Infrastructure Agency



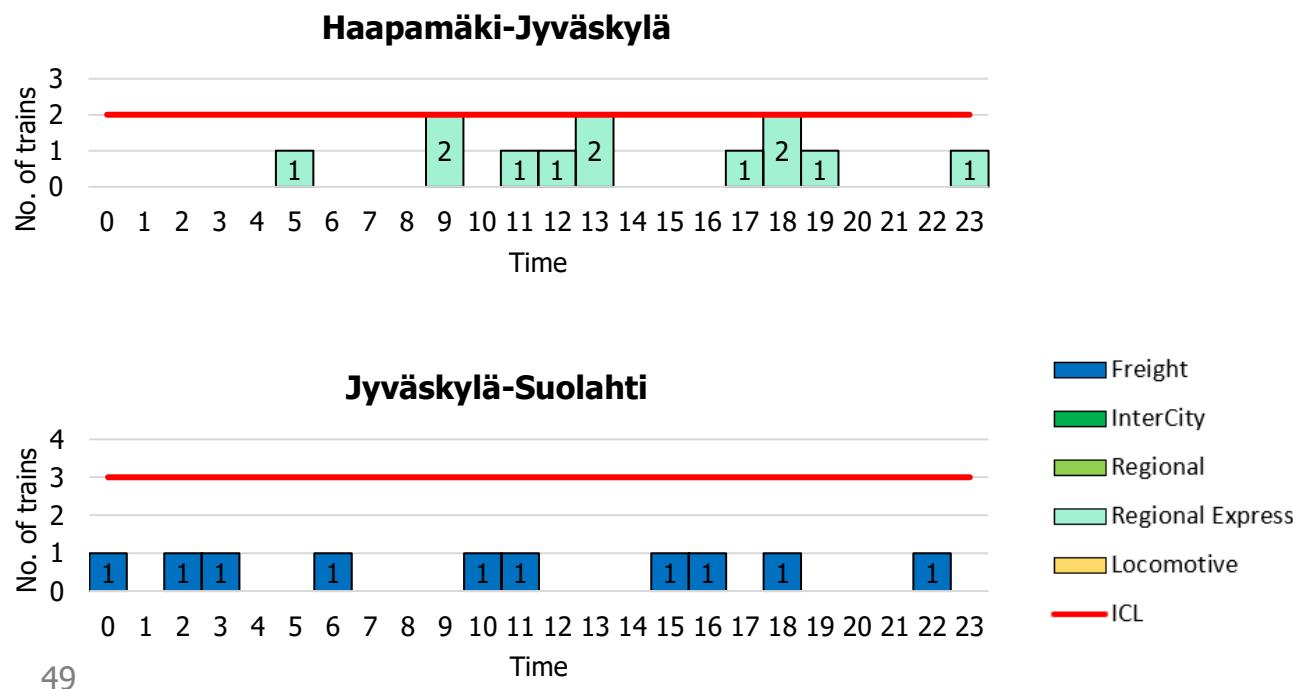
- Freight
- InterCity
- Regional
- Regional Express
- Locomotive
- ICL



7: Seinäjoki – Haapamäki – Orivesi/Jyväskylä – Haapajärvi



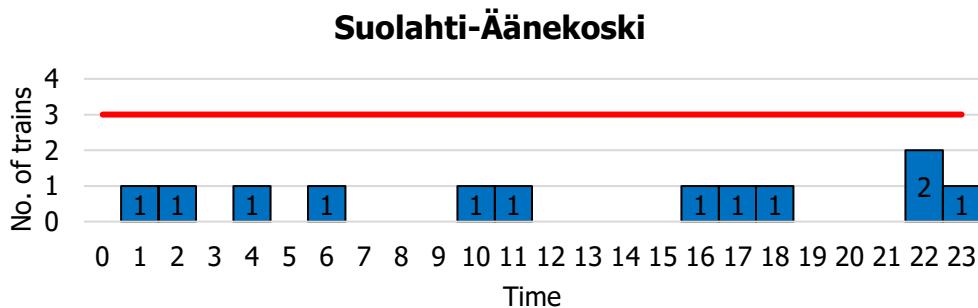
Finnish Transport
Infrastructure Agency



7: Seinäjoki – Haapamäki – Orivesi/Jyväskylä – Haapajärvi



Finnish Transport
Infrastructure Agency



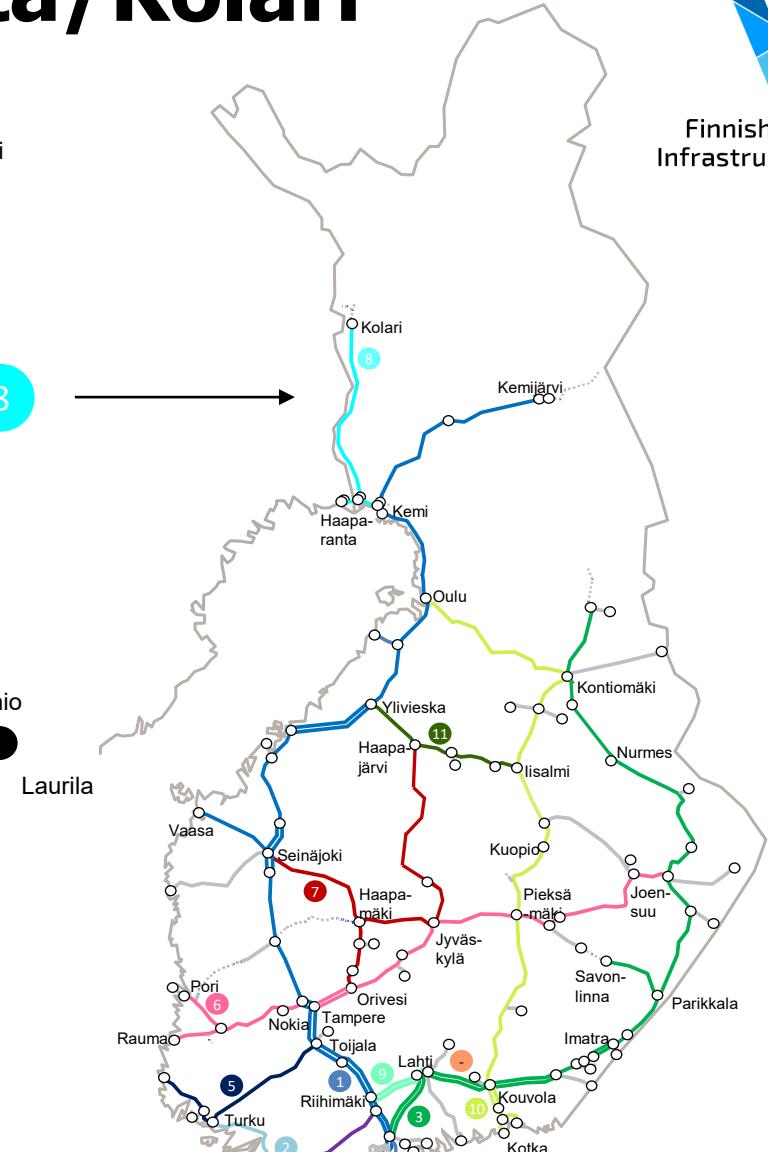
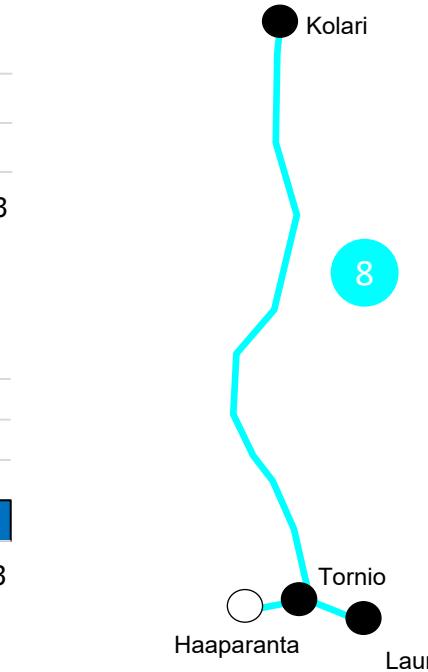
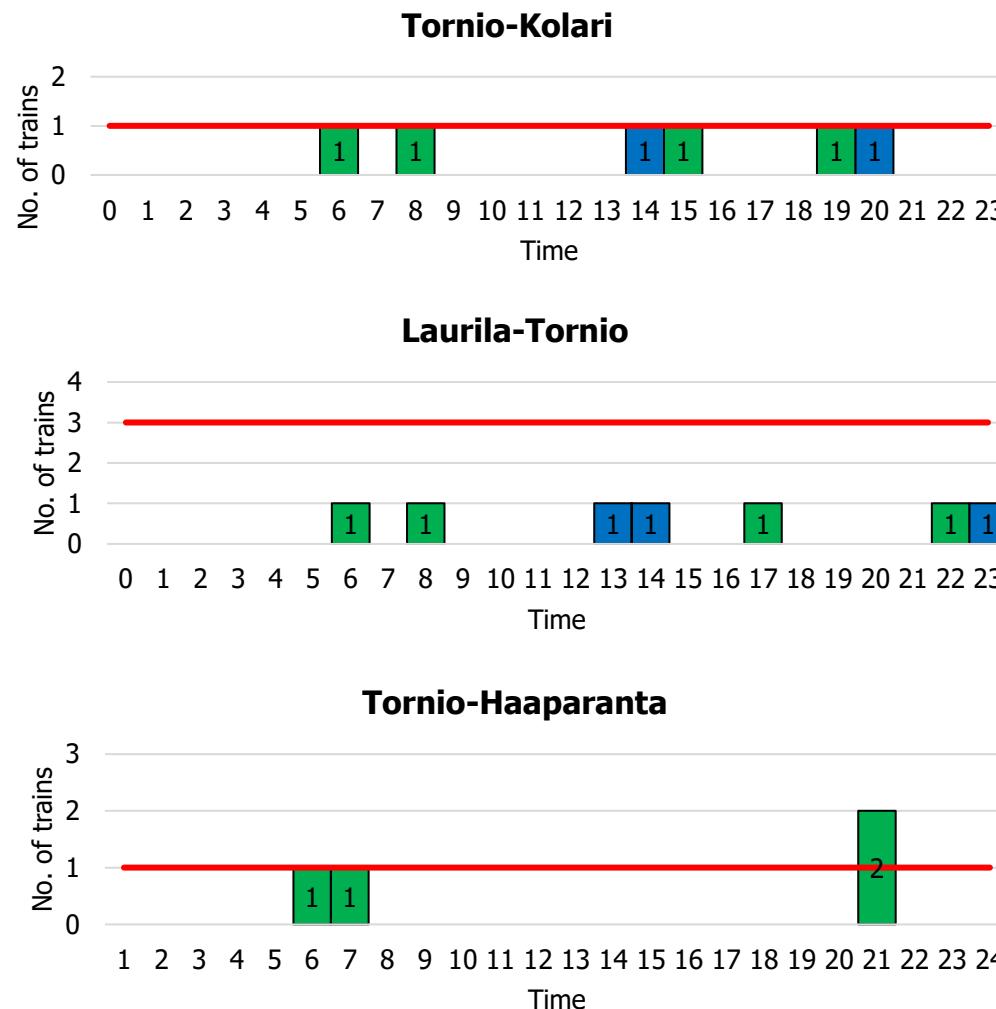
- Freight
- InterCity
- Regional
- Regional Express
- Locomotive
- ICL



8: (Kemi) – Laurila – Haaparanta/Kolari



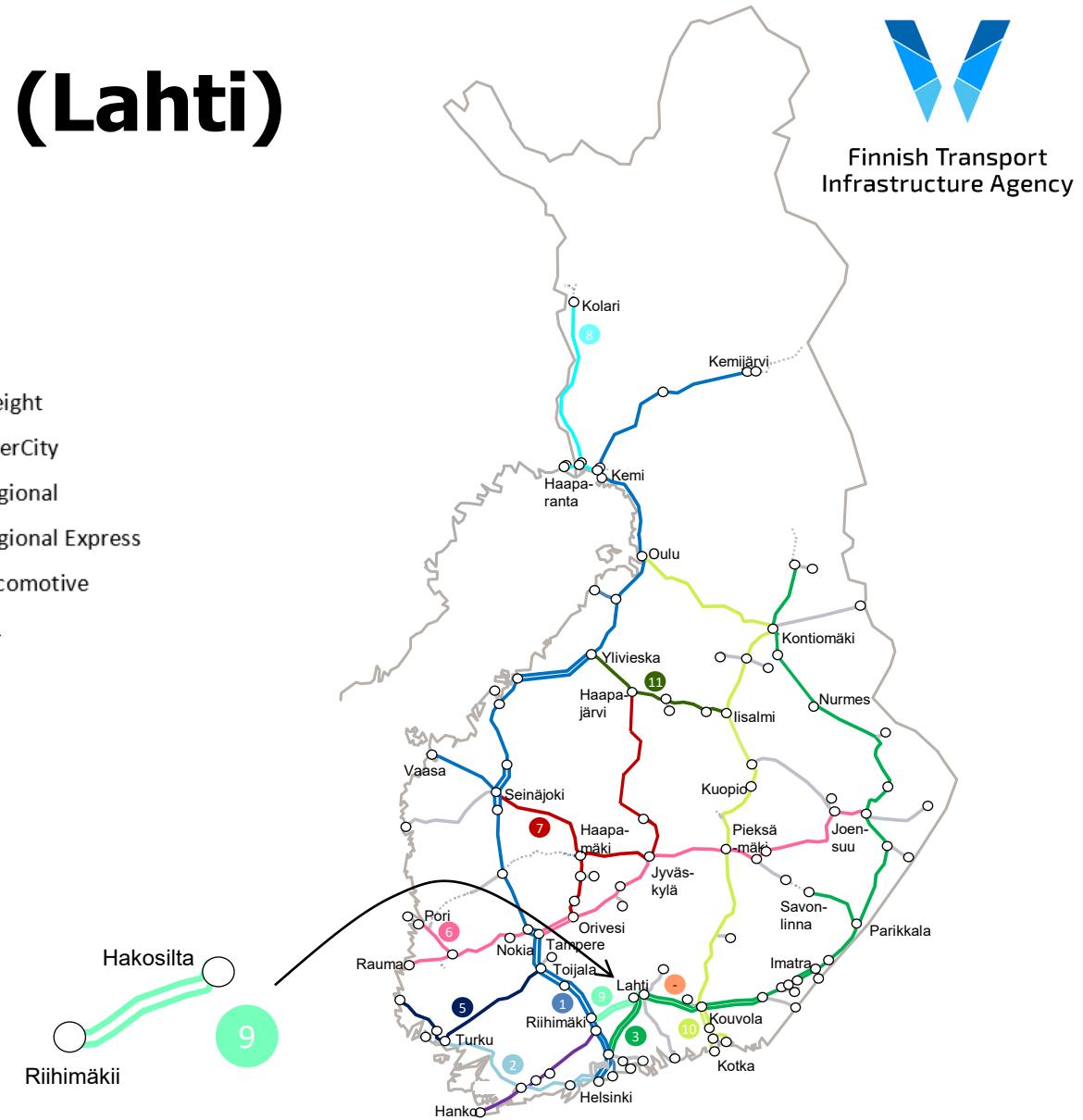
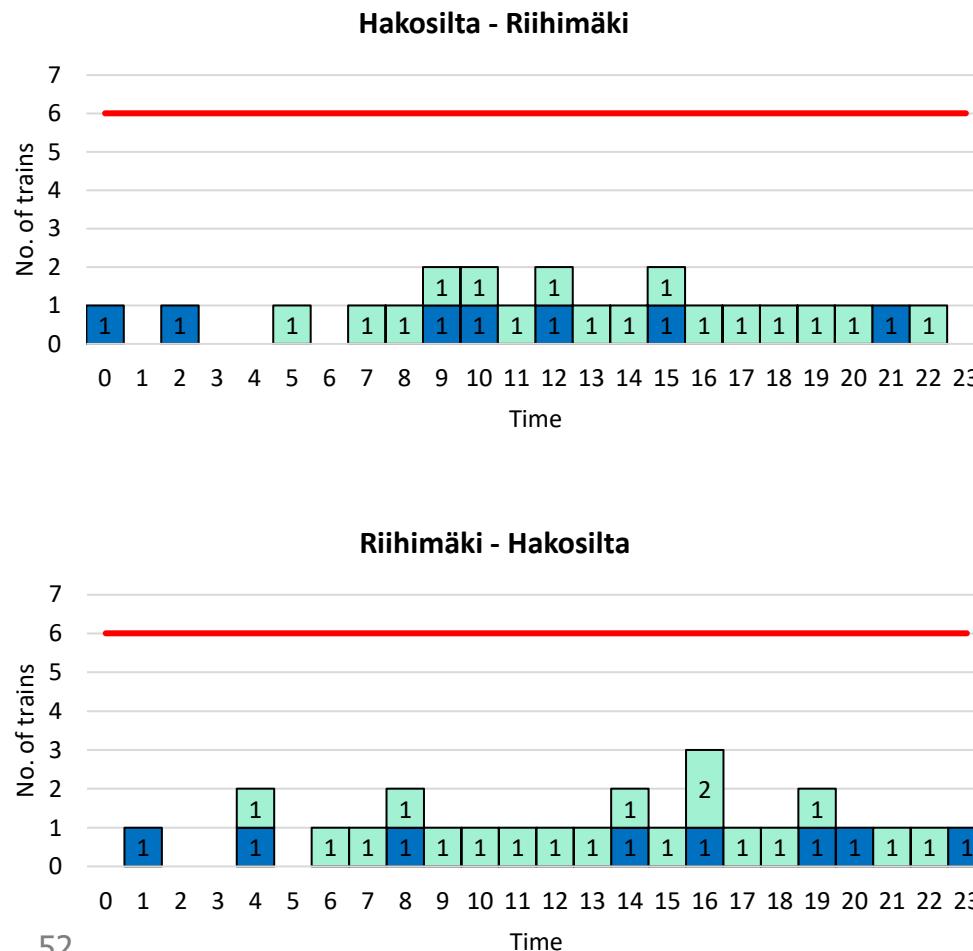
Finnish Transport
Infrastructure Agency



9: Riihimäki – Hakosilta – (Lahti)



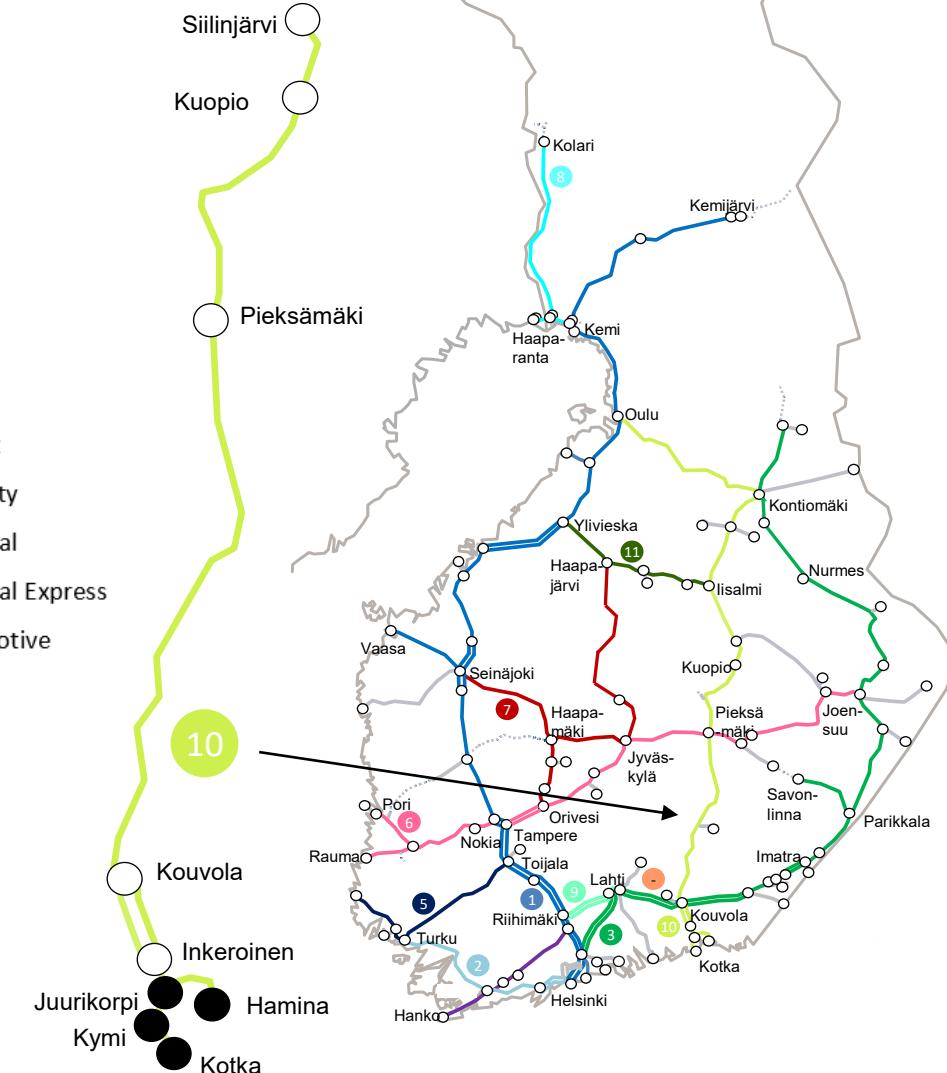
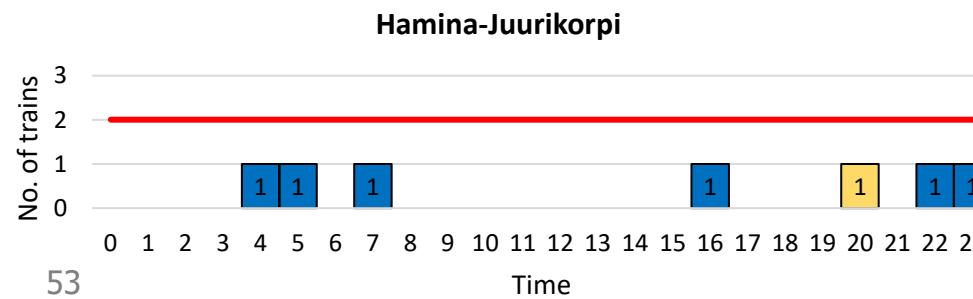
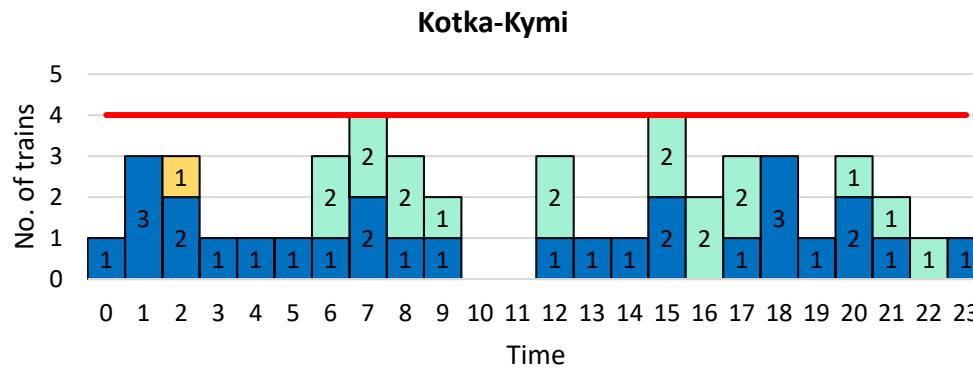
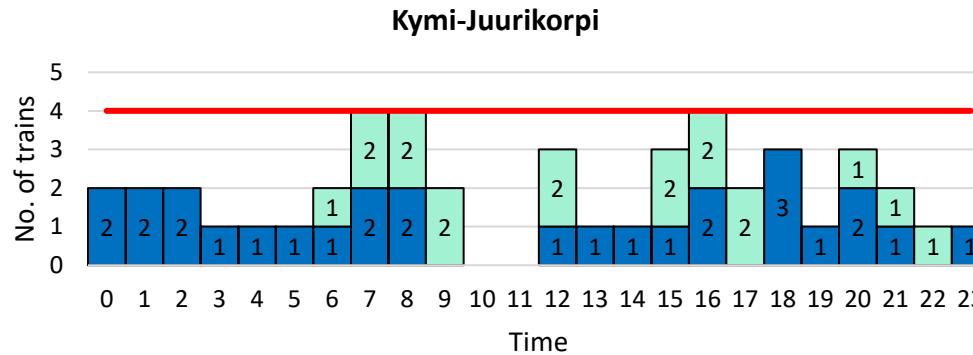
Finnish Transport
Infrastructure Agency



10: Kotka/Hamina – Kouvola – Pieksämäki – Kontiomäki – Oulu



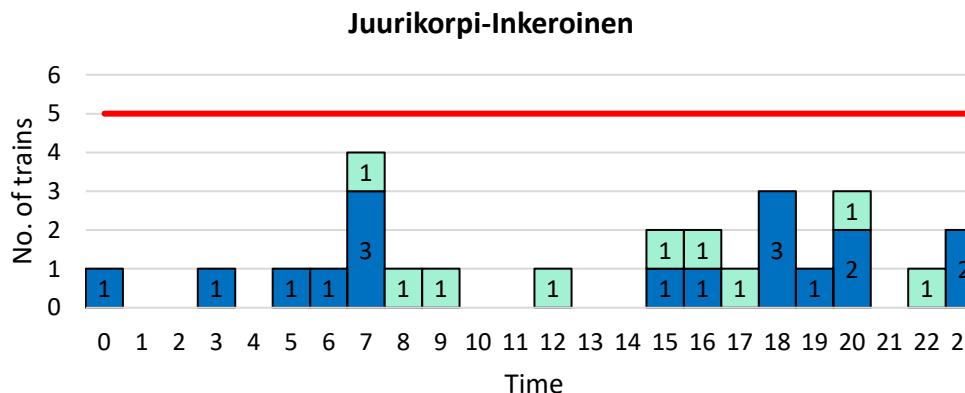
Finnish Transport
Infrastructure Agency



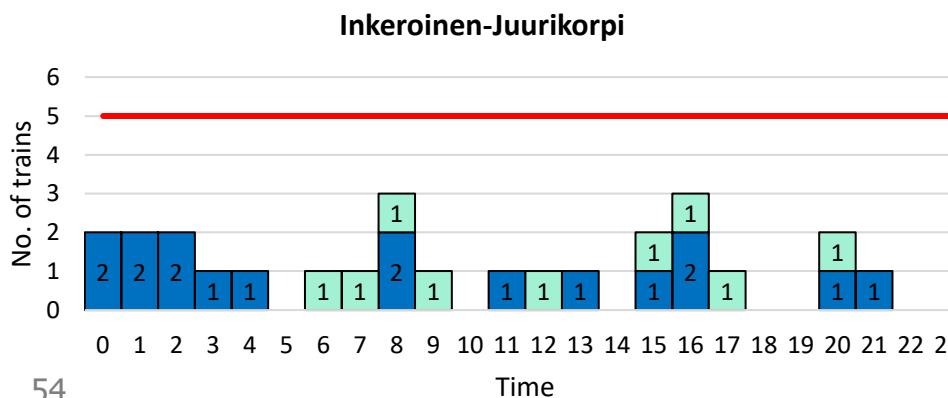
10: Kotka/Hamina – Kouvola – Pieksämäki – Kontiomäki – Oulu



Finnish Transport
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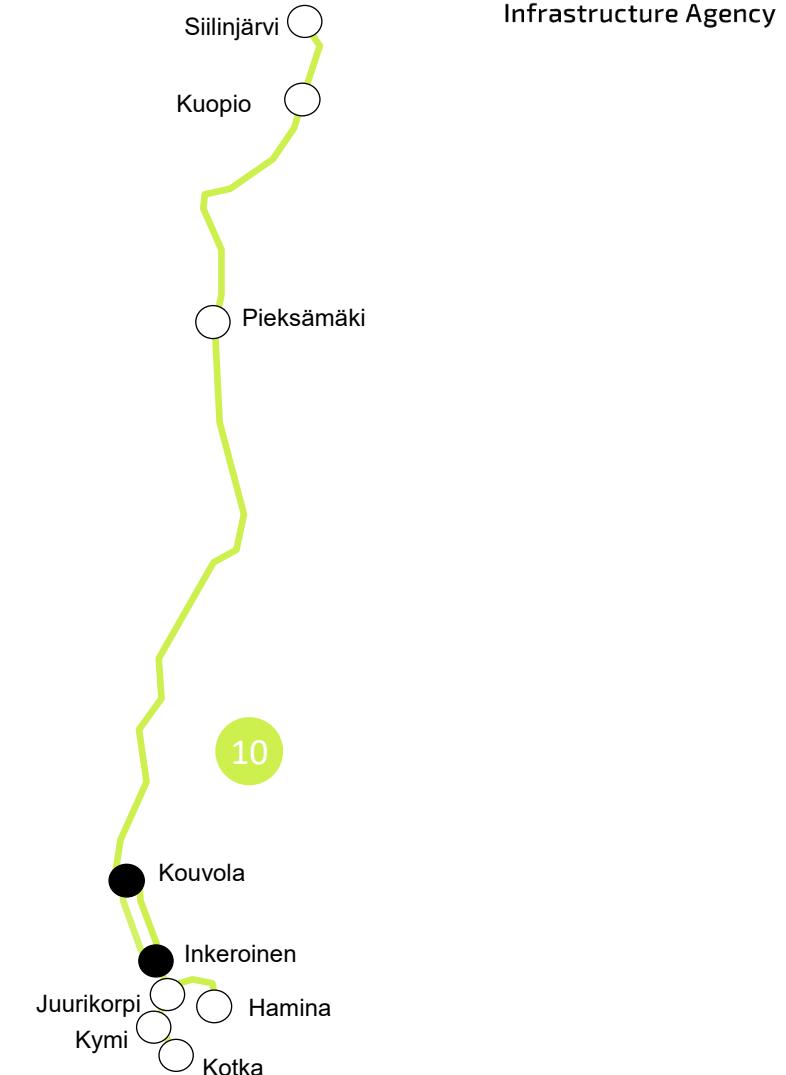
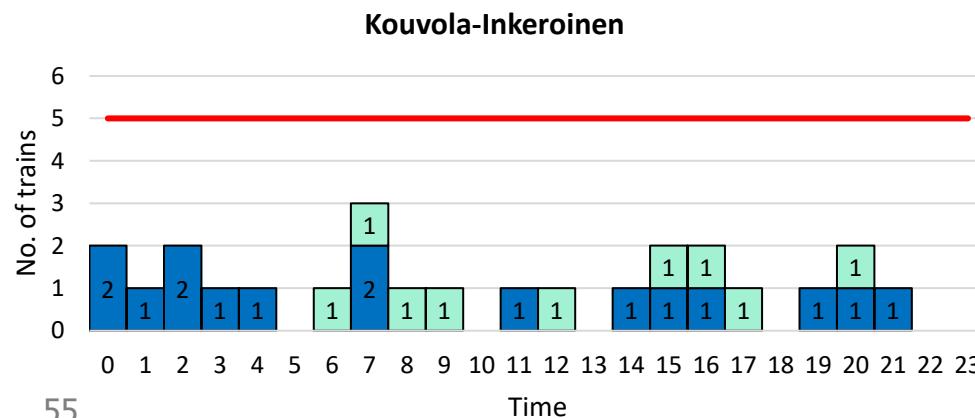
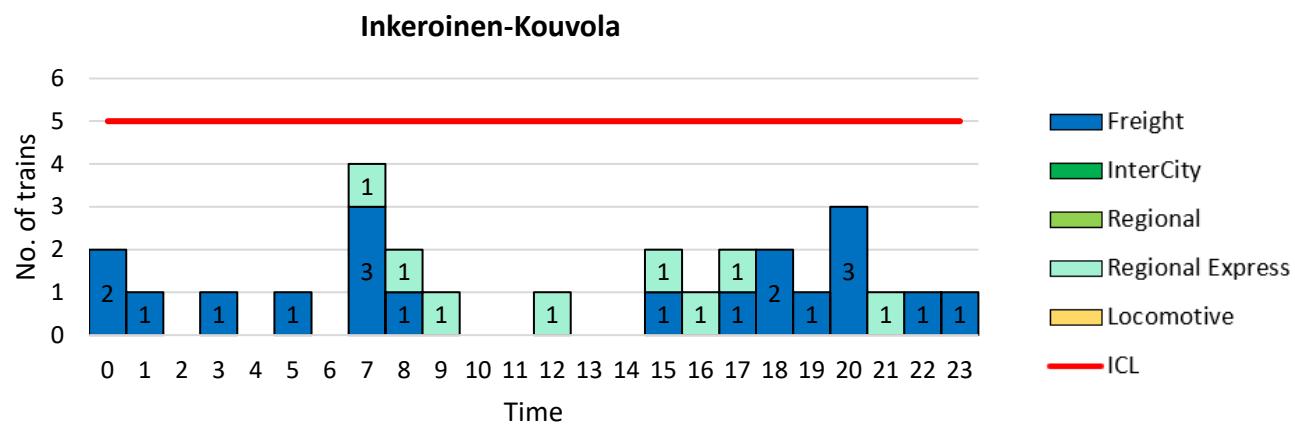
- Freight
- InterCity
- Regional
- Regional Express
- Locomotive
- ICL



10: Kotka/Hamina – Kouvola – Pieksämäki – Kontiomäki – Oulu



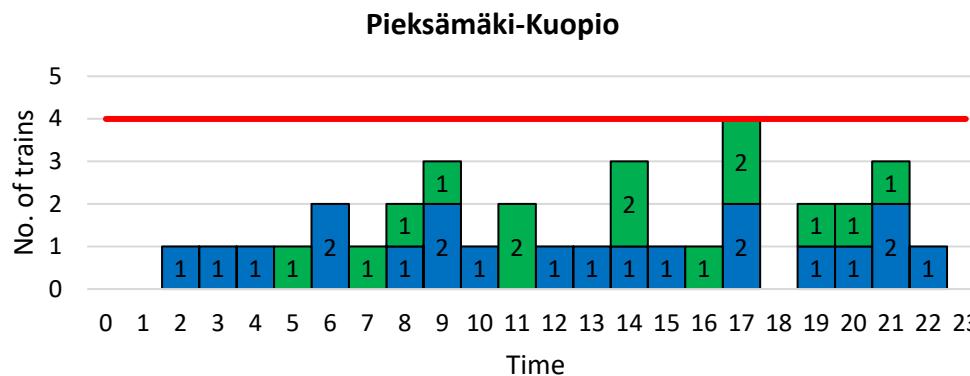
Finnish Transport
Infrastructure Agency



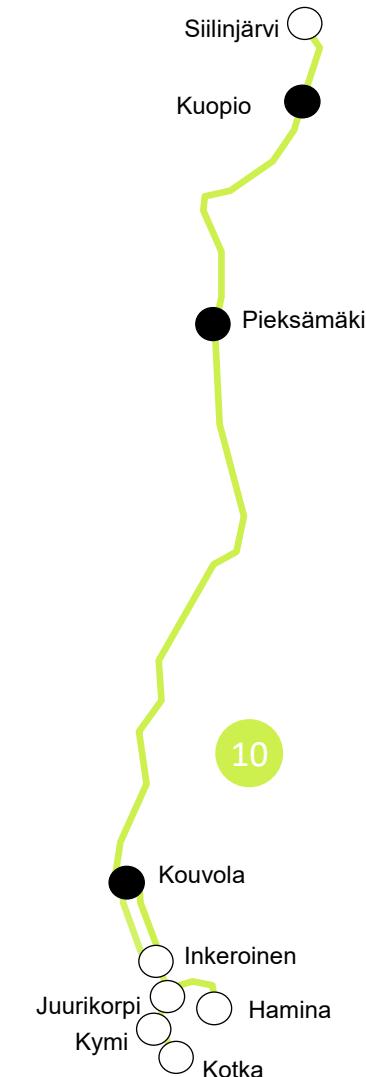
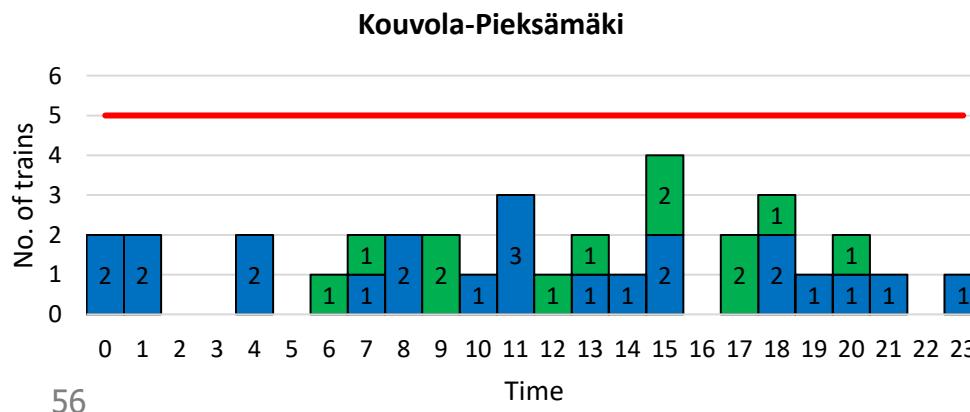
10: Kotka/Hamina – Kouvola – Pieksämäki – Kontiomäki – Oulu



Finnish Transport
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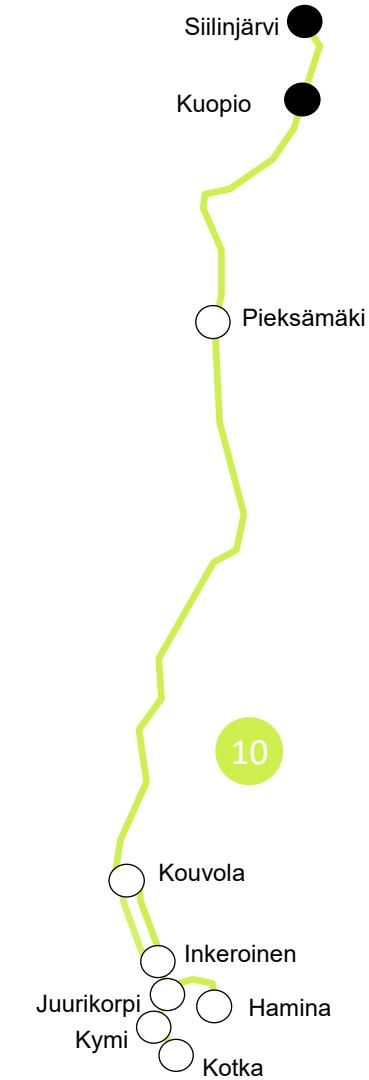
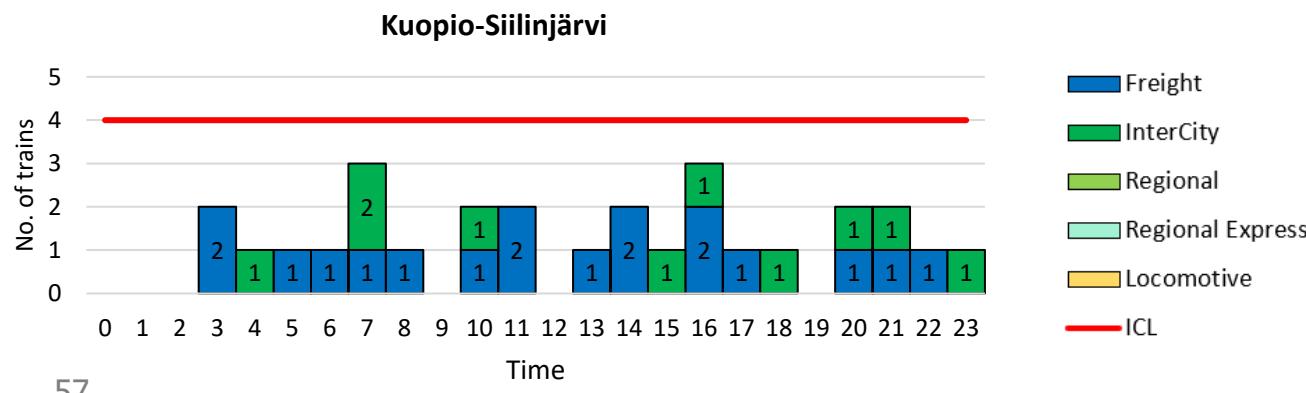
- Freight
- InterCity
- Regional
- Regional Express
- Locomotive
- ICL



10: Kotka/Hamina – Kouvola – Pieksämäki – Kontiomäki – Oulu



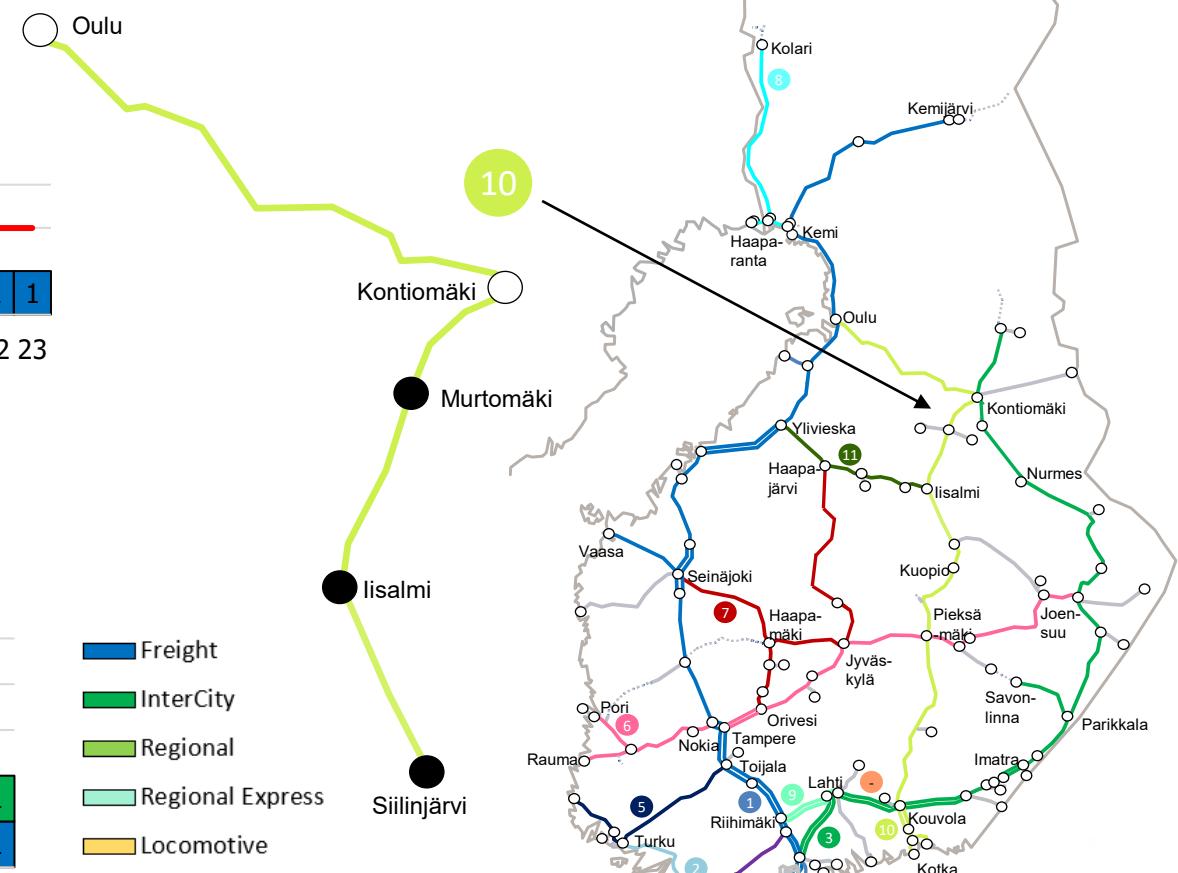
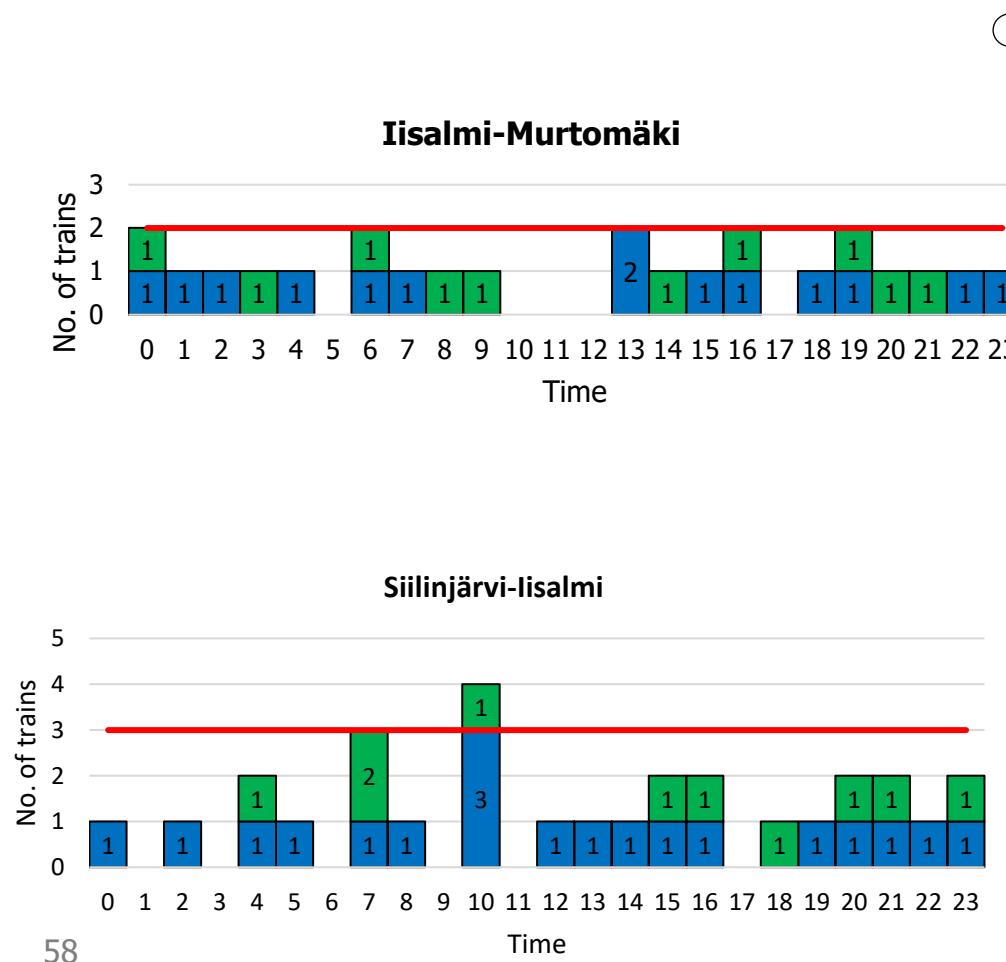
Finnish Transport
Infrastructure Agency



10: Kotka/Hamina – Kouvola – Pieksämäki – Kontiomäki – Oulu



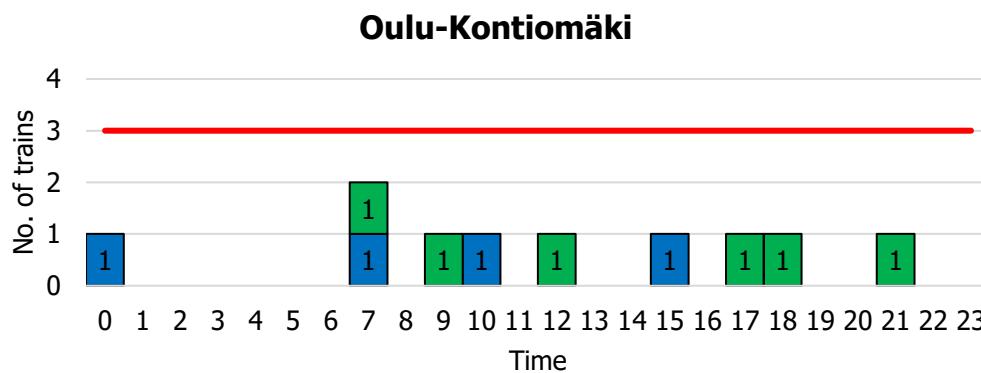
Finnish Transport
Infrastructure Agency



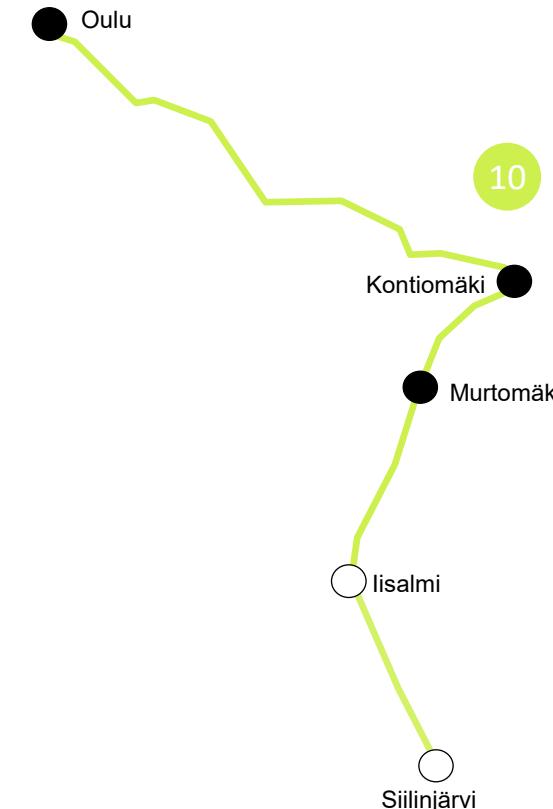
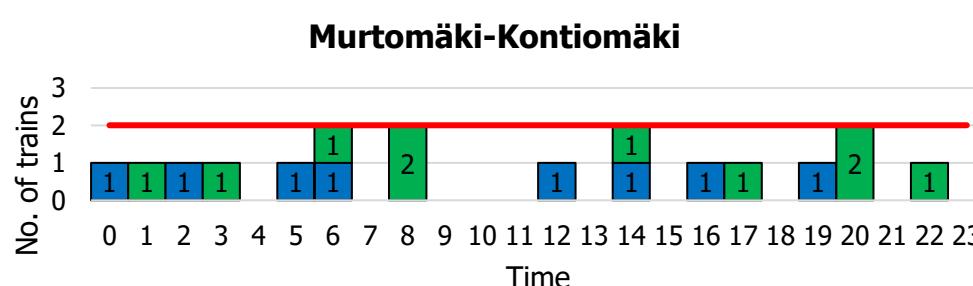
10: Kotka/Hamina – Kouvola – Pieksämäki – Kontiomäki – Oulu



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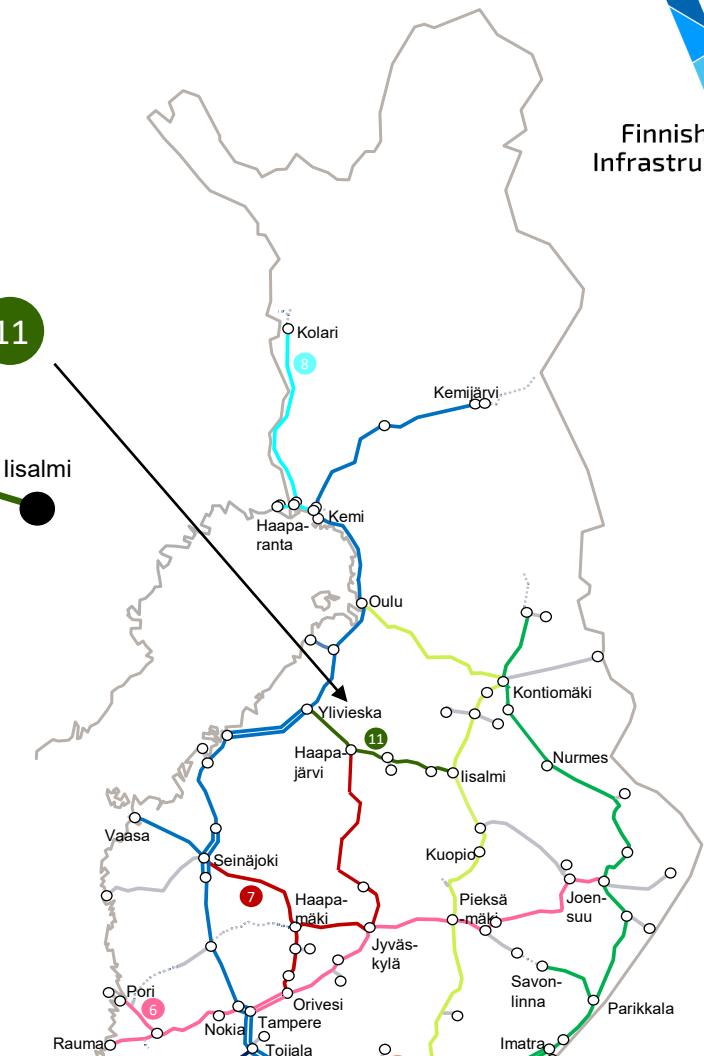
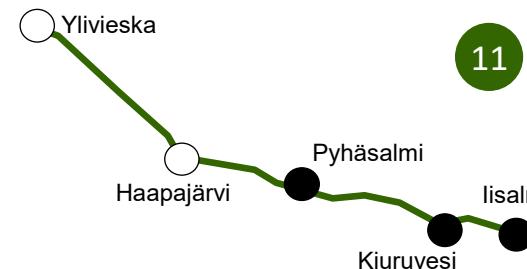
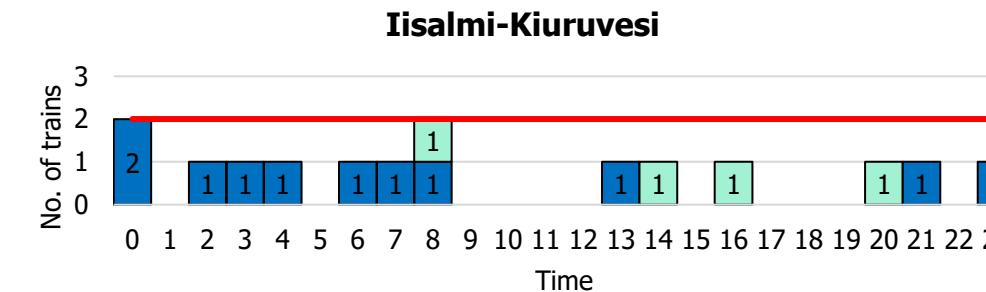
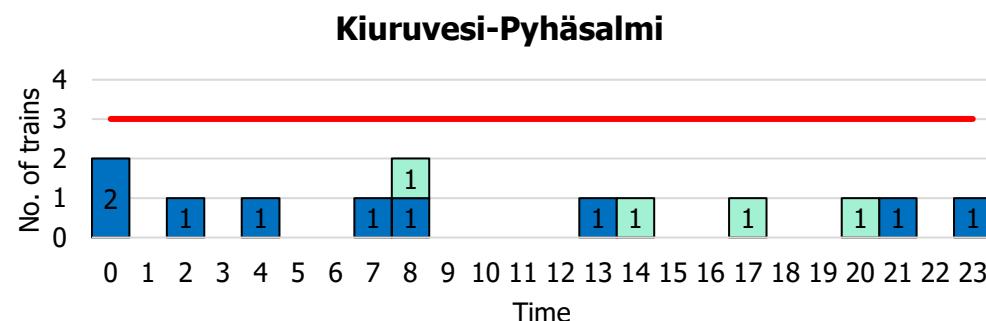
- Freight
- InterCity
- Regional
- Regional Express
- Locomotive
- ICL



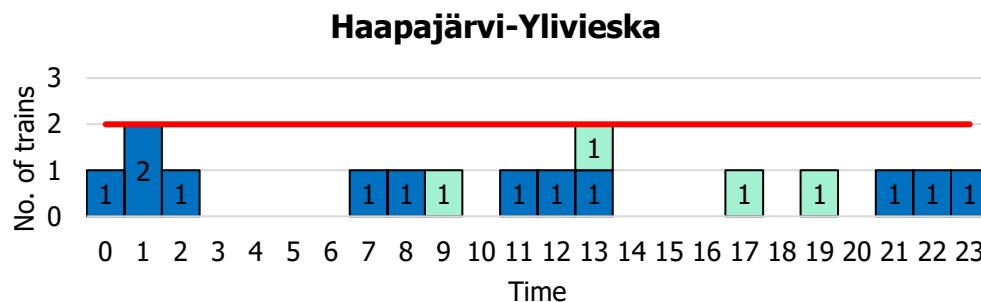


Finnish Transport
Infrastructure Agency

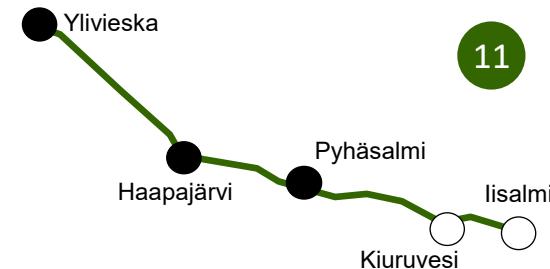
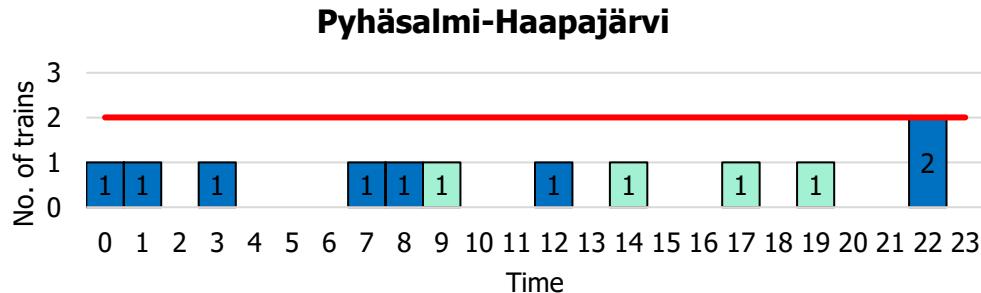
11: Iisalmi – Ylivieska



11: Iisalmi – Ylivieska



- Freight
- InterCity
- Regional
- Regional Express
- Locomotive
- ICL





Finnish Transport
Infrastructure Agency