Taloustutkimus Oy
Pasi Holm and Juho Tyynilä
Further information:
pasi.holm@taloustutkimus.fi; tel. +358(0) 50 374 7462

TR 12 Lahti-Kouvola *Impacts on the community structure and employment*

LADEC
taloustutkimus
REGION BLEKINGE
Lead Partner
Interreg
Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND

A second transverse connection for Southern Finland

- In recent decades, the road network has mainly been developed radially, leading away from the Helsinki Metropolitan Area.
- The east-west connection Turku – Helsinki region – Hamina – Vaalimaa is finally complete.
- The next development area: West coast – Tampere – Lahti – Kouvola – Lappeenranta – Nuijamaa?

-Kotka/Hamina is the main export port of the forest industry.*

-The significance of Russian trade and tourism will increase in the long term; political and economical trends vary

-Asian trade flows; Kouvola logistics centre; Containers on rubber tires across the country

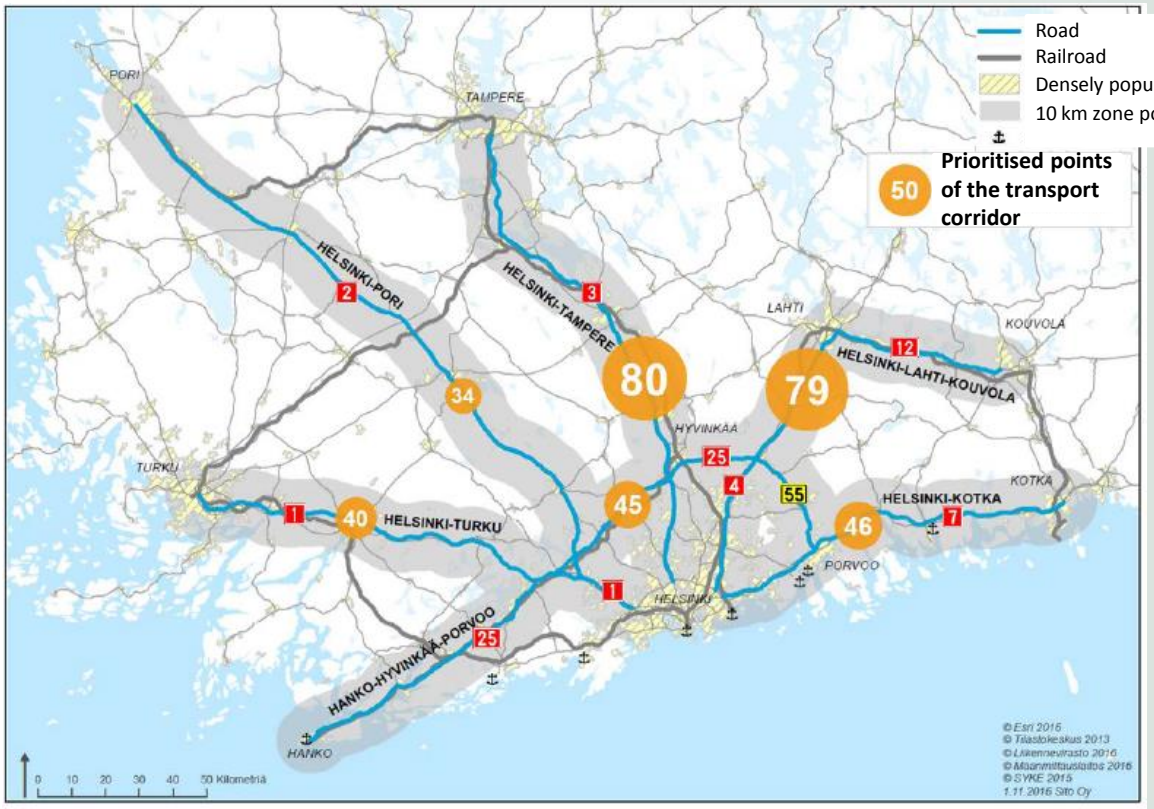
- Growth circle of Southeast Finland to accompany the growth triangle of Helsinki-Tampere-Turku: Helsinki-Lahti-Kouvola-Lappeenranta-Hamina

** Centralising import and export logistics to Vuosaari is not a fully natural process; it is also based on infrastructural solutions.*

Taloustutkimus Oy / Pasi Holm and Juho Tyynilä

TENTacle LADEC taloustutkimus Region Blekinge Lead Partner Interreg Baltic Sea Region EUROPEAN UNION EUROPEAN REGIONAL DEVELOPMENT FUND

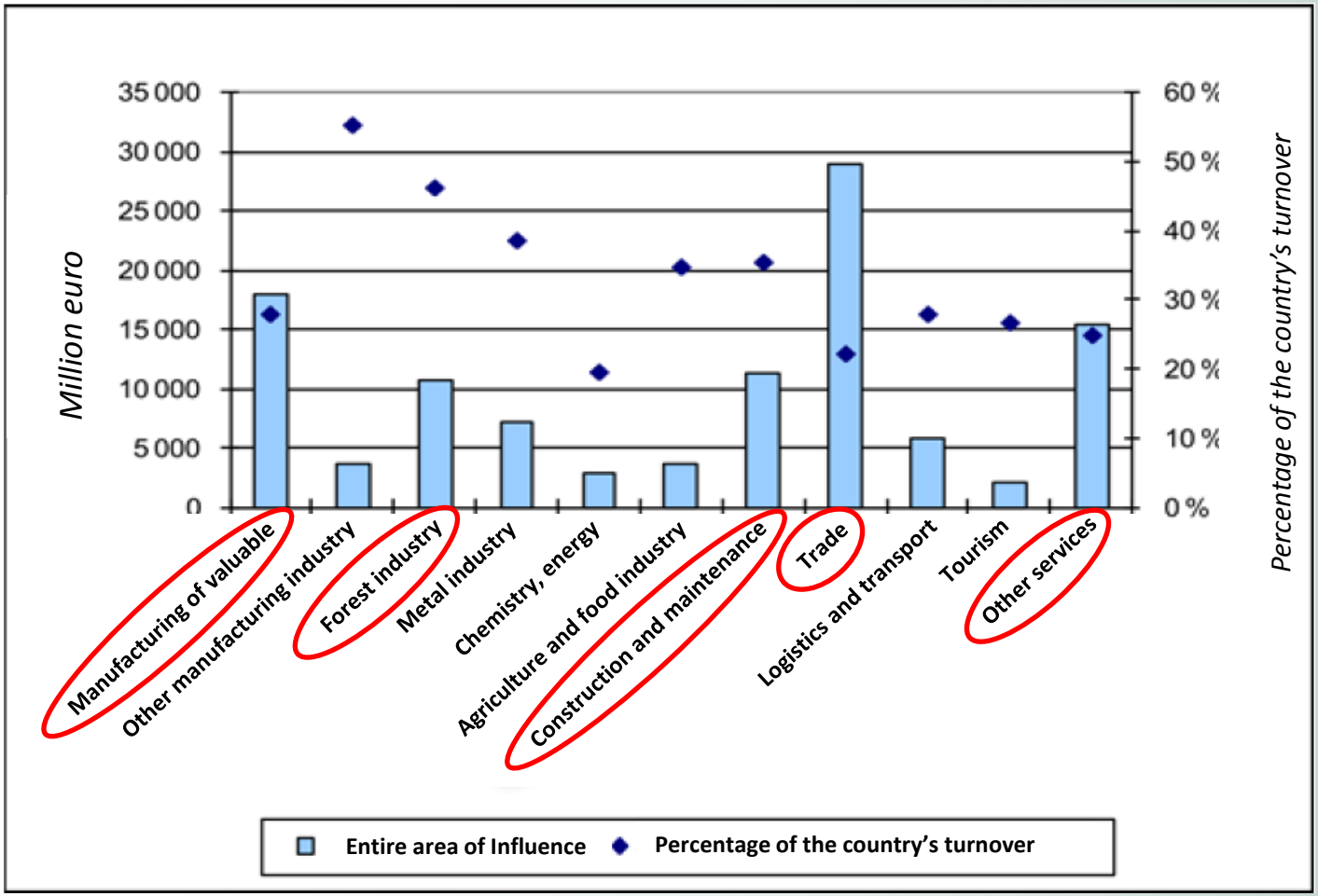
Prioritising the development corridors of Southern Finland



https://www.uudenmaanliitto.fi/uudenmaan_liitto/uutishuone/artikkelit/etela-suomen_kehityskaytavilla_nelja_erilaista_profiilia.27145.blog

Taloustutkimus Oy / Pasi Holm and Juho Tyynilä

Key sectors in the TR12 area



The area includes **Lahti Region, Kymenlaakso, Tavastia Proper, the Tampere region (Pirkanmaa), Satakunta, Southwest Finland and South Karelia.** Review of the significance of trunk road 12's area of influence for business life.

Source: *https://www.ely-keskus.fi/documents/10191/6895514/Vt12Lahti-Kouvolapalvelutasom%C3%A4%C3%A4ritt_raportti01072014.pdf/de17bf6d-28dd-4ff8-9b1e-536ae112eb8c*

Taloustutkimus Oy / Pasi Holm and Juho Tyynilä

Development views of Lahti and Kouvola in relation to TR 12

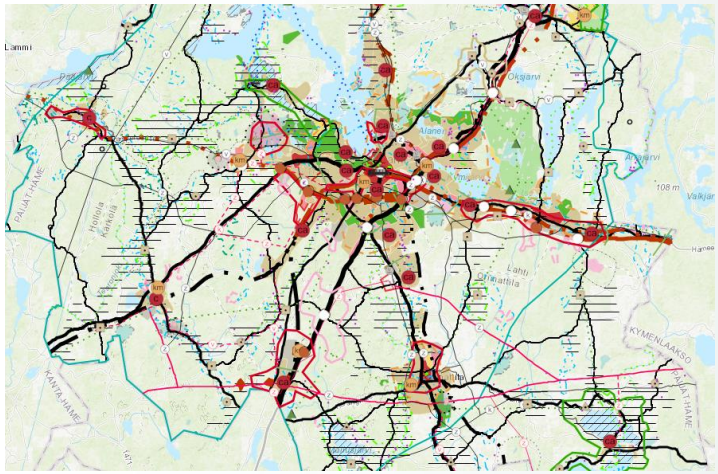
- In Lahti and Hollola, there are logistics centres at the junctions of railways and TR12 (for example Sopenkorpi and Nostava). In total, about 9,000–14,000 new jobs have been zoned along TR12 and the railroad in the city plans and partial masterplans.
- The job zoning plans for Lahti and Kouvola are expanding along TR12.
- In Lahti and Hollola, there are logistics centres at the junctions of railways and TR12 (Sopenkorpi and Nostava).
- Kouvola will implement the only Finnish railroad terminal (Kouvola RRT) that is part of the TEN-T network (EU decree).
- KymiRing under construction: MotoGP 140,000 viewers per year; 6–10 major events a year, each for more than 50,000 people.
- Kouvola is preparing the plans (partial masterplan) for the Miehonkangas transportation centre (southern side of KymiRinki)
- Commuting by train busy between Lahti and Kouvola.

Taloustutkimus Oy / Pasi Holm and Juho Tyynilä

TENTacle LADEC taloustutkimus Region Blekinge Lead Partner Interreg Baltic Sea Region EUROPEAN UNION EUROPEAN REGIONAL DEVELOPMENT FUND

Lahti and Kouvola are expanding towards each other

Päijät-Häme regional land use plan 2014



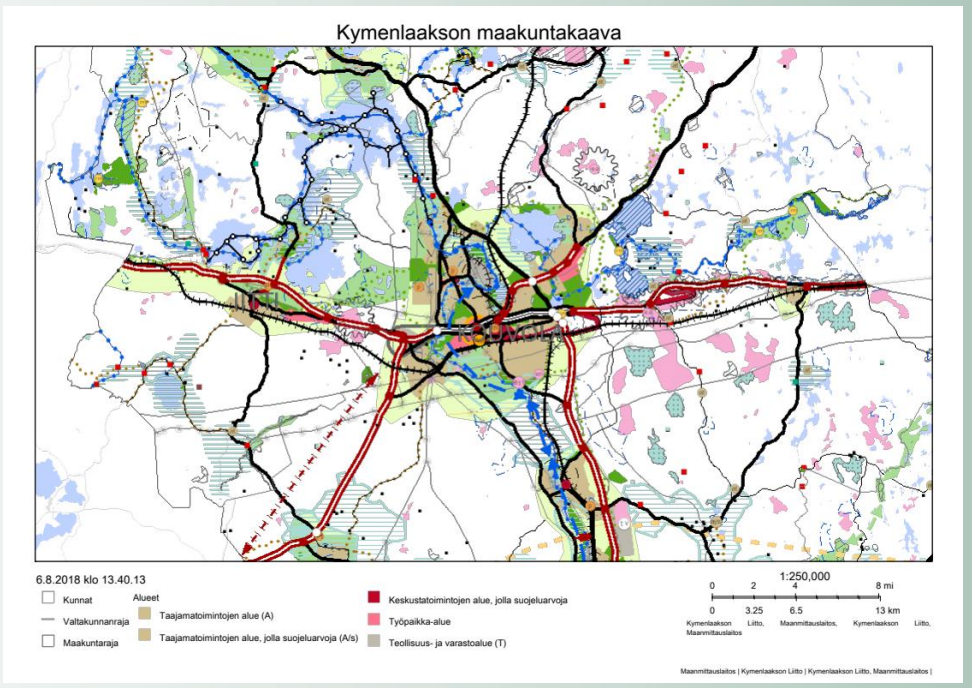
A Urban operations area

TP Jobs area

C Centre operations area

T Industrial and storage area

Kymenlaakso regional land use plan 2014



Taloustutkimus Oy / Pasi Holm and Juho Tyynilä

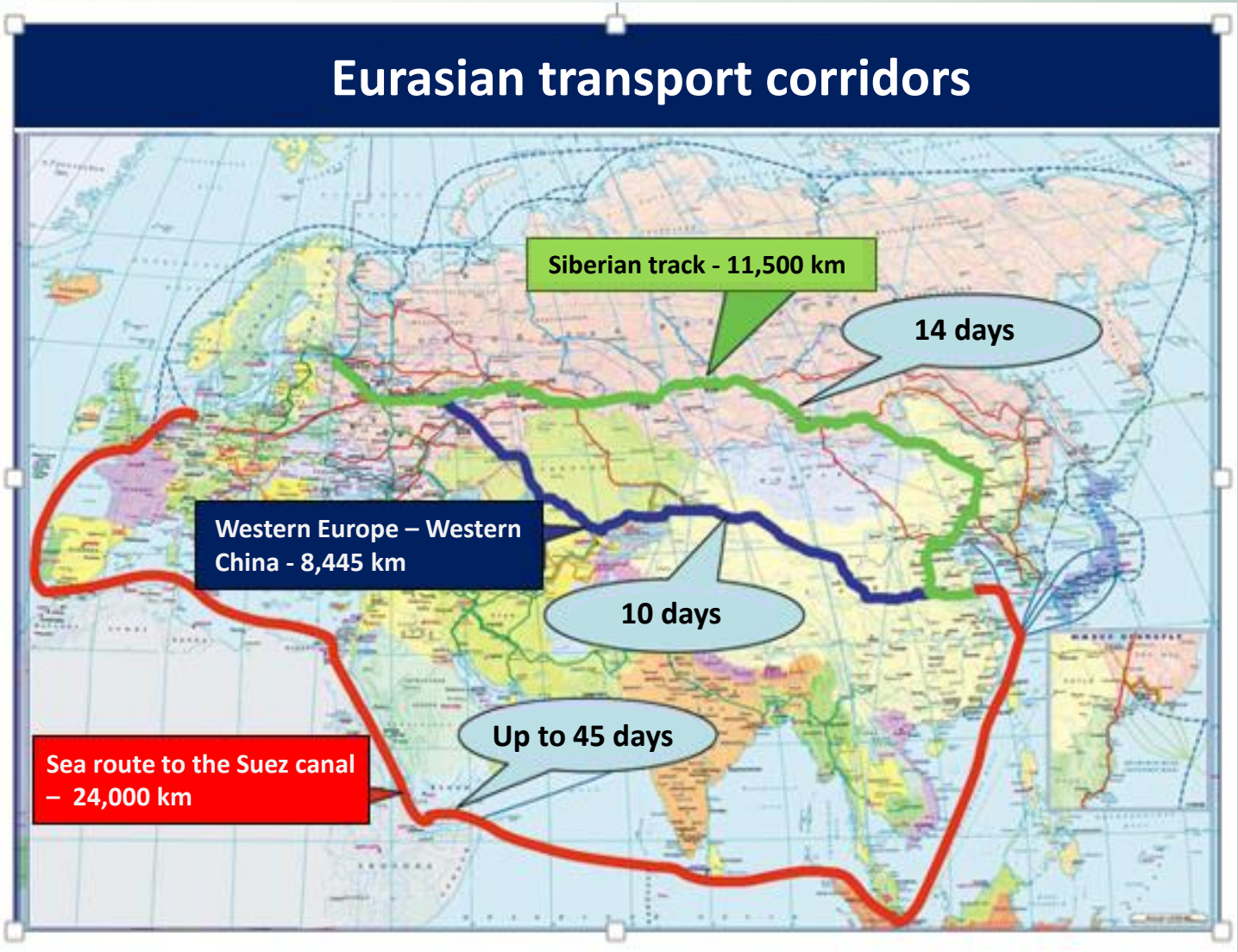
TENTacle
LADEC
taloustutkimus
REGION BLEKINGE
Lead Partner
Interreg Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND

Kouvola RRT (RailRoad terminal)

- Silk road of China – Container trains 2018: 27 departing from Kouvola and 30 departing from Xi'an, 57 connections in total.
- 8 day connection to China
- Kouvola RRT is located along the Scandinavia – Mediterranean Sea corridor of the TEN-T core network.
- In Finland, the core network connects Kouvola RTT and all the ports of the Finnish TEN-T core network to each other.
- For rail road transportation, Kouvola is the most central location in Finland: railroad connections in all directions, main road connections in six different directions and the largest marshalling yard in Finland.
- Kouvola's new 'intermodal terminal' will be completed in 2020.
- Trade and industry (the food industry, stone industry and sawmill industry) are interested in the route.
- Train connections to China could quintuple in the coming years compared to the current situation.
- => Will significantly increase business-related container transportation on TR12

Taloustutkimus Oy / Pasi Holm and Juho Tyynilä

Eurasian transport corridors



Source: Railgate Finland, Kouvola, Simo Päivinen, Kouvola Innovation Oy, 25 May 2018/ Helsinki region port and logistics committee

Taloustutkimus Oy / Pasi Holm and Juho Tyynilä

KymiRing and the Miehonkangas transportation centre

- Traffic forecast (KymiRing EIA):

- Weekday traffic 3,600 vehicles per day on TR 12

- Event weekend traffic 10,200 vehicles per day on TR 12

- It is estimated that KymiRing and the Miehonkangas transportation centre will employ hundreds of people (see Lahti transportation centre plans)
- In June 2017, the parliament approved the state's €14 million financial contribution to the TR 12 Tillola–Keltti project, which will be implemented between Iitti and Kouvola. The project is in progress.
- Kymi Ring Oy was able to gather the required €10 million in private funding by April 2018. The Municipality of Iitti is one of the project's financers. Kouvola is considering the funding options.
- => **Will significantly increase traffic on TR 12 in both Kouvola and Lahti directions.**

TENTacle LADEC taloustutkimus Region Blekinge Lead Partner Interreg Baltic Sea Region EUROPEAN UNION EUROPEAN REGIONAL DEVELOPMENT FUND

Views of businesses in the logistics industry on the quality of TR 12; *company interviews, May and June 2018*

TR 12 Lahti-Kouvola is so outdated it could be from a different century. The improvements have been postponed again and again. KymiRing will bring new dynamics and movement.

People drive to Nuijamaa from Tampere. The throughput of Lahti-Kouvola is poor: At the Kausala roundabout, trucks need to drive at a speed of 10 km/h.

Dangerous overtaking situations – and accidents – occur between Lahti and Kouvola.

Slow and busy. There is a lot of truck traffic and therefore the risks are high.

It is so slow and inadequate and even dangerous.

In winter, people drive the route Lahti-Mäntsälä-Porvoo, since Lahti-Kouvola is impossible.

Taloustutkimus Oy / Pasi Holm and Juho Tyynilä

TENTacle LADEC taloustutkimus Region Blekinge Lead Partner Interreg Baltic Sea Region EUROPEAN UNION EUROPEAN REGIONAL DEVELOPMENT FUND

Significant traffic growth can be expected on TR 12 Lahti-Kouvola

- The current road connection between Uusikylä and Tillola is the stretch in poorest condition along the Lahti-Kouvola connection. It has several 60 km speed limits and several at-grade junctions.
- The poor quality of the road hinders business transportation. The road is part of the trunk network of large special deliveries for the business sector.
- The road is sensitive to disruptions and traffic accidents are a frequent occurrence. The accident frequency is approximately 15 per cent higher than average for two-lane highways in Finland.
- A significant proportion of people commute by train.

- TR 12 project cards (2017): 11,100 cars per day and 1,800 heavy vehicles per day.

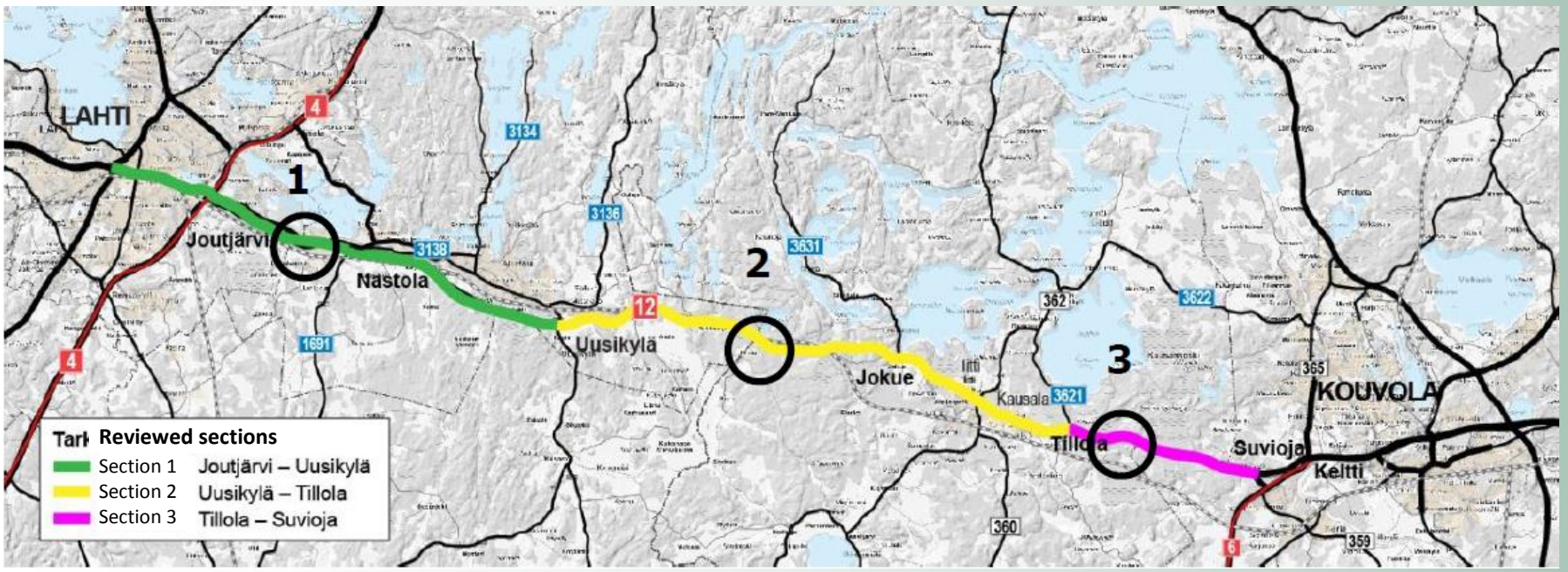
- Compared to the project card, KymiRing/Transportation centre will increase the number of vehicles on weekdays by 3,600 vehicles, i.e. by 28 per cent, and on event weekends by 10,200 vehicles, i.e. by 80 per cent.

- Kouvola RRT (Rail Road Terminal) project may increase the number of container trucks by about 80 trucks* per day, i.e. by 5%. **(5*57*40/150, i.e. 'growth' *'trains' *'containers per train' / 'working days')*

- How much has the poor condition of the Lahti-Kouvola connection forced heavy traffic onto detours?

Taloustutkimus Oy / Pasi Holm and Juho Tyynilä

RT 12 construction stages Section 3, Tillola – Keltti, has received funding



https://www.ely-keskus.fi/documents/10191/6895514/Vt12Lahti-Kouvolapalvelutasom%C3%A4%C3%A4ritt_raportti01072014.pdf/de17bf6d-28dd-4ff8-9b1e-536ae112eb8c

Taloustutkimus Oy / Pasi Holm and Juho Tyynilä

TENTacle
LADEC
taloustutkimus
REGION BLEKINGE
Lead Partner
Interreg
Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND

The Finnish Transport Agency's project card table TR 12 Lahti-Kouvola

Project cards 2017	Lahti-Kouvola	Lahti-Uusikylä**	Uusikylä-Tillola	Tillola-Keltti
Costs, € million	227	53	157	17,2
State, € million	N/A	N/A	N/A	14
Municipalities, € million	N/A	N/A	N/A	3,2
Schedule, year	2017-2018	after 2019	after 2017	2017–2018
Amount of traffic, trips/day	7 000–12 900	7 200–15 200	6 800–8 000	7 100–8 100
Cars, trips/day	6 300–11 100	6 300–13 900	6 800–8 000	7 100–8 100
Heavy vehicles trips/day	700–1 800	900–1 300	900–1 100	700–1 100
Interchange	Kausala (to be done)	N/A	Kausala (to be done)	Keltti (to be repaired)
Costs, € million	N/A	N/A	N/A	3,2
BCR*	1,3	1,3	1,3	1,2
An estimate by Taloustutkimus* **	**1,8**			

*Benefit-cost ratio

**An estimate calculated based on others and using the Finnish Transport Agency's traffic amounts map

***The increase in traffic caused by KymiRing, Kouvola RRT and other job zoning has been considered.

Based on an estimate by Taloustutkimus Oy, the benefit cost ratio (BCR) of the Lahti-Kouvola connection is 1.8 when the expected growth of traffic is taken into account.

Taloustutkimus Oy / Pasi Holm and Juho Tyynilä

Comparison of the amount of traffic on the main roads of Southern Finland

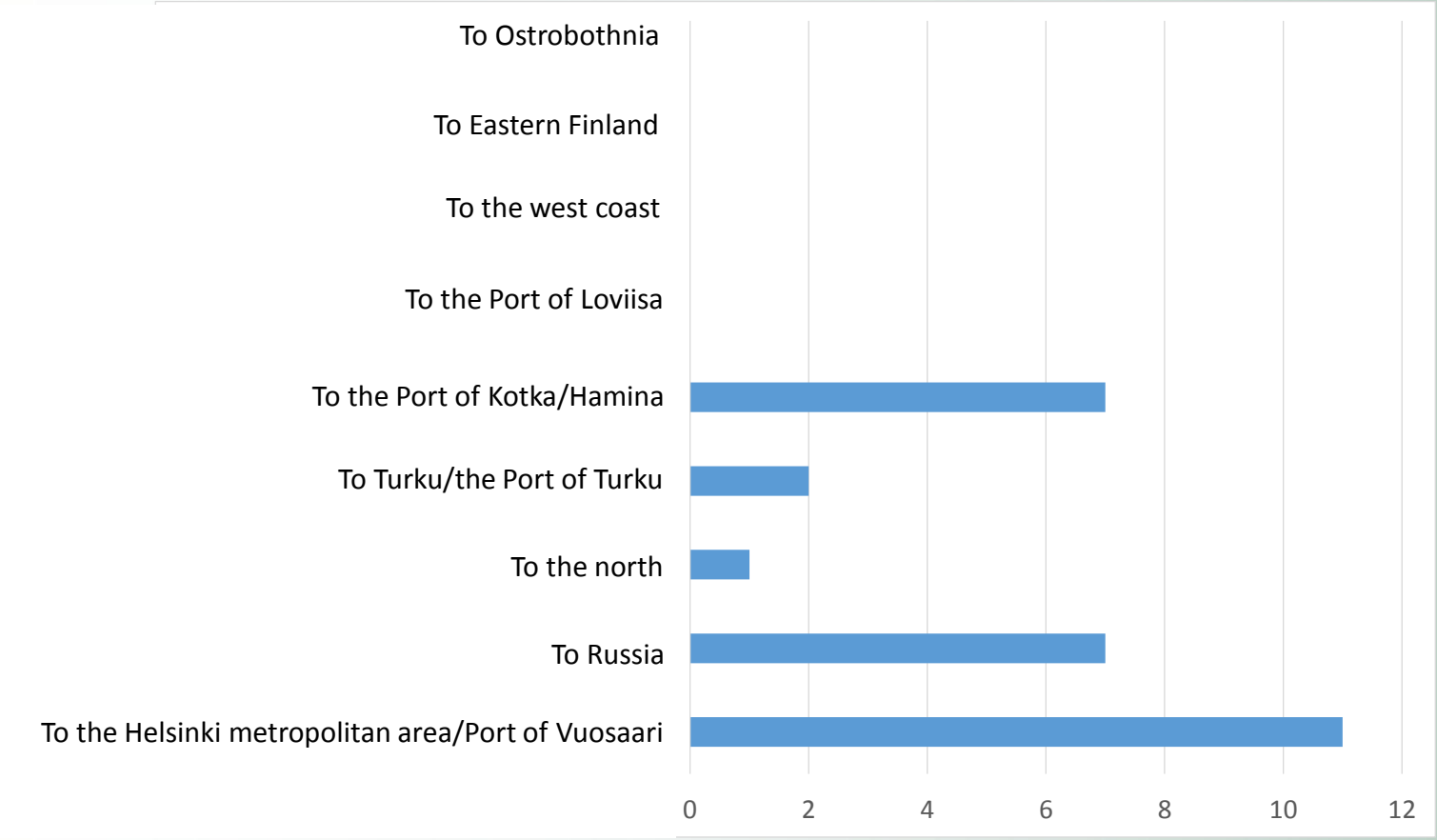
Road	Area	Road type	Amount of traffic in total in 2017	Amount of traffic, heavy traffic 2016
TR 1 & TR 7	Lohja	Motorway	28 566	2 615
	Vantaa	2+2 lanes	17 582	957
	Porvoo	Motorway	22 038	1 960
	Hamina	Motorway	6 758	898
TR 2	Nummela	Motorway	14 962	741
	Karkkila		7 609	637
TR 3	Nurmijärvi	Motorway	33 553	3 011
TR 4	Järvenpää	Motorway	30 075	2 298
	Lahti	Motorway	26 297	2 496
TR 6	Elimäki		6 430	681
	Kouvola		12 295	1 444
TR 12	Lahti	2+2 lanes	22 510	1 408
	Uusikylä		13 833	1 251
	Tillola		8 167	1 026
	Kouvola		12 295	1 444
TR 25	Hyvinkää		8 846	721

The unit used is the average number of trips in a day during the given year. Source: Finnish Transport Agency's traffic amounts maps.

Taloustutkimus Oy / Pasi Holm and Juho Tyynilä

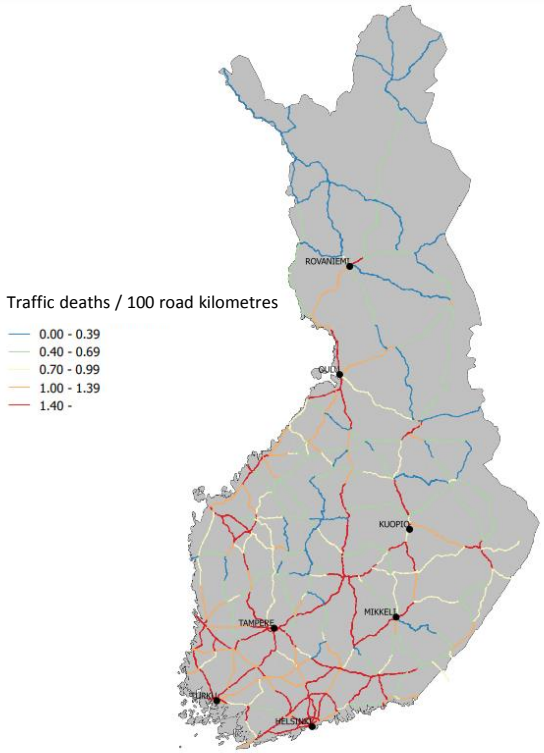
TENTacle
LADEC
taloustutkimus
Region Blekinge
Lead Partner
Interreg Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND

Company interviews, May 2018 In which direction do you believe heavy transportations from the Tampere–Lahti–Kouvola region will increase the most by 2030, compared to the current situation? Pcs.

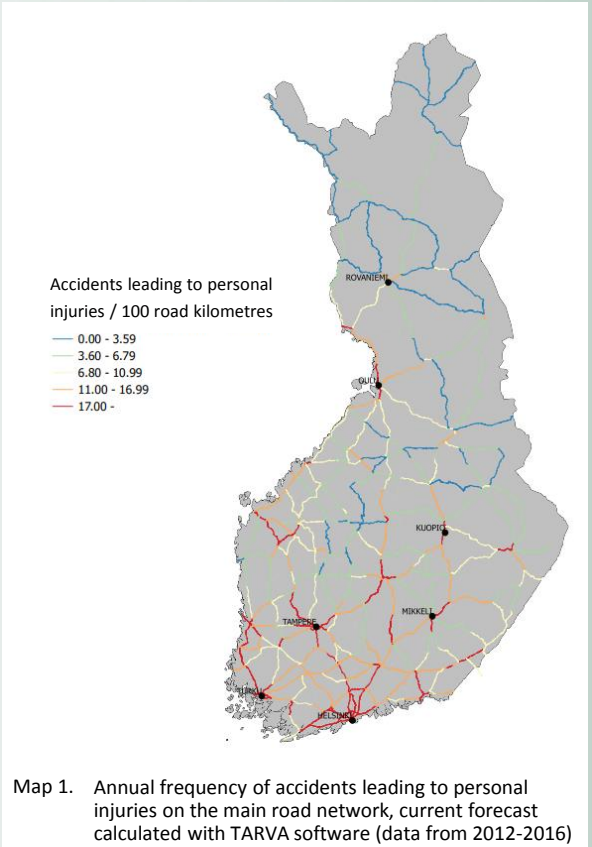


Taloustutkimus Oy / Pasi Holm and Juho Tyynilä

Finnish Transport Agency: Traffic accidents on highways 2016



Map 3. Annual frequency of traffic deaths on the main road network, current forecast calculated with TARVA software (data from 2012–2016)



Map 1. Annual frequency of accidents leading to personal injuries on the main road network, current forecast calculated with TARVA software (data from 2012-2016)

Taloustutkimus Oy / Pasi Holm and Juho Tyynilä

TENTacle
LADEC
taloustutkimus
Region Blekinge
Lead Partner
Interreg Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND


Thank you!
APPENDICES

Company interviews II

Our transportations are directed east from Lahti. TR 12 Lahti-Kouvola is the most important development target.

Finnish economic growth is based on foreign trade. Ports are important, especially Vuosaari and Kotka/Hamina.

Increasing online trade will inevitably lead to the growth of container transports. The rate of container loading will increase both in Finland and globally.

We believe that the Russian sanctions will be lifted in time. Transition traffic to Russia will increase.

Container logistics is a large area and will continue to be, especially in import, less so in export.

It is important to develop the connections of the Helsinki metropolitan area, but they should also be improved to the east.

Our trade will be with Russia in the future. Finnish industry, in general, is appreciated by Russia.

The world is becoming more and more hectic. We have been looking for quick shipping routes, but there do not seem to be any. When the train prices were at a more reasonable level, we tried that.

Taloustutkimus Oy / Pasi Holm and Juho Tyynilä

TENTacle
LADEC
taloustutkimus
Region Blekinge
Lead Partner
Interreg Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND

Interviews with interest groups of the transport industry

The repair deficit package by Sipilä's government is praised. Focus on transportation in business life.

If Helsinki implements the city boulevards, transportation to the Port of Vuosaari and ships to Tallinn will decrease.

Connections to Turku, Sweden and onwards form bottlenecks. Combining the weights and lengths of trucks in Finland and Sweden.

Repair deficit and (winter maintenance).

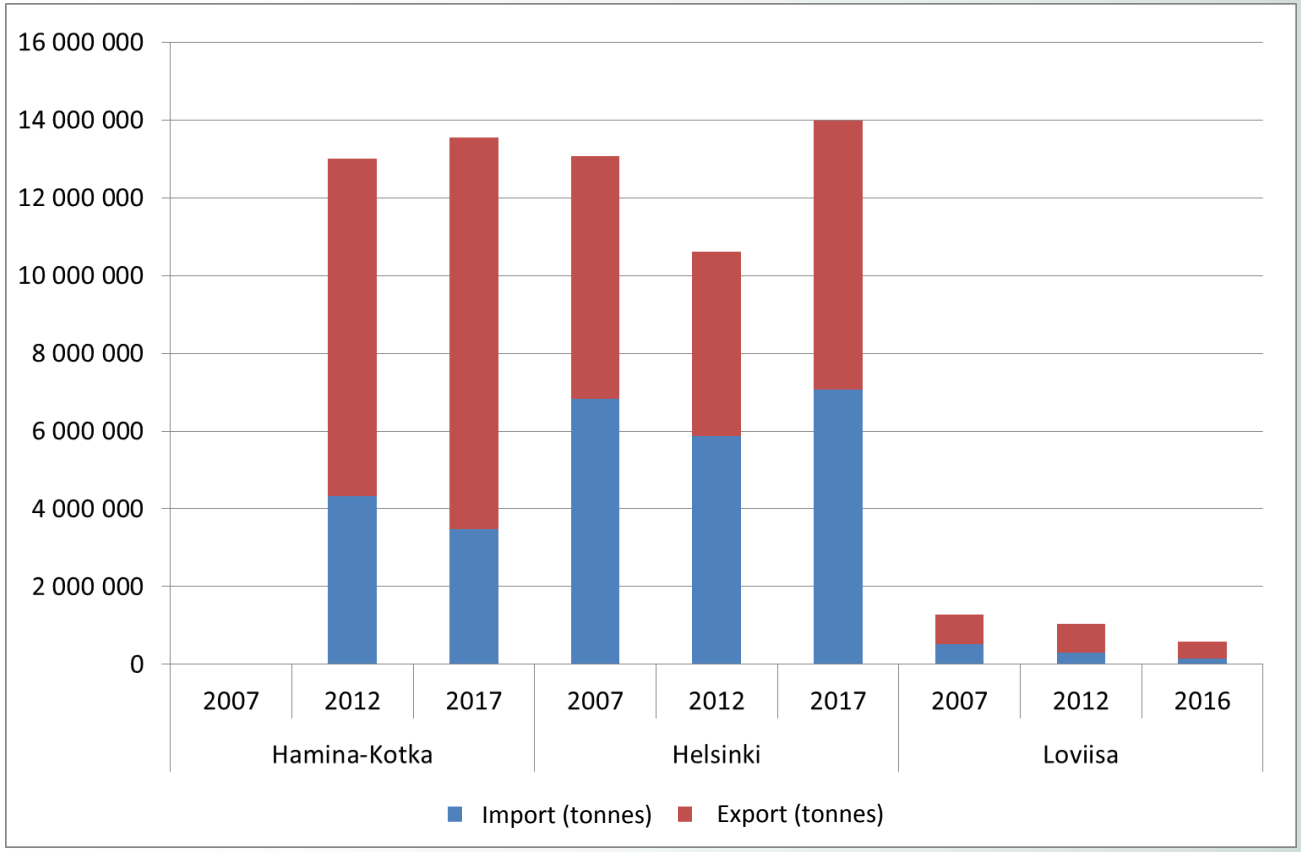
China's Silk Road 'container train connection': Belarus–Poland connection is full. Chinese transportation to Finland is directed to Kouvola. *Jobs for Kouvola* "...we are perhaps talking about thousands rather than hundreds."

Automated ports 24/7

Taloustutkimus Oy / Pasi Holm and Juho Tyynilä

TENTacle
LADEC
taloustutkimus
Region Blekinge
Lead Partner
Interreg Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND

Foreign cargo traffic at the Ports of Hamina-Kotka, Helsinki and Loviisa

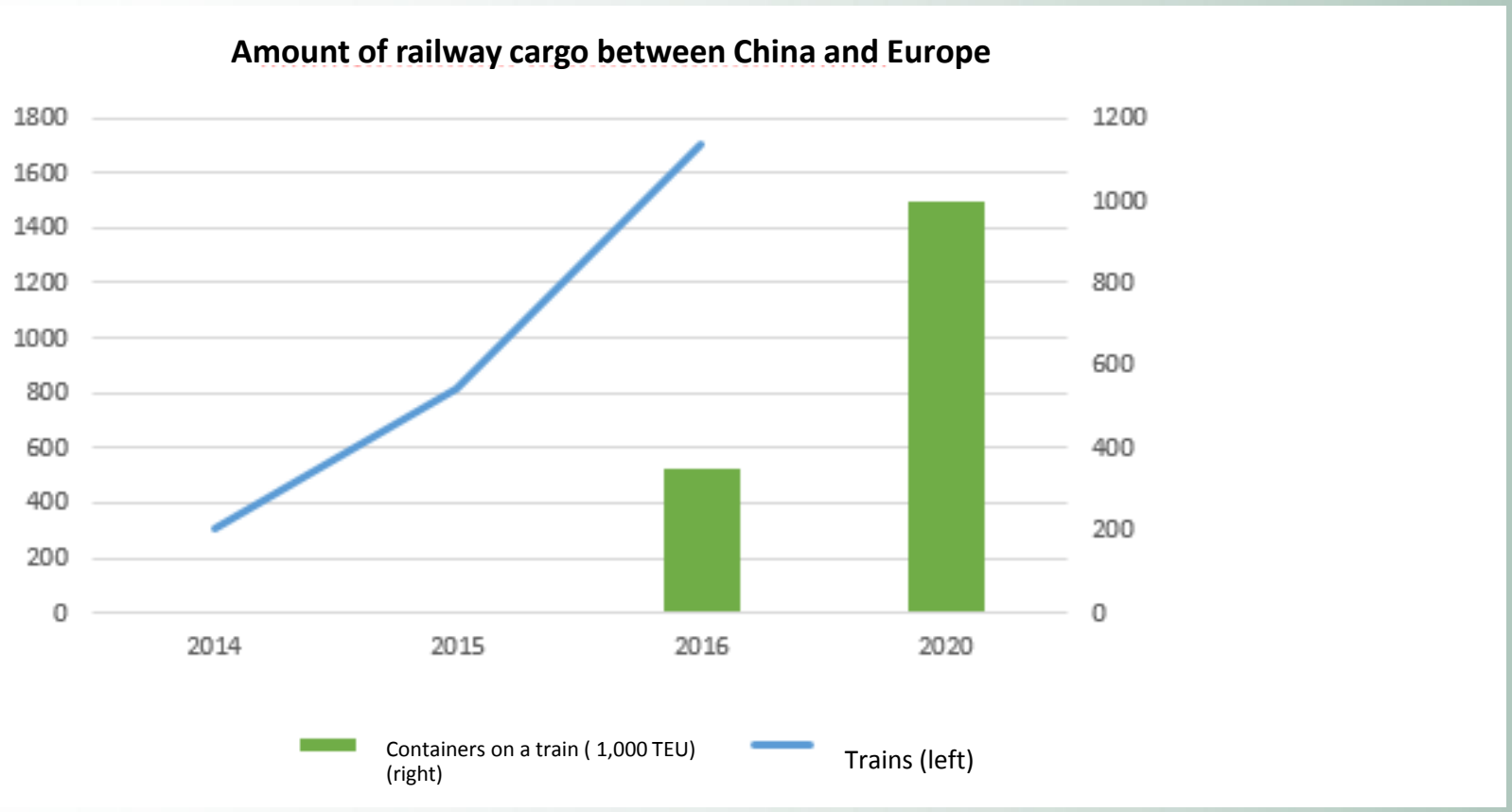


Note! The data from the ports of Hamina and Kotka is missing for 2007, as is the Port of Loviisa's data for 2017. Source: Monthly statistics of Finnish Port Association.

Taloustutkimus Oy / Pasi Holm and Juho Tyynilä

TENTacle
LADEC
taloustutkimus
REGION BLEKINGE
Lead Partner
Interreg
Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND

It is estimated that the number of annual railroad cargo (containers) between China and Europe will triple. Will Finland see similar growth?

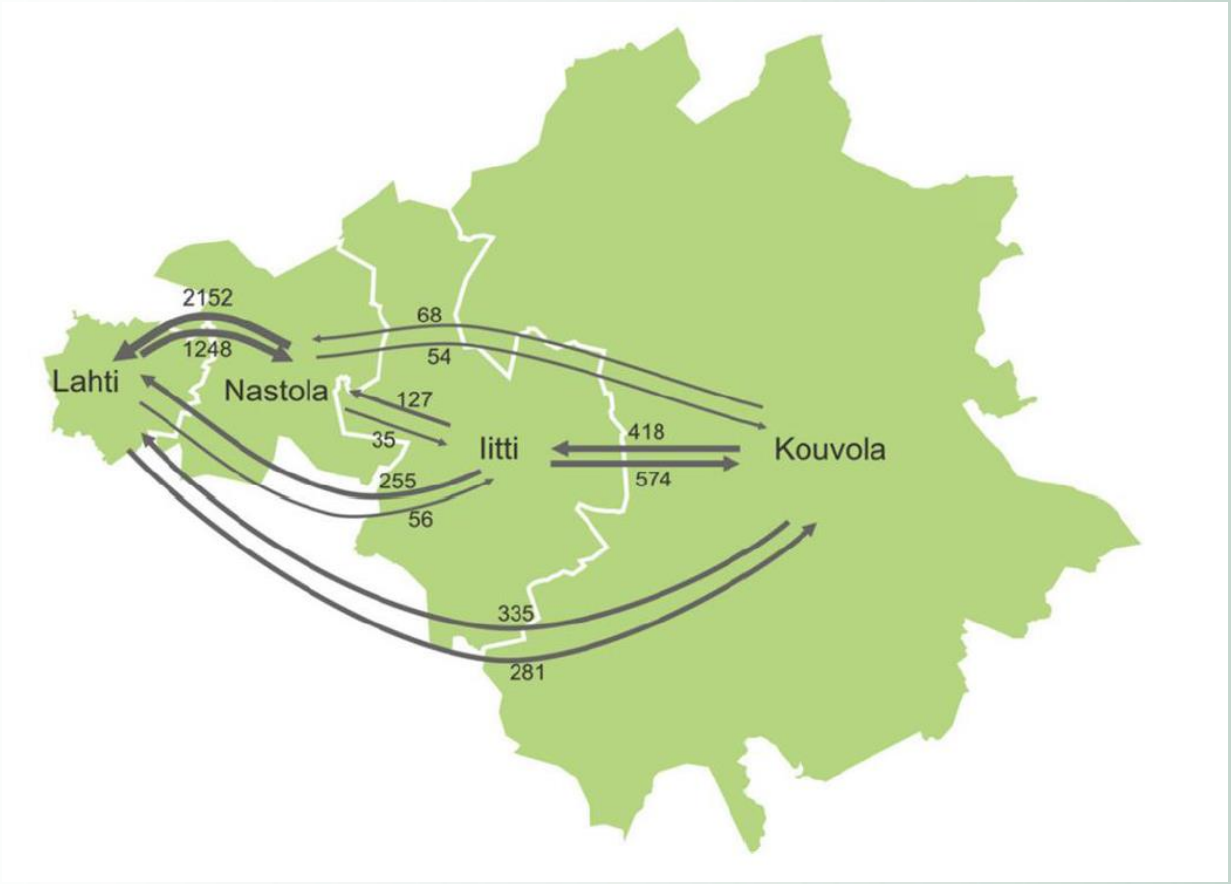


Source: Railgate Finland, Kouvola, Simo Päivinen, Kouvola Innovation Oy, 25 May 2018/ Helsinki region port and logistics committee

Taloustutkimus Oy / Pasi Holm and Juho Tyynilä

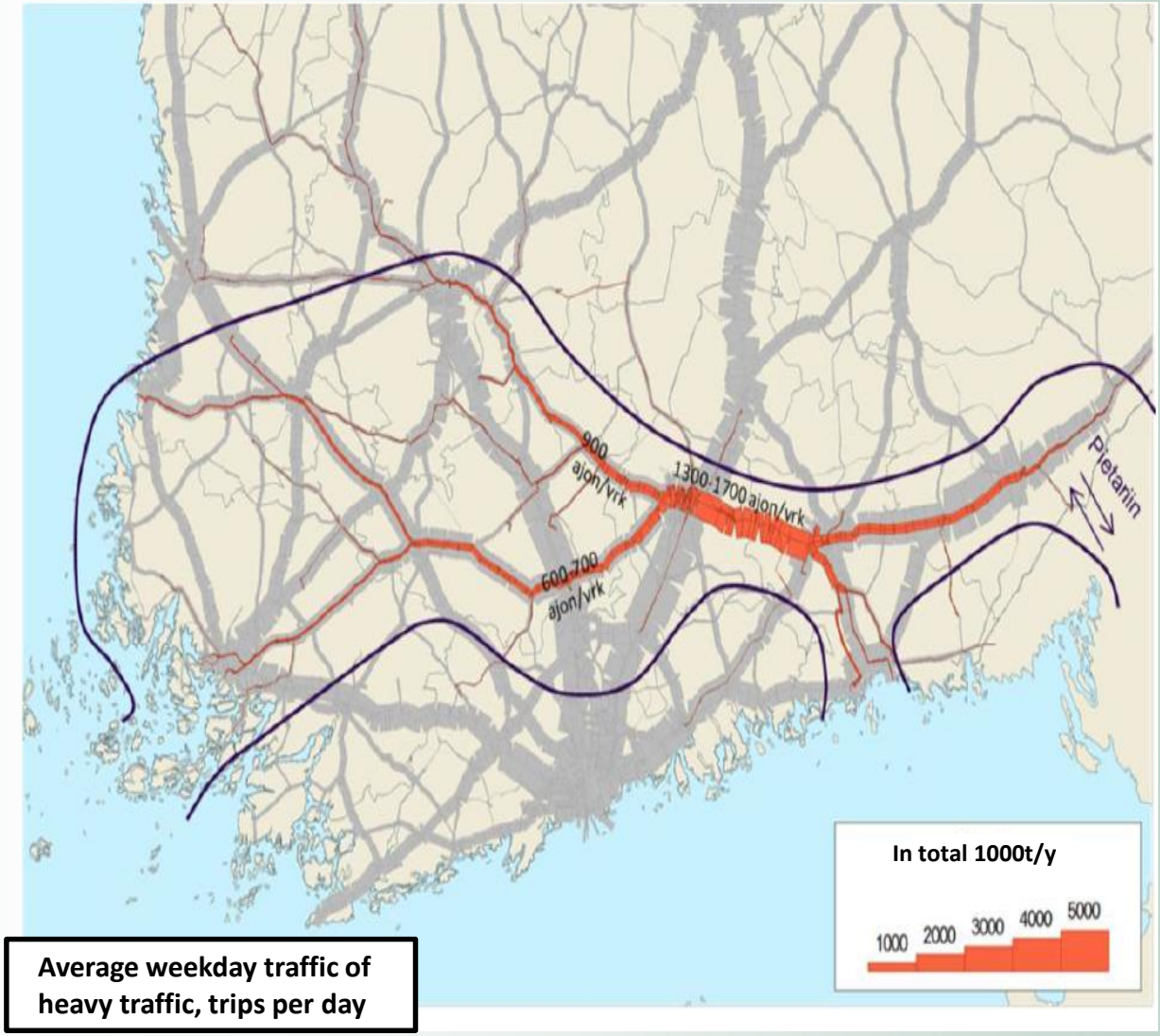
TENTacle
LADEC
taloustutkimus
REGION BLEKINGE
Lead Partner
Interreg
Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND

Commute by train between TR 12 Lahti-Kouvola



https://www.ely-keskus.fi/documents/10191/6895514/Vt12Lahti-Kouvolapalvelutasom%C3%A4%C3%A4ritt_raportti01072014.pdf/de17bf6d-28dd-4ff8-9b1e-536ae112eb8c

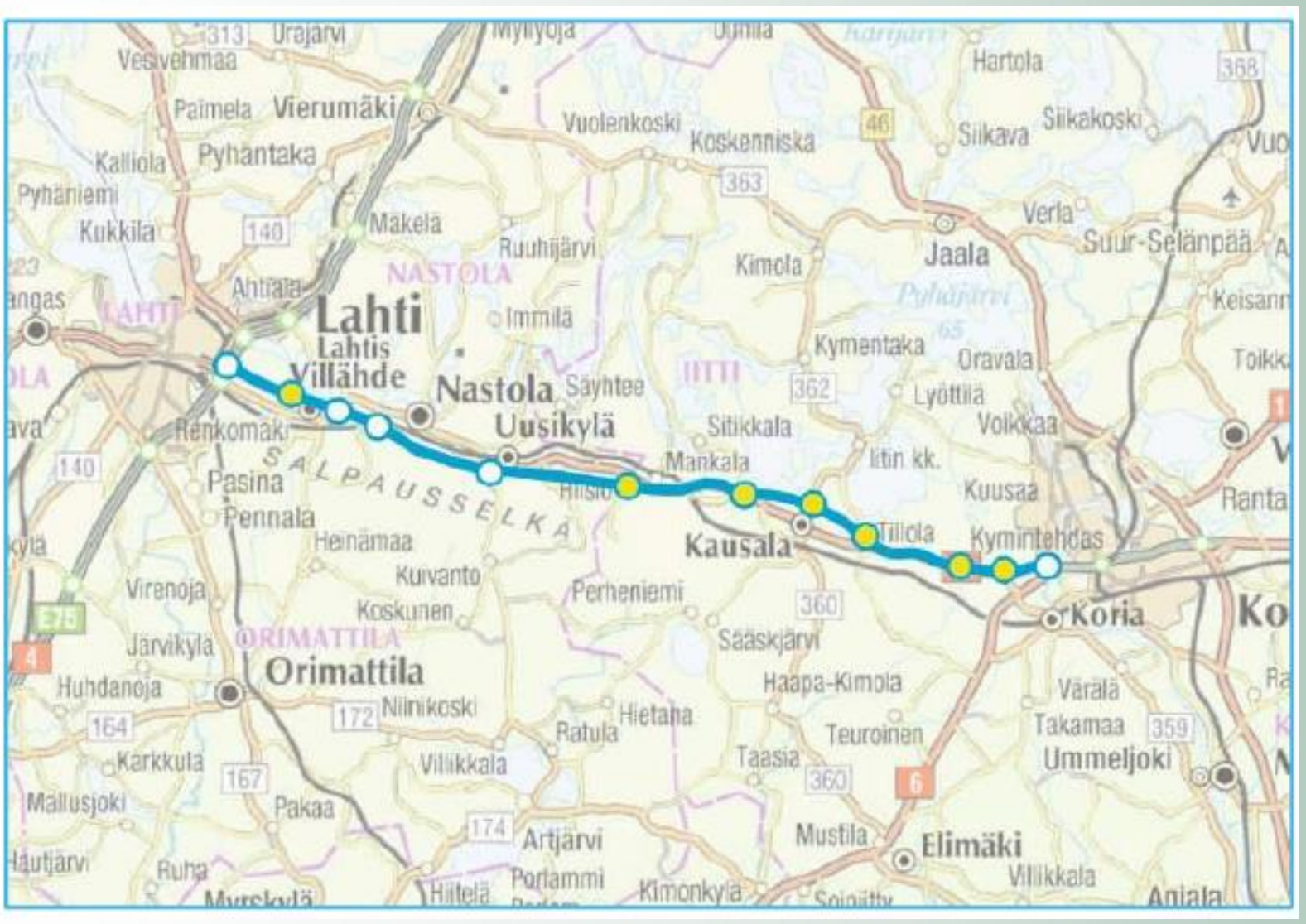
Taloustutkimus Oy / Pasi Holm and Juho Tyynilä



Average weekday traffic of heavy traffic, trips per day

https://www.ely-keskus.fi/documents/10191/6895514/Vt12Lahti-Kouvolapalvelutasom%C3%A4%C3%A4ritt_raportti01072014.pdf/de17bf6d-28dd-4ff8-9b1e-536ae112eb8c

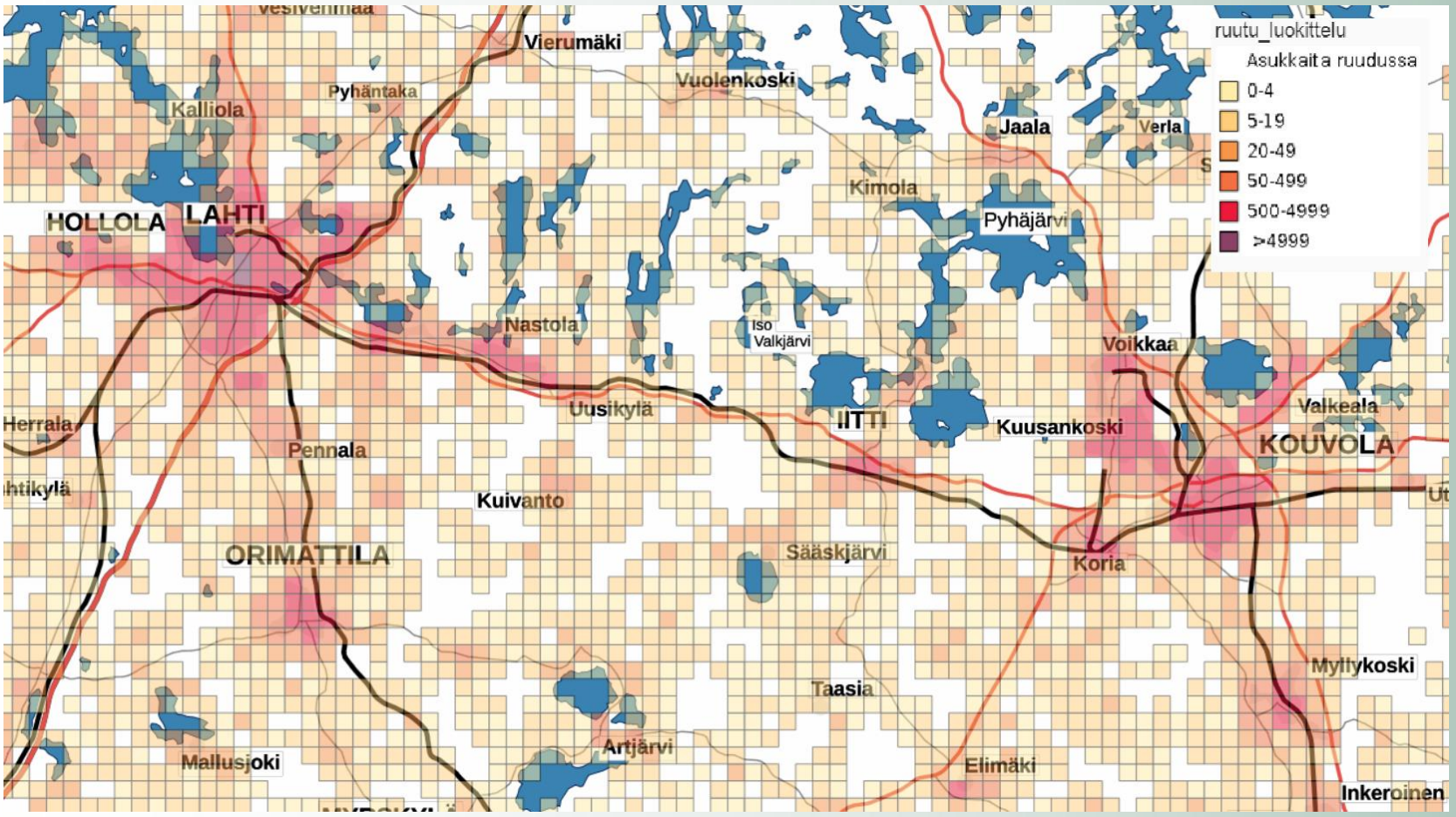
Taloustutkimus Oy / Pasi Holm and Juho Tyynilä



https://www.ely-keskus.fi/documents/10191/21328093/TIE+Vt+12+Lahti-Kouvola.pdf/20693ca1-7611-4e34-864f-868562f377ea

Population distribution in the Lahti-Kouvola region

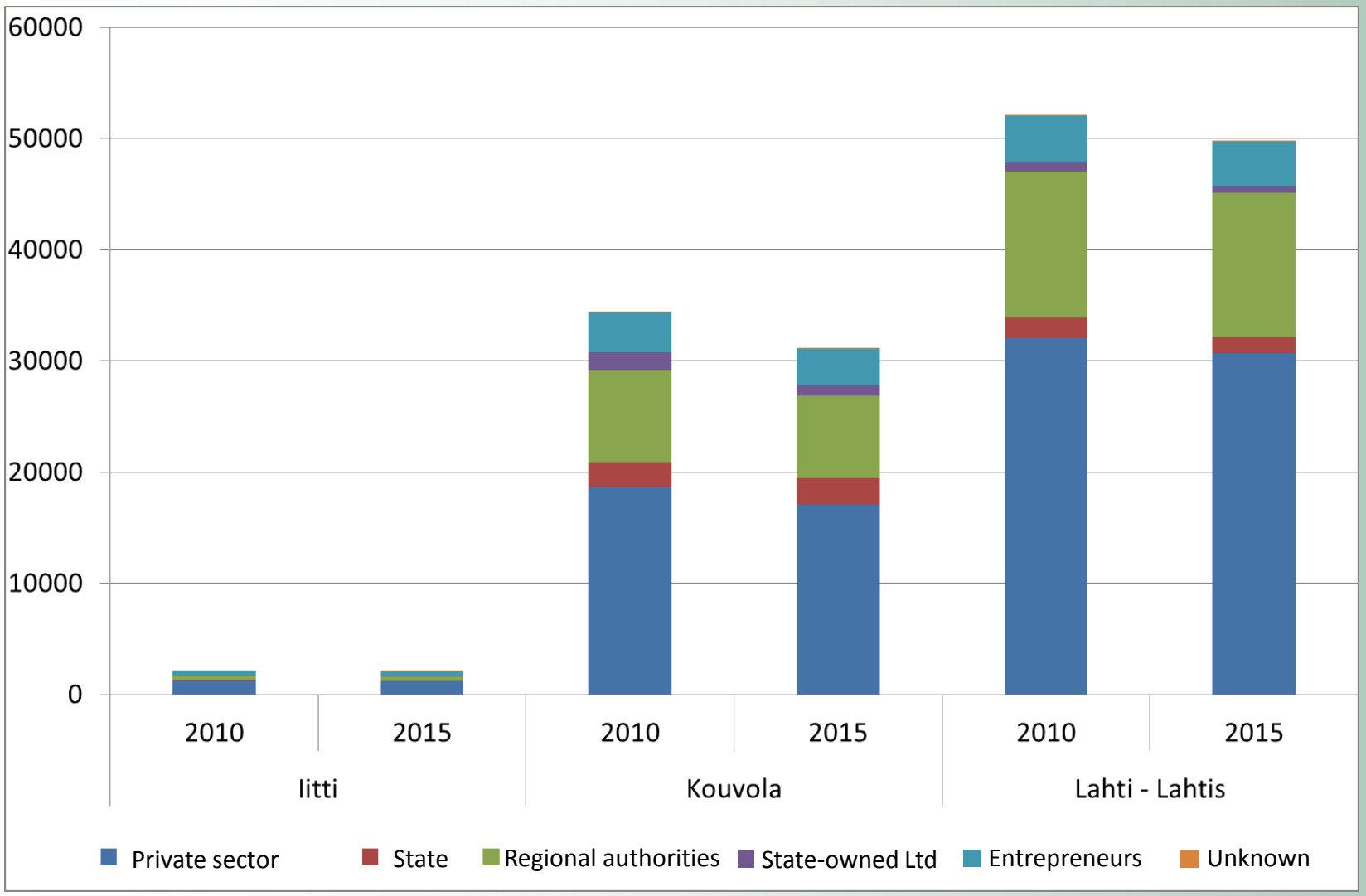
https://kartta.paikkatietoikkuna.fi/?lang=fi



Taloustutkimus Oy / Pasi Holm and Juho Tyynilä

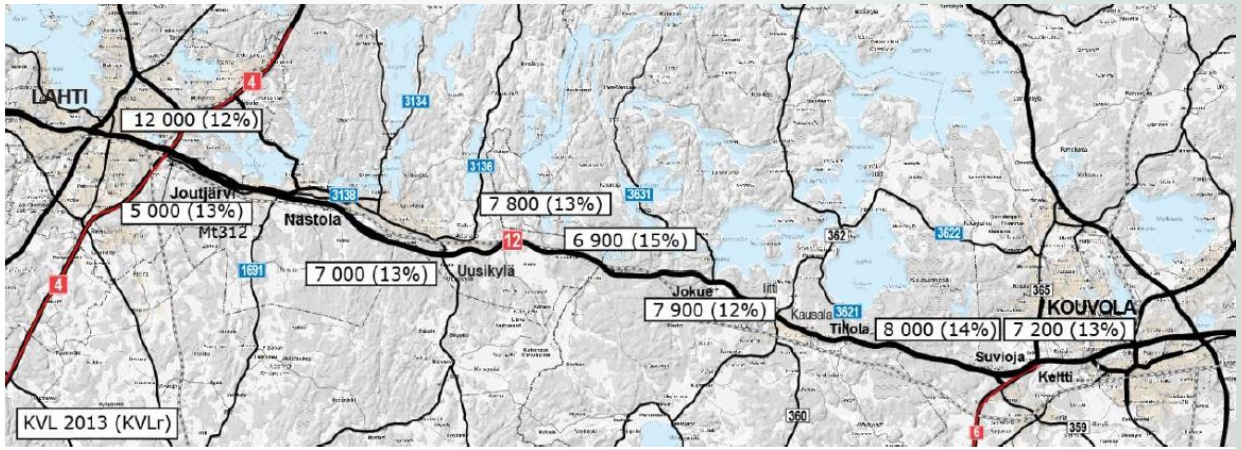
TENTacle
LADEC
taloustutkimus
Region Blekinge
Lead Partner
Interreg Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND

Employment rate in different employer sectors Lahti, Iitti and Kouvola

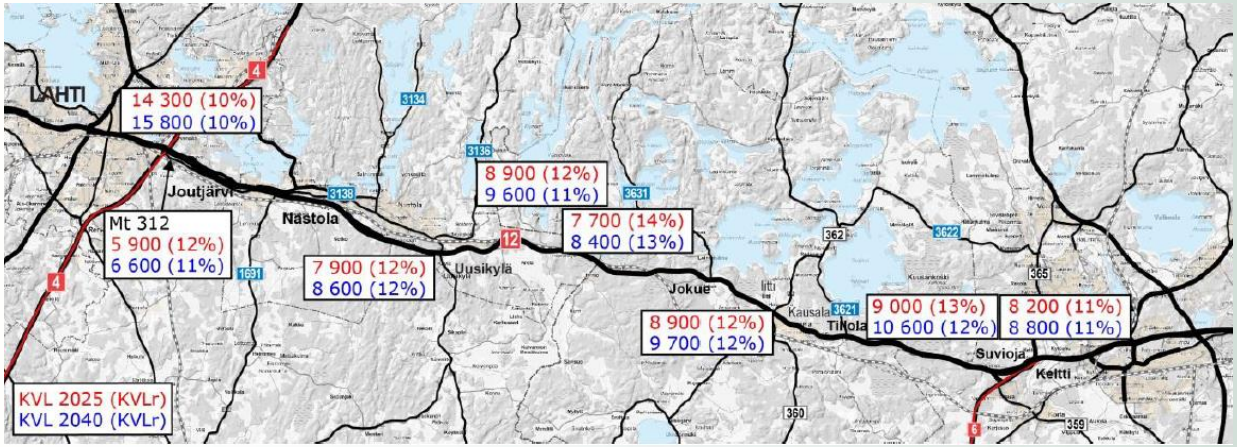


Taloustutkimus Oy / Pasi Holm and Juho Tyynilä

Amount of traffic 2013 (upper image) and forecasts for 2025 and 2040 (lower image)



Annual average 2013 (heavy traffic)

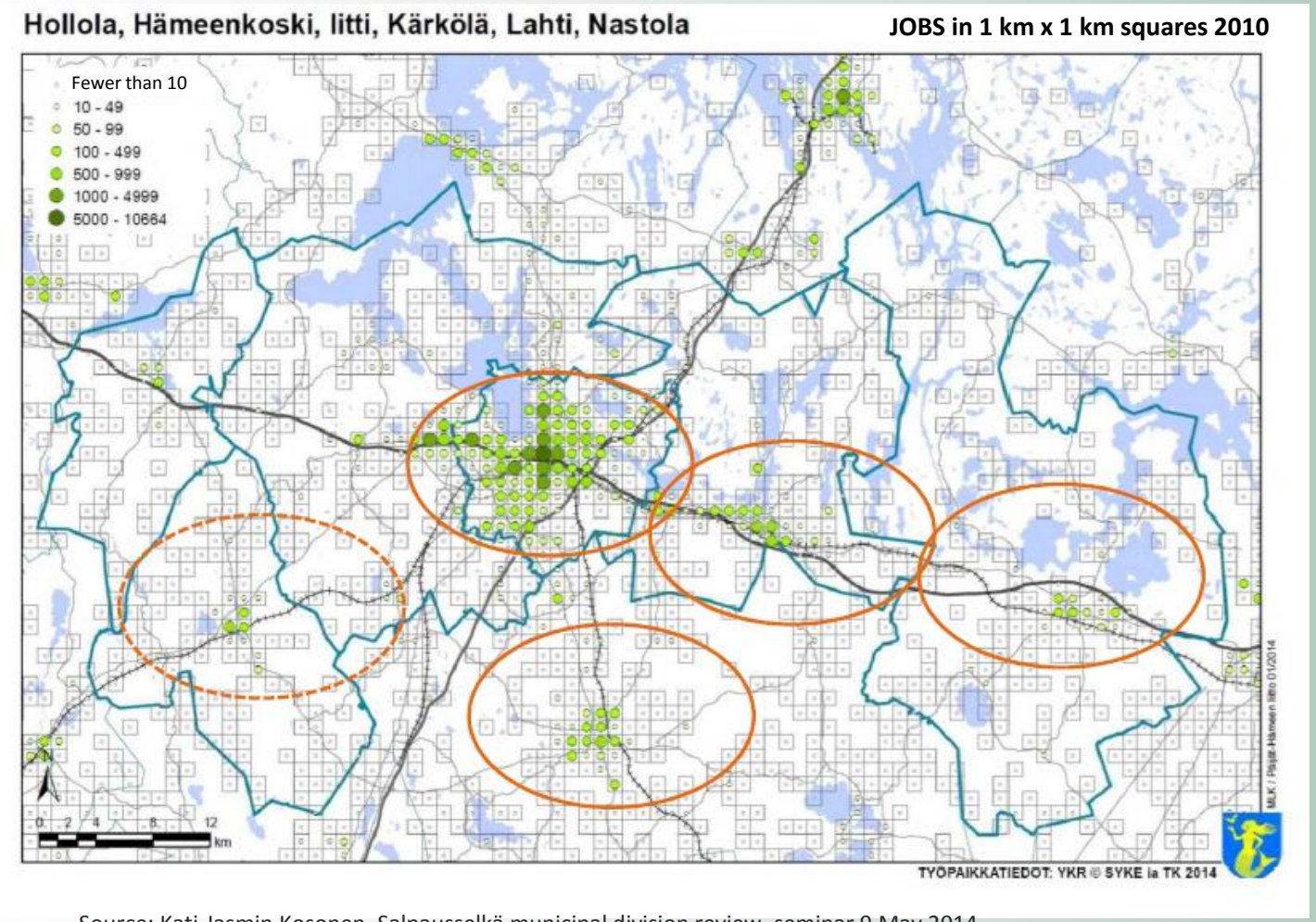


Annual average 2025 (heavy traffic)

Annual average 2040 (heavy traffic)

Taloustutkimus Oy / Pasi Holm and Juho Tyynilä

Figure 5. Jobs in the Salpausselkä region



Source: Kati-Jasmin Kosonen, Salpausselkä municipal division review, seminar 9 May 2014

Taloustutkimus Oy / Pasi Holm and Juho Tyynilä

Container trains 2018

Departure days from Kouvola:	Departure days from Xi'an:
May, next train on the 31st	May 23rd / 30th
June: 7th / 19th	June: 6th / 13th / 27th
July: 11th / 18th / 25th	July: 6th / 13th / 20th / 27th
August: 1st / 8th / 15th / 22nd / 29th	August: 3rd / 10th / 17th / 24th / 31st
September: 5th / 12th / 19th / 26th	September: 7th / 14th / 21st / 28th
October: 3rd / 10th / 17th / 24th / 31st	October: 12th / 19th / 26th
November: 7th / 14th / 21st / 28th	November: 2nd / 9th / 16th / 23rd / 30th
December: 5th / 12th / 19th	December: 7th / 14th / 21st / 28th

In total 57 departures! 27 from Kouvola and 30 from Xi'an

KymiRing

Taloustutkimus Oy / Pasi Holm and Juho Tyynilä

KymiRing

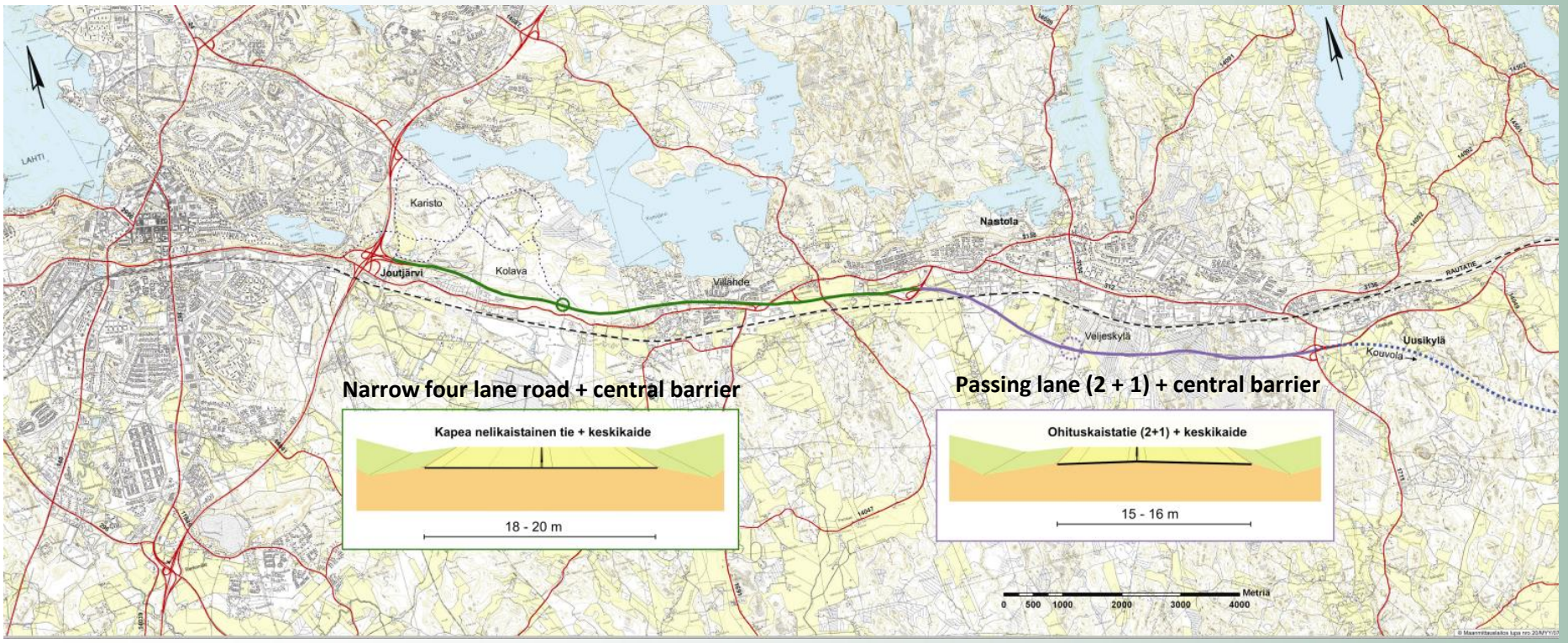
Table 9. Traffic operations in the KymiRing area

KymiRing operations	Weekday	Days during event weekends
Driver training track	150 - 200	-
Motorsports track	100	2700
Motorsports track (accompanying vehicles)	-	500
Motorsports track (buses)	-	60
Transportation centre	700	1000
Business Park	400	100
Accommodation operations	500	700
Vehicle visits	1800	5100
Traffic throughput in total	3600	10200

TENTacle LADEC taloustutkimus Region Blekinge Lead Partner Interreg Baltic Sea Region EUROPEAN UNION EUROPEAN REGIONAL DEVELOPMENT FUND

Land use planning and jobs

- https://kartta.lahti.fi/ims
  https://kartta.lahti.fi/ims?REQUEST=Search%2cKaavoituksen%20ty%C3%B6kohteet&lon=Kaavoituksen%20ty%C3%B6kohteet&layers=Asemakaavoitus
- https://www.kymiring.fi/uutiset/uutiset/2018/04/kymiringia-koskevan-valtatien-parannustyot-kayntiin-toukokuussa
- https://www.kymiring.fi/uutiset/uutiset/2018/04/kymiringia-koskevan-valtatien-parannustyot-kayntiin-toukokuussa
- http://www.ymparisto.fi/download/noname/%7BBE5CBD41-8649-4553-8D2C-337D7A9E093B%7D/92823
- https://www.ely-keskus.fi/web/ely/ely-kaakkois-suomi-vt-12-lahti-kouvola



https://www.ely-keskus.fi/web/ely/osahanke-joutjarvi-uusikyla

Taloustutkimus Oy / Pasi Holm and Juho Tyynilä

TENTacle
LADEC
taloustutkimus
REGION BLEKINGE
Lead Partner
Interreg
Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND

Table 1 and figure 2. Growth factors of major national connections compared to 2012 and traffic amounts in 2030.

Source: National road traffic forecast, Finnish Transport Agency 13/2014

Connection	Average growth factors of the connection			
	Light vehicles 2030	Heavy vehicles 2030	Light vehicles 2050	Heavy vehicles 2050
TR 1 Helsinki-Turku	1,320	1,083	1,430	1,184
TR 2 Vihti-Pori	1,310	1,092	1,418	1,210
TR 3 Helsinki-Hämeenlinna	1,344	1,089	1,458	1,192
TR 3 Hämeenlinna-Tampere	1,313	1,071	1,421	1,180
TR 3 / TR 19 Tampere-Seinäjoki	1,373	1,140	1,510	1,287
TR 18 Seinäjoki-Vaasa	1,379	1,159	1,521	1,317
TR 4 Helsinki-Lahti	1,351	1,098	1,467	1,209
TR 4 Lahti-Jyväskylä	1,342	1,114	1,467	1,251
TR 4 Jyväskylä-Oulu	1,377	1,141	1,513	1,289
TR 4 Oulu-Rovaniemi	1,375	1,151	1,511	1,308
TR 5 Lusi-Mikkeli	1,292	1,101	1,395	1,243
TR 5 Mikkeli-Kuopio	1,284	1,111	1,388	1,268
TR 5 Kuopio-Kajaani	1,276	1,108	1,381	1,264
TR 6 Koskenkylä-Kouvola	1,276	1,071	1,364	1,150
TR 6 Kouvola-Lappeenranta	1,227	1,077	1,304	1,171
TR 6 Lappeenranta-Joensuu	1,276	1,107	1,379	1,244
TR 7 Helsinki-Vaalimaa	1,276	1,071	1,364	1,150
TR 8 Turku-Pori	1,257	1,076	1,354	1,200
TR 8 Pori-Vaasa	1,285	1,092	1,391	1,227
TR 8 Vaasa-Kokkola	1,325	1,105	1,441	1,236
TR 8 Kokkola-Oulu	1,364	1,131	1,492	1,273
TR 9 Turku-Tampere	1,289	1,065	1,393	1,171
TR 9 Tampere-Jyväskylä	1,333	1,096	1,451	1,223
TR 9 Jyväskylä-Kuopio	1,334	1,124	1,455	1,275
TR 11 Pori-Tampere	1,279	1,074	1,381	1,198
TR 12 Tampere-Lahti	1,320	1,080	1,430	1,197
TR 12 Lahti-Kouvola	1,254	1,071	1,337	1,166

Taloustutkimus Oy / Pasi Holm and Juho Tyynilä

TENTacle
LADEC
taloustutkimus
REGION BLEKINGE
Lead Partner
Interreg Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND

Appendix table 1. Forecasted growth factors of light vehicles from 2012 to 2030.

Source: National road traffic forecast, Finnish Transport Agency 13/2014

Province	Trunk roads	Main roads	Regional roads	Connecting roads	In total
Uusimaa	1,375	1,354	1,354	1,219	1,343
Southwest Finland	1,287	1,268	1,268	1,141	1,246
Satakunta	1,210	1,192	1,192	1,073	1,169
Tavastia Proper	1,311	1,291	1,291	1,1,62	1,279
Pirkanmaa	1,329	1,309	1,309	1,178	1,301
Päijät-Häme	1,280	1,261	1,261	1,135	1,257
Kymenlaakso	1,215	1,197	1,197	1,077	1,190
South Karelia	1,217	1,199	1,199	1,079	1,189
Southern Savonia	1,166	1,149	1,149	1,034	1,141
Northern savonia	1,225	1,207	1,207	1,086	1,198
North Karelia	1,216	1,198	1,198	1,078	1,180
Central Finland	1,272	1,253	1,253	1,128	1,243
South Ostrobothnia	1,258	1,240	1,240	1,116	1,216
Ostrobothnia	1,294	1,275	1,275	1,148	1,255
Central Ostrobothnia	1,269	1,250	1,250	1,125	1,238
North Ostrobothnia	1,305	1,286	1,286	1,157	1,271
Kainuu	1,167	1,150	1,150	1,035	1,133
Lapland	1,226	1,208	1,208	1,087	1,199
The entire country	1,284	1,278	1,271	1,137	1.254

Taloustutkimus Oy / Pasi Holm and Juho Tyynilä

TENTacle
LADEC
taloustutkimus
REGION BLEKINGE
Lead Partner
Interreg
Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND

Appendix table 2. Forecasted growth factors of heavy vehicles from 2012 to 2030.

Source: National road traffic forecast, Finnish Transport Agency 13/2014

Province	Trunk roads	Main roads	Regional roads	Connecting roads	In total
Uusimaa	1,091	1,087	1,087	1,083	1,089
Southwest Finland	1,065	1,062	1,061	1,057	1,062
Satakunta	1,032	1,029	1,029	1,024	1,030
Tavastia Proper	1,065	1,061	1,061	1,057	1,063
Pirkanmaa	1,070	1,067	1,067	1,062	1,069
Päijät-Häme	1,055	1,051	1,051	1,047	1,053
Kymenlaakso	1,069	1,066	1,065	1,061	1,068
South Karelia	1,051	1,048	1,048	1,043	1,050
Southern Savonia	1,018	1,015	1,015	1,010	1,017
Northern savonia	1,036	1,033	1,033	1,029	1,035
North Karelia	1,034	1,031	1,030	1,026	1,031
Central Finland	1,052	1,049	1,048	1,044	1,051
South Ostrobothnia	1,047	1,044	1,044	1,040	1,045
Ostrobothnia	1,059	1,056	1,056	1,051	1,057
Central Ostrobothnia	1,051	1,048	1,047	1,043	1,049
North Ostrobothnia	1,062	1,059	1,059	1,054	1,061
Kainuu	1,018	1,015	1,015	1,011	1,016
Lapland	1,037	1,033	1,034	1,029	1,035
The entire country	1,058	1,059	1,057	1,049	1,057

Taloustutkimus Oy / Pasi Holm and Juho Tyynilä

TENTacle
LADEC
taloustutkimus
REGION BLEKINGE
Lead Partner
Interreg
Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND