

Helsinki region transport system planning

Urban node concluding workshop 6.10.2016
Tapani Touru

Contents

- Helsinki region and history of transport system planning
- Helsinki region transport system plan 2015
- Towards next transport system plan

Vocabulary

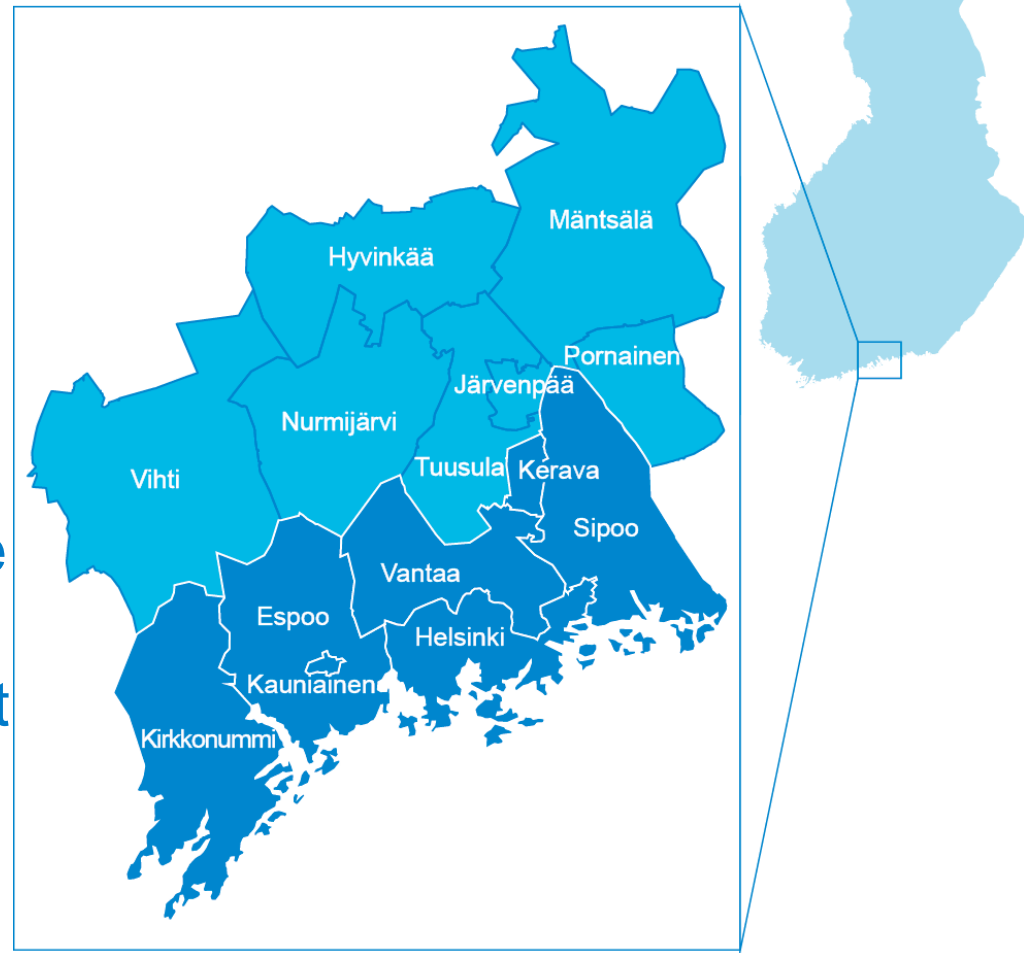
HSL = Helsinki region transport

HLJ = Helsinki region transport system plan

MAL = Land use, Housing and Transport (plan)

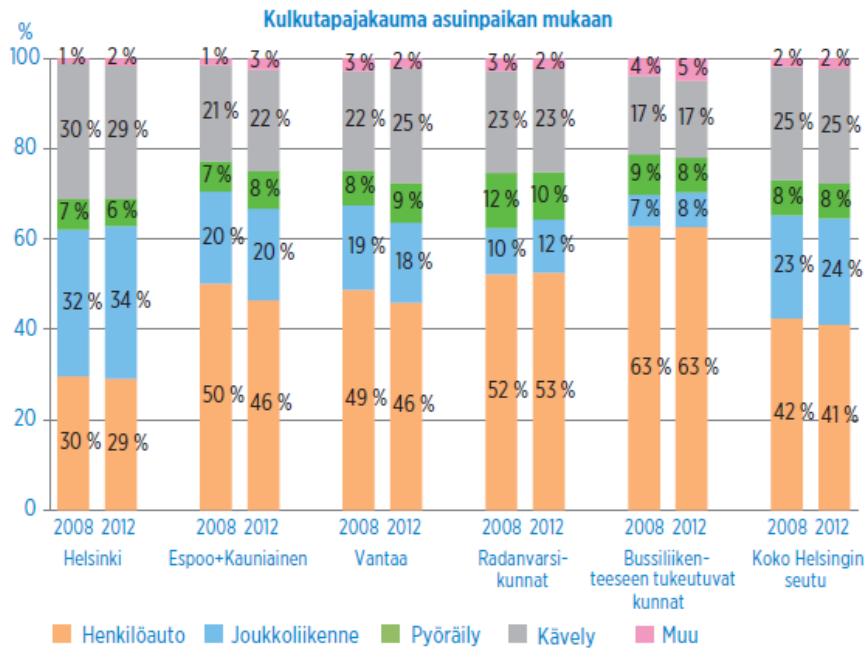
Cooperation area and main responsibilities of HSL Helsinki Region Transport

- Land area 3700 km²
- 14 municipalities
- Population 1.38 million
- HSL plans and organizes public transport in the region
- HSL is responsible for the preparation of the Helsinki Region Transport System Plan (HLJ).



Helsinki Region Transport System 2016

Modal split in Helsinki region in 2008 ja 2012

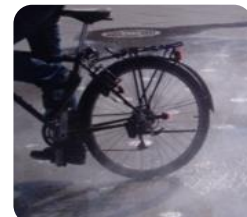


- Nationally important public transport terminal
- International airport
- Port
- Passenger traffic line
- Freight traffic line
- Metro line
- Highway
- National road
- Regional road



Helsinki Region Transport System Plan

- A long-term strategic plan.
- Aligns regional transport policy.
- A common view on the transport system development path and measures in the near future.
- Part of the land use, housing and transport (MAL) co-operation in the Helsinki region and of the MAL Letter of Intent preparation and monitoring process.
- Is based on the Regional Development Act and HSL's Charter.



Helsinki – Gradual expansion of regional cooperation and planning

Smith and Polvinen 1968

- A transport plan introducing a motorway-system in the centre of Helsinki led to a transport policy that favors public transport.

Transport studies and plans in the 1970's and 1980's

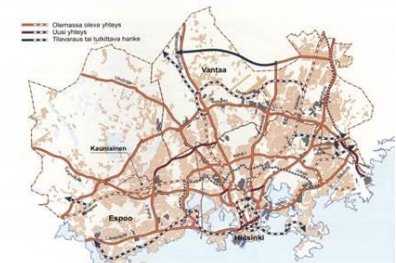
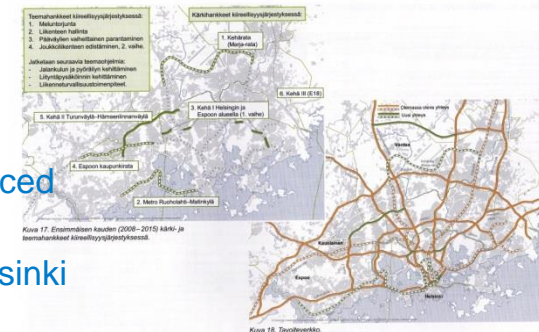
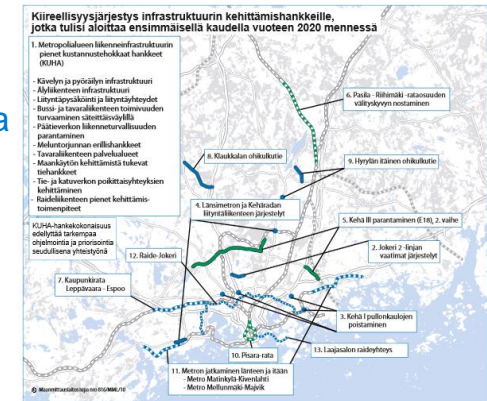
- Laid the groundwork for using transport studies in the planning and, for the regional co-operation and goal-oriented transport strategies.

The beginning of the regional planning process in the 1990's

- The first regional transport plan PLJ 1994 gave the “shape” for the plan and for the planning process. PLJ 1998 continued the process.

The expansion of the regional transport planning in the 2000's

- PLJ 2002 was a more comprehensive plan of the transport system. It led to a letter of intent (Transport) between the region and the state. PLJ 2007 introduced a more comprehensive (strategic environmental) assessment of the plan.
- HLJ 2011 expanded the planning area to cover all 14 municipalities in the Helsinki region (instead of 4 municipalities in the PLJ-plans). It led to a wider letter of intent (Transport, Land-use, Housing) between the region and the state.



MAL Letter of Intent 2012–2015

Signed 20.6.2012



Additionally:
Agreement between the
government and
Helsinki region municipalities
to support infrastructure
investments and housing
25.8.2014



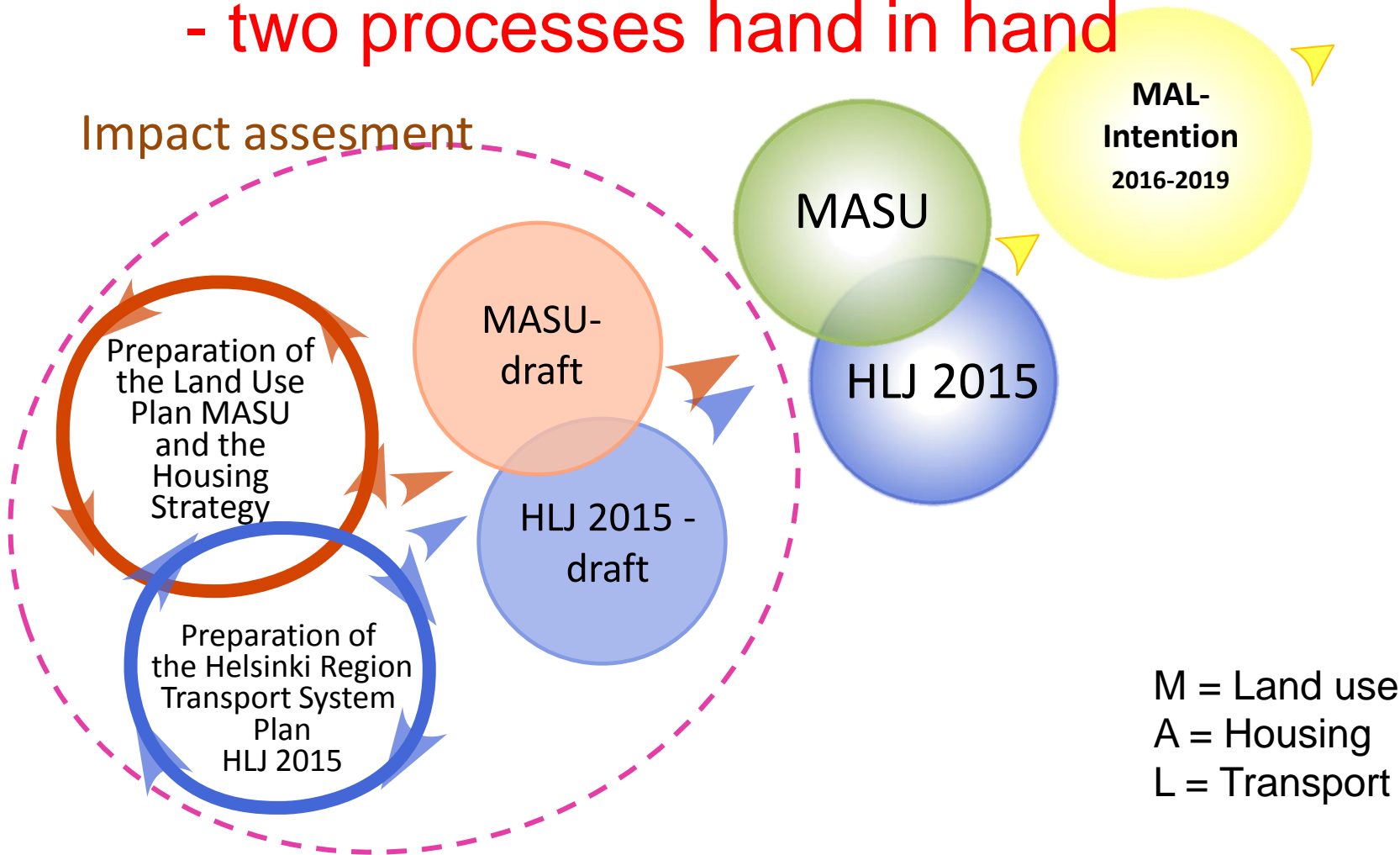
The latest HLJ 2015 –process: combining Land use, Housing and Transport planning

MAL-HLJ-interaction

- two processes hand in hand

Implementation

Impact assesment



2012

2013

2014

2015

2016

Helsinki region is developed as an **attractive** metropolitan area functioning as an **integrated whole**.

The coherent **urban structure** of the metropolitan area combines **multiple functions** and is **eco-efficient**.

The **dense core** area is surrounded by a network of **district centers** each with their own distinctive character and **close-to-nature environment**.

The **growing region** offers a wide range of housing options.

The transport system based on **sustainable modes of transport** serves the **accessibility** of the region and the **competitiveness** of industry and commerce.

MAL-VISION

Transport goals (HLJ Committee 18 March 2014)



Accessibility – smoothness

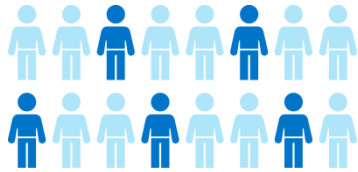
- Trip and **transportation chains** are seamless and reliable near and far.
- The competitiveness of **public transport** improves.
- **Cycling** is attractive and smooth.
- **Vehicular traffic** journey times are predictable and congestion is in control.
- Walking routes and environments are **pedestrian**-friendly.



Social, economic and ecological sustainability – responsibility

- Travel is **safe** on all modes of transport.
- There are alternatives for daily journeys meeting diverse **user needs**.
- It is **easy** for people to choose healthy and responsible modes of transport.
- Adverse **environmental impacts** and the environmental load of transport are reduced.
- The transport system is developed **cost-effectively**

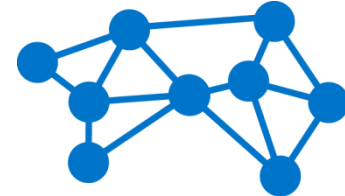
In 2050, the Helsinki region is home to



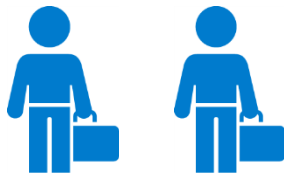
every third Finn



2,000,000
inhabitants



network-like public
transport



1,050,000
jobs



5.7 million
daily trips



a strong
metropolis

HLJ 2015 policies show the way

Stronger funding for the transport system



The strong efforts of the state and municipalities continue



Possible revenue from vehicular traffic pricing is directed to the region's transport system



Joint responsibility

The service level of sustainable modes of transport is improved



- Rail and bus trunk route network
- Supplementary feeder services
- Nodes and pedestrian environments
- Regional main cycling network
- Division of responsibilities for Park & Ride

Information and steering tools are effectively utilized



- Vehicular traffic pricing
- Incident management and information
- Regional parking policy
- Mobility management

The needs of logistics and flow of road traffic are catered to



- Logistics links and service level of national main routes
- Freight traffic service areas
- Performance of the street and road network

Results are achieved by effective methods



Long-term funding for small cost-effective infrastructure projects



Integrated public transport area



Resource-efficient operating models

The service level of sustainable modes of transport is improved

Themes	Measures
Rail and bus trunk route network and supplementary feeder services	<ul style="list-style-type: none">• The predictability of journey times is improved and number of services increased.• The trunk route network is strengthened with radial and transverse links and well-working feeder services.• Rail services are developed as the basis of the transport system supplemented by trunk bus routes.• Rail network is expanded in phases beginning from the core area.
Nodes and pedestrian environments	<ul style="list-style-type: none">• Pedestrian environments in centers are made more attractive and safer• Trunk route nodes are improved• Transfers are made smoother by improving feeder links and the service level of nodes• Housing construction is intensified around public transport nodes.
Regional main cycling network	<ul style="list-style-type: none">• A high-quality, safe regional main cycling network is implemented.• Parking, information and maintenance services for cycling are developed.• A method for monitoring cycling in the region is defined.
Division of responsibilities for Park & Ride	<ul style="list-style-type: none">• Park & Ride for cars and bicycles is developed as part of the public transport system.• The responsibilities for the costs of Park & Ride are reorganized and regional Park & Ride areas implemented accordingly.• Provisions are made for pricing of Park & Ride beginning from the core area.• The division of responsibilities for the implementation and maintenance of Park & Ride is piloted in the Pasila-Riihimäki project.

Information and steering tools are effectively utilized

Themes	Measures
Vehicular traffic pricing	<ul style="list-style-type: none">• Feasible technical-functional options for vehicular traffic pricing are identified along with an analysis of how they promote the transport system goals.• Changes needed to legislation necessary to implement vehicular traffic pricing are studied together with questions relating to administration and decision-making.• Decision on the possible introduction of vehicular traffic pricing is made as part of the transport system financing.
Incident management and information	<ul style="list-style-type: none">• The package of measures to improve the monitoring and control system of the main road network is implemented and the operation of the Helsinki rail yard is improved.• Authorities and service providers cooperate to develop information and incident management covering all modes of transport.• Operating principles for incident management on the Helsinki region transport network are established.• The operational activities of incident management and up-to-date information for all modes of transport are centralized at the traffic control center.
Regional parking policy	<ul style="list-style-type: none">• The “beneficiary pays” principle is strengthened in the development of regional parking policy.• Regional principles for parking at business premises are set out.• Parking standards are reviewed and centralized parking solutions promoted.
Mobility management	<ul style="list-style-type: none">• Mobility plans are created and implemented for places that generate significant numbers of journeys.• Mobility management tools are systematically utilized.• Communications and interaction related to the development and use of the transport system are made more efficient

The needs of logistics are catered to and flow of traffic ensured

Themes	Measures
Logistics links and service level of national main routes	<ul style="list-style-type: none">• The performance of the key logistics links is ensured by improving links of national importance as well as logistics quality routes.• It is ensured that the transport system, ports and Helsinki Airport together form a functioning network that supports the competitiveness of business and industry.• The transverse logistics links needed in Central Uusimaa are developed.
Freight traffic service areas	<ul style="list-style-type: none">• Division of responsibilities and an implementation model for freight traffic parking and rest areas are developed.• The missing parking and rest areas are implemented to enable the enforcement of the regulations on driving times and rest periods as well as the timeliness of transportation.
Performance of the street and road network	<ul style="list-style-type: none">• The service level of the street and road network is ensured through small and mid-sized infrastructure projects and information.• A study on the overall performance and service level of the street and road network is conducted in regional co-operation.

Results are achieved by effective methods

Themes	Measures
Long-term KUHA funding	<ul style="list-style-type: none">• The long-term funding for small and cost-effective KUHA projects is ensured and programmed to promote walking, cycling and public transport, logistics links and services as well as dense land use and noise abatement.• The programming of KUHA projects is continued and funding for the projects in the State and municipal budgets from 2016 on is ensured.• The programming of KUHA projects is coordinated together with the infrastructure subsidies of the Housing Finance and Development Centre of Finland (ARA) to promote more coherent urban structure.
Integrated public transport area	<ul style="list-style-type: none">• Public transport is planned and organized as an integrated whole across the region.• An integrated ticketing system is created for the Helsinki region.• Sufficient depot capacity is ensured in locations suitable for the operation of public transport.• A regional public transport management group is established as a cooperation forum.
Resource-efficient operating models	<ul style="list-style-type: none">• All-round cooperation and pilots are increased to develop mobility..• The mobility as a service concept is studied from the point of view trip chains and the promotion of sustainable modes of transport together with various actors.• The use of operating models, rolling stock and vehicles that reduce environmental load is promoted.

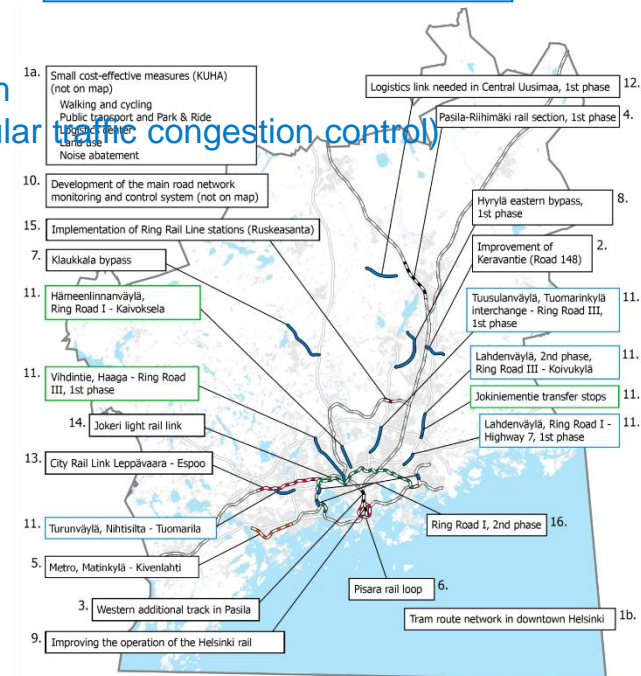
Infrastructure development projects

Proposal for projects to be launched in 2015-2025

- 1a. Small cost-effective measures KUHA (continuous) *
- 1b. Helsinki downtown tram network (continuous)
2. Improvement of Keravantie (Road 148) (supp budget 2014)
3. Western additional track in Pasila (budget 2015)
4. Pasila–Riihimäki rail section, 1st phase (budget 2015) *
5. Metro Matinkylä – Kivenlahti + street and road arrangements *
6. Pisara Rail Loop (more detailed cost estimate on 15 Oct 2014) *
7. Klaukkala bypass, Road 132*
8. Hyrylä eastern bypass*
9. Improving the operation of the Helsinki rail yard (HELRA)
10. Development of the main road network monitoring and control system
11. Mid-sized road packages (competitiveness of public transport, vehicular traffic congestion control)
12. Logistics link needed in Central Uusimaa, 1st phase
13. Espoo City Rail Link (Leppävaara-Espoon keskus)
14. Jokeri Light Rail
15. Ruskeasanta station
16. Ring Road I, 2nd phase

€375m/year

*Projects named in the agreement signed between the State and Helsinki region municipalities to promote large infrastructure projects and housing



Land Use Zones

Other areas of development for the municipalities 2016–2050

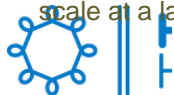
The development of areas outside the regional zones which have a strategic importance in the current plans of the municipalities

Areal development may not cause significant regional investment needs or hinder the development of the regional scale at a later time

Regional industrial, logistical and warehouse centres

Areas outside the designated zones

Areal development may not cause significant regional investment needs or hinder the development of the regional scale at a later time



The primary development areas of the region 2016–2050

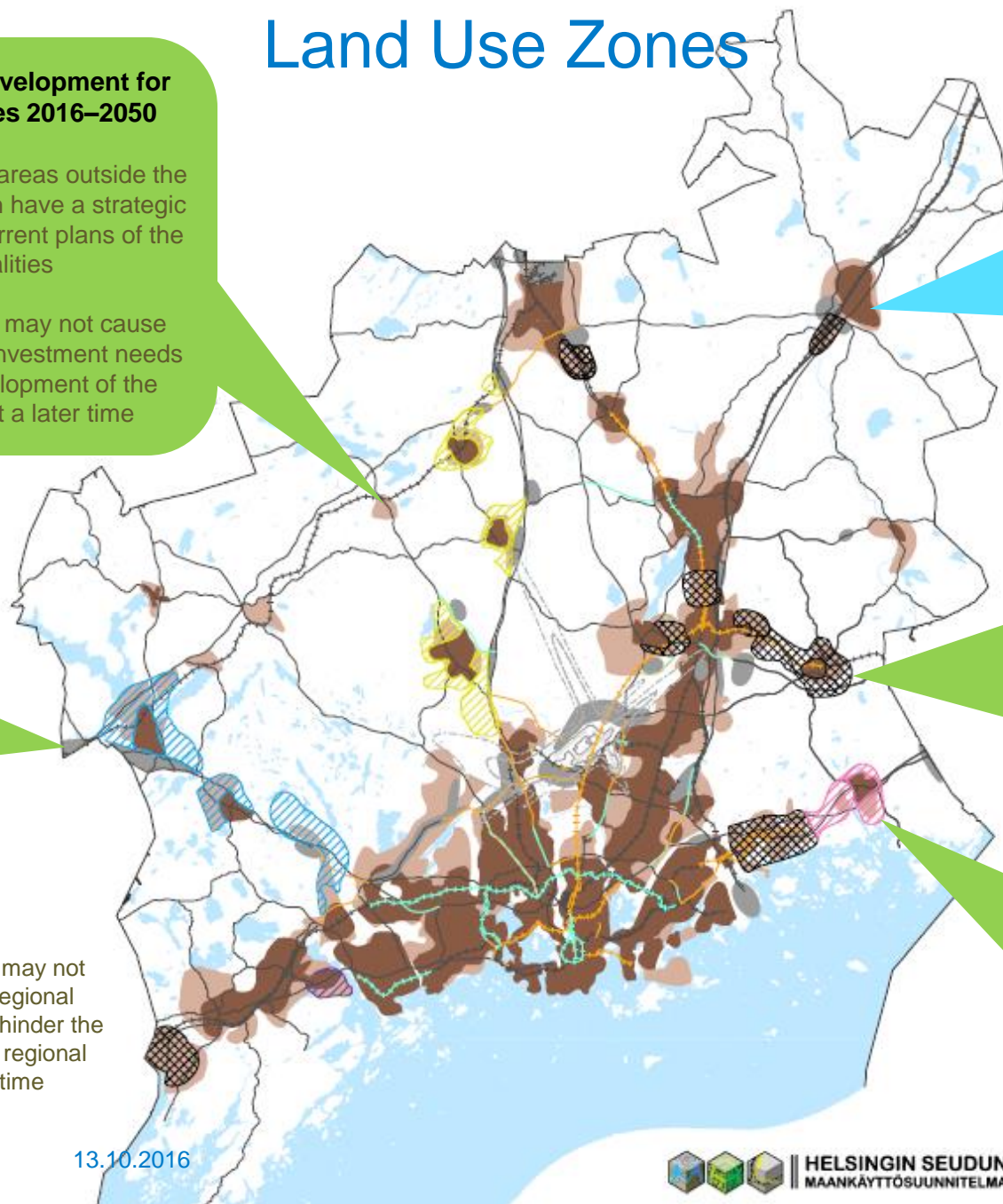
The goal is to direct at least 80 % of new housing construction into these areas

The complementary areas of the primary development areas in the region 2025–2050

These areas become primary development areas as the transport network is complemented in accordance with the HLJ 2015

Possible areas of expansion after 2040

Areas connected to large transport investments and whose development in a grand scale is in conjunction with the implementation of the possible transport investments



13.10.2016



HELSINGIN SEUDUN
MAANKÄYTTÖSUUNNITELMA

HLJ 2015 is good for the region

Public transport is used more: its share of motorized trips increases by 6 percentage points.

Accessibility of the region improves significantly.



The per journey cost of public transport decreases.



The capacity of main roads is used almost to the full but hardly ever exceeded.



An increasing number of people choose public transport, cycling and walking.

Significant environmental impacts

The climate target 2030 for the metropolitan area is achieved.



The EU climate targets are not achieved without significant changes.

New land use is located in noise zones.



Air quality may deteriorate locally.



Quiet areas are not at risk.



Increase in vehicular traffic increases accidents but relative to population, accidents decrease.

Conditions for a car-free lifestyle are created but car dependency continues to be a challenge.

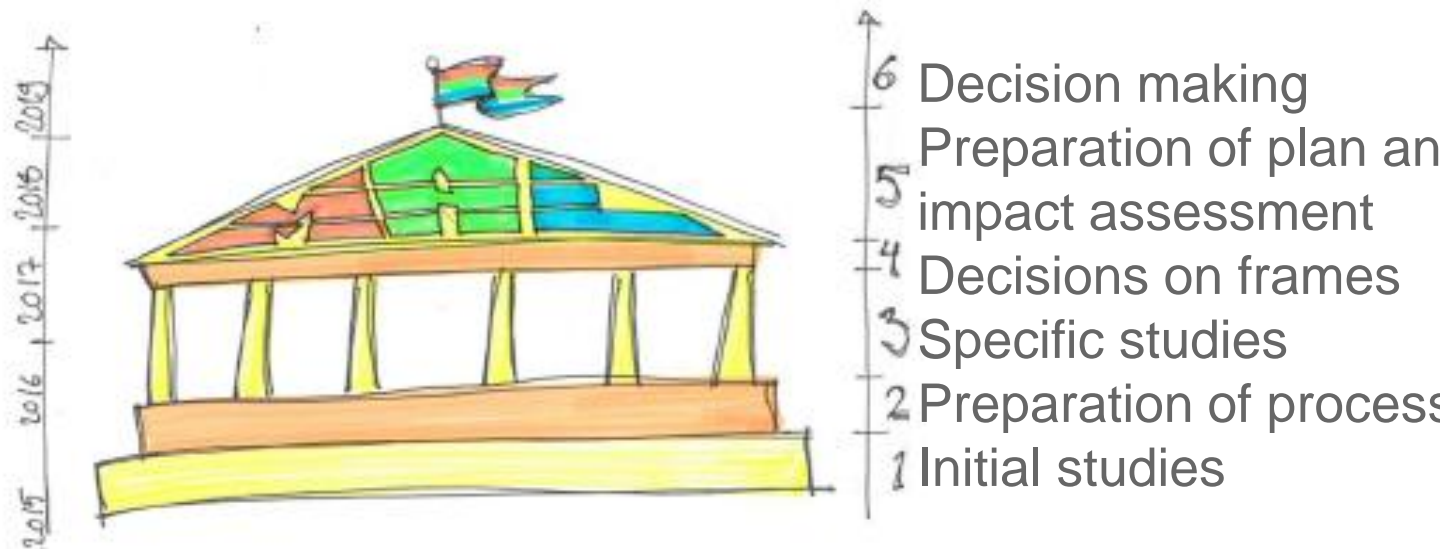


Towards next transport system plan

- Prepared together with regional housing and land use planning processes (MAL agreement)
- Key challenge is to decrease CO2 emissions (with economically viable solutions)
 - More compact cities
 - Bigger share of sustainable modes of transport
 - Technology will for sure help, but when and how?
- "Realism and resilience"

MAL 2019 -principles

- More prioritizing in short term (2030) and flexibility in long term (2050)
- Check points and synchronising
- Efficient usage of existing knowledge and focus on planning
- Continuous impact assesment guides the planning process
- Transparency, clarity and justification in interaction



Themes and studies

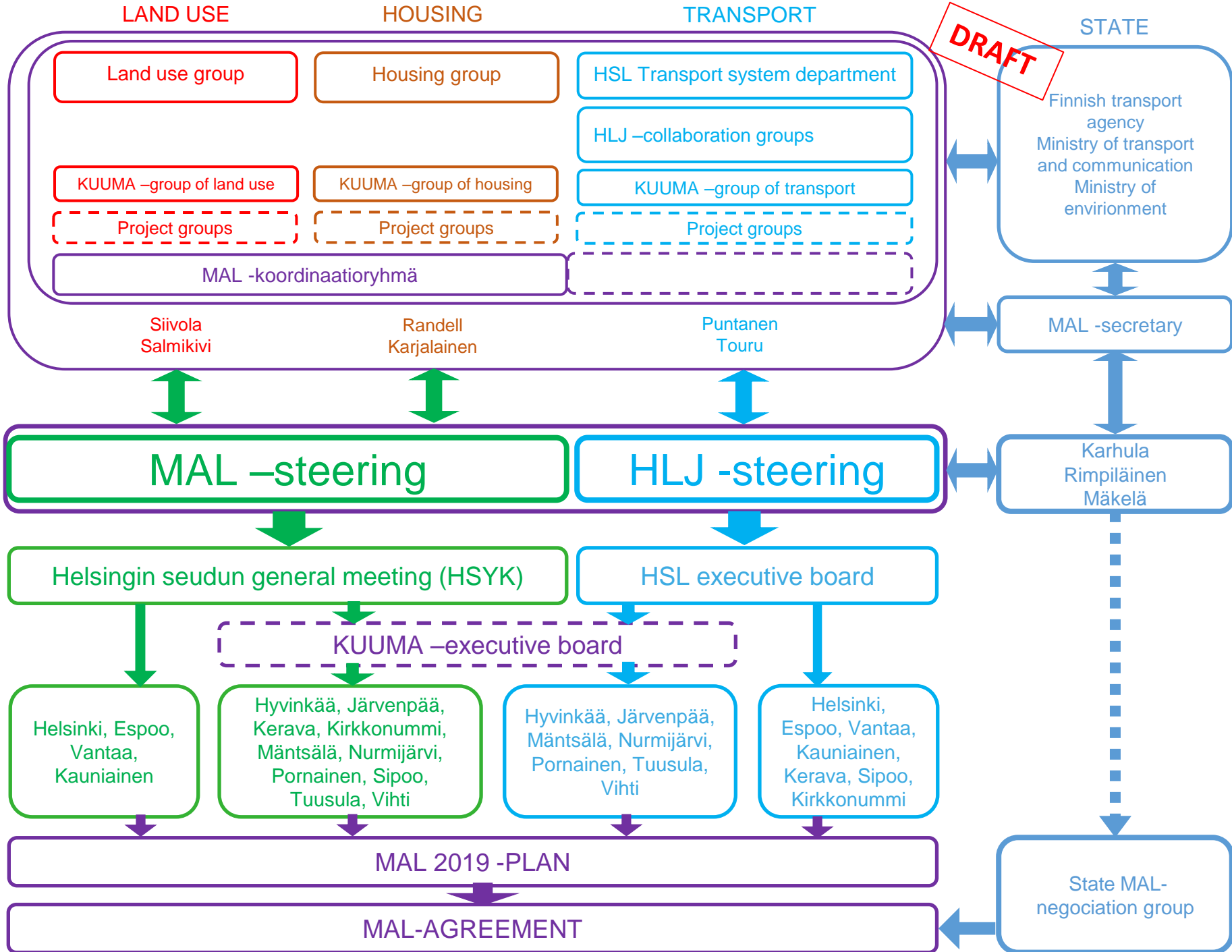
Ongoing

- Development of impact assesment: economy and health
- Cycling infra and parking
- Park&ride implementation plan
- Shared vehicles (OECD/ITF)

Planned

- Networked region:
 - "Trunk network and regional centers"
 - "Businesses, services and employers outside of centers"
- "Digitalisation, technology and new services"
- "How have we succeeded in meeting set goals?"
- "Possibilities to decrease CO2 emissions?"

DECISION MAKING STEERING COORDINATION PREPARATION



Thank you for your interest!

Tapani Touru

Head of transport system planning group
Helsinki region transport
Finland

+358 40 504 2270

tapani.touru@hsl.fi

<https://www.hsl.fi/en/hlj-helsinki-region-transport-system-plan>