Helsinki region transport system planning

Urban node concluding workshop 6.10.2016
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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 km$^2$
- 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).
Modal split in Helsinki region in 2008 and 2012

Kulkutapajakauma asuinpaikan mukaan

- Helsinki
- Espoo-Kauniainen
- Vantaa
- Raasepori
- Kanta-Häme

Helsinki Region Transport System 2016
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) cooperation 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.
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

Impact assessment

Preparation of the Land Use Plan MASU and the Housing Strategy

Preparation of the Helsinki Region Transport System Plan HLJ 2015

MASU-draft

HLJ 2015 - draft

MASU

HLJ 2015

MAL-Intention 2016-2019

M = Land use
A = Housing
L = Transport

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

(HSYK 26.11.2013, HLJ Committee 31.1.2014)
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
### Themes

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| Rail and bus trunk route network and supplementary feeder services | • 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 | • 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 | • 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 | • 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. |
### Themes

| Vehicular traffic pricing | • 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 | • 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 | • 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 | • 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

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| Logistics links and service level of national main routes | • 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                         | • 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            | • 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

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<td>Long-term KUHA funding</td>
<td>• 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.</td>
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<td>• The programming of KUHA projects is continued and funding for the projects in the State and municipal budgets from 2016 on is ensured.</td>
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<td>• 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.</td>
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<td>Integrated public transport</td>
<td>• Public transport is planned and organized as an integrated whole across the region.</td>
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<td>area</td>
<td>• An integrated ticketing system is created for the Helsinki region.</td>
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<td>• Sufficient depot capacity is ensured in locations suitable for the operation of public transport.</td>
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<td>• A regional public transport management group is established as a cooperation forum.</td>
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<td>Resource-efficient operating</td>
<td>• All-round cooperation and pilots are increased to develop mobility..</td>
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<td>models</td>
<td>• 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.</td>
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<td>• The use of operating models, rolling stock and vehicles that reduce environmental load is promoted.</td>
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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. Klaukkanala bypass, Road 132 *
8. Hyrylää 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

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 complemenal 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.

Regional industrial, logistical and warehouse centres

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.

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.

13.10.2016
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 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.

The per journey cost of public transport decreases.
Significant environmental impacts

The climate target 2030 for the metropolitan area is achieved. The EU climate targets are not achieved without significant changes.

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

New land use is located in noise zones.

Air quality may deteriorate locally.

Quiet areas are not at risk.

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 assessment guides the planning process
- Transparency, clarity and justification in interaction
Themes and studies

Ongoing

• Development of impact assessment: 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?”
Thank you for your interest!

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