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Development of bicycle, pedestrian and public transportation networks in Oulu

*Green Ways for Green Cities, 14-05-2013, Oulu*



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Public transport



Walking



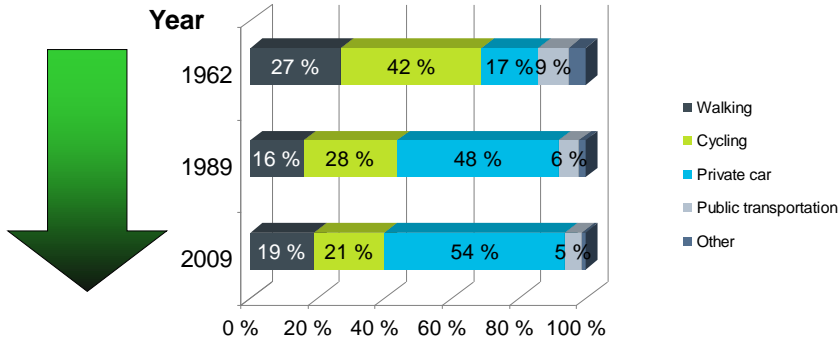
Cycling



Rotuaari



# MODAL SPLIT DEVELOPMENT



# MODAL SPLIT IN FINNISH CITIES

	Oulu	Helsinki	Tampere	Jyväskylä	Turku	Lahti
Walking	19	26	28	22	30	26
Cycling	21	7	4	14	13	14
<b>TOTAL</b>	<b>40</b>	<b>33</b>	<b>32</b>	<b>36</b>	<b>43</b>	<b>40</b>
Public transportation	5 *	26	16	6	9	5
<b>GREEN CITIES?</b>	<b>45</b>	<b>59</b>	<b>48</b>	<b>42</b>	<b>52</b>	<b>45</b>
Private car	54 *	39	50	58	48	55

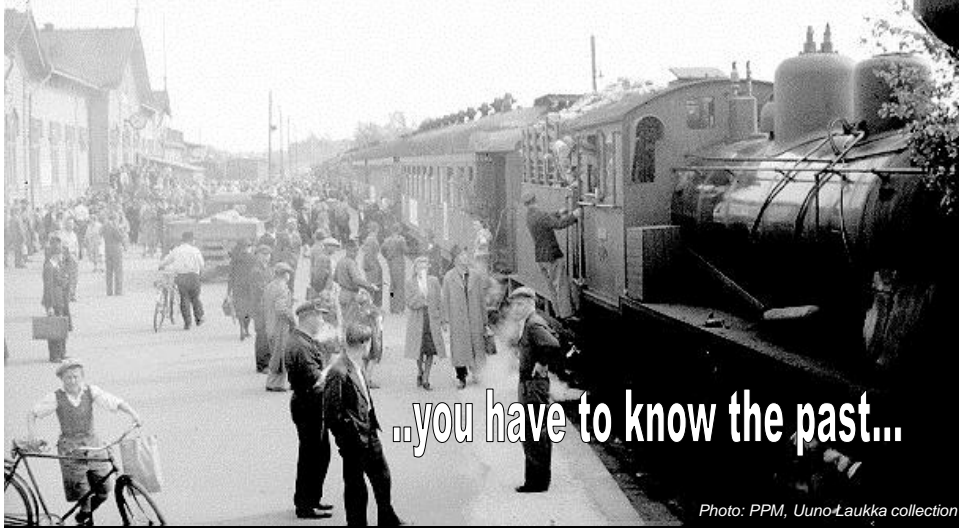
★ = a major challenge

Source: EPOMM Modal Split Tool





# To understand the future...

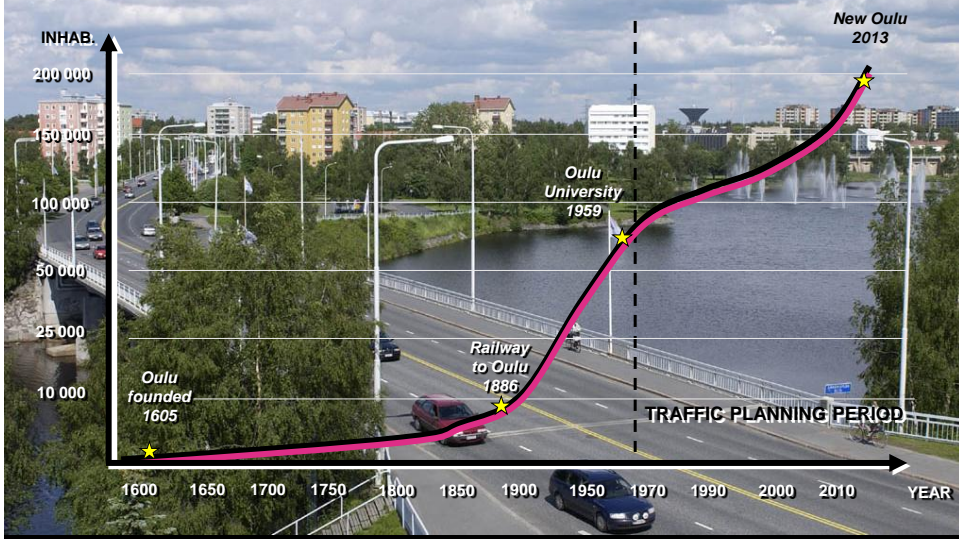


..you have to know the past...

Photo: PPM, Uuno-Laukka collection

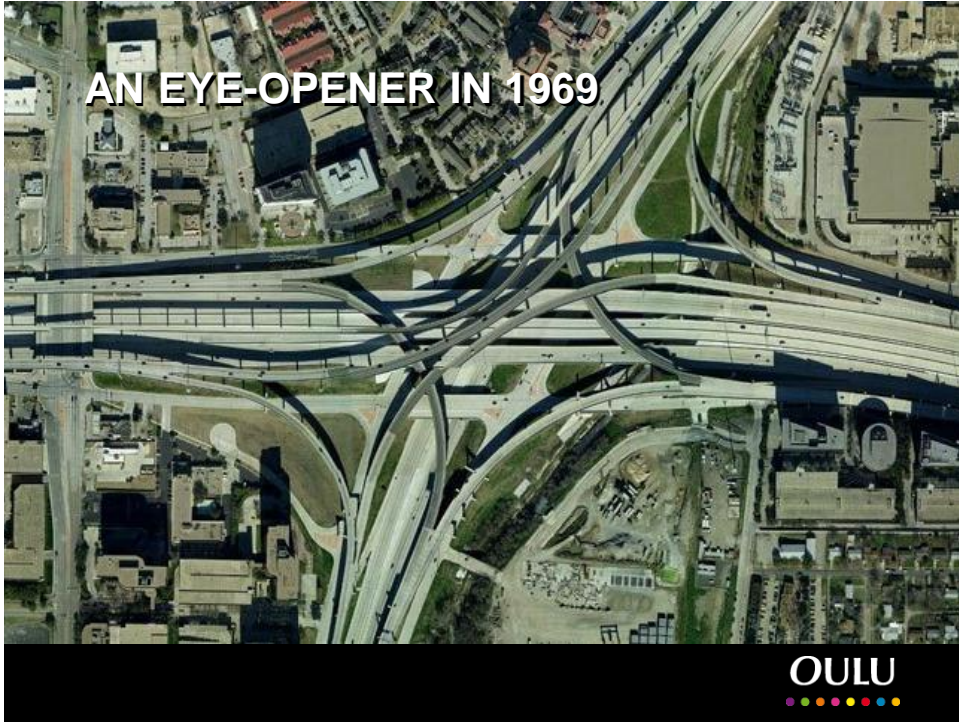


## THE GROWING CITY OF OULU









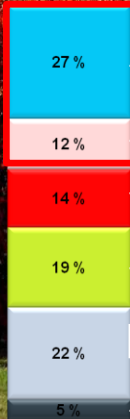


# WHY OULU IS SO SPECIAL?

- **About 650 km of bicycle and pedestrian routes**
  - One of the most extensive cycling networks in the world / inhabitant (4,3 m)
  - Not lanes among cars, but a separate, own network
  - Separated by a green stripe or by a shoulder stone
  - Busy crossings in levels
  - Lots of routes inside the city structure
  - Every bicycle and pedestrian route have street lights
  - 98 % maintained during wintertime
- **Unique cycling culture**
  - Historical / cultural reasons
  - A normal thing to do; even grannies cycle during winter



# CYCLING SEGMENTS IN OULU



- 1. Active cyclists all-year round**  
Cycle daily or several times a week both summer and winter time
- 2. Active summer cyclists, random winter cyclists**  
Cycle daily or several times a weeks in summer time, but less than once a week in winter time
- 3. Active summer cyclists, never on winter time.**  
Cycle daily or several times a weeks in summer, never in winter time
- 4. Random cyclists**  
Cycle summer time less than once a week, winter time even less
- 5. Non-cyclists**  
Do not cycle
- 6. Others**  
Missing answers make segmentation impossible

Population over 6 year old

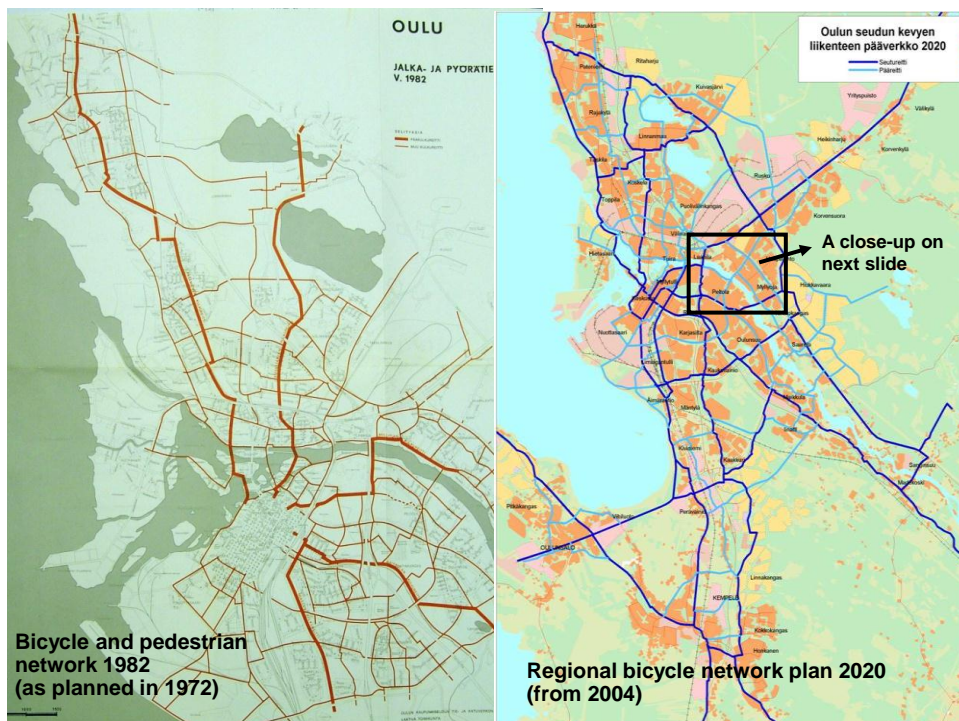


## CYCLING MILESTONES IN OULU

- **1969 Transport System Plan**
  - walking and cycling were included for the first time
- **1972 Development Plan of Bicycle and Pedestrian Traffic**
  - extensive network separated from car traffic covering the whole city
  - separate funding for bicycle and pedestrian projects (also a lot of construction using other funding sources)
  - since then cycling and pedestrian planning have been a “part of the system”
- **1981 Development Plan of Bicycle and Pedestrian Traffic in City Center**
- **1987 Pedestrian zone Rotuaari opens in the city centre**
- **1993 Rotuaari extensions were made**
- **2007 Strategy for Bicycle and Pedestrian traffic**
  - For the whole Oulu Region (Oulu + 12 municipalities + Road Authority)
- **2010 Development Plan of Bicycle and Pedestrian traffic**
- **2011 – 2013 Rotuaari extensions, heating**
- **2012 Cycling trip planner service**

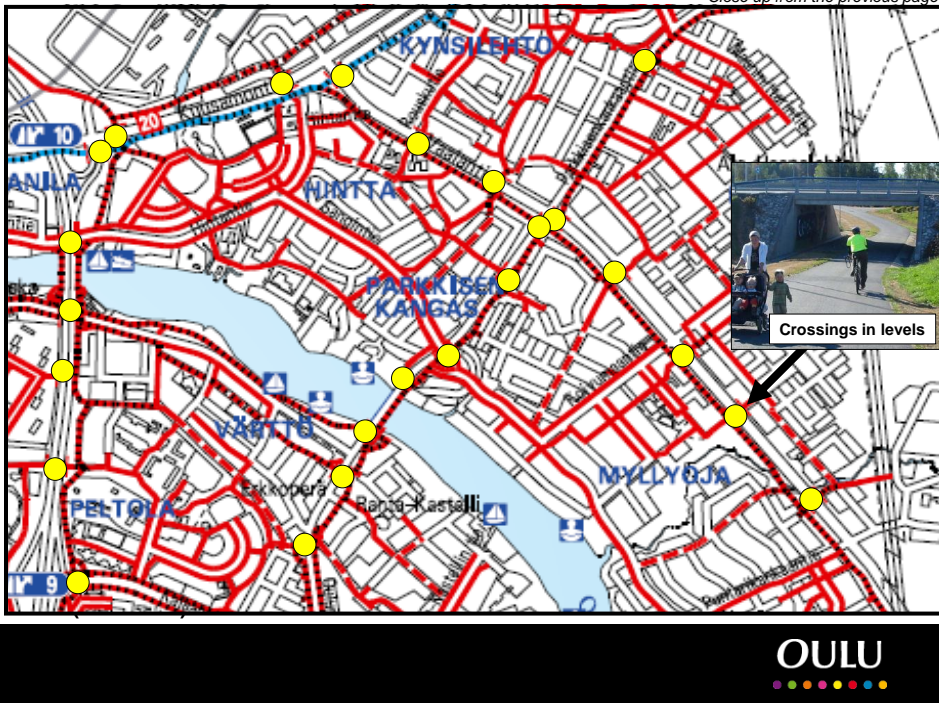


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Close up from the previous page



## KEY FACTORS FOR CYCLING SUCCESS IN OULU

- **Human factors**
  - Cycling was understood to be an equal mode of transportation right from the beginning
  - Became an essential tool in traffic and area planning
  - Conflict of interests between traffic modes were found nonexistent
- **Political factors**
  - Extensive political unity was achieved in 1980's
  - Political support has been an essential tool for the success
  - Residents are proud of the cycling network
- **Economical factors**
  - A separated funding from the year 1972
  - Though mainly the network is funded through larger traffic infrastructure investments



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## KEY FACTORS FOR CYCLING SUCCESS IN OULU

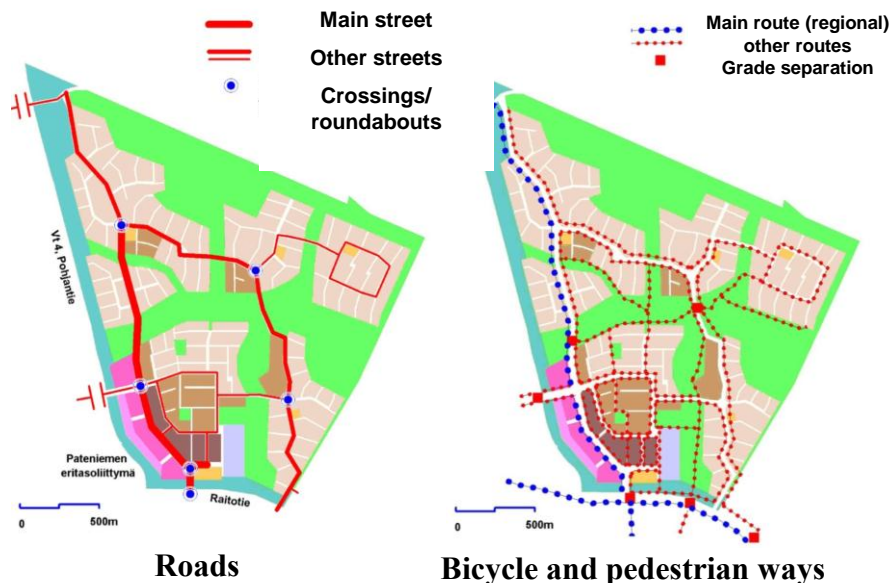
- **Technical factors**

- Regional accessibility as the baseline
- Quality demand: paved, street lights, winter maintenance
- Cycling routes planned to go inside the city structure
- Continuation important -> expensive solutions were needed
- Crossings with busy streets and roads in levels
- Shared space with cars on low trafficked residential streets
- Car free city centre



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## EXAMPLE OF A CITY MASTER PLAN



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## WALKING IN OULU



## ROTUAARI – PEDESTRIAN ZONE IN THE HEARTH OF OULU

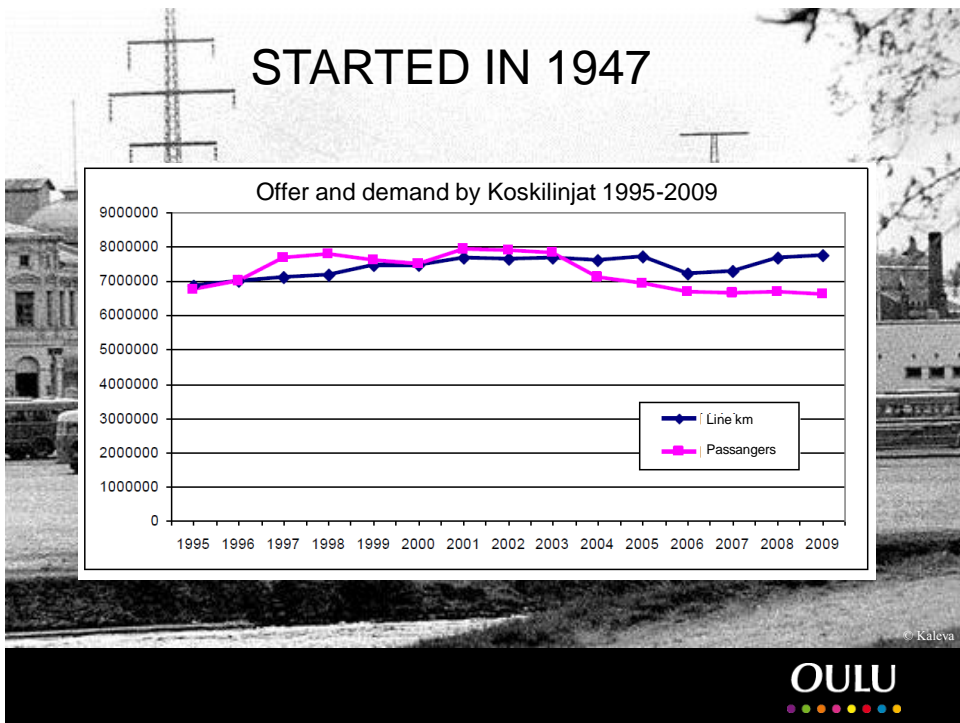
- 1967 the first try
- 1976 the second
- Third time succeeded in 1986
- Extensions in 1993 and 2011
- Heating 2011 - 2013

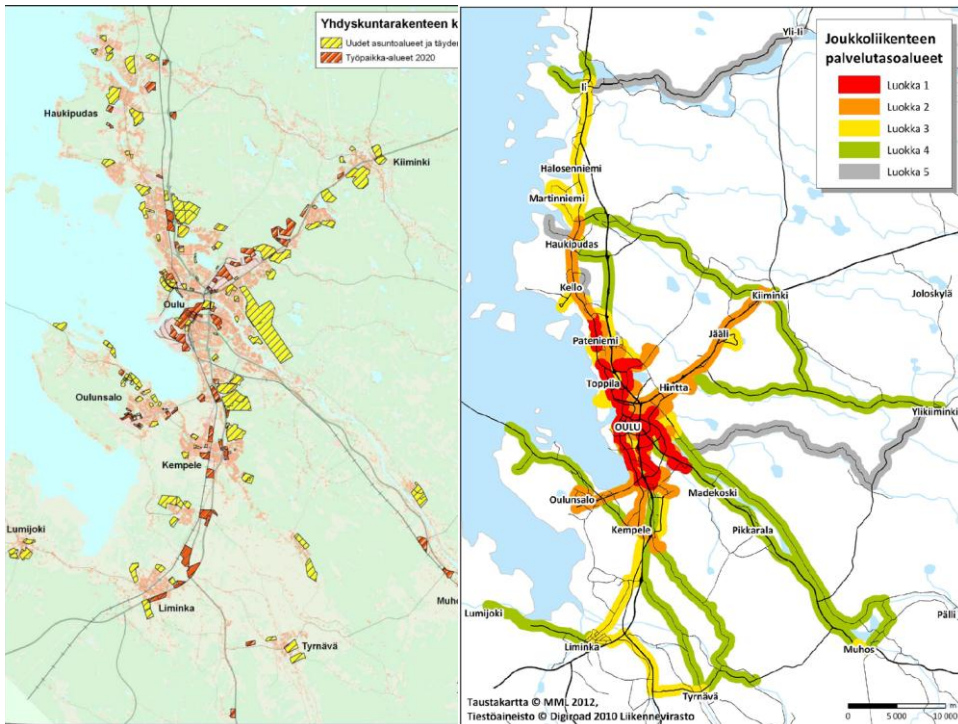


© Oulun liikekeskus ry









## A LESSON LEARNED

- Long term planning and dedication are needed
- Co-operation between authorities and organizations essential
- New tools and ways of promoting cycling, walking and public transportation are needed

The background image shows a yellow and red tram-like vehicle (SNL) on a street in Oulu. The vehicle has 'SNL' branding and is moving along a road with a large building in the background. The OULU logo is visible in the bottom right corner of the slide.



