URBAN PLANNING AND DESIGN IV 2019

TAMPERE CITY REGION 2040+

REGIONAL FACTORS OF WELL-BEING

Tampereen yliopisto
Tampere University

URBAN PLANNING AND DESIGN IV 2019

TAMPERE CITY REGION 2040+
REGIONAL FACTORS OF WELL-BEING

Tampereen yliopisto
Tampere University

Tampere University School of Architecture
in collaboration with
Tampere City Region and HYMY

Tampere University School of Architecture
Urban Planning and Design IV, Fall 2019
Tampere Region 2040+ - Regional Factors of Well-Being

Edited by Anna Koskinen, Panu Lehtovuori, Annuska Rantanen, Jaana Vanhatalo
Lay-out by Anna Koskinen (edit.) and students (content)
Published by Tampere University
Printed and bound by Grano Oy

Cover images by Wilma Blomgren (map illustration) and Roosa Sippola (collage)
The content, text and images of projects are entirely made by students.

ISBN 978-952-03-1390-6 (print)
ISBN 978-952-03-1391-3 (pdf)

The publication is part of a collaboration between the HYMY project and Tampere University. The HYMY project receives a government grant from the Ministry of Social Affairs and Health from the health promotion budget.

About HYMY project:
https://mal-verkosto.fi/hankkeet/hymy-hyvinvointiympariston-tietopohjan-mallintaminen-ja-hyvinvointijohtamisen-kehittaminen-verkostohanke/

Tampereen yliopisto
Tampere University

Tampereen kaupunkiseutu

JYVÄSKYLÄ

KUOPIO

LAHTI

CONTENT

PREFACE

Urban Planning and Design IV is a strategic and regional planning course that is organized annually by Tampere University School of Architecture for the first year master's students. Focussing on a city region, the course introduces a set of professional tools and practices that help students to move from analysis to regional strategies and projects that exemplify a successful realisation of the strategies. The course pedagogy foregrounds the complex and multi-scalar nature of urban and regional processes, as well as possibilities of many kinds of actors to play a role.

In 2019, Urban Planning and Design IV worked with the Tampere city region. Collaborating with HYMY, modelling of the well-being environment and improvement of well-being management -network project, the students explored different approaches to well-being, proposed possible indicators that work on regional scale and proceeded with projects that improve the well-being of the region's population.

During intensive seven weeks each group produced a project that proceeded from a broad analysis, using both qualitative and quantitative methods, to problem definition, strategic choices and concepts that were spatialized into general plans and exemplary urban interventions. The groups were encouraged to look everything through the lens of well-being and to create their own well-being concepts in an early stage of the project. One outcome of the discussions was that the concept of well-being might be conceived as vitality, understood holistically as a combination of economic, social and environmental aspects.

The students were also asked to create indicators that could be used to measure the region's well-being. While well-being is a complex issue that can be defined and measured in a myriad of ways, students seemed to have a clear understanding of what kind of factors create general well-being in urban and suburban environments. Basic services, connections and fluency of everyday life in regards of time and transport, identity and unity, active and social life, free-time and access to nature are recurring factors that emerge in most of the works.

Through the conceptualisation of well-being each group found their own focal points and focus areas within the Tampere city region. Prior to this, the students made a regional analysis in order to understand differences between areas and to recognize different quality factors. Based on the chosen well-being factors and concepts, as well as the findings of the regional analysis, each group developed their own regional strategy and chose their focus areas where the strategy could be implemented.

The focal points of the groups can roughly be divided into three different themes: transport, urban services and leisure. Many of the groups were interested in smaller municipalities surrounding the city of Tampere. The students found out that even if Tampere region is one of the fastest growing city region in Finland, the growth is not distributed evenly within the region. Many municipalities are declining in detriment of the growth of the city of Tampere and other more vital municipalities. Due to the decline of population and migration of especially young people with children, these municipalities have a lack of services and distorted demographic ratio. In order to access to the services and places of activities, it is likely that the resident needs to own a car or use a lot of time in public transport. In general, the connections to Tampere city centre were noted to be rather good, whereas lateral connections between and within smaller municipalities were either poor or non-existing.

Declining population creates a negative spiral: less people result to lack of services and connections which result to lack of vitality and attractiveness of the municipality. The students' groups approached this problem from different points of view: identity, connections, services, possibilities of leisure, to mention a few. The key question in these kind of cases was if there was something to be done in order to make the municipality or area more vital to attract more residents, or should a certain marginality be approved and the qualities of the area be changed into tourist and leisure activity attraction. Contrary to the current development, many groups proposed to increase and multiply the amount of basic services in smaller municipalities instead of centralizing them into growing centres only. They saw that small municipalities have a lot of hidden potential that should be used to keep the whole region vital. In addition, some municipalities and areas seem to have a strong identity that could be seen as a starting point and an inspiration for the further development.

The growing areas of the region were also studied. The groups came up with ideas on how these areas can deal with current and future challenges like immigration, segregation, climate change, and digitalization. These challenges were addressed through different scales and points of view. The urban life's effects on both mental and physical health of an individual were broadly recognized. Social life, self-actualization and leisure were often seen as important factors of well-being. The students argued that the contemporary and future way of working and better connections result in more free-time. Therefore there is a growing need of multifunctional and active social hotspots and public space within the region. The upcoming tramline, its effects and possible expansion, was also a theme that paid many group's attention. It was seen as a positive thing that opens up possibilities to develop sustainable and dense areas with mixed functions from housing and work to food production and leisure.

Taking into account that the projects were made in a very short time, the students managed to get an understanding of the problematics and dynamics of the city region, understanding the overall urban development of Tampere city region, as well as various relevant planning and management issues. They came up with innovative solutions to tackle problems in both vital and declining areas and proposed different kind of concepts to enhance the general well-being within the city region. They understood that well-being can be measured in many ways but there are certain basic functions and needs that the area needs in order to thrive and attract people.

Sincere thanks to everybody that made the Urban Planning and Design IV course possible and successful. Special thanks to Heli Suuronen, Kaisu Kuusela and the whole Tampere city region team, as well as to Matti Jääskeläinen who gave great insights to Pirkkala's planning and land policy and Jukka Vitikka who showed an unique well-being farm in Lempäälä during the site visits.

In Tampere, November 26, 2019

Panu Lehtovuori
Anna Koskinen
Annuska Rantanen
Jaana Vanhatalo

REVIVING THE INDUSTRIAL HERITAGE OF PIRKANMAA

Primesa Arapi
Venla Härmäläinen
Krista Kailajärvi
Roni Rinne
Anna Taipale

WELL-BEING CONCEPT AND ANALYSIS

DEFINING WELL-BEING

Thinking of Pirkanmaa region, there are specific historical and natural attributes that lie within, such as the vast number of industrial buildings and the strongly visible water engagement both in the public spaces and as a part of the industrial areas. Our approach aims to use this connection of built environment heritage and nature between the strong traditions and communities in the Finnish society. Analyzing the meaning of well-being, we talk about the social well-being presented through a common identity and social unity. The common identity is treated through using existing heritage and bringing it back to the everyday life.

Our strategy of promoting this understanding is:

- Reviving the industrial heritage of Pirkanmaa
- Creating urban meeting points
- Enhancing accessibility to these points

FINDING LOCATIONS FOR INTERVENTIONS

We identified industrial heritage sites around Pirkanmaa from data provided by The Centre for Economic Development, Transport and the Environment (ELY-keskus). Then we identified industrial areas around Tampere region. With both industrial heritage sites and existing industrial areas identified, we created a series of buffers around each of them and analysed the number of people as well as the number of jobs inside each buffer.

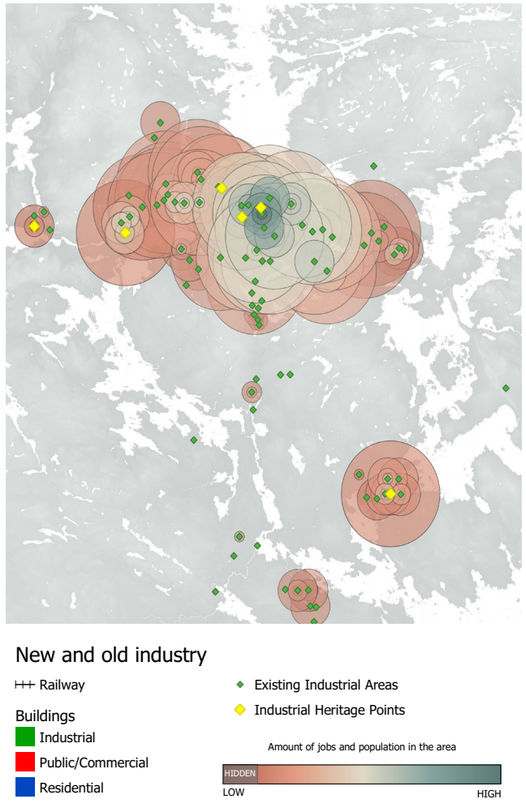


Figure 1.
Analysis done on industrial areas and heritage sites

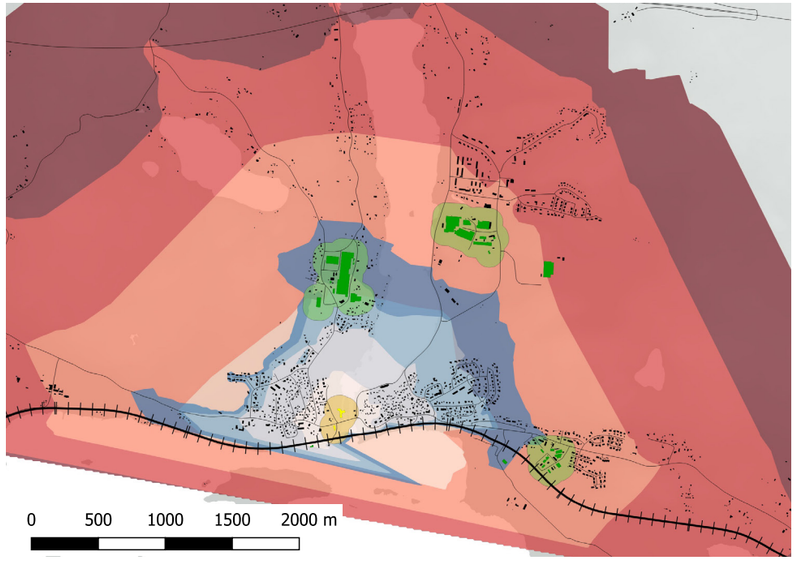


Figure 2.
Walking and cycling distances in Siuro.

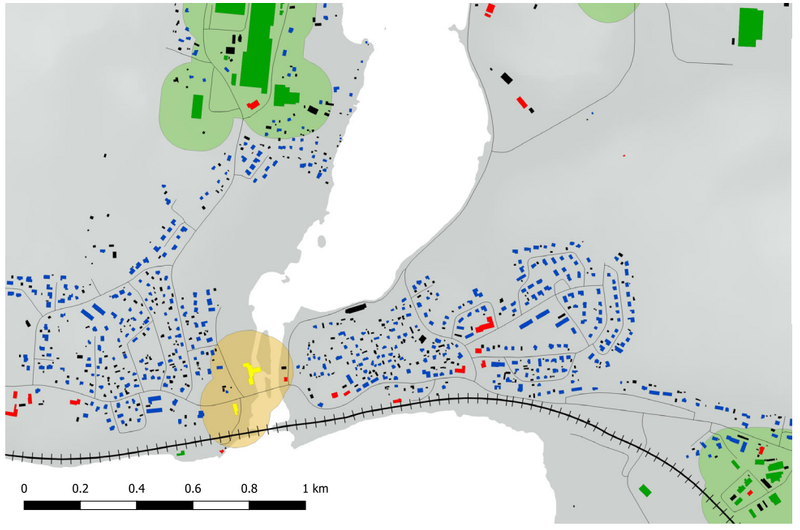


Figure 3.
Detailed map of existing building types in Siuro area.

REGIONAL STRATEGY FOR WELLBEING

OUR STRATEGY IN A NUTSHELL

Our strategy is to create new social hotspots which will unite the existing public space with the industrial site, further connecting the social wellbeing to the historical values of the area itself. The aim is to secure services for all age-groups in order to create an environment that promotes activeness throughout the whole life. The new work and housing opportunities these hotspots create will form a mixed-use environment. Moreover, the use of existing structures and repurposing them instead of building new buildings represent an ecological approach towards a better environment since it means using less resources and protecting the surroundings.

Our theme and vision of the project is:

- Urban hotspots tied into the industrial structures.
- Mixed use and services for different age groups and income levels.
- Accessibility and public transport.

COMMUTER TRAIN

We are linking a longer distance commuter train or bus to a small circular busline in the town centre. The aim is to make working in the city easy without owning a car. The commuter train would operate with minimal amount of stops or no stops at all between the town centre and Tampere centre. There would be more trains in the morning and after working hours, for example arriving to Tampere 7.45, 8.30 and 9.15 and leaving from Tampere centre at 16.30, 17.30 and 18.15. There would also be additional trains once around noon and once or twice in the evening, depending if it's a weekday or a weekend.

LOCAL TRANSPORT

Transport locally would strongly rely on biking and pedestrian routes as well as on a local bus. The green networks and biking paths would be expanded and connected to all main facilities, including the new social hubs created in the old factory areas. In some areas use of e-scooters or bikes could be considered as well, since they best work in places with less traffic.
The local bus would use a route going by the most used facilities and the most densely populated areas. The bus doesn't need to be bigger than to fit 15-25 passengers depending on the size of the town.

SPATIAL IDEA

ADAPTIVE REUSE
Saves resources, energy and costs.
A tool for sustainable wellbeing.

INDUSTRIAL BUILDINGS
Strong reference points and historic narratives signaling the collective memory.

ECOSYSTEM SERVICES
Adapting to the needs of the local community and shaping through time.

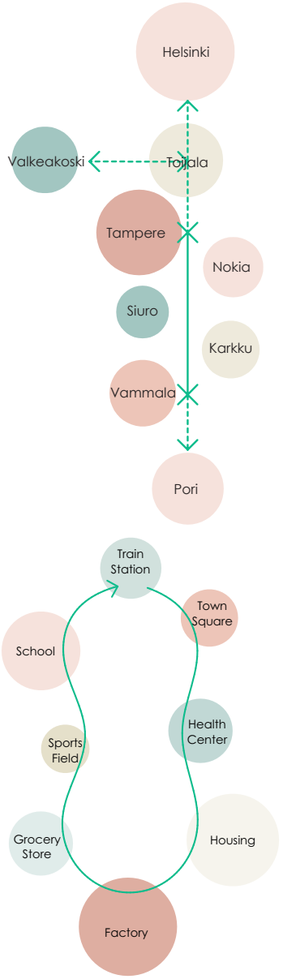


Figure 4.
Commuter train and local transport in the area

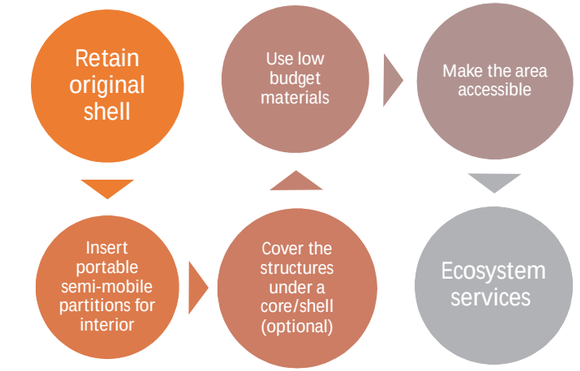


Figure 5. Spatial Approach

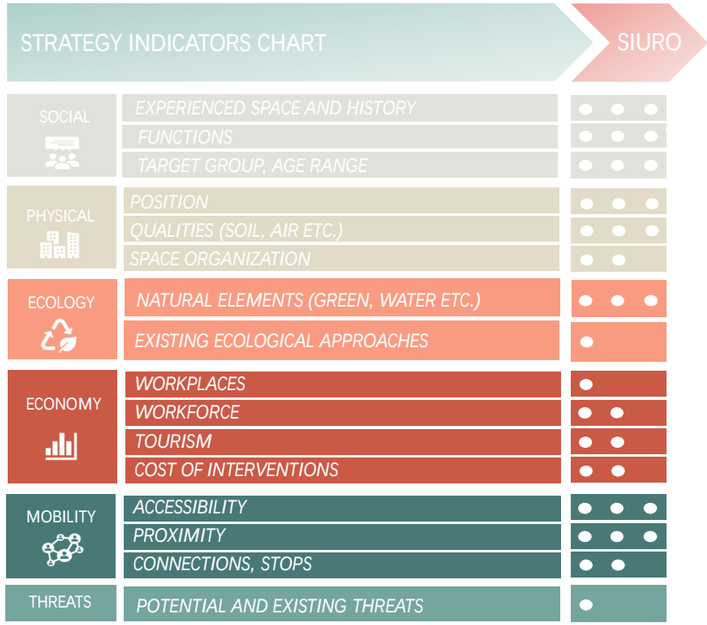


Figure 6. Strategy indicators

AREA VISION

SIURO - THE CALM FACTORY VILLAGE

Some of the factories could be repurposed, after they no longer function, to host small sports arenas, dance halls etc. They could be used by both kids and adults as well as by seniors. Organizing such hobbies would offer part-time employment for especially the youth living in the village and promote well-being of the community. Having different freetime activities will also make the area more attractive to people considering to move in. Siuro already has a lot of community events such as an amateur summer theater and winter holiday market. The factory area has an enthusiastic group of fishermen and the old factory area seems to attract the locals around the year. The factory currently hosts a boat builders workshop and some offices. It could be introduced to host new activities as the old ones close down.

The plan enhances the cycling and pedestrian routes connecting the different areas to each other. The area has a vast network of outdoor paths and the idea is to further promote the connection between built environment and nature.

CELLS IN A SHELL

The old factory areas would become new meeting points and social hotspots. They could host a wide variety of services and work as a platform for non-profit functions. The idea is to use an existing shell and to create smaller units or "cells" that can be moved or altered as the functions do.

Some examples for functions in such an area would be sports facilities (gym, ball sports, dance studio), club room for the young and the old, offices, spaces to rent for private parties, sauna, restaurant or a cafe or such. The idea is also that the spaces have users multiple times during a day. The mornings can be for elderly people's gym or yoga, afternoon for schoolkids' hobbies and evenings for adults' workouts. The party venue could be expanded to the larger spaces to host more people and in some cases the space could work as an exhibition space for the local artists or it could host a weekly or monthly farmers market.

The indoors of the factory would be divided to smaller partitions with semi-mobile walls so that the spatial configuration can easily be reorganized if the functions change. The functions are just proposistions and the evetual purposes of the spaces would be determined in cooperation with the local community.

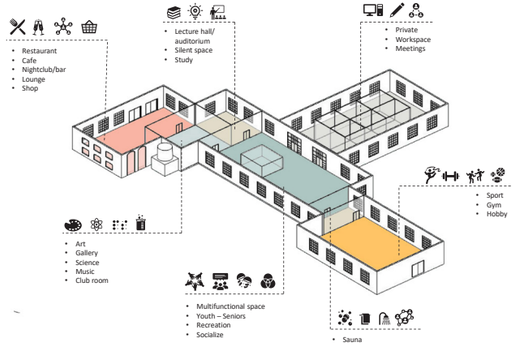


Figure 7.
Potential activities and functions

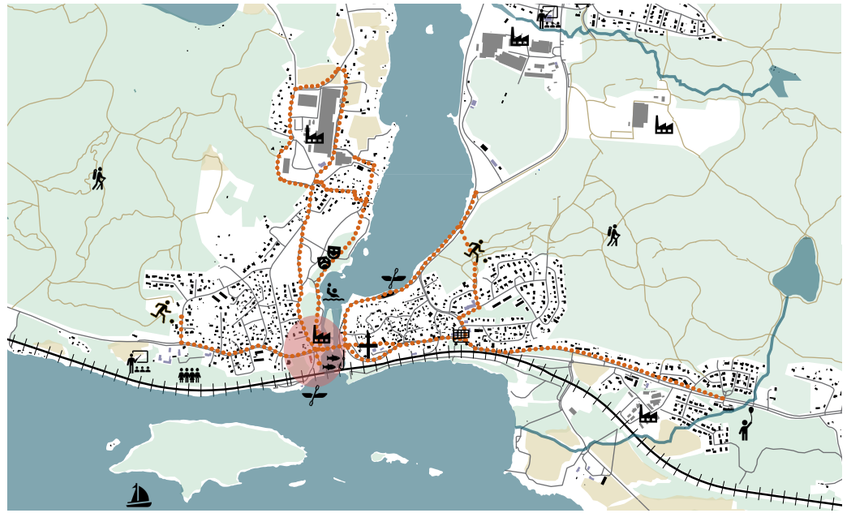


Figure 8.
Accessibility and current functions in Siuro.

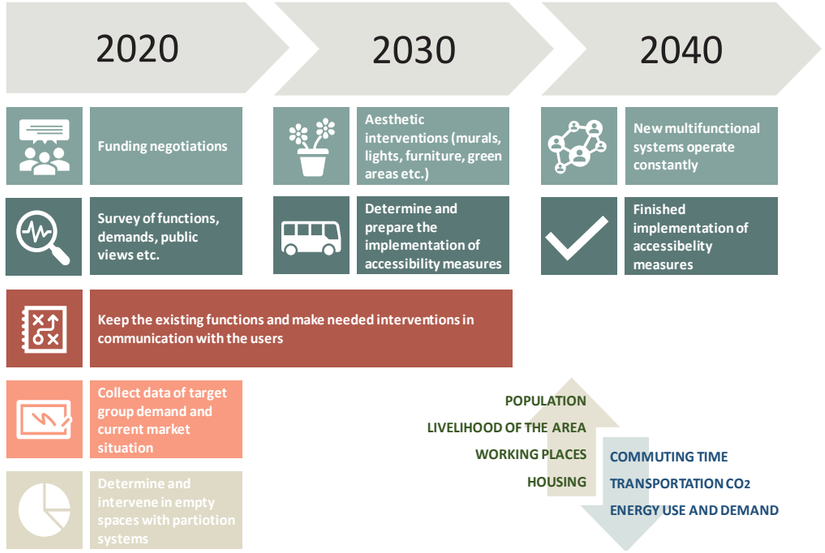


Figure 9.
Strategy timeline

FORGOTTEN AND HIDDEN PEARLS IN PIRKANMAA

Kirsi Karislahti
Karoliina Lahti
Saara Linden
Tanja Yli-Kyyny

ANALYSIS AND SYNTHESIS

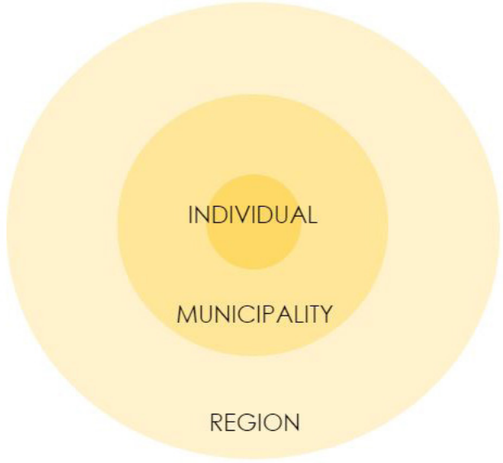
REGIONAL ANALYSIS AND WELLBEING DEFINITION

Pirkanmaa, along with Uusimaa, will be the only region of urban growth in Finland in the future. Our work focuses on finding municipalities at risk to be left out of the development, and recognising and utilizing their potential to revive their vitality.

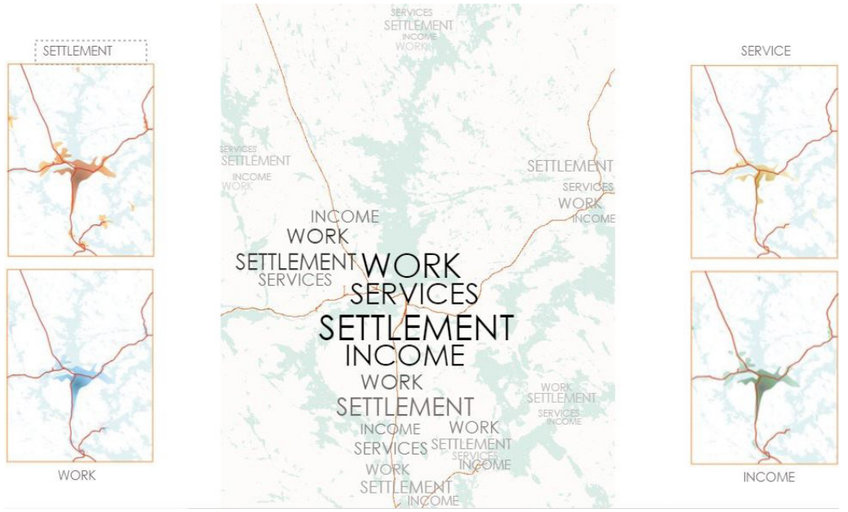
In the context of this urban design task, wellbeing is defined on 3 levels that overlap and interact with each other: region, municipality and an invidual. The focus is on invidual's subjective experience of wellbeing, that we found the most interesting. Even if material basic needs are fulfilled, it doesn't always lead to experience of feeling well. Maybe there's something about modern way of life that prevents us from finding our life meaningful?

Maps on density of settlement, workplaces, services and amount of income show that the most vital areas are located around Tampere center and the main traffic routes, especially the one to Helsinki. As these cities and their connection grow stronger, municipalities far away from the main traffic routes are at risk to be left out. Kuru, Hämeenkyrö and Pälkäne were picked as examples of such areas. Orivesi was one of them at the earlier stages of the assignment, but turned out to have traffic connections good enough to do well on its own.

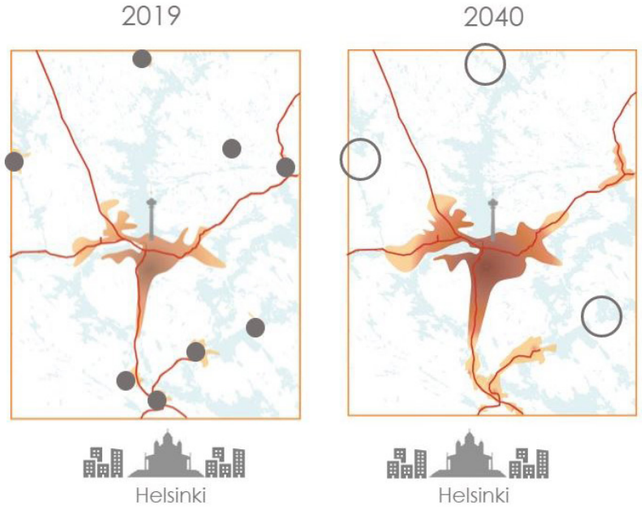
A closer look at the chosen areas indicates them to face challenges in the future. Due to Kuru's poor economical situation, it has already been merged to Ylöjärvi. Dependency ratio rises as the population grows older, and the buildingstock that mostly consists of old detached houses might be desolated and deteriorated in the future if no new inhabitants are moving in. With the lack of good traffic connections, working places (and therefore income) and services, these areas are seriously threatened to waste away.



Picture 1.
3 levels of well-being



Picture 2.
Regional analysis



Picture 3.
Future scenario of growth

REGIONAL STRATEGY FOR WELLBEING

DEFINING THE STRATEGY BASED ON VISION

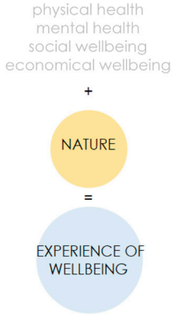
The strategy is based on the assumption of nature being a significant contributor to the experience of wellbeing besides other areas of wellbeing such as physical and mental health and social and economical wellbeing for example. The main goal is to keep small, rural areas alive because they can provide kind of wellbeing that bigger cities lack, therefore acting as an important alternative to stressful city life.

The strategy is defined on three levels of wellbeing. Being at the center of the strategy, an invidual's experience is envisaged to be meaningful life with basic needs fulfilled. Well-being inhabitants benefit the whole municipality that supports itself, and together the municipalities form dynamic region. The strategic means to achieve this vision are providing an alternative to urban life for the invidual, working places, services and balanced demographics at the level of the municipality and overall vitality, including economical factors and improved public image for the whole region.

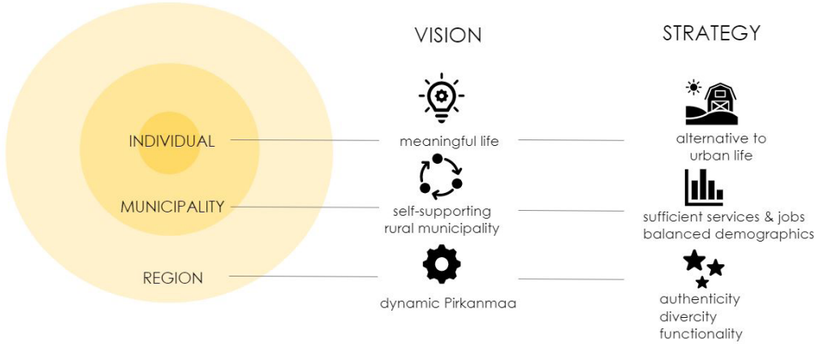
The potentials and the challenges of chosen municipalities were examined by a swot test. Disadvantages that all three turned out to have in common were poor traffic connections and the lack of jobs and services for example, but they all had pure nature. Proximity of Tampere could be regarded as both advantage and disadvantage. All areas had interesting special features to consider.

The strategy was applied in practise by compiling the observations and ideas into two main concepts, that are both based on nature and include some practical improvements on traffic connections and such, and composing a unique brand image for each municipality, based on their characteristics. Because of environmental aspects and probable zero to moderate population growth in the future, reuse of existing buildings is preferred over new investments. The concepts serve different target groups in different ways.

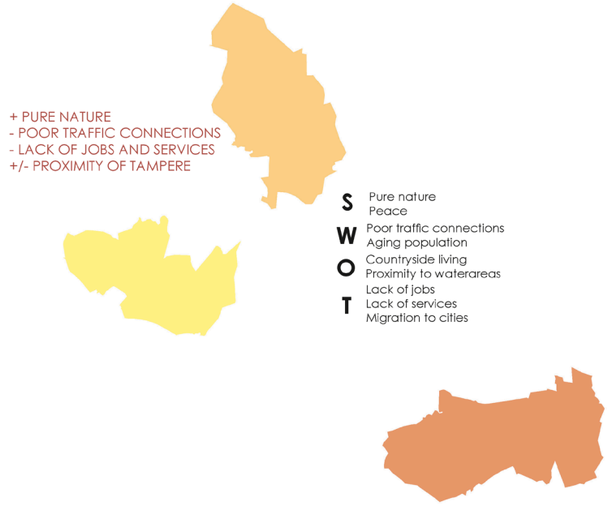
Once the actions and interventions are carried out, their effect on wellbeing is evaluated. The subjective experience of wellbeing can be directly measured by inquiries and seeing from migration statistics if people are willing to live in a certain area. Other, more measurable factors effect the experience indirectly, because they contibute to or have correlation with other areas of wellbeing.



Picture 4.
What the experience of wellbeing consists of?



Picture 5.
From vision to strategy



Picture 6.
Results of swot-analysis: common features

AREA VISION

CONCEPT I AND II/ FINAL URBAN DESIGN

Concept I is utilizing nature for tourism to generate money and new workplaces. Things like pure nature, winter and peace and quiet are boring everyday life for us, but interesting for international tourists. If flying will be reduced because of environmental reasons, local tourism increases. These areas and Tampere form a coherent route of experiences to travel, and benefit each other. Accomodation is an experience itself, too. It includes sustainable reuse of old houses as rental accommodation and a concept of farm bed & breakfast as a new form of income for small farms. New travel connections benefit tourists as well as locals.

Concept II is about enabling a modern way of life in the peaceful countryside. It includes subconcept of co-working and local food center, where both local people can remote work without commuting and city dwellers can come to work in creativity-boosting natural environment for a while. Market square and hall support local food production. The elderly are taken care of in senior communities, where they can live with each other in home-like environment and centralizing the services makes them cost-effective to arrange. These subconcepts are applied in all three areas. Modern technology innovations like drone deliveries of goods and rideshare apps make it possible to live in the countryside.

The brand concepts of the areas are derived from their actual features found by swot-analysis.

Kuru / ACTIVE Kuru's brand image is based on Seitseminen national park and outdoor activities such as hiking. Visiting the new nature center and a night in a panoramic cottage complete the Kuru experience.

Hämeenkyrö / FOOD Hämeenkyrö is known for its culinary culture – the idea is to scale it bigger. A local food festival will be arranged, as well as herb hikes and super food courses. Greenhouses will be used multifunctionally as party places.

Pälkäne / RELAX The old ruin church and the isolated location form the foundation of Pälkäne brand. They provide a perfect opportunity to relax in peace. Silence courses in the ruin church, yoga retreats in nature and a modern spa accommodation will ensure a calming stay.

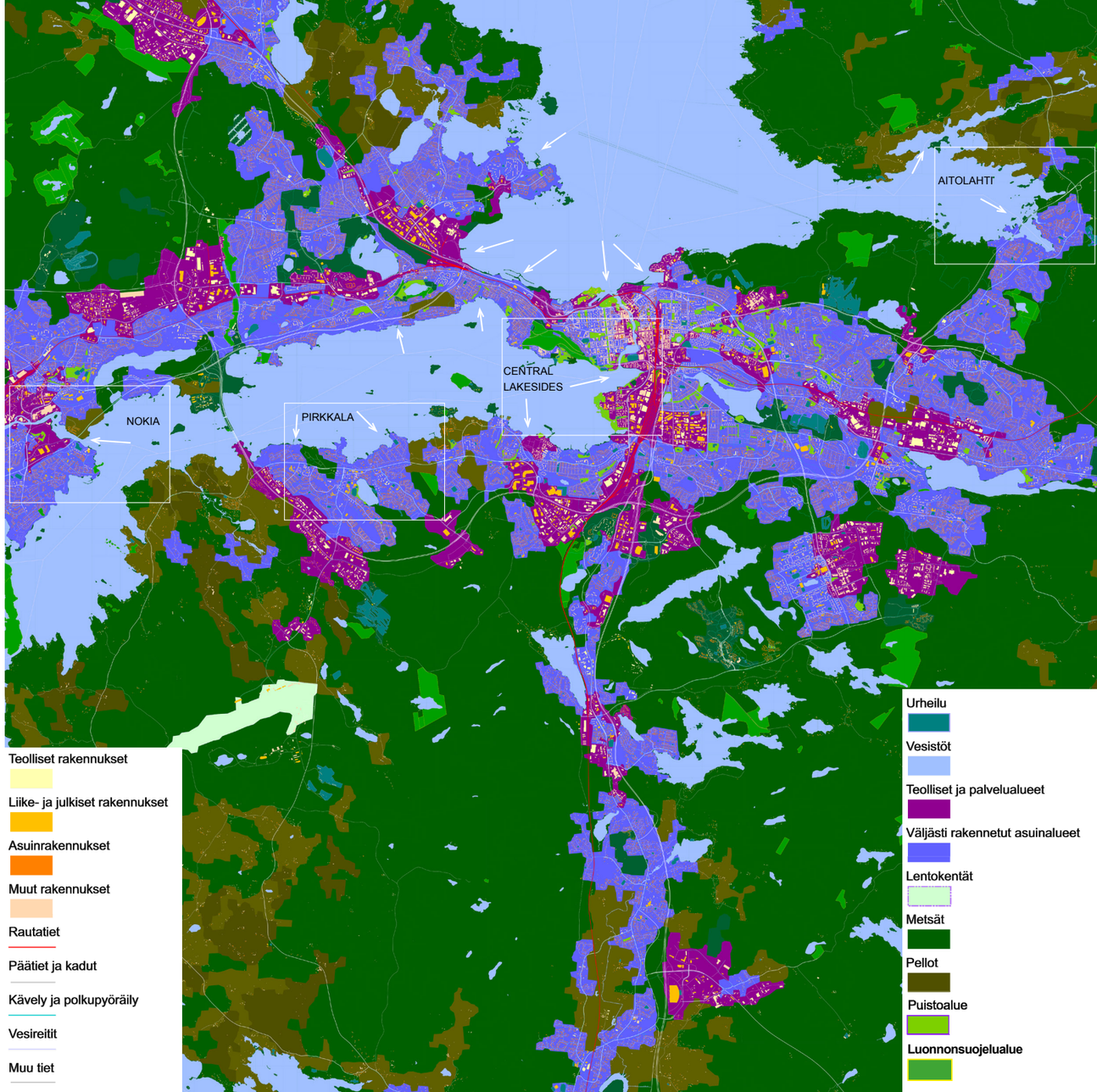
Picture 7.
Nature center in Kuru

Picture 8.
View to old ruin church from spa accommodation

Picture 9.
Drone delivery to senior community

URBAN VITALITY OF LAKESIDES IN TAMPERE REGION

Aleksi Kraama
Miisa Lehtinen
Margarita Rämäkkö
Pirkka Filander



ANALYSIS AND SYNTHESIS

DEVELOPMENT SUITABILITY

Blue space can equal better wellbeing to urban life as the future means denser cities. Industries and cities have historically developed by the waterfronts to benefit from the ecosystem services and accessibility of the lakes and rapids. According to statistics (see fig. 1) wealthier people live relatively more by the urban lakesides. The contemporary global trend to build by the waterfronts has to be ecologically and socially sustainable. Future design, political desicion making and planning faces issues like publicity of the waterfronts, equality to prevent segragation, climate change and retrofitting the urban structure in order to benefit from existing infrastructures. On regional scale, the importance of local freetime ecosystem services can grow as choices of traveling and leisure that are based on ecological reasons. Therefore wellbeing of the city begins and always traces back to the wellbeing of the whole ecosystem.

During the design process, we have developed a waterfronts development suitability analysis (DSA), which we used to analyse four sites in Tampere region: Central lakesides, Nokia, Pirkkala and Aitolahti.

NOKIA
Nokia's waterfront has more industrial and urban character which is possible to see from the DSA results. However, since area has good social points, it doesn't have developed mixed areas (workplaces vs housing), which can be the direction of the development.

AITOLAHTI
Aitolahti's waterfront is mostly owned by the municipality and has some developed beaches. The aspect that demands attention in this area's development is the motorway E63. According to DSA the area is suitable for natural development.

PIRKKALA
Area consists of two significant waterfronts: Pyhäjärvi and Vähäjärvi. The Pyhäjärvi's waterfronts are mostly in private ownership which complicates waterfront development and makes it challenging. Vähäjärvi's waterfront is mostly public and there are some designed pedestrians and cyclists' routes. Area get higher social points than natural points, and by summarizing economical/ sustainable and social points the value is staying above zero, which means that the area is suitable for urban (social) development.

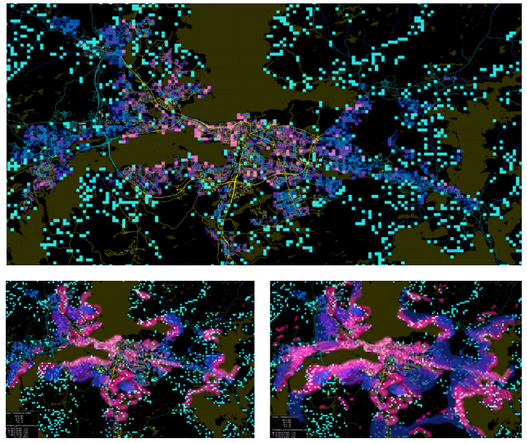


Fig 1. Income by population (YKR 2014). Under possible scenarios 2030, 2040. Wealth gathers around lakesides. This means there has to be good accessibility, services and mixing work and living. Lake Pyhäjärvi can get really urban as well Southern part of lake Näsijärvi.

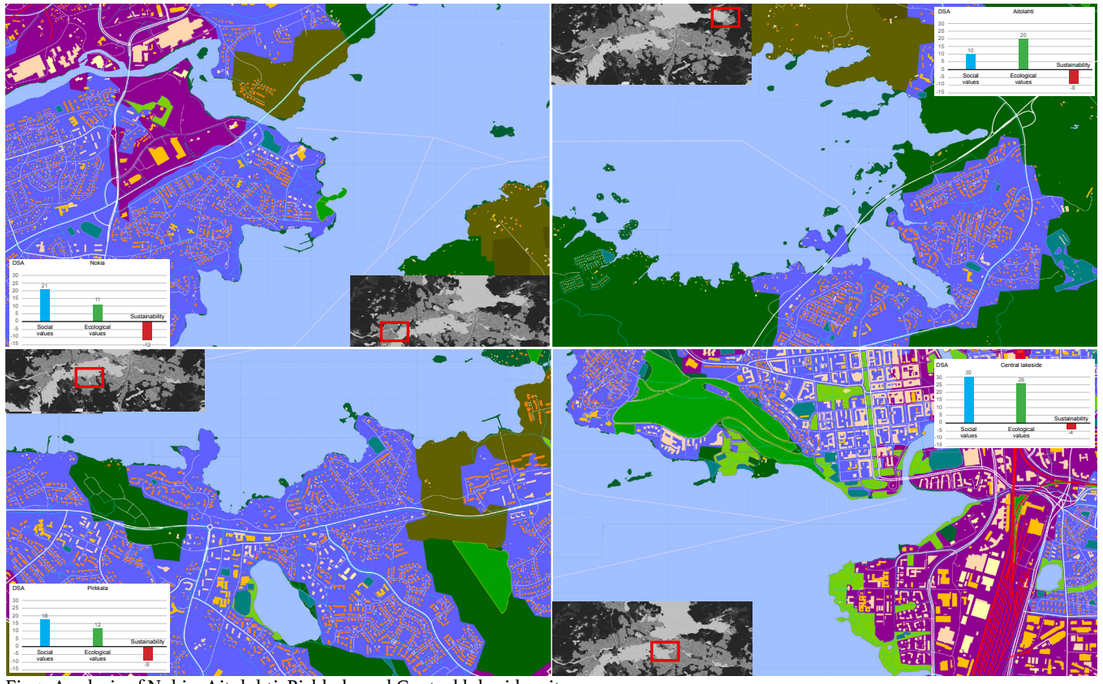


Fig 2. Analysis of Nokia, Aitolahti, Pirkkala and Central lakesides sites.

CENTRAL LAKESIDES
Area is located near to highly urbanized area, but has, however, high nature values (public gardens, recreation areas, public docks). So, the DSA results is not so clear in this case and area demands deeper analysis to clarify the development direction.

DEVELOPMENT SUITABILITY ANALYSIS (DSA)

			AREAS			
			Pirkkala	Aitolahti	Nokia	Eteläranta
POINTS	Social points	urban environment / building historical values	5,0	2,0	6,0	8,0
		mixed (workplaces vs. housing)	1,0	0,0	4,0	7,0
		services (recreational facilities, shops, etc.)	6,0	4,0	7,0	7,0
		pedestrians and cyclists	6,0	4,0	4,0	8,0
		SP total:	18,0	10,0	21,0	30,0
	Ecological points	natural values	4,0	7,0	4,0	7,0
		landscape	5,0	7,0	5,0	7,0
		sustainable development	2,0	2,0	1,0	5,0
		density	1,0	4,0	1,0	7,0
		EP total:	12,0	20,0	11,0	26,0
	Economic / sustainable points	land ownership	-7	-3	-7	-2
		terrain	-1	-1	-1	-1
		infrastructure	0	-1	0	0
		roads	-1	-4	-4	-1
		TP total:	-9	-9	-12	-4

Fig 3. Development suitability analysis (DSA). A beta level analysis tool to understand suitability for development. Research is based on three main factors: social and ecological values and sustainability.

REGIONAL STRATEGY FOR WELLBEING

WATERFRONTS

Water is the basis for life here on earth and the shores have been the basis for sustaining human life almost as long as it has existed. Most of the cities established before industrial revolution are build close to sea, rivers, lakes etc. Our thesis is that by sustaining and emphasising the connection between humans and bodies of water we can contribute positively in the general feeling of wellbeing. By developing waterfronts smartly, we can offer people better living and working environments, beautiful places for recreation and continuous connection to nature in everyday life.

Developing waterfronts means thinking about ways to improve city centres or suburban areas located in the proximity of water. Integral to this is opening up the shoreline for public recreation. However, equally important is to preserve areas just for nature and secure places for wildlife.

We defined next indicators for evaluating wellbeing: ***blue space*** - views and access to waterfronts in everyday life; ***parity*** - social equality, quality of life equally to all; ***segragation; sustainability*** - circular economy; ***work; adaptability*** - microclimates, flooding, mixed uses; ***accessebility; authencity*** - culture, services, locality.

Based on above we developed next scenarios:

PIRKKALA 2040
Connecting two lakesides and Pirkkala citycenter via green corridors. Placing recreation and hybrid development. Creating esplanades and pathways across the mainroad. Tram line connection possible in 2040.

CENTRAL LAKESIDES 2040
Activating urban lakeside with hybrid development and cultural services. Maintaining natural parks in the viscinity of the southern city bank.

NOKIA 2040
Nokia has the potential to develop industrial heritage and lakeside parks for hybrid living and working. The center has urban riverlike connection to the large blue space.

AITOLAHTI 2040
Potential to develop a new lakeside neighborhood with mixed uses of workplaces, recreation and living. Southfacing bank and bay areas may evolve into unique places: lakesides and vast forest areas are connected by main highway. Tram line connection possible in 2040.

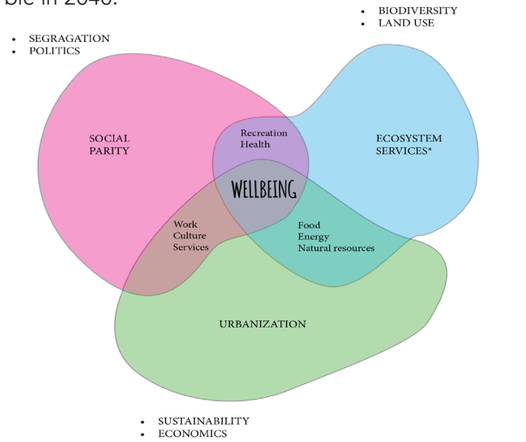


Fig 4. Wellbeing diagram. Our concept of wellbeing has three-way connectivity with social, economical and ecological.

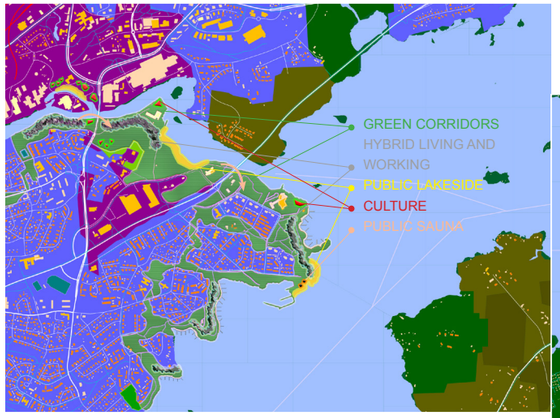


Fig 7. Nokia 2040

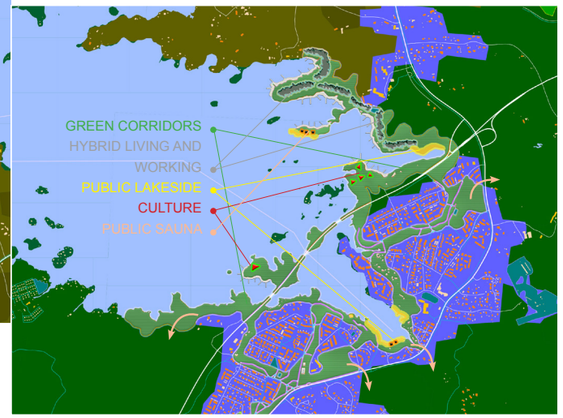


Fig 8. Aitolahti 2040

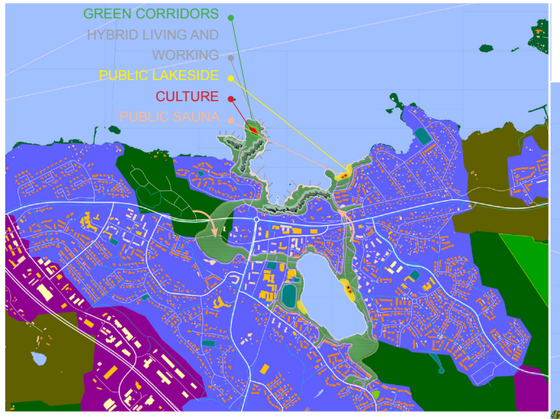


Fig 5. Pirkkala 2040

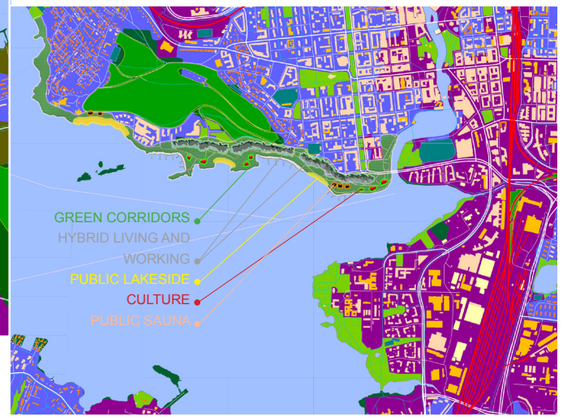


Fig 6. Central Lakesides 2040

AREA VISION 2040

WATERFRONTS WITH 4 CORE VALUES

MIXED means gathering all different aspects of life into close proximity; housing, working and services in addition to recreation and culture. Diversity of actions means less need for day to day travel and also keeping the waterfronts alive throughout the day.

CONNECTED means good transportation networks, bike lanes and walking paths. It also means accessibility in the sense of providing public spaces and making sure that also people with special needs can access these. These services should also be accessible regardless of one's economic background.

PRODUCTIVE means that waterfronts should be designed to be good places for expanding knowledge and creativity. Communities should also be self-organized and sharing working communities. Very important factor for productivity is promoting health and healthy lifestyle choices.

AUTHENTIC AND RESILIENT means that the waterfronts should be ecologically sustainable and prepared for the effects of the climate change. This means considering carefully the sites for development and creating micro-climates to manage the weather.

In district scale implementing these plans include green corridors that connect the city centres and neighbourhoods to the waterfronts and hybrid living and working which means bringing all the different aspects of life closer together. It also means public lakesides that are accessible to all, regardless of wealth, age, physical capabilities etc. and have recreational activity such as culture or public saunas.

In neighbourhood scale implementing these values lead into number of outcomes:

LAKESIDE ZONES PREPARED FOR CHANGING CLIMATES: distancing and rising buildings and primary pathways from shore to protect from waves and rising water levels to slow erosion. Also, gently sloping waterfront softens the waves when they hit the shore. Flood proofing should be taken into consideration in landscape plans. Greenery in three levels protects from winds and water and in this use, evergreens are preferred, however balance should be found with maximizing the views and providing shelter. Lakeside zones also include cyclist and walking paths that provide healthy and green means of transport.

GREEN CORRIDORS: comfortable light traffic access to surrounding city and neighbourhoods. The benefit of green can be experienced on environmental and on personal level.

ADVANCED ARCHITECTURAL SOLUTIONS: such as solar panels, covered courtyards for activities and leisure in winter and bay windows or projecting balconies in windy streets to minimize turbulence. This category also includes retrofitting and renovation.

PASSIVE DESIGN SOLUTIONS: constructing thermal zones in buildings and building masses towards north, opening large windows to south to maximise heat and light but also having deciduous trees in front of windows for summer shade.

HYBRID LIVING: housing, retail and workplaces in the same neighbourhood or building.

ENHANCED LIVING: recreational activities such as sauna and relaxation space, public pools, beaches and community gardens that are open for everyone.

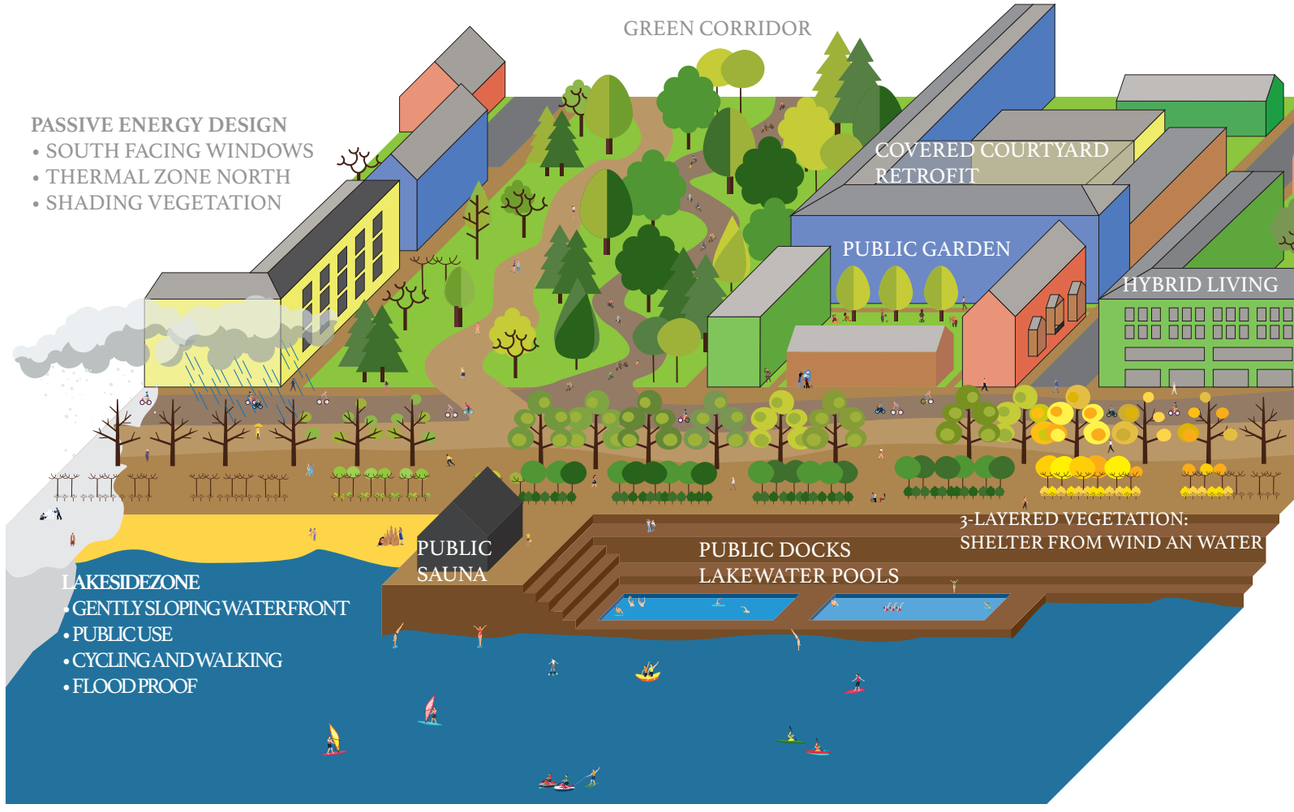


Fig 7. SUSTAINABLE URBAN MICROCLIMATE DESIGN
Hybrid residential and workplace neighborhoods

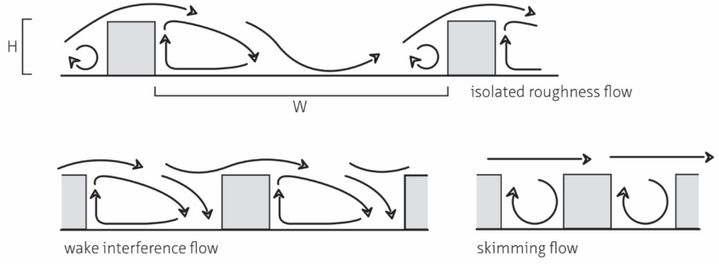
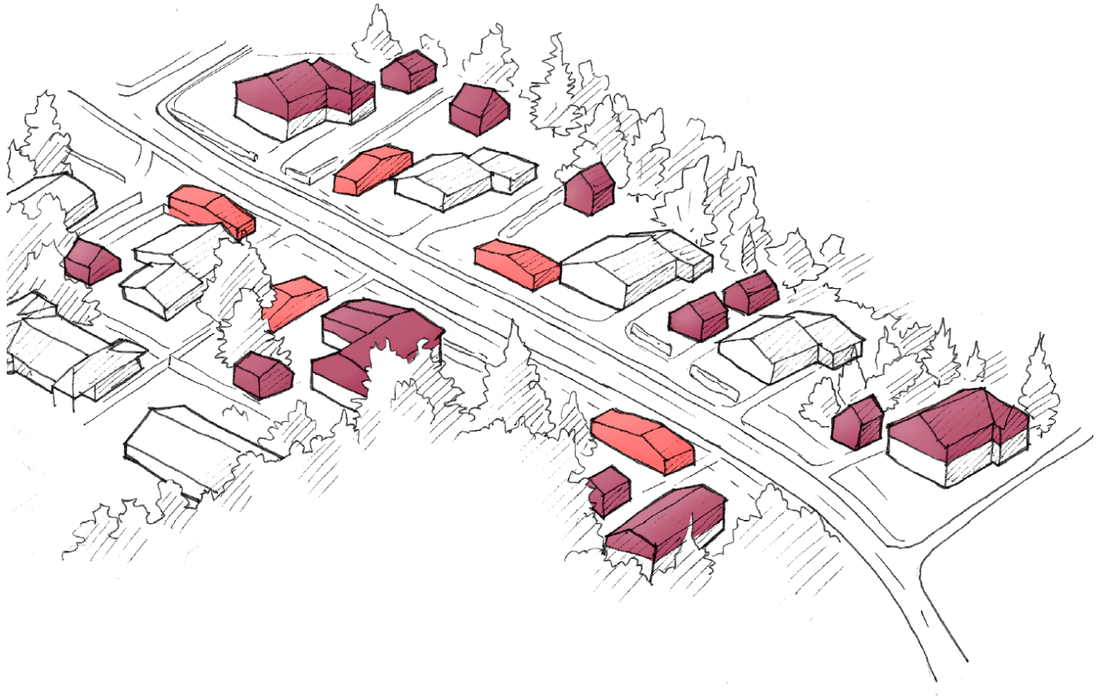


Fig 8. WIND FLOW PATTERNS. MICROCLIMATE SOLUTIONS. Designing the Urban Microclimate Pijpers-van Esch, Delft University of Technology 2015.

WELLBEING IN THE URBAN-RURAL BORDER REGION OF THE TAMPERE AREA

Vili Lustman
Andrei Periainen
Juha Riihelä
Dennis Somelar



INDICATORS AND REGIONS OF WELLBEING

PROJECT AIMS

As population is increasingly moving towards current and new urban centers, the environments' ability to sustain wellbeing becomes even more important. In our work we are investigating wellbeing in the Tampere region with focus on the link between urban form and wellbeing of residents. By creating scenarios and by assessing the possible opportunities and threats that concern our research areas, we aim to develop models for urban development and infill building that enhance wellbeing from the urban form perspective in the local level and produce examples of how these models can become actual design solutions at the local level in the municipality of Ylöjärvi.

INDICATORS OF WELLBEING

In our work the wellbeing of a region is measured with different variables from urban form factors to demographic change, such as diversity of work opportunities. The indicators are divided into three broad themes – (1) density and diversity of urban form, (2) mobility and (3) diversity of people (table 1.)

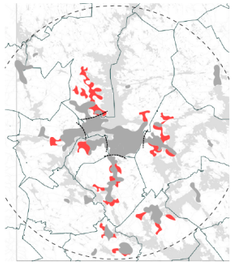
Much of the theoretical framework of the work is based on writings of Jane Jacobs (1961/1992) and Jan Gehl (1987/2011), who have argued that more plural urban communities are those that can best support community wellbeing. More contemporary writers such as Cervero & Kockelman (1997) have further operationalized urban form's ability to affect social life, movement and wellbeing by its density (of people), diversity (of functions) and design. The measure up to the first themes of indicators.

In the second theme, mobility, demand for transportation and dependency on cars is closely linked to the structure of urban form. Dense build neighborhoods that have diversity of functions reduce the need to travel and makes it more effective to organize public transportation. In number of research, urban form and its density has been seen to contribute to the lower ownership and use of private cars (Cervero 2002).

Finally, concerning the diversity of people, families with children tend to move from the center of urban structure to the outer regions in hopes of cheaper living costs and perceived higher quality of life and child-friendliness (Karsten 2003; Broberg 2008). This development concerns especially new sprawl areas, but also smaller cities around the center city urban structure, that tend to have high share of families with small children.

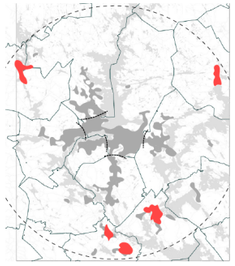
DEFINING THE RESEARCH AREA

In our work we wanted to aim our investigation to the regions between dense urban form and the sparser rural areas. This urban-rural fringe is not a clearly defined region - it includes a variety of different types of land-use. By investigating the urban-rural border region with the indicators above, we defined four different area types (types 1-4) that differ by their urban form, their patterns of migration and demographics and by their historical and temporal development (figure 1). The categorization is in many ways overlapping and is not clear-cut.



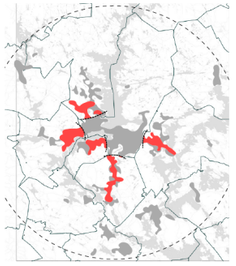
AREA 1
SPARSE URBAN SPRAWL

Area is defined by sparse land-use that has developed in the last few decades. Area is mostly residential and single-use. The areas are popular with families with small children. Mobility is based exclusively on private cars and the ownership of cars is high. For basic services areas are dependent on the center city. So of the areas have been developed without a municipal detail plan. Sparse sprawl areas can be found for example in Ylöjärvi, Pirkkala and Kangasala.



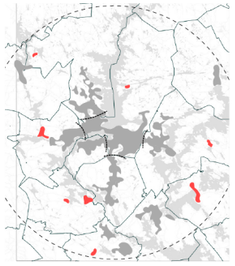
AREA 2
INDEPENDENT TOWN OUTSIDE CENTRAL CITY URBAN STRUCTURE

Areas are located outside the central city urban structure (keskustaajama) ja form their own independent urban node. These areas are often formed as old industrial towns. They provide their own basic services and are linked to the center city with moderate public transport. Town center is moderately dense and walkable while outer areas more dependent on private cars. Examples of areas are towns such as Valkeakoski and Hämeenkoski.



AREA 3
TOWN ANNEXED TO THE CENTER CITY URBAN STRUCTURE

Compared to type 2 areas, these areas are located closer to the center city and have become part of the center city urban structure as the urban areas have grown. Their development often follows that of type 2 as they too are old industrial centers. These often are located on areas with better connections to center city, such as the municipalities of Lempäälä, Nokia, Ylöjärvi and Kangasala.



AREA 4
INDEPENDENT RURAL MUNICIPAL CENTER OUTSIDE CENTRAL CITY URBAN STRUCTURE

These areas are located outside the center urban structure just as areas in type 2. These rural municipal centers are often smaller and acts as town centers for sparser rural municipalities. Number of services is limited.

THEME	INDICATORS OF ASSESSMENT
Diversity of people and services	Diversity of land-use Population density Availability of services Number of workplaces Workplace diversity
Mobility	Number of households with cars/two cars Availability of services Self-reliance on workplaces
Diversity of people	Economy / household income Age balance (number of children/elderly) Local identity

Figure 1. (above)
Four different area types were identified as the research areas.

Table 1.
Indicators that were used to assess the wellbeing of residents.

FROM ANALYSIS TO STRATEGIES OF ACTION

FUTURE SCENARIOS AND SWOT-ANALYSIS

The aim of the second phase of our work is to produce strategies that help us to guide what kind of actions could be taken place locally to enhance the wellbeing of residents in the regions identified in the first phase of our work. In order to do this, we first created three possible speculative futures for the entire Tampere region (table 2.). In the scenarios the population and migration patterns vary considerably, and they have different effect on the identified regions.

The regions themselves were analyzed through traditional swot-analysis that investigated their internal strengths and weaknesses and external opportunities and threats. The analysis was done by reflecting the indicators of wellbeing defined in the first phase. This included the assessment of all the indicators and the identified area types were given assessment from 1 to 5 on how they perform. This assessment was a helpfull tool to better show the differences between the identified areatypes.

The results from the swot-analysis and the assessment of indicators were then reflected to create strategies of action for every area type. First, three different strategies were created for every scenario, but they were later combined to form a more moderate and more realistic action strategy. This process in the end produced one strategy for every area type identified in the first phase of our work. The strategies provide a broad tool-box of local actions that in the third phase of our work were taken to the selected research areas in the Ylöjärvi municipality (table 3.).

MILD GROWTH
Tampere's central area's population and economy is steadily growing the rate it does now. Growth of Tampere's centrum spreads to Sparse urban sprawls (Ylöjärvi) and to Towns annexed to the center city urban structure (Kangasala). People migrating to these areas are well earning 25-45 years old.

STOP URBANISATION
The trend of urbanization in Tampere region has peaked in the year 2030. People are moving away from urban environments because of high living cost (housing bubble) and new studies on the negative effects of urban environments on health. Independent towns outside central city urban structure (Valkeakoski) and Independent rural municipal centers outside central city urban structure (Vesilahti) are getting a lot of new small families into the area.

MIGRATION OF REFUGEES
Climate change has hit waste areas around the globe. Big amount of refugees have found their way to Finland. Sparse urban sprawls (Ylöjärvi) and Towns annexed to the center city urban structure (Kangasala) are suffering from the areas because of the restlessness in the community. More refugees are migrating to these areas and start to segregate them.

Table 2.
Outlines of the scenarios created during the second phase.

AREA TYPE	STRATEGY	ACTION
Type 1: Diversity of people and services	Diversifying and densifying functions	New housing typologies Mixing functions with fybrids New spaces fro grass-root activities
	Enhancing connections	Adding transit routes ans connections New means of transport Enhancing transit stops (cover etc.)
	Building identity	Spaces for local happenings Identifiable architecture
Type 2: Independent town outside central city urban structure	Developing walkable central	Enrich historical (industrial) surroundings Grass-root access to empty industrial spaces No new supermarkets outside town center
	Enhancing connections	Adding transit routes ans connections New means of transport Enhancing transit stops (cover etc.)
	Enhancing attractiveness to new residents	Focus on access on basic services Services for families with small children
Type 3: Town annexed to the center city urban structure	Diversifying and densifying functions	Mixing functions with hybrid buildings New spaces for grass-root activie
	Improving connections to central city	New means of transport (train, tram) Adding transit routes and connections
	Prevent sprawling	New housing typologies Protect green areas
Type 4: Independent rural municipal center outside central city urban structure	Enhancing attractiveness to new residents	Focus on access on basic services Services for families with small children
	Attracting commercial services	Offer inexpensive land Mixed land-use

Table 3.
Strategies were developed for every area type with actions for local level intervetions.

VISION FOR YLÖJÄRVI

STRATEGIES INTO ACTION

In the third phase of our work we reflect the strategies produced previously to develop a planning visions for the municipality of Ylöjärvi. Aim is to produce a larger regional vision and local neighborhood level plans that bring the strategies and actions into new design solutions. We selected Ylöjärvi as a site of our final planning vision because Ylöjärvi itself includes different area types identified during the work. We selected three sites from Ylöjärvi - one central area corresponding to the area type 1 and two sites corresponding to area type 3 (table 4).

STATEGIES FOR YLÖJÄRVI MUNICIPALITY

Diversifying functions - Ylöjärvi is clearly divided into housing suburbs and the only mix of functions exists in the very center, also the industrial area with a large mall is separate from surrounding activities. By adding small communal functions to the suburbs we increase the daytime activity of the area. Diversity of housing stock is also non-existant and could easily be more multi-faceted with the modification of some zoning laws. The central area has a lot of potential for more a diverse milieu with the addition of more usable public and green spaces and some different types of block structures.

Densifying - This applies especially to the central part of Ylöjärvi where most of the commercial/social functions are situated now. Care must be taken not to cause further sprawling when densifying. Neighbourhood should have denser central areas where the shop/school/leisure activities and public space could meet. The future travel hub will attract more people and should have a denser city structure around it.

Improving connections - The bus routes within the area could be modified to more efficiantly gather people from different neighbourhoods. Also connection to Tampere would be greatly enhanced by a railwaystation at the city center and allow people to commute without the use of cars. The station would be located at the meeting point of bus lines so the connection to outlying neighbourhoods would also be improved.

CENTRAL YLÖJÄRVI (area type 3)
Housing areas: There area many areas around central Ylöjärvi that could benefit from densifying the existing structure
Health area: This area is connected to the existing health center of Ylöjärvi. The new blocks will create an environment capable of housing many types of people who are in need of assisted living.
Business area: Adding to the existing structure of Ylöjärvi central services the new blocks will have a lot more office space, leisure functions for the growing population of ylöjärvi and of cource commercial services.
Train station: The new train station will greatly increase connectivity with central Tampere. Residents of both towns will be able to reach one another more easily, for exaple reaching their workplace in central Tampere in fifteen minutes without the use of personal transport.

TAKAMAA (area type 1)
In small centers of sparse urban sprawl wellbeing in the area could be increased by first creating strong identity to area and provide good basic services. Area's identity could be enhanced by creating ECO-village inside the already existing structure. Providing residents with public services can be difficult in sparse urban sprawl. There isn't enough resident to increase amount of public services, but with out big investment in new public services the area stays unpopular for migrators. Municipalities could provide healthcare-, commercial-, educational services and libraries whit temporary, modular structures. Sparse urban sprawl has a lot of rural feeling to it, but it could still provide more urban like living solution. Integrating apartment buildings in sparse urban sprawl could substantially decrease the amount of migration from area.

HUURTEILA-METSÄKYLÄ (area type 3)
The characteristics of residential districts in area type 3 are rather dense low-rise suburban sprawl, lack of nearby services and diversity in age structure. These areas are quite vital in terms of the amount of young people, but this kind of homogeneity is also a threat; fluctuating age structure makes it more difficult to provide public services needed. The area could be densified without escalating further urban sprawl by encouraging house owners to add a second floor to their homes and allow them to build another smaller housing unit on their plot. These small units of roughly ~30 sqm could be used to, for example, housing students and elderly people. Even a more communal family culture might arise. o diversify the suburban street scape, small commercial or communal buildings could be built by the streets.

Table 4.
Three areas in Ylöjärvi have different local actions for enhancing wellbeing.

ACCESSIBLE LEMPÄÄLÄ IN 2040

THE FUTURE OF TRANSPORT

Alina Mustamaa
Anu Kirjonen
Andrea Jiménez
Marina Galán
Sini Hurri

ANALYSIS AND SYNTHESIS

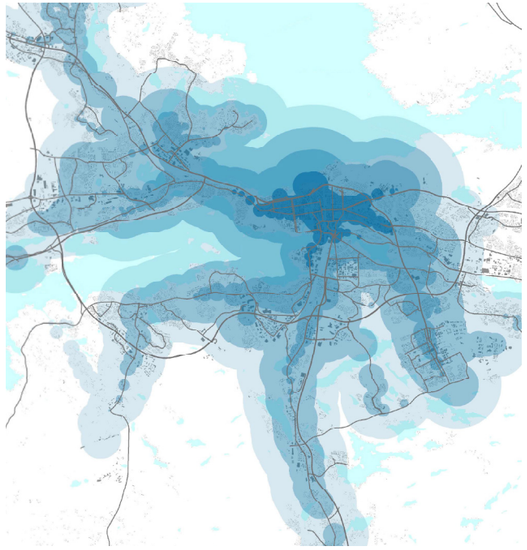
TAMPERE REGION

Our concept is transport from wellbeing point of view. We noticed some problems with the transport in Tampere region. We also learned that our everyday transport affects many wellbeing aspects. If the transport is fluent and functional, it leaves more time to do things you like and enjoy. It also leaves more time to your family and friends, which is the social side of wellbeing. We also want to concentrate on the city centre and smaller towns, because the transport and traffic possibilities can be different. We want that the transport is fluent in both cases.

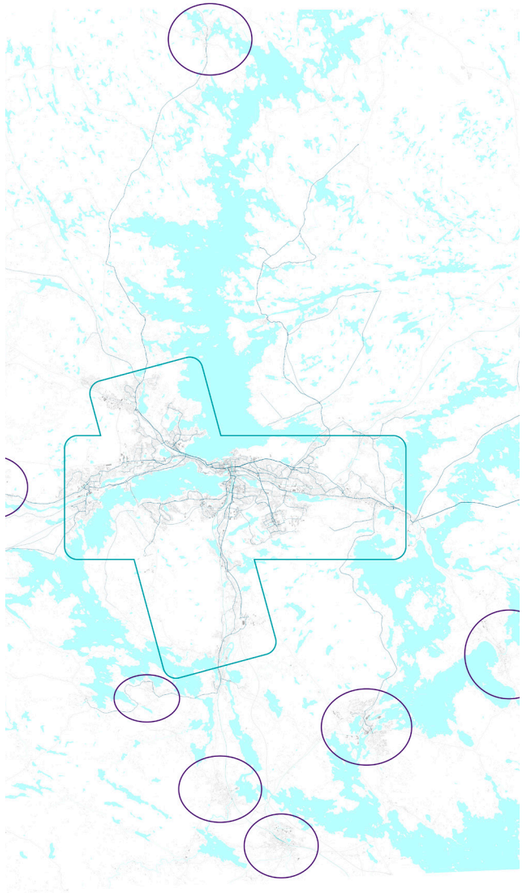
Tampere is the biggest area on the region, it has the most services, schools and population. What we also learned is that Tampere is growing on the outside boundary but inside the city as well, which means that the surrounding areas are important as well. The main areas in other areas are smaller city centres or by the areas that are located by the main roads that lead to Tampere. The closer we get to Tampere in these areas the population and services grow. We noticed that these are potential areas in growth in the future.

Population, workplaces and all the services all located in the same places. People living in other areas must visit these centres and there is a huge possibility of isolation. We learned that the smaller places are losing people and the problem is how we can make these places more tempting. In the centre apartments and services are mixed but in other areas they are in their own areas, which means a lot transport between those places. Industrial areas are the quite often most isolated.

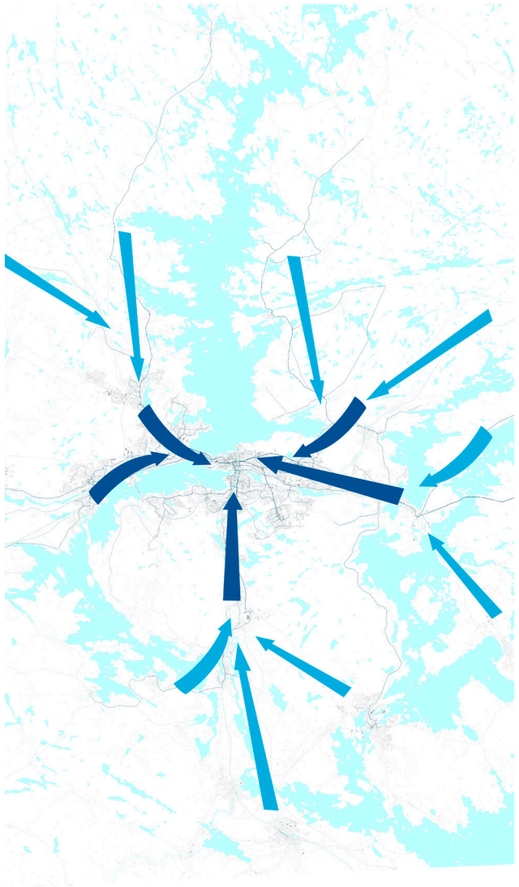
In the transport point of view, the area of Tampere centre and Tampere region is growing, which means more transport. But the change in transport must happen because of climate change. With the new tramline and bus lines, in some areas the public transport is getting better, but in some areas, there is still possibility of isolation. There is going to be some new transport methods and changing points in the area, so how can we make the transport as fluent as possible.



Picture 1.
Transport times from Tampere



Picture 2.
The centre of the region and
the isolated areas



Picture 3.
The most imporant transport
flows in the region

REGIONAL STRATEGY FOR WELLBEING

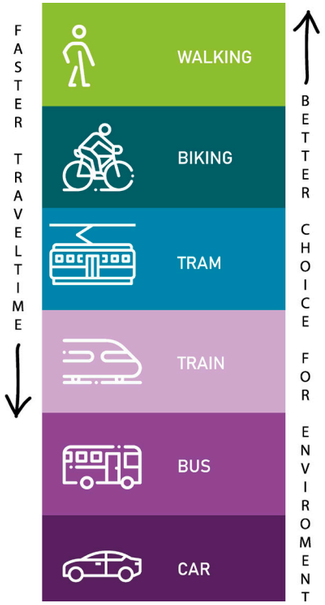
TRANSPORT AND WELLBEING

As we moved deeper from the regional scale to more detailed one, we noticed the potential of the town of Lempäälä to work as an example of the new way of making transportation more ecological and enjoyable for people. Lempäälä is a growing town close to the bigger city Tampere which has a lot of potential to work as a connecting point between smaller places around to the bigger cities for example Tampere and Helsinki. Railroads that go through Lempäälä help a lot of the connecting traffic between these places, but the train station today does not come up to expectations of today's and especially the future demands.

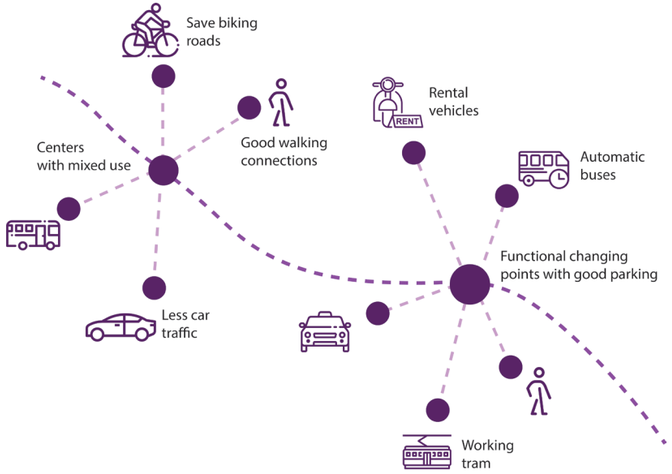
As Lempäälä is growing with popularity and the amount of people using Lempäälä's train station, in our plan we have come up with a new kind of train station that combines the good travel flow and services helping everyday life of each people using the train station. With new parking solutions for cars but also bikes we can help people make their everyday travel chains fluent and an easy choice to reduce the amount of using cars.

Transport is often combined with negative factors like lost time, hurry, noise and unsafety. By improving transport we can improve people's wellbeing. If the transport is fluent, people have more time to their family and hobbies. By reducing number of cars and adding more opportunities for walking and biking, we can make the city more pleasant and accessible for all transport methods. Noise and pollution will be reduced, and the roads become safer because they are focused on only one transport method. Also, by choosing walking and biking, both physical and mental wellbeing will increase. It also considers the environmental side of transport.

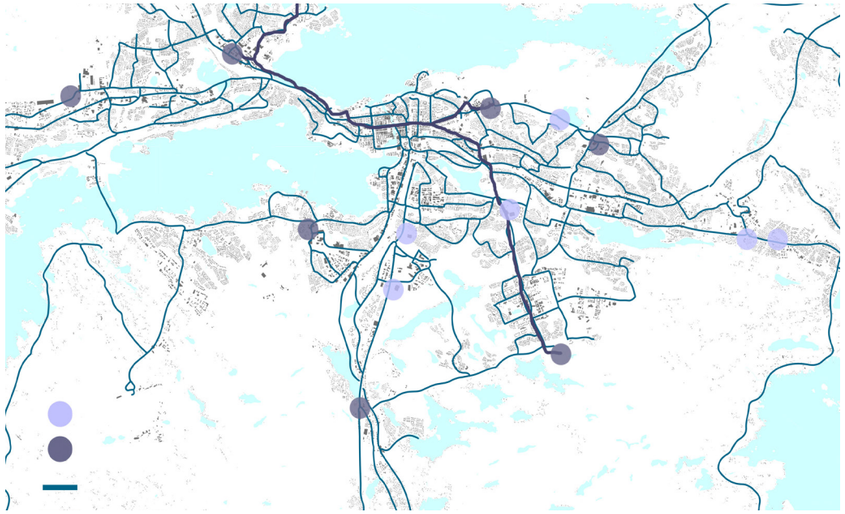
Our strategy is making walking and biking a good option for other transport methods by making it easier, safer and more enjoyable for people. We want to make public transport competing option to private cars by making it more fluent, fast and stress free. We want to affect people's mind by highlighting its environmental benefits, reduce of traffic jams and accidents and valuing their travel time as a productive time. But also coming up with new travel methods that can affect peoples transport habits.



Picture 4.
Different transport methods in the region



Picture 5.
How to connect the trasnport



Picture 6.
Connection parking

AREA VISION

NEW LEMPÄÄLÄ

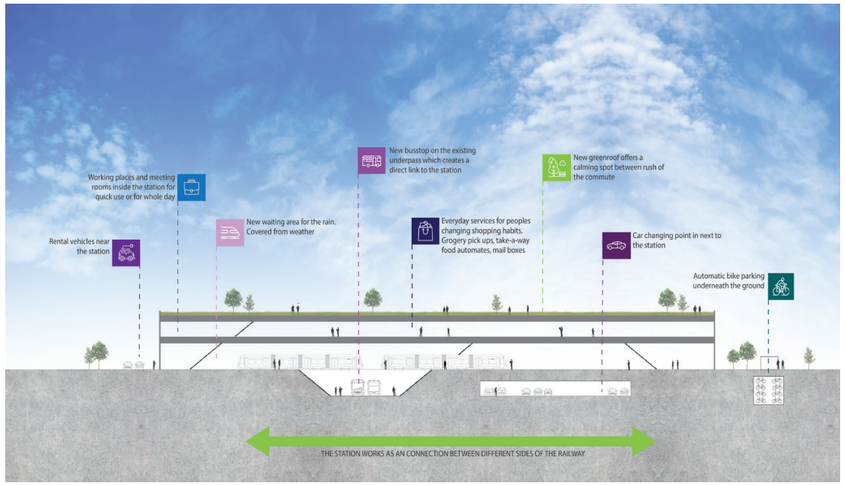
One of our main concerns is reducing car traffic and increasing biking and walking in Lempäälä.In downtown Lempäälä, Tampereentie from Kirkkopolku to Sirvalahdentie will be permitted for only pedestrians and buses. That way we can calm down the traffic near the cemetery well as the busiest downtown. The traffic flow of private cars will change because of this so that the downtown is safer for pedestrians. We studied the bike lane situation in this city, and it has good connections with the outside of Lempäälä, but these lanes are not in a good condition in the centre. As a solution, we came up with the blue wave. It consists of an elevated platform, for bicycle transit exclusively, which encompasses Lempäälä's city centre. The blue wave has a good number of entrances, ramps to access it, which are placed covering all the residential areas, so people don't have to bike a long way to get to the platform.

It is essential for the wellbeing of population that the transport system adequate to the necessities of people in order to allow everyone to follow their daily routine and to fulfil the goals of their life, both personal and social. It affects economic, social, health and timing aspects. The idea of experience is rather important, in this case the one that people have due to the transport system. The aim is to transform the travelling time into productive time, so people can use this time to do either personal or work-related things. The waiting time is one of the reasons why people don´t use public transport that much. Therefore, we decided to develop new bus stops in order to make this waiting period as comfortable as possible. Through these new bus stops we aim to enhance the travelling experience transforming the waiting time in useful time.

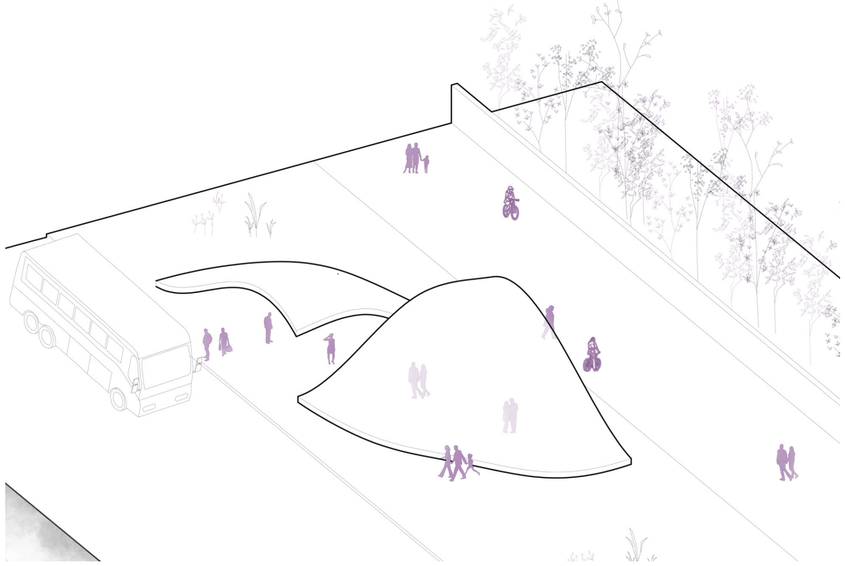
The train station works as centre of transport in Lempäälä. It uses the full potential of the railway, which has good connections to both Tampere and Helsinki, but also connects both sides of the railway and creates a more connected centre to Lempäälä. With the new train station, we want to make the train a more attractive option for everyday transport.

We improve the connections by creating connection parking. Connection parking improves accessibility of public transport. It offers on option to park your car and easily to change into public transport, so you don't have to drive car to the center and that also reduces the number of cars in the center. The connection parking should be easily accessible and should be located next to the main roads.

Picture 7.
The new road for buses and pedestrians



Picture 8.
The new trainstation



Picture 9.
Design of the new bus stop with the social space

TIME OF OPPORTUNITIES

WELL-BEING AKAA 2040

Anna Kärki
Kalle Lehto
Miikka Pihamaa
Matti Renfors
Alvaro Sempere

ANALYSIS AND WELLBEING CONCEPT

FLUENCY AND SELF-ACTUALIZATION

We started by mapping out what we think contributes to wellbeing in general. Wellbeing can only happen once the basic necessities of life have been fulfilled, then the actual quality of life comes as a layer above this. Following Maslow's hierarchy of needs this would be then the layers that come after physiological needs and safety: love/belonging, esteem and self-actualisation. (Maslow, 1943) Our aim is to create as much time and as many possibilities as possible for self-actualization. Our focus is to focus on everyday routines and to make them as fluent as possible.

What is a fluent everyday life? For us the concept includes a strong network of transportation to reduce time spent travelling. Time spent travelling is also greatly reduced by having working services in the close vicinity to home or a place of work. The internet and working delivery services also greatly reduce the need to move daily. The financial aspect of everyday life also effects the way we build our everyday routines and the way businesses work around us. A fluent life builds upon a set of routines and these routines can best be achieved by living in an area focused efficiently. Our concept of wellbeing is based on the fluency of everyday life.

The free-time in our lives has steadily increased ever since the industrial revolution. (Heinonen, 2008) We spend less and less time at work and more time doing other things. On the other hand, the centralization of services makes for long distances being travelled to complete everyday tasks. We want to both reduce the stress and time spent on the actual travelling from place-to-place and reduce the need to go to different places to complete the actions of everyday life. It frees time for both social life and rest but also allows for a more fluent working culture. One of our key aspects is also the benefit that the local businesses get from working in an efficient environment. We believe a fluent life also creates strong connections to places which help the wellbeing of the individual and region by creating stronger identities.

However, these connections are still not the end goal. A fluent life is a good objective in itself, but what do we do with all the saved time and all the new possibilities we get through these new connections. We go back to Maslow. The final stage in his hierarchy is self-actualization. With time on our hands we can start to focus fully on ourselves. Whether it is through hobbies, interaction with people, more work or even solitude, we want to provide spaces for people to fully express themselves. We create spatial solutions for a new type of public space to let everyone's inner creativity flow.

Our strategy is divided into three intertwined phases. The first phase focuses on improving the physical connections. The second one focuses on connecting people with spaces and services through digital platforms. Through these two phases we create the basis for the final phase which focuses on the final step in Maslow's pyramid, self-actualization. In the final phase we want to concentrate on creating more opportunities for people to express themselves. We want to create diverse spaces available for everyone and we want to create a new type of public space concentrated on the self-actualization of the individual.

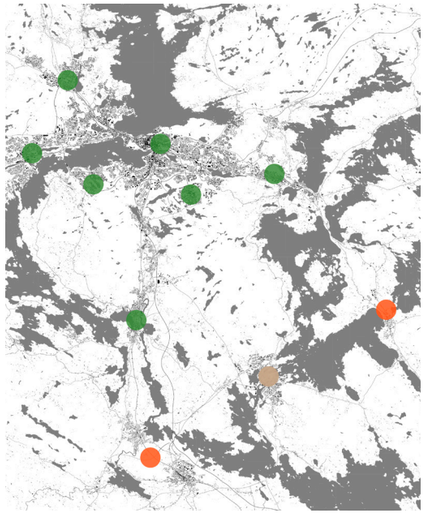


Fig. 1 - Left
Population development in the analysed area:
green - growing
brown - neutral
orange - shrinking

Fig. 2 - Right
Nodes and main connection routes

Fig. 3
Urban meadow in Toijala

REGIONAL STRATEGY FOR WELLBEING

REGIONAL STRATEGY PHASES 1 AND 2

The first phase concentrates on improving the actual physical connections around the Tampere region. The focus is on creating effective travel chains. New commuter train lines will create the spine for transport in the region. Existing train stations will be improved by adding everyday services and improving parking facilities. New commuter train stations and platforms will be built in densely populated areas to ease the access to the new train lines. Bicycle and car parking facilities will be added and improved in all stations. This will reduce the amount of people commuting by car to the city center while simultaneously enabling living in a more remote place. Carpooling and car and bike sharing will also play a vital role in the flexible travel chains of the future. Electric shuttle busses will also be introduced to more remote villages.

The second phase in our strategy consists of providing platforms for a comprehensive base for urban economies reliant on collaboration. The platforms will include resources such as space, items and human resources like knowledge, which will be produced by and providing for urban actors like communities, businesses, institutions and individuals. A regional system of platforms relies on collaboration between regional and municipal governments, businesses large and small, and local institutions. On top of these actors the platforms should benefit individuals in an area, by providing a service of information on resources available to them. Our proposition is that these platforms will affect urban ecosystems in three ways:
1. That they will make local business economically viable
2. That they will benefit the built environment and the natural environment of the region
3. That they will support self-actualisation of individuals and groups.

INDICATORS OF WELL-BEING

In our first phase we concentrate on improving connections and reducing the need of movement. We want to achieve a more fluent life and save time from our daily routines. Thus, our indicators are mostly focused on time and the usage of transport:
1. Amount of services within a certain time-range
2. Usage of different means of transport
3. Services available directly home

The second phase consists of providing platforms to enable a more comprehensive base for a new urban sharing economy. With these indicators we will follow how different actors take on the platforms and how it affects their behavior.
1. Amount of owned space/items compared to the amount of rented/loaned
2. Amount of co-operation/ sub-contracting/ free-lancing
3. Data from the platform
- once established the platform can provide all types of new indicators to common use

The final phase focuses on the self-actualization of an individual. We develop private and public spaces to better accommodate for the self-improvement of a resident. Focus is on the quality of space and to create a surrounding that encourages self-improvement. Indicators are done in two ways:
1. Evaluation of the quality of spaces
- how flexible are the spaces? is there variety in spaces available? Are there enough indoor spaces?
2. Questionnaires to residents
- focus on belonging, esteem and self-actualization

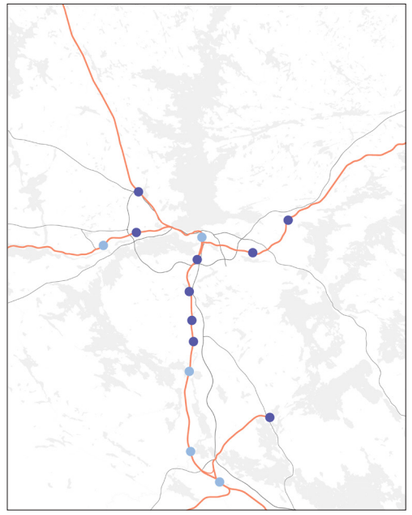
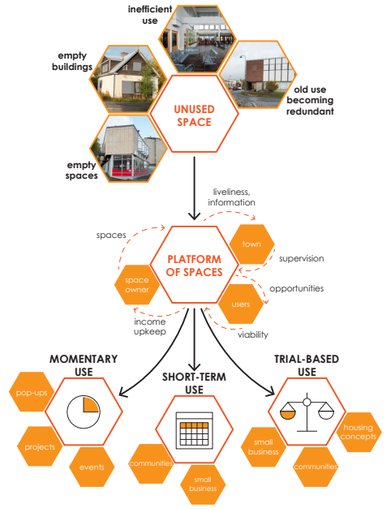


Fig. 4 - Left
Train station development
Light blue - existing stations
Dark blue - new stations

Fig. 5 - Above
Viiala train platform improvements



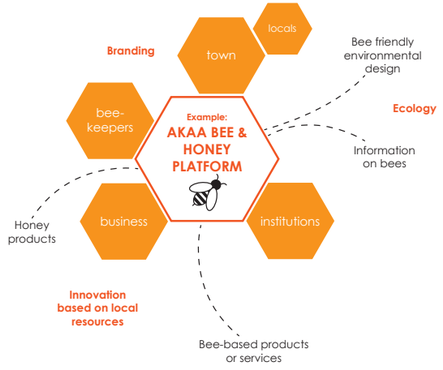


Fig. 6 - Left
Platform of spaces

Fig. 7 - Right
Example of a local platform. What could be useful in Akaa is catering a platform around certain theme that rises from a local strength or tradition.

AREA VISION

URBAN & PERIPHERY QUALITY DEVELOPMENT IN AKAA

Our focus area will be Akaa and its three smaller centers, Toijala, Viiala and Kylmäkoski. Through these locations we will show the different tactics to arrive in our goal of a well-connected satellite town. The focus is on the existing station areas in Toijala and Viiala. In Kylmäkoski the focus is on smaller scale communal village center. The goal in the first phase is to connect the residents in these areas better to the train stations of Viiala and Toijala. In Viiala and Toijala the focus is on parking improvements for both cars and bicycles, and on pedestrian developments near the stations. Kylmäkoski will be connected to these two with a electric shuttle bus route.

This system of platforms will affect differently in large and small communities, but a regional level collaboration would benefit all. Our focus area of Akaa is a middle-sized community close to the larger city of Tampere, but also well connected to the town of Valkeakoski and the cities along the growth corridor to Helsinki. This means Akaa could take part in platforms on both regional and national levels.

In the third and final phase in our strategy we concentrate on creating more opportunities for people to express themselves in public space. The new type of public space offers public and semi-public areas for the self-actualization of the individual and the new urban structures supports more fluent everyday life. Our focus area for the final phase is still Akaa and its three smaller centers. However, in this phase the biggest developments have been made to Toijala, so we concentrate into that in a bit more detail.

The plan happens in three parts, that we have been calling "phases", but that is mainly an indicator of how the different aspects begin, by starting one the others will follow, but the details of each are linked: aspects happening in the different phases at the same time are similar in content but are connected to the different themes of each phase. Like we mentioned in our introduction on our wellbeing concept, the two first phases form the base on which the third phase can happen.

In our vision of the future the environment you live in happens with a participatory approach where the locals are involved through platforms. They have time to do this as their everyday routines have been made easier. These active people with interest and time then have interest in high quality spatial development happening in their towns, which have organised themselves through their strenghts but aware of their weaknesses.

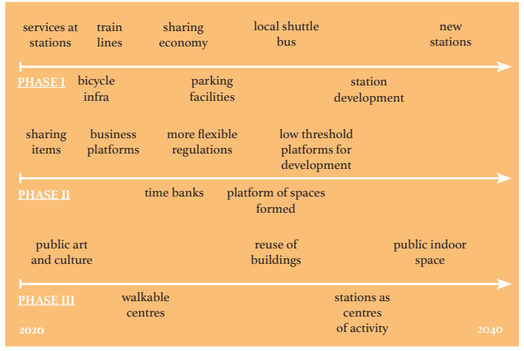
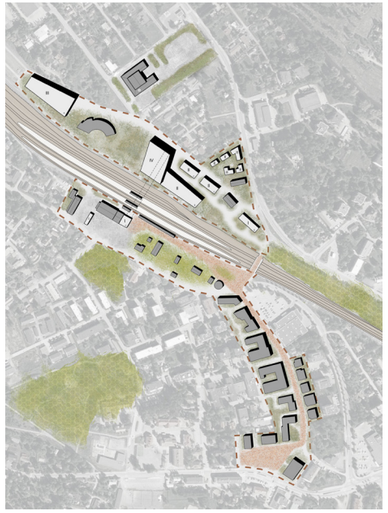


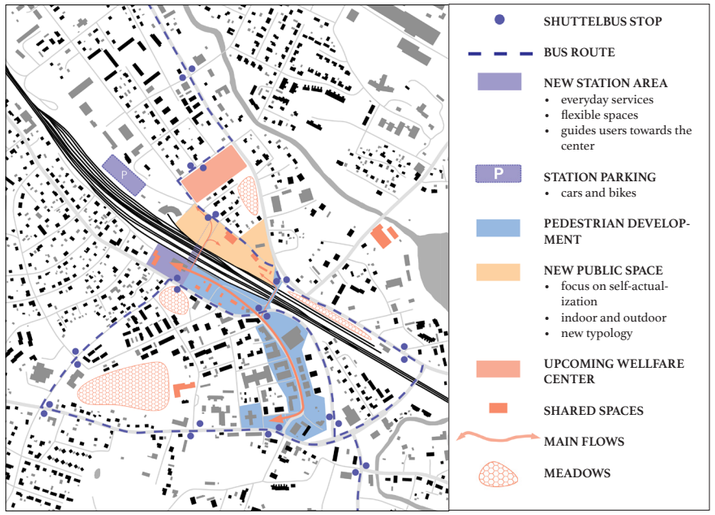
Fig. 8 (previous page)
Timeline

Fig. 9 - Left
Toijala pedestrian street

Fig. 10 - Bottom left
Toijala master plan

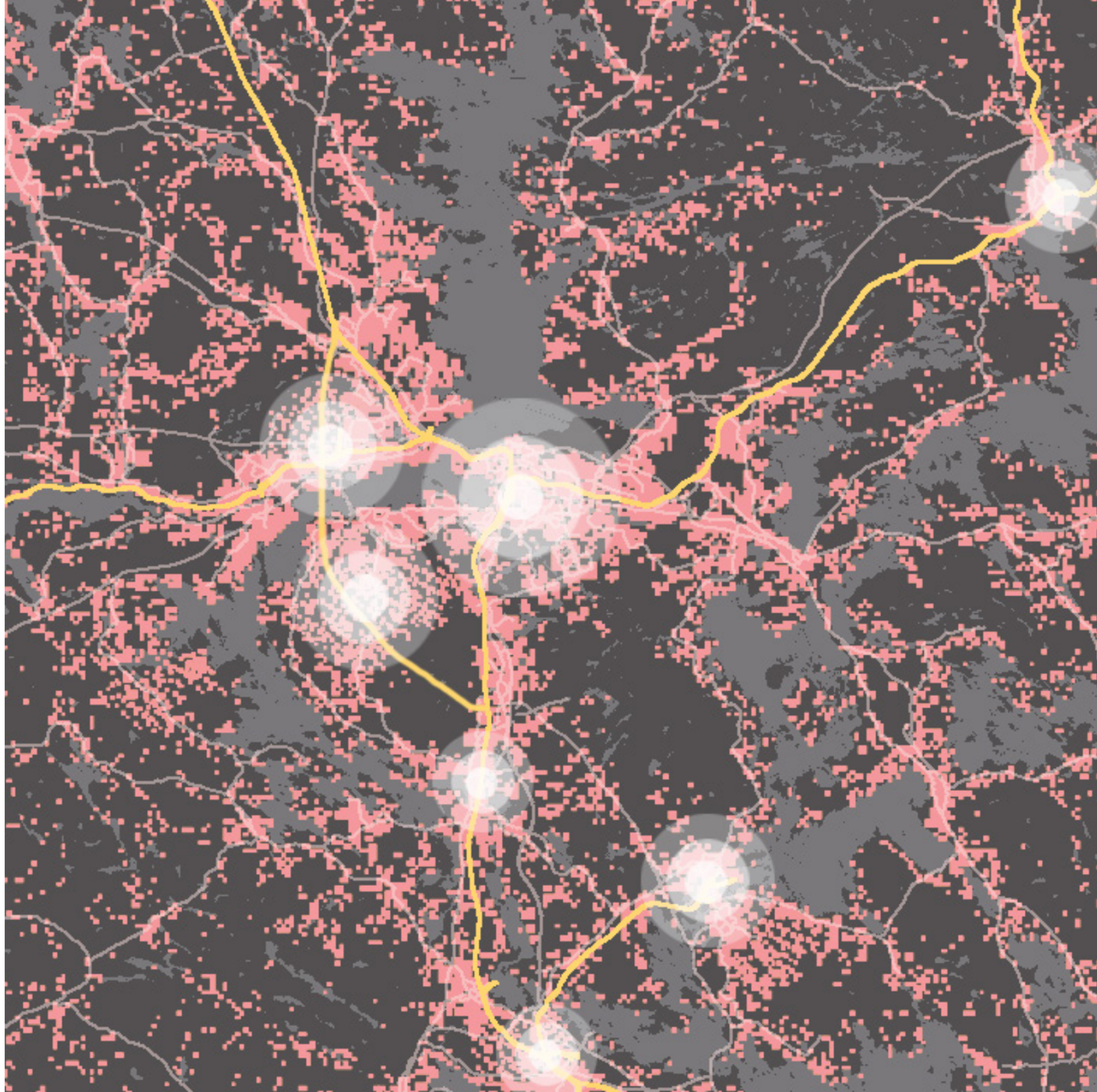
Fig. 11 - Bottom right
Toijala strategic plan





THE NEW LOCAL

Anni Turunen
Elina Harjunpää
Hanna-Riitta Lappalainen
Janita Laakkonen



ANALYSIS AND SYNTHESIS

THEME OF WELLBEING

Our project started with an overall discussion about the theme of wellbeing, nowadays and in the future. The most important topics we wanted to choose was the need of connections between other humans - and with the nature. From the futuristic point of view, we also wanted to focus on the issues about the climate change and the change of population structure. These issues formed our theme. In our project we also wanted to highlight the traditional values of the welfare states where society takes care of everyone.

ANALYSIS

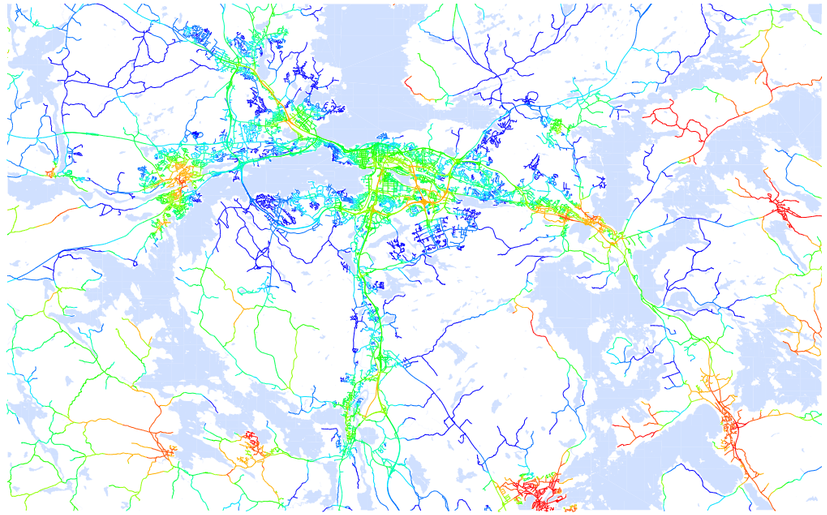
On analysis phase we mainly focused on collecting information about the population, population growth, structure of the population and about the prognosis of the demographic change. We used different kind of (viral) statistics and researches to find substantial information for the base of our analyses.

In the bigger scale Pirkanmaa stands out as a rapidly growing area alongside Turku and Helsinki. Growth is not evenly distributed and is mainly centralized in Tampere. The smaller municipalities are suffering from the migration loss and the prognosis predicts it to stay that way. Population structure will change especially as a result of increasing amount of the elderly people which will negatively effect on the already poor dependency ratio. Birth rate is decreasing in a scale of whole country. In shrinking municipalities the dependency ratio is predicted to deteriorate even more. Approximately 6.4% of all foreign language residents, in Finland live in Pirkanmaa. 7.7% of Tampere residents are foreign language (in 2018). Population who moves to Pirkanmaa is mostly from other municipalities and abroad for family reasons, for work and for study. There has also been humanitarian immigration in Tampere, Lempäälä and Pirkkala. On Finnish scale the population of Pirkanmaa is not remarkably international. Different integration projects are being implemented in Pirkanmaa, for example employment, study, communal urban nature management, inclusive elderly care, rehabilitation and family coaching.

We also analyzed the accessibility of the area, as well as the major public transport routes and stations. We found out that Tampere and its suburbs are mainly based on car traffic. Tampere is centrally located in according to Finland's largest cities. Effi ciency between municipal population growth and the railway network is evident almost everywhere in Finland. We sort out community studies as well as loneliness studies and statistics. We found out that loneliness is often linked to age, living alone and living in a facility. In Finnish culture loneliness is relatively common in all ages but especially among the elderly. Communality protects and supports individuals and prevents isolation.

We also researched information about the impact of nature on humans and how the nature impacts people's attitudes to one another. These focus points popped up on the analysis phase:

Shrinkage and net immigration of municipalities surrounding Tampere: problematic dependency ratio
Loneliness
Communality
Possibility of segregation
Inequality
Climate change



Text sources:

Kotouttamisen osaamiskeskus, Työ- ja elinkeinoministeriö
Elinkeino-, liikenne- ja ympäristökeskus

Väestöliitto

Tilastokeskus

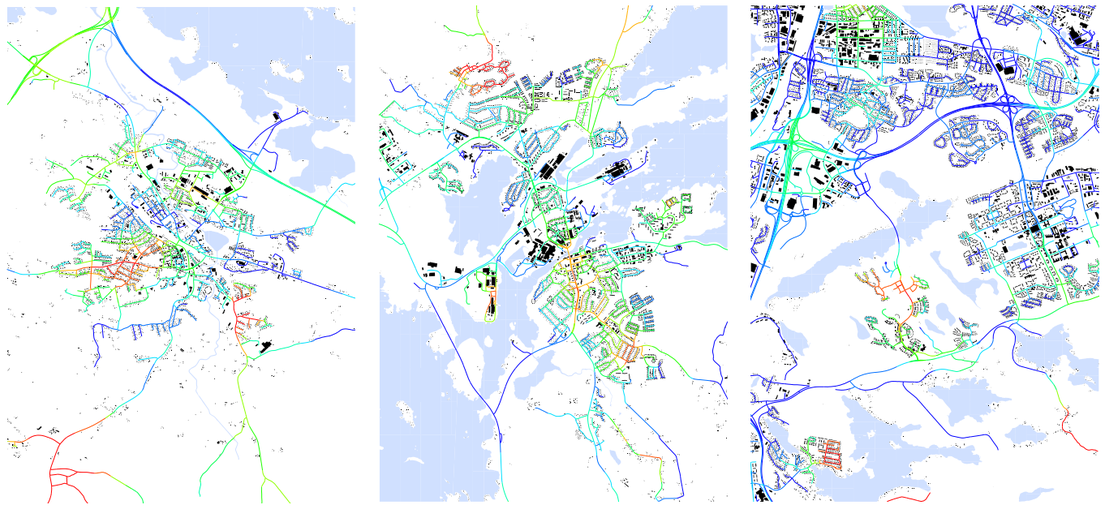
Pirkanmaan liitto

UEF , Elisa Tiilikainen: Ikääntyvien yksinäisyys Psykoterapia-lehti (2007), Pirjo Lindfors

MTT, Luonnosta hoivaa ja voimaa

Picture 1. (left)
Accessibility by car.

Picture r 2. (below)
Accessibility by foot.



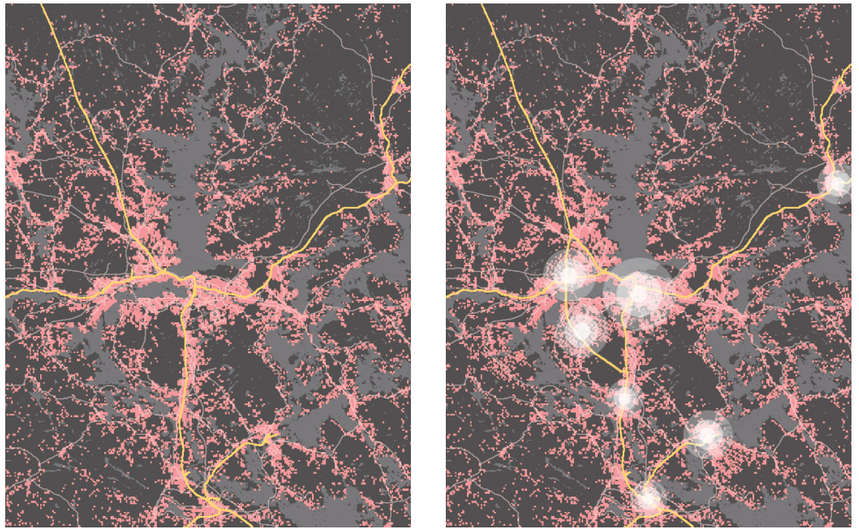
REGIONAL STRATEGY FOR WELLBEING

STRATEGY AND CONCEPT

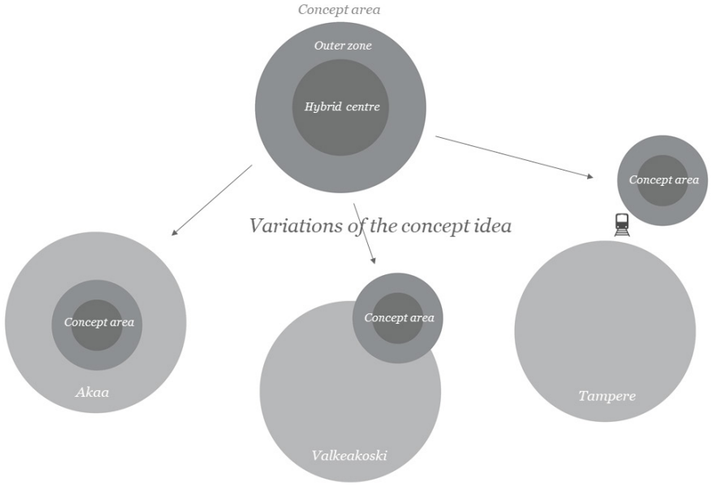
Our goal is to create a regional development strategy model that prevents segregation and slows down climate change. We aim to respond to the needs of the municipality and the individual as the demographic changes with: affordable housing and accessibility of services, workplaces, preventing the weakening of the dependency ratio of municipalities. Our strategy will guide the direction of migration because Tampere does not expand geographically but it will grow inwards. We are trying to emphasize Tampere as an attractive cultural center, develop the rail network and other public transport and station areas: municipalities remain competitive and migration loss stops. In our strategy model we propose the development suggestion for the rail network in Tampere region area and bring the local train into use between Tampere and the municipalities. Tramway will continue from Hervanta to Vuores. The station areas is being developed to multifunctional local service centers. Affordable and eco-friendly housing is placed to the vicinity next to the stations. Municipalities are being developed especially from the perspective of preventing segregation, mixing with different forms of housing in view of existing identity and scale of the area. The intention is to offer the opportunity for more people to live close to the services and without a carregardless of the income or wealth. The aim is also to increase ecological commuting traffi c from the municipalities toTampere, Helsinki and the rest of Finland.

We want the station areas, municipalities and their surroundings to become attractive, safe and generally welcoming alternatives to move to. We suggest these places to be developed in accordance with our concept idea that turns them into a communal hybrid area that enables everyday life to be fluent and ecological. Our concept idea is possible to implement by stages and even with a small steps we can successfully start the natural development.

Concept idea includes accessible hybrid area: urban, open ''town centrum'', located near the public transportation, comprehensive services mixed with the housing and. It is the center of the communality with multi-functional shared spaces, for example ''kortteli-mummola'', common living room. Different groups of people meet and benefit from each other: the elderly, immigrants, families etc. Retirement homes are in a big role as a part of the identity of the place, not separate units. Dwellers of the area, school and kindergartens are working with retirement homes. Different functions can be overlapping in building typologies too. A scale and location of a hybrid area is variable in different municipalities. The hybrid area can be located at different distances in relation to the municipal center: completely separate from the municipal center (Vuores), alongside the center allowing the center to expand towards the area (Valkeakoski) or as part of an existing central structure (Toijala). The hybrid area is accessible and activates its environment that we call ''outer zone''. The density, population distribution, amount of visitors and types of users will determine the scale of the hybrid area. Services and housing in the area will be developed in cooperation between the municipality, residents and companies.
Outer zone: existing city structure, mostly different housing areas, potential infill building area, infill building focus on prevent segregation by mixing owner-occupied housing and rental housing, diversifying typologies and fi nancing model solutions.



Picture 3.
Strategy from 2020 to 2040.



Picture 4.
Variations of the concept idea.

AREA VISION

COMMUNALITY - FROM AN IDEA TO PRACTICE

Communality doesn't come into being just by putting people to live together in same house or area. Communality should always be voluntary and never forced. It could be enhanced in city planning and building planning by organizing common spaces for communality activities. It's important to locate common spaces so they easily come familiar to dwellers and it's natural to step in. Location near an entrance area of a centre, a block or a building could be good. Communality in practice requires mentoring and support. People acting together may need help and control, but it could advance health and decrease needs for social- and healthservices.

Affordable housing near services

In a point of view of social diversity, it's good if there are rental apartments in addition to owner-occupied apartments in communities. We suggest workplace benefit apartments for municipality's elderly care works, for example. Those apartments could be located in urban, dense area, and include a possibility to use an allotment summerhouse. An apartment cooperative can be good way to offer inexpensive housing and indent inhabitants. A dweller can have an owner-occupied apartment with smaller loan by paying for example 10 % of the price of an apartment. After renting it about 10 years, the dweller can buy the whole apartment and the paid rent is part of the price. A municipality takes part in joint building as a project leader and offers planning professionals. Municipality can still own and rent apartments. In that case there is no need to build entire rental apartment buildings and -areas. An apartment cooperative -system requires more adapting legislaton to minimize risks.

Toijala

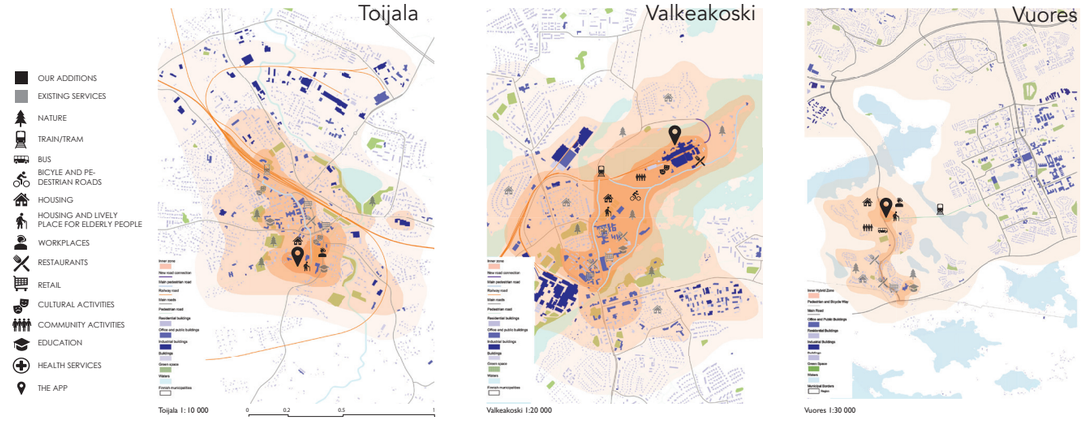
In Southeast corner of Toijala center there are close to each other a library, school, multifunctional hall and a retirement home. This is a nice combination already, and with low density and a piece of urban fallow land, a good starting point for an hybrid area development. In the future the center, between hybrid area and railwaystation, could be transformed to a lively walk centre and, by infi ll building, a safe home area for different population groups.

Valkeakoski

In our strategy model Valkeakoski has a strong status as a central municipality beside Tampere. We show the way of expansion of the centre towards Northeast. An abandoned industrial building could be put to cultural reuse with temporary projects. A hybrid area in Valkeakoski is quite wide. It includes for example a hospital area and a new railwaystation that could be located in Northeast next to the existing centre. To be developed like this, Valkeakoski requires a local train.

Vuores

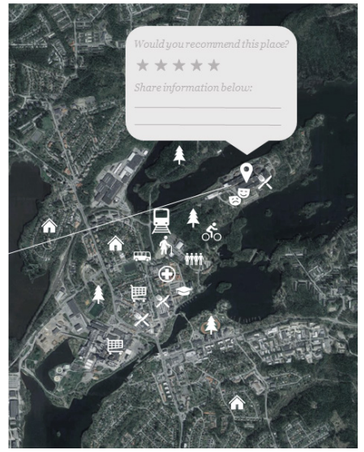
In Vuores city plan, there is a wooden central area, which has already started to be built. We suggest that in future a tramline from Hervanta to Vuores will touch this area. Next to the wooden centre and Vuoreksen puistokatu, there is a wide unplanned area. This area is located in a very potential place and could be developed to a hybrid area, based on our concept.



Picture 5.
Detailed plans.

The App
- base for communality
- a dweller could easily be active by using map-based-on application
- nformation about events, trade-off-jobs and tasks

Interesting Projects:
- Nappinaapuri -palvelu
- Hogewayn Dementiakylä, Hollanti
- Loppukiri, Helsinki
- Sukupolvien kortteli, Helsinki
- Färdknäppen, Tukholma
- Jaso, Jyväskylä
- Osuuskunta Pöllökartano, Pälkäne



Picture 6.
The app

IDENTITY

WELL-BEING THROUGH IDENTITY

Ville Mäkelä
Taru Salo
Jyri Marttunen
Klaus Eloranta
Mari-Sohvi Miettinen

ANALYSIS AND SYNTHESIS

TERMS OF IDENTITY AND WELLBEING

The most basic quality of identity is differentiation – something is different than something else, answering to the question: "Who?" Meanings and their representations such as different kind of symbols are what identity is defined by. That answers to the question: "What?" These are the two levels that Amos Rapoport claims every identity is made of (Wegelius, 1997). Identity also develops and changes through time so it needs to be maintained - that gives us the third vital level of existing identity, action.

The base of all identity is the individual experience and its formation. Individual identification is therefore the connection between the individual and a place or a group, for example. Place identity, as a theoretical concept in social and phenomenological studies, is most often considered as an individual perception. This is not to be confused with the 'genius loci' which is only the physical part of place identity. If an individual develops a deep connection to a place and its identity, place attachment can be spoken of. (Laurila, 2015, 8-9)

Local and areal identities are place-based as well but consist of several individual experiences which are shared. The shared quality of the meanings are the basis of collective identities. However an individual place identity and a collective local identity are somewhat overlapping ideals and cannot be separated. (Laurila, 2015, 8-9)

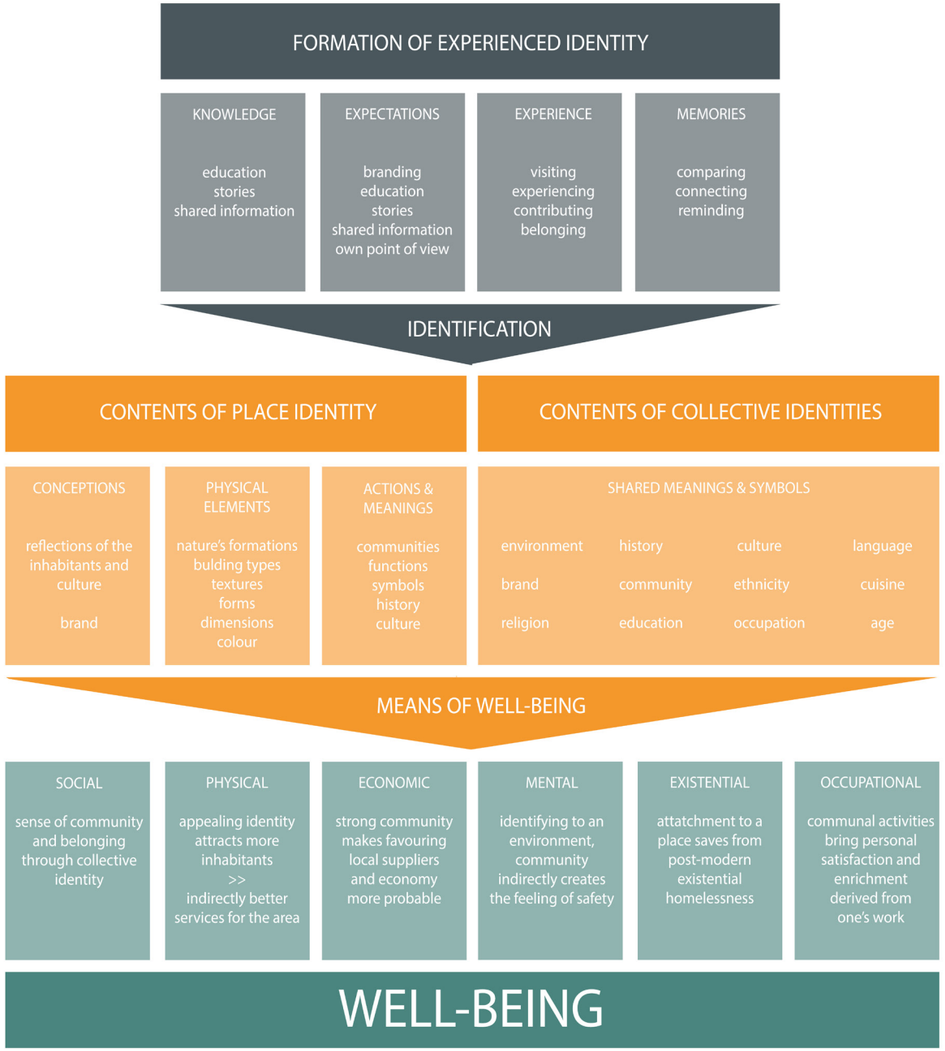
Every identity group also has its inner and outer appearance depending on the perspective of the viewer. The image or a brand of a place can be an outer form for example. (Sjöberg, 2014, 13)

The premise of this plan is that every place and area can have a strong identity, whether it be a historically and architecturally rich environment or a seemingly faceless dormitory town. After researching any place or area we can create tools for strengthening identity and simultaneously creating well-being by connecting the factors of identity formation and the contents of identity.

The effects of identity on well-being are plentiful and diverse but complicated. The most direct effects are on social, mental and existential well-being. These are most often phenomena that result inside the collective communities or in the individual experience. The effects can also be indirect. For example if an appealing identity attracts more inhabitants that may eventually result in better services for the area. This kind of well-being effects can usually be achieved by the outer image of an area.

Picture 1.
Three terms of identity

Picture 2. (next page)
Formation and contents of identity and its connection to well-being



REGIONAL STRATEGY FOR WELLBEING

STRATEGY FOR TAMPERE REGION 2040

The TRE strategy for Tampere city region consists of three themes: metropole, satellites and identity. TRE seeks and embraces the characteristics of places within. By strengthening the character of a place, it becomes more significant to its inhabitants and easier to attach to. This creates a sense of belonging, a sense of community and a sense of home – and a base for wellbeing.

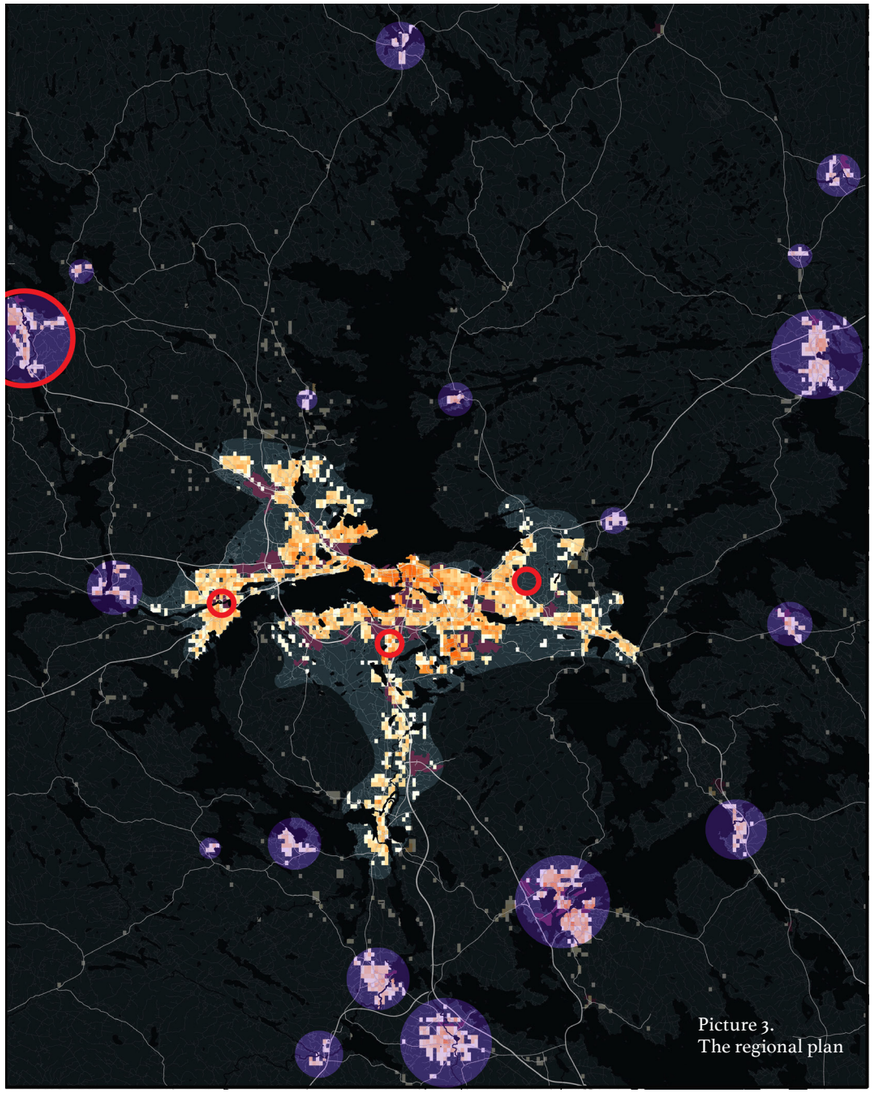
The core of Tampere city region is a T-shaped area surrounding Tampere city centre. TRE strategy aims to improve the urban coherency of this area and its edges. A coherent city region improves the coworking of municipalities, helps to share the benefits and challenges of growing population and offers better accessibility to services for inhabitants on the whole area.
On national scale, Tampere has attraction. It is estimated by MDI that in 2040 Tampere, along with Helsinki and Turku, are the only growing cities in Finland. The city's own population forecast suggests that there will be over 290 000 people living in Tampere in 2033. As the overall population and number of new-born in Finland is decreasing, this progress in Tampere is explained by migration and urbanization. (MDI, 2018)

There will be a need for new housing in Tampere region. Due to the climate crisis, ecological aspects have a key role in all decisions made. Supplementing the existing urban areas is the most efficient and ecological way for new building: using existing infrastructure, saving unbuilt area for nature to maintain the biodiversity and supporting the eco-friendly lifestyle by for example improving the use of public transport and cycling. As the saying goes, the most ecological brick is already on the wall: another aspect of TRE strategy is recognizing the value of existing building stock and areas that are already built but for some reason are not commonly found attractive.

Due to geographical facts, centre of Tampere will soon meet its limits of growth. Supplemental building in city region will not cover the need of new apartments. Tampere is growing towards its edges in east, west and south. The main growth direction is south, as it has the best transport connections to Helsinki. In east and west Tampere is meeting its neighbour towns, Kangasala and Nokia. In TRE strategy, cities merge together as one big Tampere metropole area.

Inside the metropole area, one can find numerous smaller neighbourhoods that have their own specific urban character. An essential part of the TRE strategy is to recognise, strengthen and embrace these characteristics. In this work, different tools for doing so are explored and showcased by different spatial examples: Hämeenkyrö, Nokia, Peltolammi & Multisilta and Lamminrahka. These chosen examples are representatives of "types", and similar methods can be used in other similar areas in the region.

The Identification as a dwelling-place renews the community, creating safety, togetherness and will to take care of the surroundings and people. Naming the values of underestimated places, or even branding them, might help to bring new life to areas with a poor reputation, such as Peltolammi and Multisilta, which are southern suburbs of Tampere.



Picture 3.
The regional plan

AREA VISION

PELTOLAMMI & MULTISILTA

A new participatory planning strategy is implemented in Peltolammi & Multisilta. This means bringing the planning process and different stakeholders together and creating opportunities for people to have a real influence on what is planned and built in their area.

Three types of platforms are created to include people with different levels of interests. Social media channel acts as a platform with little formality. The threshold for sharing views is low and news about local happenings keep people updated. A local newspaper makes sure that the elderly people are also kept involved.

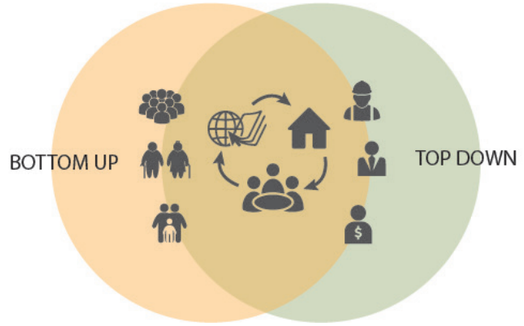
A semi-formal platform brings local people, hobby groups, planners, builders and entrepreneurs together in Me-talo where different workshops and talks are held. Interests are shared which leads to ideas and companionships, for example co-producing a block of flats together with inhabitants being part of it.

Neighborhood assembly is the formal platform which will take place in the neighborhood center. A few times a year an event is held where the material produced in informal and semiformal platforms are collected and presented to everyone. This is where the top-down and the bottom-up meet. Together they will form a base for the detail plan as equal partners.

In the scenario of Peltolammi and Multisilta the population has grown by 3000 people. This has leaded to a pressure on adding new housing and services to the area. The work done in the participatory platforms and the city planner have come up with a vision. The value of the old suburb in the woods is recognized and the green and calm atmosphere is preserved. The dull area of Lakalaiva is built again strengthening the services of Peltolammi and creating new housing. A green corridor locates between the new and the old and connects the two areas together. A regional train line is put into use and a new train station is located near Peltolammi center connected with it by a green pedestrian route. Multisilta center around Me-talo will also be renewed with mixed housing and services.

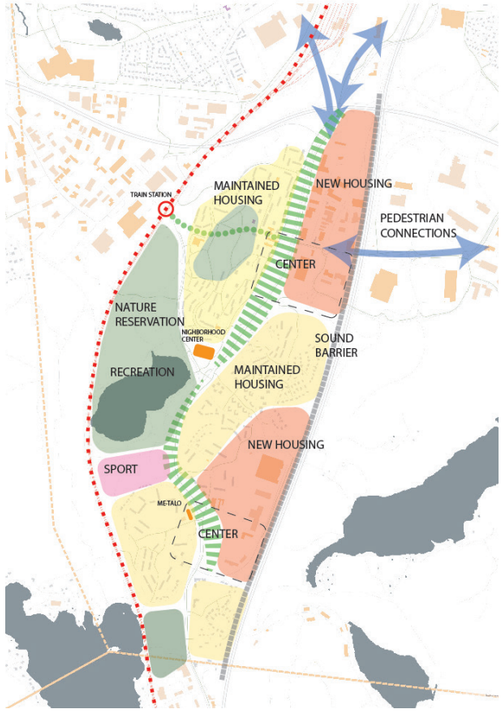
People have wished the pedestrian and cycling connections to be improved. Biking lanes are developed to Härmälä and Vuores as well as to the city center.

The big green area will serve as the main provider of recreation as the nature reservation area and the beach are maintained and improved. The dark hidden football field is developed into a sport center offering wider range of hobby activities.



Picture 4.
Participatory planning strategy

Picture 5.
The planning tool in Peltolammi/Multisilta



Picture 6.
Scenario

Picture 7.
Peltolammi in 2040

LEISURE EXCHANGE

LIFE ON LEFT-BEHIND

Ariane Chateau
Sandra Kangaspeska
Eero Okkonen
Laura Pasanen
Roosa Sippola

WELLBEING – LEISURE

LEISURE AND LEFT-BEHIND

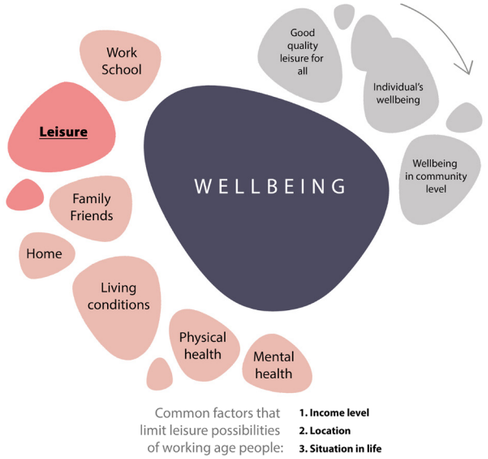
Key components of individual's wellbeing are things important for everyday life: work, school, home, family, friends and free time. This work concentrates on leisure, which is a balancing force to pressure and tasks of one's mandatory work, enabling possibilities to express oneself and recover. Tasks done voluntarily have a positive impact on both physical and mental health. According to a study published in Journal of Happiness studies leisure triggers five core psychological mechanisms: Detachment-recovery, autonomy, mastery, meaning and affiliation. They improve subjective wellbeing, which enhances communal wellbeing. (Newman et al. 2014)

In this work we analyzed different groups' access to diverse leisure services and possibilities. The most common factors that affect these options are person's financial situation, family occupation and location. Many forms of leisure require money to invest into and having children to look after limits variety of possible activities. In rural areas, many urban services such as cinemas and restaurants are hard to reach and require use of personal car. On contrary, in dense urban areas, nature with solitude and silence is unavailable.

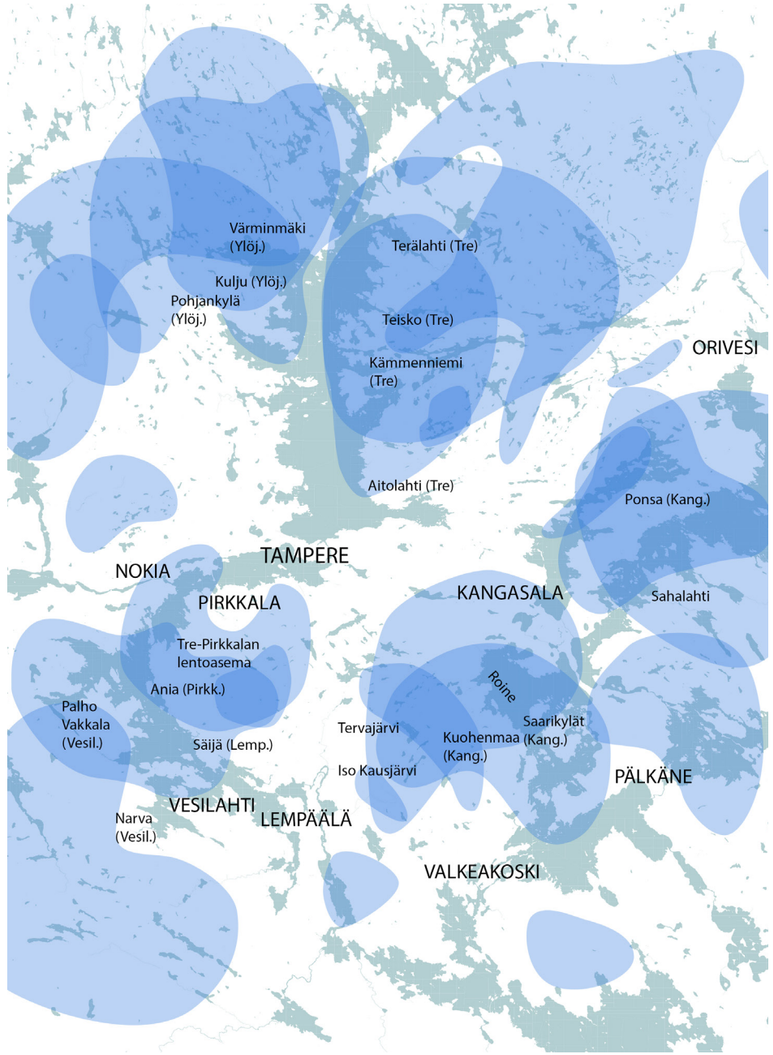
Left-behind areas

Finland is sparsely populated with low population density. Despite of being the largest inland city in the northern countries, Tampere has large areas of land in uses of forestry and agriculture closely around it: Fields, meadows, forests and clear-cut areas. They have few small villages, but mostly the inhabitants are scattered around the region. The project concentrates on these kind of areas in Tampere region with factors that make them left-behind.

The first factor is lack of services, which are concentrated on Tampere centre and major thoroughfares at Lempäälä, Ylöjärvi, Nokia and Kangasala, and some local centres like Valkeakoski. The second factor is lacking accessibility. Bus network transforms from dense to extremely sparse when moving away from the city centre, and simultaneously ticket prices increase and frequency decreases. The third factor is the low density of residential buildings. In general, it follows the density of services, but coverage of detached housing expands beyond. Meanwhile, there are many summer cottages on the left-out areas. Many of those can be only used during summer, which increases the seasonal change of population.

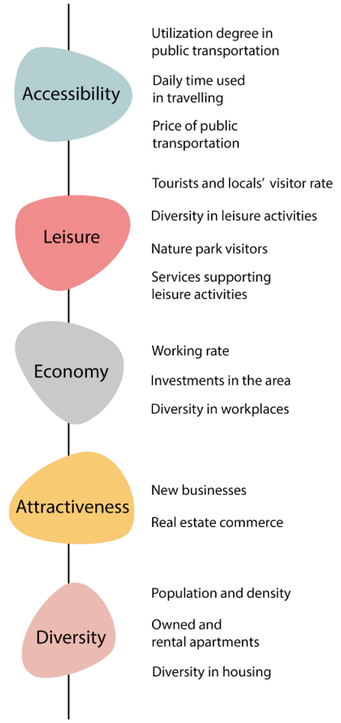


Picture 1. Concept of wellbeing



Picture 2. The left out areas

Picture 3. Indicators



VISION AND STRATEGY

STRATEGY

Future trends that affect society are climate crisis, urbanization, globalization, change of nature of work and mixing of services. Transportation is central in all these themes. Services will concentrate on urban centres, which continue growing whereas rural areas will decrease in population. Global connections will enable working from home or summer cottage, and 24/7 society with everyday streaming services will develop both working and leisure. However, denser cities will not fulfill need of nature and recreation. For example, according to study by Metsähallitus, visitations to Finnish national parks has increased by almost 3 million and rising in 18 years. Careers will be more flexible, and individuals will possess several jobs and skills. Autonomous transport might develop transport time into decent working hours. Global warming affects sustainability instantly. This creates pressure for the development of public transport and circular economy. Emissions of travel increase in-country leisure travelling in counties when going abroad becomes harder and more expensive.

Left-behind strategy

The main concept of left-out development is leisure exchange. Rural, peaceful and unique area offers recreational experiences to urban city-dwellers and improved transportation enables inhabitants to use services of the city. Throughout the strategy it is important to spread knowledge about the development to get most out of the improvements. The first part of the strategic plan features improving public transport. With better accessibility, unique landscape can be harnessed as a resource. Investments around leisure activities promote growth, supporting living and working of local and multi-local inhabitants.

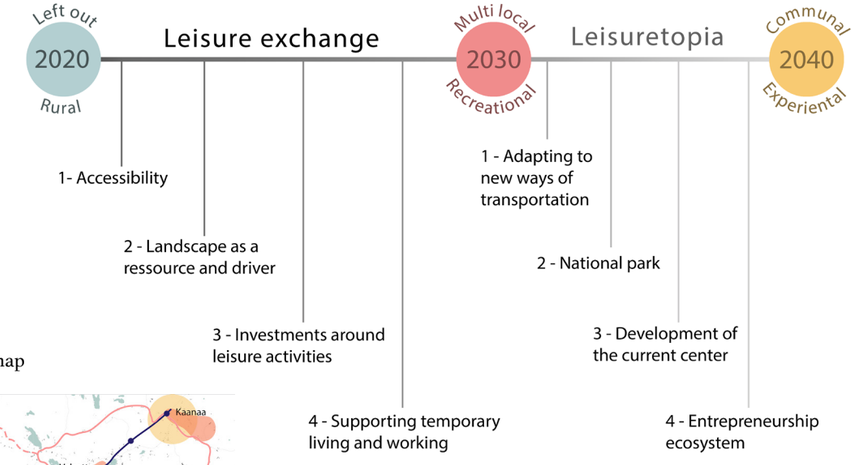
Teisko strategy

One left-out area found in analyses is Teisko, located on eastern shore of Näsijärvi, north-east of Tampere center. It has been part of Tampere municipality since 1972 and forms most of its size. According to a study on Teisko's cultural heritage, the area has strong communal attitude, but it suffers from being left out from the city's development. There are excellent possibilities with recreation and cultural heritage, but the area lacks many urban, even everyday services, and transportation is almost solely based on a personal car.

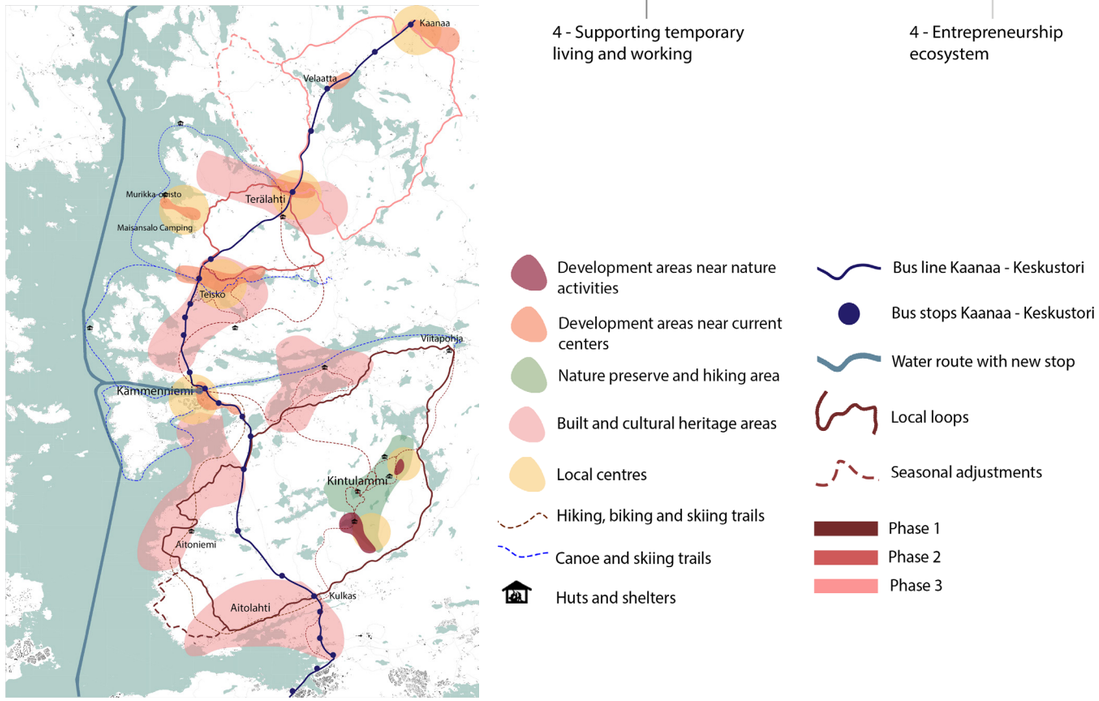
In strategy implemented in Teisko, bus connection is organized with frequent, fast connection from Kaanaa to Tampere centrum. It is supported by local loops, driven by electric buses. They connect to the main route and can be adjusted for peak times based on population density. Where landscape and denser housing makes local loop ineffective, the main line has more frequent stops. Alternative loops near shore can be used on vacation seasons to support cottage inhabitants. Loop system creates flexibility to transport network, compensating the use of personal cars.

New trail network combines Kintulammi nature and hiking area with Teisko's rich cultural heritage. Paths for hikers and bikers vary in length. New passages enable visitors experience Teisko's villa culture, wealth of Teiskola mansion site as a part of nationally important cultural landscape and isthmuses of Sisaruspohja. Canoe trails allow experiencing Teisko's shoreline with a new angle. Paths and waterways are used as skiing trails during the winter. New array of shelters is built along the trails on beautiful and serene spots.

Picture 4. Strategy of Teisko



Picture 5. Steps 1, 2 and 3 on map



VISION AND STRATEGY

TEISKO STRATEGY

Natural and cultural drivers attract visitors, creation potential for local economy. According to study by Metsähallitus, one euro invested in national park or nature centre services brings back on average 10 euros (Metsähallitus 2019). Flexible entrepreneurship program support activities such as equipment renting, trip arranging, accommodation and local specialties delis. New services concentrate around local centres with harbour and Teiskola or important nature spots like Kintulammi. New ways of working help the area to develop, making it economically sustainable. It boosts everyday services used by locals.

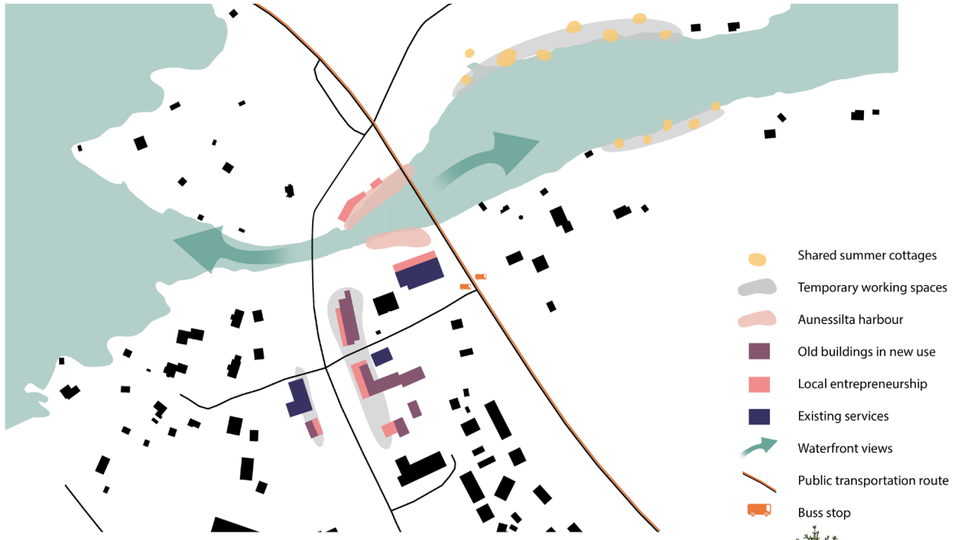
Kämmenniemi as the new focal point of the area is structured to enable temporary living and working for visitors, since the seasonal changes in population and tourism are inevitable. Temporary working places, such as renovated old buildings and shared summer cottages can be rented. Experimental entrepreneurship, artist studios and recreation-related businesses in Kämmenniemi offer diverse experiences. For the people working in the area, the peaceful location, community, affordable rents and quick transportation between Teisko and Tampere city enable a multi-local lifestyle for the rising interest.

Leisuretopia

Once the multi-local recreational state has been achieved, further development ideas – titled "Leisuretopia" – include equal zero-emission transport, water routes, new national park around Kintulammi with multifunctional nature center and Kämmenniemi as cozy but trendy local point of interest with innovative entrepreneurship ecosystem. Kämmenniemi as the new lively core of recreational activities boosts businesses alike to co-work in communal events and markets. Variable businesses attract tourism and tourism supports the economy. Visitors can enjoy a diverse area of experimental services.

New Teisko will balance the urban lifestyle of growing Tampere city, offering refreshing but energic experiences and unique possibilities for inhabitants, visitors and businesses alike. With fast public connections to Tampere city centre the leisuretopian Teisko works in synergy with the hectic Tampere city center and offers a quick get-away from every-day tasks.

Picture 6. Step 3: Investments around leisure activities



Picture 7. Step 4: Kämmenniemi development

Picture 8. Leisuretopia nature centre

SOCIAL CONNECTEDNESS

Kia Terho
Ria Aasholm
Ulla Viitikko
Sylwia Marczyk
Michał Mela

CONCEPT OF WELLBEING

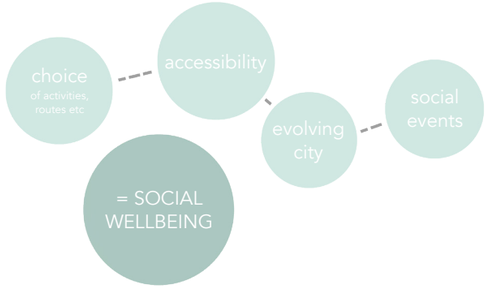
The focus of the project is in region of Tampere and its regional dynamic. The main goal was to create a development strategy from the wellbeing point of view. Strategy is then implemented in the development plans and designs. The project started with defining the concept of wellbeing. What is wellbeing and what is included in it, and what are the most important factors of wellbeing? How can these factors be promoted and embedded in the planning process? Outlining the theme through a discussion our concept of wellbeing became clear. Things we value most in our everyday life are diversity in activities, social connections, lively evolving city, events and easy access to them. All these things are linked in the matter of social wellbeing.

Social wellbeing as a theme is still quite a large. We studied more what it consists of to outline the subject. The social wellbeing can be divided into physical and digital things - physical ones can be more spatially resolved so they are more relevant in this project. Those consist of necessary and optional activities - and the ones you choose to do assumably promote your wellbeing more. The optional activities.

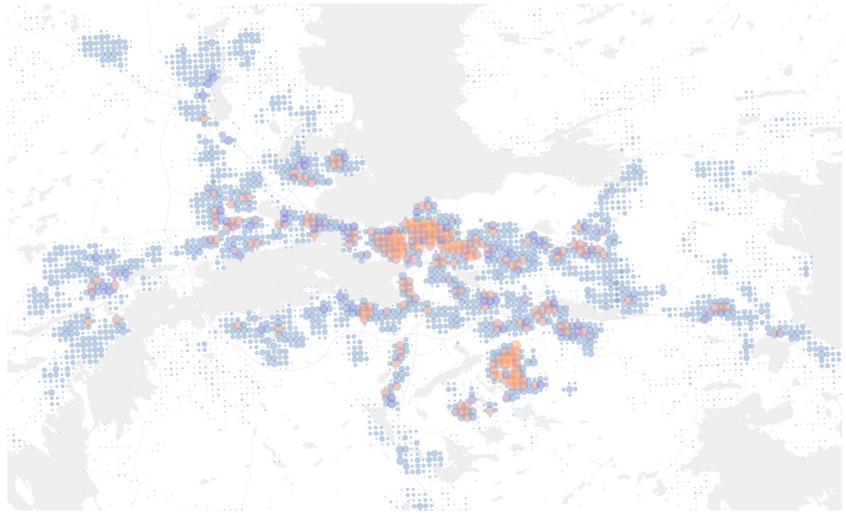
Categories of optional social activities were defined: leisure activites (outdoor living, i.e. beaches, playgrounds, scenery lookout places and spectator sports), culture (i.e. galleries, theatres, cinemas, libraries), social (food and drink related social places, i.e. restaurants, pizzerias, night clubs, bars and pubs) and sports (exercising and sport activities, i.e. gyms, sports centers and trails).

According to the Tampere region official website from the year 2015 to 2016 the population growth in Tampere metropolitan area was 1.1% (more than 4 000 inhabitants), which is the second highest rate in Finland after 1.3% growth in the Helsinki region. It is predicted that this annual growth continues, and the population will grow from 380 000 in 2016 to 480 000 in 2040.

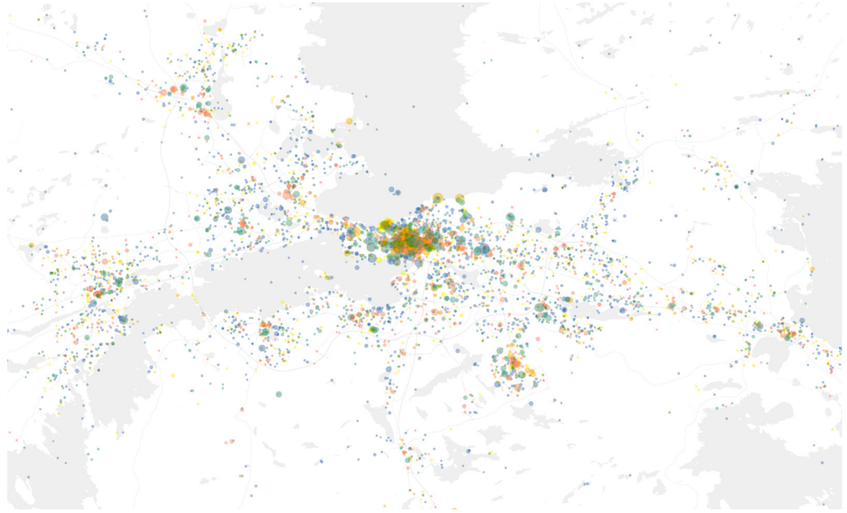
From Foursquare data we analyzed where and how evenly optional social services are spread out in the whole region. Foursquare is a local search-and-discovery mobile app that allows people to share location from the aspect of services. In the whole region level the social activities are quite evenly spread compared to the population.



Picture 1.
Outlining the theme of social wellbeing



Picture 2.
Population density



Picture 3.
Popularity of activities

ANALYSIS AND STRATEGY

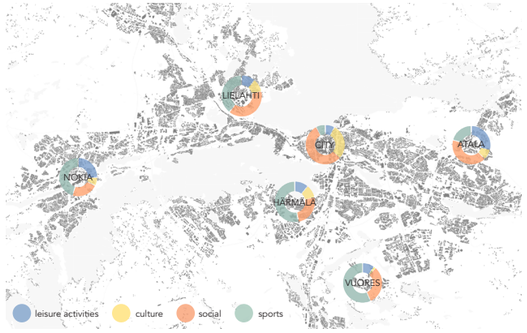
Because of the rapid population growth, it becomes more important to create functioning development strategies for the growing future regional centers. We wanted to focus our study to the "third" biggest density clusters in Tampere core and develop them, the areas with quite many people already but not too much social activities for them. That leads to leaving out the city center and the next density areas such Hervanta and Kaleva.

We studied the differences in which kind of services are the most popular and what can be learned from it. The statistical distribution in social services is similar in the clusters outside of the Tampere city area. The most popular social activity is sports related. In round numbers the popularity is always 50 procent. The next categories are either leasure activities or social. Culture has the smallest share in popularity. One interesting finding is that the numbers are quite the same despite the area.

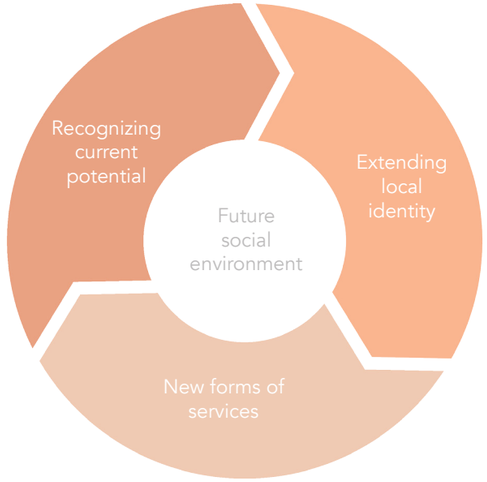
When compared to the city center the number of social activities and their popularity are quite different from the other places. The most popular is social services by roughly 50 procent and the second most popular is culture. This led us to the conclusion that all the growing regional centers should improve their social and cultural services so that in the future Tampere city core would be more multicentralized. More multicentralized Tampere core would provide more opportunities in social services and easier access to them.

Our main goal is to have the different social services spread more evenly in the whole Tampere region and especially in the future regional centers. The strategy is providing opportunities for social interactions in the growing areas of the Tampere urban core evenly, by creating decentralized urban structure. When implementing the strategy, it is important to take area's current situation into account. There is not one simple answer that works in every place.

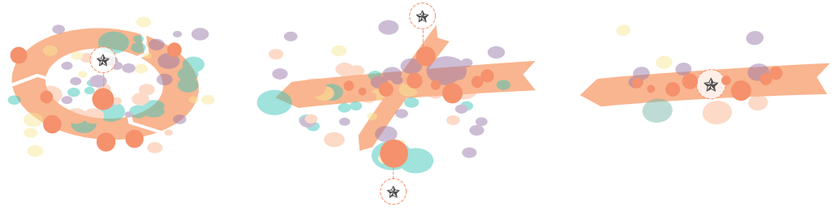
In the chosen areas we recognized three schemes to develop. The current potential makes these forms of a circle, a cross and a line, that become of the formation of existing social places in relation to the main traffic lines. These schematic shapes are then filled and reinforced by developing the existing services and creating new ones that would support the local identity.



Picture 4.
Study areas



Picture 5.
Strategy which takes are's current situation into account.



Picture 6.
Schematic shapes

AREA VISION

NOKIA, HÄRMÄLÄ AND VUORES

Nokia is an old factory town with some original workers' housing and a centrum built in the modern age. The most active commercial center is by the central square and other activities are spread around.Nokia is well accessible by bus both internally and from Tampere also by train. The main traffic lines also form kind of a circle around the centrum. Next to the central roads there are wide lanes for pedestrians and bikers and even a water connection could be developed.

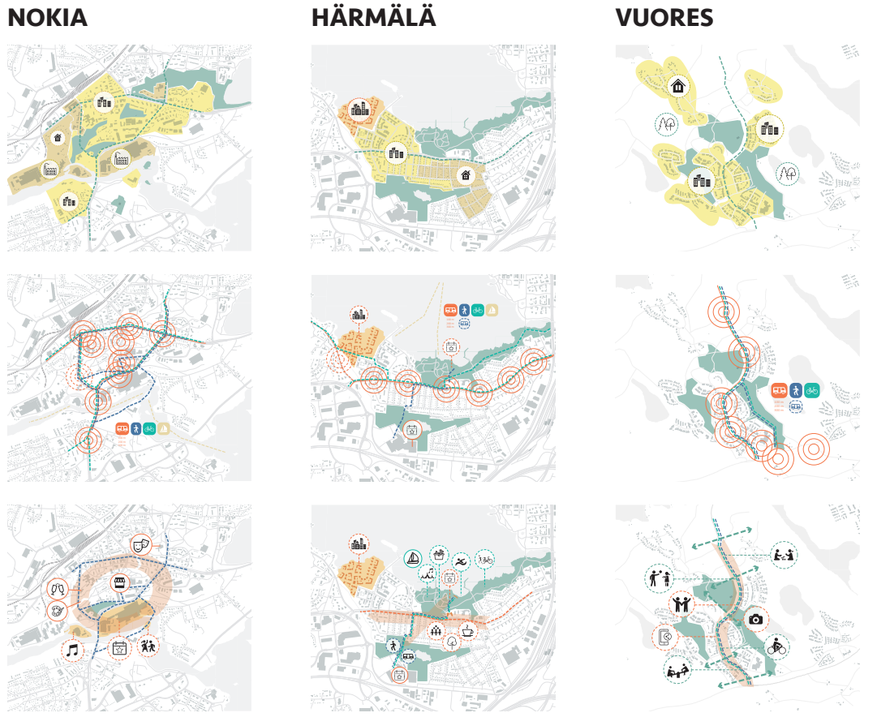
In the proposition the cultural circle is reinforced. The existing potential is developed further and a clearer connection between the places created. Factories become event and festival places with an industrial atmosphere. Also the art house of Nokia, the festive Kerhola and the worker's theatre are activated. The activities become then an alternative for the ones in Tampere, especially for those living in Nokia and further away. Thus Nokia's role as a legitimate regional center is retained.

In Härmälä the oldest part is well preserved protected area with small single houses. Block houses and other newer buildings present how the area has been developing through times. Also one part is a factory area. Härmälä is well connected to the city and accessible also by walk within the area.

Regionally Härmälä's lakeshore would be important and to maintain this public park.In proposition new local center is built in front to promote the active use. The local services are concentrated by the main road and is further developed as an active and attractive urban green space. The fair center is great potential for the area. A new pedestrian connection between the lake park, local center and the fair center might also be operated with robot buses during great events.
Old houses could be opened by the inhabitants themselves by opening local businesses but also with temporary coups, like open door events and one-night cafés.

Vuores is a new urban quarter in Tampere region, with thoroughly young built structure, developed since 2010. Vuores was built as a pioneering eco-friendly "small town" which could provide different residential options and artistic every-day environment with high quality services. It is developed as a unified urban structure to combat with environmental issues and climate change.

The concept of future development supports mainly the residents of Vuores. Its enviroment-friendly strategy is promoted in the solutions. The need for moving is minimized by giving the users new choices with mixed and dense community structure nearby their home. In the proposition the main road going through the area is transformed to a green boulevard and a social place.The car traffic is put underground and the street level is dedicated for pedestrians, bicycles and new electric vehicles. The street becomes a park-like environment with spots for children to play and grown-ups to meet. Art in the street could play a stronger role. Active life would also attract new companies offering social facilities to the area.



Picture 7.
From top urban structure, traffic and local strategy maps.

CARLESS WHISPER

TOWARDS GREENER TAMPERE

Outi Grönberg
Julia Lahtinen
Suvi Perttula
Marie Yli-Äyhö

MISSION

TOWARDS GREENER TAMPERE

Significant decrease of private cars is one of the most essential themes in recent urban planning. The biggest reason for this is, of course, the climate change: for example, right now traffic is producing 20% of world's pollution. (Kanninen et. all, 2010, 6)

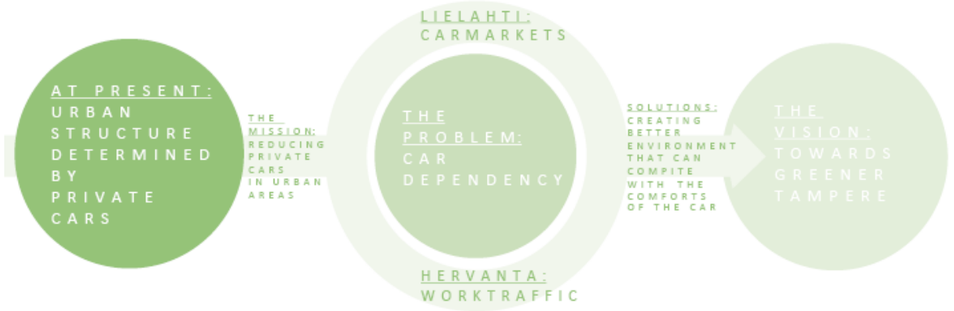
Tampere, as a rapidly growing city, has to also find its own ways to meet the future demands concerning increases in population, traffic, pollution and housing issues. Tampere is, for one, aiming to be totally carbon neutral and also to increase the portion of cyclists up to 60% by 2030 (Tampere region 2012, 5).

The future tram (picture 1) of Tampere is helping to solve some of these problems as it gathers the city together in a whole new way. The new tracks will allow the city structure to be more dense and the estimation is that 75 % of the residental building till 2040 concentrates by the tram routes (Tampere city 2016, 11). Overall, the tram activates a lot of improvement processes in the city with ecological planning in front. Our work concentrates in examining the possibilities of reducing private cars in Tampere and proposing our solutions on the matter.

Rather than banning cars, our vision is a future in which city planning and the green environment challenge the car-oriented lifestyle. If present represents a world dictated by car based services and city structures, our aim is to understand how those structures work, how it builds car dependency and how this phenomenon will be affected by the tram. That way we attempt to first understand what exactly is standing between the present and our future vision; what exactly is the problem and how that problem should be answered. (Picture 2.)

According to our study and regional analyses there are many factors that play to heavy car reliance and to which car-based hypermarket systems and commutation traffic play a great role. (Picture 3.)
We determined that if we could create solutions on how to decrease private car traffic in these phenomena, we could create strategy models that could be applied to other similar areas in the future when the tram connects many different parts of the region. To this study we have chosen two future tram end stops, Lielahti and Hervanta, that also house a hypermarket area and a workplace cluster respectively.

Picture 1.
Tram line and it's planned extension.



Picture 2.
The strategy graph.

Picture 3.
Working areas and market areas in Tampere region.

STRATEGY

CARLESS COMMUTE & COMMERCE

In Hervanta's case the major problem is how car oriented the daily commuting is and how little it is challenged by other transport modes at the moment. Bettering bike conditions, such as the quality lane network, all-year maintenance, greenery and bike stops and services is a crucial step (Tampere city 2018, 4-9). In addition people's attitudes towards both cycling and public transport should be addressed by cooperating with local schools, businesses and workplaces.

The public transportation is already very operational with the tram bettering the services in near future. On this front, it is crucial to ensure the ease of user experience especially with new applications and combined transport options, such as having shared e-bike and scooter stops near tram and bus stops (Tampere city 2018, 20-21).

SCENARIO 1: Traffic and private car-ownership have decreased with other transport modes' rising popularity. Development can better shift to the re-scaling of the environment and adaptive reuse of released car spaces. Human experience has become a public interest with people participating in their environment's planning. Also on-street parking can be banned.

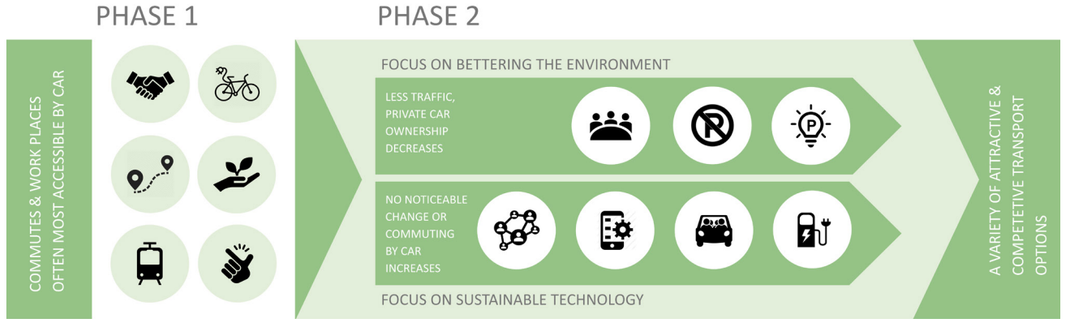
SCENARIO 2: If commute traffic with private cars doesn't change or increases, the focus will shift to the innovations' side by supporting new car renting and sharing sytems and electric cars. (Picture 5.)

In Lielahti, we aim to highlight the factors that can influence attitudes about the current way of trading. The tram and other public transport should be aligned so that it stops at the mall door. The extension of the tram route, to Ylöjärvi and Tesoma, will allow people to arrive at longer distances without a car. The need for a car can be reduced by developing innovative transportation solutions that are affordable and available whenever needed.

SCENARIO 1: If the region begins to diversify, it will be supported by means of trade and urban restructuring. Public and private services would be located to now monotonous area. Urban planning should ensure that there are places for social interaction in the area.
An outdated trading model where weekly grocery shopping with car takes place, could support the transformation of hypermarkets into market-like places. The transport of goods is detached from this more social event. (Picture 8.)

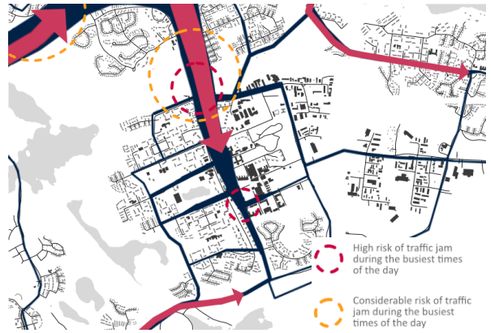
SCENARIO 2: If regional diversity is not possible, we will increase the area's comfort in another way.
Car-free area is increased by reducing transit traffic. From Paasikiventie there will be added connections that allow the car to be parked on the outside of the area. A fairly wide area could be circulated with a free shuttle, which is easy to onboard with the goods.

Picture 4. Cycling ruotes and parks in Lielahti.

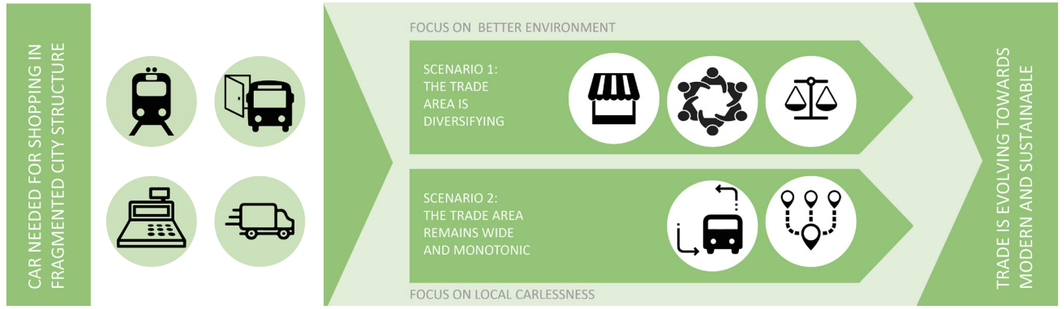


Picture 5. Concept to reduce car in commute.

Picture 6. Service clusters & carlessness in Hervanta.



Picture 7. Traffic flows to Hervanta.



Picture 8. Concept to reduce car in shopping.

SOLUTIONS

DEVELOPMENT PLANS

At first In Hervanta's case the strategy and tactics implementation focuses greatly on the areal and surrounding cycling routes and the tram's imminent environment: the city structure is bettered, public transport's fluency is maximized and an e-bike and scooter service system is introduced to the area. Cooperation with local businesses and institutions gets immediate attention with different reward systems and a new major scenic cycling road is build through Nekala to the city centre.

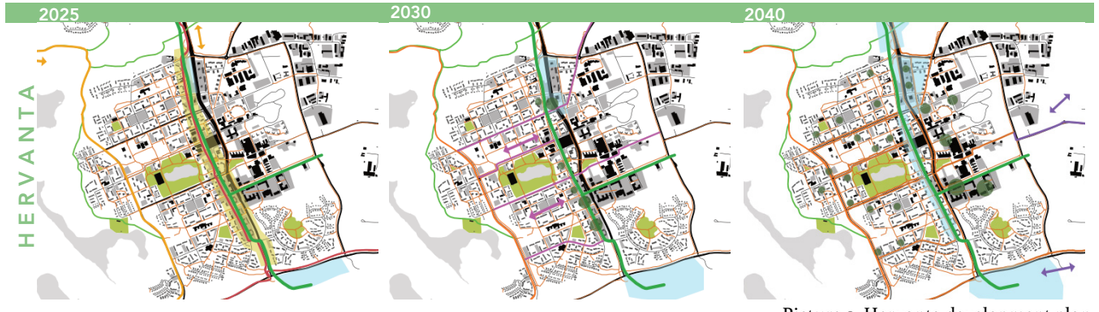
In 2030's goal the cycling and walking environment is further developed with oversized roads such as Opiskelijankatu and Teekkarinkatu re-scaled to make the environment more human and to better connect Hervanta's edge areas to the centre. The area by the tram is further developed into a walking centre with a noticeable decrease of visible parking areas.
By 2040 the urban development has furthered with Hervanta being connected by both the tram and cycling lanes all over Tampere. Mobility is easier than ever and other workplace areas are fast adopting Hervanta's example which is making traversing even more easier. The car is no longer seen as a necessity and so there is a demand to create new uses for large parking areas. (Picture 9.)

Lielahti business area will be developed side by side with Hiedanranta area. The aim is to exploit its potential for change to support a growing area and to make the whole more human and cozy. Tram stops are centrally located from the service point of view.
The goal in the 2030s is to create cross-cycling routes. Housing construction will also be increased in the central part of the area. At the same time, the use of land as parking spaces is reduced and the environment becomes more comfortable. The large commercial property in the eastern part of the area will be converted into a sports facility.

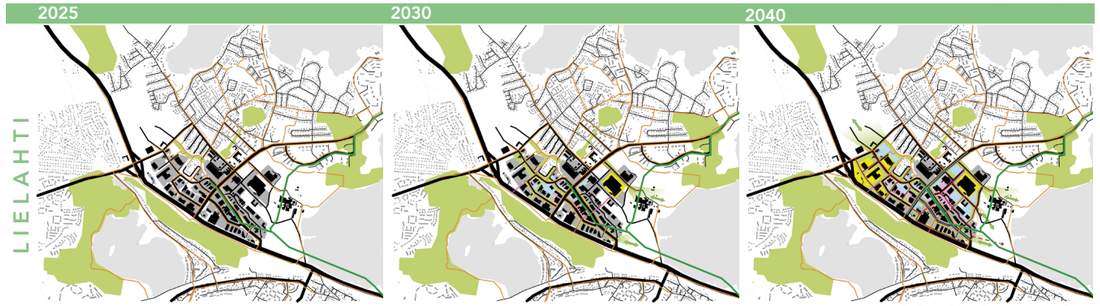
By 2040s, the area's diversity will be enhanced by housing, sports facilities and with a blend of public and leisure services and commerce. The green networks will be further expanded and the surroundings of the cycling trails will be greened. The tram extensions can bring people without a car for longer distances to Lielahti. (Picture 10.)

The success of this plan and its impacts on the overal wellbeing can be estimated through various means such as people's ways of living (car ownership, income levels, and by the number of cars and bikes on routes) and network systems (public transportation network, road networks and mobility). Also the city structures (building, workplace and service density, land use and green areas) and changes in the city structures are excellent indicators.

If the strategy implementations are successful and the overal vision is met, the plan will have a great impact on people's wellbeing: the purpose of our work is to create solutions that have both direct and indirect effect on people such as environment that is cleaner, healthier and safer and diversified transport options that are accessible, userfriendly and take into account different states of life and lifestyles. The solutions also extend from the material towards mental and social by active coworking, reward systems and overal attitude that sees the environment as a value and as a possiblity rather than an obstacle to be rossed with a car.



Picture 9. Hervanta development plan.



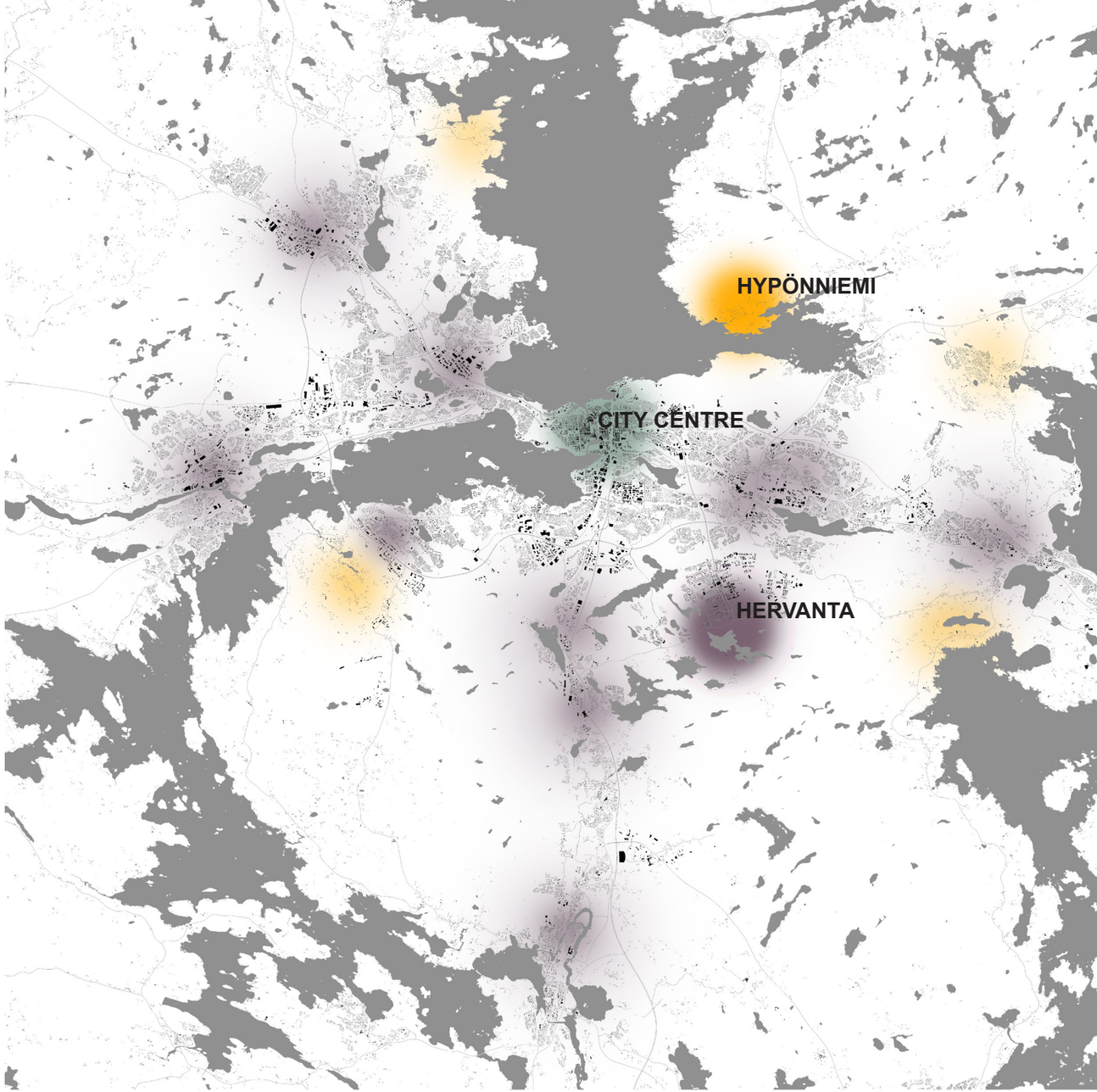
Picture 10. Lielahti development plan.

Picture 11.
Regional map. Areas where the concepts are possible to copy.

THE ELDERLY AMONG US

TYPOLOGICAL TOOLS

Emmi Anttila
Sarianna Sievi-Korte
Wilma Blomgren
Xing Li



BACKGROUND AND TYPOLOGIES

FOCUS

The ever-growing ageing population of Finland and the resulting gap (Tilastokeskus, 2019) in the population structure are highly consequential social alterations, which bring about various challenges, for example economical questions, organisational pressure, and imbalance in working forces. As this national phenomenon has immense importance both ethically and temporally, it needs to be considered better in current Finnish urban planning, as well.

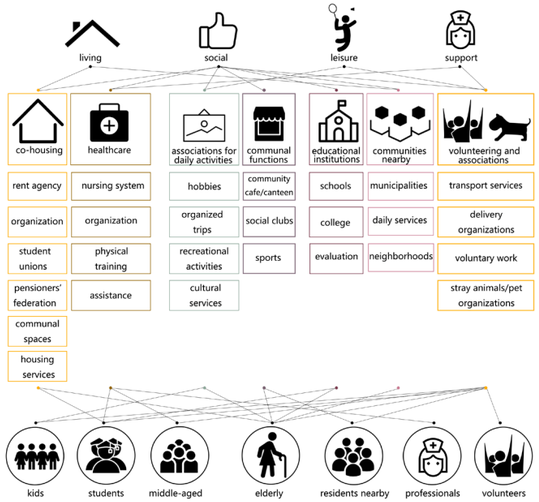
The project aims to promote better utilization of humanistic resources in the task of improving the well-being of senior citizens (02). The emphasis is on social wellbeing, for it also contributes positively to other aspects of wellbeing, like physical and mental wellbeing. Using of preventive measures, such as proactive elderly care and wide range of support services, is in the key position of the action plan.

The main aim of this project is to provide a new formula (03) to be used in creating of sustainable platforms for increasing wellbeing in Tampere region. The formula is based on elements such as housing options, service provision, and social networks. All of these elements include various suggestions. The exemplar solutions are divided into three categories based on different areal typologies: type 1, 2 and 3. Naturally, there are areas which do not exactly fit into these categories, however, the suggestions for them can be flexible combinations from those three types. Ideally, the formula should be used as a schematic model for urban design. Strong co-operation, new connections and ever-evolving support systems of the elderly are the minimum requirements for a successful project.

TYPE 1

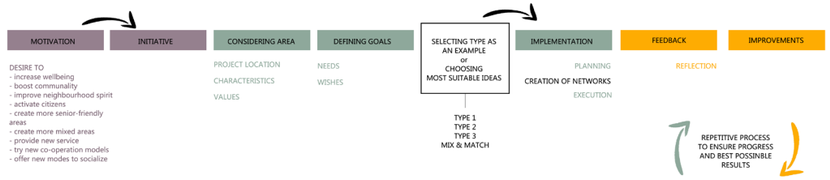
Type 1 areas can be described as city type: rather dense and accessible areas with high range of services, larger scale buildings and active hotspot areas. Balanced development, sustainable growth, good connectivity of networks, and avoiding areal segregation are some of the top goals. As a solution, we suggest mixed generation housing units including co-operation between student housing organisations and elderly care units (01). Main emphasis is on the use of existing buildings and local resources by repurposing facilities and spaces, making use of existing services, and improving connections. Even with weakened mobility and shorter ranges to operate within, in cities the elderly might have a chance to higher quality of life, as well as greater possibilities to live on their own for longer as most Finns wish to do. The idea of easy living is luring.

Picture 1.
Co-operative living in the city center



Picture 2.
Different general organizations and parties that could be involved in this project.

QUALITIES	1	2	3
DENSITY	DENSE	MEDIUM	SPARSE
SERVICE RANGE	HIGH	MEDIUM	LOW
ACCESSIBILITY	HIGH	MEDIUM	LOW



Picture 3.
Charts for defining three main typologies and how to use them.

TYPOLOGIES

CASE CITY CENTER (05): With the elderly often lacking social contacts and needed help in everyday tasks, the students could be seen as a possible solution to the problem. Being housed together with the younger might even have a positive impact on the costs of healthcare policies. The benefits of the housing solution can be summarized into following points: intergenerational solidarity, strengthened social cohesion, and mutual benefits of the communal system. Building family-like links at the community level helps fight isolation, loneliness, and vulnerability of elderly and others, whereas the communal housing system respects the private life of each individual, yet ensures demand and supply meeting naturally. For the project partners, then, the resulting new business connections could be valuable, and working together for a communal project is a great leading example for other companies and development projects, as well.

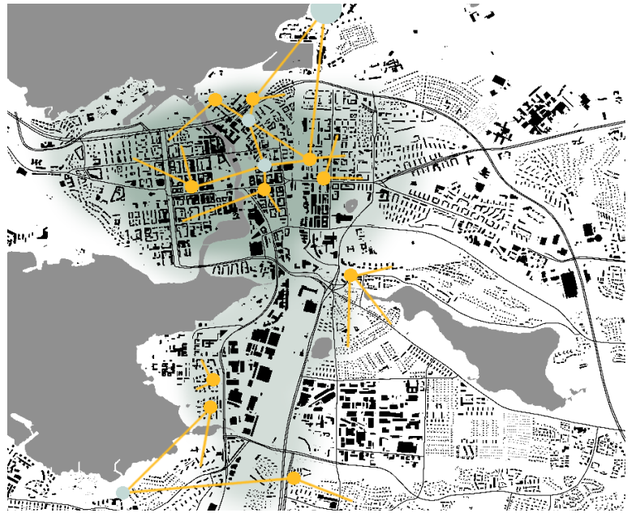
TYPE 2

Type 2 can be considered sub-urban areas. Balanced spread of housing and green areas, clear distinctions in purpose of use, and a medium supply of services are some of type 2's basic characteristics. Creating communal housing areas in larger scale, for example blocks with service clusters, is the ideal solution for areas like these. New communal entities with social sustainability, co-operation with different service providers and associations, as well as well-planned synergic relations can help increase communal spirit and boost the practice of neighbourhood support. The key factors of these areas are self-sufficience, innovativeness and centralisation of activities.

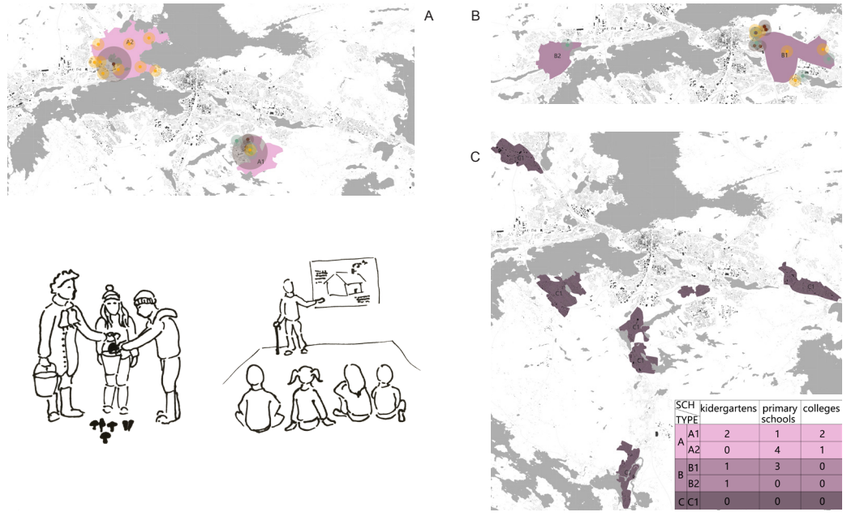
Furthermore, type 2 areas can be categorized into three sub-types (06). Category A relies on connecting the elderly with higher educational units (students) through sharing activity platforms and building new co-housing areas. Category B focuses more on co-operations between the seniors and kids, and lastly, category 3 focuses on activating the employed young adults in new communal areas and spaces.

CASE HERVANTA (04): The regular project partners of the co-housing system are ideally local service providers, such as housing providers, construction companies, and health/home care services. To benefit most of the partnerships, the care service range of the cohousing area could even reach beyond its boundaries to serve larger unities. As for the spontaneous co-operation partners, educational institutions, communities nearby, non-profit organisations, as well as different associations and volunteers could be encouraged to take part in the project.

Picture 4.
Site plan, Hervanta



Picture 5.
Possible connections in Type 1



Picture 6.
Categories of Type 2 based on different types of education

TYPOLOGIES AND FUTURE

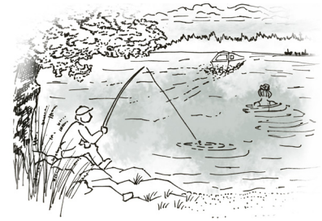
TYPE 3

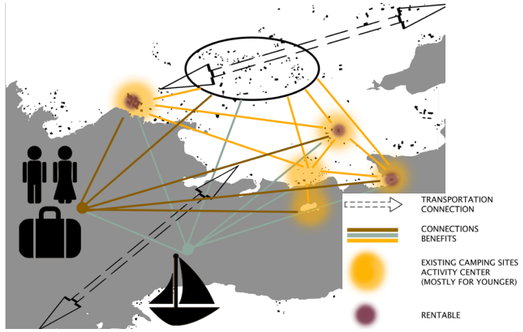
Type 3 areas are rural areas with rather sparsely distributed housing and relatively long distances, which lead to the bare minimum of service supply, but to independent, peaceful and unique places. Getting old shouldn't mean a need to move to a city and leave the environment or landscape the elderly are familiar with. To support the ability to live home and have a socially active life, maintaining areal features and values is important. For the solution we recommend home sharing program, mobile services and events. The young can be attracted to the areas by new leisure activities.

CASE HYPÖNNIEMI (07): The area already has camping activities for the young and nature values, so an elderly's holiday resort and boat connections over the lake would be suitable additions to the area. Co-operating between facilities and different generations make the usage more balanced. Leisure activities benefit the villages nearby economically and work as a part of a larger service circle (08) around the city center.

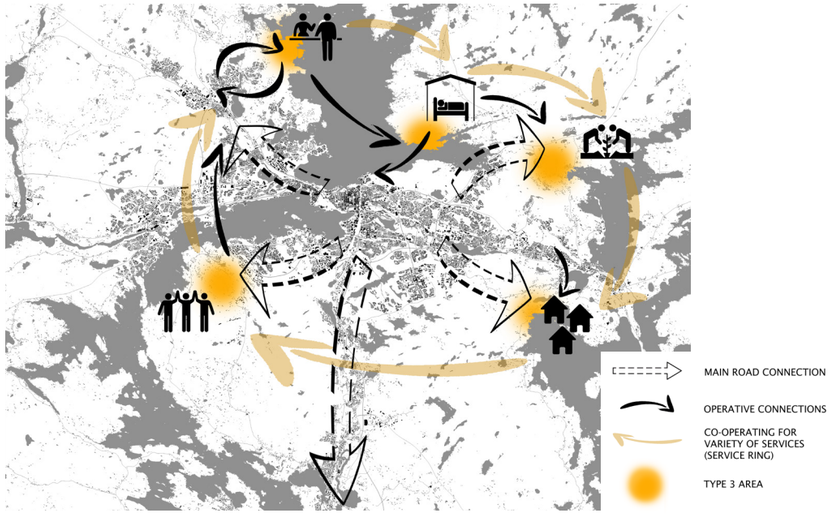
FUTURE

In the future, all these 3 typologies are implemented in the discussed areas according to these models. The new typology-based solutions maintain the diversity of different areas, and increase the wellbeing of the elderly by connecting the generations. The success of the process can be evaluated by measuring social and physical indicators, as well as by collecting feedback. Continuous development (09), adjustments and reflecting (even after implementation) are pivotal points of the entire project.

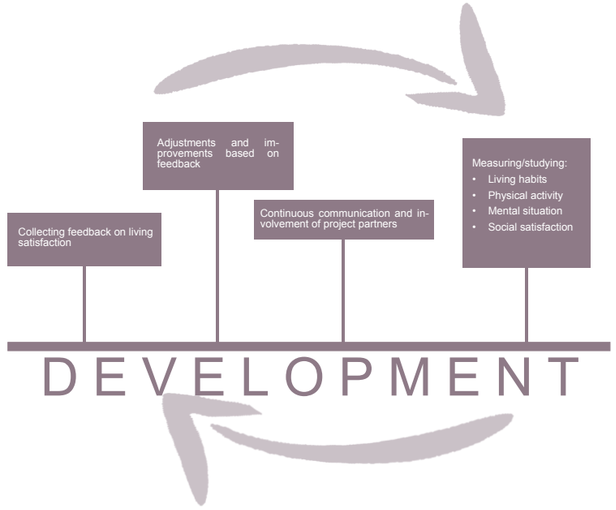




Picture 7.
Connections and benefits, Hypönniemi



Picture 8.
Provided new services in Type 3



Picture 9.
Cyclic development process for all types

VIRTUOUS CIRCLE

A STRATEGY ON IMPROVING THE VILLAGES OF TAMPERE

Ville Ruokosenmäki
Eero Kuokkanen
Saku Rantanen
Émile Corbeel
Denis Marotte

WHAT IS WELLBEING?

ANALYZING WELLBEING IN THREE SCALES

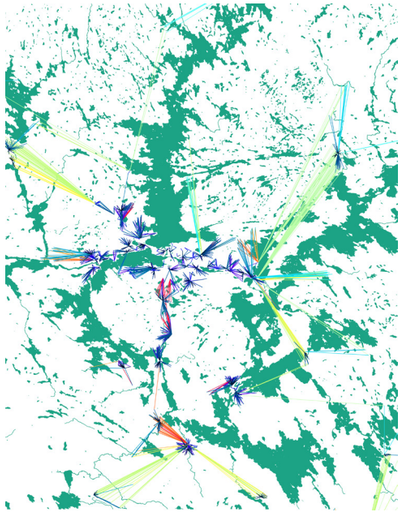
The aim of our work was to analyze wellbeing at the regional level. We started by defining wellbeing and what it means to us. Then we looked at how we could measure wellbeing in society and decided to focus on three main issues: diversity, accessibility and identity. By diversity we mean the amount of necessary and optional activities or residential options for a city / population (by type, price, environment etc.). Accessibility may simply be the time it takes to travel to a friend, but we dealt with it as an access to both necessary and optional services by foot, bicycle, public transport and car. We looked at the identity as a distance between "monuments" in the city, amount of art and visual appeal of public facades and the strength of the citys'/village's brand.

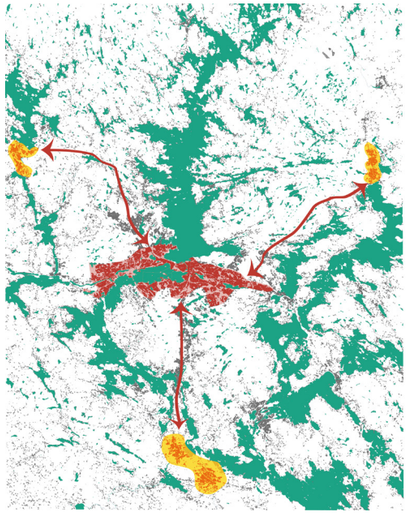
A lack of meaning and existential homelessness can be tied to the mass produced houses and urban planning choices of the last decades. By providing distinct identites for cities and their portions we can provide poles for people to orient themselves on. The identity of a city is built on both historical and contemporary aspects, each unique to their surroundings. By analyzing these themes we can build on the existing and create new where needed. Everyday accessibility is a main component for a working urban environment. "Dead zones" can be identified with accessibility analyzes and improved upon. Sustainability in all its forms depends heavily on ease of access to daily needs. A healthy city is a diverse city, with mixed uses and plenty to do. By analyzing the services in both quantative and qualitative terms we can improve areas by providing opportunities for new actors.

By analyzing the wellbeing in the regional scale by identifying local meaningful services and areas and cultural themes and by measuring the diversity and accessibility to services we could find lacking necessary services nearby residental hubs and find areas that are improvable due their existing connections. By looking at our analyzes and maps we found three focal points that have certain problematic things in common and have potential to be developed. These areas are Orivesi, Hämeenkyrö and Akaa. By having a closer look on each one we managed to make a planning concept grounded on our three main themes which are accessibility, diversity and identity. We aim to improve the rural villages by improving accessibility to Tampere center, improving inter-region connectivity and drawing in new populace seeking less urban environments. We aim to build the identity and services of the rural villages by creating attractivity for residental and economic actors and improving local wellbeing by utilising new resources.

Picture 1.
The Human Scale

Picture 2.
From individuals to region





Left:
Picture 3.
Accessibility analysis from residential hubs to healthcare and education.

Right:
Picture 4.
Analyzes to strategies

FOCAL POINTS AND REGIONAL STRATEGIES

STRATEGY AND A CASE EXAMPLE

After finding the focal points we began to build a strategy for improving the cities and concurrently the wellbeing of their inhabitants. By improving our chosen three themes a strategy of a virtous circle, the opposite of a vicious circle, appears. Through improving the identity of an area we can attract more users, who benefit from improved accessibility, which leads to diverse services. Depending on the focal area the method of improvement may vary, but the three themes are applicable everywhere.

We chose Orivesi as our focus area because of its good potential in accessibility and identity. The city can be improved with small steps leading to greater development. The main themes are split into smaller and smaller parts, some of which are shown here.

Improving station areas

The cities have good connections, but the platform areas are deserted. By reinvesting in the areas we can improve the attractability of sustainable means of transport

Reuse of empty buildings

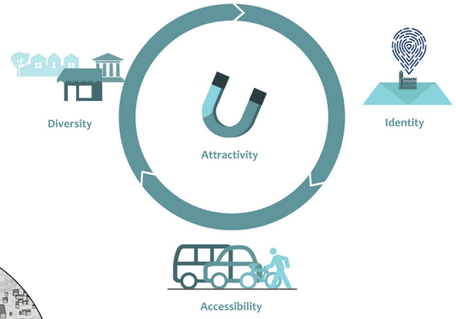
All the cities have potential in the form of urban fallows and unused spaces. By revitalizing the centers we can improve the functions and diversity while preserving the spatial identity.

Incremental growth

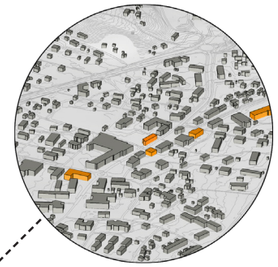
By building on small, less costly increments we can have a realistic plan on how to achieve our goals. With community-based and city supported actions the cities can begin to grow and accumulate resources for later development.

IMPROVEMENT EXAMPLES IN ORIVESI

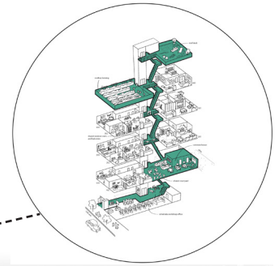
Picture 5.
Branding through outdoor activities and vistas



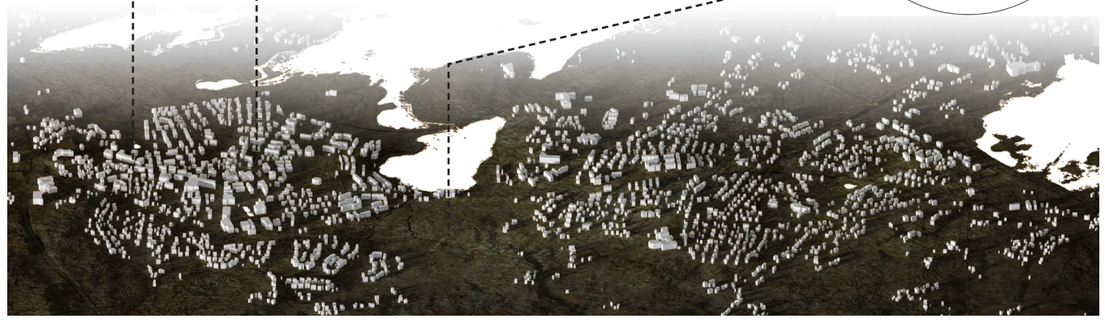
Picture 8.
Virtuous circle



Picture 6.
Re-purposing the old central street

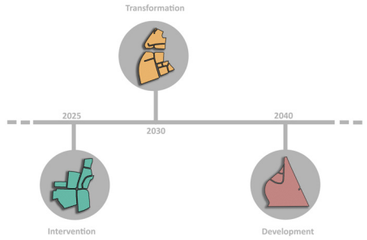


Picture 7.
Communality through Co-housing



LOCAL INTERVENTIONS

CASE ORIVESI



PHASE 1: INTERVENTION

Orivesi's redevelopment begins with small and uncostly steps through which we can build attraction to the city. The city's existing sports image is improved by building hiking routes, mountain biking tracks and lakeside facilities. The city center has empty commercial spaces in prime positions, which will be leased out flexibly with lowered rents or nonbinding pop-up style terms.
Through these actions the city can be advertised as a outdoor retreat for the major urban settlements, only a short trainride away. The influx of new visitors will strengthen the center's services, drawing in populace from the surrounding areas.

PHASE 2: TRANSFORMATION

The city's strong accessibility is improved by developing the railway stations and their connections to the city center. Small structures such as railway platforms can be used to build interest in the city through design competitions with moderate costs. The connections to and within the city will be improved with clear paths and guidances. The station areas have existing historic buildings currently not in use, that can be developed similar to phase 1. The city's split, retail dominated center will be developed to form a clear focal point.

By making the journey to and within Orivesi pleasant we can draw in visitors and permanent inhabitants. By improving the clarity and atmosphere of the center we can increase it's amount of staying activities and liveliness.

PHASE 3: DEVELOPMENT

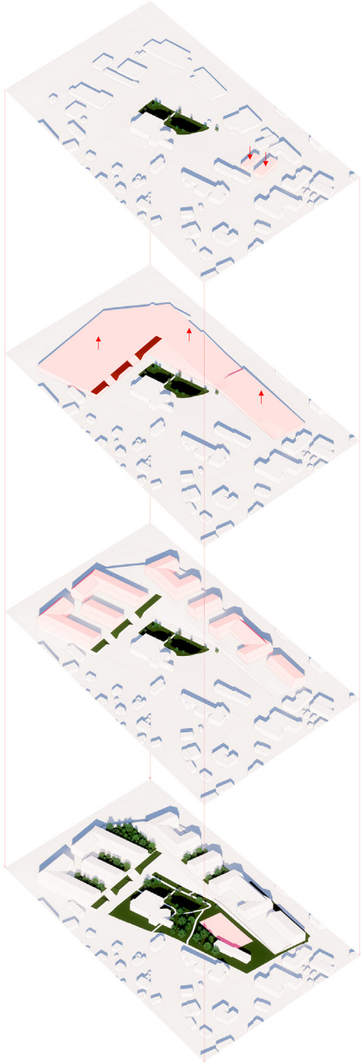
The sports identy of Orivesi will be built further by adding a higher level education facility and related housing structures. The education will concentrate on visceral subjects such as sports and physical healthcare. With the new addition youth can complete their education wholly in Orivesi and the addition will attract younger populace to the city. The residential needs will bind the city's northen and southern part together and justify better public transport in the area. The exististing outdoor activities will serve the students and help brand the city as a health enthusiast's haven.

The city center's improvements can be extended with increasing funds. The train frequency should be increased with growing use and accessibility to main urban areas improved. With diverse services, good accessibility and a clear identity the city can draw in and keep new populace.

Top:
Picture 9.
Increased staying activities

Right:
Picture 10.
Improved stations

Below:
Picture 11.
Residential development



Picture 12.
Low risk center development
through phasing

REFERENCES

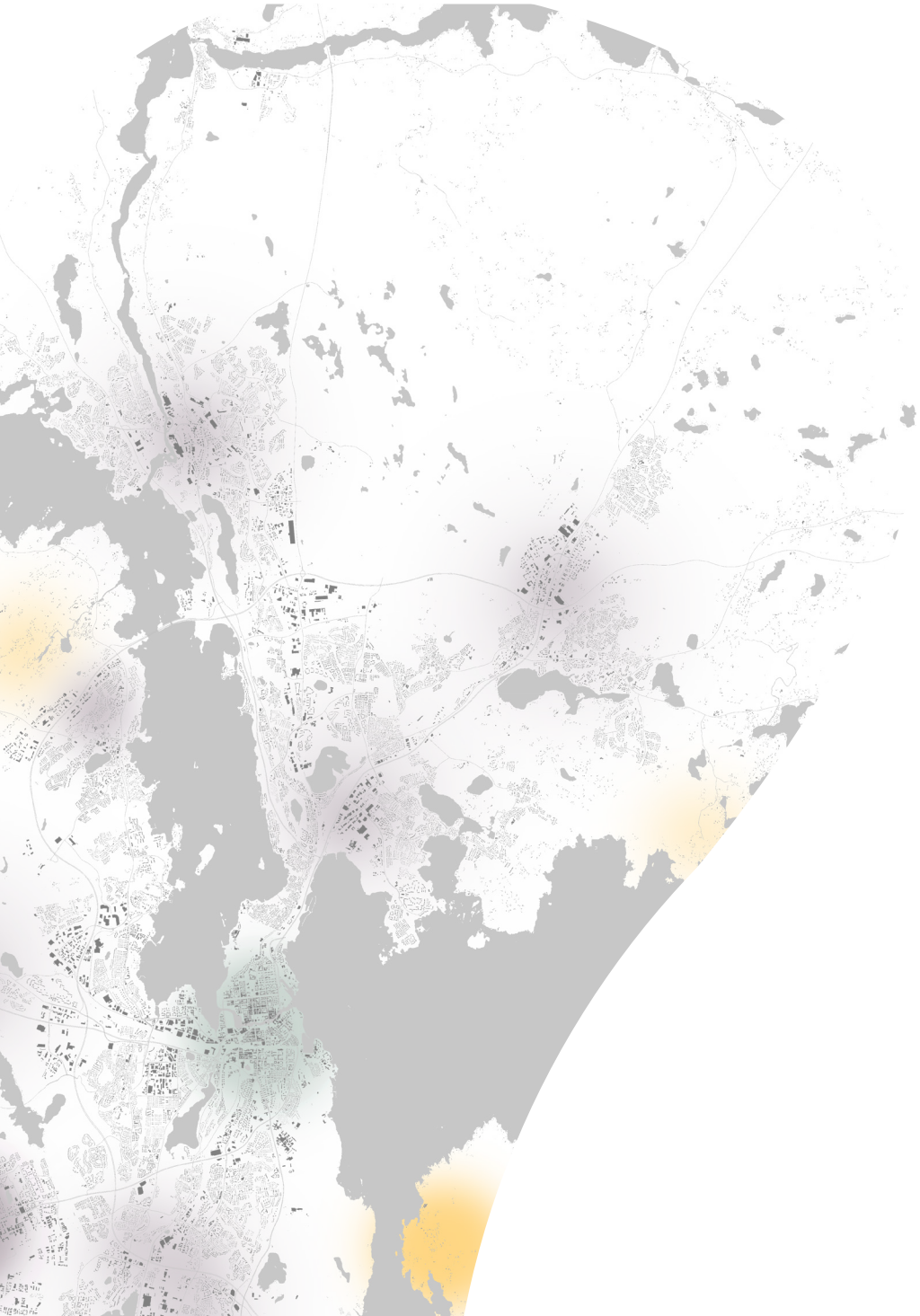
WELLBEING IN THE URBAN-RURAL BORDER REGION OF THE TAMPERE AREA
s. 36–43
Broberg, Anna. 2008. Valikoiva muuttoliike Uudellamaalla. Uudenmaan liiton julkaisuja, E97.
Cervero, Robert. 2002. Built environment and mode choise: toward normative framework. Transportation Research D 7, 265–284.
Cervero, Robert; Kockelman, Kara. 1997. Travel demand and the 3Ds: Density, diversity and design. Transport Research D 2:3, 199–219.
Gehl, Jan. 1987/2011. Life Between Buildings, Island Press, 216 p.
Jacobs, Jane. 1961/1992. The Death and Life of Great American Cities, Vintage Books, Random House, New York, 458 p.
Karsten, Lia. 2003. Family gentrifiers: challenging the city as a place simultaneously to build a career and to raise children. Urban Studies 40, 2573–2584.

IDENTITY - WELL-BEING THROUGH IDENTITY
s. 68–75
Wegelius, Sirkka; Yhdenmukaisuus ja ainutlaatuisuus : paikan identiteetti
lähiöparannuksen lähtökohtana. [Espoo] : Teknillisen korkeakoulun arkkitehtiosasto, 1996
Sjöberg, Markus; Symbolinen kyläyhteisö : Harvaan asutun maaseudun kunnan paikallisidentiteetti kuntarakenneuudistuksen Suomessa. [Jyväskylä] : Yhteiskuntatieteiden ja filosofian laitos, 2014
Laurila, Jenni; Tammelan alueen identiteetti asukkaiden näkökulmasta. [Tampere] : Johtamiskorkeakoulu, 2015
Maakuntakeskusten väestöennuste 2040. Aluekehittämisen konsulttitoimisto MDI, 2018

CARLESS WHISPER
s. 88–95
Kanninen, Vesa; Rantala Annuska (toim.) 2010. Kauppakeskukset osana kestävää kulutusta ja kaupunkirakennetta.
Yhdyskuntasuunnittelun tutkimus - ja koulutuskeskuksen julkaisuja C 82.
Tampere city. Liikenne Tampereella 2018. Webpage. Accessed 22.10.2019: http://www.e-julkaisu.fi/tampereen_kaupunki/liikenne-tampereella-2018/mobile.html#pid=1
Tampere city. Tampereen raitiotien vaikutusten arviointi, yhteenvetoraportti 2016.
Eräsalon Kirjapaino Oy, 2016, p. 11
Tampere region. Tampereen kaupunkiseudun kävelyn ja pyöräilyn kehittämisohjelma 2030.
Kirjapaino, 2012, p. 5

THE ELDERLY AMONG US - TYPOLOGICAL TOOLS
s. 96–103
Google Maps. [https://www.google.fi/maps]
Karttapalvelu. [https://kartat.tampere.fi/oskari/]
Tampereen kaupunki. Background information. [https://www.tampere.fi/] Accessed: 24.10.2019.
Tilastokeskus. 2019. [https://tilastokeskus.fi/tup/seutunet/tampere_vaesto_fi.html] Accessed: 24.10.2019.

TIME OF OPPORTUNITIES - WELL-BEING AKAA 2040
s.48–55
Heinonen, S. (2008) 'Muutoksia suomalaisten vapaa-ajan vietossa', Kulutustutkimus.net 2008 [Online]. Available at: http://www.kulutustutkimus.net/nyt/wp-content/uploads/2008/11/kts2008heinonen.pdf (Accessed: 13.9.2019)
Maslow, A. H. (1943) 'A Theory of Human Motivation', Psychological Review, 50, p. 370-396. Available at: http://psychclassics.yorku.ca/Maslow/motivation.htm (Accessed: 13.9.2019)



ISBN 978-952-03-1390-6 (print)
ISBN 978-952-03-1391-3 (pdf)