



# Kantakaupungin yleiskaava [2040]



Evaluation of the local master plan for the inner city 1998

**City of Tampere, Finland**

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# Introduction

**T**he drawing up of the local master plan for the inner city of Tampere started in 2013. The present document is one of the basic background reports that are prepared for this new local master plan. The present document will assess the implementation and up-to-dateness of the local master plan that was approved in 1998 and the partial master plans that have been made in the 21st century.

The purpose of this report is to give a picture of the objectives and basic solutions of the old local master plan and of the partial master plans that have been made in recent years. This report will study the city's development in recent years, i.e. in the period when the local master plans have been in force.

The report will review the inner city's current state, as well as the housing and business conditions. The city centre of Tampere has been included in this report in order to investigate the theme as one entity. In the end part of the report, you will find a description of each city district in the light of the themes presented in this report.

At the end, the report will discuss the up-to-dateness of the planning tool.

The report has been made by the City of Tampere's master planning unit. Kaisu Kuusela, Project Architect, has been in charge of the work. The analysis work has been participated in by Hannu Eerikäinen, Architect, Urban Planning, for the part of the green areas and environmental protection. Map analyses have been carried out by Jouko Järnefelt, GIS Specialist, Jukka Aaltonen, Senior Planning Officer, Maikki Jokinen, Technical Designer, and Kaisu Kuusela. The maps have been made by Maikki Jokinen. Birgitta Helsing, Technical Designer, has been in charge of the layout of the document.

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# Starting points for the study

## Local master plan for the inner city 1998, objectives and role

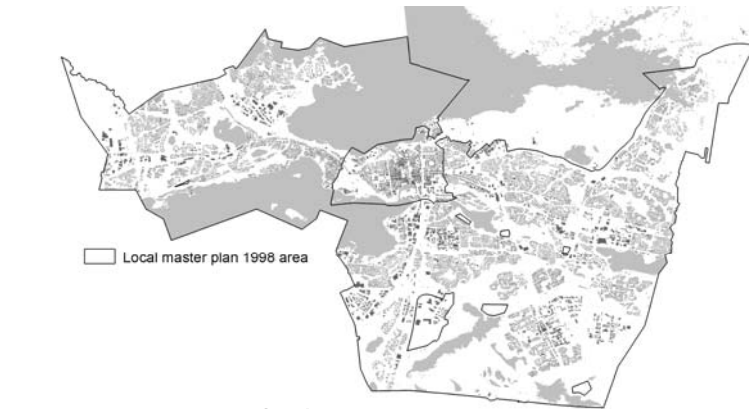
The local master plan for the inner city of Tampere was approved by the City Council of Tampere on 27 May 1998 and ratified by the Ministry of the Environment on 12 December 2000 and on 14 February 2003. The report that was included in the local master plan explains the plan's statutory role. According to an Act that was in force at the time, it is necessary to make a local master plan in order to act as the basis for the planning of a city's detailed planning, construction, and other land use.

The purpose of the local master plan was to provide guidelines for drawing up and amending local detailed plans. Although local master planning was carried out in the period when the Building Act was in force, the local master plan for the inner city 1998 was made into a legally binding local master plan, as referred to in the Land Use and Building Act, which came into force in 2000.

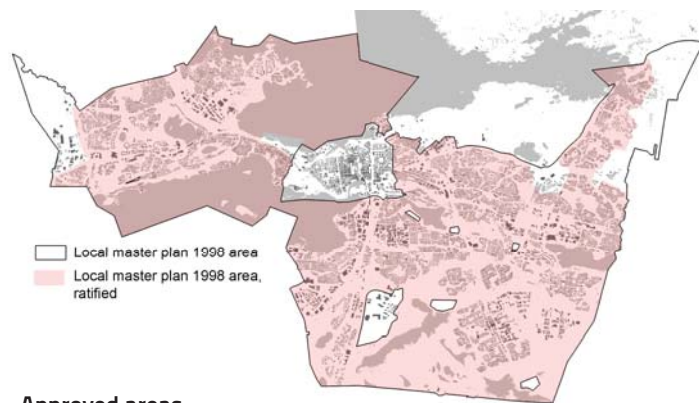
### Geographic boundaries of the local master plan for the inner city 1998

The local master plan for the inner city 1998 was drawn up for the urban settlement zone that was located outside of the city centre and Pyyrikki. The plan excluded Kauppi–Niihama and Lahdesjärvi. In the plan's approval phase, Ojala and Myllypuro were also excluded from the plan. Furthermore, after the City Council had made its approval decision, the City of Tampere cancelled the Ministry of the Environment's ratification procedure for Koilliskeskus and Santalahti. The City of Tampere wanted to investigate all the above mentioned areas more closely by means of partial master planning.

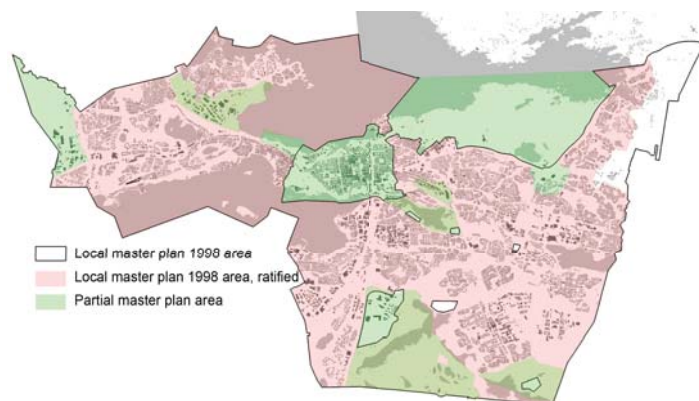
The Supreme Administrative Court repealed some reservations regarding infill development for housing on the southern shore of Lake Iidesjärvi, in the area between Lahdesjärvi and Hallila, and in the Hervantajärvi area. It was decided that the residential area reservations for the Hervantajärvi area that were approved later would be re-exam-



Local master plan for the inner city area.



Approved areas.



The area that is currently covered by a local master plan, including later partial master plans and related area specifications.

ined by means of partial master planning. When ratified, the local master plan was partially outdated, as the Act steering land use was reformed in 2000.

Since the beginning of the 21st century, fourteen partial master plans have been made for the city centre and the in-

ner city. They include the areas that were excluded from the local master plan for the inner city 1998.

The monitoring of holiday homes has been excluded from this study, due to their low number.







# 1 Local master plans as space reservations and choices

**The local** master plan for the inner city 1998 extends to the entire city area and presents a variety of themes. The partial master plans that have been made in the 21st century have focused on finding solutions for small planning matters covering small areas. This Chapter will present the local master planning situation in 2014 and examine what principles are adhered to in organising the City of Tampere's functions in the local master plans.

## 1.1 Principles and starting points for the local master plan for the inner city 1998

**The foreword** to the report included in the local master plan for the inner city 1998 stated that the plan's central purpose was to steer infill development and define a green network. The aim was to make the local master plan valid by 2020. The objective was to grow the Tampere region, so that it would provide a genuine alternative for the Helsinki Metropolitan Area. The local master plan aimed at promoting the coherent and compact city structure. The intention was to densify the city centre into a European city.

### Population

**There were** 191,000 inhabitants in Tampere at the time the local master plan

was completed. It was estimated that the population would increase to 210,000 inhabitants by 2020. The original infill development areas designated by the local master plan for the inner city 1998 had space reservations for roughly 29,000 inhabitants. Due to the geographical boundaries that were drawn in the approval phase, the number of inhabitants to be placed in the infill development areas dropped to 20,000. Later, partial master plans were made for some areas that were excluded from the plan, resulting in new local master plan reserves for housing.

### Jobs

**There were** 95,700 jobs in Tampere in 1998. The goal of the business and industrial sector has been to improve its operating conditions and to make the economic structure more versatile. The objective of the local master plan for the inner city 1998 was to create 15,000 new jobs in Tampere by the turn of the 2010s. Consequently, there should be roughly 110,700 jobs in Tampere in 2010.

### 1.1.1 Housing

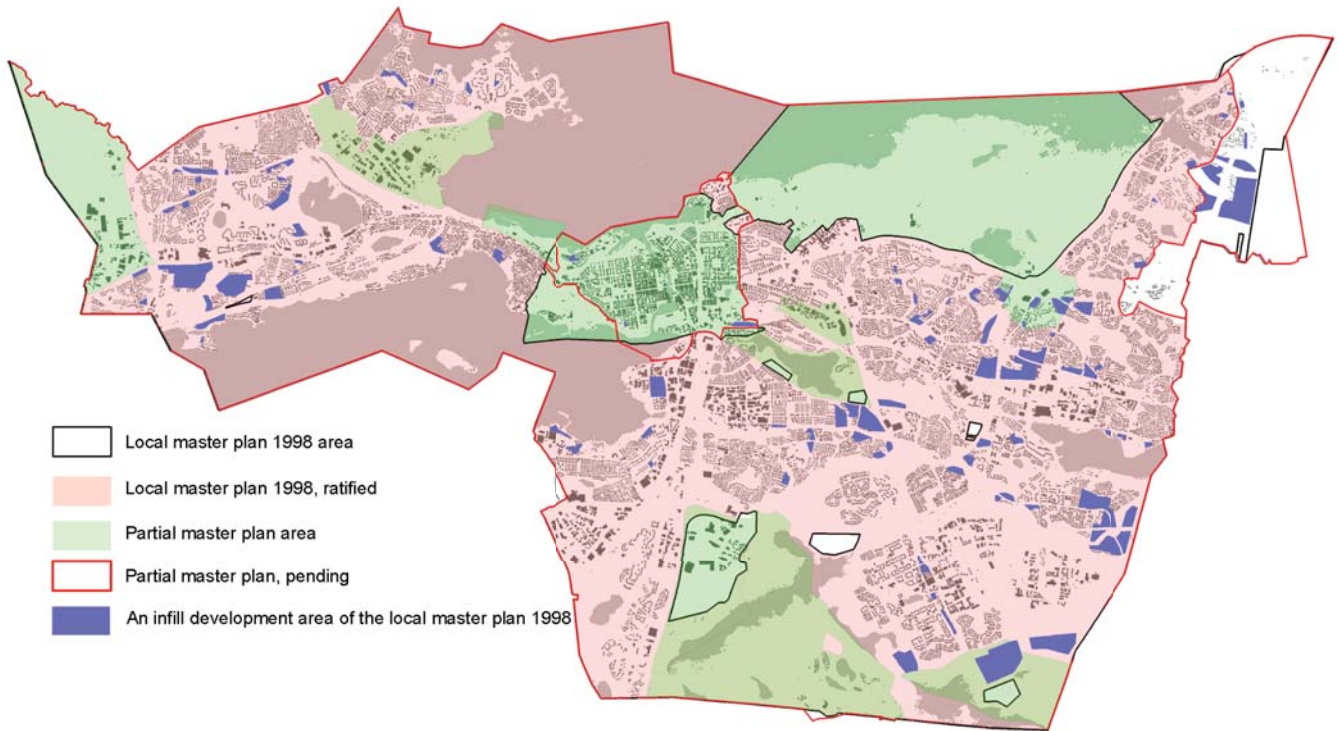
**The objective** of the local master plan for the inner city 1998 was to promote the construction of an urban community structure dominated by detached housing and defined by green areas. Out of the dwellings designated by the local master plan, the intention was to locate half of them in blocks of flats, one fourth

in two-storey terraced houses, and the rest in one-storey terraced houses and in groups of detached houses.

The aim was to support the city centre by locating most of the reserve meant for blocks of flats in the city centre and in the surrounding district. The objective was to locate most of the new residential areas outside of the district that surrounded the city centre. The aim was to take account of the natural conditions, the availability of basic services, and the transport connections when deciding on the location, the geographical boundaries, and the dimensioning of the residential areas.

Originally, the local master plan for the inner city 1998 had 480 hectares (in 120 infill development areas) that were targeted for housing. In the plan's approval phase, some of the areas were left out and the size of the infill development areas decreased to less than 400 hectares.

The local master plan also provided an opportunity for building dwellings in those centre areas that adhered to the local master plan (C areas), as well as in the inner city's old residential areas. However, the local master plan for the inner city 1998 did not designate infill development to old residential areas. Instead, most of the infill development areas for housing were located on former agricultural lands and in forests.



Infill development areas of the local master plan for the inner city 1998.

Areas reserved for blocks of flats

The report that was included in the local master plan for the inner city 1998 stated that in the following decades, the construction of blocks of flats would be focused on the city centre’s sphere of impact. In addition, the intention was to designate the construction of blocks of flats in the vicinity of the service centres and the public transport connections which existed or had been planned in various parts of Tampere.

The objective regarding the production of blocks of flats was roughly 18,000 dwellings (calculated from the local master plan’s approval to the year of 2020).

It was estimated that in the old residential areas covered by the local master plan, there would be space for about 500 flats, which would be built in order to densify the areas concerned. For example, in the residential areas covered by the local master plan, it has been possible to convert small plots designated for public buildings into housing plots.

Detached housing areas

According to an estimate presented in the local master plan for the inner city 1998, the aim was to produce 9,000 new detached houses (calculated from the plan’s approval to the year of 2020).

The idea was to form a maximum of 500 plots for detached houses and 500 terraced houses by densifying the inner city’s local detailed plan areas. In addition, the intention was to plan plots for about 6,300 detached houses in the local master plan’s residential areas, which meant the reservation of about

360 hectares for the construction of detached housing.

The AP areas marked in the local master plan functioned as flexible zones for which it was possible to plan terraced houses, detached houses, or low-rise blocks of flats.

The local master plan for the inner city 1998 defined the dimensioning principles for the infill development areas for housing: about 60% of the areas had to be reserved for construction and the rest for streets and parks.

Housing production plan presented in the local master plan 1998

	(Group) detached houses	Terraced houses	Flats	Total
1995- 2000/year	100	350	900	1300-1440/year
2001-2010/year	80	300	770	1100-1200/year
2010-2020/year	60	350	640	900-1000/year



## Housing production

**The local** master plan for the inner city 1998 estimated that the annual production of blocks of flats would be 900 flats until the year 2000 and thereafter decrease until the year 2020. The production of detached housing was dimensioned to one hundred dwellings per year, and the production of terraced houses to 350 dwellings per year. It was thought that an annual decrease corresponding to the annual decrease in the production of blocks of flats would also take place in the other forms of housing. It was estimated that the need for plots allocated for housing production would be 35–50 hectares per year.

According to the estimates of the housing production plan (that was included in the local master plan for the inner city 1998), in 2010, detached houses would constitute about 18% of the housing stock, terraced houses about 16%, and blocks of flats about 66%.

### Partial master plans

**Since the** 2000s to the present day, the master plans for housing have complemented the residential area reservations that were presented by the local master plan for the inner city 1998. These partial master plans can be divided into two themes: they either extend the community structure, or they alter the character of areas within the city structure.

**The so far approved partial master plans that extend the community structure** are located in the southern parts of the inner city, i.e. in Vuores, and in the Hervantajärvi area. **The Vuores partial master plan** became valid in 2005. It was drawn up together with the municipality of Lempäälä. In Vuores (in the territory belonging to Tampere), 150 hectares have been designated for housing. According to the plan, roughly 6,200 dwellings would be built and there would be about 10,200 residents in these areas. In addition, the plan includes

12 hectares for centre activities. Green areas make up 45% of the total area.

**The Hervantajärvi partial master plan** became valid in 2014. In this partial master plan, the area designated as residential areas is about 30 hectares, of which half are designated for blocks of flats and half for detached housing. The idea was to locate about 75% of the area's residents in blocks of flats. In dimensioning, construction efficiency  $e=0.70$  has been used for the areas designated for blocks of flats, and  $e=0.30$  for the detached housing areas. According to this dimensioning, it will be possible to locate roughly 3,000 residents in these areas.

The Hervantajärvi partial master plan's regulations have allowed the placement of services that are suitable for residential environments in areas that are dominated by blocks of flats. The residential areas that are dominated by detached housing may include terraced houses, townhouses, and detached houses whose storey height is I or II. The detached housing areas will be implemented using an average block efficiency of 0.3, with space for about 800 residents. In addition, there are recreational and traffic areas in the area.

Out of the master plans for housing that extend the community structure, the partial master plans for Ojala and Nurmi–Sorila are pending. It has been estimated that the number of inhabitants in Ojala would increase by about 6,000 people and that the number of inhabitants in Nurmi–Sorila would be roughly 13,000 after the completion of the area.

**The Koilliskeskus partial master plan** (from 2004) and the **Kalevanrinne partial master plan** (from 2011) are **the master plans for housing that densify the community structure** on the eastern side of the city centre. The Koilliskeskus partial master plan solved the commercial dimensioning of the

area, but it also allowed the construction of 40,000 gross floor m<sup>2</sup> for roughly 350 new dwellings (and for 600–650 new residents). Most of the new residential areas are located on the eastern side of Aitolahdentie Road and have been designated for blocks of flats. The Kalevanrinne partial master plan reserved about 80,000 gross floor m<sup>2</sup> for housing construction to be carried out in an area of seven hectares. It is possible to locate about 1,500 residents in the area.

The master plans on the western side of the city center that densify the community structure are located in old industrial sites near lake Näsijärvi. In **The Santalahti partial master plan** (from 2008) there is some 60 000 gross floor m<sup>2</sup> for housing. It is possible to locate some 1, 300 residents in the area.

**The Lielähti partial master plan** (from 2008) was mainly made for enabling a former stock area to transform into a sub center. It is possible to locate some 40. 000 gross floor m<sup>2</sup> of housing in the center of the area. That corresponds some 850 new residents.

**The Niemenranta partial master plan** (from 2009) was made to enable housing in the reservation area for industrial expansion. The area located directly north from the Lielähti area is dimensioned for average 4.000 residents. Most of the new residential area, some 34 hectares, are designated for blocs of flats. In all, it is possible to build some 200.000 gross floor m<sup>2</sup> of new housing in the area. In addition there are some 18.000 gross floor m<sup>2</sup> designated for public services. There is also some 360.000 m<sup>2</sup> reserved for recreational uses.

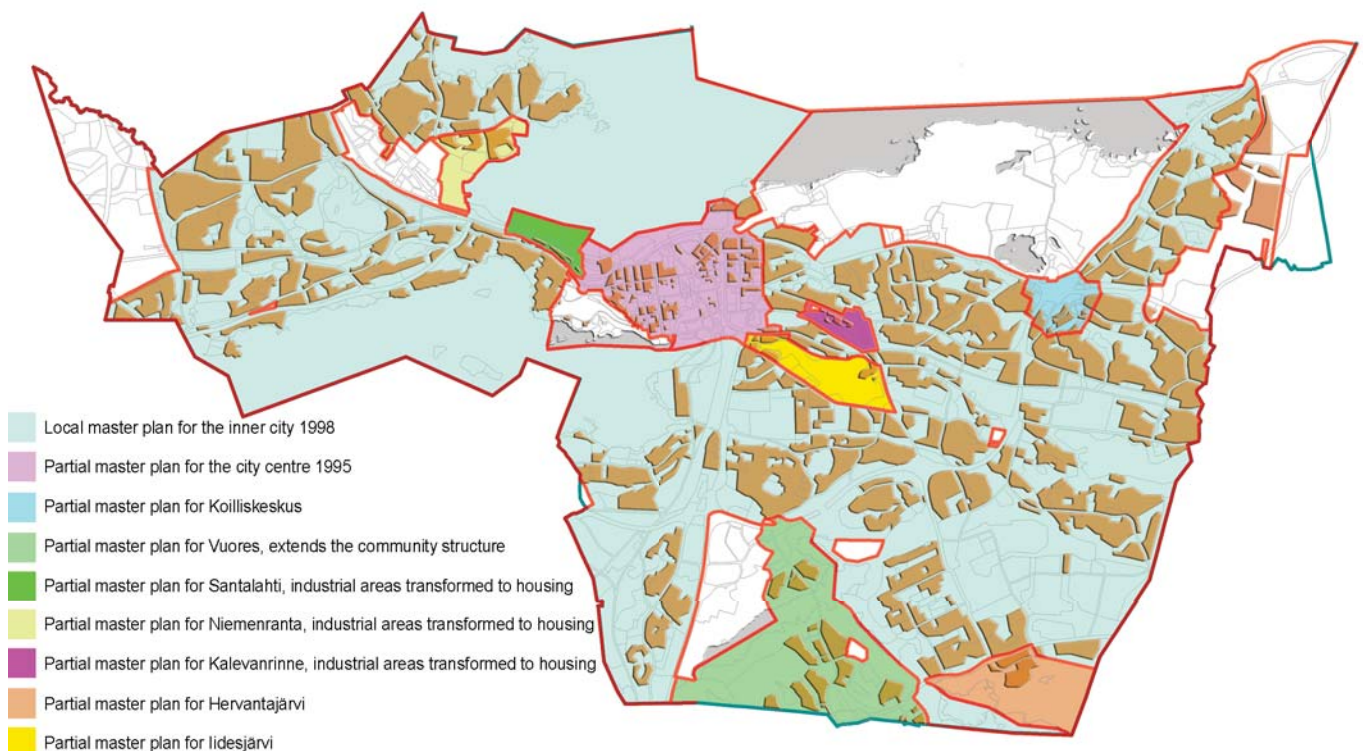
At the moment there is in process one master plan that densify the community structure. it is located in the city center.

## The total housing situation in the local master plans

In Tampere, the local master plan has designated 4,000 hectares for housing, which is 32% of the inner city's land area that is covered by local master planning. The combined volume of the new residential areas that have been included in the local master plan for the inner city 1998 and in the partial master plans that were completed in the 2000s is less than 650 hectares. According to local master planning, it has been possible to locate approximately 44,000 residents in these areas. Besides the local master plans' residential areas, it is also possible to build dwellings in areas that have been designated for centre activities (C areas) by local master planning.

A summary table of housing volumes in the local master plan

Plan	The volume of residential areas (in hectares)	Gross floor area in gross floor m <sup>2</sup>	Increase in the population
Infill development areas of the local master plan for the inner city 1998, housing	399	1 051 000	22 000
Partial master plan for Vuores 2005, residential areas	140	435 000	10 200
Partial master plan for Koilliskeskus 2004	9	42 300	850
Partial master plan for Santalahti 2008	7	60 570	1 300
Partial master plan for Lielähti 2008, centre	6	40 000	850
Partial master plan for Niemenranta 2009	34	200 000	4 200
Partial master plan for Kalevanrinne 2011	7	80 000	1 500
Partial master plan for Hervantajärvi 2014	30	155 000	3 000
<b>Total</b>	<b>632</b>	<b>2 075 870</b>	<b>44 150</b>



Residential areas included in the local master plan for the inner city 1998, infill development areas for housing, and partial master plans that contain housing functions..



## 1.1.2 The business and industrial sector

At the time the local master plan for the inner city 1998 was approved, the number of industrial jobs had been decreasing for almost twenty years. Industrial activities decreased in the city centre, in particular, but the number of jobs in the service sector kept increasing. Twenty years ago, the City Council of Tampere set a guideline according to which the goal of the business and industrial sector was to improve its operating conditions and to make the economic structure more versatile.

There are several old industrial areas in the inner city, such as Nekala, Hatanpää, and Lielähti, where the transformation from industrial into service areas started in the 1980s. The local master plan for the inner city 1998 increased the share of services in these areas and at the eastern end of Sammonkatu Street. The areas were marked with the symbol PK-2. Later, the Lielähti partial master plan was drawn up, allowing the transformation of Lielähti into a commercial environment and into a district centre.

At the end of the 1990s, some of the old industrial areas had become areas for production-dominated enterprises, and, therefore, the sales activities dealing with production also had to be allowed. There are areas in Hatanpää, Sarankulma, Lakalaiva, and Nekala that have been marked with the symbol T-3, which allows sales activities.

In the local master plan for the inner city 1998, the actual industrial environments were Rusko, Hankkio, as well as Messukylä, Sarankulma, and the sides of the railway line running to Nokia. The plan included reservations for new industrial areas in Myllypuro, Ryydynpohja, Lahdesjärvi, Atala, and Olkahinen. When locating these industrial and working areas, the smooth connections to the main road network were taken into account.

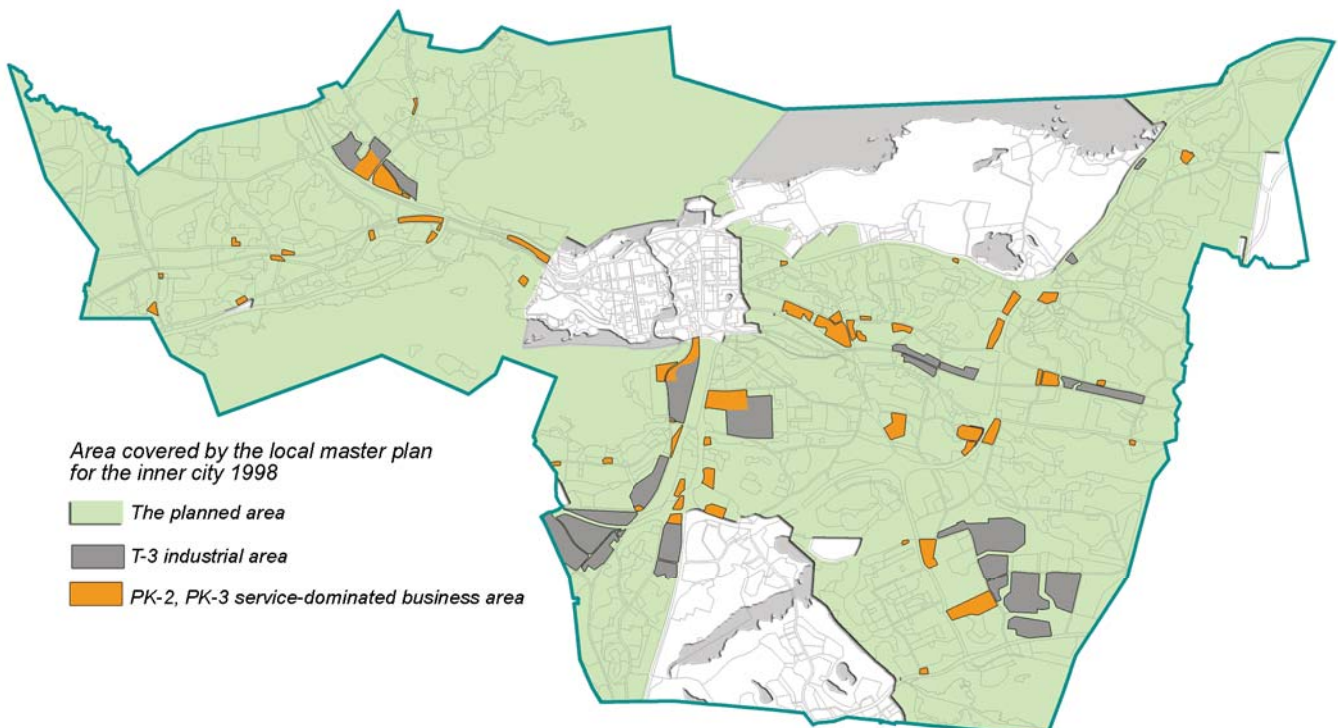
### Partial master plans

The working and industrial areas have also been studied by means of partial master plans. The Myllypuro partial master plan (from 2009) focused on the production-dominated industrial activities that were located close to the good

logistic connections in western Tampere. The Lahdesjärvi partial master plan (from 2013) dealt with the relation of services and workplaces. Lahdesjärvi is located close to good traffic connections in southern Tampere.

The Myllypuro partial master plan was made for a 390-hectare area on Tampere's western border. It has been planned that the industrial area would extend to the neighbouring municipalities' territories. There are less than 240 hectares of industrial working areas in the plan. The rest of the plan area, 150 hectares, has been designated as traffic and recreational areas. The plan allows the creation of roughly 4,000 new jobs in the area.

The Lahdesjärvi partial master plan (from 2013) studied complementing and extending the working areas by means of trade activities that have an extensive space requirement. Roughly 60 hectares of working areas and 92 hectares of areas for services and administration have been designated for this master plan area. Out of these reservations, about 29 hectares were new area reservations. Along with this partial master plan, the



Production-dominated business areas (T-3) and service-dominated business areas (PK-2, PK-3) of the local master plan for the inner city 1998.

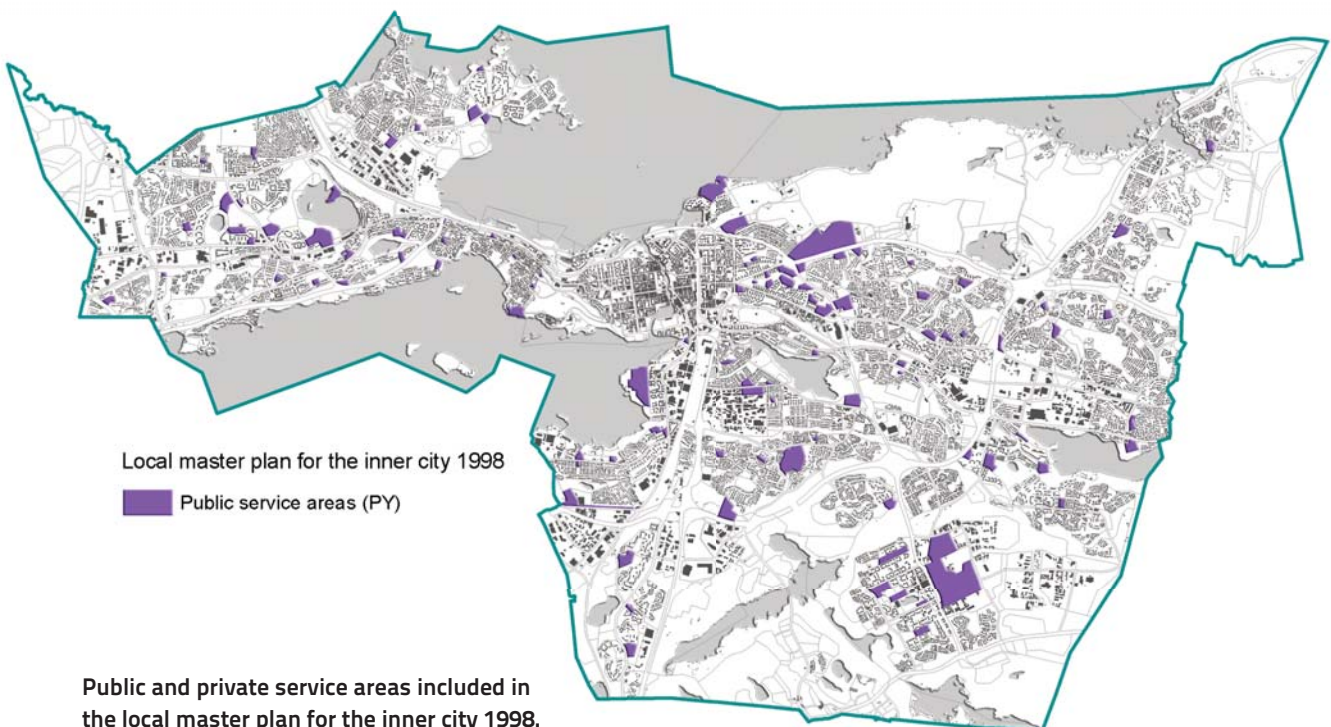
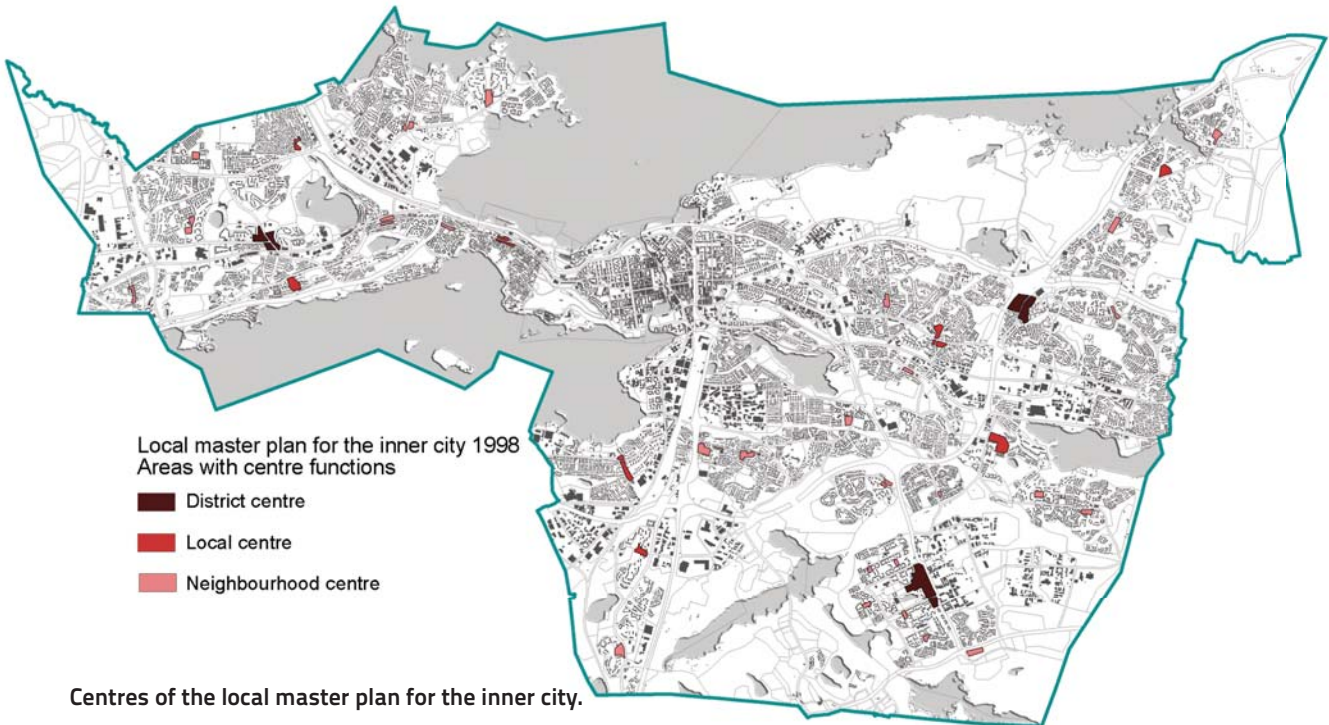
original building rights (allowed by the local detailed plans) were increased by about 130,000 gross floor m2. As regards commercial services, about 50,000 gross floor m2 of specialised trade and 290,000 gross floor m2 of trade that has an extensive space requirement may be placed in the area.

According to the partial master plan, it is not possible to locate grocery stores in Lahdesjärvi. In the working

areas covered by local detailed planning, the gross floor area designated for the construction of business premises may only be one fourth of the total gross floor area. As regards the areas marked as working areas in the plan, the reservation for the construction of business premises has been meant for the use of trade that has an extensive space requirement. Construction in accordance with the plan allows about

2,600 jobs in the area. It is estimated that roughly 2,000 new jobs will be created in the area, most of which will be in the trade sector.

The Vuores partial master plan (from 2005) had about 29 hectares of working areas. It is possible to build about 85,000 gross floor m2 of commercial and office premises in the area. After completion, there may about 800–1,200 jobs in the area.





### 1.1.3 Services

**The aim** of the location of the service areas in the local master plan for inner city 1998 was to enable the development of versatile services in the entire city area. There had to be smooth connections to the service areas by all modes of transport. In addition, the development of the areas had to be monitored and, if necessary, steered.

The local master plan for the inner city 1998 organised the public and commercial services into neighbourhood, local, district, and main centres. In addition to this four-step system, it was also possible to locate public and private services in some old industrial areas, as well as in areas reserved for public services. The aim of these general markings was to prevent any uncontrollable location of large retail units.

A report made in 1994 was used as a basis for the service network presented by the local master plan for the inner city. The local master plan steered the services to the city districts in the following way:

The main centre was a centre for the province, the central region, and the city that provided functions serving the central region and the city.

The district centres (Tesoma, Hervanta, and Koilliskeskus, and later Lielähti) were the main centre's sub-centres. They had to have functions which complemented or replaced services provided by the main centre and which served a part of the city area. The plan symbol C-9 concerns these areas.

The local centres were centres for groups of city districts that had versatile services complementing the basic services and thus affected many city districts, such as services provided by banks, post offices, and pharmacies. The population base was about 5,000 residents. The plan symbol C-10 concerns these areas.

The neighbourhood centres were centres for a city district or for a residential area to which the aim was to locate basic services (i.e. a telephone booth, a kiosk, a children's playground or a ballfield, a grocery store, a daycare centre,

and a primary school). The population base was 1,000–3,000 residents. The plan symbol C-11 concerns these areas.

The local master plan for the inner city allowed commercial services in those industrial areas where sales activities were allowed by the symbol T-3. In addition, the old trade-dominated business areas were marked with the symbol PK-2 and the service-dominated business areas with the symbol PK-3. Public services have been steered to the city structure by using the symbol PY.

#### Partial master plans

**The Koilliskeskus** partial master plan (from 2004) solved the dimensioning of the commercial functions in the area. The size of the plan area was 110 hectares. The objective of the partial master plan was to develop Koilliskeskus into a versatile and practical district centre. The areas for a new large retail unit and the Linnainmaa swimming hall were reserved in the plan. The dimensioning of the new shopping centre was about 12,000 gross floor m<sup>2</sup>, of which the area

PHOTO: KAISU KUUSELA



Lielähti district centre is a dense cluster of commercial services.

designated for grocery stores was 3,000 gross floor m2.

In addition, the plan allowed a total of 14,000 gross floor m2 for the current shopping centre and for the social and health station. Thanks to this entry, it is possible to build more space – the local detailed plan allows the construction of 1,000 gross floor m2 for trade premises and 800 gross floor m2 for public services.

The Lielähti partial master plan (from 2008) sorted out the role of Lielähti as a district centre and steered the development of its commercial services with respect to the Tampere Central Region's service network. The size of the partial master plan's area was slightly over 200 hectares.

The partial master plan allowed the construction of about 200,000 gross

floor m2 of business premises in Lielähti. Out of the area allowed to be used for the construction of business premises, half had been implemented at the time the plan was approved.

The area that was used by M-Real for its industrial activities as well as the Turvesuo area were marked as industrial areas in the plan. Working areas were designated to the western side of Myllypuronkatu Street, to the southern side of Teivaalantie Road, and to the eastern side Lielähdenkatu Street.

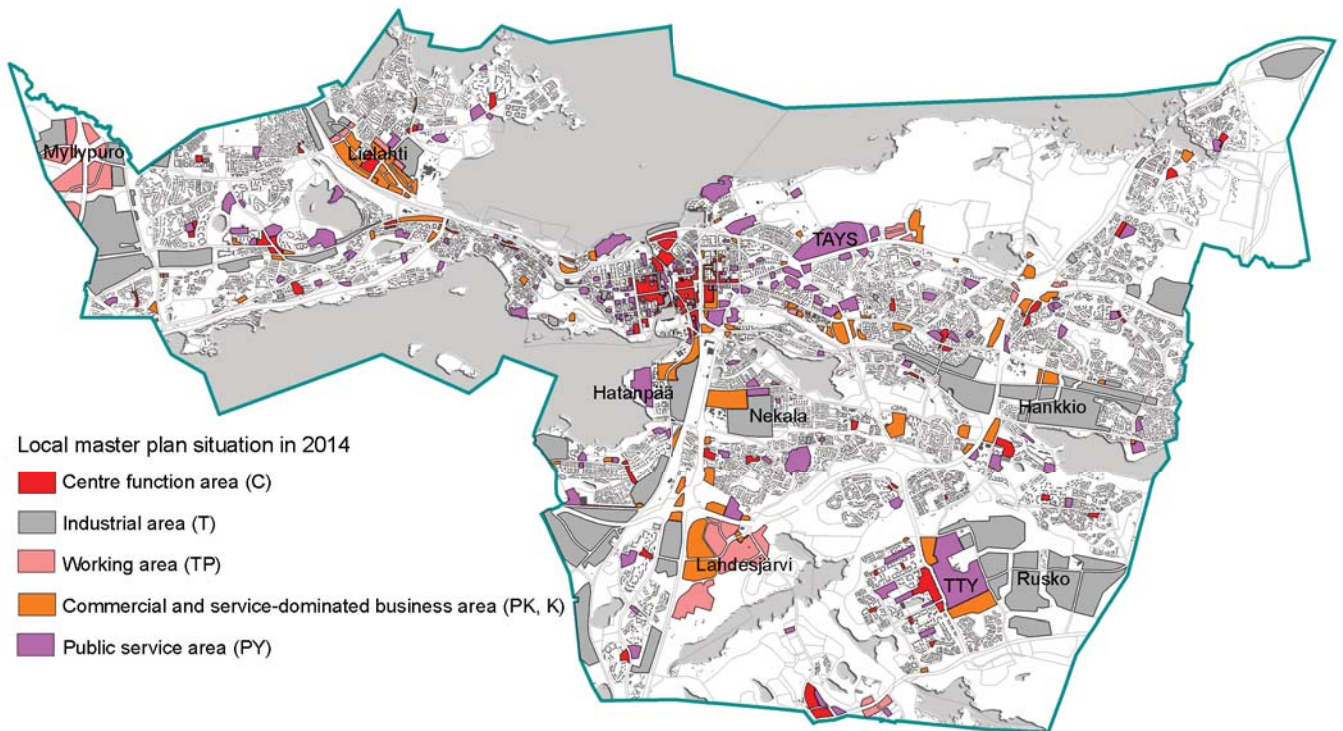
Along with the Kalevanrinne partial master plan (which was completed in 2011), the sides of Sammonkatu Street were converted into an urban residential area and the Prisma centre into a versatile commercial and service area. The partial master plan increased the planning area's volume of business premises

by 24,000 gross floor m2. Consequently, the planning area has 120,000 gross floor m2 for business premises. Out of this volume, the share of grocery stores is 14,000 gross floor m2 and the share of specialised trade (other than the specialised trade with an extensive space requirement) 70,000 gross floor m2.

### **The business and industrial sector in the local master plans, a summary**

**The local** master plan for the inner city 1998 and the more recent partial master plans have a total of 2,395 hectares of working areas, centres, and service areas. That is 18% of the land area covered by the local master plan.





The working, industrial, service, and centre function areas of local master plans.

A summary table of the volume of working and service areas included in the local master plan. Not all local master plans include an estimate of the gross floor areas or number of jobs.

Plan	Plan marking	Surface area (in hectares)	Gross floor area in gross floor m <sup>2</sup>	The estimated number of new jobs
Local master plan for the inner city 1998	T (T, T-3, TY-1)	984		
	PK (P/r, PK-2, PK-3)	241		
	PY (PY)	408		
Partial master plan for Koilliskeskus 2004	PK	8,5	25 200	
	PY	3,4	800	
Partial master plan for Vuores 2005	TP	29	85 000	800-1200
Partial master plan for Lielähti 2008	PK	50	200 000	
Partial master plan for Myllypuro 2009	T	240		4000
Partial master plan for Kalevanrinne 2011	PK	12,6	120 000	
	PY	4,3		
Partial master plan for Lahdesjärvi 2013	T, TP	60		600
	PK	92	342 000	2000

### 1.1.4 Traffic and logistics

**According to** the local master plan for the inner city 1998, the state of the main traffic network was good. The goal of the local master plan's traffic planning was to produce a solution where the modes of travel are integrated to each other in a balanced and smooth way, adequately serving citizens and enterprises. At the turn of the 2000s, the focus of traffic network development was shifting to the development of the lower-category street network.

As regards vehicle traffic, the local master plan for the inner city 1998 aimed at complementing the radial and ring-shaped main traffic network in Tampere. According to the plan, the street and road network leaned on a ring-shaped main network circling the city centre to which both long-distance traffic and traffic running between the city districts were steered to. Thanks to steering the traffic between the city districts to the ring road, it was possible to protect the residential areas from traffic driving through them. That way, traffic noise and emissions were brought into control.

The largest road reservation in the local master plan for the inner city was the Holvasti–Aitovuori road reservation. This reservation belongs to the area covered by the Ojala partial master plan (in a proposal phase), and it will be re-examined in connection with this plan.

The local master plan for the inner city 1998 aimed at promoting the role of public transport by densifying the community structure. The new residential areas of Tampella, Finlayson, Hatanpää, and Iidesranta were regarded as important objects of public transport. The launch of light rail traffic was regarded as one opportunity for organising public transport.

At the time the local master plan for the inner city 1998 was completed, the aim was to carry out a separate regional-level study regarding pedestrian and bicycle traffic. The intention was to use this study as a basis for creating the connections between the municipal centres. The local master plan reduced the scope of the pedestrian and bicycle network, so that only the most important connections between the city districts were presented.

From the perspective of rail traffic, it was stated that the location of Tampere is nationally central. The long-term objective has been to start using the main railway line in commuter services, as well.

The development of the airport was regarded as an important theme in the trunk traffic system of the region and the central region. The creation of the prerequisites for the construction of the Lakalaiva–Kalkku motorway by the local master plan for the inner city significantly contributed to the matter. The plan also aimed at promoting the ring route that has been planned from Hervanta towards Kangasala.

#### Partial master plans

**The drawing up** of the master plan for city centre traffic (from 2006) started in a situation where it was necessary to find traffic solutions in order to support the city centre's vitality. Amongst the central structural questions in the mid-2000s were the light rail system, the Rantaväylä tunnel, and connecting Ratapihankatu Street to Kekkosen tie Road. Of these, the first two were regionally significant projects.

The master plan for city centre traffic decided to develop the area's transport conditions in a versatile way. The plan's underground solutions allowed

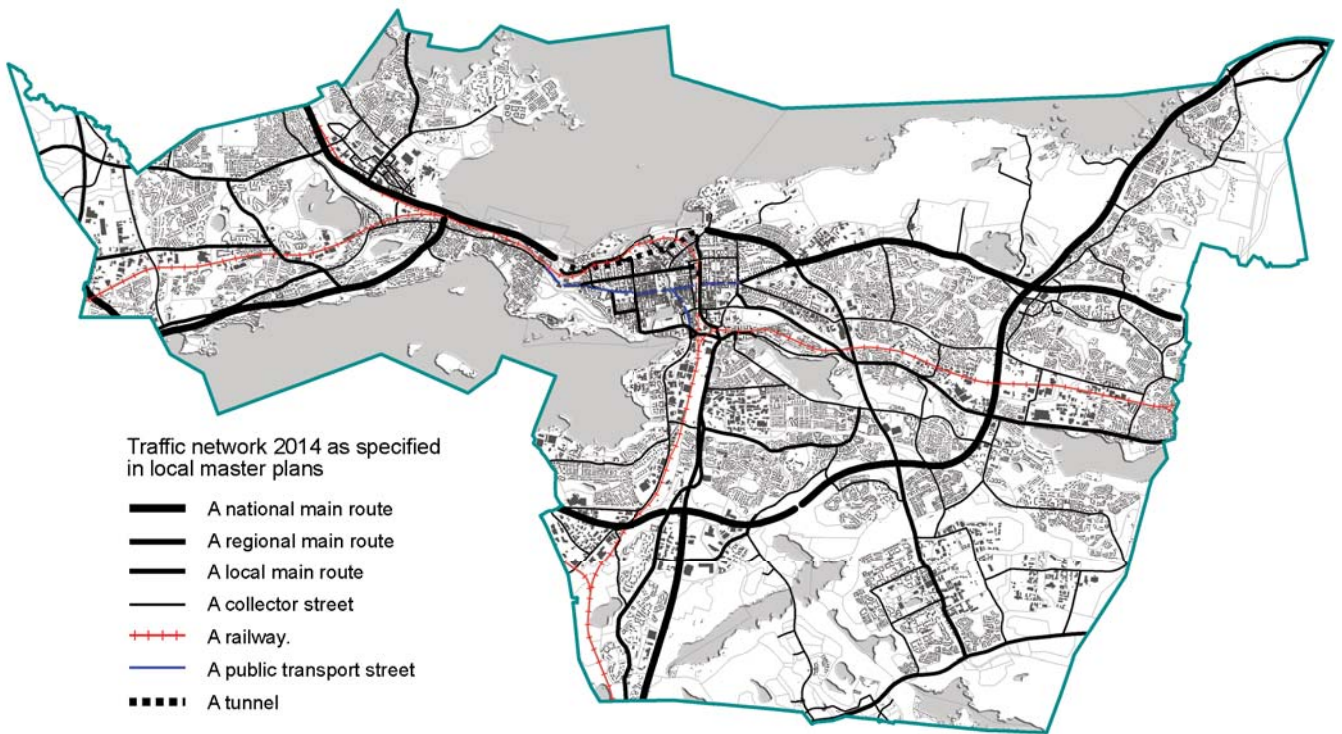
smoother vehicle traffic and parking and an underground alignment for the light rail system. The plan also presented the alignment of the Rantaväylä tunnel. In addition, walking and cycling were made smoother by implementing structural solutions in many places in the city centre. The aim was to develop the public transport structure by allowing the construction of a light rail system beneath the city centre.

**The Vuores partial master plan** planned a street area and a bridge to the inner city's extension area. Alterations and modifications were carried out to traffic arrangements in the old industrial areas of **Koilliskeskus**, **Lielähti**, **Niemenranta**, and **Lahdesjärvi**. In these areas, most of the new street network consisted of the road network that was meant for local vehicle traffic. **The Kalevanrinne partial master plan** did not cause any alterations to the traffic network. The partial master plans for **Santalahti**, **Myllypuro**, and **Hervantajärvi** produced local traffic networks that supported the internal functionality of the areas concerned.

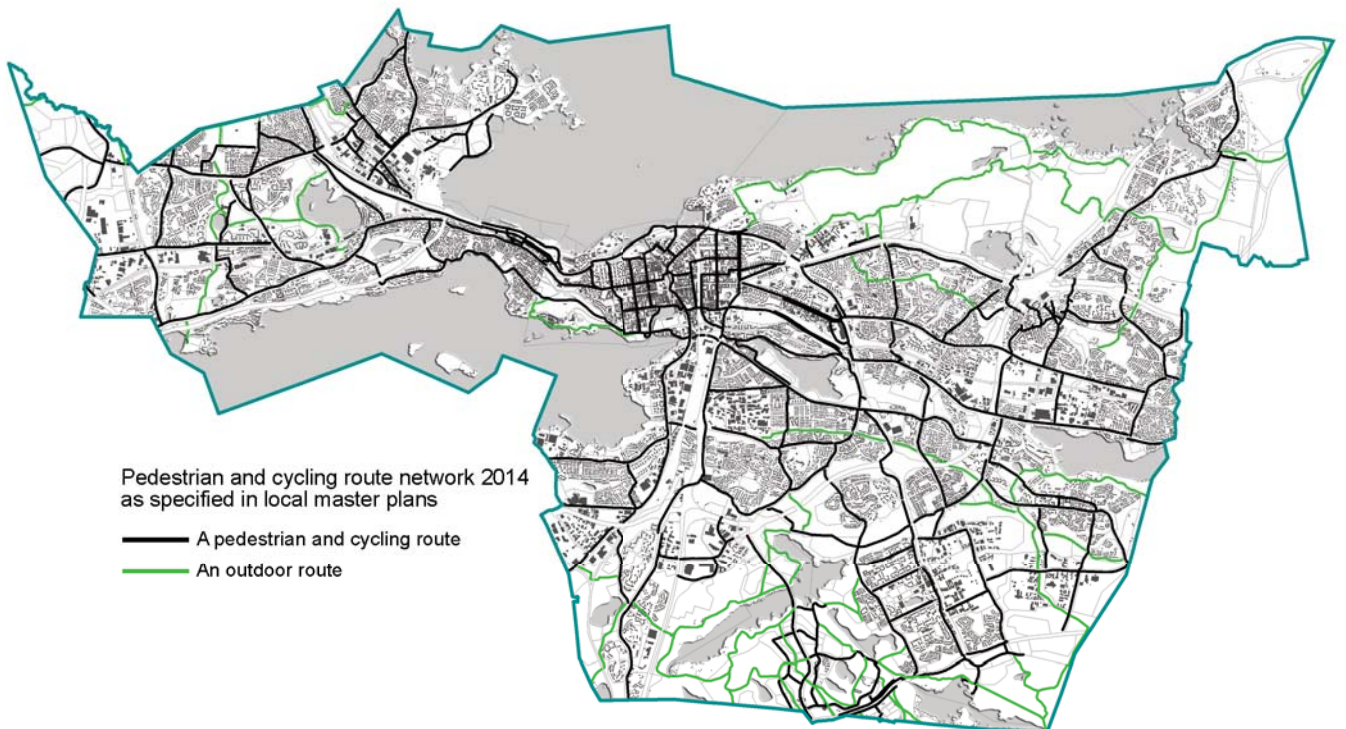
#### Tramway

**The master plan** for the tramway was completed in the spring of 2014. In the summer of 2014, the City Council decided on the continuation of the planning work. In the first phase, the tramline would be built between Hervanta and the city centre and there would also be a rail connection to the Tampere University Hospital (TAYS). The tramline would be extended from the city centre to Lentävänniemi, bringing vigorous development to Lielähti.





Trunk roads and regional roads included in the local master plans.



Main pedestrian and cycling routes and recreational routes included in the local master plans.

### 1.1.5 Green areas

The local master plan for the inner city 1998 regarded the green network as a central element organising the city structure. The green areas have been formed on the basis of the natural features and the needs of the adjacent areas. Significant amendments to the green network were made by more recent partial master plans.

The green areas were marked by two symbols on map 2 of the local master plan for the inner city 1998. The areas were classified as areas to be preserved as green areas, or as areas to be preserved as significant green areas. The recreational areas marked by the symbol VLK, VLL, or VLM were included in the local master plan's green areas. In addition, the green areas also included the areas reserved for sports and recreational services (VU), the nature reserves (SL), the camping areas (RT), the collective gardening areas (RP), the graveyard areas (EH), and the areas reserved for agriculture and forestry (MU).

The local master plan for the inner city 1998 designated a total of 2,462 hectares of green and protected areas. In addition, there are city district parks, as well as pedestrian and cycling connections that have been allocated to parks, in old detached housing areas as well as in infill development areas for housing of the local master plan for the inner city 1998.

#### Partial master plans

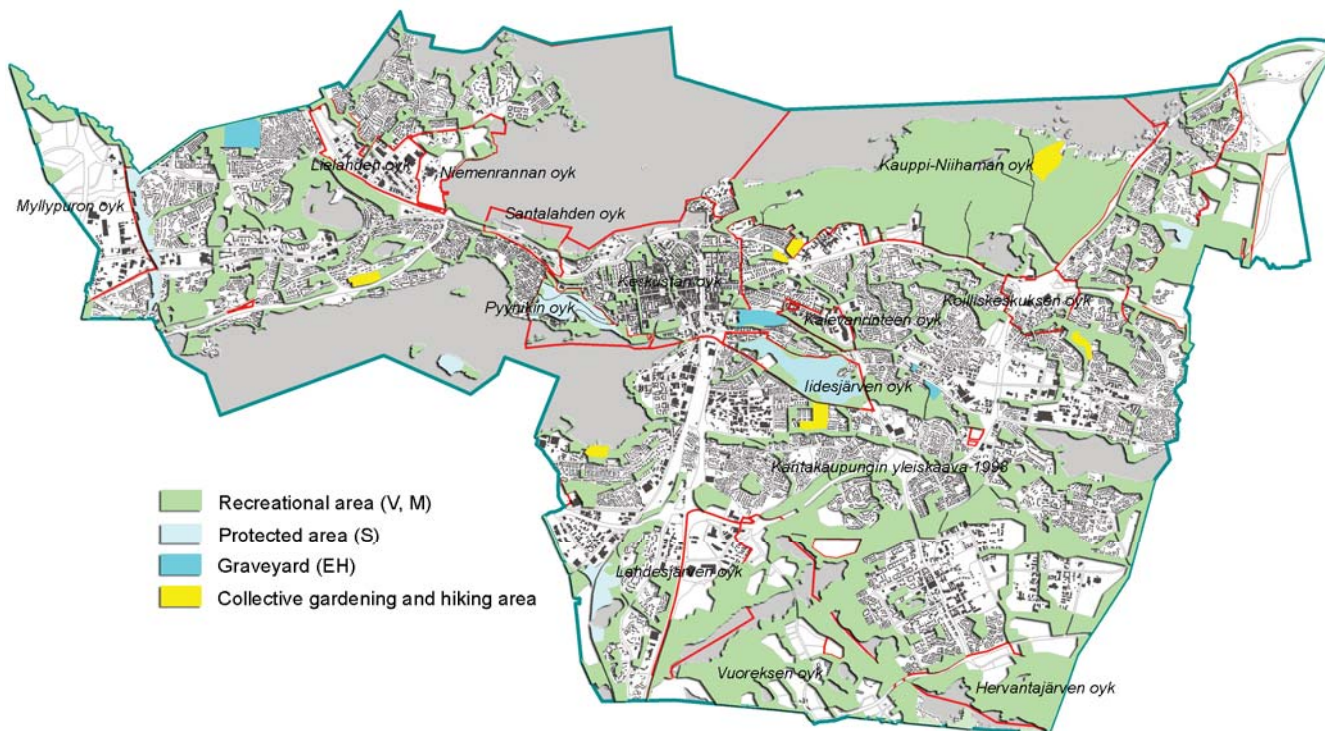
The City Council of Tampere approved the Pyynikki partial master plan in 1991. Most of the plan area was located on the unbuilt southern slope of Pyykinharju Esker, which was designated as a protected area in the plan. In addition, the local master plan designated local recreational areas, or areas reserved for sports and recreational areas as well as water areas. The local master plan has almost 82 hectares of protected and recreational areas. Apart from Jalkasaari Island, this area has also been covered by local detailed planning.

The Kauppi–Niihama partial master plan came into force in 2011. Thanks to this plan, Kauppi–Niihama became a significant recreational area in Tampere. Kauppi–Niihama has a total of 1,020 hectares of protected areas, recreational areas, sports and recreational areas, and areas for holiday homes.

In the Iidesjärvi partial master plan (from 2014), Lake Iidesjärvi was marked as a protected area and most of its shores as park areas. The plan area is about 160 hectares, of which the share of water is about 40%. The size of the park and recreational areas is about 30 hectares, which is almost 20% of the plan area.

#### Summary of the green areas covered by the local master plans

The inner city's local master plans have a total of 4,592 hectares of green areas, which is 36% of the inner city's land area. Along with the partial master plans, the share of the recreational areas has significantly increased in recent years.



Recreational, protected, graveyard, collective gardening, and hiking areas included in the local master plans.



A summary of the green areas included in the local master plans

Name of the local master plan	Recreational, protected, graveyard, and holiday home areas (in hectares) included in the local master plan
Local master plan for the inner city 1998	2462
Partial master plan for Koilliskeskus 2004	11
Partial master plan for Vuores 2005	425
Master plan for city centre traffic 2006	77
Partial master plan for Lielähti 2008	15
Partial master plan for Santalahti 2008	9
Partial master plan for Niemenranta 2009	23
Partial master plan for Myllypuro 2009	56
Partial master plan for Kauppi-Niihama 2011	1019
Partial master plan for Kalevanrinne 2011	14
Partial master plan for Lahdesjärvi 2013	106
Partial master plan for lidesjärvi 2014	121
Partial master plan for Hervantajärvi 2014	173
Partial master plan for Pyytikki 1991	82
<b>Total</b>	<b>4593</b>

## 1.1.6 Environmental management and protection

**In order** to ensure sustainable development, the objectives of the local master plan for the inner city 1998 were to promote the creation of a healthy and inspiring environment and to allow the preservation of the versatile and ecologically sustainable natural environment in Tampere. This report has examined the implementation of the protected sites in the built environment for the part of the local master plan for the inner city 1998 and for the part of the local master plan for the City of Tampere 1988.

The local master plan for the inner city 1998 followed the Finnish Government's decision (1996) on the guidelines and limit values for air quality. The guidelines concerned the airborne content of sulphur dioxide, nitrogen dioxide, carbon monoxide, suspended particulates, breathable particles, and sulphur compounds. At the time the local master plan was approved, the guidelines were exceeded in some places in the city centre.

According to the noise control programme that was made at the turn of the decennium, 34,000 people were living at the end of the 1990s in an area where the level of traffic noise exceeded 55 dBA. Out of these people, 1,100 were exposed to noise that exceeded 65 dBA. The noise was particularly caused by vehicle, rail, and air traffic. The noise control tool used in the local master planning was a noise report (required in a local detailed plan phase) in areas where the guidelines were exceeded.

According to the local master plan for the inner city 1998, the major cause of the lower air quality were the small airborne particles whose annual average value was double as high as the guidelines at the end of the 1990s. It was noted that half of the airborne dust was created by traffic.

At the time the local master plan for the inner city 1998 was approved, the large lakes (i.e., Näsijärvi and Pyhäjärvi) were recovering from industrial activities. At the time the local master plan for the inner city was prepared, it was noted that the water quality in Lake Näsijärvi (close to Lielähti) was deteriorating, due to the industrial activities. The water quality in the eastern parts of Lake Py-

häjärvi was only passable because of the activities of the Viinikanlahti wastewater treatment plant.

The aim of all land use planning was to reduce transport needs, utilise the existing structures, and to preserve the natural values. The ground protection programme was drawn up in order to safeguard the groundwater areas in esker areas, in particular.

### Ancient monuments and building protection

**At the** end of the 1990s, there were 130 hectares of nature reserves protected under law or under local detailed plans in Tampere. They were located in nine areas. On the basis of the Nature Conservation Act, nineteen natural formations were protected in Tampere.

In the inner city, the protected sites that were marked in the valid local master plans were cultural and natural environments. In the local master plan for the inner city 1998, the protection of the built environment was based on a publication that provided guidelines for the construction culture in Tampere (Tampereen rakennuskulttuuri, in Finnish).

The protected sites have been organised by theme and listed on plan map 2 and in the report (according to the category and the protection status):

- A Significant areas
- R Significant building
- K Church
- H Graveyard
- M Ancient monuments, these sites have been protected by virtue of antiquities legislation
- SL Nature reserves, these areas have been protected or have been meant to be protected under a local detailed plan or by virtue of the Nature Conservation Act
- L Nature conservation sites, these sites have been protected as natural monuments by virtue of the Nature Conservation Act
- N Valuable plant areas

### Significant built sites and areas

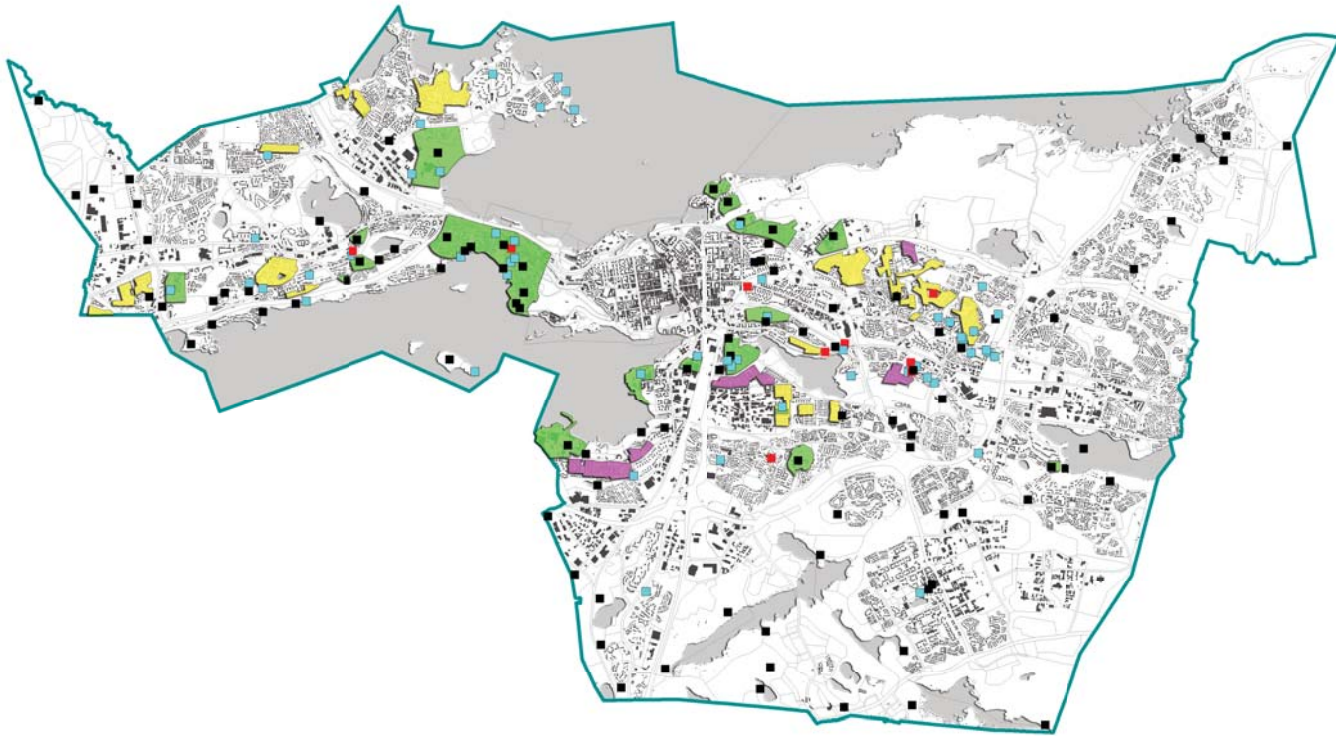
**The local** master plan for the inner city 1998 has presented the protected sites in the built environment by using three symbols (depending on the level of protection):

- Protected site on the basis of an Act, a Decree, a local detailed plan, or some other regulation. (On the map: a black square.)
- A very significant site as to its cultural history, architecture, or city structure, which has been meant to be protected by virtue of a local detailed plan or the Building Protection Act (rakennussuojelulaki, in Finnish). (Protection by means of local detailed planning, on the map: a square that is half black.)
- A significant site; measures taken must observe its value. (Discretionary protection, on the map: an unfilled square.)

This report will also examine the state of the built environment at sites designated by **the local master plan for the City of Tampere 1988**. These valuable areas present the well-preserved layers of Tampere's development history, from the time the city was established to the post-war reconstruction era. Detached housing in different periods has been raised as a particular theme of protection.

The local master plan 1988 has three protection categories:

- A very significant or significant area as to cultural history, architecture, or cityscape, whose special features and protection must be taken into account in detailed planning and in other measures. (The areas have been marked with a green colour on the adjacent map.)
- Area whose character will be preserved. In renovations and alterations, the original stylistic features of the buildings, as well as materials and colours characteristic of the construction period must be preserved. New construction must be fitted to the cityscape. It is important to create the prerequisites for preserving the character of the street areas and the plantations. (The areas have been marked with violet on the adjacent map.)
- Area dating from the reconstruction period. When carrying out measures in the area, the above protection recommendation and the report that will be made on the renovation of these buildings must be taken into account. (The areas have been marked with yellow on the adjacent map.)



### Local master plan for the City of Tampere 1988

- Special consideration must be given in local detailed planning or in other measures to protecting areas that are significant or very significant in terms of cultural history, architecture or cityscape.
- An area that must be preserved in character. The original stylistic features and materials and colours typical of the era must be preserved during renovation and modification measures. New construction must be harmonised with the cityscape. Conditions must be created for preserving the character of street areas and plantations.
- An area dating from the post-war reconstruction era. In measures affecting the area, in addition to the above protection recommendation, consideration must be given to the survey to be prepared on the renovation of buildings from that era.

### Local master plan for the inner city 1998

- A site protected by an Act, a local detailed plan, or by some other regulation.
- A very significant site in terms of cultural history, architecture, or cityscape that has been indicated for protection in a local detailed plan or by the Act on the Protection of Buildings.
- A significant site, whose value must be taken into account in any measures that will affect it.

Protected areas and sites included in the local master plans 1988 and 1998.



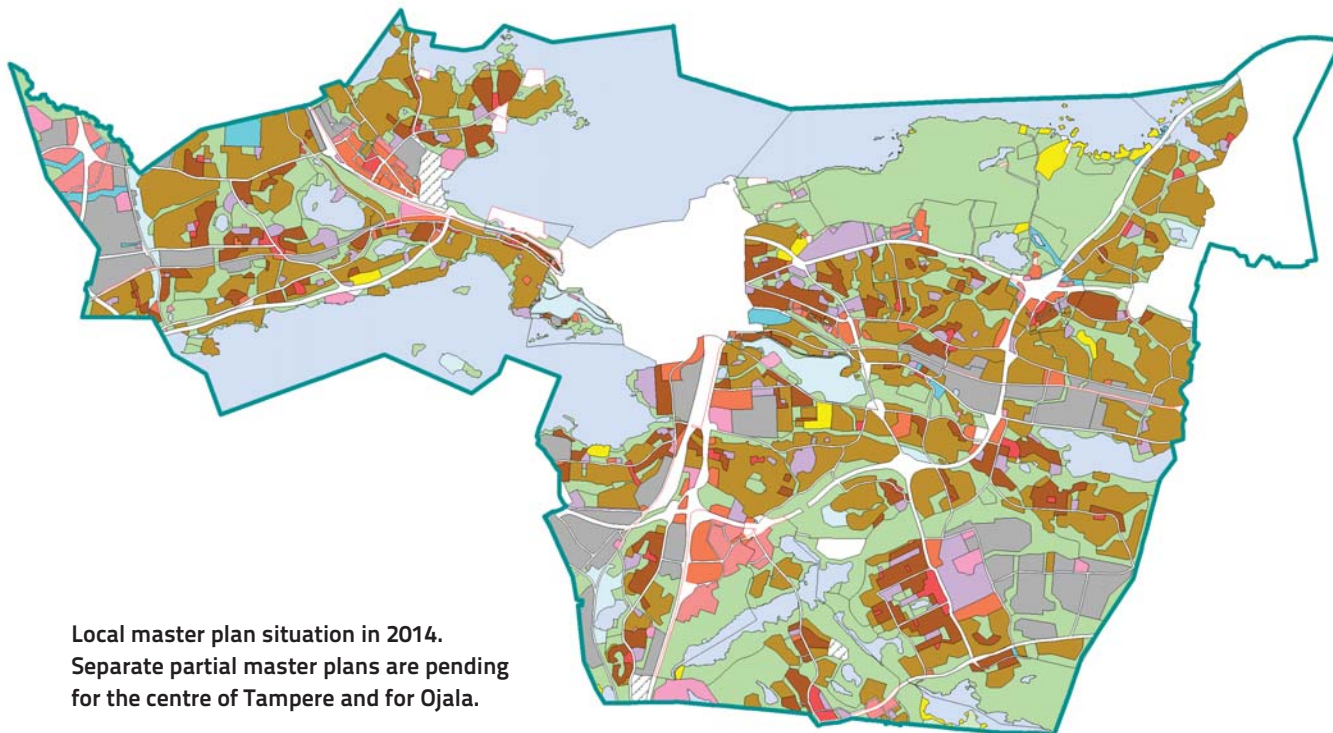
### 1.1.7 The local master plan situation in 2014

The local master plan for the inner city 1998 is the most recent local master plan that deals with the urban area extensively. The more recent partial master plans have complemented the aims of this local master plan in cases where areas were excluded from the plan in the approval phase. The more recent partial master plans have also responded to the planning needs caused by the changing operating environments.

As regards the area, the largest form of land use in the local master plan for the inner city 1998 was housing: 3,718 hectares, i.e. 26.5% of all land use in the plan. The largest areas thereafter were the recreational areas (2,522 hectares and 18%), the industrial areas (1,337 hectares and 9.5%), the traffic areas (1,121 hectares and 8%), and the services areas (667 hectares and 4.8%). The statistical data included in the local master plan for the inner city 1998 have been attached to this report.

A summary table of the volume of different forms of land use in the inner city area in the local master plan

Form of land use	Surface area (in hectares)	Surface area %
Residential areas (A)	4 031	32
Areas with centre functions (C)	188	1
Industrial areas (T, TP)	1 366	11
Service areas (P)	289	2
Public service areas (Y)	504	4
Business premises areas (K)	48	0
Green areas (V, M)	4 536	36
Areas with special functions (E)	317	3
Traffic areas	1 338	11
<b>Total</b>	<b>12 617</b>	<b>100</b>



Local master plan situation in 2014. Separate partial master plans are pending for the centre of Tampere and for Ojala.

In the inner city, the size of the land area is 127 km<sup>2</sup>, of which almost all areas were covered by local master planning (126 km<sup>2</sup>) in the summer of 2014. Currently, the area covered by local master planning is divided, so that housing takes about 4,000 hectares, which is 32% of the inner city areas covered by local master planning. The local master plans have about 200 hectares of mixed centre areas. The size of the area used by industry and logistics is less than 1,400 hectares, which is 11% of the area covered by local master planning. There are 300 hectares

designated for service areas and 550 hectares for areas reserved for public buildings. In addition, there are about 50 hectares of business areas in the plan.

The size of the recreational areas covered by local master planning is 4,600 hectares, which is more than 36% of those inner city areas that are covered by local master planning. Over 1,300 hectares have been reserved for traffic areas, which is 11% of the inner city areas covered by local master planning.

When comparing statistical data presented by the local master plan for the in-

ner city 1998 with the current local master planning situation, it can be seen that the green and recreational areas have become the largest form of land use – they have exceeded housing, which is now the second largest form of land use. Today, the area required by the traffic areas is as equally large as the industrial areas. They are the third largest forms of land use. In the past fifteen years, the share of the local master plans' service areas has decreased the most.

PHOTO: PIA HASTIO



Housing construction has been intense on the shores of the large lakes.







# 2 Implemented matters

**This section** will present the development of Tampere from the end of the 1990s to the end of 2013 from the perspective of planning. The source material comprises the local detailed plans made in 1999–2013 and the deviation decisions that have been approved from 2003 onwards (there are no archives on the earlier deviation decisions). Furthermore, this study takes account of the approved building permits from 1999 onwards.

When carrying out population analyses, we have used the City of Tampere's facta register and the YKR (the Finnish Monitoring System for Spatial Structure) material from 2000 and from 2013. The city centre area has been included in the present study as to its residential areas, working areas, and traffic areas. The implementation of the local detailed plans' protection entries regarding the built environment has been examined for the part of the local master plan for the inner city 1998 and for the part of

the local master plan for the City of Tampere 1988. The aim is to find out to what extent the development objectives set (by the local master plans) for the areas have been implemented.

Amongst the central themes are the construction of the residential areas as well as the development of the working and industrial areas. The traffic systems, the green network, the recreational environments, and the protected sites will be studied briefly.

## 2.1 Housing

**Between 1999** and 2013, the population of Tampere increased by 30,000 people. This report will study the most central processes that have enabled the population increase.

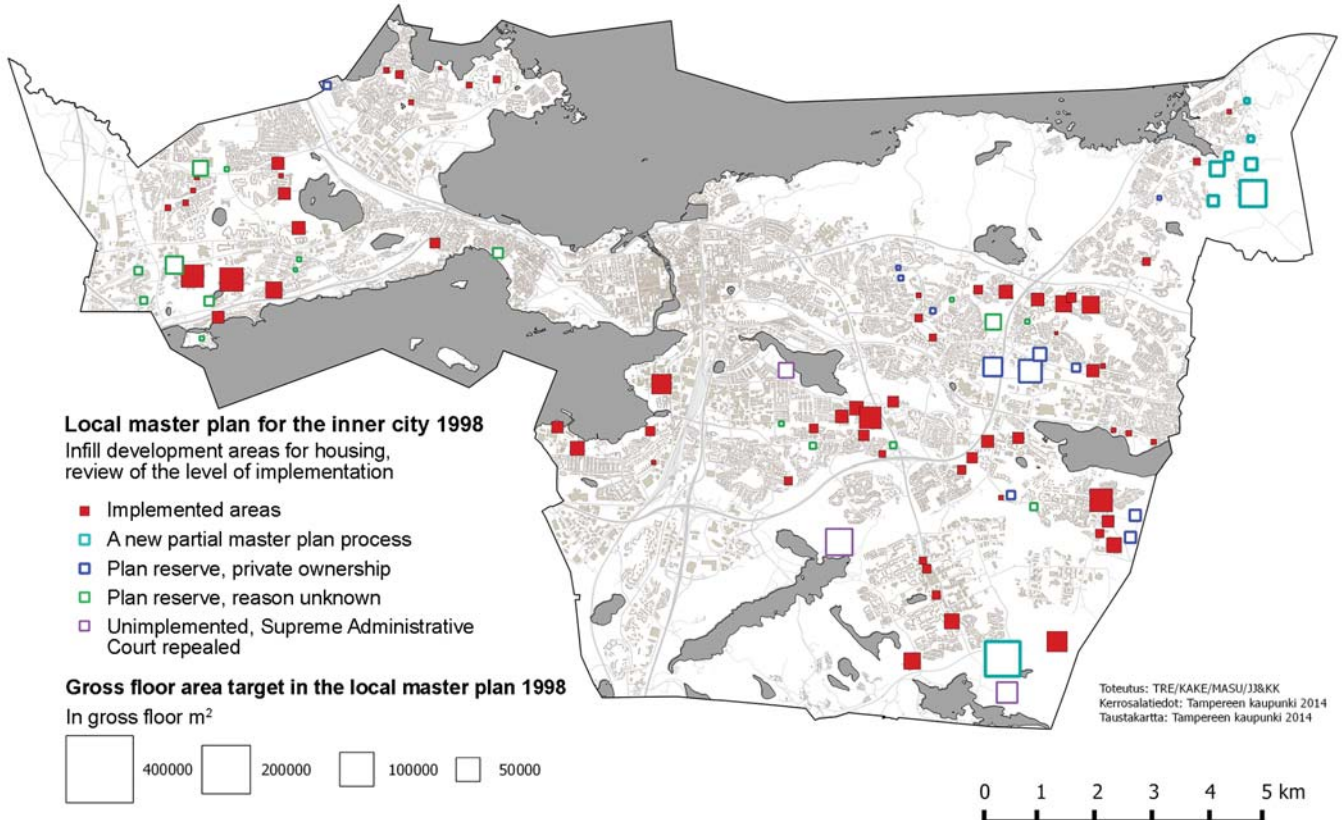
In addition to the local master plan for the inner city 1998, we will also observe the increased gross floor area for housing and the increased population in the centre areas (symbol C) covered by local master planning, as well as the

increased gross floor area for housing and the increased population produced by partial master planning. Besides, we have also observed the increased gross floor area for housing and the increased population produced by local detailed planning that allows housing, contrary to local master planning. Housing production will be examined in the period 2005–2010 on the basis of the data provided by the City of Tampere's Statistical Yearbook 2010.

We have carried out the analyses in a way that will allow a more automated monitoring of housing construction in the future. The description of the analysis methods has been attached to this report.

### 2.1.1 Infill development for housing adhering to the local master plan for the inner city

**Housing production** adhering to the lo-



The implemented and unimplemented infill development areas of the local master plan for the inner city 1998. There are extensive areas in the inner city area for which no infill construction has been proposed in the local master plan. Later prepared partial master plans have partly rectified this problem. The main reasons for the lack of implementation of the infill development areas are re-planning and private land ownership.

cal master plan for the inner city 1998 has been possible on three kinds of zones of land use covered by local master planning: infill development areas for housing, old residential areas, and in centre areas. As regards housing and local detailed planning, quantitative and qualitative objectives were only set for the local master plan's infill development areas. Infill development in the centres and in the existing residential areas was allowed.

A total of 134 hectares of the local master plan's infill development areas have been designated for housing by local detailed plans. At the end of 2013, there were slightly over 14,000 residents in these areas, which is less than half of the number of residents that was originally targeted to the infill development areas. About 650,000 gross floor m<sup>2</sup> have been built in these areas.

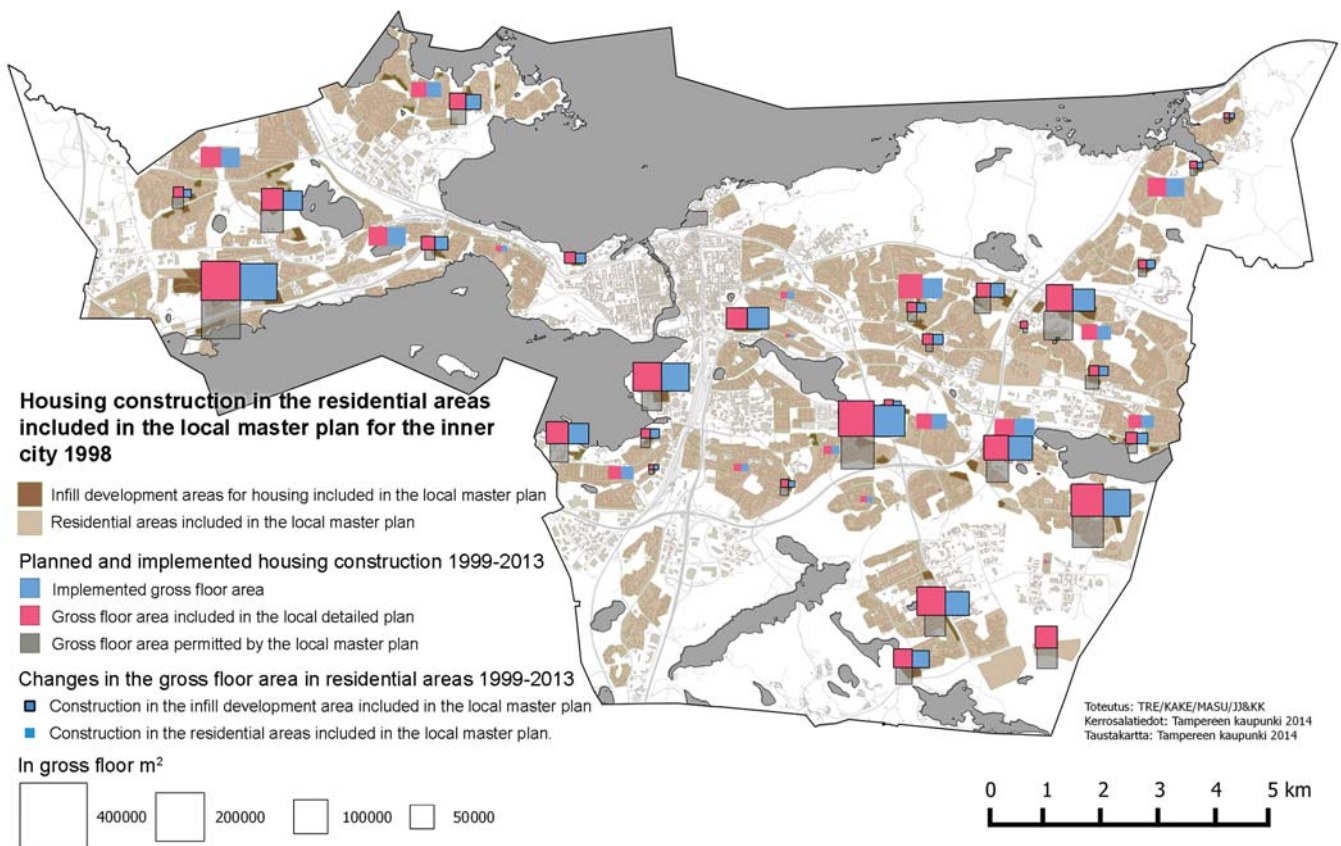
The infill development areas for housing presented in the local master plan

have chiefly been built in accordance with the targeted gross floor area and number of residents. The objective set by the local master plan is clearly exceeded only in Hatanpää and in the centre of Hervanta. Both areas were implemented as areas dominated by blocks of flats, and they were clearly more efficient than the objectives set by the local master plan. The implemented infill development areas for housing that were designated by the local master plan for the inner city 1998 represent a high-quality urban structure in a spirit of the qualitative objectives set by the local master plan. They form entities that are adequately integrated to their surroundings. Here, we can mention the residential areas of Rahola and Muotiala, which are examples of thoroughly investigated and adequately implemented areas.

The land ownership conditions have slowed down the taking into use of large infill development areas in eastern

Tampere. On the other hand, land transactions have also enabled construction in infill development areas. In Jokipohja, the transfer of land areas to the City of Tampere's ownership made the planning of Muotiala and its construction possible in the 2000s. The small-sized infill development reservations in challenging locations have so far not been implemented.

The old residential areas of the local master plan for the inner city 1998 have been densified by means of local detailed planning, in accordance with the objectives set by the local master plan. In old detached housing areas, a plot reserve has accumulated due to the division of plots. It has become possible (by means of local detailed planning) to designate small plots (that have been reserved for other purposes) for housing. The areas have become denser via other processes as well. For example, it was only in the period covered by this study that the



Housing construction in the local master plan for the inner city 1998. The image shows the construction of residential and infill development areas included in the local master plan between 1999 and 2013. Three versions of the dimensioning of the infill development areas are shown: as specified in the local master plan, as specified in the local detailed plan, and as implemented. The infill development in residential areas is shown as specified in the local detailed plan and as implemented. Infill development of old residential areas, in particular, has been implemented without the steering of a local master plan.



plots which were included in local detailed plans before 1999 could be taken into construction use. Detached housing areas have also been protected in accordance with the objectives set by the local master plan for the City of Tampere 1988.

Almost 200 hectares of plots located in old residential areas have been built in 1999–2013. In this period, 800,000 gross floor m<sup>2</sup> have been built in these areas, and the areas have received more than 16,000 new residents. The size of the old residential areas for which local detailed plans have been drawn up over the past fifteen years is 315,000 gross floor m<sup>2</sup>. In the framework of these local detailed plans, these areas have almost 285,000 gross floor m<sup>2</sup> and about 6,000 residents. Consequently, a large part of the infill development for housing is connected to the plots that were included in local detailed plans before 1999.

In addition to the centres presented by the local master plan for the inner city 1998, the present study regarding the construction of centre areas comprise the centre areas of the partial master plans for the city centre (1995), Koilliskeskus (2004), Lielähti (2008), and Vuores

(2005). The centres presented by these plans form the framework for the city's private and public service network. However, a centre area is a flexible plan entry and may, therefore, also include housing.

Housing construction in centre areas covered by local master planning has been active in the city centre, as well as in the district and local centres in eastern Tampere. Thanks to the guidelines set by the partial master plan for the city centre, housing construction in Tampella and Finlayson became possible. The city centre areas marked with the symbol C have received slightly less than 1,600 new residents in the past fifteen years. The centres located in the area that is covered by the local master plan for the inner city 1998 have developed in an unbalanced way for the part of housing.

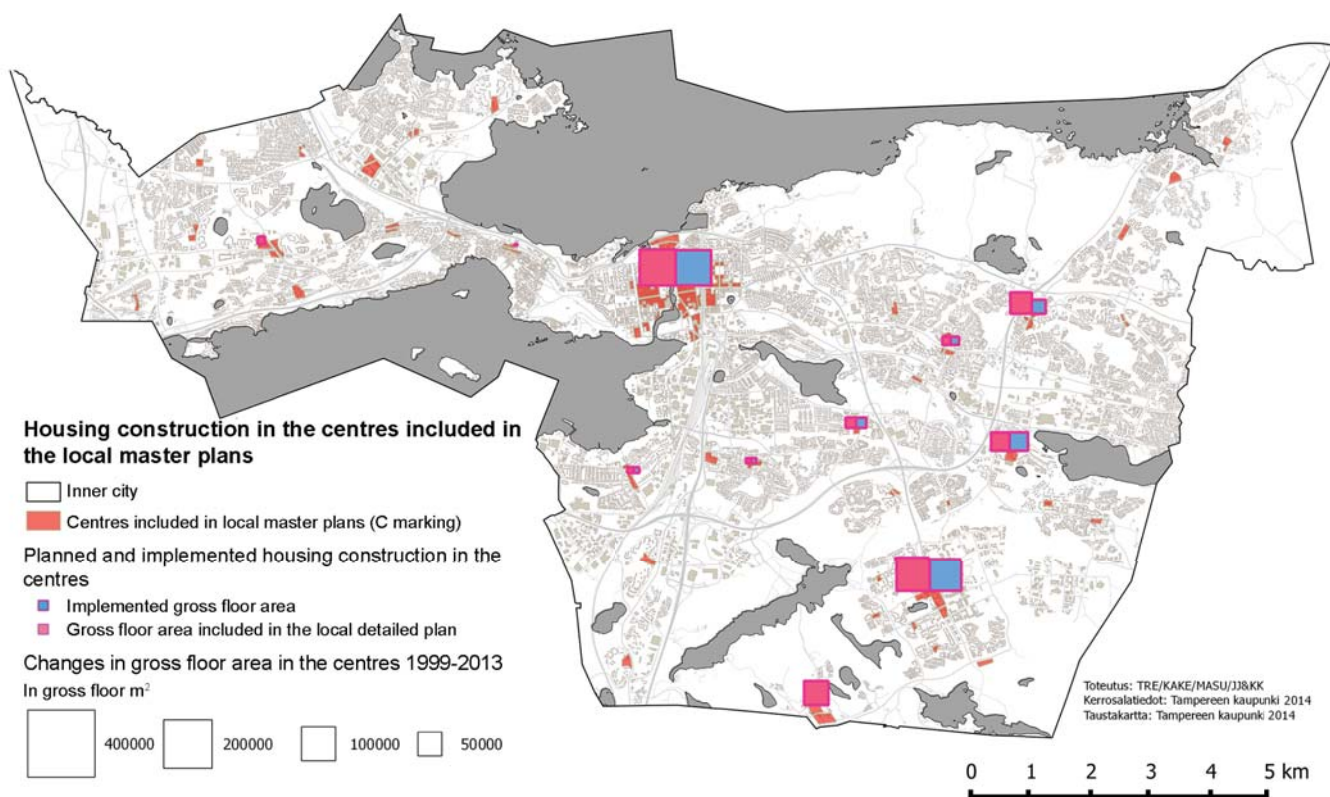
The surroundings of Hervanta's central axis developed vigorously in the 2000s. At the end of 2013, there were 1,250 new residents in the C area of the local master plan. There were 264 residents in the local master plan's C area for Koilliskeskus. As regards the local centres, there were about 700 residents

in the centre of Kaukajärvi. There is also housing in the centre of Muotiala. The same amount of gross floor area for housing has been designated (by means of local detailed planning) for the centre of Vuores, as for Koilliskeskus.

In western Tampere, the district centres have not attracted housing construction. Stimulated by the Lielähti partial master plan, Lielähti became a commercial district. There has not been any construction in the centre of Tesoma in the period when the master plan for the inner city 1998 was prepared and has existed. These areas and the local centres in southern Tampere have not developed from the perspective of housing. In 1999–2013, the population living in Tampere's centre areas has increased by slightly less than 4,000 residents.

### 2.1.2 Partial master plans and the residential areas covered by local detailed plans (contrary to the local master plan)

Over the past fifteen years, the aim has been to respond to Tampere's vigorous



Housing construction in the centres included in local master plans from 1999 through 2013. In addition to the epicentre, there has been infill development in centres near the eastern bypass and in Hervanta. The attraction of the latter is partly due to the university and the related working area.



growth by directing housing to areas that are located outside of those residential and centre areas that were designated by the local master plan for the inner city 1998. Housing conditions have been studied and enabled by means of partial master plans and local detailed plans.

Since the mid-2000s, seven partial master plans for housing have been completed in the inner city area. The present study includes six valid partial master plans, which propose more housing to the planning area: the partial master plans for Koilliskeskus (2004), Niemenranta (2009), Santalahti (2008), Kalevanrinne (2011), Vuores (2005), and for Hervantajärvi (2014).

Partial master planning has been a tool for studying the target area in a comprehensive way. It has been possible to study the housing conditions and the connection of housing to the city structure's other elements (as sufficiently large entities) in the areas of change that are located within the city structure or outside of the urban settlement zone.

The partial master plans have estimated the impacts of housing construction from the perspectives of new residents and the environment. The impacts on the organisation of services have

also been assessed. The local detailed plan work (for the partial master plans listed above) was almost completed at Niemenranta in the autumn of 2014. In Vuores, the work continues in the northern part of the district. Both districts are being built. Local detailed planning is on-going in Santalahti and Kalevanrinne, and local detailed planning for Hervantajärvi has begun.

At the end of 2013, the gross floor areas covered by the partial master plans was 970,000 gross floor m<sup>2</sup> of which the area covered by local detailed planning was 470,000 gross floor m<sup>2</sup>. The size of the areas built by 2013 is 8.2 hectares. These areas have a gross floor area of 66,000 gross floor m<sup>2</sup>. The total number of inhabitants in these areas is 1,250.

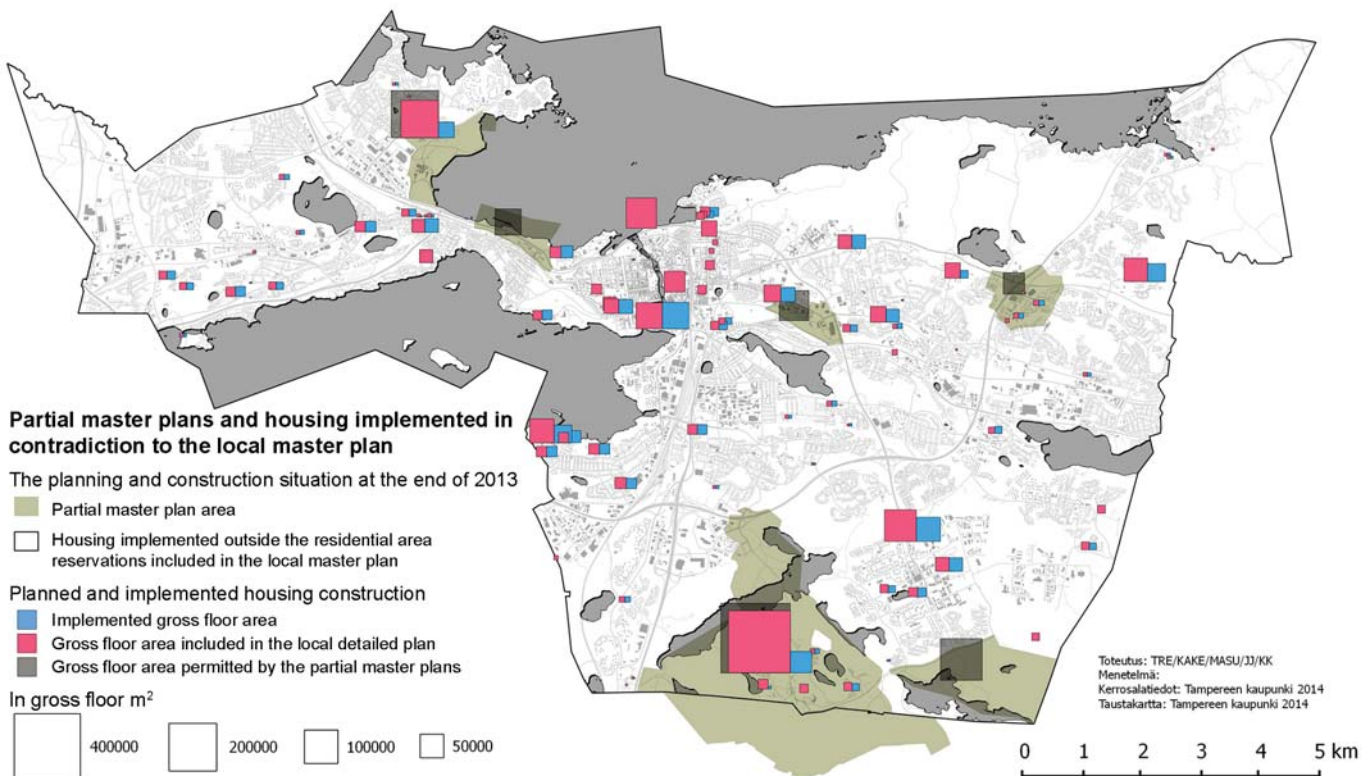
At the end of 2013, there was a reserve for about 20,000 residents in the areas covered by the partial local master plans.

At the same time, areas designated by the local master plans for service activities, industry, or as survey areas have been reserved for housing by means of local detailed plans. In the local detailed plan phase, some of the local master plan's recreational areas have been reserved for housing, particularly in the

residential and infill development areas of the local master plan for the inner city. However, it must be noted that the local detailed plans regarding the infill development areas of the local master plan for the inner city 1998 have designated compensatory recreational areas. Consequently, this procedure partly concerns the general character of local master planning.

The areas that have been converted into residential areas by means of local detailed planning are located in areas designated as service and industrial areas by the local master plans. The constructed areas are versatile in character. Amongst the densely built infill development areas are the residential areas of Ratina and Sammonkatu Street, and the northern parts of Hervanta. These extension areas are located close to the existing centre areas. The infill development areas of Tampella and Ratina are the local master plan's green and traffic areas, as well as their extensions on the filled shores of the large lakes.

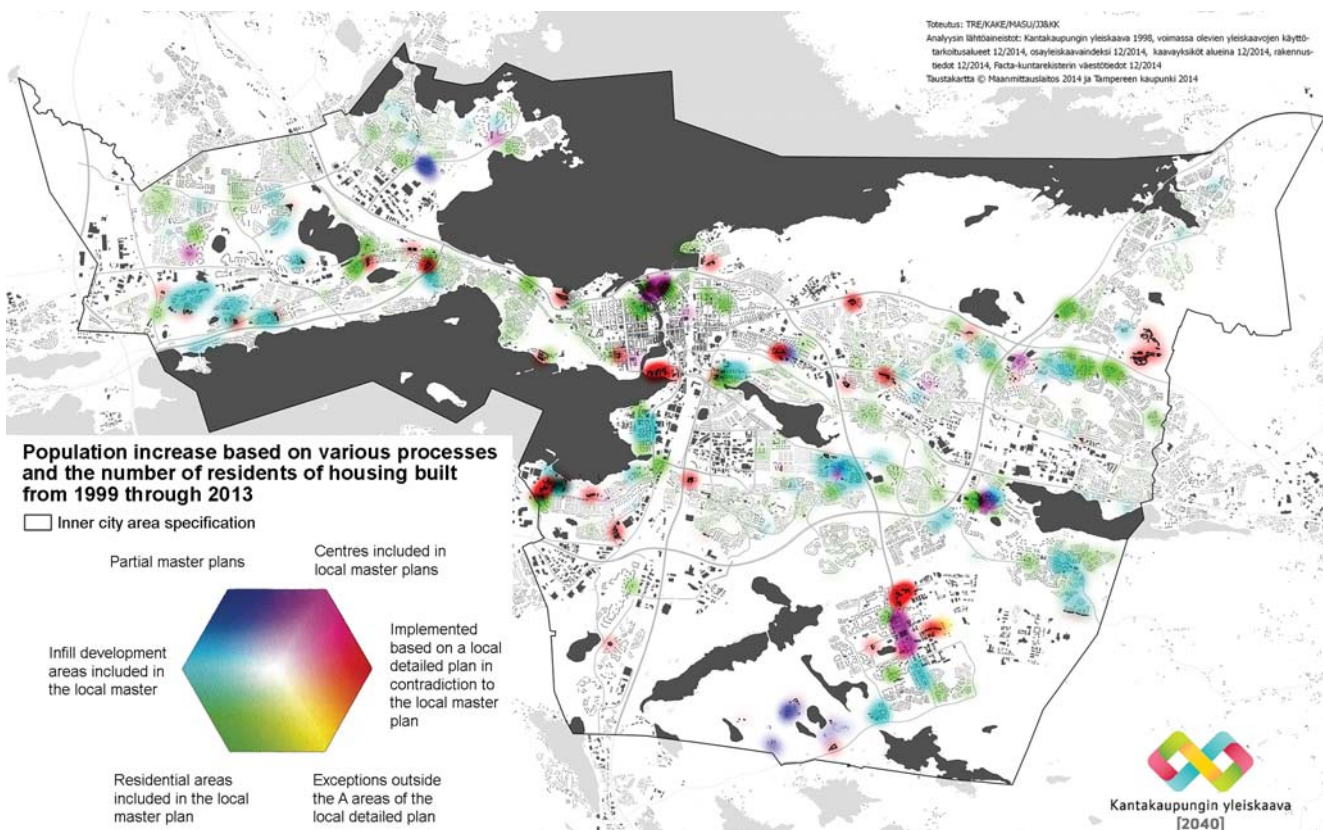
The size of the housing plots that were produced in 1999–2013 outside of the local master plans' residential areas is 93 hectares. The gross floor area given in the local detailed plans for these areas



The construction situation of residential plots outside the residential areas included in partial master plans and local master plans at the end of 2013. Attractive centres are being extended based on partial master plans and local detailed plans. Also the shores of the large lakes are attractive environments for efficient housing construction. The precision of the method used in the analysis also highlights the minor deviations resulting from the non-detailed nature of the local master plan.

A comparison of the processes that facilitate housing construction	The area (m <sup>2</sup> ) of the local detailed planning units in accordance with the process	The number of new residential buildings 1999-2013	Implemented gross floor area in total (gross floor m <sup>2</sup> )	Number of inhabitants in 2013	Inhabitants /gross floor m <sup>2</sup>	Average plot efficiency
Infill development reservations included in the local master plan for the inner city 1998	1 343 500	1 186	642 545	14 174	1 /45	0,48
Residential areas included in the local master plan for the inner city 1998	1 990 200	1 630	795 325	16 217	1/49	0,40
Centres included in local master plans (C areas)	190 000	84	253 559	3 952	1/64	1,33
Construction implemented based on the partial master plan process	82 300	84	66 047	1 246	1/53	0,80
Housing outside the residential areas that is included in the local master plans	646 000	422	480 763	8 938	1/54	0,74
Deviations	66 350	3	8412	166	1/51	0,13

A comparison of the implemented infill development areas included in the local master plan for the inner city 1998 and the housing implemented outside the residential areas included in the local master plans. Housing construction from 1999 through 2013. A comparison of various processes. One-third of the city's growth is located in the infill development areas specified in the local master plan for the inner city 1998. The densification of old residential areas has been more efficient. One-fifth of the city's growth has taken place outside the residential areas included in the local master plan. The total volume of new construction in the past 15 years has exceeded the dimensioning specified in the local master plan for the inner city 1998. The focusing of construction on housing blocks creates pressure to use the same efficiency in infill construction as in city centre areas.



The population increase in housing construction from 1999 through 2013 based on the various infill development processes. Infill development has been implemented through various processes in areas where the growth pressure has been great, such as the city centre and Hervanta. On the other hand, there are extensive zones in the inner city area where the population has not increased though any of the processes.

is 870,000 gross floor m<sup>2</sup>. Out of this gross floor area, 480,000 gross floor m<sup>2</sup> were implemented at the end of 2013. These areas had 8,900 residents at the end of 2013. Most of the residential areas implemented outside of the local master plan have been made very compact.

## Housing production

**Housing construction** has been more vigorous and more dominated by blocks of flats than was forecast by the housing production projection that was included in the local master plan for the inner city 1998. According to the City of Tampere's Statistical Yearbook 2010–2011, the annual production of housing from the mid-2000s onwards has been well over 1,000 dwellings.

Although the volumes of annual housing production have varied by several hundreds of dwellings, the production of detached housing and blocks of flats has, year after year, exceeded the objectives set by the housing production projection of the local master plan for the inner city 1998. However, the production of terraced houses has remained behind the local master plan's objective.

In 2011, over 70% of the city's dwellings were located in blocks of flats. The share of small flats is high. Housing production is increasingly focused on small flats and detached housing. The share of

detached housing out of all dwellings is 15%, even though their share is more than two thirds out of the residential building stock in Tampere.

### 2.1.3 Summary of the housing construction processes, and a comparison of the processes and their mutual differences

**Out of** the gross floor area for housing built in 1999–2013, 35% has been built in the old detached housing areas that are covered by local master planning, due to the division of plots carried out on the residents' initiative. These new construction activities (which have been implemented by means of a detached housing typology) have been implemented with an average efficiency of  $e=0.4$ . From the perspective of the local master plan, spontaneous densification has been the most significant tool for steering the growing population. In the old areas of blocks of flats, there has not been any infill development and the population number has begun to decrease.

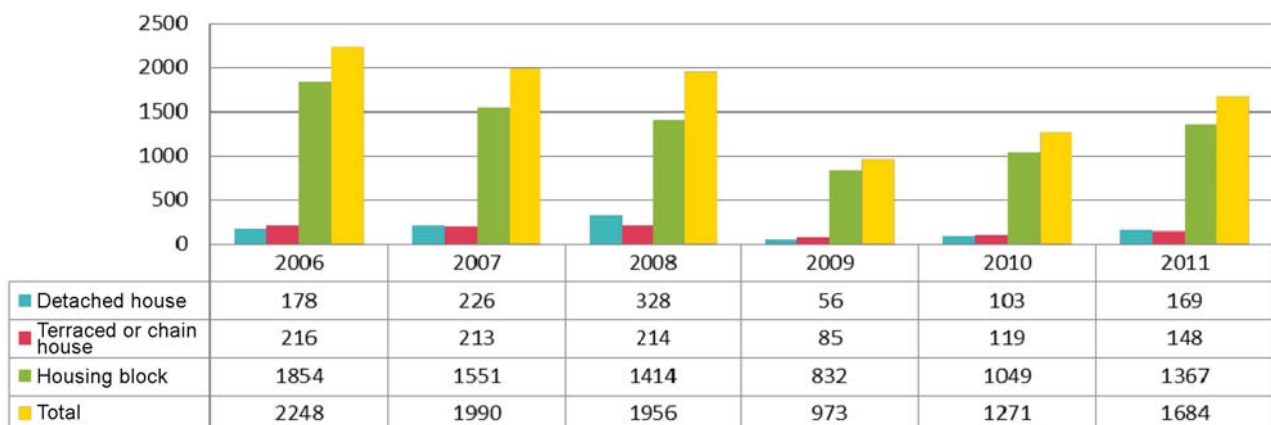
The infill development areas marked in the local master plan for the inner city 1998 have become compact and typologically versatile. The average plot

efficiency in the areas is  $e=0.5$ . Out of the city's increased population, 29% have been channelled to these growth zones. When also taking account of the housing construction activities in the centre areas covered by the local master plans, the share of housing construction that adheres to the local master plan for the inner city 1998 out of all housing construction that took place in 1999–2013 is 78%.

So far, the average efficiency of the sites built in the areas covered by the partial master plans is  $e=0.8$ , which corresponds to the efficiency of the blocks of flats. The residential sites that are located outside of the local master plan's residential areas have been implemented equally efficiently. The share of the housing construction activities completed outside of the residential areas at the end of 2013 out of the gross floor area for housing that was implemented during the period of study was 22%. The share of the gross floor area built in areas that are covered by local master planning was 3%.

In 1999–2013, almost one third of the Tampere's population settled in housing areas that were produced contrary to the local master plans. Two thirds of the city's population have become affected by local master planning in a spontaneous way.

Housing production between 2006 and 2011 as per building type



Lähde: Tampereen kaupungin tilastollinen vuosikirja 2010–2011.



## Quality of the built environment

The infill development areas marked in the local master plan for the inner city 1998 are high-quality areas that are smoothly connected to traffic networks at all levels. In addition, the municipal services provided in these areas have been produced systematically.

Due to densification, the unbroken character of the old detached housing areas and their cultural values may have been lost. In the spring of 2014, the Supreme Administrative Court set a guideline (in connection with a local detailed plan made for a detached housing area) that if a local detailed plan's boundary that only concerns one plot is implemented, one cannot be sure that it is possible to treat the neighbours equally (the principle of equality) in the future. (Supreme Administrative Court:2014:54, 20 May 2014) The values concerning the cultural and building history of the area may prevent the implementation of the plot division.

Housing has been located in the local master plans' attractive centres. So far, amongst the attractive factors have been a good location in relation to the traffic network, as well as the public functions that organise the urban structure (such as educational institutions, services, and the proximity of workplaces). The creation of a centre-like, mixed structure in the implemented areas has been challenging in places. For example, in the Koilliskes-

kus area, the mixing of functions and typologies in city blocks and in buildings has not been successful.

Most of the residential blocks that have been built outside of the areas reserved for housing by the local master plan are located in the vicinity of the attractive centres or the good traffic connections. These environments are not systematically linked to the green network or to public services. However, when located close to the centres, the centre-like typology is extended to these areas. The infill development activities that have been carried out by other means than by local master planning have removed service plots from many city districts. This has advanced the creation of unbalanced district structures. It is difficult to increase services in areas where the service plots have been planned for residential use.

### Development challenges dealing with typologies, ownership, and the planning process

Some of the infill development areas marked in the local master plan for the inner city 1998 have not been implemented due to the new local master plan processes or due to the private ownership of land. The detached housing areas that are located in those residential areas that are covered by the local master plan are likely to become

more compact, as on these old plots, there is a great deal of space that can be densified and the ownership of the plots is clear. It should be investigated as to on what conditions the old areas of blocks of flats could also be densified.

The aim has been to respond to Tampere's strong growth by drawing up partial master plans that allow housing within the city structure or on its extension, and by converting the service, industrial, and survey area reservations into residential use by means of local detailed planning. In order to receive more residents, it has been more efficient to act by means of local detailed plans, as the partial master plan areas have been implemented slowly due to the heavy character of the planning process. The focus on the production of blocks of flats in the housing construction activities that are implemented outside of the local master plan's residential areas causes a pressure to schedule infill development as efficiently as in the centres.

The construction of blocks of flats in the centres is strongly linked to attractive factors such as the centres' connections to the other parts of Tampere and to the area's functional structure. If the areas surrounding the existing areas of blocks of flats are not developed, they may decline, and even deteriorate in the long run.

## 2.2 Development of the industrial and working areas, the service areas, and the development of the centres

In this section, we will study new local detailed plans that were drawn up for the industrial, service, and centre areas in 1999–2013, as well as local detailed plan amendments that have resulted in one hundred plan areas. In addition, we will also study the deviation decisions from 2003 onwards for the areas concerned. The number of these deviation decisions is 161.

The industrial areas that were included in the local master plan for the inner city 1998 have been covered by local detailed plans in 1940–1970. A large number of building rights were assigned to the plots that were ratified in that period. This has allowed the actors in the area to expand their operations. Consequently, the number of applications regarding local detailed plan amendments is low, when proportioning the number of amendments to the size of the area and to the number of jobs in the area.

In this study, we have investigated how the areas have developed after the granting of the local detailed plan amendments and the deviation decisions. In addition to the plan maps, we have also studied the local detailed plan reports, as well as the justifications written by the applicants of the plan amendments and of the deviation decisions, as changes affecting the dynamics of the industrial and working areas (and partly the service areas) often take place within the old building stock. The present study also has quotations from some plan reports, in order to explain the different conditions in the areas.

The objective of the local master plan for the inner city 1998 was that by

2010, there would be 110,700 jobs in Tampere. According to the City of Tampere's Statistical Yearbook 2010–2011, the number of jobs in 2010 was 116,219. The number of jobs that was targeted by the local master plan was exceeded, even though the number has been slightly decreasing in recent years.

### 2.2.1 Compliance with the local master plan and the deviations from it

**Fragmentation and** infill development are amongst the plan processes (that adhere to the local master plan) for the industrial, service, and business areas. In these areas, most of the local detailed plan amendments have conformed to the local master plan.

The fact that the activities of the enterprises in industrial areas are becoming increasingly up-to-date can be seen in the fact that local detailed plan amendments now allow shifting from production-dominated operations to product development. Consequently, these enterprises will need more versatile premises, but their need for the volume of premises will decrease. The local detailed plan quoted below crystallises the development in these industrial areas. Along with the plan project, an area reservation for industrial production was fragmented in order to also provide office and business premises in the vicinity of the production facility. Part of the area was converted into housing.

An excerpt from the report of local detailed plan no. 7545 for Rantaperkiö (from 2003):

*"On the southern side of the current building, the aim is to construct a business-park-like solution that is made up of three buildings (commercial and office premises) that are chained to each other.*

...

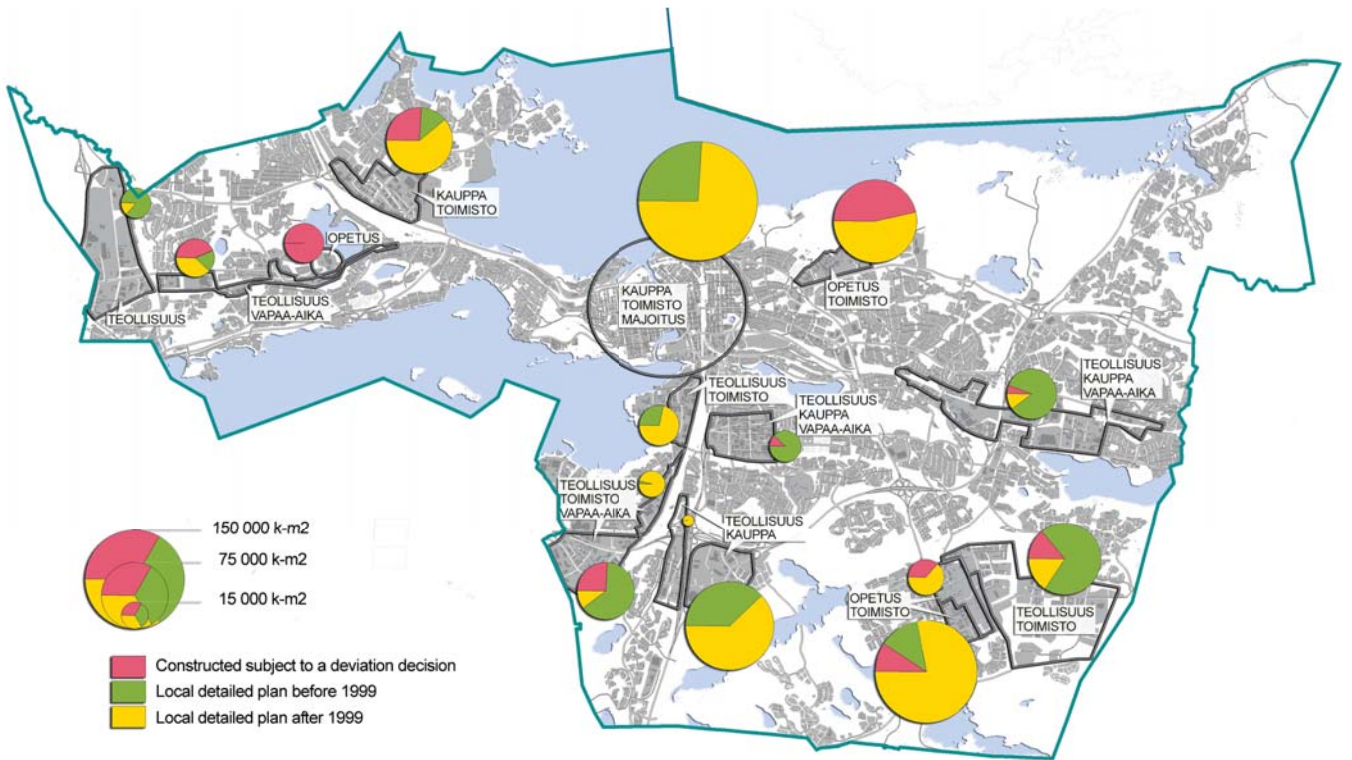
*Most of the area is reserved to function as a city block area for office and production buildings, as well as for buildings that serve research activities.*

*The six plots bordering Metsolankatu Street and Lentokentänkatu Street will be converted into plots for terraced houses and residential buildings."*

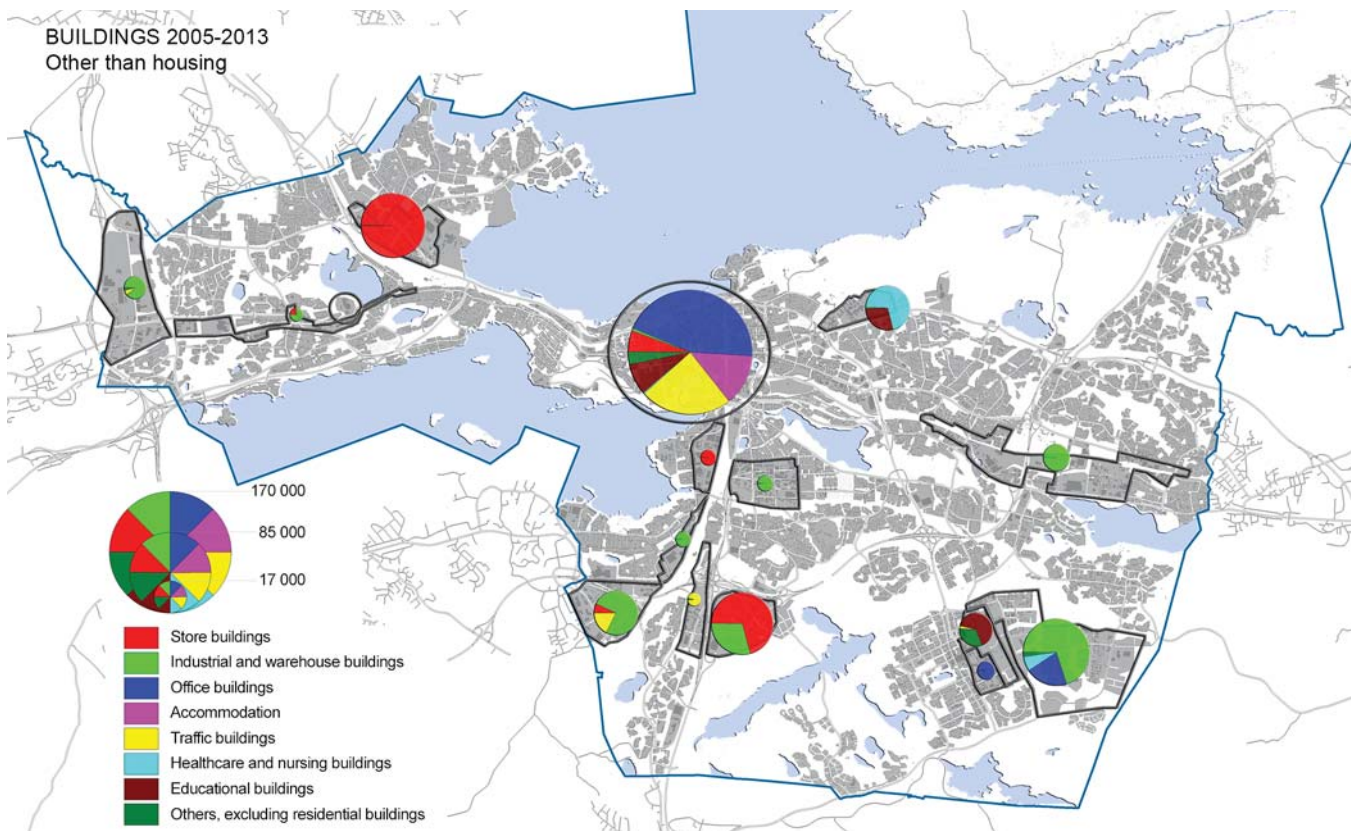
The low volume of investments that is characteristic of industrial areas is also visible in this plan project: the office and research buildings planned in 2003 have not been implemented. Nevertheless, the residential buildings were constructed.

The conversion of industrial and service area reservations into housing is a phenomenon that concerns the entire city. More than 90 hectares of these local master plan's reservations have been converted into housing. These areas are located in many parts of the city centre and the inner city. Increasing the volume of business premises in industrial areas has also been clearly seen in recent years.

Over the course of time, the industrial, working, and service areas have become more versatile as to their administration, activities, and premises. It is difficult to describe these areas consistently, as matters dealing with their location, ownership, history, and neighbourhood have made the areas very different.



The volume and direction of gross floor area processed in connection to local detailed plans and deviation decisions concerning the industrial, working, service, and centre areas included in the local master plans provide information on functions between 1999 and 2013. The size of the circle in the picture does not correspond to the volume of investment in the area. In western Tampere, for example, most of the changes have taken place within the old building stock.



Buildings completed in the industrial, working, service, and centre areas included in the local master plans between 2005 and 2013. The city centre clearly stands out from the rest of the city as the most diverse construction area with the most significant volume. Some of the construction in the city centre is linked to publicly funded improvement of conditions such as the development of traffic systems. In other parts of the inner city, construction is less diverse and is smaller in volume.



## 2.2.2 Features of the functional zones

### Industrial areas

**There are** three large industrial areas in Tampere: Myllypuro, Rusko, and Etu-Hankkio. In these large industrial areas covered by local master planning, local detailed plans have not been adjusted in order to make them adhere to the more recent local master plans, but plans have been adjusted in connection with projects or other planning needs. On the basis of the plans studied, it can be said that these areas develop slowly as the industrial actors are very economical in investing in new construction.

Over the past fifteen years, some local detailed plans have been made for **Myllypuro**. They have been carried out on the City of Tampere's initiative, and they have been technical procedures carried out due to the restructuring activities that have been implemented in the traffic areas. The Myllypuro partial master plan was ratified in 2009. The plan provides extension opportunities in the area.

**Etu-Hankkio** is one of the inner city's industrial areas that adhere to the local master plan. The area is developing and becoming more versatile (mainly as an industrial area).

The industrial area of **Rusko** has chiefly developed by means of a local detailed plan that was made for the area in the 1970s. In recent years, the area has been extended to the south (by means of a local detailed plan). However, there is not yet any new construction in this zone. In recent years, the largest construction project in Rusko has been an industrial and office building (which received the permits in 2011), which deviated from the local detailed plan (from 1979) by producing more office premises in the area than what was allowed by the plan. In addition, the building masses were designed according to the current needs:

**Justifications given in the deviation application, Committee for City Planning and Infrastructure Services, 10 May 2011, Section 155**

*"A building for offices, product development, and service premises has been planned for the site. The size of the building will be 10,000 m<sup>2</sup>.*

*This three-storey building will extend to a wide area and there will be long distances inside the building. It is necessary to build several staircases and lift lobbies in the building, in order to prevent walking through the work premises. An extension that would be carried out later would mean even longer distances in the building and a scattered work community.*

*A taller building would be more efficient and compact. In this case, the building could be designed as having one main staircase and lift lobby, when the lift lobby, as well as the meeting and lunch premises (located in the vicinity of the lift lobby), would bring the work community together. In addition, it would be easy to carry out an extension later without making the connections in the building excessively long. Due to its compact dimensioning, the building would emphasise the unity of the work community and part of the plot could be saved for some other use. A taller building would be a good landmark in the fairly scattered district structure of Rusko.*

*A permit to deviate from the number of floors defined by the local detailed plan is applied for, so that a building with a maximum of seven stories could be constructed."*

### Rise of the services

**Out of** all plan areas formed by means of the local detailed plan amendments in the industrial, business, and service areas, 61% concern increasing the volume of business premises in the plan area. 35% of them deal with converting an industrial plot into a commercial plot or increasing the volume of business premises on a plot that has been designated for industrial operations.

#### Lielähti process

**Lielähti is** an old industrial and warehouse area. The local master plan for the inner city 1998 stated that the eastern part of Lielähti had transformed from an industrial area into a zone dominated by services. Before that, a large retail unit, for example, had set its operations in the area. The pressure to respond to the area's increasing commercial role led to drawing up a partial master plan that was approved in 2006. This plan allowed the making of the area into a district centre, and the plan also established

the role of the large retail units. This completed the process where warehouses were converted into commercial premises, first under deviation decisions, and later under local detailed plans. This change was affected by the first land use plan for the Tampere Region, where the area had been marked as a district centre. The Lielähti partial master plan has also allowed centre activities, which is why it would also be possible to plan more housing in Lielähti.

#### Lahdesjärvi process

**The Lahdesjärvi** partial master plan was approved in 1990. In the local master plan for the inner city 1998, Lahdesjärvi has been marked as a survey area and the partial master plan that was approved in the 1990s remained in force in the area. In local detailed planning carried out in the 2000s, part of Lahdesjärvi was made to adhere to the entry large retail unit, because the first land use plan for the Tampere Region used this entry for the area. The Lahdesjärvi partial master plan was completed in the autumn of 2013. In this partial master plan, most of the area has been designated for trade that has an extensive space requirement but there are also areas for workplace functions. The traffic conditions in the area were also developed. The commercial activities are developing in the wake of Ikea, which was opened in Lahdesjärvi in 2010. Over recent years, commercial and office premises have been built in the area.

### Specialised clusters of expertise

**On the** basis of the plans studied, it appears that the most dynamic development activities are located in the area of the Tampere University of Technology (TTY) in Hervanta, and in the area of the Tampere University Hospital (TAYS) in Kauppi. These areas are developing at such a brisk pace that planning is not able to react to their changes of direction. Since the 2000s, local detailed plans have been created for both areas, but the areas have not entirely been developed in accordance with the local detailed plans but projects have also been launched under deviation decisions.

**Justifications given in the deviation application regarding a project where the plan is to locate an eight-storey**

**educational and office building in the TTY area also for the use of private enterprises, Committee for City Planning and Infrastructure Services, 14 May 2013, Section 192:**

*“Along with the reformed Universities Act, the integration between the universities and the business world will increase, and it is therefore justified to locate such business activities at university campuses that synergically connect to the disciplines of the university concerned.”*

Both clusters of expertise have a public background. They provide higher education, carry out research, and are able to link to the business sector. The premises of these service clusters are becoming more compact and versatile, as these clusters are dependent on the formation of innovation environments. Centralising the internal activities in these areas in order to create smooth interaction is important in the formation of premises.

In these areas, the expertise and business activities are data and knowhow intensive and reach, at their best, the international level. Over the course of time, a significant number of jobs have been created in these higher education institution areas. If successful, these areas will be able to attract cutting edge experts.

Tohloppi has received a deviation decision that allows the transfer of art and communications education next to the Finnish Broadcasting Company in Tohloppi in the autumn of 2014. Mediapolis is a cluster of expertise and education that has a public background, in the same way as the two other dynamic clusters of expertise described above. In addition, the University of Tampere has a corresponding principle in the city centre.

**The city centre is a story of its own**

The most recent partial master plan that was made for the city centre dates to 1995. This plan was approved by the City Council of Tampere, but it was not ratified by the Ministry of the Environment. The master plan for city centre traffic was made in 2006. It did not concern land use. The city centre has chiefly developed by means of local detailed plans. A partial master plan is currently being made for the city centre.

The local detailed plans and the local detailed plan amendments densify the

city centre. Locations for business and accommodation premises have been looked for in the vicinity of the railway area, often by converting traffic area reservations for the needs of construction. In addition to the ground level, the recent local detailed plans have also regarded decks and underground solutions as profitable. For example, we can mention two projects that have significant impacts: the deck of the railway yard and the Ratina shopping centre, which are located in an area that has been designated as a traffic area by the partial master plan for the city centre (1995). These projects utilise space beneath or above the basic level. Out of the plan amendments that have been made for the industrial, service, and centre areas, 10% have converted traffic areas into business and office premises. Most of these changes have been implemented in the city centre.

The city centre is developing by means of local detailed plans specifically made for projects, and the launching of projects is slow. This may be due to the fact that the projects need to collect an exterior funding base. The implementation of the projects is sensitive to economic fluctuations.

**Excerpt from the report of local detailed plan no. 7750 for Tulli (from 2002):**

*“Preparations have been made for the construction of a hotel plot. It will probably be implemented soon after the local detailed plan has come into effect. If the local detailed plan is not in force in 2004, the project may have to be cancelled.”*

This project was revised at the turn of the 2010s. After the completion of the plan and launch of the project, the development prospects for the surroundings of the plan area had changed so much that the actors wanted to adapt the project into the landscape that was enabled by the new local detailed plans, and, therefore, they applied for a deviation decision.

In the city centre, many local detailed plans are connected to the development of the traffic and transport system in the area. The share of public investments in the development of the city centre is large.

**The mixing and waiting areas**

**Construction appears** to be ceased on

the southern side of the city centre in the old industrial areas of Hatanpää, Nekala, Sarankulma, and Lakalaiva, as well as along Nokiantie Road in western Tampere. New partial master plans have not been made for these areas, except for Lakalaiva, where a local master plan was drawn up for Lakalaiva and Lahdesjärvi. However, Lakalaiva was detached from the plan area at the end of the planning work.

In recent years, not many new constructions have been built in these areas. The functions of the areas are getting mixed. Some plots still carry out industrial activities, adhering to their original purpose. On other plots, local detailed plan amendments have enabled increasing the share of business premises in the original building stock. In this case, the use of the buildings has become more attractive. In some cases, opportunities have been created for transforming industrial activities into product development. Some local detailed plans and deviation decisions have allowed space for pastime activities. Small service enterprises using subcontracting, as well as associations, function in these increasingly mixed areas.

Many areas are owned by investors. In these areas, there is a lack of operator-oriented investments, which form the background of the construction activities in the inner city areas. On the basis of the local detailed plans studied, it appears that so far, the investors settle for the rent yield that they receive from the old building stock. However, the construction of the areas may depend on the will of and measures taken by the City of Tampere, which has happened in the city centre. The transformation sensitivity of these areas is indicated by the justification given in the application for a deviation decision for Sarankulma:

**Regarding the deviation decision applied in 2013 for constructing an office building along Ilmailukatu Street:**

*“The value of the area has increased due to the proximity of the ring road and the Tampere Exhibition and Sports Centre, and it is currently better suited for the construction of office premises than for industrial and warehouse buildings. In addition, the plot has a prominent location along the good connections, which is very suitable for this kind of a building.”*

### 2.2.3 Services

According to the local master plan for the inner city 1998, the intention was to organise the public and commercial services by using a four-step service system (the C areas of the local master plan). Furthermore, the areas for public services and their extension reserve (PY) were designated to each city district. Private services were allowed in some old industrial areas. The small reservations for public areas (that were located in residential areas) were converted into a reserve area for housing.

In the background of the hierarchical service centre network that was presented by the local master plan for the inner city 1998 was the idea of providing basic services in the residents' neighbourhoods, as well as the idea of making the district centres into significant clusters that provide public and private services, alongside with the city centre. Between these two levels, there were the local centres whose aim was to serve several neighbouring city districts in a centralised way. For all these levels, the services and the targeted population base were defined within the radius given in the plan.

#### The service centres' development from the perspective of planning In the 2000s, local detailed planning

was launched in accordance with the local master plan for the inner city 1998 in Hervanta, Kaukajärvi, and Muotiala. Partial master plans were drawn up for Koilliskeskus and Lielähti. The Koilliskeskus partial master plan examined the dimensioning of the district centre's commercial activities, and the Lielähti partial master plan converted Lielähti into a district centre.

The increased population base was the background for local detailed planning in Hervanta, Kaukajärvi, and Muotiala. Reservations were also made for services. The local detailed plans concerning the district centres of Koilliskeskus and Lielähti allowed the construction of increased commercial volume and produced area reservations for public services. The service areas have not systematically been developed by means of planning, which was the idea of the model presented by the local master plan for the inner city 1998.

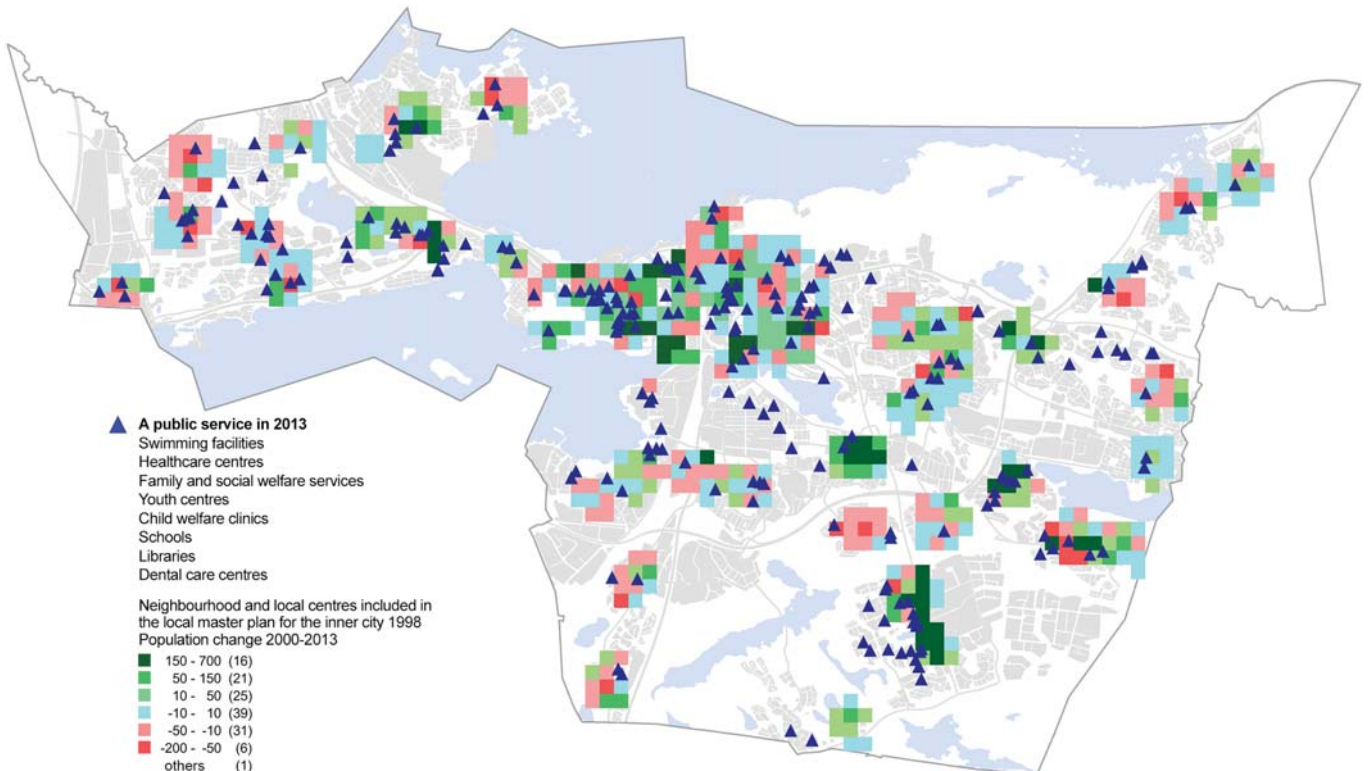
#### Public and commercial services in 2013, and the variation of the population base in the local centres

As regards the implementation of the service model presented by the local master plan for the inner city 1998, the most sensitive areas are the neighbourhood centres. The radius of a neighbourhood centre was defined to be half a

kilometre and the population base of a neighbourhood centre a minimum of one thousand residents. A kiosk, a playground, a grocery shop, a daycare centre, and a primary school were designated to each neighbourhood centre in the service centre network. In addition, there should have been a telephone booth in each neighbourhood centre.

The neighbourhood centres presented by the local master plan for the inner city 1998 and the changes in their population base in 2000–2013 have been compared with the public and commercial services that existed in the inner city in 2013. The aim was to check whether public and commercial services have been steered to the neighbourhood centres or to the over-lapping district centres. As regards public services, the swimming halls, the health stations, the family and social services, the youth centres, the maternity and child clinics, the schools, the libraries, and the dental care clinics have been placed on the map. As regards commercial services, the supermarkets, the hypermarkets, the pharmacies, the banks, and the post offices have been marked on the map.

In most cases, the neighbourhood centres' population base is higher than one thousand residents, which was the minimum population number given by the plan.



Neighbourhood centres included in the local master plan for the inner city 1998 and their population density between 1999 and 2013, and the location of public services in relation to the centres.



The centre system has not been implemented as expected, as there is variation in the location of services in the neighbourhood centres that are located in different city districts. In western Tampere, public and commercial services are systematically located in the neighbourhood centres, with a few exceptions. In eastern and southern Tampere, there is a great deal of variation in the location of services. Hervanta, Kaukajärvi, Annala, Janka, and Koilliskeskus are clear service clusters. In the other neighbourhood centres, there are only some services or no services. There are both public and commercial services outside of the planned service centres. Apparently, there are no versatile service centres in the easternmost and southernmost suburbs of Tampere.

### Recent changes in the service sector

There have been many drastic changes in the service providers' operating logic. For example, bank services have been shifted to the Internet and the post has centralised its parcel services next to kiosks and grocery shops.

One result of the study of the plans regarding the industrial and service areas was the increased share of premises that

were designated for services in certain industrial areas. We also noted that many third sector activities (i.e. various pastime and lifestyle groups) have been located in industrial areas throughout the city. This affects the residents' needs, as they need to travel within the regional radius when running errands and spending leisure time.

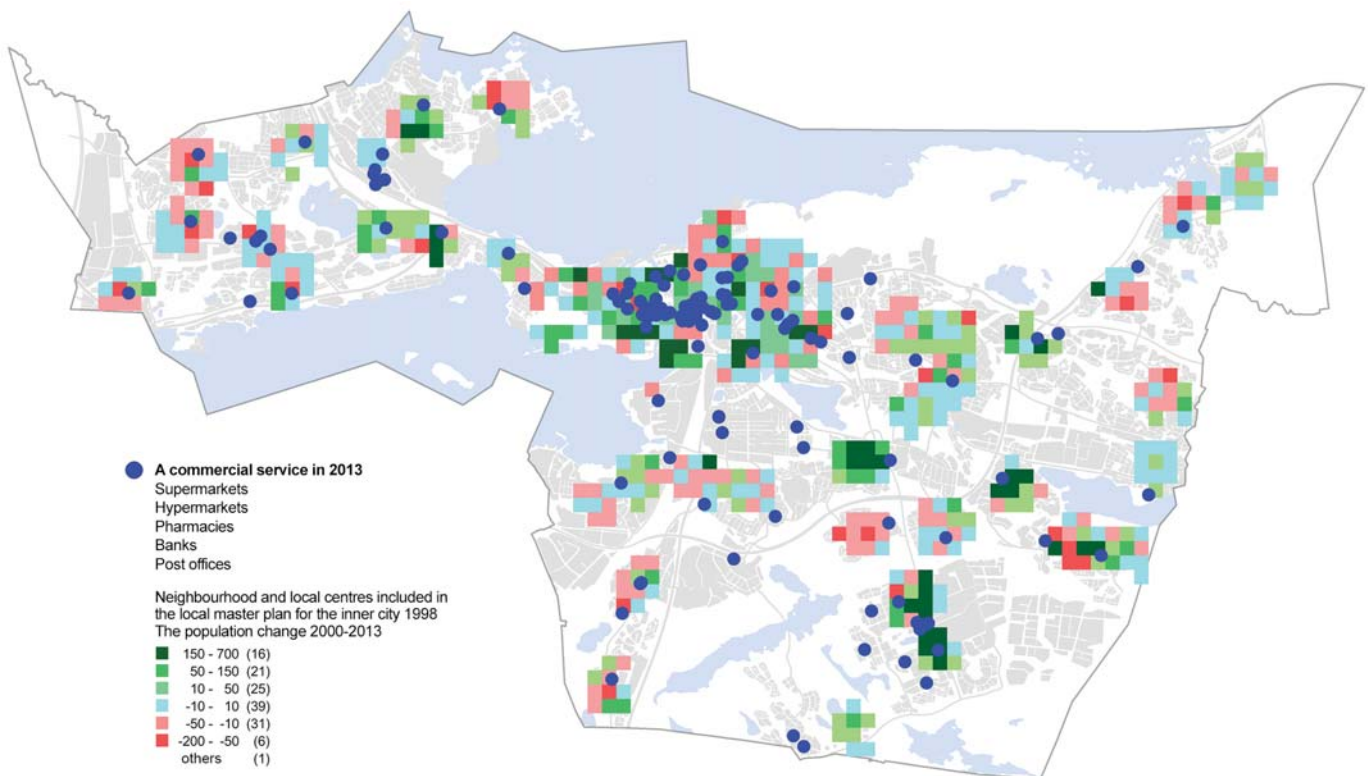
In Tampere, there is an ongoing development project that is based on the service network development plan 2009–2030 (Palveluverkon kehittämissuunnitelma, in Finnish), which was published in 2009. The service network development plan investigates the services provided by daycare and basic education, upper secondary schools, libraries, youth and sports services, social and health services, and services for senior citizens. Out of these services, local and district services are provided in a customer-oriented way in five different service areas. Specialised services are centralised in the city centre.

The plan proposes the formation of service clusters where services that support each other (as regards their functions and premises) can be located in the same, modifiable premises. Accessibility has been a significant theme in the placement of the service clusters.

The service clusters have been located in the local master plan's district centres. As regards the accessibility of services, it is important to have safe and smooth pedestrian, cycling, and public transport connections from the residential areas to the service centres.

Tampere belongs to the Joint Authority of Tampere Central Region, which administrates the work carried out by the Tampere region. Regional cooperation is carried out in different sectors, including education and culture as well as social and health services. Adhering to the regional-level guidelines, the City of Tampere also aims at carrying out the joint planning and provision of services on its municipal borders.

Private and third sector actors will participate in service production in the sports and cultural services, in the health services, in the housing services, and in daycare. According to the guidelines set by the service network development plan, the need for services will be monitored and the extent of the network will be adjusted according to the varying service needs. Consequently, the solutions for service premises will also change over the course of time.



Neighbourhood centres included in the local master plan for the inner city 1998 and their population development between 1999 and 2013, and the location of commercial services in relation to the centres.

## 2.2.4 Summary and conclusions regarding the development of the industrial and working areas, the service areas, and the development of the centres

In the city centre of Tampere, projects have been based on local detailed plans and they have been implemented slowly. In the background, there have been actors that need exterior funding. In the foreword to the report that was included in the master plan for city centre traffic, it has been said that the city centre's vitality is important for the entire region. The role of public will and investments is significant in making private construction decisions.

The industrial, working, and service areas outside of the city centre have developed in an operator-oriented way. This has led to a development that is scarce, on the one hand, and dynamic, on the other hand. The actors have only carried out the investments that are necessary for organising their activities. However, in cases where the activities have been quickly reorganised, construction has been started vigorously, under a local detailed plan or under a deviation decision. Thanks to these processes, the

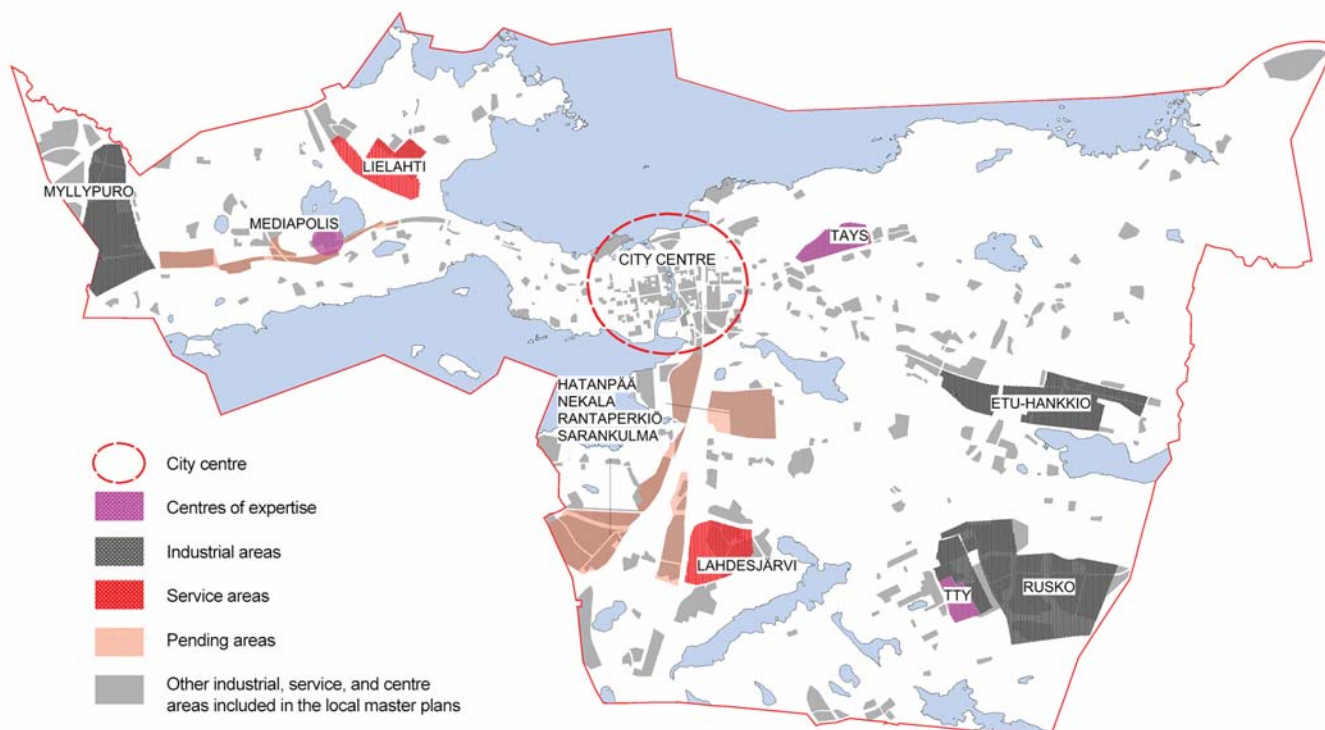
areas have become more versatile as to their activities and space solutions.

The industrial areas where service activities have been allowed have become increasingly dominated by services. In addition, leisure activities and offices have also been located in these areas. There are no efficient public transport connections to most of the old industrial areas, and travelling in them is challenging for pedestrians and cyclists.

It looks like the city centre's model for the logic of construction is spreading to some inner city working areas, as a large share of the plots are owned by investors. This fact makes these working areas very dependent on the City of Tampere's will and the measures taken by the City in order to speed up the construction of the areas. At its best, smooth cooperation between the private and public sectors can create an excellent operating environment that is beneficial both for citizens and investors.

It looks like some public service areas would have a similar economic significance as the centres, the working areas, and the industrial areas. The local master plan has not been able to forecast the transformation of public educational institutions providing higher education into environments that also include business activities. They have created significant markets in the areas where they have settled.

Projects are emphasised in the development of the industrial, service, and centre areas. On the other hand, the conversion of old areas into areas that have new uses takes place within the existing building stock as well. In the background, there are investors, entrepreneurs, and amateurs whose relation to master planning is weak. On the other hand, it must be noted that public investments (such as traffic routes) that are administered on a general level, also affect the location of private investments.



The "functional zones" formed in the industrial, working, service, and centre areas in Tampere due to the development in recent years.

## 2.3 Traffic system

In this section, we will study the implementation of the routes that were planned in the local master plan for the inner city 1998 and in more recent partial master plans.

Most of the city's traffic areas and pedestrian & cycling routes are located in the area covered by the local master plan for the inner city 1998. This local master plan presented the city's traffic system and some amendments to the traffic areas. The more recent partial master plans have complemented the traffic system in the planning areas. There is a separate master plan for city centre traffic. This section will study the implementation of the traffic area reservations presented by the local master plans. We will also study local detailed planning regarding the pedestrian & cycling routes and the main outdoor routes.

In the local master plan for the inner city 1998, the largest traffic reservation in eastern Tampere was the Holvasti-Aitovuori road reservation. This reservation belongs to the Ojala partial master plan's area (which is in the proposal phase) and has not yet been implemented. For Hankkio, the plan presented a north-south connection (running beneath the railway tracks) from Sammonkatu Street to Kangasalantie Road. This connection has not been built. The junction connecting Highway 12 and Holvasti has not been implemented, either. The connection from Lahdesjärvi, via Kar-

kunvuori, onto Lukonmäenkatu Street has also remained unbuilt.

The traffic and transport system along the central axis of Hervanta has been developed as a development target of the local master plan for the inner city 1998.

In western Tampere, connections presented by the local master plan for the inner city 1998 have not been implemented between Pispalan valtatie Road and Lielähti, and not from Haukiluoma to Ylöjärvi, either.

The master plan for city centre traffic presented several projects that organise traffic and transport in the centre area in a new way. Many of them have been covered by local detailed plans and have been built or are being built in 2014.

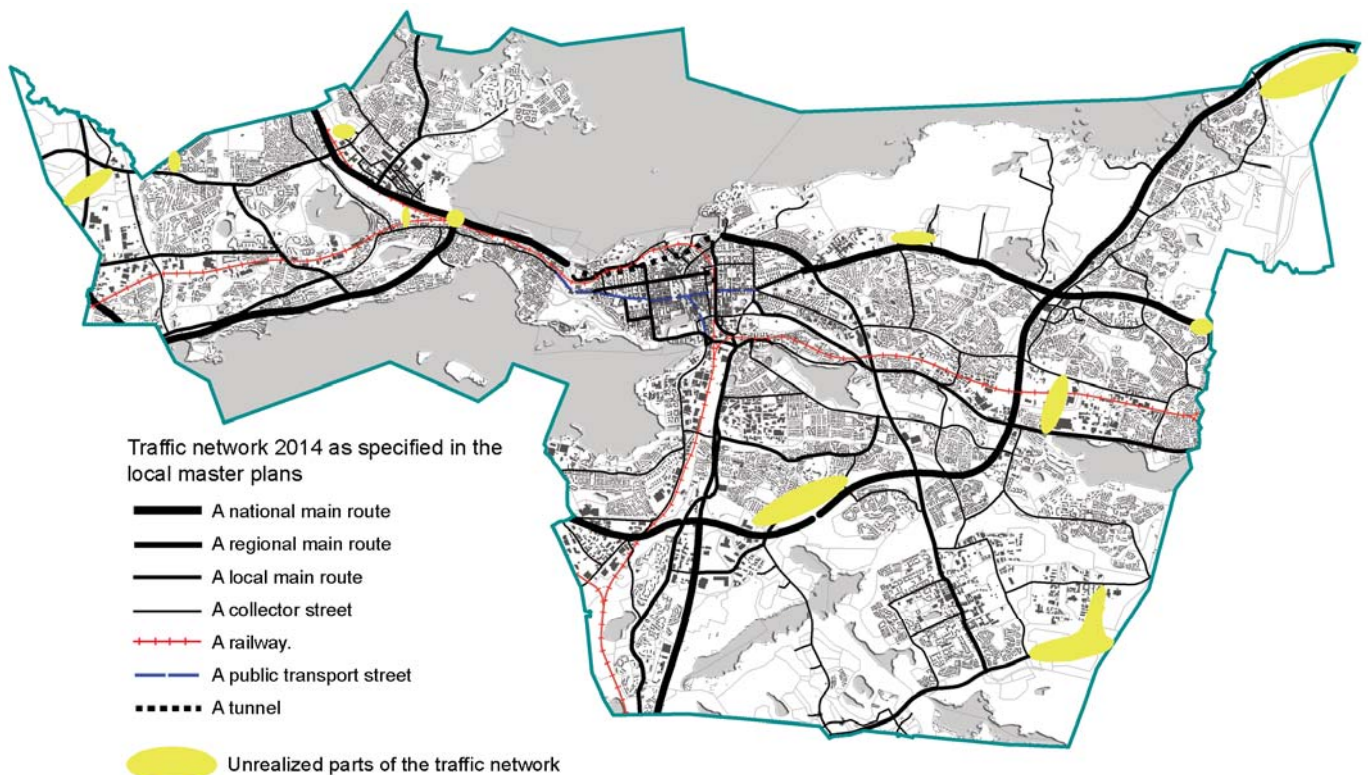
The local detailed plan (which adheres to the master plan for city centre traffic) for the Rantaväylä tunnel was approved by the City Council of Tampere on 10 October 2011. A solution was selected where a 2.3-km-long rock tunnel would be built between Santalahti and Naistenlahti. The construction of the tunnel began in October 2013.

Ratapihankatu Street, which was presented by the master plan for city centre traffic, has been built all the way to Tammelankatu Street. The local detailed plan (plan number 8330) concerning the stretch between Tammelankatu Street and Naistenlahdenkatu Street is in a proposal phase.

A report was made for the light rail project that was presented by the master plan for city centre traffic. The rail project dealt with the utilisation of the rail network in public transport in the Tampere Central Region (Rataverkon hyödyntäminen Tampereen kaupunkiseudun joukkoliikenteessä, Raideprojektin raportti 2004, in Finnish). Thereafter, the project has not been developed. A tramway master plan (which deviated from the light rail project presented by the master plan for city centre traffic) was completed during the spring of 2014. In the summer of 2014, the City Council decided upon the continuation of tramway planning. In the first phase, the tramway would run between Hervanta and the city centre and there would also be a rail to the Tampere University Hospital (TAYS). The plan is to continue the tramway later from the city centre to Lentävänniemi.

The partial master plans for Koilliskeskus, Vuores, Lielähti, Niemenranta, and Lahdesjärvi made changes to traffic arrangements. The traffic arrangements planned for the areas have been covered by local detailed plans and they have been implemented. The largest part of the new street network constitutes of a road network meant for local vehicle traffic.

The Kalevanrinne partial master plan produced an area reservation for a multi-level junction. The local detailed planning work for the partial master plans for Santalahti, Myllypuro, and Hervantajärvi is still ongoing.



Unimplemented sections of the trunk road network that were specified in the local master plans.



### 2.3.1 Main routes for walking and cycling, and the main outdoor routes

The local master plan for the inner city 1998 reduced the pedestrian and cycling network and presented just the main connections between the city districts.

In the city structure, the cycling and recreational routes have been designated to versatile areas (ranging from separate bicycle paths to residential streets, or to cycling routes that run along local connector streets). Main outdoor routes have been designated to gravel roads and to properly surfaced paths that are connected to green areas.

The master plan for city centre traffic presented a large number of improvements in the walking and cycling conditions, such as bridges crossing Tammerkoski Rapids and the tranquil waters of Ratina, as well as the Rongankatu underpass.

#### Bicycle paths and walking routes

Next, we will study the implementation of the bicycle paths and walking routes

presented by the local master plan of the inner city 1998. The routes have been presented on map 2 of the local master plan.

The unbuilt cycling routes are the same as those traffic connections presented by the local master plan for the inner city 1998 that have not been implemented. Furthermore, some bicycle paths next to traffic areas have not been implemented.

The walking route onto the shore of Lake Näsijärvi in Kauppi–Niihama has not been implemented. There are also walking routes in Kaukajärvi, Annala, and Vuores that have not been built.

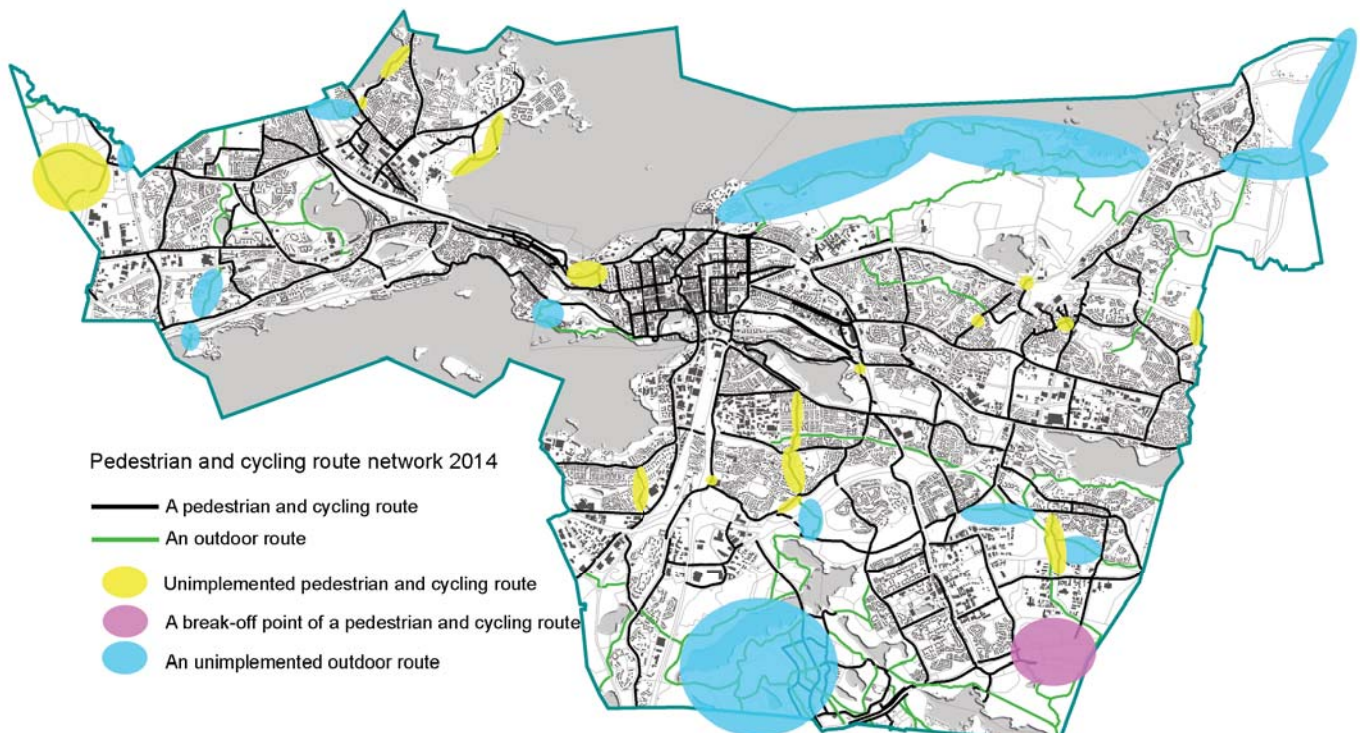
Pedestrian and cycling connections adhering to the master plan for city centre traffic have been implemented across Tammerkoski Rapids (between the Finlayson and Tampella areas) and at Rongankatu (the underpass beneath the railway yard). In addition, cycling routes have also been built in the city centre, in accordance with the master plan for city centre traffic.

### 2.3.2 Summary of the implemented traffic reservations

The local master plan for the inner city 1998 mentioned that the regional traffic system was, to a very large extent, completed at the end of the 1990s. However, only a few pedestrian and cycling routes have been built outside of the city centre.

In partial master planning, some street network has been produced in some workplace zones that used to be occupied by industry. The integration of the old industrial and working areas with the street network and the linking of the city districts to each other by means of a lower-level street network and practical cycling connections are themes that have been ignored in inner city planning.

Traffic areas have been determinedly implemented in the areas covered by partial master planning. Some of the connections presented by the local master plan for the inner city 1998 have not been implemented.



Unimplemented sections of the pedestrian routes (as specified in the local master plans) in local detailed plans.

## 2.4 The green network and recreation, environmental protection, and building protection

**This section** reviews the protection status of the green and protected areas that have been proposed in the local master plan for the inner city 1998, and the building sites and built environments that have been indicated in the same to be protected. The areas are outlined and named on map 2 of the local master plan. In addition to the local master plan for the inner city 1998, the survey also takes account of the protected built environments proposed in the local master plan for the City of Tampere 1988, and the additions presented in later partial master plans to the green and protected areas and to protected sites.

### 2.4.1 The green network

**In the** local master plan for the inner city 1998, the green network is presented as areas to be preserved as green areas or as significant green areas. Pyynikki has been marked as a protected and a green area in a partial master plan in 1991. With the Kauppi–Niihama and Iidesjärvi partial master plans, both of which were prepared in recent years, new significant green areas have been established in the inner city area. Also, the partial master plan for Vuores in particular extends the green network outlined in the local master plan.

At present, the effective local master plans of the Tampere inner city area include a total of around 4,510 hectares of green and recreational areas, which constitutes around 36% of the total land

A review of the surface areas of green areas included in the local master plans

Name of the local master plan	A recreational, protected, graveyard, and holiday home area included in the local master plan (in hectares).	A recreational, protected, graveyard, and holiday home area (in hectares) included in the local detailed plan	A recreational area (in hectares) covered by a local detailed plan outside the area reservation made in the local master plan
Partial master plan for Koilliskeskus 2004	11,1	17,2	7,1
Partial master plan for Vuores 2005	356,7	99,2	28,5
Master plan for city centre traffic 2006	79,3	71,5	14,5
Partial master plan for Lielähti 2008	11,1	11,5	1,1
Partial master plan for Santalahti 2008	8,7	14,1	7,5
Partial master plan for Niemenranta 2009	23	17,2	8,9
Partial master plan for Myllypuro 2009	55,5	13,5	6,6
Partial master plan for Kauppi–Niihama 2011	1019,7	134,9	7,8
Partial master plan for Kalevanrinne 2011	14	15,6	2,1
Partial master plan for Lahdesjärvi 2013	106,5	6,2	1,3
Partial master plan for Iidesjärvi 2014	121	92,5	2,9
Partial master plan for Hervantajärvi 2014	172,3	0,6	0,6
Partial master plan for Pyynikki 1991	81,6	81,3	2,7
<b>Total</b>	<b>2060,5</b>	<b>575,3</b>	<b>91,6</b>

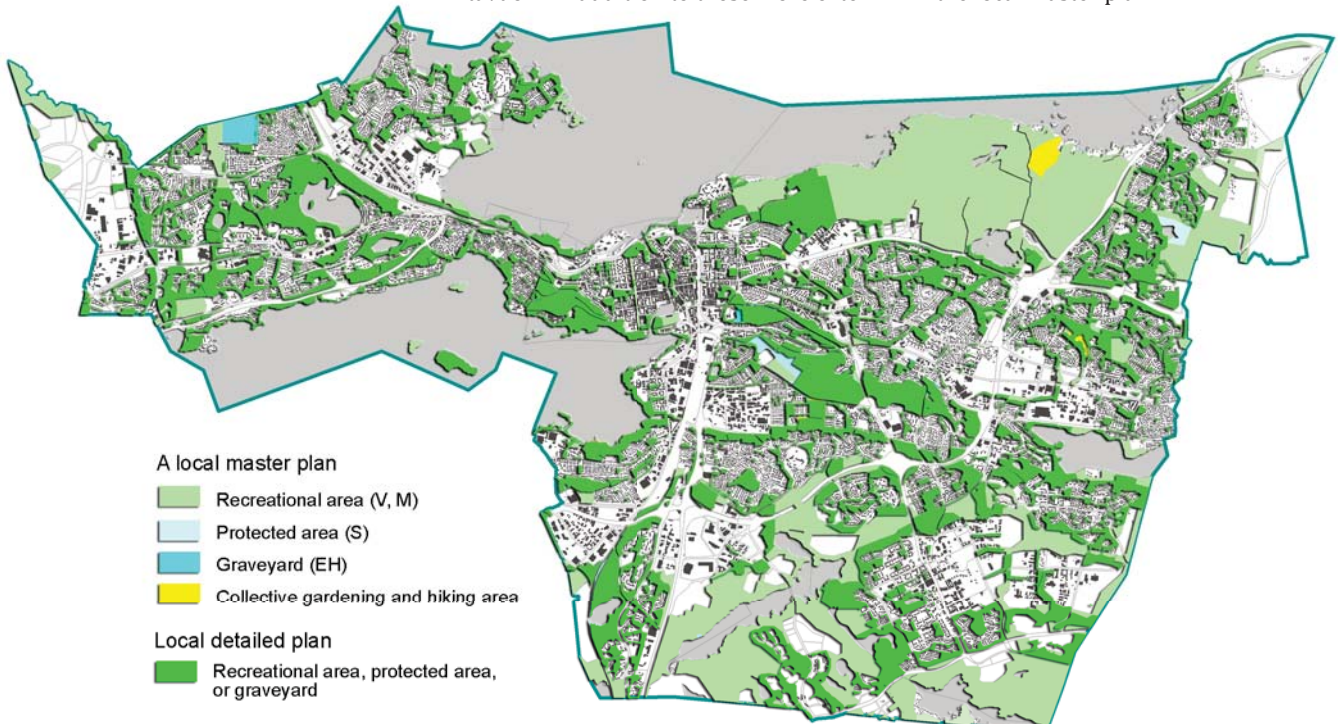
area in the inner city. The figure also includes nature reserves.

Of the reservations made for green and recreational areas in the local master plans, around 44% or 1,995 hectares are covered by a local detailed plan.

The most extensive green area reservations that are not covered by a local detailed plan are in Kauppi–Niihama and Ojala and around Vuores, Hervanta, Hallila, and Särkijärvi. The local master plan remains to be implemented also at the green link between Tesoma and Haukiluoma, at Lamminpää graveyard, and at the old soil extraction site in Mustavuori. In addition to these more exten-

sive area reservations, the local master plan has not been implemented in many shore areas and, quite surprisingly, at Hämeenpuisto Esplanade.

In total, the inner city area includes around 2,670 hectares of green areas that are covered by a local detailed plan. Around 675 hectares of local recreational areas have been indicated for the residential areas of the local master plan and for other areas with land use reservations, because local recreational areas must be indicated for dwellings in local detailed plans in areas where a reservation has been made for a residential area in the local master plan.



Green areas included in local master plans and green areas covered by local detailed plans.



## 2.4.2 Environmental management and conservation

**A comprehensive** air quality survey was completed for the inner city in 2013. Based on the modelling results, in most of the Tampere Central Region, air quality is good or satisfactory. However, near the busiest streets, the amount of nitrogen dioxide and breathable particles (NO<sub>2</sub> and PM<sub>10</sub>) might sometimes exceed the national air quality guideline levels. Although the daily amount of small particles (PM<sub>2.5</sub>) generated by the traffic and industrial operations did not exceed the daily guideline level specified by the WHO, the daily guideline levels might sometimes be exceeded due to transboundary air pollution and small combustion. The annual limit values for air quality (NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>) have not been exceeded in the Tampere region.

According to the 90-percentage point distribution of the local air quality index that is based on hourly concentrations, the air quality in the centre of Tampere is satisfactory or better, and good or satisfactory in the residential areas 90% of the year. The worst hours are usually in winter in connection to severe inver-

sions or inversions that last several days, or in spring during the street dust season.

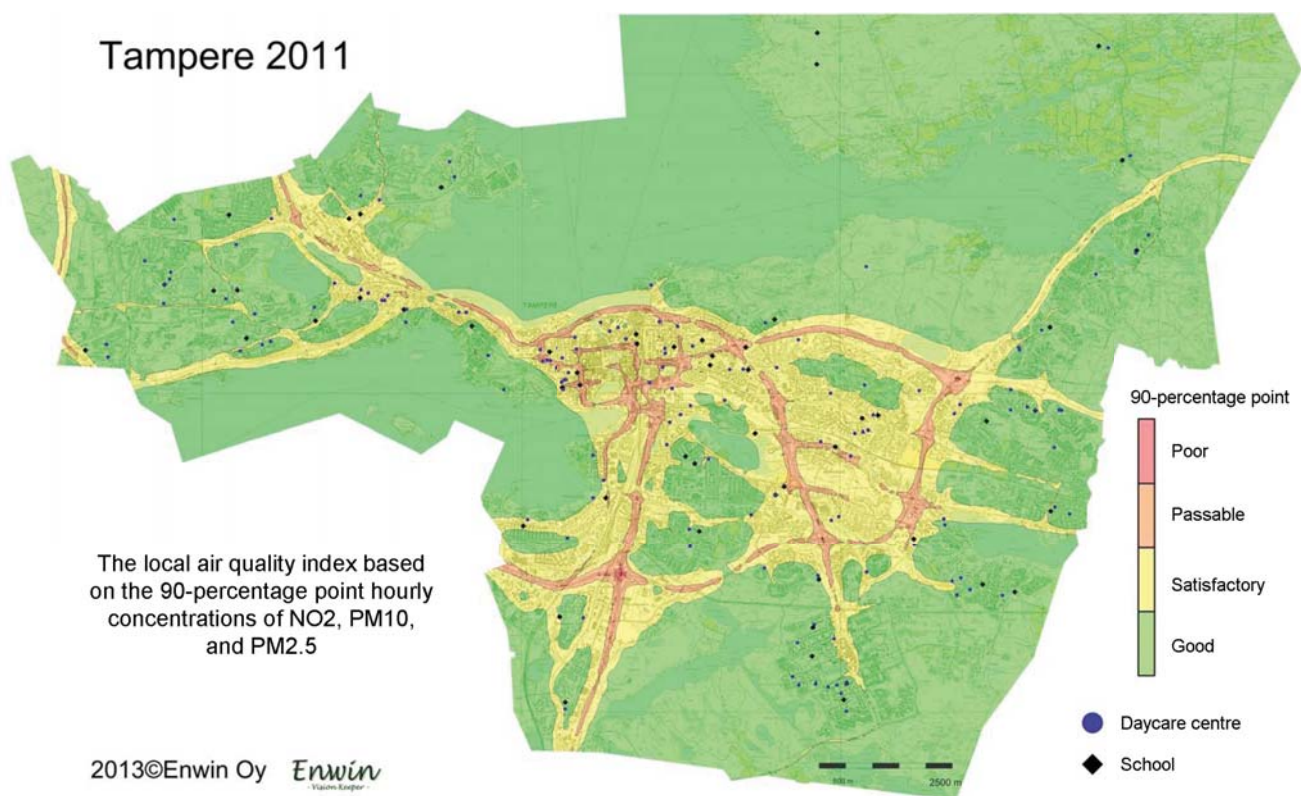
Of the population in Tampere, 5.4% lives in areas where the daily guideline level of nitrogen dioxide (70 µg/m<sup>3</sup>) is sometimes exceeded. 15.7% of the population lives in an area where the daily concentration of nitrogen dioxide is 85-99% of the guideline level. Correspondingly, 6.5% of the residents in Tampere lives in areas where the daily concentration of PM<sub>10</sub> particles in the street dust can exceed the guideline level (70 µgPM<sub>10</sub>/m<sup>3</sup>) and 5.1% lives in areas where the daily concentration of street dust (PM<sub>10</sub>) is 85-99% of the guideline level. Based on these percentages that illustrate the relation between the population and pollutant concentrations, nitrogen dioxide is the most significant air pollutant in Tampere. The impact area of street dust is more strongly limited to areas near streets.

In the air quality survey conducted in Tampere in 2013, the shared air and noise pollution impact areas, known as hot spots, were identified for the first time. In these areas, the air and noise pollution levels exceed the guideline levels. At

present, 4.1% of the population of Tampere lives in hot spot areas.

In the Tampere inner city, noise is generated by road traffic, railway traffic, railway yards, industrial facilities, and air traffic. The most recent noise survey was conducted in 2012. According to the survey, the number of residents exposed to noise is higher now than when the previous noise survey was conducted, in 2003. This difference is partly due to increased traffic volumes and possibly also to different methods of assessing exposure levels.

An estimated 27% of Tampere residents is exposed to noise levels of over 55 dB (LAeq 7-22), which is caused by street and road traffic. It was further estimated that 10% of the residents is exposed to noise levels of over 50dB (LAeq 22-7) caused by night-time railway traffic. The noise areas around industrial facilities and railway yards have been calculated to be significantly narrower and also the number of residents who are exposed to noise to be clearly lower: on estimate, around 300 residents are exposed to loud noise (LAeq 22-7 > 70 dB) from railway traffic.



The local air quality index in Tampere in 2011 based on the 90-percentage point hourly concentrations.



Changes in traffic arrangements will affect future noise levels. The construction of the Rantaväylä tunnel will reduce noise exposure in the northern parts of the centre of Tampere. Also, a tramway is being planned in Tampere that would partly affect traffic arrangements, and therefore also the noise levels. New street connections will be opened in the southern parts of the city in particular, including Särkijärvi, Lahdesjärvi, and Rusko. The impact of these new connection streets on noise levels will be mostly local.

Based on the model that was created in 2012 as part of the survey to assess future noise levels, the volume of road traffic was estimated to increase by around 20% by 2030 relative to the 2011 level. Using the national noise indicators, it was estimated that in the model situation, the number of residents exposed to road traffic noise will increase relative to the present situation by around 10%, and the number of residents exposed to rail traffic noise will increase by around 20%.

The general state of the lakes in Tampere has improved significantly over the past decade. The main contributing factors include improvements in the

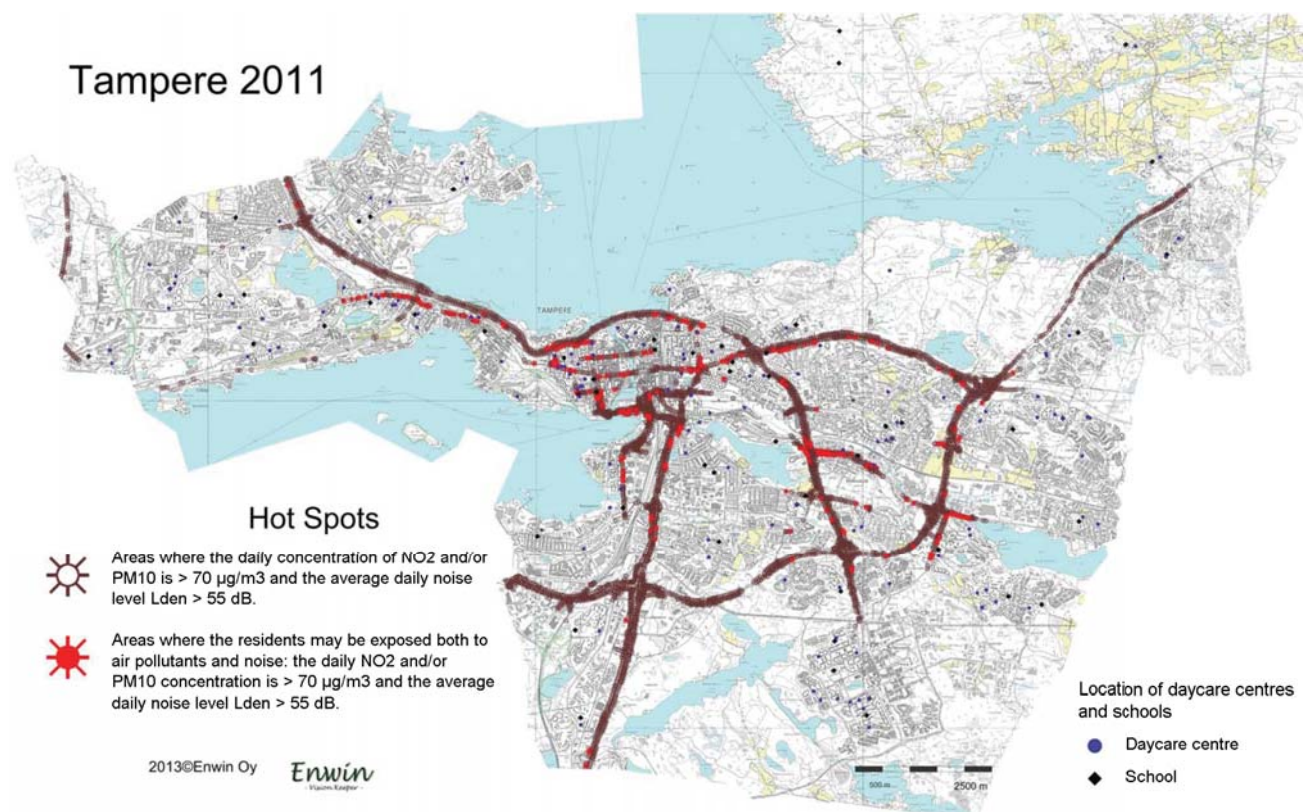
sewage network, increased efficiency of wastewater treatment, and reduced volume of industrial waste water. Since these changes and measures have been implemented, water quality has not been poor in any of the lakes in the inner city area, with the most significant improvements being in Lake Näsijärvi and Lake Pyhäjärvi.

On the other hand, in some areas of Tampere, water quality deteriorated in the early 21st century. As recently as 2005, the water quality was excellent in Lake Särkijärvi and Lake Lahdesjärvi. At present, the water quality in both these lakes is still good but some eutrophication and other deteriorations in quality have been observed. Also in Lake Suolijärvi and Lake Hervantajärvi, the quality has dropped one class from good to satisfactory. The quality has deteriorated more markedly in Lake Suolijärvi than in Lake Hervantajärvi. The quality classification of all the other lakes in Tampere is the same now as it was ten years ago. (Source: The Water Protection Association of the River Kokemäenjoki (KVVY), 2014).

The most significant groundwater areas in the Tampere inner city area are located on eskers. The Aakkulanhar-

ju and Epilänharju-Villiläharju eskers are class 1 groundwater areas. Pispala, Pyynikki, and Kalevanharju have not been classified important groundwater areas in terms of water supply, but are nevertheless groundwater areas.

At present, environmentally risky operations such as traffic areas, laundries, service stations, concrete industry operating premises and warehouses, and some small-scale chemical facilities are located in groundwater areas that are important to the city's water supply. Of the total surface area of groundwater areas, over 50% is currently surfaced, which poses a risk to groundwater formation. Subsequently, all groundwater areas in Tampere have been classified as risk groundwater areas. On the other hand, 50% of the surface area of the eskers is currently green areas. The goal of the groundwater protection programme is to prevent the location of all new risk operations in groundwater areas, and to ensure, in due course, the relocation of the environmentally risky operations that are currently located in these areas. The green areas that are located in the groundwater absorption zone must be preserved and left unsurfaced.



Hot spot areas in Tampere in 2011.

### 2.4.3 The implementation in the local detailed plans of the protection of ancient monuments, nature conservation sites, and buildings designated for protection in the local master plan

**The local** master plan for the inner city 1998 and partial master plans include a total of 190 protected sites. Of these, 22% has been protected in local detailed plans. In the old local detailed plans, protected sites – most often ancient monuments or natural environments – have been included in the parks, without separate protection marking. Most of the built environment sites that have been designated for protection are in an area covered by an original or several decades-old local detailed plan. The protection value of the sites was determined after the local detailed plan was completed, but the sites have not been protected because the planning of the area has not yet properly begun.

The protected sites included in the local master plan for the City of Tampere 1988 were built areas that were designated for protection. Local protection has been implemented in accordance with the local master plan in the sphere surrounding the city centre. The Lapinniemi and Kauppi hospital areas were protected in the local detailed plan, in 1988 and 2007 respectively. In Viinikka, Nekala, and Muotiala, protection plans were prepared in the late 1980s and in the 1990s. The Hatanpää area was pro-

tected from the 1980s to the 2000s, whereas Härmälä was protected in 2005. In autumn 2014, protection plans for Pispala and Petsamo were pending.

Most of the local protection sites indicated on the outer periphery of the inner city in the local master plan for the City of Tampere 1988 are residential buildings from the post-war reconstruction era. Plot divisions have been completed in many places within the area. The old building stock has been protected in supplementary plans, and infill development has been harmonised with the building style of the post-war reconstruction era. Consideration must be given as to whether any of the protection value specified in the local master plan remains in the areas.

#### Protection categories of local detailed plans

In local detailed plans, the protection of the built environment is divided into three categories:

Sites in the building- and structure-specific protection category do not directly comply with the protection guidelines of the local master plan, but the site-specific protection is more extensive than specified in the protection guideli-

nes of the local master plan. Site-specific protection seems to be most often implemented in connection to other planning needs, when the building stock in the area is also inventoried. The sites protected in a local detailed plan include buildings that were also among the protected sites indicated in the local master plan for the City of Tampere 1988.

Two protection categories that are used in the local master plan for the City of Tampere 1988 are cityscape protection and area protection. The protection status of the areas covered by the local detailed plan is as stated in the headline.

#### Conclusions on the protection situation

**The protection** has been most efficient and systematic in connection to local detailed planning when the starting point for the plan has been to implement protection of an area complex, and to ensure that preservation of the site is the goal of the local detailed plan.

The sites designated for protection in the local detailed plan have been protected in an unsystematic manner in the local detailed plan when the site list has not been linked with a separate protection programme.

## 2.5 The inner city area in 2013 as space reservations in the current local detailed plan

**The land** area of the Tampere inner city area is 127 km<sup>2</sup>, of which 100.5 km<sup>2</sup> is covered by local detailed plans.

This planned area contains various functions, with around 2,740 hectares (over one quarter of the planned land area) being reserved for housing. The planned area also includes around 2 hectares of mixed centre areas and 1,070 hectares of areas reserved for industrial and logistics use. The latter amounts to one-tenth of the total planned area. The local detailed plan includes 29 hectares of plots reserved for services and 520 hectares of plots reserved for public buildings. Around 280 hectares are reserved for business buildings.

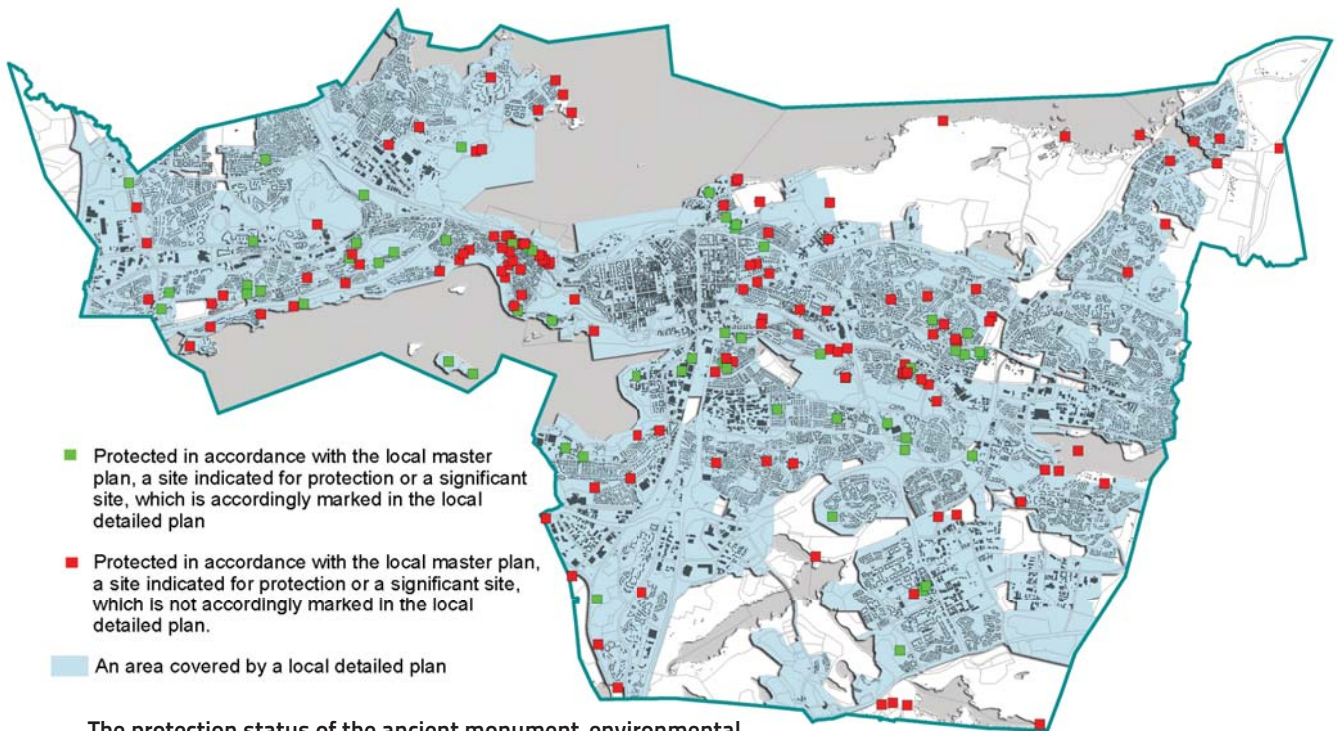
Roads, traffic areas, streets, pedestrian zones, squares and marketplaces, and related green buffer zones and block areas reserved for traffic in the city

centre and the inner city area constitute 1,973 hectares of the land area in the city centre and the inner city area, or nearly 20 per cent of the inner city area covered by local detailed plans.

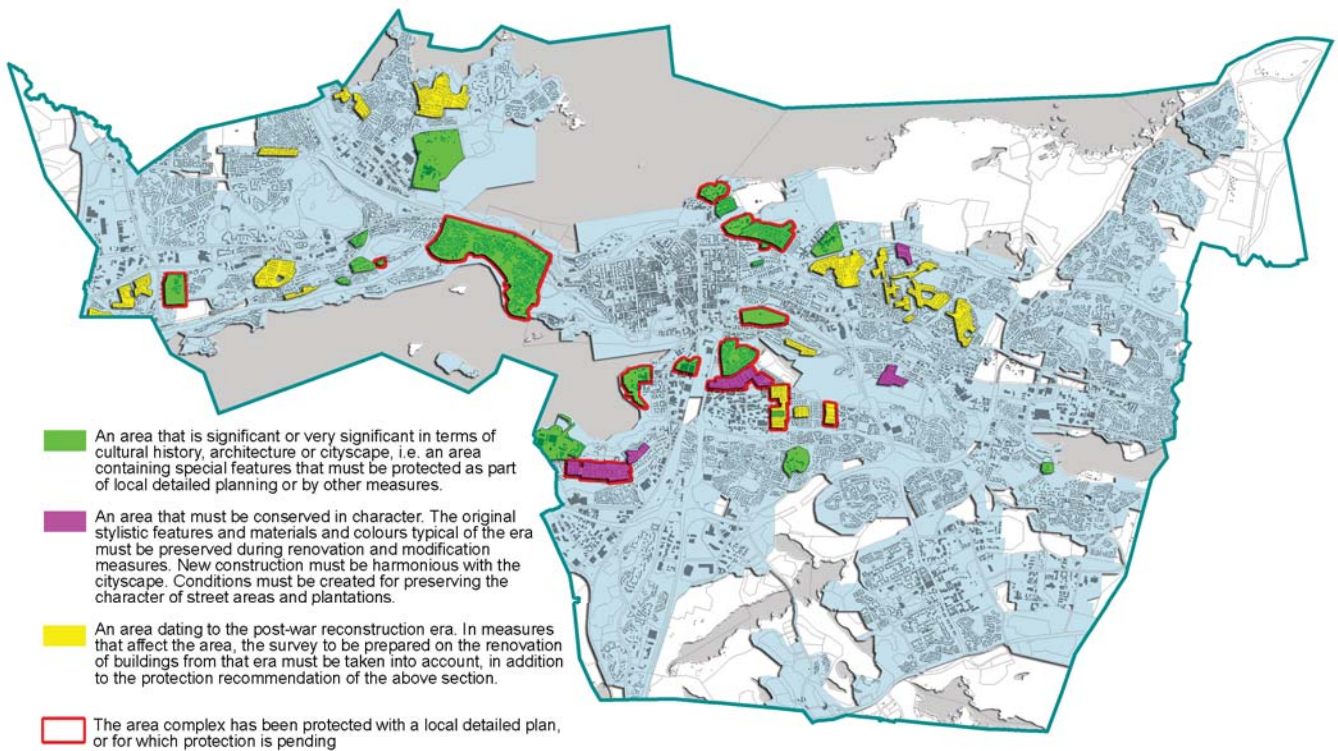
A total of 2,670 hectares of recreational areas are covered by local detailed plans, which amounts to over 26 per cent of the inner city area that is covered by local detailed plans.

Function specified in the local detailed plan	Surface area (in hectares)	Surface area %
Residential areas (A)	2 722	28
Areas of centre functions (C)	2	0
Industrial areas (T)	1 039	11
Public service areas (Y)	495	5,3
Business premises areas (K)	329	3,6
Maintenance buildings and parking spaces (L, LH)	93	1
Green areas (V)	2589	27
Hiking, holiday, and collective gardening areas	43	0,5
Protected areas (S)	171	2
Special function areas (E)	239	2,6
Traffic areas	1860	19
<b>In total</b>	<b>9 582</b>	<b>100</b>





The protection status of the ancient monument, environmental protection, and building protection sites included in the local master plan for the inner city 1998 in the local detailed plans.



The protection status of sites included in the local master plan for the City of Tampere 1998 in the local detailed plans.





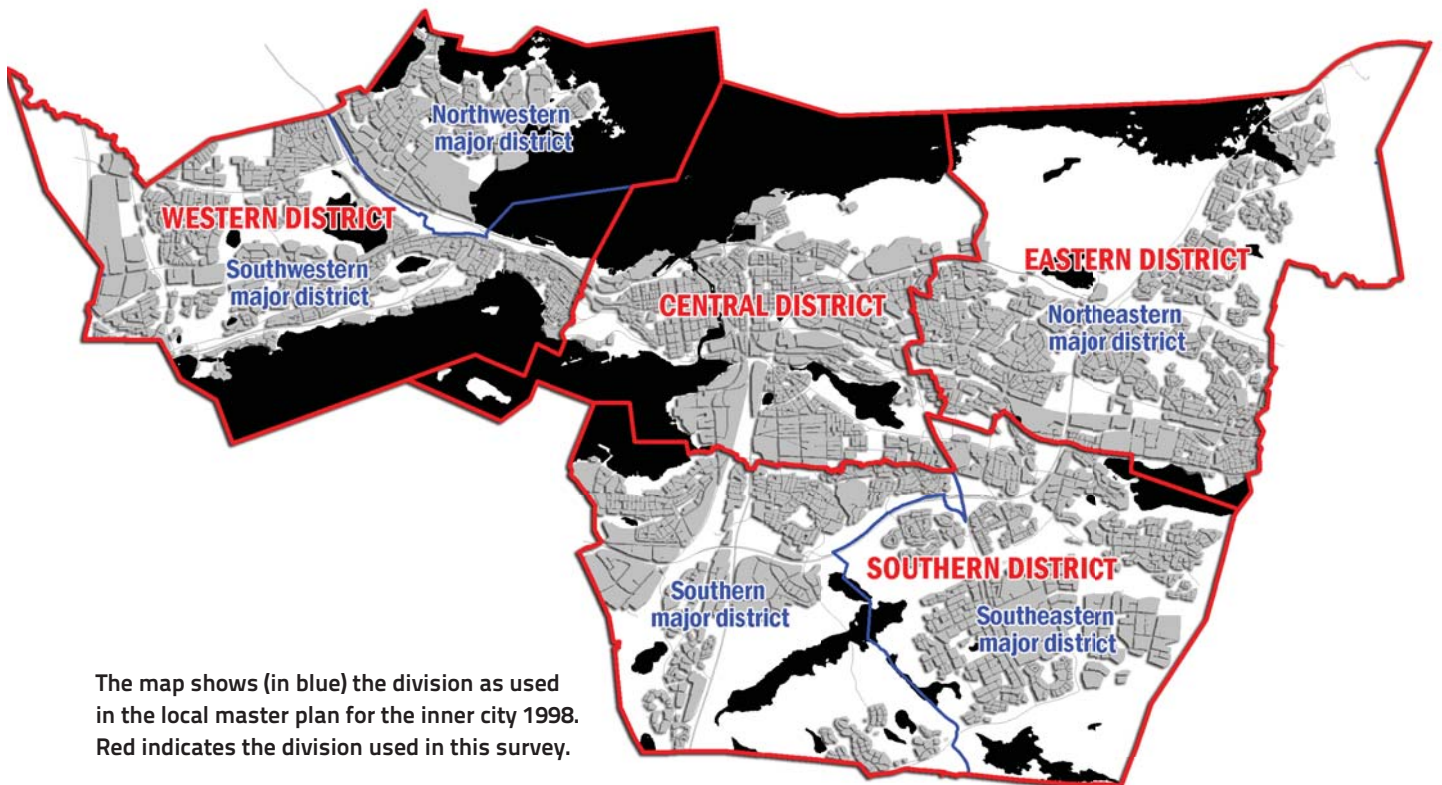
# 3 District-specific study on the development in recent years

This section will study the inner city districts in their current form, as a result of the development taken place after the approval of the local master plan for the inner city 1998.

When describing the city districts, we will present each city district's

special features and role with respect to the other city districts and the region. We will focus on the most important themes of this report: housing, traffic & transport, and recreational conditions, as well as the features and development of the working areas. This study is based

on a division that roughly adheres to the major districts used by the local master plan for the inner city 1998. The same geographical boundaries have also been used in the other reports made for the local master plan for the inner city 2040.



The map shows (in blue) the division as used in the local master plan for the inner city 1998. Red indicates the division used in this survey.



### 3.1 Central district

The **central** district is the centre of Tampere and the entire region. In addition to Tampere's largest concentration of housing, the region's most versatile palette of services and enterprises is also located in the central district. It must also be noted that the city centre's historical building stock is a significant identity factor for the entire region.

#### Objectives set by the local master plan for the inner city 1998

The **aim** was to develop the city centre as a visual and functional centre for the entire central region. The intention was to centralise the construction of tall blocks of flats in this area. The aim was to improve the conditions for the cityscape, for the accessibility of traffic

and transport, and for business activities by implementing plan amendments.

In addition to the infill development sites designated by the partial master plan for the city centre, the aim was to locate significant infill development sites in Hatanpää and Jokipohja (the current Muotiala).

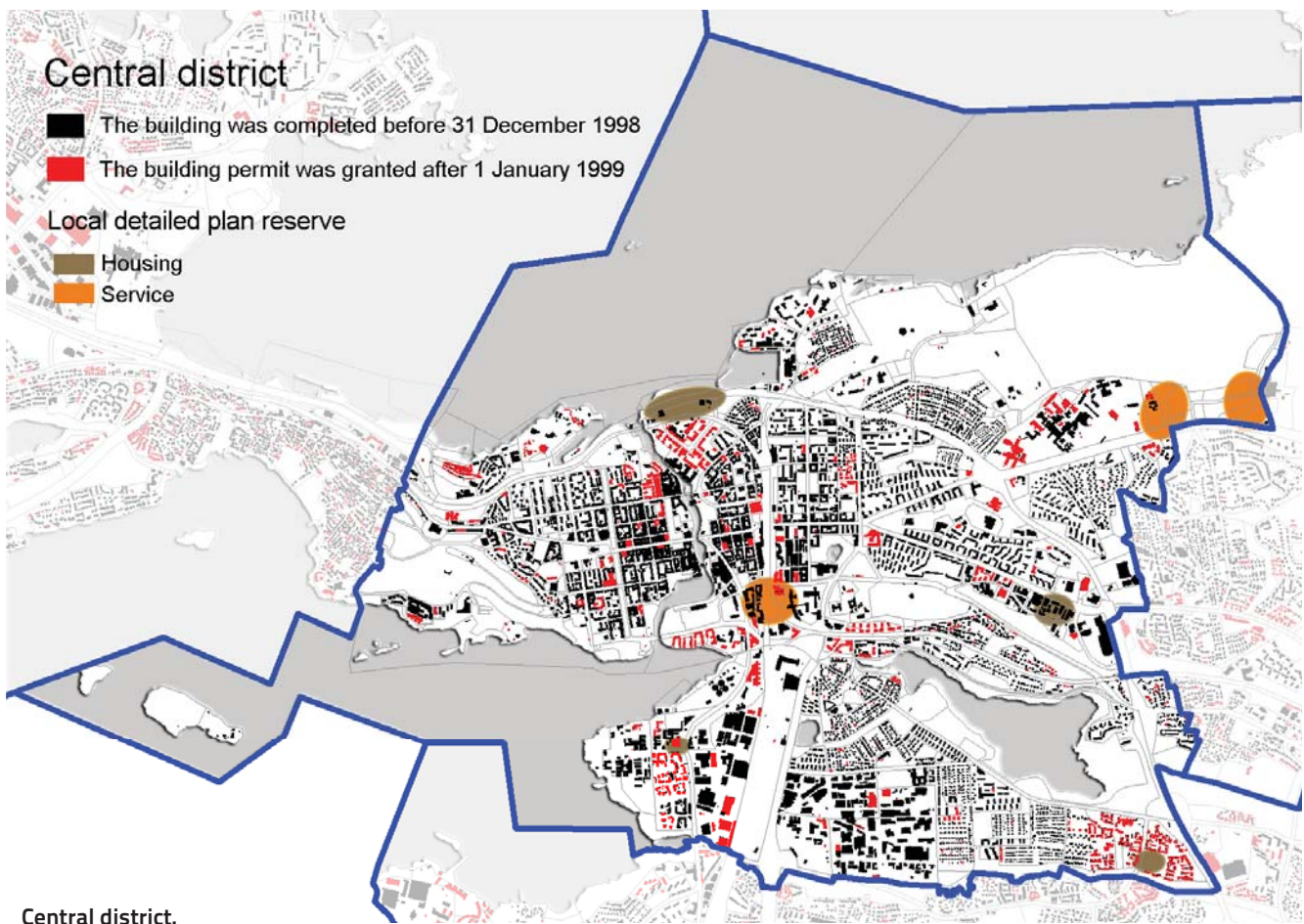
#### Description of the central district's current state

In **accordance** with the local master plan's objectives, the central district has developed as an area dominated by blocks of flats. The district's population has increased by 15,000 residents after the approval of the local master plan for the inner city 1998. As regards housing, the plan reserve covered by local detailed plans has been used efficiently. There

were 66,411 residents in the district at the end of 2013.

The city centre's development has been based on the changing uses and the densification of the areas. Previous factory facilities have been converted into offices and supplemented by housing construction. Some area reservations for industry and traffic have been converted into residential plots. Consequently, the city centre has extended in all directions. The latest development phase has also produced construction on filled shores. The local detailed plans have allowed the utilisation of decks in the infill development of the city centre and in extending the city centre.

After the approval of the local master plan for the inner city 1998, the city centre has extended in many ways. Hou-





sing blocks have been built in the Finlayson and Tampella areas. Ratina is the latest extension of the city centre area. There are infill development areas in Onkiniemi and Järvensivu, and also some in Tammela.

There is new housing in Hatanpää and a new city district in Muotiala. A total of 630,000 gross floor m<sup>2</sup> of new or renovated dwellings have been produced in the city centre area. On the map, the renovated and extended sites have been marked with a red colour within the city structure.

In the city centre, new working and commercial premises have been built on the southern side of the epicentre in Sori and in the northern part of Hatanpää. The construction of new commercial premises is also taking place in Tulli. There has been infill development in the Tampere University Hospital's (TAYS) area, which is the largest working and service cluster in Tampere.

The investments made on traffic and transport in the city centre area have contributed to the development of the property market in the area. The projects to be carried out in the area require a public presence in order to be implemented. In the background, the City of Tampere is a producer of local detailed planning and municipal engineering. Consequently, the situation in the city centre is developing in a direction where

all development is jointly carried out by the public and private sectors. The quality and development of the area is significant to the entire Tampere region, as the city centre is the centre of business activities in the region.

For the part of housing in the central district, almost the entire plan reserve has been used. There will be housing plots in the area covered by the Kalevanrinne partial master plan. The Tampella area can also be extended after the tunnel running beneath the city centre is completed. Particularly in the city centre area, the construction companies have taken an active role, looking for construction sites. According to the plan situation, it is possible to launch projects that produce business and commercial premises in Tulli and Sori.

The epicentre's traffic system has been organised and developed in recent years. Extending the city-centre-like zone will require vigorous measures in order to develop traffic and transport connections as currently, the city centre is bordered by regional traffic routes whose barrier effect for walking and cycling is significant. The efficient linking of the epicentre to the centres of expertise and to the residential areas is an important question regarding the city's development. The tramway is one topical solution in linking the areas to each other efficiently.

In recent years, two partial master plans have become valid in the central district: Kauppi–Niihama and Lake Iidesjärvi, which significantly add to the city centre's palette of green and recreational areas. Furthermore, Pyynikki is located on the northwestern side of the city centre. It is the third significant green area in the city centre area. As regards recreation, Lake Näsijärvi and Lake Pyhäjärvi provide a lot of potential for the city centre area. In recent years, the accessibility of the large green and lakeside areas on foot has received too little attention. These areas could provide an advantage (as regards recreation and tourism) for Tampere, if their use is made easy.

The city centre's green areas function as the city's facade and living room. Their pleasantness and attractiveness are important in receiving residents and tourists to the city centre.

### Special

- Position as a regional centre
- Linking to the other regional centres and city districts
- Location between the two large lakes
- Tammerkoski Rapids
- Topography

### 3.2 Eastern district

The local master plan for the inner city 1998 called this area a northeastern major district. However, the geographical boundaries have remained the same. The eastern district is a residential city district that also includes extensive industrial areas.

#### Objectives set by the local master plan for the inner city 1998

The eastern district is a significant construction area for housing and workplaces. The most significant new

residential area is Ojala, which is dominated by detached housing. Linnainmaa and Holvasti have also made preparations for infill development.

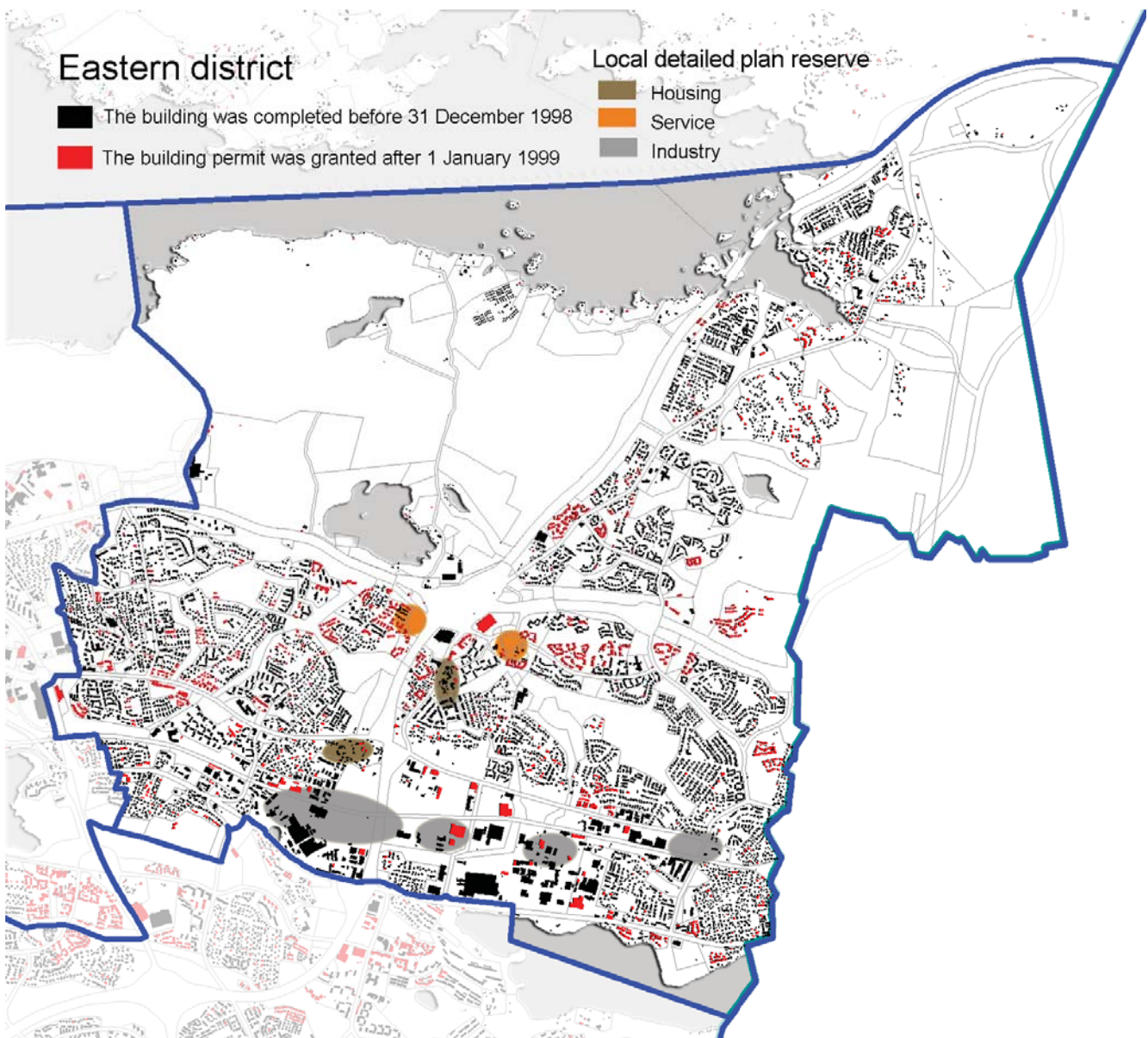
There are significant reservations for working areas in Olkahinen and Atala. In addition, an area for services and administration has been designated for high-quality service functions in Vehmainen (in the territory of Kaukajärvi Manor).

Kauppi-Niihama is being developed as a large recreational area serving the entire city.

#### Description of the eastern district's current state

The dominant land use form in eastern Tampere is housing, as two thirds of all the gross floor area are used for it. Housing is concentrated on an isthmus between Tampere's city centre and Kangasala, and on the north-south zone on the eastern side of Jyväskylätie Road. In the eastern district, there are city districts built in different decades and old farms.

Densification and infill development adhering to the local master plan for the



Eastern district.

inner city 1998 have been carried out in the eastern district. Along with the Koilliskeskus partial master plan, some new housing construction was allowed in the planning area. The residential area of Risso has been built in an area that was an industrial area reservation in the local master plan. The residential area was implemented via a local detailed plan process.

There is no mixed structure in the eastern district. There is no actual centre in the eastern district, except for Koilliskeskus, which has two large retail units and some small-scaled public services. There are no identifiable structural centres in the residential areas, which mostly comprise detached housing. On the regional level, the eastern district is linked to the city by means of the regional (east–west) routes.

The eastern district is characterised by a looser land use than elsewhere in Tampere. There are extensive unplanned areas on both sides of Jyväskyläntie Road. The urban settlement's structure is broken by national and regional traffic routes, the railway tracks, the fields, and by the industrial areas.

There were 34,528 residents in the eastern parts of Tampere at the end of 2013. During the past eighteen years, the eastern district's population has increased by 5,750 residents.

There are two job clusters in the eastern district: Etu-Hankkio and Koilliskeskus. Etu-Hankkio is an industrial area, even though there are also business premises. Koilliskeskus is a commercial cluster at the junction of Lahdentie Road

and Jyväskyläntie Road, and the aim has been to develop it as a district centre. Currently, the public services provided in the eastern district have not been fully implemented in relation to the potential enabled by the local detailed plan.

From the perspective of the market, the location of eastern Tampere is favourable, close to the good traffic connections. There is a fairly easy vehicle connection from the eastern district to the largest working areas, which are located in Hervanta and in the city centre. As regards traffic, the location of Etu-Hankkio is also favourable. Etu-Hankkio is located on the southern side of the Tarastenjärvi waste management site. The development of Tarastenjärvi may also affect the future development of the eastern district.

Out of the district centres that are located in the inner city, the location of Koilliskeskus is attractive as to housing construction, even though there is no mixed structure in the area. The attractiveness of the area for housing construction is probably affected by its good location close to the large recreational areas and the good traffic connections.

In eastern Tampere, there is still some local master plan reserve (defined by the local master plan for the inner city 1998) left. In Ojala, a pending partial master plan will produce a reserve for detached housing.

On a regional scale, the eastern district's traffic connections are good. You can travel towards the city centre along three national-level routes. However, it is challenging to walk and cycle wi-

thin and between the city districts. The large routes and the industrial area prevent all transverse connections within the eastern district and from the eastern district to the other city districts.

In the future, the challenge will be to improve the conditions for travelling in the eastern district, particularly walking and cycling.

The Kauppi–Niihama recreational area is located in the eastern district's northern part. In addition, there are recreational activities in Kaukajärvi in the eastern district's southeastern part. Both recreational areas are located close to housing: the distance from all homes to these recreational areas is a maximum of two kilometres. The problem is accessibility, as regional traffic routes run between housing and the recreational areas, and an industrial area is located between housing and the recreational area. They have no transverse connections.

There are city district parks within the residential areas. The parks have been designed in such a way that an almost unbroken pedestrian and cycling connection could be implemented from the area to Kaleva Church.

### Special

- Traffic routes
- The loosely built industrial areas are a development opportunity
- Development of pedestrian and cycling conditions



### 3.3 Southern district

The inner city's southern district is a loose zone for many operational clusters, which characterise the district, in addition to housing. The varied topography, the large green areas, and the large-scale traffic arrangements also characterise the southern district.

The southern district as referred to in this survey is a district that has been combined from the southeastern and southern major districts of the local master plan for the inner city 1998.

#### Objectives set by the local master plan for the inner city 1998

The aim was to develop Hervanta into a significant and versatile district centre. As regards the residential areas, amongst the significant reservations were the eastern parts of Kaukajärvi, as well as the areas west and south of Hervanta. The most significant working area was Rusko. The idea was to base

the development of the area's traffic network on the current routes, even though the extension of the Sääksjärvi-Hervanta road connection to Kangasala was planned.

There are a large number of regional-level traffic networks in Lakalaiva, Lahdesjärvi, and in the residential areas surrounding them. In addition, a national railway runs in the area. The aim of the local master plan for the inner city 1998 was to develop the area into the southern entrance route to Tampere, including significant job clusters. The intention was to develop the Särkijärvi area into an important recreational area. Vuores was being planned.

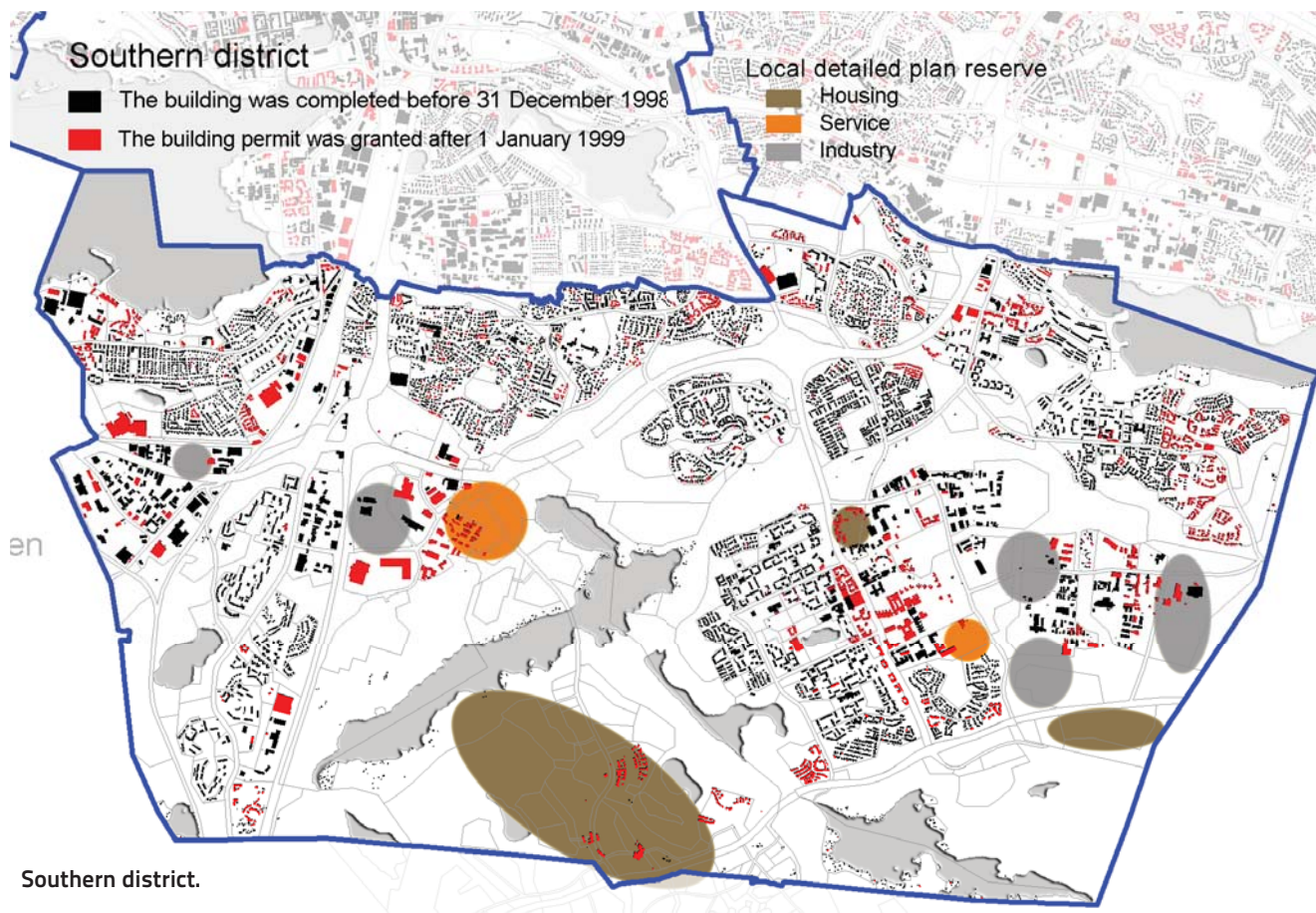
#### Description of the southern district's current state

Out of all the gross floor area in southern Tampere, 65% is in residential use. The history of housing construction in the southern district is versatile. In the

north, there are old wooden housing areas, such as Härmälä, Koivistonkylä, and Viiala. The satellite districts of Multisilta, Peltolampi, Hervanta, Kaukajärvi, and Annala (which were built in the 1960s and 1970s) are located in the southern zone. Lukonmäki and Hallila, which were built between the 1970s and the 1990s, are located between these zones.

The infill development reservations of the local master plan for the inner city that are located in southern Tampere have been implemented, except for the eastern parts of Annala, where some old master plan reserve remains. Two partial master plans for housing, Vuores and Hervantajärvi, have been drawn up for the southern district. Vuores is being built.

Out of the district centres in Tampere, Hervanta has become a mixed, independent centre that provides versatile services. Infill development for housing



has been carried out in the area, and the city blocks are mixed, as well. The attractiveness of Hervanta for students can also be noted in the fact that in the Tampere University for Technology's (TTY) area, residential blocks of flats for students have been built and some of the local master plan's service reservations have been converted into housing construction areas. In recent years, infill development and densification have also been carried out in Kaukajärvi and Anjala (perhaps in the wake of Hervanta).

There were 64,650 residents in the southern parts of Tampere at the end of 2013. During the past fifteen years, the population in the southern district has increased by 12,350 residents. More than one third of the southern Tampere's population live in Hervanta.

There are several significant job clusters in southern Tampere. Currently, the Tampere University of Technology and Hermia are the most prominent clusters. In recent years, the area's development has been strong and independent. There are thousands of jobs and study places and a large amount of research activities in the area.

In recent years, Sarankulma and Rusko (which are old industrial areas in the southern district) have developed in different directions. Sarankulma is becoming more versatile, whereas Rusko is developing as an industrial environment.

The western parts of southern Tampere are located in a logistically favourable place, at a junction of two national

routes. On the southern side of the ring route, the city districts are radially linked to the city centre, but the transverse connections within the southern district are weak or do not exist. The development of the traffic connections is challenged by the demanding topography in the south-eastern part of the southern district, as well as by the barrier effect caused by the national and regional traffic connections. The development of the traffic arrangements is complicated by the fact that the southern district has been built fairly densely.

Lakalaiva and Lahdesjärvi (located at a highway junction) will be developed as an area for trade that has an extensive space requirement and as an area for industrial business activities. Thanks to its location, it has a great potential for becoming the second functional centre in southern Tampere. The place is also located close to the railway. The excellent connections to the airport, and in all directions by rubber wheels, create great opportunities for the development of the business and industrial activities in the area.

Along the green corridors that remain between the city districts, it would be possible to arrange quick transverse connections from one city district to another, particularly for pedestrians and cyclists.

In the southern district, the varied topography and the small and large lakes have caused structural gaps that are in recreational use. In the southeast,

the planning area borders the forest zone between Tampere and Valkeakoski. In other words, there are also forests suitable for recreation on the city district's southern side.

The plan's reserve for housing is good in southern Tampere. As regards the reserve of the local master plan for the inner city 1998, there is still some reserve left in the eastern part of Kaukajärvi. Vuores is being built, but there is still reserve left for the densification of the area for several years. In the future, the Hervantajärvi area will form a reserve for the local detailed plan. Furthermore, possibilities for densifying areas in Multisilta and Peltolampi are investigated by the EHYT project (the Harmonisation of the Urban Structure of Tampere project).

On the basis of the past developments, there may be pressure in Hervanta to carry out infill development for housing. This will concern an increased production of blocks of flats.

### Special

- Successful district centre
- Versatile opportunities for developing business and industrial activities
- Opportunities brought about by the good logistical location
- Challenging topography
- City districts that are poorly linked to each other

### 3.4 Western district

**For the** purpose of this study, we have combined the southwestern and north-western major districts (presented by the local master plan for the inner city 1998) into the western district.

The western district strongly focuses on housing. The area's economic structure has undergone a drastic change over the past ten years.

#### Objectives set by the local master plan for the inner city 1998

**The aim** was to densify the western district's southern parts by infill development and to clarify them by means of a green network. New significant housing construction areas were designated to Rahola, Villilä, and Kalkku. The location of Highway 3 in the district's western part is important to the district's development. The idea was to organise

the western district's northern parts by means of a green network. No significant infill development sites have been designated to the northern part.

#### Description of the western district's current state

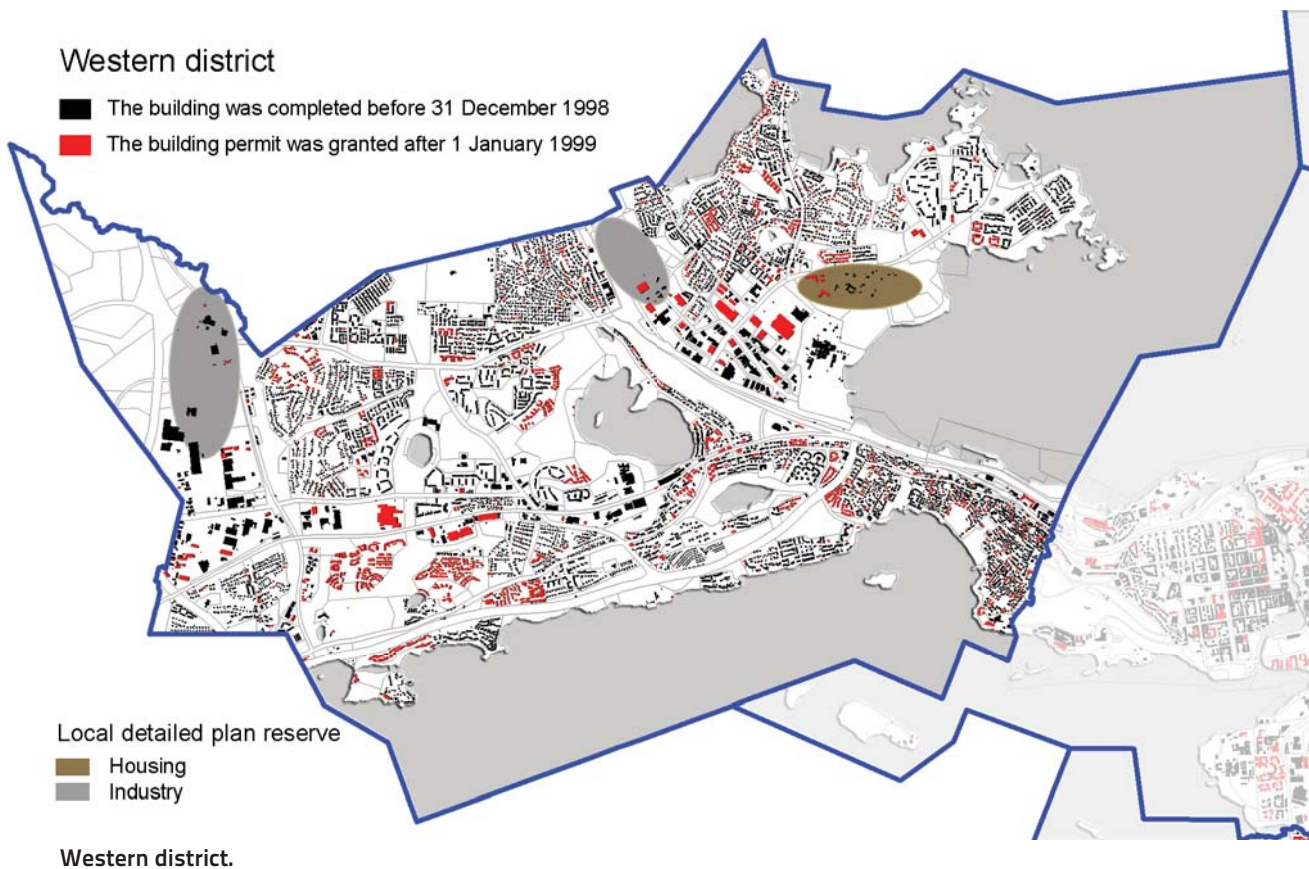
**In the** western district, more than two thirds of the built gross floor area are in residential use. Most of the residential areas are well connected to each other, compact, and have a small scale. New dwellings have been built adhering to the local master plan. The esker and the large traffic areas divide the city district and separate the residential areas from each other. In particular, the barrier effects caused by the main railway line and the highways form gaps in the urban settlement's structure.

Currently, there are 45,260 residents in western Tampere. During the past

eighteen years, the western district's population has increased by slightly less than 6,700 residents.

Western Tampere has two district centres that should function as mixed centres providing high-standard services. So far, the district centres have not attracted the housing market. Apparently, Tesoma has fallen behind the development of the other district centres. Western Tampere does not have elements that would bring demand to the housing market in the same way as Hervanta and the city centre. In the western district, there are no large educational institutions, which would guarantee the market for investments.

The economic structure of the western district has significantly changed over the past ten years. The Lielähti business area, which was formed ten years ago, is the western district's commercial





centre and the most vigorously developed area. Industrial activities are concentrated to Myllypuro.

In the spring of 2014, the City of Tampere bought almost 90 hectares of land and water areas on the eastern side of the Lielähti district centre. Visions have been drawn up for creating a new city district and attracting more than 20,000 new residents to the area. The development of Lielähti will probably also encourage the development of the business and industrial activities in the other parts of western Tampere.

In the autumn of 2014, Mediapolis (an educational institution in the field of media) started operating in Tohloppi. This brings a large number of students to the city district, which may also affect the development of the market for residential flats in the district centres.

There is an ongoing development project in Tesoma aiming to improve the wellbeing and attractiveness of the area. (Please see the Oma Tesoma project.) Currently, the development of the western parts of Tampere is dependent on public investments and the City of Tampere's will. We should consider whether any activities stimulating the market could be placed in Tesoma in the same way as the educational institutions stimulate Hervanta.

The new partial master plans have a plan reserve for the western district. Housing-focused partial master plans

have been made for Santalahti and Niemänranta. In both plans, an old industrial area or an industrial reserve area was converted for housing functions. These areas will function as the first reserve in the infill development activities that will be carried out in this city district.

The Myllypuro partial master plan (regarding an industrial area) was completed in 2009. There is also active local detailed planning in the area. There is an industrial plot reserve in this area.

Vehicle traffic leans on Paasikiventie Road (which runs along the main railway line) within the city district, as well as on the regional level. The connections from the western district to the city centre and to the other city districts are dependent on some parallel main routes.

The pedestrian and cycling connections within the western district and to other areas are challenging. The areas on the northern and southern sides of the main railway line are connected to each other via one main collector street. Within the residential areas, the situation is better, as Tesoma, for example, has good pedestrian connections.

In western Tampere, there are recreational areas in the surroundings of Lake Tohloppijärvi and Lake Tesomajärvi. In Myllypuro, there is a brook running between the industrial area and the houses. The brook and its banks form a nature reserve. From the perspective of recreation, the situation is challenging

on the northern side of Lielähti, which does not have any larger recreational areas than a city district park.

Western Tampere could benefit more from the recreational opportunities offered by Lake Pyhäjärvi and Lake Näsijärvi, if the connections to these large lakes would be seamless. In the south, Nokiantie Road and the railway tracks cause a large barrier effect between the urban settlement and Lake Pyhäjärvi. In the north, it is easy to arrange connections to the lake in the framework of the existing structure. It is only in the Pispalanharju Esker area where the traffic areas currently create a barrier between the houses and the shore.

The development of public transport by means of the tramway and commuter trains would bring significant opportunities for the western district's development. In places, the topography sets great challenges for the development of the traffic system.

### Special

- New city district centre in Lielähti
- Current state and development of Tesoma
- Topography
- The shores of Lake Näsijärvi and Lake Pyhäjärvi
- The Myllypuro industrial area

# 4 Conclusions on the development in recent years

**Master planning** has generated solutions in Tampere for the expansion of and infill development in the city from spatial starting points. The local master plan for the inner city 1998, which was approved by the City Council of Tampere in 1998 and ratified by the Ministry of the Environment in 2000 and 2003, is the most recent extensive master plan to address the city structure. Since the local master plan was approved, the City Council has ratified a total of 14 partial master plans, which have extended and infilled the city's housing and working areas, service network, and green network. A master plan for city centre traffic has been prepared in order to develop the traffic network in the city centre area.

The master plans include space reservations for housing, job functions, and services that are evenly distributed throughout the city. Due to the partial master plans, the inner city green network has now taken on its final form. During the period of validity of the local master plan for the inner city 1998, Tampere has grown more dynamically than was estimated in the population projection of the plan. In response to the pressure generated by this growth, partial master plans have been prepared and local detailed planning that facilitates housing has been directed to areas that were specified in the master plans as industrial and service areas. In the city centre area, traffic areas included in the local master plan have been supplemented through projects, as part of which local detailed plans facilitating housing and office construction have been prepared.

The infill housing development areas included in the local master plan for the inner city 1998 have been implemented in the eastern and western city districts to the extent permissible by land ownership. Also public services and investments relating to the improvement of the traffic network are distributed evenly around the city, and for the most part have been implemented as planned.

The overall development of the construction of housing blocks and the business and industrial sector has been uneven.

From the point of view of planning, dynamically developed business & industrial and service environments include the high-expertise areas of the Tampere University of Technology and Hermia in Hervanta and the Tampere University Hospital area, and the centrally located commercial environments in the centre of Tampere, Lielähti, Koilliskeskus, and Lahdesjärvi. Compared to these, the development of the industrial areas in Tampere has been minor. One notable administrative feature is that projects can be implemented quickly in the industrial and service areas of the inner city when required, thanks to the relatively broad local detailed plan and possible deviation decisions. By contrast, implementation is slower in the city centre, since a local detailed plan must be prepared for each project. In the industrial areas near the city centre there are indications that the model used in the city centre (based on strong public presence, common intent, and external financing) is spreading to the inner city.

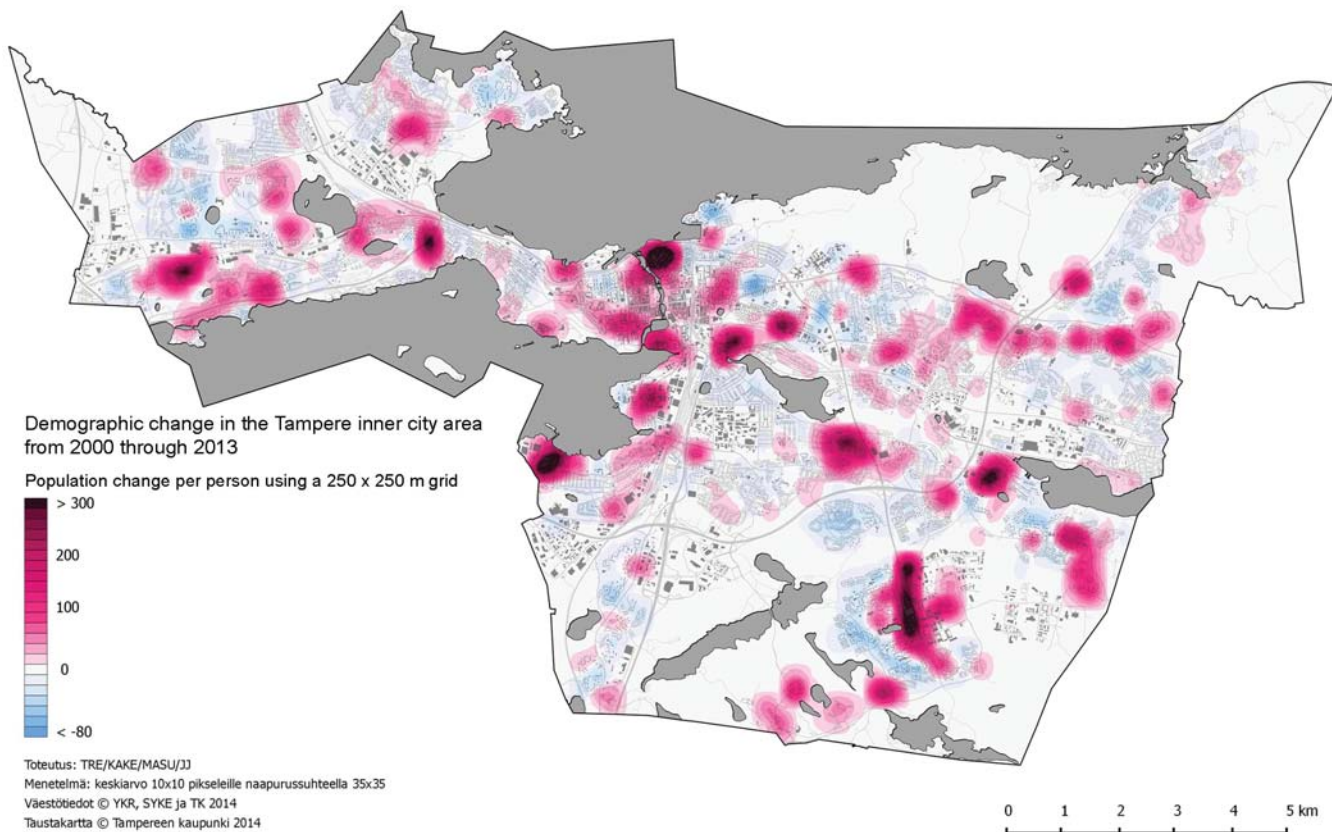
The focus areas of new housing construction seem to be located near the existing strong centres or near good transport connections, especially in eastern Tampere. In the construction of housing blocks, there is a clear positive correlation with the degree of success of the business environments. Of the centre areas covered by a local master plan, the epicentre and the centres in eastern Tampere have been developed with housing construction. On the other hand, centres in western Tampere have not been developed at all. Development has been slow in areas covered by a partial master plan that facilitates housing construction. By the end of 2013, residential areas implemented in contravention of the master plans had almost nine times more residents than areas based on partial master plans that were prepared in the 2000s.

At present, the city has a large proportion of green areas per resident. The protection of natural and cultural heritage sites designated for protection in the local master plans has been most successfully implemented when the protection has been made the main goal of the planning work.

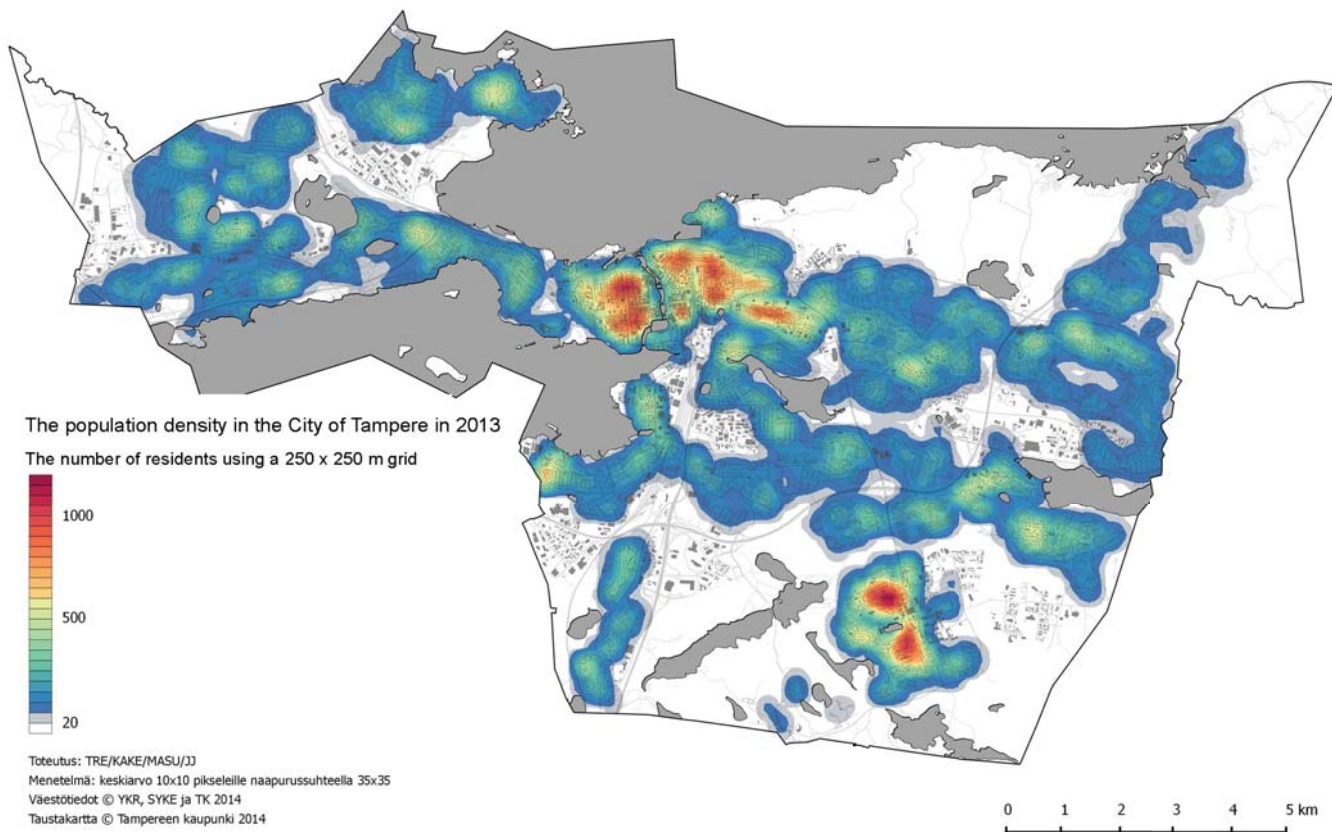
Nearly all the inner city area is covered by the local master plan, providing a preliminary solution for the city structure. In the coming years, the focus of master planning will be shifted from identifying the direction of expansion to monitoring the functional development of the city and offering solutions for the direction and implementation of the focus areas presented in the city strategy, for example. For the green areas, the focus will be on improving the quality and accessibility of these areas on the level of master planning.

## Observations on the implementation of the local master plan:

- › In recent years, construction has been uneven in the various city districts of Tampere. The centres in eastern Tampere have developed strongly. In western Tampere, on the other hand, construction has taken place on a smaller scale.
- › The improving traffic connections or institutions of higher education can have a positive impact on the housing market.
- › Publicly implemented forms of land use: green areas and routes will be constructed systematically.
- › Public investments have been used to influence the housing market and the operating conditions of the business sector. This can be seen particularly well in the centres near the eastern bypass and larger educational institutions.
- › The techniques for general-level planning must be developed so as to support local detailed planning and facilitate more even development of the city area.
- › Monitoring the implementation of the local master plan will, in future, form an important part of the planning work, with the aim being to specify the planning needs of various areas and directing investments within the city structure.



Overall demographic change in the inner city area from 2000 through 2013. The population development of old housing block areas is mainly negative.



The population density in the City of Tampere in 2013. Hervanta and the city centre are especially dense residential areas.



## 4.1 The need for and role of steering in the plan

**The method** of future construction can be predicted to some extent based on the analyses presented in this survey and attention directed to areas where the development needs linked to housing construction and certain business sectors are emphasised.

### Housing

**In the** inner city area, the focus of new construction has been on the construction of housing blocks. In steering infill construction, it is advisable to prepare for facilitating built environments with the efficiency typical of city centre areas, especially near good traffic connections and next to existing centres. The smooth integration of housing with services and green areas should be taken into account more carefully than has previously been the case.

#### Areas with a possible need for housing construction

**1** The Tampere University Hospital area has developed rapidly in recent years, and is now one of the main working areas in Tampere. The area is on the eastern side of the city centre, next to the densely built housing blocks in Kaleva and alongside the Kauppi–Niihama recreational area. The city districts next to the University Hospital (Kissanmaa, Ruotula, Takahuhti, and Pappila) have become more compact than other old city districts in Tampere, due to the infill development plans of old residential areas and to housing blocks built in plots designated in the local master plan for service and industrial use.

The pressure for infill housing construction in the surroundings of

the University Hospital is linked to the extension of the city-centre-like densely built zone, and may be partly due also to the housing demand generated by an expertise cluster similar to Hervanta.

The turning of Teiskontie Road into a boulevard between the University Hospital and Koilliskeskus could provide a solution to the housing shortage and to the extension of the urban structure from Kaleva to the inner city area that is sustainable both environmentally and logistically (for the organisation of public transport).

**2** In addition to the thriving centres, intense housing construction has, in recent years, taken place on the shores of the large lakes. In the city centre and in eastern Tampere, the construction of nearly all infill development areas has been completed. In the east, the Kauppi–Niihama recreational area prevents the use of the shore zone for housing construction.

In western Tampere, the development of the Lielähti area can generate pressure to extend housing construction to the shore zones. Turning the Nokia Highway into a boulevard might be a sustainable solution to the housing shortage in western Tampere.

#### Residential areas where the planning need is linked to stopped development

**3** Tesoma, Multisilta, and Peltolampi are old housing block areas in the inner city area where no densification has taken place since the local master plan for the inner city 1998 took effect. The population development in these areas is now negative. In addition, these areas and the other old housing block areas in the inner city area are now due for renovation. The need for a public presence

and the specific type of this presence needed should be investigated and planned in these areas.

### Business and industrial sector

**I** The attractiveness of the old industrial areas south of the city centre is enhanced by their good location. Construction seems to have slowed in these areas in recent years, and their functions are also diversifying. Much of the land in these areas is privately owned and most of the original industrial operations have ceased.

As with the epicentre, it is possible that these areas will need the strong presence of the City of Tampere and a strong common intent to steer development so as to encourage investment in the areas. This might entail revision of the plans in order to reorganise the areas or investments in the traffic network and in operators that the City wants to keep in the areas.

**II** In part, old local detailed plans are in effect in the industrial areas covered by local master planning. In these areas, the City of Tampere's intention should be clarified. Development trends that are facilitated by the old local detailed plans but are not significant for today's business and industrial operations, or that might even deter businesses that the City wishes to attract to the region, should be eliminated. For example, the old local detailed plans allow for housing to a certain extent.

**III** Myllypuro must be made suitable for entrepreneurial operations, despite the area presenting some obstacles to planning work.

**Services**

In accordance with the City of Tampere’s service network development plan, public services will be centralised. The local master plan should ensure efficient connections between residential areas and services. In planning new construction, the formation of functionally mixed environments should be promoted.

Old industrial areas that have become service-dominated should be better linked with the rest of the city.

**Transport**

The previous comprehensive survey on the transport conditions in the inner

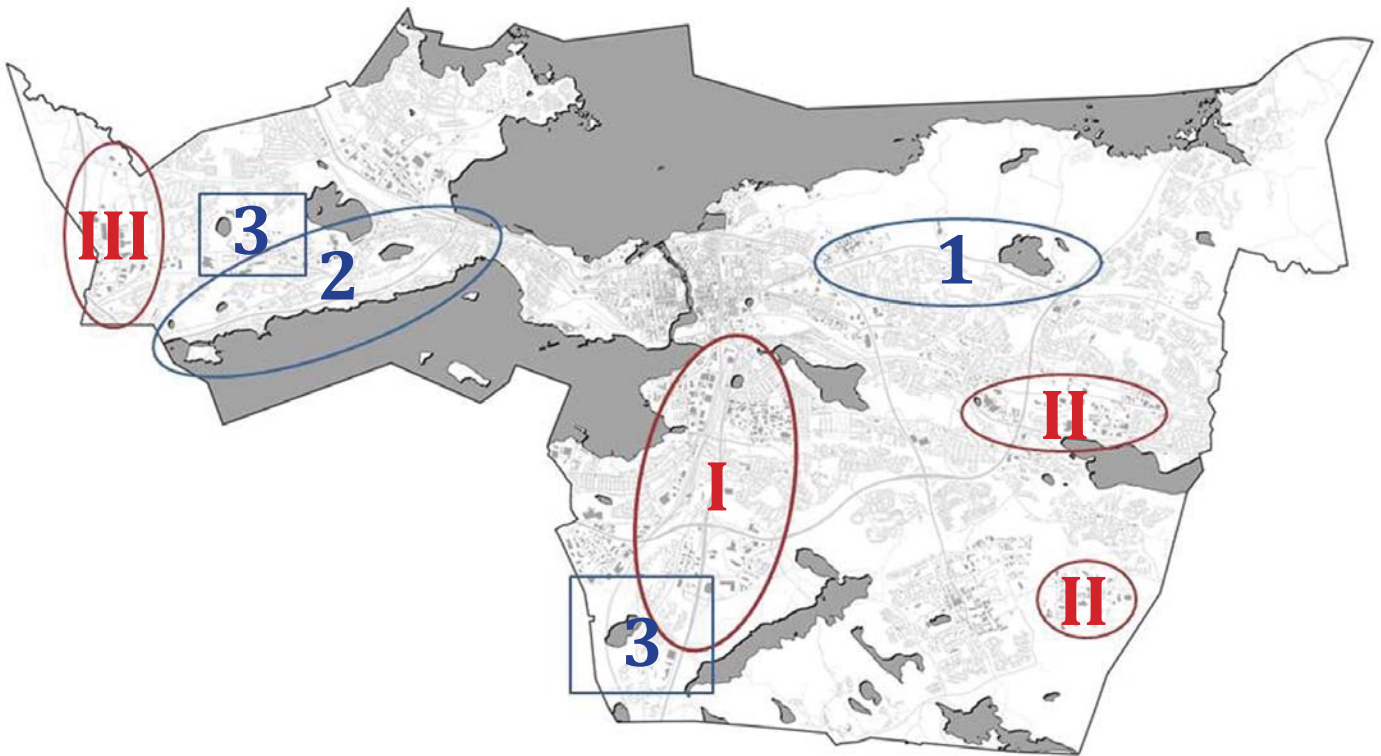
city area was completed in the 1990s as part of the preparation of the local master plan for the inner city 1998. The survey should be updated, and past and desirable future development of the city should be compared to the current transport conditions. For example, improving the conditions for walking and cycling would require a separate and strong programme.

A tramway is being planned in Tampere that would rearrange transport in the inner city area. It will also have a major impact on the location of new construction, as the planning increases the compactness of the areas along the

tramline. In planning the traffic system, the functional mixing of the community structure should be considered as one way of reducing the need for moving from place to place.

**Green areas and protection**

A large number of green areas have been included in local master plans in recent years. Connections between residential and green areas should be improved, particularly for walking, cycling, and exercising.



Planning and steering needs relating to housing construction (1-3) and business and industrial zones (I-III) arising from the analyses.

## 4.2 Purpose of the local master plan

**When the** planning work starts from the local master plan, the actual construction of the city district is estimated to take at least ten years. Preparation of the local master plan should be based on principles that promote highly systematic development of the urban environment, such as the overall cost-efficiency and energy-efficiency of the community structure. The general standard of living is just one of the themes that could steer this kind of planning.

Until now, the development of business areas has been very operator-oriented. The analysis also revealed an increasingly close relation between the planning work and public projects and the markets, due to which various attractions in particular (such as educational institutions, traffic projects, and event arenas) encourage privately-financed development in the areas. The development in Hervanta proves

that the markets are relatively local: development impulses affect the city district in question, and at most their neighbouring city districts, but do not necessarily change the markets on the opposing side of the city.

A local master plan is needed to reflect the general development principles of the city structure. The goals of the general level plan are that the plan expresses the strategic common intent that directs development by presenting (on a map) the location of the main public projects and infill development and their relation to the rest of the city. The plan might also function as a description of the organisation of public services that reflects the City's intent and operating model. The official task of the plan is to promote the planning goals of the Land Use and Building Act regarding the sustainability of the community and the preservation of the values of the area.

The plan can contain themes of a varying strategic and juridical level. The spatial aspect and timescale of the

themes can vary. The preservation and safeguarding of values is a permanent and long-term theme. This allows for strict area specification and ensures that the contextual or formal aspects cannot be opened for negotiation even after a long time. In terms of the service structure, the plan is flexible and lives with the times. With regard to this theme, the plan is also sensitive to market fluctuations and any changes of course.

The theme of directing the development reflects the values and planning models that predominated when the plan was being prepared. All the levels of steering in the plan require monitoring and scheduling. Even the safeguarding of values is linked to programmes if the aim is to achieve the goal specified in the plan. This requires a public common intent and possible investments.

### Purposes and themes of the plan

#### Directs development

- leading projects
- new residential areas and structural changes
- infrastructure

#### Structures services

- location of public services so as to minimise the need for moving from place to place, and in places where they support the selected district centres
- development of the transport system so that it supports services

#### Secures values

- protection
- recreation
- equality of the modes of transport



## SOURCES

### Printed sources

- EHYT. Yhdyskuntarakenteen eheyttäminen Tampereella, Tampereen kaupunki, Kaupunkiympäristön kehittäminen, Maankäytön suunnittelu 2011
- Hyvinvointipalvelut. Palveluverkon kehittämissuunnitelma. Tampereen kaupungin tietotuotannon ja laadunarvioinnin julkaisusarja C 1/2009.

### Internet

- Korkein hallinto-oikeus, KHO:2014:54, <http://www.kho.fi/fi/index/maatoksia/vuosikirjapaatokset/vuosikirjapaatos/1396332184156.html>, 20.5.2014
- Oma Tesoma. <http://www.tampere.fi/tampereinfo/projektit/kaupunkiymparisto/omatesoma.html>, 22.7.2014
- Tampereen kaupunkiseudun palveluverkkoselvitys 2008. Tampereen seutu. [http://www.tampereenseutu.fi/seutuhankkeet/raportit\\_ja\\_muut\\_julkaisut/](http://www.tampereenseutu.fi/seutuhankkeet/raportit_ja_muut_julkaisut/), 24.7.2014
- Tampereen kaupungin tilastollinen vuosikirja 2010-2011, Tampereen kaupunki, Tietotuotanto ja laadunarviointi, ISSN 0355-2810, Juvenes Print—Tampereen yliopistopaino Oy, Tampere 2013, [http://www.tampere.fi/material/attachments/t/6EZg82aYW/Tampereen\\_tilastollinen\\_vuosikirja\\_2010-2011\\_verkko.pdf](http://www.tampere.fi/material/attachments/t/6EZg82aYW/Tampereen_tilastollinen_vuosikirja_2010-2011_verkko.pdf), 25.8.2014

### Local master plans

- <http://www.tampere.fi/kaavatjakiinteistot/kaavoitus/yleiskaavoitus/voimassaolevatyleiskaavat.html>
- Tampereen kaupunki. Kantakaupungin yleiskaava 2040, Työohjelma 24.11.2013. [City of Tampere. Local master plan for the inner city 2040, work programme 24 November 2013.]
- Tampereen kaupunki. Tampere kantakaupungin yleiskaava 27.6.1998. Selostus. [City of Tampere. Local master plan for the inner city 27 June 1998. Report.]
- Tampereen keskustan liikenneosayleiskaava 2006, selostus [Master plan for Tampere's city centre traffic 2006, report]
- Lahdesjärven osayleiskaava, 2013, selostus [Lahdesjärvi partial master plan, 2013, report]
- Kauppi-Niihaman osayleiskaava, 2011, selostus [Kauppi Niihama partial master plan, 2011, report]
- Koilliskeskuksen osayleiskaava, 2004, selostus [Koilliskeskus partial master plan, 2004, report]
- Vuoreksen osayleiskaava, 2005, selostus [Vuores partial master plan, 2005, report]
- Santalahden osayleiskaava, 2008, selostus [Santalahti partial master plan, 2008, report]
- Pyynikin osayleiskaava, 1991, selostus [Pyynikki partial master plan, 1991, report]

### Local detailed plans

- Tampereen kaupunki. Asemakaavat ja asemakaavamuutokset 1999-2013. Kaupunkiympäristön kehittäminen, intranet – paikkatieto. [City of Tampere. Local detailed plans and local detailed plan amendments 1999-2013. City Planning and Infrastructure, intranet – GIS data.]

### Deviation decisions

- Tampereen kaupunki. Poikkeusluvut 1.1.1999 - 14.3.2014. [City of Tampere. Deviation decisions 1 January 1999 – 14 March 2014.]



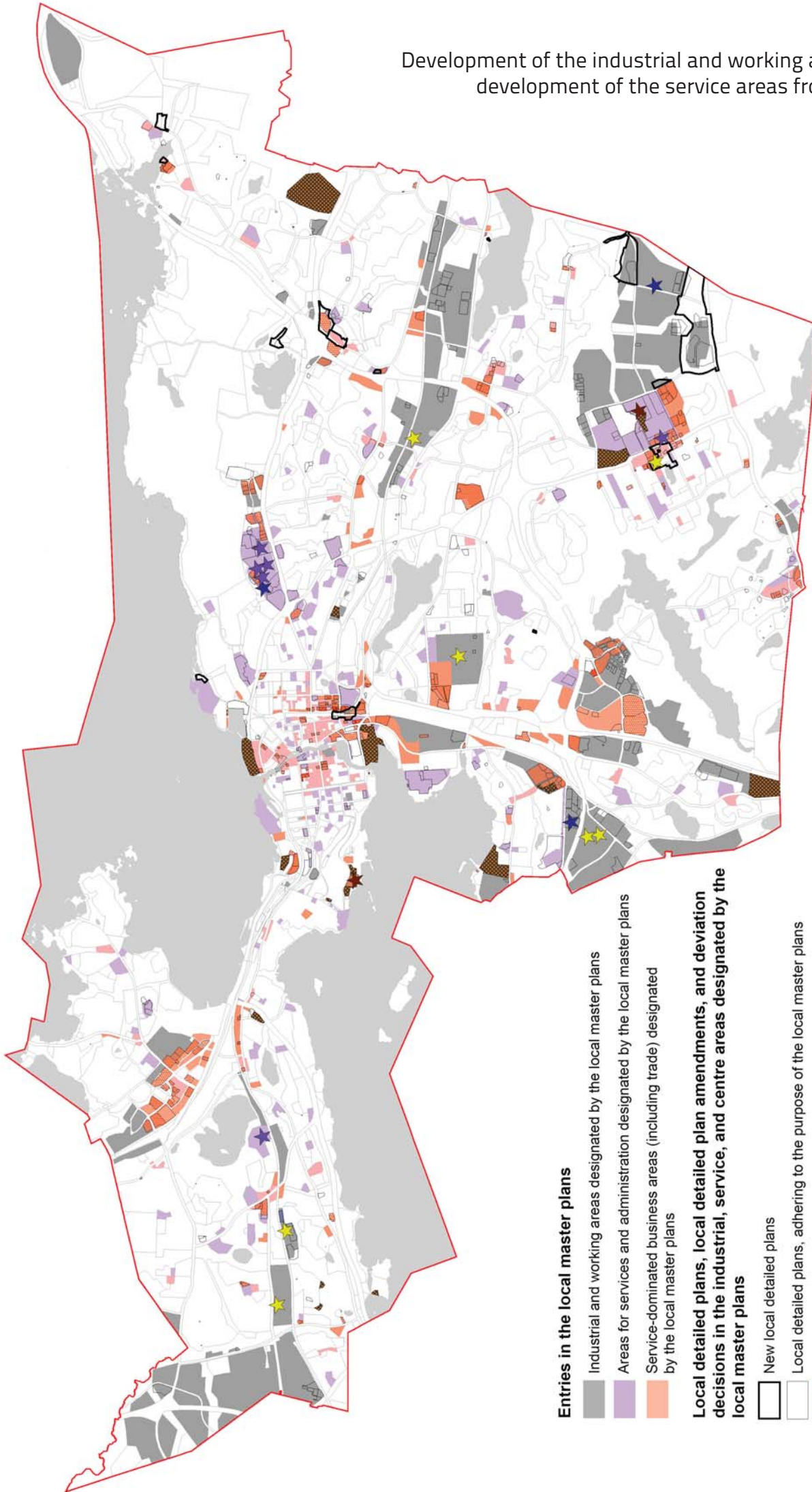
Statistical data on the areas that are covered by the local master plan for the inner city 1998  
and need to be ratified

### STATISTICAL DATA, AREA TO BE RATIFIED

<i>Areas (in hectares) of the different land use categories</i>		
Land use category	<i>total</i>	<i>%</i>
A-1	133,9	
AK	762,8	
AP	2691,8	
<b>total A Residential areas</b>	<b>3588,5</b>	<b>27,8</b>
C-9	24,1	
C-10	26,8	
C-11	41,8	
<b>total C Areas for centre activities</b>	<b>92,7</b>	<b>0,7</b>
P/r	8,3	
PY	408,1	
PK-2	102,7	
PK-3	129,7	
<b>total P Service areas</b>	<b>648,8</b>	<b>5,0</b>
T	316,5	
T-3	506,9	
TY-1	160,7	
<b>total T Industrial areas</b>	<b>984,1</b>	<b>7,6</b>
VLK	384,2	
VLM	1007,8	
VLL	669,4	
VU	175,3	
<b>total V Recreational areas</b>	<b>2236,7</b>	<b>17,3</b>
R-1	1,1	
RA-3	12,4	
RT	7,6	
RP-1	36,5	
<b>total R Holiday areas</b>	<b>57,6</b>	<b>0,4</b>
L	793,1	
LR	145,0	
LV	21,8	
L varaus		
<b>total L Traffic areas</b>	<b>959,9</b>	<b>7,4</b>
E	15,7	
ET	66,0	
EH	50,8	
EA		
EP		
<b>total E Special areas</b>	<b>132,5</b>	<b>1,0</b>
SL-3	143,5	
SL-4	55,1	
<b>total S Protected areas</b>	<b>198,6</b>	<b>1,5</b>
MU	15,5	
<b>total MU Agriculture and forestry areas</b>	<b>15,5</b>	<b>0,1</b>
SE	948,6	
<b>total SE</b>	<b>948,6</b>	<b>7,4</b>
W	3034,6	
<b>total W</b>	<b>3034,6</b>	<b>23,5</b>
<b>TOTAL</b>	<b>12898,1</b>	<b>100</b>







**Entries in the local master plans**

- Industrial and working areas designated by the local master plans
- Areas for services and administration designated by the local master plans
- Service-dominated business areas (including trade) designated by the local master plans

**Local detailed plans, local detailed plan amendments, and deviation decisions in the industrial, service, and centre areas designated by the local master plans**

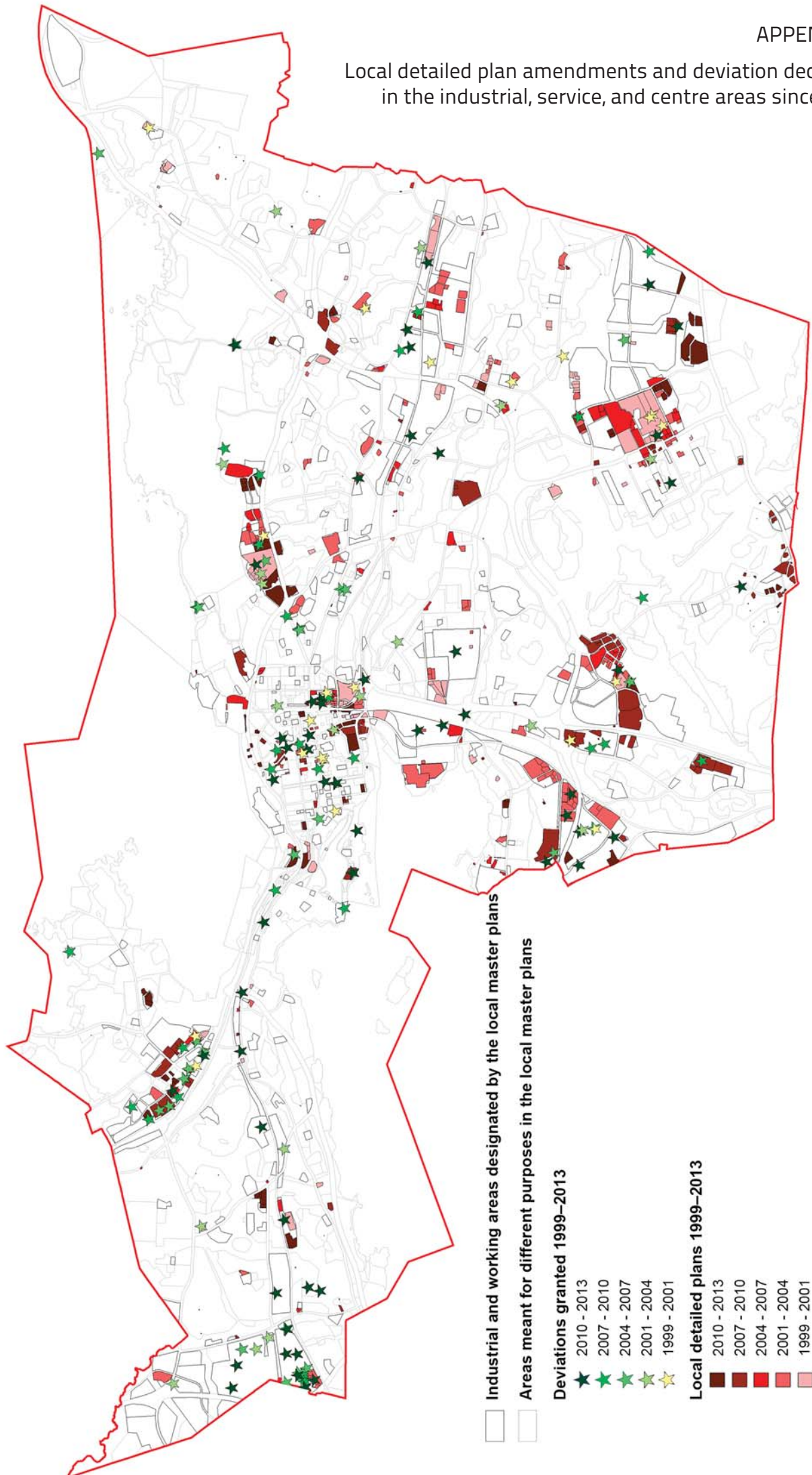
- New local detailed plans
- Local detailed plans, adhering to the purpose of the local master plans
- Industrial, service, and survey area converted into housing by means of a local detailed plan
- A local master plan's industrial area converted into a service plot by means of a local detailed plan
- A local master plan's traffic area converted into a business plot by means of a local detailed plan
- A local detailed plan has increased the share of business premises in part of the industrial or service plot, or on the entire plot

- A cluster of expertise allowed by a deviation decision (educational, research, and business activities)
- Pastime facilities allowed by a deviation decision
- Office premises allowed by a deviation decision
- Housing allowed by a deviation decision





Local detailed plan amendments and deviation decisions in the industrial, service, and centre areas since 1999





### **A general level method description to identify housing units implemented based on a local detailed plan in contradiction to the local master plan:**

1. Class A planning units (more than half of which have been implemented in some other than A or C areas of the local master plan) are sought from the local detailed plans. The gross floor m2 data of the selected planning units are recalculated based on the volume of surface area lying outside the A or C areas of the local master plan. (E.g. The building right is 1,000 gross floor m2 based on the planning unit, and 75% of the planning unit is outside the A and C areas >> the new gross floor m2 value = 750 gross floor m2).
2. Next, the normative planning units indicated for housing that lie outside the A or C areas of the local master plan are selected to be shown on the map as points.
3. Finally, the two resulting map levels are combined, and a new map level is created in which all planning units of each plan are combined to form one focal point that contains the gross floor m2 data of each planning unit.

### **A general level method description to identify construction based on the previous process.**

1. Residential buildings constructed during the inspection period (e.g. 2000-2013) that are within the local detailed planning unit areas chosen in the previous step are selected to be shown on the map as points. The gross floor m2 are combined, and new focal points and total gross floor m2 data are generated based on the buildings included in different plans.

### **Population that has moved to the area due to implemented construction:**

1. Areas are selected that contain the buildings of the previous phase as points.
2. The population within these buildings is selected.

### **A more detailed method description to identify housing units implemented based on a local detailed plan in contradiction to the local master plan. (Also takes account of normative planning units!)**

1. Areas that have been indicated in the local master plan for any other use than housing or centre functions (Not Like A% OR C%) are selected from the Yleiskaavan käyttötarkoitukset (forms of land use used in the local master plan) database. L and k areas are still included at this stage.

2. The planning units that have been verified (VAHVPVM) between 2000 and 2013 and their function 'Like A%' are selected from the kaavayksiköt alueina (planning units as areas) database. Then, the areas that intersect with the areas of Query1 (Select kaavayksiköt alueina WHERE (KAYTTOTARK Like "A%" AND VAHVPVM Like "20%") AND kaavayksiköt alueina.OBJ intersects Query1.OBJ).
3. Add new columns to the Query 2 table: "ProportionSumAC", "suhdeAC", "ProportionSumLk" and "suhdeLk".
4. The ProportionSumAC column is updated according to the volume of surface areas of the planning units that overlap with the A% or C% areas of the local master plan. Next, the osuus (proportion) column is updated to describe the area that does not overlap with the A% or C% areas of the local master plan (in %), based on the surface area of the planning unit and on the overlapping surface area (i.e. (AREA-ProportionArea)/Area\*100).
5. The same calculation is completed to L and k areas using the columns reserved for them. This information will be used to identify planning units that have been implemented mainly in the A+L areas of the local master plan.
6. Planning units more than half of which are located in areas other than the A% or C% areas of the local master plan (i.e. other than the areas indicated for housing in the local master plan) (ratio > 50%) are selected (This aims to take into account the precision difference between / scale of the local master plan and the local detailed plan >> a minor vs. major deviation).
7. In addition, planning units of which 10-50% is located in the A or C areas AND of which 50-90% is SIMULTANEOUSLY located in the L or k areas. (Takes account of planning units that have been almost fully constructed in the A+L areas. This kind of deviation is considered minor in this survey.)
8. A new gross floor m2 value is calculated for the selected planning units based on the ratio calculated in Query 4. The result is presented as a gross floor m2 value that describes the volume of building rights that contradicts the local master plan. (formula: building rights\*ratio/100)
9. Finally, planning units of the plan type 3 (normative planning unit, verified 2000-2013, function like 'A%') that are located outside the A and C areas of the local master plan are selected from the kaavayksiköt pisteinä (planning units as points) database. Please note! This ensures that also normative planning units are taken into account in the calculations.
10. The results are combined into one map level showing planning units that have been implemented contrary to the local master plan, and showing also an estimate of the volume of gross floor areas of construction in these areas.





**TAMPEREEN KAUPUNKI**

