POSTERS & REPORTS

PERNILLA HAGBERT

POSTER PRESENTATION

- 1 WHAT YOU SAY (CONTENT PRIORITIZATION)
- 2 HOW YOU SAY IT (CHOSE APPROPRIATE MEANS OF REPRESENTATION)
- 3 HOW YOU BRING IT ALL TOGETHER (LAYOUT)

A GOOD POSTER

- A SHORT TITLE THAT SUMS UP & DRAWS INTEREST
- SUMMARIZED ARGUMENTATION & PROPOSAL HIGHLIGHTS
- USE MAPS, PLANS, DIAGRAMS, TABLES & ILLUSTRATIONS
 TOGETHER WITH TEXT! (THINK ABOUT CAPTIONS &
 INTEGRATION)
- THE RIGHT USE OF GRAPHICS, COLOR & FONTS
- + (DON'T FORGET TO INCLUDE YOUR NAMES!)

SUMMARIZED PROPOSAL

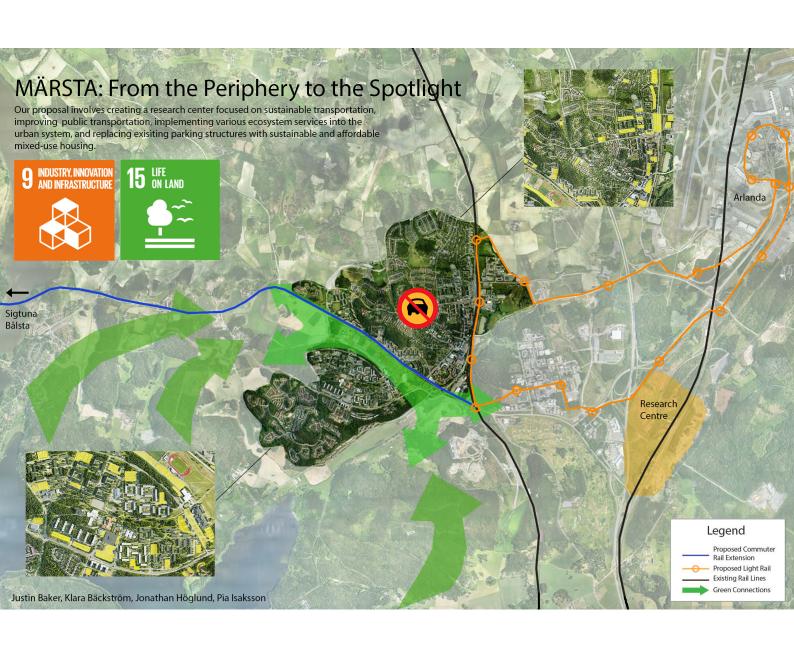
- WORK WITH AN OVERARCHING STORY:
 - PROBLEM FORMULATION;
 - CHOSEN AREA/FOCUS;
 - CHOSEN SDGS & FRAMEWORK OF ANALYSIS/ METHODOLOGY;
 - HOW PROBLEM IS ADDRESSED IN RELATION TO THIS AREA, USING THIS PARTICULAR FRAMEWORK;
 - PROPOSED FUTURE DEVELOPMENT/PROCESS
- ILLUSTRATE REFERENCES (TEXT & BUILT) IN AN APPROPRIATE WAY
- USE DIAGRAMS TO SHOW MAIN TAKE AWAYS

MAPS, PLANS, DIAGRAMS & ILLUSTRATIONS

- THINK OF WHAT IT IS YOU WANT TO SAY WHAT SCALE IS THE MOST RELEVANT? (RELATIONS BETWEEN OR WITHIN)
- DON'T PUT TOO MUCH INFORMATION IN & USE CLEAR LEGENDS (WHAT DO THE COLORS/LINES/ICONS MEAN)
- YOU CAN USE "ZOOM INS" TO ILLUSTRATE CERTAIN
 POINTS, BUT A READER SHOULD BE ABLE TO FOLLOW THE
 LOGIC OF ANALYSIS (HOW DOES IT CONNECT BACK TO
 THE STORY AS A WHOLE?)
- MAKE SURE PLANS/IMAGES ARE CONSISTENTLY ORIENTED & BE CLEAR WHEN CHANGING SCALE!

GRAPHICS, COLOR & FONTS

- KEEP IT SIMPLE & CLEAN THINK OF WHITE SPACE!
- USE HIGH QUALITY IMAGES
- CHOSE A COLOR SCHEME & STICK TO IT! (IF YOU MAKE DIAGRAMS/PLANS ETC IN A DIFFERENT PROGRAM - MAKE IT COHESIVE! SET A SPECIFIC RGB OR CMYK)
- HIERARCHY & LEGIBILITY (MOST IMPORTANT INFORMATION SHOULD BE READABLE FROM ABOUT 2-3 M!)
- ONLY USE A MINIMUM NUMBER OF DIFFERENT WAYS OF DIFFERENTIATING BETWEEN LEVELS OF HEADLINES, TABLE OR FIGURE TEXT, & MAIN TEXT



Sustainable Märsta 2030



TRAM LINE

Sigtuna

Built in phases

population

· Services the whole

Reduces commuting

Tram to Sigtuna

Tram in Marsta

Tram in Valsta

Tram to Arlanda

TRAM ROUTE

SIGTUNA

Buildings and services, boulevard

Proposed Tram stops

times and car use

· Main station will be

Märsta, also servicing

Arlanda Valeta and

The main issues that were identified in Märsta in relation to Sustainability Development Goals 9 and 10 include a lack of innovative industries and a car reliant transport system which hinders the achievement of Goal 9. A divide between Märsta and Valsta both socioeconomically and physically that negatively affects equality and the achievement of Goal 10

Our proposal has three interlinked plans focusing on creating a modern sustainable industrial sector, improving public transport links and bridging the gap between Märsta and Valsta by implementing education programs and a connection of the built environment

The participation of the local and global private sector as well as the municipality, the residents and regional stakeholders such as SLL and SL will be key to implementing the proposals. Policywise we will introduce changes that will facilitate and complete the proposed changes to the physical environment

ITE OVERVIEW

Wind turbines

MÄRSTA

Wind turbines buffer 500m

TRAM VISION

Tram stop distance 500n

New bus route

New Tram stop distance 750m

New Tram stop distance 1000m







- · Sustainable and innovative industries
- · Reshoring of jobs in the industrial sector
- · Focus on the production of sustainable products such as CLT and battery technology
- Introduce an advanced recycling plant in the Brista area · Localised workforce will be recruited
- · Public-private partnership with new education facilities to train people to work in these industries
- Makes Märsta a regional and national centre for production of sustainable goods

TRAMLINE

Section 11a



OFFICE +

EDUCATION

INDUSTRIAL AREA PLAN

INDUSTRY





Group 9: Anton Frisk, Emma Höglund, Kajsa Lundström, Max Smyth

POLICY CHANGES

- Affordable housing to counter the risk of gentrifica-
- tion within the new developed area Tax incentives and funding support for the new
- industries No emission zone in Märsta targeted at heavy traffic

to make industrial transport sustainable

TRANSPORT

INFRASTRUCTURE

Improving the infrastructure by encouraging public transport use, making it more equitable and increasing its connectivity within the entire municipality. To do this, we propose a tramline connecting Arlanda to the new industrial area, Märsta centrum, Valsta and Sigtuna

The speed limit on road 263 will be lowered to 30 km/h. This will help transform the road into a street with a more urban character with a more safe environment for pedestrians and cyclists

ARLANDA







INEQUALITIES



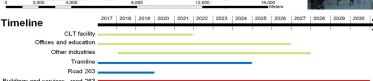
















RSTA IN THE MIDDLE



vision for a sustainable future -

Forget cars. Forget stress, fossil fuels, loneliness and segregation. Imagine a future of connections, meetings, well spent time and freedom. Welcome to a connected Märsta. Welcome to Märsta in the Middlel

In 2030 Märsta is a central part of the Stockholm - Uppsala region. It is well connected at a regional level by railway, and commuters who live here feel that they live close to their work place in Uppsala or Stockholm. It is well connected at a local level by buses, walk paths or biking lanes, and it is easy to go where you want to go. There are not many cars anymore. As climate and sustainability issues has been taken seriously people do not consume as many products any more, but instead they spend more time on social activities, creating memories and strong networks of friendship. The dependency on Arlanda has decreased, and the local industry has a more sustainable approach, e.g. by creating sustainable fuel for the airport and the local transport businesses trucks or simply by no longer using fossil fuels.



ISSUES —

Largest amount of greenhouse gas emissions comes from the transport sector in the municipality End station on the commuter train - railroad track not connected further north



Noise pollution

A Housing shortage

Märsta's economic dependency on Arlanda



A starting point for sustainable city development is a well-developed and reliable transportation infrastructure, which is relevant in both goals. Our main focus in SDG 9 and SDG 11 is therefore transport infrastructure.

MIDGÅRDSVALLEN

Railroad capacity has reached its limits



Road 263 has been narrowed and it has a low speed limit. As a city street, it is easy to cross and have been implemented.

Middårdsvallen is an inclusive safe and accessible green public space and a vibrant housing and local business area and meeting place. People in Märsta comes to Midgårdsvallen in all seasons, Märsta comes to Midgårdsvallen in all seasons, taking part of outside sports activities and inside activities in the organisation facilities on the ground floor of the residential buildings, The area s easy to reach by public transport, since all bus. ines go to Midgård.



STATION AREA



Dense, regionalised, localised. The station area has become teeming with life, with trains connecting to not only Uppsala and Stockholm, but

There is a new bus terminal here, connecting the trains and buses and a let = trains and buses, and a lot more housing and ser-vices. East of the station industries associated with sustainability have been established and connected with transport businesses. With the creation of sustainable fuel solutions the transport businesses are no longer dependent on fossil fuels. There is more work available here, and in combination with the stronger regional connection Märsta is now depending less on Arlanda for jobs.





resulted in 10 positive outcomes, 6 neutrals and 1 negative outcome on SDG 15 "life on lar

PUBLIC TRANSPORTATION

The railway extension is an important part of the proposal. The bus traffic and the commuter train is an integrated system where both parts are heavily de pendent on one another and a change in the commuter train system will result in effects on the bus traffic and vice versa. Therefore the bus traffic is included



BUS: The bus lines have been improved and they are better con-nected with the new and larger transit nodes of Midgårdsvallen, Märsta Centrum, the Station area, Sigtuna and Arlanda. Another change that has occurred is an increased bus ride frequency that can cope with a decreased car usage and an increased popula-tion. The buses are driven on renewable fuel.

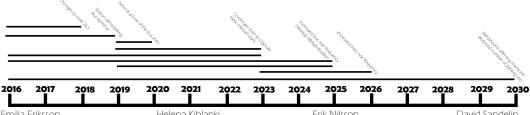


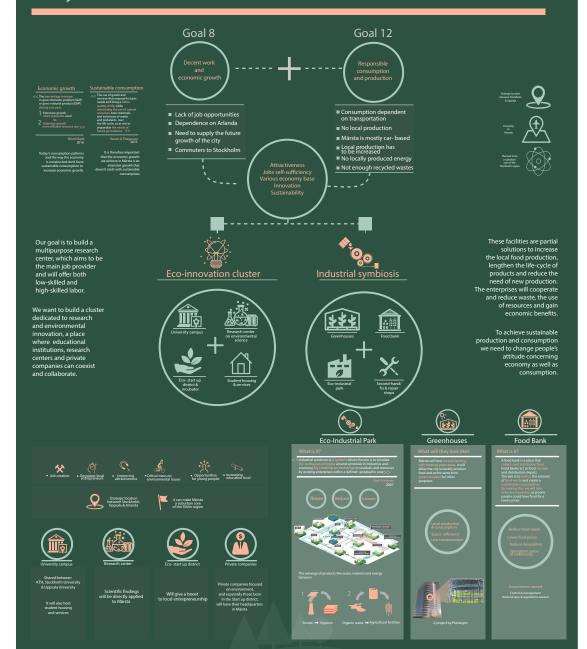
TRAIN: In 2030 it is easy to travel to and from Marsta with IRAINE in 2030 it is easy to travet to and from warsta with commuter train, since two more tracks has been built on the East Coast Line between Märsta and Uppsala so both region, and local trains can use the tracks. Märsta is now a node in the Stockholm - Uppsala region.

STAKEHOLDERS



TIMELINE









Ecological footprint and biocapacity in Sweder



Märsta in 2050 will be characterized by local production, local work and local life. Everything will happen at the local scale. Märsta will change its consumption patterns. Its people will repair instead of discard, produce instead of consume, share instead of down. This circular economy will reduce waste, build relationships, and create a sense of community. Märsta will be a joy to navigate by bike and on foot. Its streets and roads will belong to pedestrians, bikes, and mass transit instead of cars. Märsta and Valsta will be knitted together with a new center oriented around food production, sustainable city life, and education. Märsta will be connected with other growing regions in the north without going through Stockholm. Job, leisure, and educational opportunities will be made available to residents of the region without needing to commute in and out of Stockholm. Märsta will have new mass transit connections to the wider world beyond Sweden. Linkages from the Atlantic to the Baltic and from Skåne to Norrland will connect at Märsta, enabling people and goods to smoothly move across all of Scandinavia. Märsta will develop without depending on Arlanda airport. Work opportunities will be found within Märsta itself, and the importance of the airport will diminish. Märsta will be connected to its surrounding biosphere so all living beings can share the city and contribute to its welfare. One will be able to walk across the city without leaving green space, and the city's vegetation will clean its water and air naturally. We are excited to present to you this vision of a shared, connected, and integrated Märsta.



Vision for a sustainable Märsta in 2050

AG 2805 SUSTAINABLE PLANNING AND DESIGN | A SUSTAINABLE SCENARIO FOR MÄRSTA | GROUP NO 2 | Mustafa Sherif - Emma Johansson - Annika Lesem - Peng Wu - Daria Borovyk

Regional connection 2016

Regional connection 2050

märsta for marsha



- Climate Change
- Peak Oil
- Reached planetary boundaries
- Cultural and religious conflicts
- Inter- and intragenerational injustice



GLOBAL MIGRATION

by 2050

scenarios









~200 Mio. migrants¹

~2 Mio. migrants ~500.000 migrants ~40.000 migrants

SUSTAINABLE MÄRSTA IN 2050

Integration of 40.000 new inhabitants

- Development of three new residential areas
- Densification of existing urban areas
- Community supported buildings and institutions, like community kitchens,
- "House of One" church, community gardens, indoor & outdoor public spaces
- Inter-generational and -cultural housing
- Education on culture







When Marsha was five, she moved to Märsta from the Maldives. She had to move because her home was destroyed by the rising sea levels. In her new hometown, she found a community, where she can practice her culture and learns! skills for living a sustainable life.





- Connection of the green sourroundings with urban green spaces
- Supporting biodiversity in existing green space
- Preserving natural green space, if possible



Energy

- gas, I
- Geothermal energy, wind energy, solar, bio gas, hydropower
 - · Education on energy-saving behaviour

• Decentralised energy supply from:

· Energy-efficient buildings

Green connections

Emission-free transportation

- Good bike lane network and expanded bike-parking
- Two tram lines: Arlanda-Märsta-Sigtuna and "circle" tram connecting Märsta's centrums
- Two mobility hubs supporting electric cars and car shar-
- Primarily pedestrian roads and car-free areas
- One-way streets



- Food production on local farms and rooftop gardens
- Shops and markets selling locally produced products
- Production of clothes and bikes in local factories
- Restaurants using locally produced food

Local production and use





REPORT

- 1 WHAT YOU SAY
 (IN WHAT ORDER)
- 2 HOW YOU SAY IT (LINES OF ARGUMENTATION)
- 3 HOW YOU BRING IT ALL TOGETHER (RED THREAD)

MAPS, PLANS, DIAGRAMS & ILLUSTRATIONS

- PLACEMENT IN RELATION TO TEXT
- MAKE SURE TO PROVIDE CAPTIONS OR DESCRIBE IN ADJACENT TEXT - IT SHOULD BE USEFUL!
- (IF USING IMAGES YOU YOURSELF HAVEN'T MADE/TAKEN, CLEARLY STATE SOURCE!)
- THINK OF THE READER SHOULDN'T HAVE TO JUMP TOO MUCH BACK AND FORTH BETWEEN PAGES
- MAKE SURE PLANS/IMAGES ARE CONSISTENTLY ORIENTED & BE CLEAR WHEN CHANGING SCALE!

GRAPHICS, COLOR & FONTS

- DON'T OVERDO IT!
- KEY IS THAT THE READER CAN ORIENT WHERE IN THE TEXT ONE IS (PAGE NUMBERS IS A GIVEN)
- CHOSE A COLOR SCHEME & STICK TO IT
- HIERARCHY & LEGIBILITY USE ABOUT THREE LEVELS & BE CONSISTENT WITH HOW YOU FORMAT
- ONLY USE A MINIMUM NUMBER OF DIFFERENT WAYS OF DIFFERENTIATING BETWEEN LEVELS OF HEADLINES, TABLE OR FIGURE TEXT, & MAIN TEXT

Equality through connections Ana Karen Alanís Jiménez Gustav Carlsbrand Ulrika Gustafsson Sona Huldt Sustainable Urban Planning and Design Sofia Huldt

KTH Royal Institute of Technolo

Equality through connections

1. **Abstract**

We live in a world full of inequalities and the city of Märsta is not an exception. In a municipality where 28% of its inhabitants are born abroad (Sigtuna kommun, 2016), inclusion should be one of the most important focuses of improvement. The UN established 17 Sustainable Development Goals regarding subjects from poverty to climate change. By implementing two of them this report will plan for Märsta to be a more sustainable city not compromising any of the other goals.

The purpose of this report is to create a proposal that will form an equal community for everyone by vanishing barriers between areas and connecting them in a sustainable way, also new modes of transportation will be implemented. As well, Citizens will have the opportunity to be part of this change with an increase in citizen

This has been done by applying different methods, like getting to know the area by visiting it, finding relevant reference projects and doing discourse analysis on them. By implementing the proposal Sigtuna will become a more sustainable and equal municipality. The implementation will require investments by the municipality. The investment will however pay off in terms of equality and sustainability and it's also

The geographical area of Märsta 2.

Märsta is the central county of the municipality of Sigtuna. It is located approximately 40 kilometers north of the inner city of Stockholm, a little over seven kilometers from Arlanda airport's main entrance. Märsta is pointed out as the northernmost city core in the regional plan of Stockholm, where this polycentric city structure is promoted for a sustainable development of Stockholm (RUFS 2010, 2010). The area Märsta-Arlanda is today quite sparse and has weak internal connections. Making Mārsta, Arlanda and Arlandastad into a more integrated and connected area is mentioned in Stockholm Regional plan. Arlanda airport provides many job opportunities and the surrounding area is considered to have good potential for business services while housing would not be suitable because of the noise pollution (RUFS 2010, 2010). Nowadays Märsta is connected to Arlanda by buses and to the center of Stockholm by commuter train.

Sigtuna consists of several quite scattered living areas, Arlanda airport and it's surroundings. Today the connections between these areas mainly consist of big roads for cars, with separated smaller lanes for bicycling and walking. The only public network between Märsta and Arlanda is by bus, but according to the municipality most people living outside Märsta do not know this. The focus area for this proposal will be the area between the center of Märsta and Valsta, south west of Märsta. Valsta was built during the million program and is therefore characterized by a separation of traffic and a structure where Märsta and Valsta is geographically separated from each other (Stockholms stad, no date).

Sustainable Transportation Research Center

The current development plan for the Arlanda area, *Airport City Stockholm*, is a project managed jointly by Sigtuna Municipality, the state-owned Swedavia, and the property development company Arlandastad Holding. A new "airport city" is taking shape around the airport and the vision emphasizes the good opportunities for both large and small companies to grow and develop, expecting to create 50,000 new jobs by 2030. The *Airport City Stockholm* project is planned as a 'cluster' mainly focused on logistics and transport companies, conferences and services, but also on technology and research. One of the areas, located in the middle of the airport city, is *DriveLab* – a centre for training and development in road safety, green transports, and an arena for the future automotive industry (ibid.)

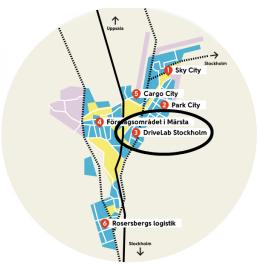


Image: Airport City Stockholm - Urban Design Strategy (2013).

Despite new job opportunities being created, there is an issue regarding dependency on jobs in connection to the inherenetly unsustainable aviation industry and on raised levels of consumption. Therefore, our proposal contains an alteration of the existing plan for *Airport City Stockholm* by implementing a research centre for sustainable transportation instead of the proposed *DriveLab*. The research centre will focus on developing new forms of sustainable transportation, and it is our hope that the research conducted here will lead to technological innovations within the transport sector, helping to improve issues with carbon emissions and other harmful environmental effects. Märsta is a great location for this type of research since it is strategically located close to a major highway, railway, and international airport, as well as highly ranked universities and institutions, including Uppsala University, Swedish University of Agricultural Sciences (SLU) and KTH.

Segersäng, the current situation

The following section will present the current situation of Segersäng:, what is there and what is not, and also what possibilities to work with. This current-state-analysis will later be used as a basis for future development and possibilities. The municipality's current plans for Segersäng and Nynäshamn in general are summarised in Appendix B.

What is there

As Stockholm is becoming more dense and congested, people choose to move to rural municipalities with proximity to Stockholm such as Nynäshamn and thus Segersäng. Even though Segersäng's population is smaller than the Garden City's, which consists of around 30,000 inhabitants (Howard 2007), it could be compared to a Garden city because of this movement and decentralization phenomenon.

Segersäng is a village, which was first developed in 2003, and with a growing population, due to the railway, Segersäng has gone from a place consisting of summerhouses towards a permanent residential area with about 600 inhabitants. This is a positive trend of an increasing number of inhabitants, which seems to continue. The village holds a rural and hilly structure where villas, wooden houses painted in red (see figure 2.), are sprawled out along blind alleys surrounded by an infinite amount of greenery, a feature that makes the are less welcoming for visitors (Bagaeen & Uduku 2010). This implies a significant character, which gives the area its countryside feeling and strong identity.

Nynäshamns Municipality (2015) made a report of all of the villages in the municipality. An interesting note and also a bit alarming is that the fear and feeling of safety is relatively low in Segersäng. It is noted that the inhabitants of Segersäng are afraid of people that drive their cars too fast and burglaries. Both these fears are projected on 'the others' and people that do not live in the community, which in the long run could be connected to the fear of safety in gated communities (Bagaeen & Uduku 2010). According to the arguments by Bagaeen and Uduku (2010), a patterns of self-wanted segregation, people moving out from a city and building up their own isolated and exclusive community, can in the long run lead to areas associated with gated communities. The unilateral building structure and quite high land prices for the area attracts a certain group of people, which can increases the segregation in the region. The situation within Segersäng could be seen as a non-segregated area due to the homogenous group living there and the lack of another type of group, outcast or not.

Rural hilly structure
Red villas
Sprawl
Blind alleys
Greenery
Countryside feeling
Stroing identity



Figure 2. Segersäng (Nynäshamn municipality 2012)

Preconditions

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The development of contemporary Ösmo is closely tied to the railway stretching from Stockholm to Nynäshamn, established in 1901. The location of the railway is vital for the opportunity for everyday commuting for residents in and around Ösmo. East of the railway runs road 73, the logistical backbone of Nynäshamn municipality, it connects to Stockholm and are since 2010 classified as highway. Through the southern parts of Ösmo runs another of the municipalities most important traffic routes, road 225, leading from Södertälje and connects to road 73 outside of Ösmo. These infrastructural routs are central to the current and future planning and development of Ösmo and surrounding areas.

From the 1960's and onwards Ösmo was the main residential area for employees of the military base on the island Muskö, 20 kilometres east of Ösmo. Hence, much of the planning in Ösmo have been focused on providing living space for families while the working place, for the mostly male workforce, was located outside the community. Dominant places for employment in Ösmo today are within public services as elderly care and school institutions, well as in small private firm This shift in employment structure demark change in focus from traditionally male domin ed sectors of the labour market into today's f on sectors primarily coded as female worksp In current commuting trends for the munici shows that a larger share of men commute er municipalities for work, while females commute within Nynäshamn to a larger d

This could mirror the composition of the labour market as a large share of working opportunities in Nynäshamn is connected to public services.

The contemporary planning is steered by a number of key documents, a detailed comprehensive plan for Ösmo were developed in 20061 and points out a number of development areas in, mostly focusing on possibilities for densification and extended supply of services, as well as connections to the contemporary public transport. In 2009 a detailed plan for densification of the central parts, and further exploitation of areas south of Ösmo were presented2. In the current municipal comprehensive plan for Nynäshamn³, from 2012, the focus on densification is stressed further. A goal of 500 new dwellings in the central parts of Ösmo is presented; of these most will be multifamily housing. South of Ösmo an area consisting of around 350 new dwellings, primarily consisting of single-family housing, is planned. The planning of new housing thus enforces a spatial separation between dwelling

Regarding accessibility the detailed comprehennstresses the need for further investments and cycling environments in put larger focus on sustainable modes of traffic - cycling, pedestrian and public transport. Currently, car based traffic is highly important for the municipality as a whole, and also for Ösmo, both for freight traffic connecting from Södertälje and Stockholm to Nynäshamn harbour area, as well as for private commuting traffic. Patterns of car ownership shows a large share of male ownershipt, which could point towards a gendered pattern of transport mode choices, even though solely ownership do not portray actual use.

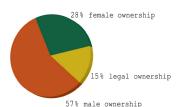


Figure 10: Percent of car ownership between the sexes in Nynäshamn municipality Source: Trafikanalys A major intervention in the traffic infrastructure of Ösmo is the planned conversion of Nyblevägen into an urban, city street, with safer environments for pedestrians and cyclists. These plans are mentioned both in the detailed comprehensive plan from 2006 and in the 2009 detailed plan for central and south Ösmo.

In the municipal comprehensive plan public spaces are noted as areas for consumption of public and private services, but also as important spaces for interaction and leisure activities. No further specific plans for the public spaces of Ösmo are presented in this document. A separate plan for refurbishment of Ösmos most central public space are currently being developed, a need that was discussed already in the detailed comprehensive plan from 2006. In the current plan a number of key challenges are lifted, as lack of functions, poor supply of services, unsatisfactory aesthetics and physical design. Constructions of the first phase are already begun, in this phase parts of the central parking area and entrance road will be refurbished and bus stops will be relocated to stop the busses from entering the inner parts of the central area.

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