

PROJECT REPORT - 2023



ADEQUATE HOUSING

FOR JÄRFÄLLA

AG2129 - Project Sustainable Urban Planning

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INTRODUCTION

Most institutions and citizens in Sweden agree that there is a housing shortage. But what defines a housing shortage, and who experiences it?

The official Swedish definition does not entail a physical shortage of units, but rather measures of overcrowding, strained household economy, how often one moves and the amount of adults still living with their parents (Boverket, 2023). This suggests that the housing shortage in Sweden is closely tied to the issue of affordability. In fact, international analysts have calculated that Sweden's housing market is one of the most overvalued and unaffordable ones in the world, relative to rents and disposable income (Christophers, 2013). The prices of condos in Sweden went up 800% between 1996 and 2021, and the prices of villas in Stockholm increased 550% (Cervenka, 2022). Between 1991 and 2022, the cost of living in a rental apartment has more than doubled in Sweden (Hyresgästföreningen, 2023).

Housing affordability is a crucial issue and its impact extends beyond individual households' implications to the wider economy and environment (Mulliner and Maliene, 2011). Expensive housing significantly constraints household budgets, limiting not only expenditure on essential items such as food, services and transportation to work but also reducing the savings capacity for emergencies, further education and retirement (Anacker, 2019). Indeed, according to the National Financial Inspection, many Swedish households have small liquid assets, and SCB says 20-30% cannot handle an unpredicted expense of 12.000 SEK (Cervenka, 2022).

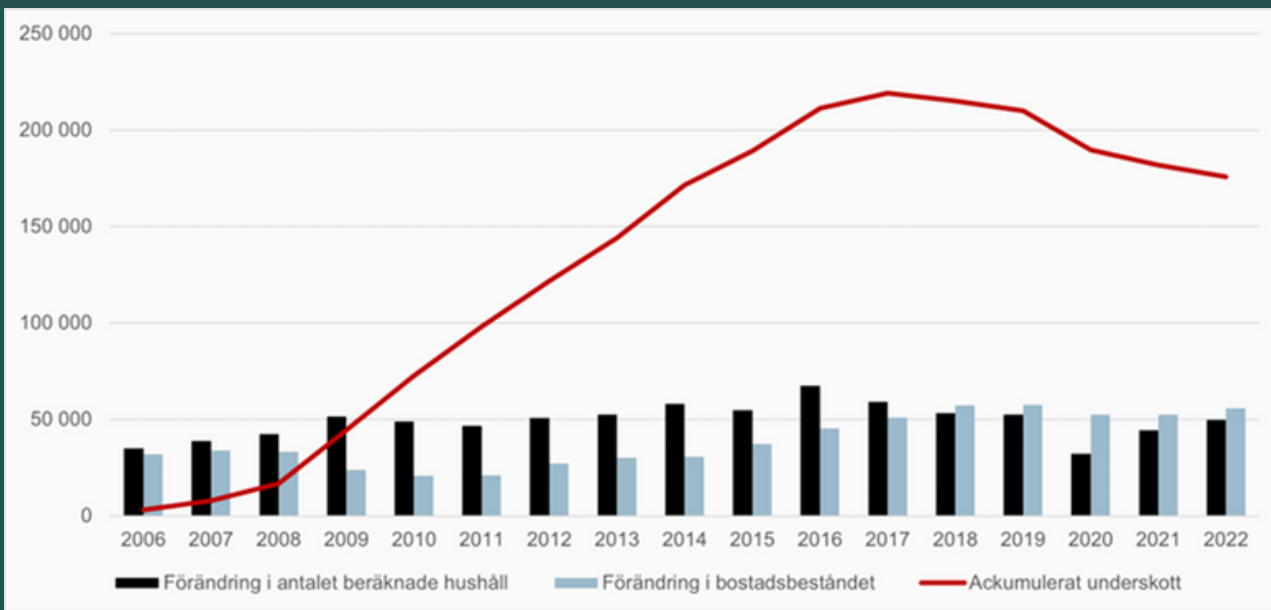


Figure 1. Estimated annual demand for new housing compared to housing construction from 2006-2022. Source: Boverket (2023).

The ‘urban effect’ described by Tonkiss (2020), explains how contemporary wealth inequality patterns exacerbate injustice, and often lead to profound social divisions and exclusions in the society. The underlying factors that contribute to the current situation are multifaceted, including economic, social, and political dimensions. In this context, housing acts both as a product and producer of the urban political economy, strengthening existing social hierarchies and economic disparities (Wedepohl, 2023).

During the past decade, Swedish cities have faced a housing deficit, unable to meet the needs of a growing population (Henriksson, 2018).

The forecast of housing needed to eliminate the deficit indicates that 67,300 new dwellings should be built annually from 2023 to 2030

As shown in Figure 1, the forecast of housing needed to eliminate the deficit indicates that 67,300 new dwellings should be built annually from 2023 to 2030 (Boverket, 2023). Despite this, the housing sector is under stagnation due to rising construction costs due to economic and geopolitical factors.

Boverket (2023) identified that the crisis manifests in three key areas:

- affordability
- accessibility
- suitability

Affordability is compromised by structural shortages and inflated prices, affecting low-income, young, and elderly households. Rising energy costs and interest rates exacerbate this issue.

Suitability issues arise from a mismatch between supply and the varied needs of households, including an ageing population and apartment sizes.

In essence, the housing shortage is not merely quantitative but also qualitative, affecting disposable income and market accessibility.

In a presentation by Järfälla municipality, which this project is based on, the civil servants identified overcrowding and strained household economy as issues in their vulnerable areas (Westin, Henricsson and Falk, 2023). This woke our interest in centring our project around housing in Järfälla.

As has been clear from this introduction, there are several issues related to the complexities of housing vulnerability, meaning that it is not enough to merely address affordability.

Instead, this project will focus on the more comprehensive term “adequate housing” (Mulliner and Maliene, 2011). Since many issues related to housing are structural or above the municipalities’ jurisdiction, and since Järfälla does not have a definition of affordable or adequate housing (‘Questions to civil servants about housing policies in Järfälla’, 2023), the focus of this report will be to provide a framework of Adequate Housing for the municipality.

The framework will be shaped so it can be used within the municipal jurisdiction, as a definition of Adequate Housing to base strategies on. It is also meant to be used as a framework to assess adequacy of housing in Planning projects and existing areas, or as a guide for creating and maintaining adequate housing.



OUR GOALS

Järfälla does not have a definition of affordable housing and municipal tools are often insufficient to combat structural socio-economic inequalities. After looking into the main issues related to housing, we identified that affordability is only one aspect to consider when addressing housing policies.

To address this shortcoming we decided to:



A NEW FRAMEWORK

To provide a guidance for the municipality to assess the adequacy of existing and planned housing developments to ensure that strategies align with sustainable socio-economic goals and foster equity.



EVALUATION

To serve as a form of investigation to identify the distinctive characteristics and needs specific to each location to facilitate the achievement of overarching goals and the development of relevant solutions.



NAVIGATING AHEAD

To facilitate a smooth integration of the framework into the municipality's operations where collaboration among professionals and diverse stakeholders occurs at every phase and thus supports critical reflection on identified obstacles to overcome them.

METHODS

The project group started by creating a project program which included the main issues to be addressed, aim, delimitation, possible theoretical frameworks, preliminary suggestion of methodology and a timetable for the process.

The study was divided into 5 stages:

1 LITERATURE REVIEW

After that, a qualitative study was conducted where each group member made their own literature review on a certain aspect of Adequate Housing. The literature reviews were conducted by searching the KTH Library, browsing the web for scientific articles and studying public documents. This step was crucial in order to gain an understanding of housing research in general as well as in the Swedish context. The literature reviews also focused partly on the Stockholm area and Järfälla to have a theoretical ground for the continuing project. That is also why this study was done first. However, the project group conducted additional literature research throughout the project when the need arose, as new perspectives and data were found continuously.

2 DATA AND RESOURCES

The group gathered the most relevant and important data to start on the report. Throughout the project, the group worked simultaneously on the report, a poster and a presentation. Several maps showcasing current circumstances and issues were created using QGIS and Illustrator. The next step was to start constructing the framework for Adequate Housing, using the data from the literature reviews. To start answering the first research question, six principles that describe Adequate Housing were chosen and their possible applications were formed. This was done by reading each others' literature reviews and discussing as a group. After that, the group figured out how to show the framework visually by designing pedagogical logotypes in Canva. This was shown in the midseminar presentations along with other findings that were in the early stages.

3 INTERVIEWS

Additionally, an interview study was conducted, consisting of four interviews. Three of the interviews regarded the renovation project in Sångvägen, and one written correspondence with the municipality regarded Järfälla's housing policies in general. The questions were formed by identifying where data was missing. The three oral interviews were with Hyresgästföreningen, Järfällahus and a local resident in Järfälla, respectively. All individuals will remain anonymous.

4 BUILDING OUR FRAMEWORK

The group then started researching each of the six principles and how they can be defined and described for Järfälla in particular. That way, the framework can be used for assessments of existing residential areas but also as a base point of reference for new projects.

5 CASE STUDIES

Three geographical areas in the municipality were then chosen as case studies to apply the framework to and thus answer the second research question. The three areas each represent different scales and phases of the Planning process. The Million Program area, Sångvägen, was chosen because there is an ongoing renovation project there, Söderhöjden was chosen as there is a planned infill project for the area while it also has social challenges. Lastly, Barkarbystaden was chosen as the third focus area as it is a large-scale project with only new development.

By using earlier findings from the literature, as well as conducting new document studies and browsing Järfälla's digital platforms to collect data on the case studies, the group analysed each area with the proposed framework.

6 RESULTS

The results and analysis were then compiled visually on the poster, which was presented to Järfälla municipality before the report and presentation were done. The poster included the most important findings that could be visualised effectively.

The report was then finalised and a discussion was written to reflect critically on the method and outcome of the project.



Foto: Presentation for Järfälla's municipality at Jakobsbergs folkhögskola on December 8th, 2023

HOUSING IN SWEDEN

To understand the current challenges Sweden faces regarding housing affordability, it is important to review the socio-economic and political conditions that shaped the housing policies and market. Sweden faced a housing crisis after World War I due to economic downturns and rapid urbanization. Deregulatory measures led to a wave of evictions and low-quality housing. In response, the Folkhem concept emerged in the 1930s, leading to the establishment of the Allmännyttan, public rental companies, which were non-profit and under municipal control. This housing strategy aimed to provide good quality housing for all and eliminate the national housing shortage, providing economic security and welfare without specifically targeting the most vulnerable in society (Wedepohl, 2023).

THE MILLION PROGRAMME

The Million Programme (1965-1974) was a significant initiative funded and led by the state, aimed at alleviating a severe housing shortage at the time. Although the programme primarily focused on constructing single-family homes and low-rise structures, it gained recognition for its high-density complexes.

To achieve low costs and meet ambitious targets, large-scale industrialised construction methods were employed, which utilised standardised prefabricated concrete panels. The prefabrication process involved creating a limited number of interior and exterior designs that were repeatedly used.



Foto: Sångvägen, a project of the Million Programme in Jakobsberg
Source: Järfällahus

This broad approach to different housing types made it possible to adapt the houses to suit various family needs. Most of the dwellings were in suburban areas (Henriksson, 2018; Hall and Vidén, 2005).

This period was characterised by substantial investments in many different areas, which is why it is often described as "The record years".

Today, many of these areas need technical renovations to maintain livability. They also need to be updated to today's energy efficiency standards (Järfällahus, no date). This housing strategy aimed to provide good quality housing for all and eliminate the national housing shortage, providing economic security and welfare without specifically targeting the most vulnerable in society (Wedepohl, 2023).

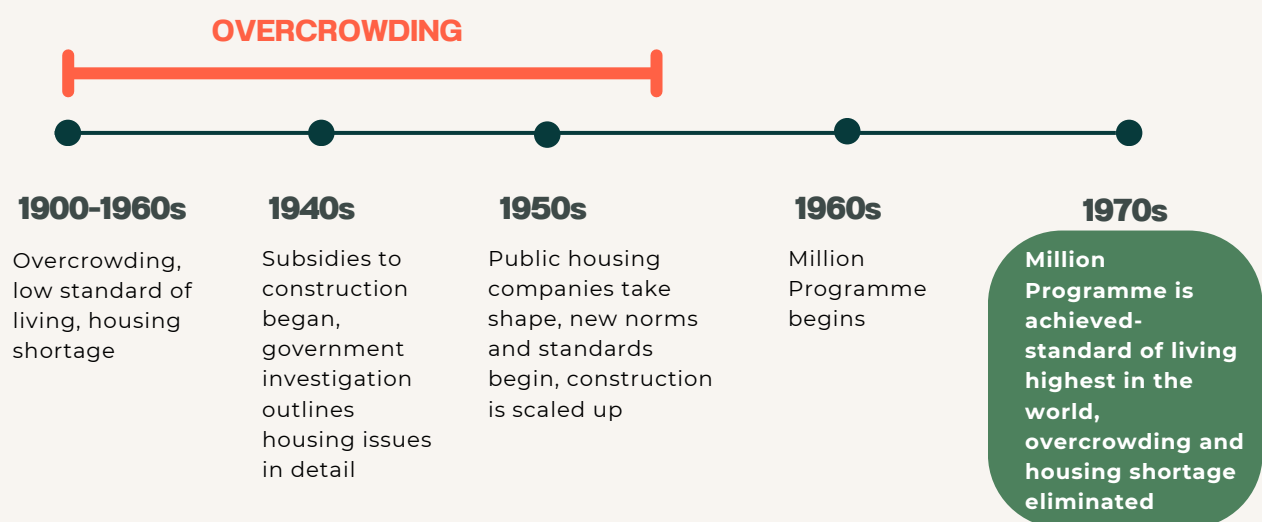
Towards the end of the Million Programme, the former rent regulation was replaced by the use-value system, which is described as something between a pure-market driven rent and complete rent control. The rent is, instead of being based purely on the landlord's cost of maintaining the apartment, also determined by the practical use it offers to the tenant.

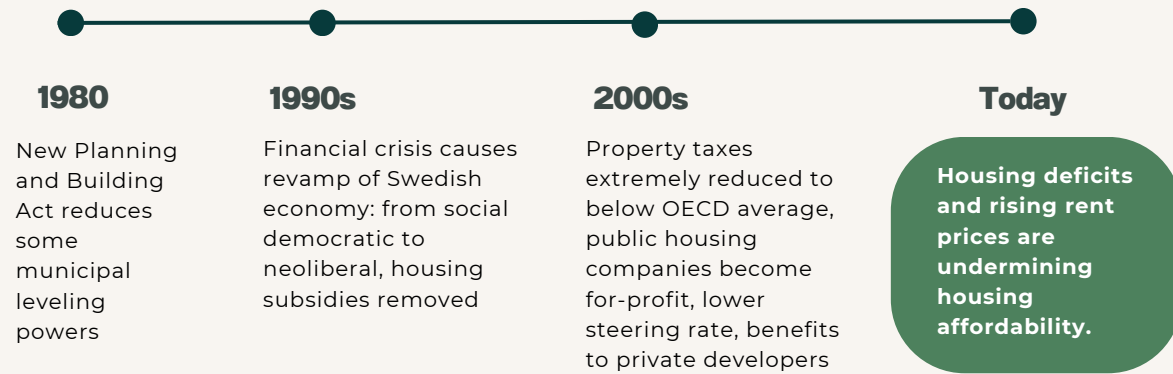
This housing strategy aimed to provide good quality housing for all and eliminate the national housing shortage

These benefits are assessed based on factors such as floor plans, size, modernity, standards, noise isolation and accessibility (Gustafsson, 2019). The use value is decided by the impartial Rent Board and the final rent is negotiated between the landlord, Public Housing Sweden and the Rental Union (Hyresgästföreningen).

Additionally, the rents of the surrounding apartments of similar standards are taken into consideration. The purpose of the use-value system was to mitigate rapid rent increases and decide rents collectively (Gustafsson, 2021; Hyresgästföreningen, no date; Sveriges Allmännytta, no date b; Sveriges Domstolar, no date).

Today, this system, along with the entire housing structure has undergone changes, which will be covered in the following section.





NEOLIBERALISATION OF THE MARKET

The 1980s marked a significant shift in Sweden's housing policy, moving from a state-dominated approach to one that embraced neoliberal principles. As Henriksson (2018) points out, the market was deregulated and companies were offered cheap loans for housing developments.

Consequently, housing was no longer treated as a distinct entity, but rather as a regular commodity.

This shift was further exacerbated by the financial crisis of the early 1990s, which resulted in the transfer of the responsibility and risk of financing housing from the state to the private sector. Furthermore, Wedepohl (2023) argues that the transition to a right-wing government in 1991 accelerated marketisation, introducing changes in housing subsidies and the tax system that disproportionately favoured homeowners.

Furthermore, centre-right municipalities and cities, including Stockholm, increasingly promoted privatisation, granting tenants the choice to purchase flats instead of renting. However, this approach enabled private real estate companies to acquire residential complexes.

Subsequently, the government substantially reduced subsidies to public landlords for housing construction, eliminating their competitive edge over private developers.

Between 1996 and 2011, subsidies to construction were reduced from 60 billion SEK to just 10 billion SEK and real estate taxes were raised. This posed challenges for municipal real estate companies, especially those in economically disadvantaged areas facing higher housing demand due to immigration. It partly caused public landlords to sell parts of their stock, leading to a drastic decrease in the share of public housing units in the overall housing supply from 22% to 16.5% between 1990 and 2013 (Henriksson, 2018). This, combined with the reduced construction of new housing by municipal companies due to the elimination of subsidised housing loans, worsened the situation of rising housing prices and extended waiting lists.

Consequently, the housing market became overvalued and over-mortgaged, which led to an increase of up to 30% in housing costs both for residents, as well as landlords.

A significant development occurred in 2002 when private actors in the rental market filed a report to the European Commission, claiming that subsidies directed to public housing conflicted with European legislation on competition. The state responded by removing these subsidies in 2011, transforming public housing into a market-driven actor and making the provision of affordable housing increasingly challenging (Wedepohl, 2023).

This shift has caused further rent increases in both the public and private sectors, and the use-value rent is now mainly adjusted to the rents of other apartments of similar standards

The reform also implied that public landlords were now required to operate with a profit margin, shifting away from their previous non-profit status and their rents were no longer normative for the private rental sector either (Gustafsson, 2021). This caused further rent increases in both the public and private sectors, and the use-value rent is now mainly adjusted to the rents of other apartments of similar standards (Elsinga and Lind, 2013). It also caused public landlords to sell large parts of their stock.

The drastic decrease in public financial assurance for municipalities, public landlords and developers overall has compelled municipalities to realign their strategies to market interests rather than public ones, thereby undermining their ability to pursue active land policies (Cars and Hedström, 2006).

Municipalities nowadays establish agreements with private developers before initiating planning processes (Cars and Hedström, 2006). While these pre-established agreements can benefit urban development, they frequently lead to planning proposals that predominantly reflect the developer’s interests, as they prepare concepts and draft proposals in advance. As outlined by Cars and Hedström (2006), municipal planners have expressed a sense of unpreparedness in response to this approach, lacking their vision boards and preliminary drafts before entering negotiations.

This presents a notable challenge as it constricts the representation of public interests. To address this issue, Cars and Hedström (2006) suggest creating additional FÖP (Fördjupade Översiktsplaner) or Deepened Comprehensive Plans – non-binding plans that delineate the municipality’s vision and strategies for a specific area before negotiations.

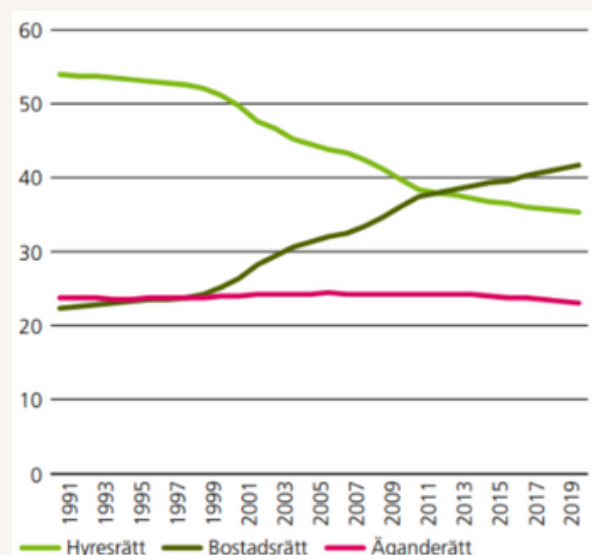


Figure 2. The portion of tenure forms out of the total Stockholm Region housing market 1990-2019. Source: Region Stockholm, 2021

As can be seen in figure 2, the portion of rental apartments has declined from constituting over 50% of the total Stockholm Region housing market to about 35%, with condos emerging as the predominant tenancy type today (Region Stockholm, 2021). Condos are somewhat inaccessible to certain low-income groups, due to legal demands of a 15% deposit as well as mortgage costs. In a market with rising costs, this further disrupts moving chains and causes low-income earners and young people who cannot handle these prices to turn to the shrinking rental sector, causing extremely long waiting lists of 6-12 years at best (Fox and Syvixay, 2020; Bostadsförmedlingen Stockholm, no date).

Hence, Sweden's housing policies have undergone significant transformations over the decades, transitioning from a high level of state involvement to a growing dependence on private actors, with noteworthy implications for affordability, social equity and urban development.

CURRENT SITUATION

This background has made it clear that municipalities no longer have the financial means to initiate large scale public housing projects on their own. This has caused several social issues, and complementary approaches on municipal level are therefore needed. Banking policies, financial politics and state-funding are all beyond local level of control.

Simultaneously, there is a housing shortage among low-income groups that needs to be addressed. This sets the preconditions of the Stockholm region, Järfälla and municipalities overall. Municipalities can influence their own land policies, planning and management, as well as assessments and investigations. The framework will therefore be adapted to this reality.



Foto: Construction of Barkabystaden, one of the main current urban developments of the municipality. Source: Järfälla kommun

JÄRFÄLLA TODAY

Järfälla is a municipality located in the northwest part of the Stockholm region in Sweden being considered one of the suburbs of the Stockholm urban area. It is divided into four districts, Barkaby-Skälby, Jakobsberg, Kallhäll-Stäket and Viksjö.

The projected urban development for Järfälla is one of the key goals of the Regional development for Stockholm's region (RUFS 2010). Considering Järfälla as today one of the Stockholm region's hottest growth areas (Översiktsplan Järfälla - nu till 2030), it has become one of the central nodes of development for the coming years. Järfälla is currently undergoing rapid growth, with a current population of 85.4600 inhabitants. Between 2020 and 2035, it is expected additional 40.000 inhabitants, meaning a significant demographic increase that will undoubtedly impact the character of Järfälla.

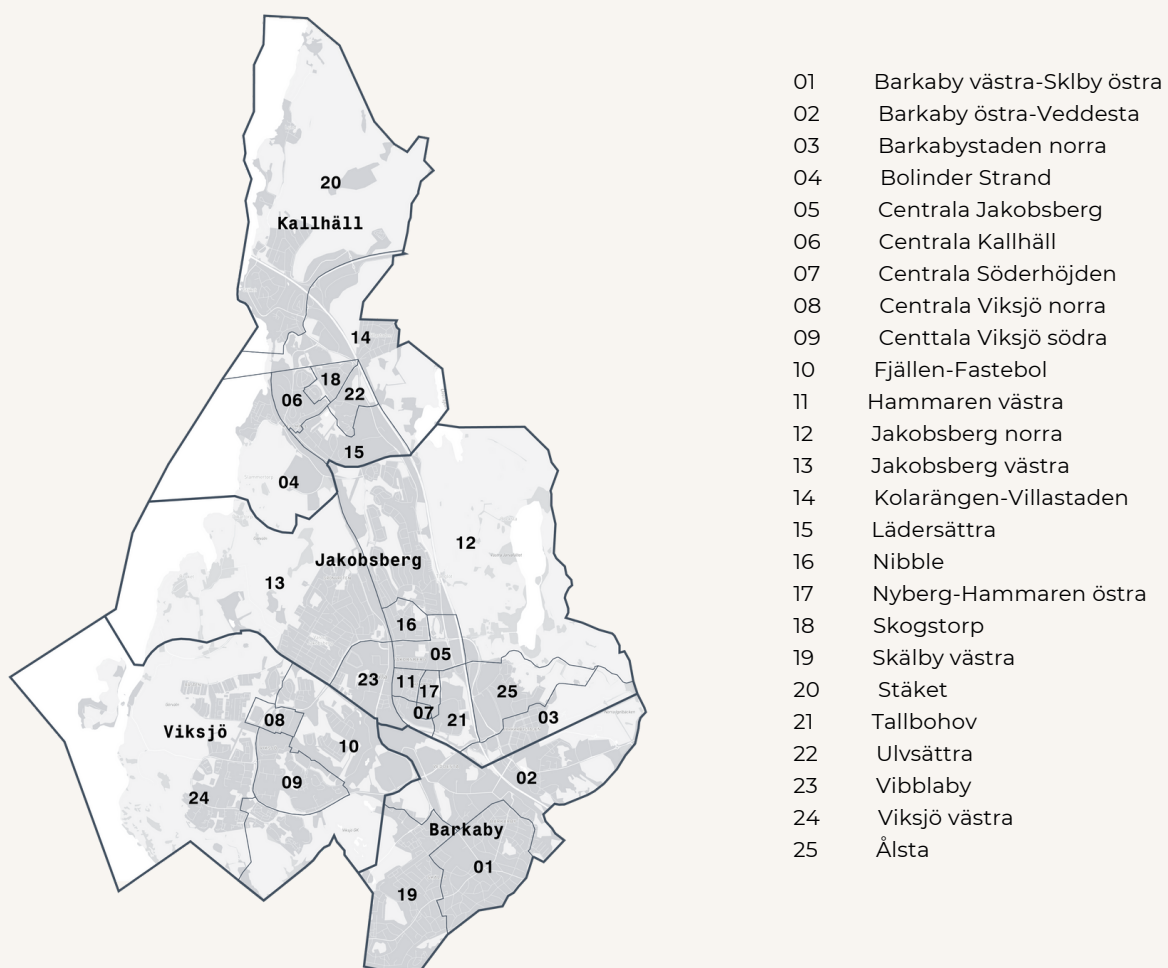


Figure 3. Järfälla's district division and subdivision
Source: created by the authors

Most people live close to the urban centres which have developed around the commuter train stations in Barkaby, Jakobsberg and Kallhäll. Three vulnerable areas are identified, Sångvägen and Söderhöjden in Jakobsberg district and Termovägen in Kallhäll. These areas are not only characterised by having low-income families but also by rising criminality in the neighbourhood.

The inhabitants with foreign backgrounds, being considered people from different nations and people with both migrant parents, represent 42,5% of the population, having increased up to 17% since the year 2002. Combined with the high expected new residents in the coming years, Järfälla has a great potential to develop as a diverse and vibrant municipality.

KEY STAKEHOLDERS WITHIN THE HOUSING SECTOR

There are a lot of new developments in Järfälla. With all these large-scale projects such as the construction of new urban districts, the renovation of 3,200 flats of Järfällahus, a new metro network being built, etc, there are many different actors who each have their interests. Therefore, it is important to have a clear picture of these involved actors so that they can be taken into account.

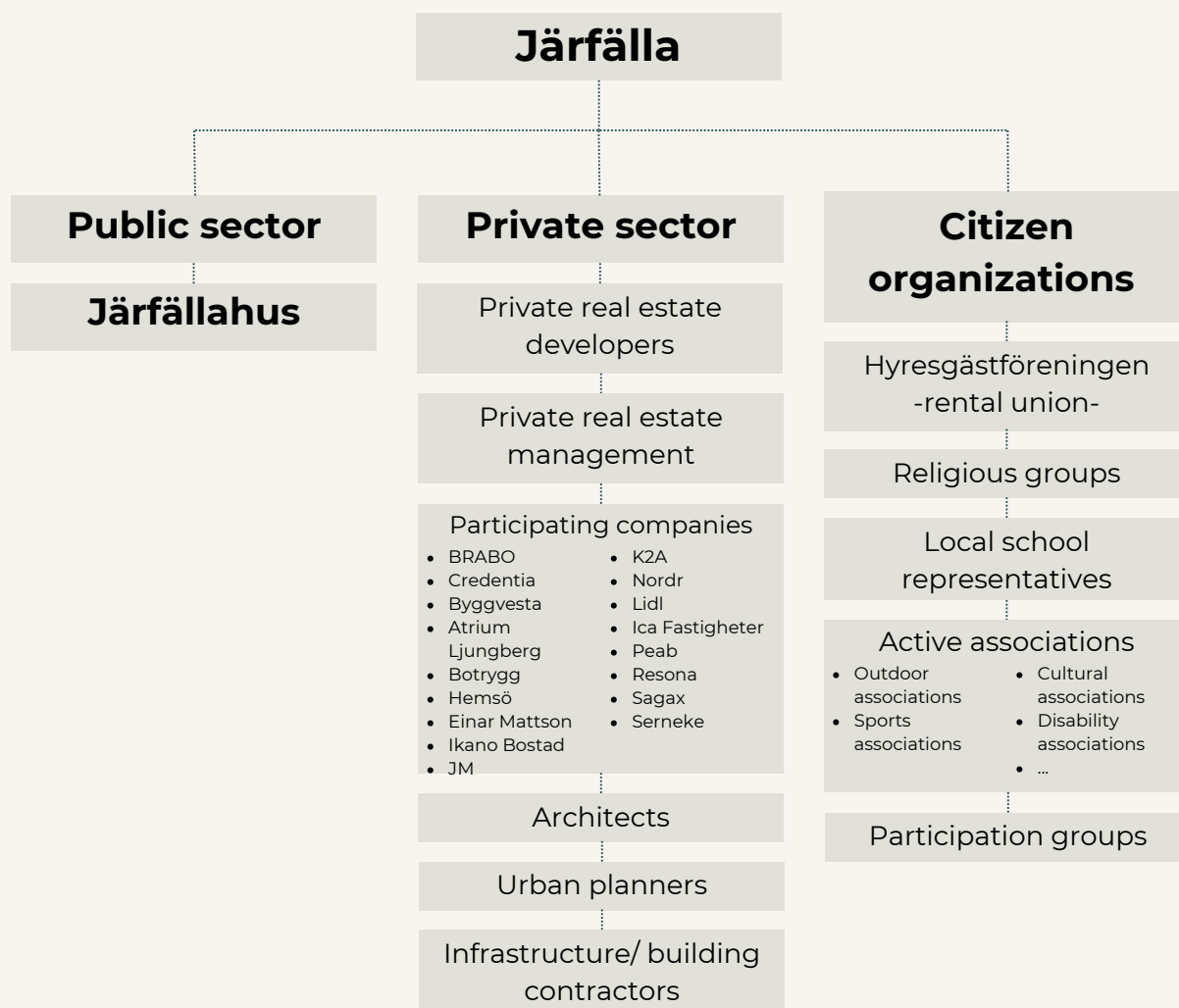


Figure 4. Key stakeholders within the housing sector
Source: created by the authors

As shown in Figure 4, the actors are divided into three groups. First, there is the public sector. This includes Järfällahus, which is a housing company 100% owned by the Municipality of Järfälla. Their main tasks are urban development and building affordable housing. They own 5,700 apartments, 4,600 parking spaces and 58,000 m² of commercial space. Apart from developing new buildings, they also manage the buildings they own.

To be able to rent an affordable apartment, people have to register for the queue. The waiting time is approximately 10 years. There are different types of queues, for example, the internal, external, youth, student and senior queues. Depending on what type of housing you need you can register for that type of queue. There are also 20 special units assigned to the social welfare board. Secondly, there is the private sector. As large pieces of land come into the possession of private companies, they play an increasingly important role in the future development of Järfälla. An example of this is the new Barkabystaden district. This new district is being developed entirely by private developers. The buildings built by them are partly sold or leased and then managed by these companies.



Figure 5. Location and type of Järfällahus properties
Source: Created by the authors
Photos from Järfällahus

Architects and spatial planners play an important role here. They have a great influence on the design of such projects and thus also partly determine the future image of the municipality. In such large-scale projects, the municipality of Järfälla has the important task of monitoring. They make sure that all urban planning regulations are complied with and that quality urban planning is done without just looking at profit maximisation. In theory, they should primarily look after the interests of residents and ensure that private developers are not given free rein. In reality, this is often not the case.

The last important sector is those working for the residents of Järfälla. These organisations/companies are primarily going to represent the interests of the residents.

For example, there is the rental union 'hyresgästföreningen', which provides advice, answers questions and ensures that tenants' rights are respected. With the expanding private rental market, this organisation is becoming more and more important and more and more people are needing them.

Religious groups, educational representatives, and local associations are very important actors. It is important to consider that 34.7% of the population in Järfälla (SCB, n.d.) is of foreign origin. This can make it difficult for urban development companies, whether private or public, to explain their plans to these people.

The same applies in the opposite direction. When people of foreign origin who may not have a good grasp of the Swedish language want to express their opinions or want to criticise the plans, it is difficult for them to convey these criticisms or concerns. This can create a feeling of not being heard/ forgotten among this group of residents.

It is therefore important to take this target group into account as well. Hence, religious groups, school leaders or others can play an important role as intermediaries.

All stakeholders in the housing sector play a crucial role in constructing a sustainable society that considers social, economic, and environmental aspects.

Currently, some participation groups have already been formed where people can give their opinions and ideas on renovation projects. In theory, this is very positive, however, in practice, we find after speaking to a person from such participation groups that not much is done with the feedback given.

On the website of the Järfälla municipality, we also see that there is a page provided where people can indicate how they see Järfälla in the future, the questions relate to building projects, greenery, attracting businesses, leisure, etc. (Järfälla, 2023). It is not clear what specifically will be done with this information and whether it will be taken into account in the future.

INTERVIEWS

The municipality has a comprehensive plan that guides all its land and water developments. It is informed by the Planning and Building Act, national guidelines and the Regional Plan. The municipality has also used a deepened comprehensive plan for the large project Barkarbystaden. None of these plans are binding, but much research and many reports and investigations are done for them. Detail plans, which are legally binding and usually done on a neighbourhood level, are supposed to be guided by the previously mentioned documents (Boverket, 2021).

Moreover, Järfälla has a Housing Provision program for 2020-2024, where it is stated that the municipality must provide housing for all groups in society, and suggests using the public landlord Järfällahus to achieve this by building 100 units per year (Järfälla kommun, 2021). However, this has not been achieved yet, and the municipality is working on a new Housing Provision program as this report is being written.

When asked what other strategies are missing today that could increase Järfällahus' role (especially for affordable housing), the interviewees have several inputs. The municipality thinks that an economic system for long-term social investments in public landlords is missing – from the state to the local level.

They also refer to the rule that public landlords operate on market terms (Järfälla kommun, 2023e). Järfällahus says the high cost of production today causes rents to be higher in their new developments. Despite the legal requirement that they need to profit every year, Järfällahus operate new projects without profit requirements, strategizing to lower costs as much as possible while still breaking even. Still, costs are high, and thus rents.

They state much of this has to do with broader political and economic structures as well as global crises but identify three issues on the local level. Firstly, Järfällahus is allocated land for new development within existing residential areas, which is more expensive to build than in other areas. Secondly, parking becomes an issue when building in densified areas, because there either is no room for it, or the land allocated is currently a parking space that then needs to be compensated elsewhere. This increases costs and planning.

Both, the municipality and Järfällahus, think long-term strategies are the crucial tools missing today that could allow Järfällahus to be chosen for more housing developments

Thirdly, the municipality has high demands on for example facade quality and aesthetics, which drive up costs and thus rent. Apart from these factors, they mentioned some other realities that impact production costs throughout the interview, such as the fact that they have to buy land from the municipality at market price and that they are not involved in the municipality's conversations on long-term housing plans (Järfällahus, 2023a).

Up until now, the overall directive Järfällahus had was to sell their properties whenever possible (converting them to condos). Now, the directive is to build 400 apartments by 2026. The reason for the low number is because they need to renovate their older stock. Ideally, they say, these renovations would have started 10-15 years ago. They attribute this, too, to shifting majorities and a lack of financial support from the state. When asked why they were only allowed one property in the new development of Barkarbystaden (the land is owned by the municipality), Järfällahus answered they were forced to give back even that property in 2022.

Even though the company has a social responsibility, Järfällahus is not involved in the municipality's conversations on long-term plans for housing

The current allocation competition model implies that the municipality has deliberately excluded Järfällahus from receiving the opportunity to buy and develop land in Barkarbystaden

The municipality has said when asked how tenure form is decided in general, that the municipality decides tenure form depending on the political orientation of the area. They usually arrange a land allocation competition where the developer with the best proposal wins the opportunity to buy the land from the municipality and develop it (Järfällahus, 2023a; Järfälla kommun, 2023e). This all implies that the municipality has deliberately excluded Järfällahus from receiving the opportunity to buy and develop land in Barkarbystaden.

This could be attributed to prioritising the dire need for renovations in Järfällahus' existing stock, but the landlord merely said in the interview that it was a political decision. The municipality was never asked directly why Järfällahus is excluded from Barkarbystaden.

MUNICIPAL TOOLS

Järfälla municipality, characterised by owning a relatively large amount of land, especially in areas designated for intense densification and urban development in the 2030 overview plan (Järfälla kommun, 2014), is well-positioned to address housing challenges. The municipality highlights that coupled with a good land policy it has a strong negotiation position, increasing the opportunity to “steer the direction of the lands development in the desired direction” (Järfälla, 2021).

In Sweden, municipalities have an important role when comes to planning processes and building permits. According to Boverket (2023), municipalities, given their planning monopolies and extensive land holdings, can mitigate the housing crisis by adjusting land prices and revising planning policies. It is suggested that the municipalities can partly contribute to maintaining housing production that meets the needs, and partly give more actors the conditions to survive and compete in the long term. This allows changing the model from a local perspective. As Tonkiss (2020) argues, local administration can redistribute goods and services in different urban landscapes. This opens the way to municipal strategies and policies that can increase housing affordability and combat gentrification.

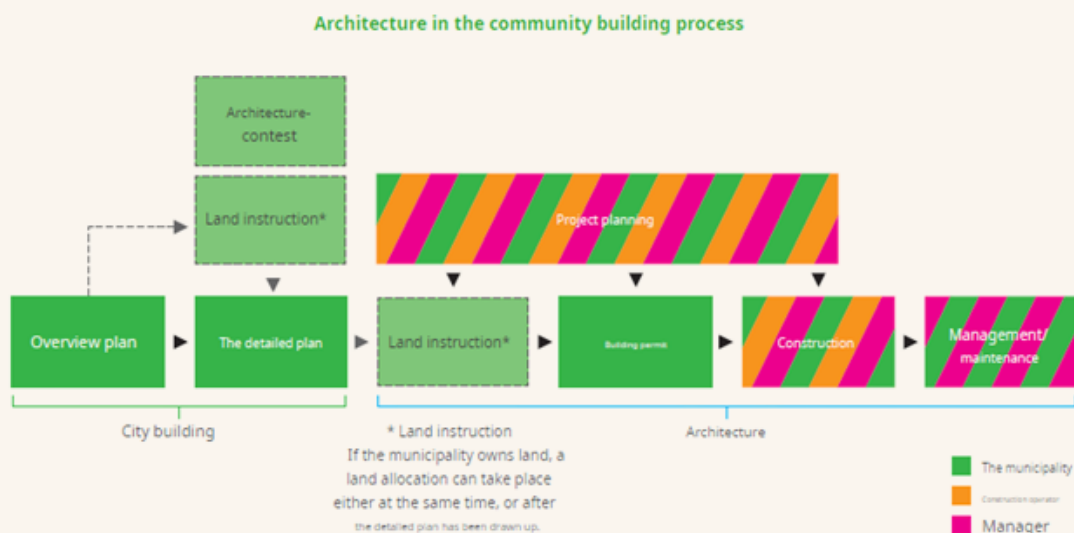


Figure 6. Municipal role in planning processes. Source: Järfälla kommun, 2022

As illustrated in Figure 6, the municipality has a complete monopoly over the urban planning process, which includes the overview plan and detailed plan, to a shared cooperation with managers and developers during the project planning, construction and management and maintenance of the buildings.

Local administration can redistribute goods and services in different urban landscapes. This opens the way to municipal strategies and policies that can increase housing affordability and combat gentrification.

The overview plan serves as a masterplan which outlines the areas that the municipality intends to develop, the strategies to follow and the image of the future of Järfälla. The current overview plan, Järfälla now until 2030 focuses on growing with quality, increasing social equity, and achieving a sustainable future to achieve carbon neutrality by 2030 (Järfälla kommun, 2014). The plan determines which areas of the municipality will be densified, with a focus on new areas like Barkabystaden, Veddesta, and developing central Jakobsberg, although it is not legally binding.

Detailed plans, in contrast, are a legally binding document that regulates the use and type of development for each specific area and property in the municipality. It considers aspects of economic, social, and ecological sustainability, forming the basis for building permits. While the overview plan serves to develop the future vision for Järfälla, this phase provides an opportunity for the municipality to set specific goals and conditions to address social issues.

When the municipality owns the land, it can make requirements for quality and regulate the type of development through the land policy and allocation. This is done by competition, where developers are chosen depending on price and or quality criteria.

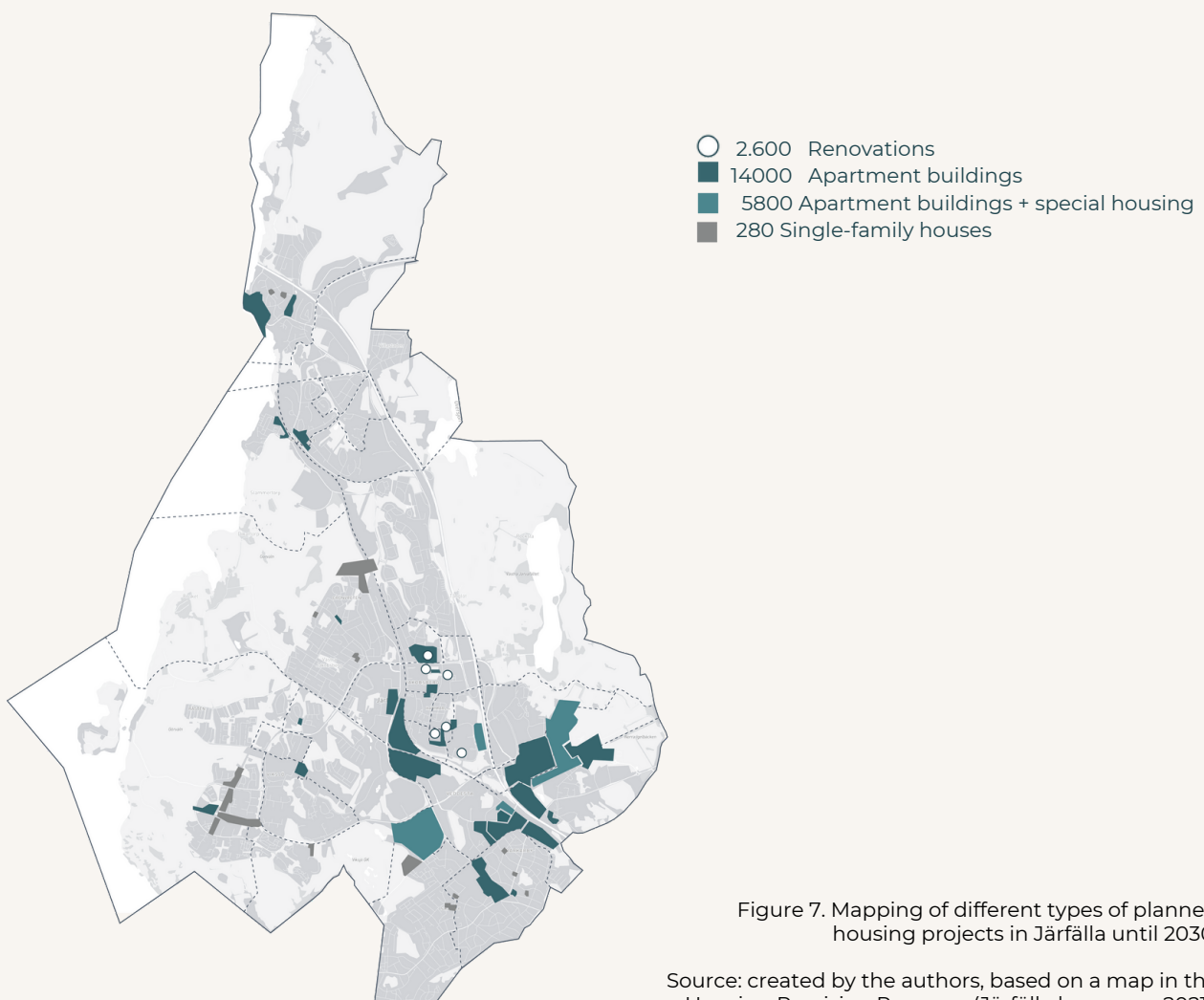
This gives power to the municipality to make demands on the type of projects, such as special forms of accommodation such as LSS (people with need for special care) or retirement homes as well over the tenancy types, for example, if it is rental or ownership rights. As well, the municipality reserves the right to acquire or rent out parts of the complete building (Järfälla kommun, 2022).

However, to achieve desired goals it is important to maintain long-term political collaboration. Initially, it was intended that Järfällahus would purchase land and be part of the current ongoing stage of Barkabystaden but it was subsequently denied (Järfällahus, 2023). This serves as an example of how, despite being a potentially excellent tool to integrate housing affordability into master plans, such initiatives can be dismissed when other priorities, such as economic considerations, take precedence.

HOUSING PROVISION PROGRAM

The main instrument to measure housing issues and create policies aligned to it is part of the overview plan for Järfälla is the Housing Provision Program's report (Järfälla, 2021), whose main goal is to provide an overview of the housing situation, guiding future planning, and compiling a list of development areas. It also acts as a foundation for the municipality's budgeting and serves as information for stakeholders in the construction and housing market.

The land allocation system allows the incorporation of different stakeholders into the renovation, densification, and development of new areas. Specifically creates attractive opportunities for private developers while incorporating municipal goals into the projects (Caesar, 2016). However, it is crucial to note that land policy is the foundation of the municipal budget and may not always align with the planning strategy. Instead, they often respond to municipal financial needs, especially with the decline in the municipal budget (Lower Result for Municipalities and Regions in 2022, n.d.), increasing the need for selling public-owned land.



Although land sales provide immediate liquidity for municipalities, they result in a decline in long-term planning and development controls, particularly in terms of affordable housing strategies. A more sustainable alternative involves prioritizing land leases or stipulating that a large proportion of developed units belong to municipalities. This strategic approach enables development and density and maintains land control over the long term (Atmer, 1987). Such a change in focus could help overcome the challenges of reduced budgets and increased pressure for the sale of land and ultimately promote more controlled and sustainable approaches to urban planning and development.

Currently, there are around 33,000 homes in the municipality, with 43% being condominiums, 23% rental properties, and 29% ownership rights. As reported by the municipality, since 2014, the proportion of condominiums has increased, while rental properties and ownership rights have decreased, primarily due to recent housing additions mainly consisting of condominiums.

According to the 2014 Stockholm Agreement, the municipality of Järfälla commits to the construction of 14,000 houses within the city's influence zone by 2032. Housing construction projects between 2020 and 2034 include a phased approach, approximately 1,700 new homes to be built by 2022 and a total of 16,000 new homes to be built by 2030.

As illustrated in Figure 7, the planned housing projects until 2028 include the construction of 14,000 apartment buildings, 5,800 residential apartments combined with special accommodation, and 280 single-family homes. In addition, Järfällahus plans to renovate more than 3,200 units in the coming years (Järfällahus, n.d.).

The development initiatives in Järfälla municipality exhibit variations across different areas. Kallhäll's development focuses on the station and the former Bolinder industrial site. Viksjö plans for new single-family housing. Jakobsberg's central area, strategically located with excellent public and transportation connections, is ideal for further densification. Barkabystaden is the main development focus, with subsequent stages planned in Veddesta and Bällstadalen to create new residential areas.

Although land sales provide immediate liquidity for municipalities, they result in a decline in long-term planning and development controls, particularly in terms of affordable housing strategies.

The goals of the Housing Provision Program are categorized into four areas:

1. Housing for All Groups: Providing various forms of tenancy, sizes, and prices, addressing the needs of diverse groups, and reconciling the housing market with demand.

2. Safe and Sustainable Living Environments: Ensuring quality construction and sustainability in social, ecological, and economic aspects, emphasizing resource efficiency and resilience.

3. Contribute to the Region's Development: Aligning with regional plans to build 1,000 new homes annually and 14,000 within the new metro area influence by 2032, aiming to solve the housing shortage.

4. Work for a Mixed City: Prioritizing mixed housing in vulnerable areas, with directives to Järfälla Hus AB and initiatives to counteract segregation and gentrification processes.

While the overview plan focuses on the large-scale development of attractive new areas that will change the image of Järfälla, there is less emphasis on current social issues within the municipality. For example, there are planning strategies or master plans for historically impoverished and vulnerable areas like Kallhäll or Nimble, being absent from the priorities for the current plan, contradicting the vision of inclusivity and promotion of a socially diverse community.

While the overview plan focuses on the large-scale development of attractive new areas that will change the image of Järfälla, there is less emphasis on current social issues within the municipality.

Balancing social responsibility for affordable housing with keeping market-driven business principles becomes a dilemma for municipalities (Henriksson, 2018; Wedepohl, 2023).

The focus has shifted from affordability to other social objectives such as sustainability and attractiveness. Therefore, housing is increasingly targeted at the middle class, becoming more expensive when aligned with sustainability goals. As a consequence, the current approach does not necessarily address the affordability issues since private developers mainly focus on high-profitable projects.

While Henriksson (2018) has hopes for the capacity of the market to regulate itself when the units built overpass the current demand, the process of financialisation and commodification of housing described by Mazzucato and Farha (2023) shows an opposite trend, where private actors only aggravate the current situation

The municipality emphasizes the commitment to addressing the housing needs of all groups in society, guided by population forecast.

Reported mismatches between housing demands and what the market is developing, combined with rent increases in newly developed buildings, aggravate the housing situation. Even though, there are no clear strategies in place to counteract these trends, leaving affordability concerns unaddressed.

Solutions like shelter accommodations and temporary housing to fight homelessness are limited, creating a reliance on social contracts and direct assistance from social services (Blackwell & Bengtsson, 2023). This approach leans towards a more targeted but fragmented strategy, rather than embracing a comprehensive and universal solution for housing challenges.

Reported mismatches between housing demands and what the market is developing, combined with rent increases in newly developed buildings, aggravate the housing situation.

ARCHITECTURE POLICY

Another key instrument developed by the municipality is the Architecture Policy (Järfälla kommun, 2022), which provides designed guidance for both existing and new environments. The guidelines promote architecture based on the site conditions, with a central focus on generation value for those who live and work in Järfälla.

The proposal is based on three levels of architecture: the district, the city room and the building or place, identifying the importance of design from meeting places, squares, the scale of the neighbourhood as well as the proportions, materials shapes, and colours of the buildings.

It is recognised that the built environment has a direct impact on people's health and well-being and is aligned with the goal of "Grow with quality" of the overview plan (Järfälla kommun, 2014).

The architecture policy is meant to aid planners when developing detailed plans, which as mentioned before, are legally binding. The focus is to promote sustainability goals and building quality, without subordinating to short-term financial considerations.

As shown in Figure 8, Järfälla Municipality identifies 5 residential areas: small houses, multi-family houses in parks, multi-family houses in the landscape, large-scale neighbourhoods, dense urban development, and neighbourhood town. It describes their unique character and advantages, identifying what is needed to improve the quality of life in each area. More meeting places, better connections to other districts and services, sustainable transportation and parking solutions, mixed building typologies and including children's perspectives are some of the strategies considered in the guidelines.

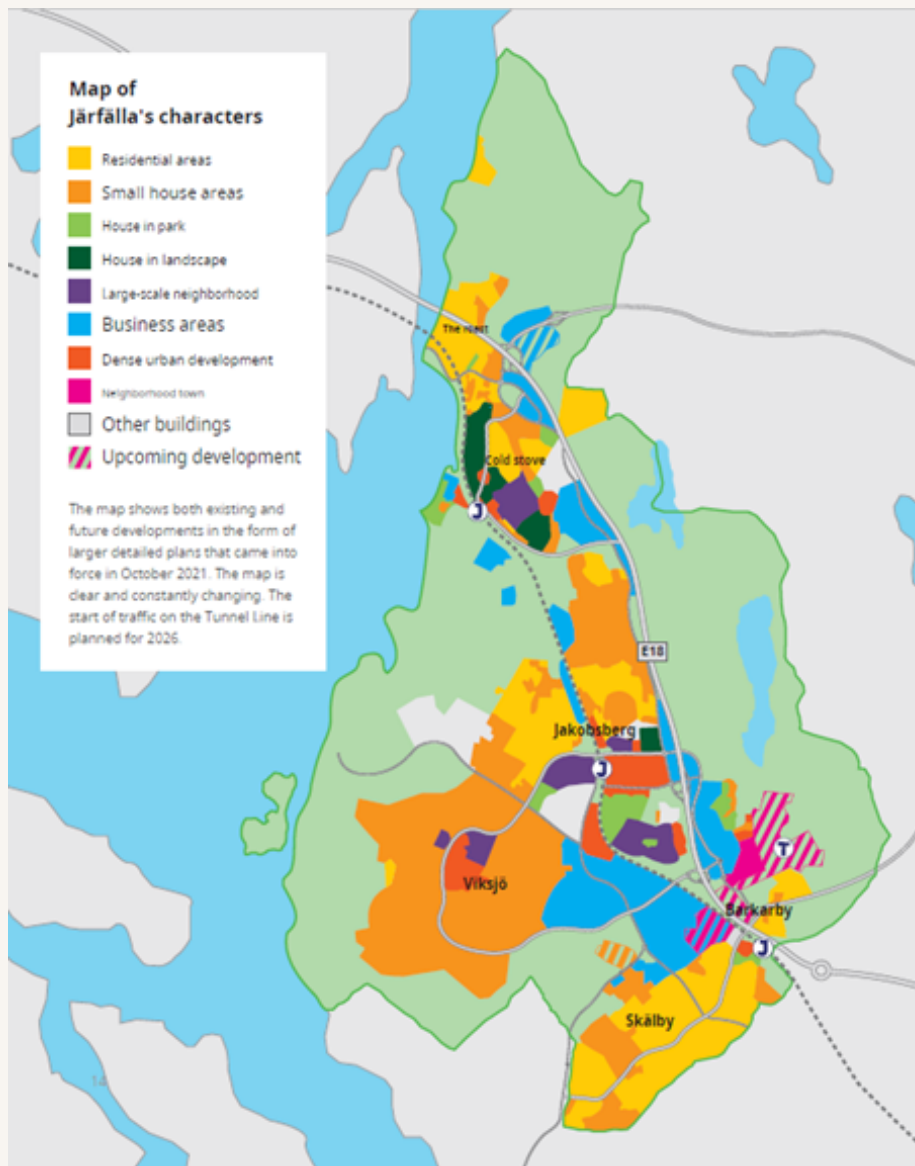


Figure 8. Map illustrating Järfälla's urban characters and building typologies
Source: Järfälla kommun, 2022

However, crucial aspects like safety concerns, poor living conditions such as overcrowding, and social segregation between areas are overlooked. The current description seems to have a generic approach, falling short of addressing specific challenges faced by residents. Exploring how planning and design contribute to the goal of fostering a social mix is essential.

Architectural design can promote equality through equitable access, fairness, and the right to the city (Harvey, 2008). Strategies like affordability by design (Talen, 2010), where consideration of housing typologies, and the promotion of walkable access are key components, ensuring a built environment that not only meets basic housing needs but also contributes to creating a socially inclusive and equitable urban landscape.

While the report mentions a dialogue between parties involved in all stages of the community-building process, the specific approach to this dialogue remains unclear. Social sustainability within architecture design, as outlined by Dempsey et al. (2011) should incorporate non-physical factors like social justice, inclusion, safety, a sense of community and belonging, cohesion, and cultural traditions.

As well, there is a lack of clarity on how design should effectively integrate social equity, addressing issues like ageism and racism, for instance. There is also a notable absence of how actions should be prioritised to address the main issues, and the projects outlined in the report predominantly focus on new development and economic investment, sidelining the critical social issues faced by the municipality.

In conclusion, Järfälla Municipality holds several tools and planning processes with the potential to address socio-economic issues, such as its land policy, detailed plans and close collaboration with the public and private sectors. However, the lack of definition of what constitutes affordable housing for Järfälla and the definition of the main aspects of a robust housing policy creates a gap between desired goals and the current trends. This is seen as a missed opportunity to establish a robust planning practice based on a framework that would enable the municipality to pursue long-term goals. Clarification of this concept will provide a basis for understanding the development of effective policies and strategies to address housing challenges in Järfälla. This comprehensive approach is essential to create a sustainable and inclusive housing environment that meets the community's various needs.

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ADEQUATE HOUSING FOR JÄRFÄLLA

In Järfälla, there is currently no specific definition of affordable housing, and the existing municipal tools often fall short of addressing deep-rooted socio-economic inequalities. When examining housing issues, we recognized that affordability is just one aspect of a comprehensive housing policy. Consequently, we decided to create a broader framework that the municipality can use to align housing policies with overarching social objectives.

Recognizing that affordability alone is insufficient to address the complexities of housing vulnerability, including factors like condition, location, and neighbourhood characteristics (Mulliner & Maliene, 2011), we investigate two frameworks for a more holistic understanding of adequate housing: the human rights approach and the sustainable approach. These frameworks aim to provide a more nuanced perspective on housing challenges beyond affordability, considering the wider context and diverse factors affecting housing vulnerability.

THE RIGHT TO HOUSING

International human rights law recognises the right to adequate housing, which includes security of tenure, availability of essential services, affordability, habitability, accessibility, location, and cultural adequacy.

Forced evictions, defined as the removal of individuals, families, or communities from their homes or land without appropriate legal or other protections, are a significant global issue. According to UN-Habitat (2009), at least 2 million people are forcibly evicted annually, often for reasons such as development projects, urban redevelopment, or land conflicts.



Figure 9. Characteristics of the right to housing. Source: Mazzucato & Farha (2023).

Therefore, framing housing as a human right is a primary goal to ensure basic social needs and to prevent individuals from becoming homeless or vulnerable to further human rights violations (UN-Habitat, 2009). Other social and environmental concerns, such as economic growth, become subordinate to achieving the right to housing under this approach.

SUSTAINABLE HOUSING

Due to the current climate crisis, the Nice Declaration posits that we have entered a new era of public action on housing, with a focus on reducing carbon footprints (Housing Europe, 2023). Mulliner and Maliene (2011) believe that housing affordability should extend beyond economic metrics to include the quality of life and the residential environment. For instance, energy-efficient homes situated in proximity to employment, public transport, and essential services can positively impact both the household budget and overall well-being.

Nainggolan et al. (2020) provide a detailed literature review on sustainable housing which summarizes into 10 criteria: physical building, energy, waste and water, site and surroundings, human behaviour, quality of housing, culture and values, communication and transportation, safety and comfort living and, price and availability. To achieve a sustainable approach, appropriate use of technology, energy savings and resource-efficient developments through renovation, operation, and maintenance are needed. **The focus shifts from viewing housing primarily as a social right to a more holistic approach that balances social, economic, and environmental sustainability.** However, achieving environmental objectives through improved housing conditions often leads to higher rents, resulting in a displacement of residents. Therefore, a balanced approach would require economic support from the public sector to facilitate essential renovations while simultaneously maintaining affordability.



Figure 10. Criteria for sustainable housing
Source: Nainggolan et al. (2020)

Both frameworks aim to broaden the scope of affordability to other aspects that have an impact on households' overall quality of life, to create successful and sustainable communities (Mulliner & Maliene, 2011). They encourage stakeholders to be accountable for the type of housing projects developed and to actively promote progressiveness in their implementation (Mazzucato & Farha, 2023). The main objective is to establish the components for a global definition of housing policy formulation, particularly in the context of social housing. However, these definitions are too general and do not provide a clear understanding of specific social, economic, and political considerations in different contexts. As Watson (2003) argued understanding the unique conditions of a particular context and including actors involved in the process are key to the development of planning theory that effectively supports planning practices. Although the authors focused on non-Western contexts based on post-colonial theory, the call for planners to 'avoid universal assumptions' should be always integrated into policy-making processes to integrate the specificities of the reality of each case.

A NEW FRAMEWORK

While most proposals are focused on developing countries facing high levels of poverty and homelessness, Sweden, ranked seventh on the Human Development Index and has the status as a highly developed country (UN, 2022b), faces growing inequality, especially regarding access to housing. Even though the poverty level and homelessness are considerably lower than in most countries, the rise of housing costs and lack of adequate housing have become an increasing issue since the shift of housing policies during the 1990s, as described in section 3, Housing in Sweden.

In Sweden, there is a political consensus against social housing, meaning that there are no specific subsidies or units reserved for low-income households (Lind, 2014). Instead, housing policies are done from a non-discriminatory approach, based on the principle that housing policies should be universal. Even though it is a noble approach which was successfully executed during the 1970s, the current conditions need to be revised, urgently. Without protective measures to ensure housing for low-income households, coupled with a shortage of new affordable units and the gradual decrease of the current stock, the current situation has become significantly challenging for households in disadvantaged conditions.

Recognizing the need for a situated approach, our work focused on developing a new framework which is relevant to the local situation of Sweden and specifically to the case of Järfälla. Using the studied theoretical frameworks, we have formulated the definition of Adequate Housing for Järfälla, adjusting the main principles to fit the local context, considering the current challenges, and incorporating the unique characteristics and strengths of the municipality.

The definition of Adequate Housing for Järfälla is based on six key principles: affordability, habitability, location, sustainable production and management, equitable access, and participation.

These principles create a new framework for adequate housing that the municipality can use when developing and addressing housing policies. The principles are based on our analysis of the different aspects of Järfälla, coupled with international examples of housing standards and policies. Each principle not only identify the most relevant aspect that adequate housing should contain but also identify the need for different solutions according to specific target groups.





AFFORDABILITY

Affordability is defined as the housing cost in relation to the disposable income, to prevent people from entering poverty. This was done according to Swedish definitions.

Housing affordability is a crucial issue whose impact extends beyond individual households implications for the wider economy and environment (Mulliner & Maliene, 2011). The financial burden of expensive housing significantly constrains household budgets, limiting not only expenditure on essential items such as food, services and transportation to work, but also reduces the savings capacity for emergencies and retirement, limiting opportunities for social mobility such as further education or starting small businesses (Anacker, 2019), impacting the access to public services, employment, and social networks (Wedepohl, 2023).

In this context, housing acts as a product and producer of the urban political economy, strengthening existing social hierarchies and economic disparities (Wedepohl, 2023). The underlying factors that contribute to the current situation are multifaceted, including economic, social, and political dimensions.

Between 2013 and 2022 building permits in Sweden had a record contraction of 26.1%. During the same period, Sweden experienced an increase in house prices by 87.5%. The rising inflation, high energy prices and increasing interest rates have resulted in a burden for households. Housing affordability has decreased steadily over the years in Sweden. Between 1986 and 2005, rent increased by 122 percent, while general inflation and cost of living only increased by 49 and 41 percent, respectively (Bergenstråhle 2006). As demonstrated by Turner (2001), 90 percent of the increase was directly related to political decisions, primarily reduced subsidies to and increased taxation on rental properties (Hedin et al., 2012).

In Järfälla, the average income is around 27.820 SEK per month, but it is not equally distributed in all areas. As illustrated in Figure 11, while the average income in Staket is between 35.000 and 40.000 SEK, in vulnerable areas like Söderhöjden is lower than 20.000 SEK. This means that losing affordability is impacting the population unequally.

From the year 2000 to the year 2020, the percentage of households with a low-income standard (absolute poverty) decreased from 12.3 to 5.1 percent. During the same time, however, the proportion that has a low-economic standard increased from 9.3 to 14.7 (Så många är fattiga i Sverige – 10 fakta om fattigdom, vad det är och vilka som drabbas – Arbetet, 2023).

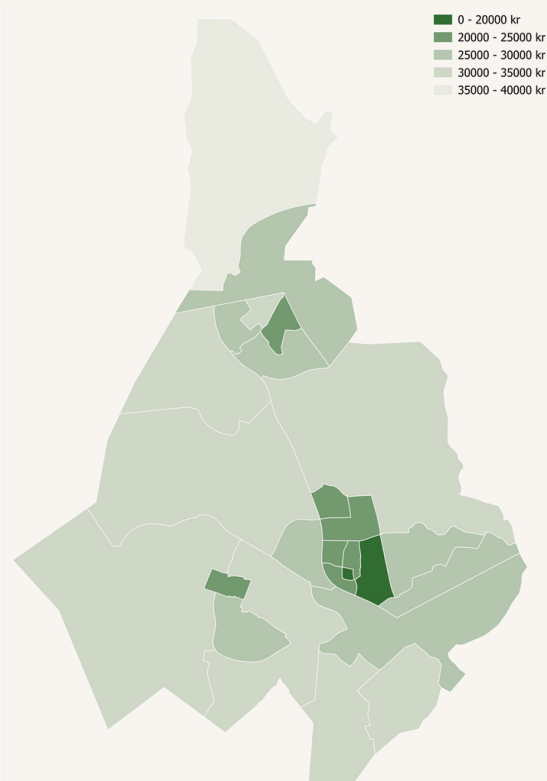


Figure 11. Average income for each are of the Municipality
Source: created by the authors based on SCB

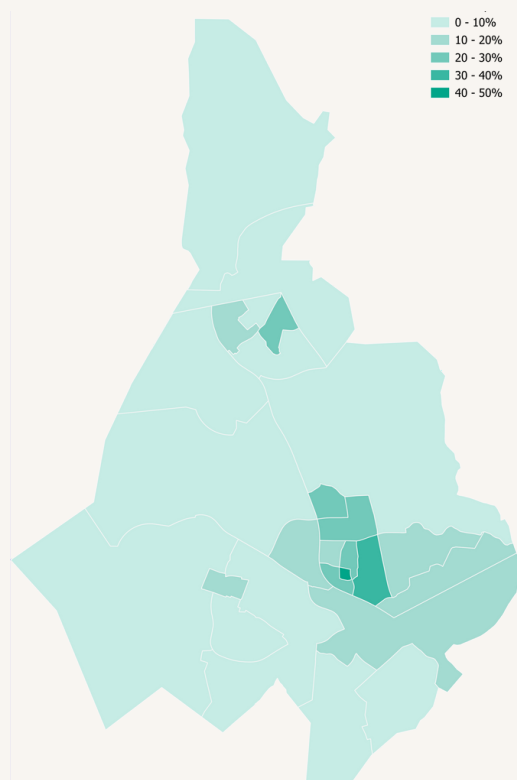


Figure 12. Percentage of people under Low Income Standard category
Source: created by the authors based on SCB

With the current situation, increasing of inflation and unemployment will aggravate the situation. In Järfälla, 12 percent of the population lives in relative poverty, which means 10.143 people. As described in Figure 12, vulnerable areas of the municipality contain more than 40 percent of people under poor living conditions.

THE ROLE OF RENOVATIONS

A significant portion of the rental housing stock in Sweden, particularly properties constructed by the welfare state during the 1960s and 70s, has become a focus, following the ambitions of the European Union (directive 2012/27/EU) and the Swedish government to reduce the housing sector's energy consumption through refurbishment (Johansson et al., 2017).

Over the last decade, in Sweden, renovations of rental apartments have physically and socioeconomically transformed the housing stock in the country (Baeten et al., 2016). However, Weckström (2018) draws attention to the fact that the motivation for structural renovations, including pipe replacement and energy retrofitting, has increasingly become interlinked to incentives for 'luxury' renovations that change apartment standards and rent levels.

The 'luxury' alterations range from the installation of a dishwasher to a full kitchen or bathroom upgrade, as well as other cosmetic changes to the interior. Elmgren et al. (2017) point out that such renovations while intended

to improve the quality of the ageing buildings often lead to significant increases in rent and can be seen as an 'accumulation strategy', which is used by 6 of the largest private landlords in Sweden.

In Sweden, under the use-value system, which is the current rental legislation, various housing market stakeholders (Public Housing Sweden, The Swedish Property Federation, and the SUT) engage in local negotiations to establish rent levels. The rents are determined in accordance with similar apartments in an area (Elsinga and Lind, 2013).). The use-value system allows for a rent increase when living standards are enhanced; however, Sweden's rental regulations are strict only permitting rent increases in cases where renovations elevate the dwelling's standard (Mjörnell et al., 2022). Rent increases from maintenance and measures that aim to restore the technical standard of the building are prohibited. One of the key purposes of this system is to protect tenants from steep rent increases (Gustafsson, 2019).

Nevertheless, these types of renovations are not always separated, as landlords tend to combine structural modifications with standard increasing measures resulting in higher rents. It is not uncommon for rents to surge by over 40% following renovations (Elmgren et al., 2017). This often leads to lower-income households struggling to afford the significant rent increase and thus many tenants decide to move out after such renovations (Boussaa et al., 2023).

However, given the current housing shortage in Sweden, the residents are often left with no good alternatives. As a consequence, the Million Programme rental stock finds itself in a completely new economic-legal environment and has been turned into an interesting object for profit-seeking. Hence, a key challenge is to find an intermediate solution to improve the energy performance of the buildings from the million programme without losing the tenants after renovation (Pardalis et al., 2019). Westin (2011) argues that homes tend to be renovated in such a way that leads to economically weaker residents leaving, thereby contributing to socioeconomic segregation. Moreover, most developers target upper-income households to achieve higher profits, thus contributing to gentrification processes (Anacker, 2019).

Additionally, the Swedish Union of Tenants (SUT) recognises the link between renovations and a shortage of affordable housing (Elmgren et al., 2017). The National Board of Housing, Building and Planning (Boverket, 2014) indicates that tenants facing renovations are 1.8 times more likely to move out. In the case of renovation-induced rent increase and associated relocation of residents when rent becomes too expensive to afford to stay put, some researchers have coined the term 'renoviction' to describe this unique form of gentrification that arises as a consequence (Baeten et al. 2017; Polanska and Richard 2021; Thörn, 2020).

GENTRIFICATION

Most developers target upper-medium income households to achieve better profit margins, thus contributing to gentrification processes (Anacker, 2019). Such processes, as densification and renovation projects, often lead to the displacement of low- and middle-income residents. In Sweden, this problem gains relevance since most of the public housing stock, constructed between 1960 and 1975, needs to be renovated in the coming years (Wedepohl, 2023).

Tenants frequently report issues such as abrupt rent increases, evictions for the sake of profitable but often substandard renovations, and a lack of accountability from landlords (Mazzucato & Farha, 2023). Since tenants have limited influence over renovation processes, the results end up in renovations which only seek to increase the rent values without necessarily addressing the technical status or requirements of the building (Mjörnell et al., 2019). These renovation practices, driven by the intensified commodification of housing, have increased tenure inequality and exacerbated the housing crisis (Polanska et al., 2022). Mjörnell et al. (2019) explain how renovations, while environmentally sustainable in principle, present conflicts between social and environmental goals, where substantial investments required for energy efficiency are often unfeasible in low-income areas.

FRAMEWORK FOR AFFORDABILITY

Housing affordability is commonly understood as the proportion of a household's disposable income dedicated to housing expenses. According to the United Nations (2022), a generally accepted guideline is that housing costs should ideally fall within the range of 30-35% of a household's disposable income.

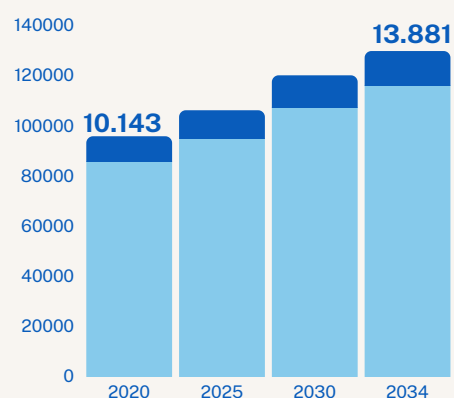
This includes not only the cost of rent or mortgage, but all expenses associated with housing, including heating, electricity, and maintenance, as well as costs related to the quality and location of the housing. The goal of achieving housing affordability implies that households should not face the risk of falling into poverty once housing costs are deducted from their disposable income. This becomes crucial, given that housing costs constitute a substantial portion of a household's budget, they significantly influence the economic stability of the household.

It is important to note, however, that the definition of poverty is subjective and varies from one country to another, making it a complex metric to measure universally. Moreover, the assessment of housing affordability also involves considering perceptual measures, such as self-reported burdens related to housing costs.

In Sweden, for instance, multiple parameters are employed to measure poverty, reflecting the nuanced nature of the concept in different contexts. Those parameters are divided into:

- 1 Absolute measurements of poverty
 - Material and social poverty (defined by the EU)
 - Low-income standard
- 2 Relative poverty
 - Low-economic standard
 - Risk of entering poverty or social exclusion

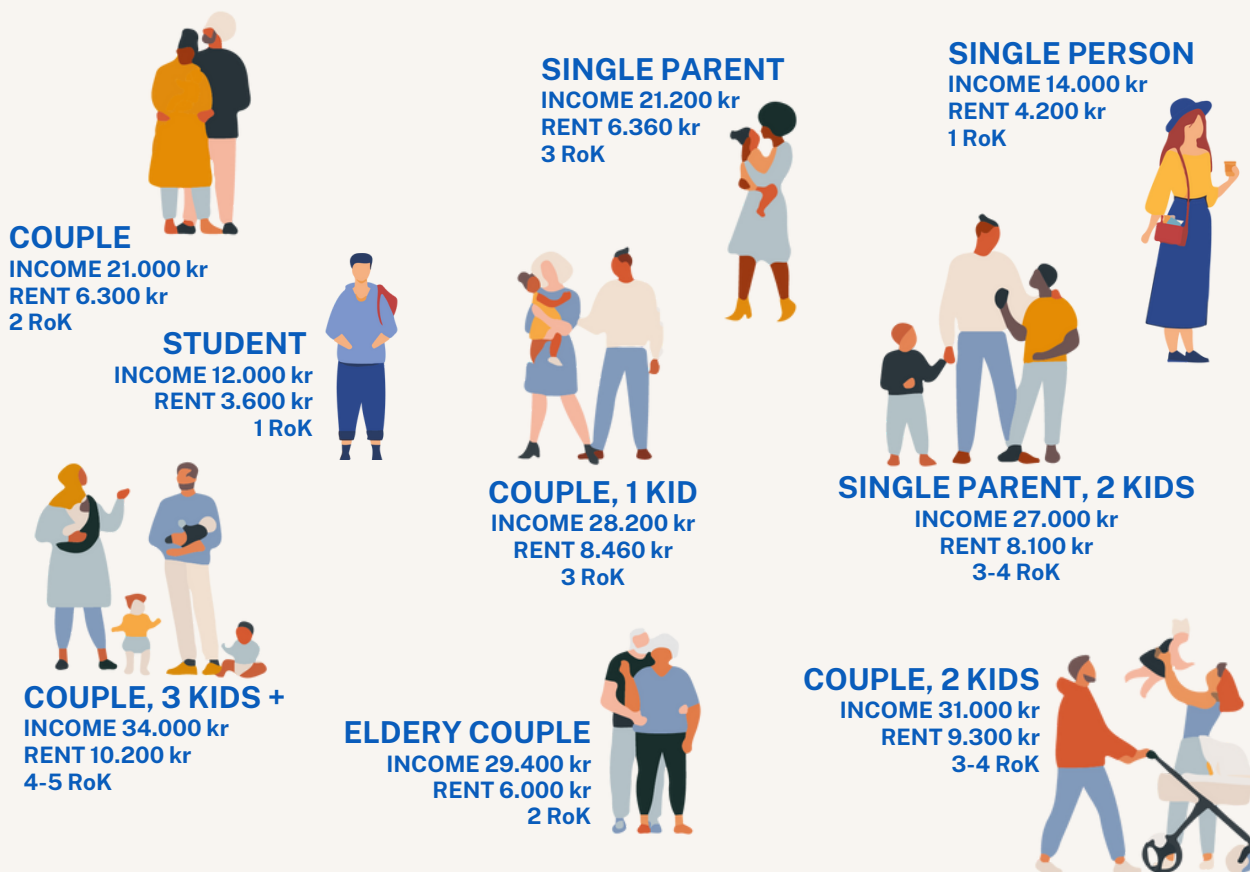
While the first two parameters, refer to individuals classified as living below the poverty line, our framework focused on the definitions of relative poverty. When living under Low-Economic Standard there is an elevated risk of entering poverty. Therefore, household costs should align to this and not be a contributing factor for social vulnerability.



Optimistically, assuming that the same 12% of the population in Järfälla will be living within the Low-Economic Standard, by 2034, almost 14,000 people would be at risk of entering poverty. Considering the increasing housing prices described before, limiting rental prices becomes imperative to address social vulnerability.

According to SCB, when a household income is lower than 60% of the average national income it is considered a low economic standard, also referred to as relative poverty. The latest statistics for 2022, the middle income in Sweden is around 38.300 SEK, the professions with the highest average salary are around 150.000 SEK (managers in banking), and the lowest is 25.000 SEK (cleaners, and service workers). However, 14,7% of the households have an income lower than 22.980 SEK.

Based on the low economic standard (S. SCB, 2023), which defines a minimum income based on different types of households, we identified the maximum rent that can be paid under the parameters of affordability. This means dedicating around 30% of the salary to the rent. Considering this, we identified that an apartment for a full-time student, dependent on a student loan, should not have to pay rent over 3.600 SEK. Similarly, a single parent with one child should pay a maximum of 6.360 SEK for a 3-room apartment. An elderly couple should have a rent of 6.000 SEK and a couple with 3 or more children should pay 10.200 SEK for a 4 to 5-room apartment.



Poverty is significantly higher among foreign-born individuals in Sweden, with 10.3% experiencing it compared to 2% of those born in the country (SCB, 2022). Single parents with children face particular challenges, with 14% living in material and social poverty, and almost half of them can't cover an unforeseen expense of SEK 13,000 (SCB, 2023d). In 2021, women had reduced labour market participation (SCB, 2023c), with an average 5% pay gap compared to men in similar positions. Integrating equitable considerations is crucial when addressing these disparities.



HABITABILITY

Habitability relates to the quality of the dwellings and the adequacy of the space. Even though the construction quality in Sweden is a great standard, we found that overcrowding is higher in vulnerable areas and also new developments mainly build small apartments.

For housing to be considered adequate, minimum conditions of habitability must be fulfilled. These conditions are divided into two main categories, housing quality and overcrowding. There are many ways of defining housing quality and overcrowding standards and those can differ considerably depending on the country and within the different housing policies.

HOUSING QUALITY

One of the main legacies of the housing policies during the social welfare approach was the focus on quality, affordability, and accessibility, positing the Swedish housing system as offering a high standard of living for its residents (Terner Center, 2017). However, the increasing housing deficit, rising prices and apartments being built are generally smaller which has led to an increasing rate of overcrowding.

In Sweden, the standards are defined and regulated by Boverket, the Swedish central administrative authority for urban planning, urban development, construction, and housing. These regulations, usually referred to as BBR, vary from universal accessibility, fire protection, hygiene and health, noise protection, safety, and more. Most of these standards are mandatory but some are recommendations to developers to promote good living environments through high-quality housing.

OVERCROWDING

According to BBR, overcrowding in Sweden is defined by norms 2 and 3. In norm 2, the limit for overcrowding is that there should be a maximum of two people per room, excluding the kitchen and living room. Adding to this first requirement, norm 3 defines that in addition to the kitchen and living room, there must be the opportunity for each household member to have their own room, except for partners.

Norm 2 indicates that 5% of households in Sweden experience overcrowding, while norm 3 reports a higher rate of 17.4% in 2018. As shown in Table 1, overcrowding's percentage is not equal among different household types:

	Norm 2	Norm 3
Single	2.6%	46%
Single parent	2.8%	2%
Couple	10.7%	24%
Couple + children	11%	23%

Table 1. Percentage of households overcrowded according to norms 2 and 3. Source: created by the authors based (Runting et al., 2021)

As pointed out by Runting et al. (2021), the minimum requirements of this norm are usually what ends up being built. Studio typologies, which represent the main typology built in new developments, are therefore considered overcrowded households since the living room is not considered a potential bedroom.

Over the years, overcrowding in Järfälla has increased steadily since 2012 from 16,3 percent to 21 percent in 2022. As illustrated in Figure 13, the overcrowding is mainly concentrated in the areas of Söderhöjden, Tallbohov, Noble and Ulvsättra.

When looking at the reasons behind these numbers, it is important to consider that these neighbourhoods are characterised by a high portion of people with foreign backgrounds.

Indeed, despite the relatively large size of the apartments in these buildings, it appears that households are accommodating a significant number of family members, leading to overcrowding.

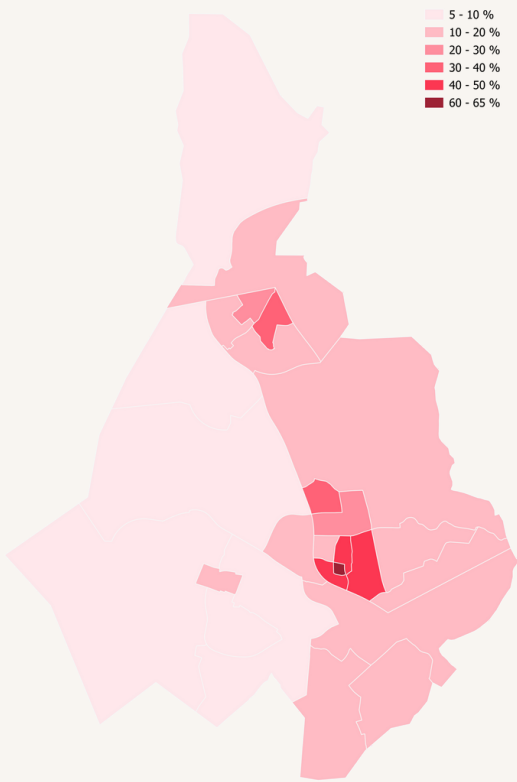
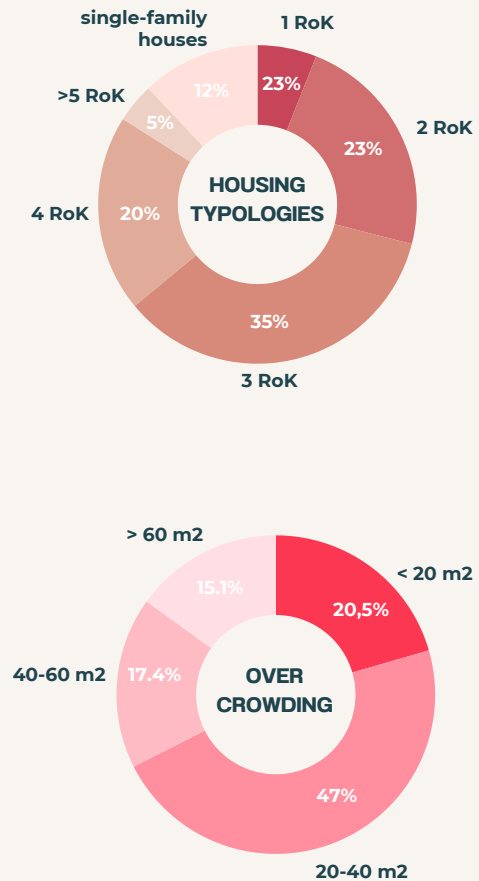


Figure 13. Percentage of household's overcrowding
Source: created by the authors based on SCB

HOUSING AREA

The apartment sizes in Järfälla are proportionally bigger than the offer in Stockholm city. Also, it has a quite equitable distribution of apartments with sizes between 1 to 4 rooms. As illustrated in Figure 14, the average housing area per person is lower than 30 square meters in overcrowded areas. Demonstrating the need for bigger apartments according to household sizes.



However, this is being counteracted by the typologies built in new developments. It is interesting to note a low housing area in Barkabystaden, which can be explained since it is a newly built apartment.

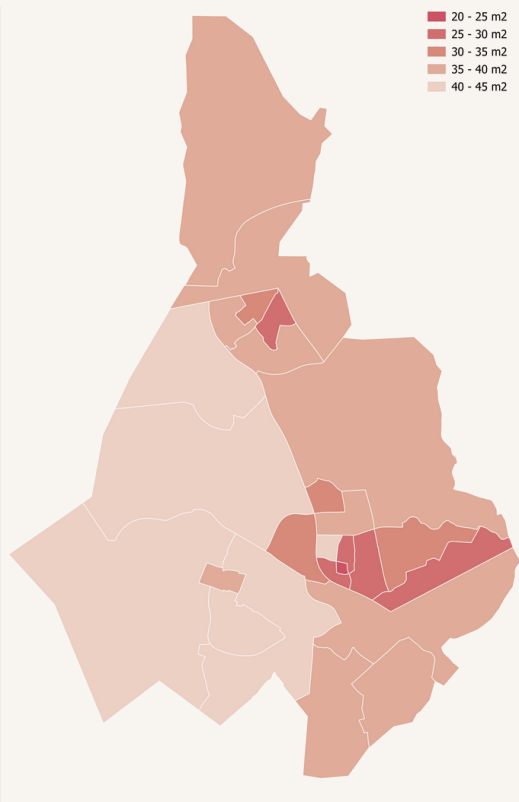


Figure 14. Average housing area per square meter.
Source: created by the authors based on SCB

When Runting et al. (2021) reviewed all the building permits approved in 2017 in Järfälla, the authors found that approximately 50% of the apartments are designed for 1 person. This presents a challenge for an important portion of households in the municipality.

NEED FOR RENOVATIONS

Some housing properties owned by the municipal housing company Järfällahus date back to the 1960s and 70s. They are now over 60 years old, which means that certain repair and refurbishment measures must be carried out in order to ensure the ongoing livability of the buildings (Järfällahus, no date).

After a prolonged period of time without essential maintenance and renovations, Järfällahus now finds itself compelled to embark on the most extensive housing stock renovation initiative in the company's history (Lejdelin, 2023).

Järfällahus has received complaints that the maintenance work has lagged behind for many years. Even the current CEO of Järfällahus, Jennie Sahlsten, who came into the position in 2020 made a comment: "Maintenance has lagged behind and I don't know why they didn't start earlier" (Lejdelin, 2023).

The primary goal of this unprecedented effort is to secure housing for the coming decades while improving the living conditions for the residents. To accurately identify the specific needs of the housing stock, an inventory was conducted in 2022, which revealed a greater need for the renovation than was initially anticipated..

After a prolonged period of time without essential maintenance and renovations, Järfällahus now finds itself compelled to embark on the most extensive housing stock renovation initiative in the company's history

Approximately half of the housing stock, equivalent to 3100 apartments, requires extensive renovation work .

According to the inventory, approximately half of the housing stock equivalent to 3100 apartments requires extensive renovation work (Jarfallahus, 2023). It was concluded that 6 areas in Jarfalla are affected including Sångvägen, D-area, Engelbrekt, Tallbohov, Söderhöjden and Dackehöjden.

The specific renovation needs of buildings include the replacement of plumbing, wiring and electrical installations (Jarfallahus, 2023; no date), as well as renovation of windows, facades and roofs. In some places, the need for renovations is greater than in others.

For instance, significant work on roofs needs to be done in Sångvägen, due to the roofs being built inward, which often results in substantial water damage (Lejdelin, 2023).

In addition, in recent years Järfällahus has expressed a commitment towards a green transition to reduce emissions and make the housing stock more resource-efficient (Socialdemokraterna i Järfälla, 2023).

Plans include the possible installation of solar panels along the entire length of Sångvägen and Nibblevägen (Lejdelin, 2023).

The extensive renovation work is scheduled to unfold gradually over the next 10 years, aligned with the individual needs of each building. Moreover, certain additional renovations, such as modifications to interior spaces will be carried out based on the preferences of the tenants (Järfällahus, no date). The initial phase of the renovation project has commenced with low- and high-rise buildings on Sångvägen and Nibblevägen.

FRAMEWORK FOR HABITABILITY

In 2018 the World Health Organisation (WHO) published the Housing and Health Guidelines Housing Standards (UN, 2022) which defines a general framework for minimum housing conditions. Housing quality is defined according to a set of indicators that the dwellings need to have. If the housing unit does not have four or more of these indicators it indicates poor quality of housing.

Overcrowding is defined as when the household does not have a minimum number of rooms depending on the people living in them. For a household to not be considered overcrowded must have at least one room for the household, one room per couple, one room for each single person aged 18 or older, one room for a pair of people of the same sex between 12 and 17, and or, one room per pair children under 12 years old.

While there are current standards in Sweden as described before, there is a risk of these minimum definitions to turn into the norm, following economic considerations. To achieve habitability, the apartments built must follow the demand dictated by population forecast. It is important to be considered not only the amount of people per household but also how it is configured in order to determine the amount of rooms needed, as shown in Figure 15.

When comparing to the current proportion of apartment types with the current demand, as illustrated in Figure 16, a noticeable mismatch is apparent. It is important to be considered that this trend is worsening. Clearly, a mandate on what type of apartments are built is needed. Municipal tools like land allocation are crucial when counteracting the market trends. Specially for rentals, since describe previously, those are the ones apartments that can be accessed by the most vulnerable groups.

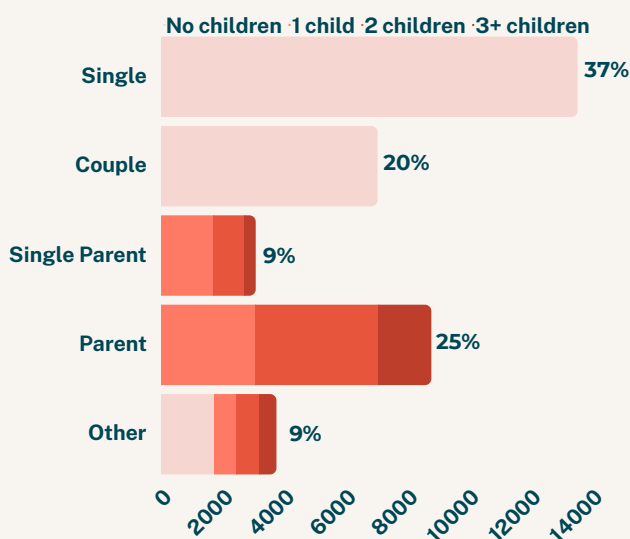


Figure 15. Percentage of different types of households in Järfälla.
Source: created by the authors based on SCB

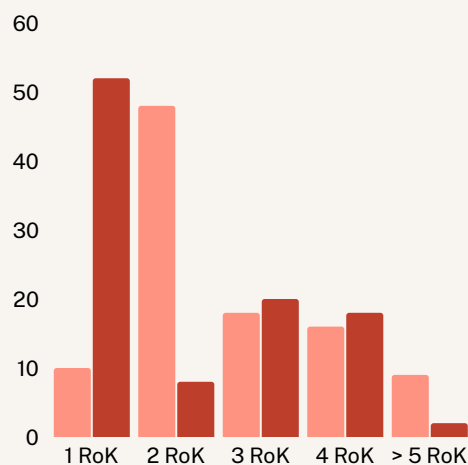


Figure 16. Comparison between current apartment types and the actual demand in Järfälla.
Source: created by the authors based on SCB



LOCATION

Location is about proximity to both public transport and amenities. This includes also the quality of public space and safety around them.

Safety issues

The official Swedish definition of safety in an Urban Planning context is the one by the National Board of Housing, Building and Planning, which reads: “Safety is the feeling that is triggered when an individual interprets the design and use of a physical environment by combining sensory impressions with their own experiences, as well as with other individuals’ or media’s descriptions of the risk of being exposed to crime or threatening situations” (Boverket, 2022c).

Every year, The Swedish National Council for Crime Prevention measures the perceived safety among Swedes. Since 2015, the perceived safety has declined overall in Sweden, and the same was true for Järfälla (Gerell, Ivert and Mellgren, 2018; Brå, 2023).

This year, although, the perceived safety actually increased in Järfälla. For example, the portion of respondents who perceived unsafety when walking outside in their own neighbourhood at night decreased from 48% in 2018 to 39% in 2023 (Brå, 2023). However, it is too early to say if this is a new trend, and the current number is still quite high.

Safety also depends on demographic (Gerell, Ivert and Mellgren, 2018). For example: Also, 47% of female respondents in Järfälla 2023 felt unsafe walking in their own neighbourhood at night (Brå, 2023).

People in vulnerable areas tend to feel less safe than average

47% of female respondents in Järfälla 2023 felt unsafe walking in their own neighbourhood at night

The municipality especially points out Söderhöjden and Sångvägen as areas that are perceived as unsafe (Järfälla kommun, 2023a).

This means there is an uneven distribution of perceived safety in the urban space of Järfälla. Promoting safety is still very much on the agenda in several municipal goals and strategies, and the municipality itself says collaborative measures between civil servants, the Region, the Police, Social services, Järfällahus and so on have been integral for the work (Järfälla kommun, 2023d, 2023a). All this indicates that safety is an important aspect of Adequate Housing and should be further cemented into the municipality's work.

39% of people in Järfälla feel unsafe walking in their neighbourhoods on late evenings

SEGREGATION

Socio-economic segregation is measured in different ways. It often includes income levels, which have already been covered. It also includes housing segregation, occupation and education, among other variables (Boverket, no date). Even though some variables are not addressed in the proposed framework, like employment, they are here to illustrate that there is socio-economic segregation in Järfälla and that it coincides with both ethnic and housing segregation.

The socio-economic segregation in Järfälla can be described in different ways. With data from SCB open data we have created the following maps to visualise segregation in the municipality. The maps can be compared to the larger one at the beginning of this section.

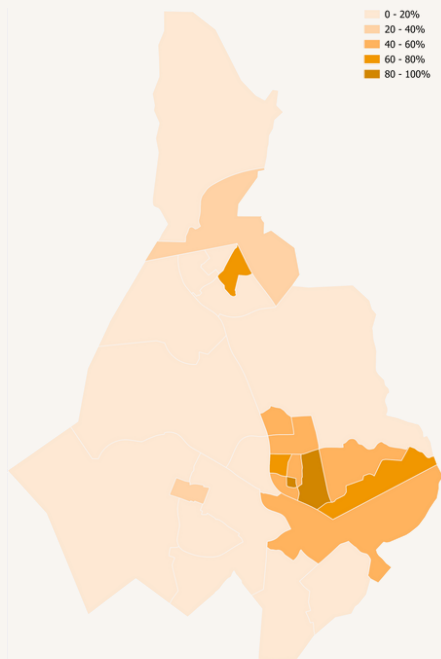


Figure 17. Portion of rental accommodation in every neighbourhood in Järfälla. Source: created by the authors based on SCB

Figure 17 illustrates that in most neighbourhoods in Järfälla, rentals constitute 20% or less of the housing stock. In Central Jakobsberg, Nibble (where Sångvägen is), as well as in Hammaren, Nyberg, Central Söderhöjden and Tallbohov (which are often referred to as Söderhöjden), rentals make up 40% or more of the stock. In Tallbohov and Central Söderhöjden, the rentals constitute 80-100% of the stock. Ulvsättra also stands out with over 60% rentals. Eastern Barkarby, Ålsta and Barkarbystaden also have more rentals than most areas

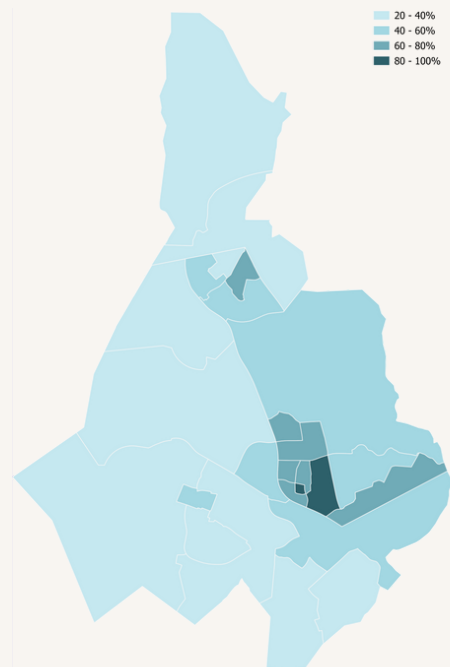
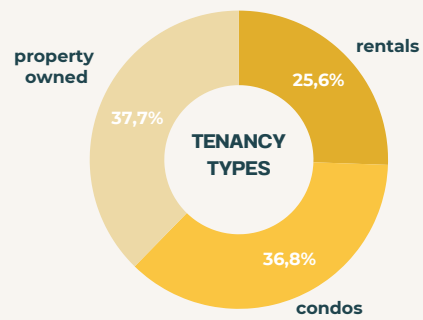


Figure 18. Portion of the population in each neighbourhood with foreign background. Source: created by the authors based on SCB

Figure 18 illustrates that even the most homogenous areas in Järfälla have at least 20% people with foreign background. Foreign background here is defined as being either born outside Sweden or born in Sweden but having at least one foreign-born parent. Järfälla is clearly an ethnically diverse municipality. However, it is also clear that there is an ethnic segregation, where the eastern part has a higher concentration of people with foreign background than the northern and western parts. In Ulvsättra, Nibble, Central Jakobsberg, all areas in Söderhöjden and Barkarbystaden, there is a particular high concentration of people with foreign background.

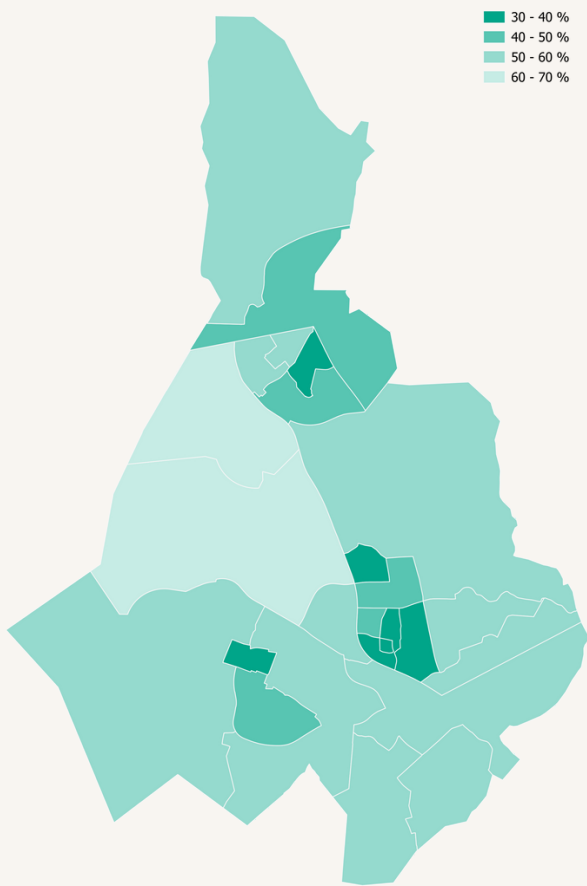


Figure 19. Portion of population that has higher education (university or college).
Source: created by the authors based on SCB

Figure 19 confirms that level of education adheres to similar patterns of segregation as the earlier maps. Interestingly, Barkarbystaden, Åsta and Eastern Barkarby are in this aspect more similar to the rest of the municipality. Meanwhile, Central Viksjö, Ulvsättra, Nibble, and all neighbourhoods but one in Söderhöjden stand out as areas where 40% or less have higher education, compared to the municipality average of 48%.

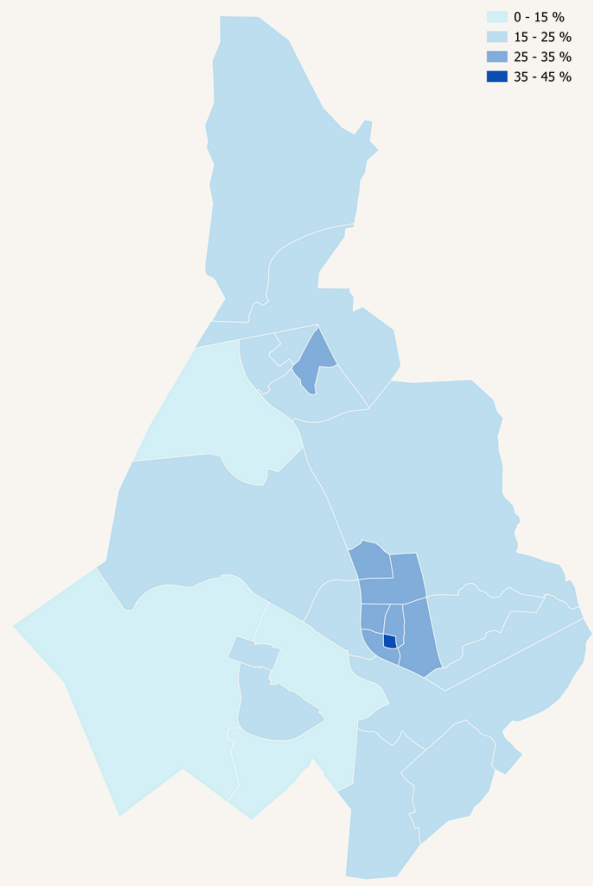


Figure 20. Portion of unemployment.
Source: created by the authors based on SCB

Figure 20 shows that unemployment in Järfälla is concentrated to Ulvsättra, Nibble, Central Jakobsberg and all neighbourhoods in Söderhöjden. Central Söderhöjden has the highest unemployment rate in the whole municipality, where 35-45% of residents are unemployed, compared to the municipality average of 20%. Figure 5 from the section “Key stakeholders within the housing sector” confirms that most of the rentals showcased in figure 17 are owned by the public landlord Järfällahus.

However, it also shows that there are no public rentals in Ålsta or Barkarbystaden, and only one area with public rentals in Eastern Barkarby. This means that while there is a high portion of rentals in these areas, they are administered and thus distributed privately, outside of the public queue system in Järfälla.

In summary, the mappings have shown that there is ethnic and socio-economic segregation in Järfälla. They show that the most afflicted areas, where lower socio-economic status is concentrated, are Nibble, Ulvsättra, Central Jakobsberg and all neighbourhoods in Söderhöjden.

RESEARCH ON THE ASPECT OF LOCATION

Sustainable urban planning should include access to essential opportunities among its priorities. Residents of 'affordable' housing are at particular risk of suffering from below-average accessibility levels. However, the scarcity of housing in many cities, coupled with high demand and limited space, intensifies competition for this vital resource.

There is a tendency to locate more affordable housing projects in peripheral neighbourhoods with limited transport infrastructure (Welch, 2013; Martínez et al., 2018; Zeng, Rees and Xiang, 2019).

A notable drawback of numerous public housing initiatives is the absence of quality standards ensuring equitable access to opportunities (Smith, Bertolaccini and Lownes, 2021). Socially and economically vulnerable residents— groups lacking the resources or agency to control their life situations— may find themselves confined to areas with lower accessibility. This limitation hampers their ability to reach employment, educational institutions, and healthcare facilities, or visit family members (Foth, Manaugh and El-Geneidy, 2013; Lucas, Van Wee and Maat, 2016; Verlinghieri and Schwanen, 2020).

Public transit accessibility becomes important here, and can be defined in multiple ways, including the distance or walking time to the nearest public transport stop (Ju, 2014) or the number of stops within catchment areas (Lan et al., 2018).

ACCESS TO SERVICES AND AMENITIES

Urban development initiatives are shaped by both calculations aimed at making investments in new housing financially viable, and a broader evaluation of the value associated with housing units, including access to amenities like parks and shopping facilities.

Although these amenities may not be directly factored into the prices or rents set for potential buyers, they still impact them because amenities influence market demand. This complexity is particularly pronounced in low-income city districts and those with "negative" amenities, such as visible street crime (Styhre, Brorström and Gluch, 2022).

On the flip side, part of why "positive" urban amenities are not available in low-income areas is because location is an important factor in housing prices (Zhou et al., 2022). Location can also, contrary to popular belief, affect rents in the Swedish use-value system (Jartsell, 2007; Hyresgästföreningen, no date). Housing prices in Järfälla are therefore influenced, too, by location and thus by access to urban amenities.

Property development companies encounter challenges in justifying investments, especially in contexts where outcomes are uncertain, such as in the low-end housing markets dominated by households with limited budgets (Styhre, Brorström and Gluch, 2022).

Proximity to the central business district (CBD) and employment centers correlates with higher prices (Cui et al., 2018). Additionally, factors such as the presence of schools and urban green spaces, including nearby parks, contribute to a better quality of



life for residents, thereby influencing housing prices (Jim and Chen, 2006; Wu et al., 2017; Zhou et al., 2022).

The economic valuation of the housing stock is dependent on what housing market studies refer to as amenities i.e. tangible or intangible qualities which are not directly included either in the rent or in the cost of renting an apartment in a specific neighbourhood/area but which still affect the valuation of the housing unit because amenities affect market demand (Styhre, Brorström and Gluch, 2022).

Amenities encompass various factors, including access to nature reserves like parks and recreational areas, perceived safety and security of the local neighbourhood, access to local businesses, cafes, and restaurants, the quality of public transportation, and other perceived benefits of the immediate geographical area (Styhre, Brorström and Gluch, 2022).

These factors significantly impact how investments are made in a city district. Understanding the influence of urban service amenities on housing prices is crucial for informed planning strategies by administrations. For residents of public housing, whose mobility is often restricted due to precarious economic situations, the accessibility of services and facilities is a fundamental concern (Apparicio and Seguin, 2006).

Due to the uneven distribution of public transport, variations in urban development, cultural backgrounds, and other factors, the trade-offs between the positive impact and negative externalities of accessibility differ across the city.

When lacking affordable housing in Järfälla and only providing it in certain areas, which are monofunctional, car-dependent and located away from urban centres may contribute to reduced trust among residents. This stands in contrast to individuals residing in walkable neighbourhoods characterised by a blend of housing, shops, services, and workspaces.



FRAMEWORK FOR LOCATION

The above findings suggest that the municipality and Järfälla hus should not only look at the units but also the space around the buildings. This is of course already done in the planning process, but there is a lack of consideration for public space in vulnerable areas, such as Söderhöjden and Sångvägen. The project looks into how location can be improved in these two areas specifically, but first, it must be stated: what defines an adequate location?

There is overwhelming research pointing to the need for access to urban amenities. But how can it be measured? From both a social and ecological sustainability standpoint, the 15-minute city is often used internationally and in Swedish contexts (Mattsson, 2023). The 15-minute city can mean different things depending on context.

When vehicle transport is necessary, the travel time should still be 15 minutes as a norm. Not only is this important from the perspective of social equity, safety and efficiency, but also from an environmental perspective. Car use must decline, especially for the car-dependent Järfälla who aims to be climate neutral by 2030.

For Järfälla, an adequate location for housing should exist within 15 minutes of walking to necessary amenities such as shopping clothes and groceries. Even more visionary, people should be able to walk to school and their leisure activities (whether it be going to the cinema with friends or playing in a gymnastics team) within 15 minutes.



When vehicle transport is necessary, the travel time should still be 15 minutes as a norm. Not only is this important from the perspective of social equity, safety and efficiency, but also from an environmental perspective. Car use must decline, especially for the car-dependent Järfälla who aims to be climate neutral by 2030.

It is not easy for inhabitants who do not have access to cars, and who do not live within walking distance to any of the town centres, to take the bus when they are so sparse in frequency in Järfälla.

As stated, people will ultimately need to take the commuter train, so taking a bus to the train should be accessible and effective. Some areas may already fulfil the 15-minute city as a recent study reveals (Mattsson, 2023), but Järfälla needs a general norm to decide on and adhere to, since adequate locations are unevenly distributed among the municipality's population.



Considering safety when designing new areas, the municipality should generally consider the risk of unsafe alleys, darkness and lack of movement in the area, and plan against it already from the early stages. While there are several theories on how to achieve this, there should always be assessments of safety both ahead of new projects and for existing problem areas. For Sångvägen and Söderhöjden, there should be planning programs especially aimed towards increasing safety through utilising public space.



There is also a possibility to engage in placemaking efforts when creating these public spaces, in order to identify the needs of the locals and help them create a sense of ownership over and relationship to the spaces. Maybe the spaces suggested by this project or the municipality itself are not what is demanded by the local population, so engaging them in the Planning of these spaces helps to increase their quality (Boverket, 2022a). Placemaking is further elaborated upon in the Participation chapter. The improvement of public space, increased public transport, and addition of amenities can on the whole increase the adequacy of housing through a location aspect.

SUSTAINABLE PRODUCTION & MANAGEMENT



Sustainable Production & Management refers to efficient energy use, renewable materials, and the management of buildings. Especially updating older buildings.

Sustainable construction is building with sustainability in mind, with the aim of reducing the impact of construction on the environment. Sustainability is addressed in the design, construction and use phases as well as during demolition. This can be done by using recyclable and renewable materials in construction projects and minimising energy consumption and waste production.

The primary goal of the sustainable construction method is to reduce the impact on our environment. Like many other municipalities and cities, Järfälla and Järfällähus are also struggling with a large number of residential units that were built in the 1960s and 1970s and are now in need of energetic/sustainable renovation. We are talking about a total of 3,200 flats spread over 6 different residential areas. (Järfällähus, n.d.)

In order to ensure a good housing supply in the future, not only sustainable/energy renovation is important, but it is also important that the new buildings being built meet strict sustainability requirements.

Through various measures, the municipality has ensured that since 2009 the energy consumption has fallen by 27%, as can be seen in figure 21. By 2030 it should be 30%. They have been able to do this by doing the above renovations and changes. For its part, Järfällähus also has targets to meet. They aim to reduce energy consumption by 20% by 2025. They have already managed to reduce heat consumption by 15% between 2009 and 2017 and reduce their property's electricity consumption by more than 20%. Currently, 95% of Järfällähus' current property portfolio is heated with district heating from E.ON.

This district heating is 95% produced from renewable fuels and recycled energy. The new buildings currently under construction are also subject to strict measures. The new buildings must achieve at least Miljöbyggnad level silver (or equivalent). This means that the building owner is committed to an energy- and environment-friendly building with both the building's occupants and visitors in mind. This also involves ensuring that factors such as solar shading, a good environment and sun protection far exceed the legal requirements. The focus will also be on good energy production and energy efficiency so that the climate impact of building materials and structures is reduced.

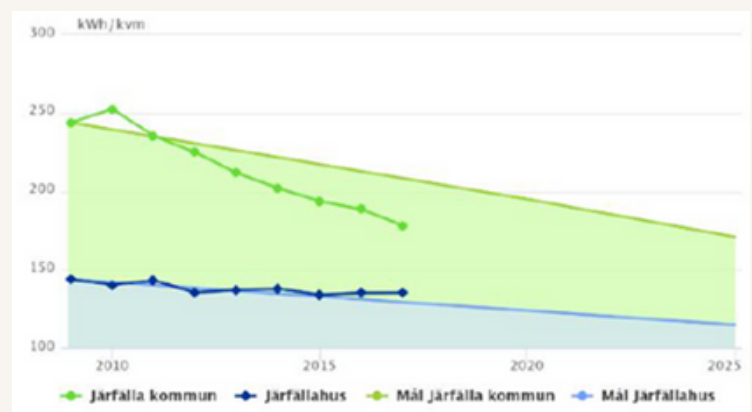


Figure 21. Energy use per square meter. Source: Järfälla kommun, 2019

In terms of sustainability, however, the buildings should not just be looked at as a separate entity, they should fit into a larger story that is sustainable and climate-proof. The sustainability of the buildings must be extended to the entire neighbourhood and later to the city. This is the only way to fully succeed in their design.

Making an entire neighbourhood sustainable means looking at sustainable mobility solutions, water circulation, high-quality greenery (both for animals and people), circular economy, renewable energy, ... We will not go into this in depth in this report as we mainly focus on adequate housing.

However, we still want to mention this as adequate housing is only one part of a much bigger story. The negative aspects of sustainable renovation/construction should also be considered. In fact, studies have shown that sustainable renovations cause financially weaker families to be forced to move because they cannot afford the rent increase that is the result of the higher rent that is put in place after these renovations. They are then replaced by financially stronger families. (Westin, 2011) such renovations in these cases encourage social segregation and loss of trust by the affected families.

If municipal housing corporations use these so-called 'renovictions', the risk is that social trust in society will decrease. This may lead to increased crime as social capital in the form of prosocial norms in buildings has been shown to have a reducing effect on crime rates. (Saegert and Winkel 1998) In the short term, such a strategy might be interesting for housing companies but in the long term, it is counterproductive for society. (Valenti and Giovanni 2013)

If municipal housing corporations use these so-called 'renovictions', the risk is that social trust in society will decrease..

While renovating outdated housing stock, it is important that the following issues are addressed:

Firstly, an energy audit should be carried out, this is important to better understand the current status of the housing stock in terms of energy efficiency. It ensures that there is a good mapping of where weaknesses are located and where energy is concretely lost. This can then be acted upon later and how these weaknesses can be addressed.

A second important point is to insulate well and, if the situation allows, to insulate more. This ensures that less energy is lost in winter and the house stays cool in summer. High-quality insulation also directly ensures that less energy has to be used to heat/cool the house.

Improving windows and doors also plays an important role for similar reasons. High-efficiency glass and good doors also ensure that less energy is lost in winter and the house stays cool in summer. Large windows that have single-glazing or are not energetic enough, for example, created a big cold bridge in the house.

An energy audit should be carried out, this is important to better understand the current status of the housing stock in terms of energy efficiency.

Using renewable energy systems is also crucial in making buildings more sustainable/energy efficient. These could include solar panels, wind or geothermal energy systems. It allows you to generate your own energy and be less dependent on the power grid where energy has to be purchased. It is often a big investment but in the future it ensures that you can generate electricity more cheaply and that your carbon footprint is reduced.

Not only renovating or adding energy-efficient new buildings contributes to more sustainable housing. Technology also plays a major role in this. By implementing technology in building management, various things can be handled much more efficiently and Järfällahus can benefit from this as well, some examples listed:

Indoor climate monitoring: By monitoring the temperature in the entire building, it is possible to find out where energy is lost in order to then prevent it. This is important for both Järfälla and Järfällahus to know as it allows them to save unnecessary energy costs. In addition, the buildings can be made less environmentally damaging after identifying where energy is lost.

Heating optimisation: By starting to collect real-time indoor climate data, it is possible to start optimising the heating in the building. This makes it possible to increase tenant comfort and also prevent unnecessary energy use. This way, the cost for Järfälla and Järfällahus can be lowered and the building's CO2 emissions are also reduced.

Air quality monitoring: By monitoring air quality, and pollutants in the air, ... it is possible to start regulating the building in such a way that it improves air quality. This too ensures a better living environment for the tenant and visitor. Again, this makes it easier to identify exactly where energy is going and how efficiently it is being used.

Electricity and water monitoring: As electricity and water consumption are often included in the rent, it is important for Järfällahus to gather information on how efficiently this system is running, where any leaks are located and general information on electricity and water consumption. This way they can quickly anticipate possible problems.

Deploying renewable energy sources can also be very beneficial for Järfälla and Järfällahus, an example being the installation of solar panels and small wind turbines on the roofs of their buildings. For several years now, the installation of solar panels has been growing in Sweden. As can be seen on figures 22 and 23 to the right, between 2017 and 2022, Sweden experienced a large growth in the installation of solar panels and the number of MW generated (P. Ahrberg, 2023).

It is therefore the case that Sweden is a very interesting country to generate solar energy, if we look at the number of light hours there are in Stockholm, for example, we arrive at 1960h/year. The solar radiation per year in Stockholm amounts to 975kWh/m².(P. Ahrberg, 2023)

From a previous analysis of the total real estate portfolio, we have seen that Järfällahus owns about 285 buildings. The roofs of these buildings are not being utilised to date. It would therefore be an opportunity to make these rooftops and install solar panels here. This gives Järfällahus an extra source of income as they can use their own energy to heat their buildings and sell the rest of the energy that is not used to energy companies.

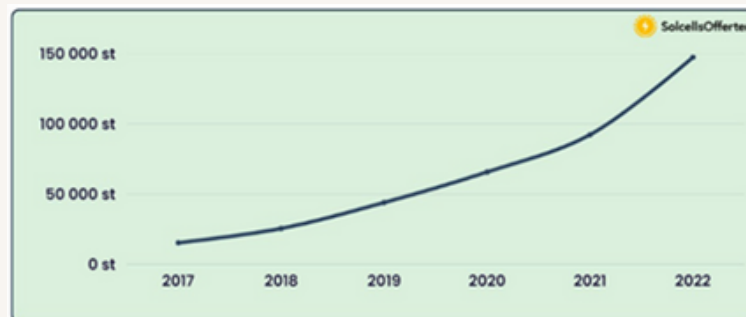


Figure 22 Number of photovoltaic systems installed in Sweden (P. Ahrberg, 2023).

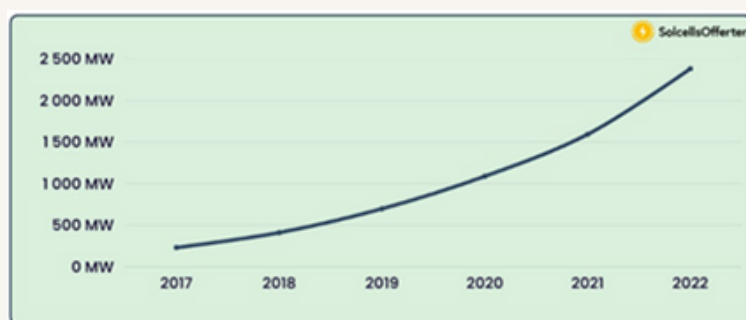


Figure 23 Total power in MW for all photovoltaic systems in Sweden

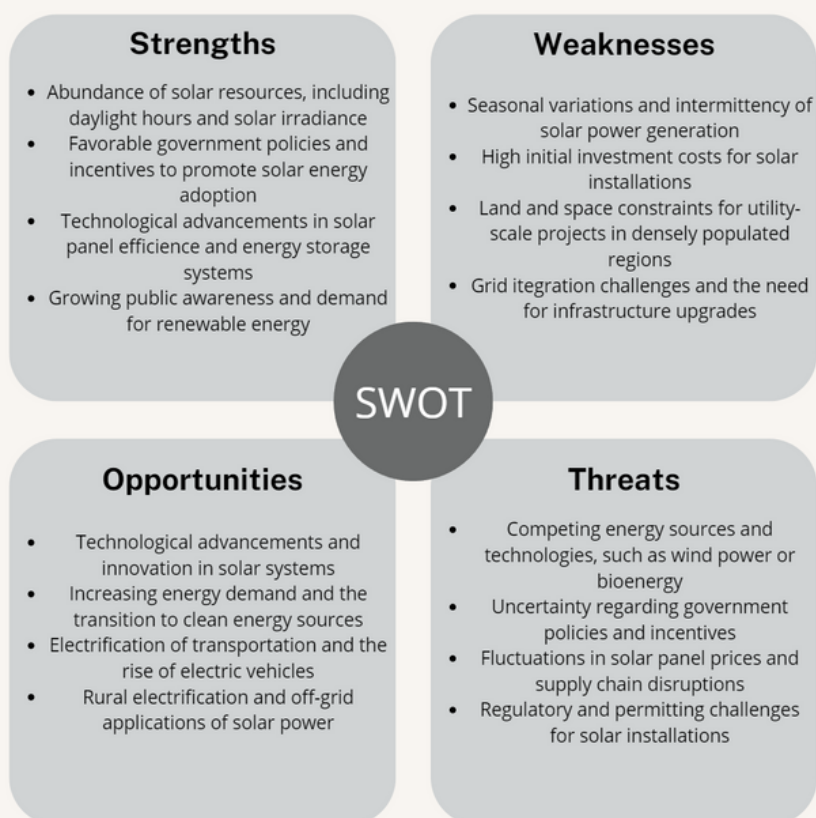
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Table 2 shows the payback time of a solar panel installation and how profitable it can be for the housing company. If Järfällahus does not have the financial capacity to make such a large investment, they can also opt for "Solar energy as a service", which means that the energy company takes over the cost of purchasing, installing and maintaining the solar panels. In exchange, Järfällahus must provide the roof of their buildings to install the solar panels. Then Järfällahus, the owner of the buildings, will enter into a contract with the energy company, agreeing that Järfällahus will purchase energy for a long-term period. It is interesting for Järfällahus because the price of the energy they buy from the company will be lower than the price they usually get. (JB Sustainable Approach AB, 2019)

Profitability calculation for a 10 kW photovoltaic system in Sweden	
Photovoltaic cells including installation:	SEK 150,000
Annual electricity production:	10,000 kWh
Electricity price per kWh:	SEK1.20
Total reduction of energy costs/year:	SEK 12,000
Estimated payback period	12.5 years

Table 2 Profitability calculation for a 10 kW photovoltaic system in Sweden (P. Ahrberg, 2023)

However, realistically, the disadvantages that solar panel installations have must also be taken into account. Therefore, the SWOT analysis below summarises what specifically the strengths, weaknesses, opportunities and threats are.



Another possibility are small wind turbines that can be put on the roofs of buildings owned by Järfällahus. Despite this technology being less elaborated and used than solar panels, it can still be interesting to explore the possibilities. It is possible to combine with solar energy to ensure maximum green energy yield. Several systems exist but in this report we will limit ourselves to two.

First you have the 'Windbox' (figures 24 and 25), which is a box covered with two photovoltaic panels and houses a horizontal wind turbine. They are installed at least ten metres high at the edge of flat roofs. This is where it captures the wind that accelerates across rooftops in urban environments. The big advantage of this system is that it has fewer seasonal intervals. It is often the case that when there is a lot of wind, there is also less sun and vice versa. Because it can capture both, this is not a problem to less windy or sunny days.

The box is 1.6m high so it does not stand out from the street side and therefore has no aesthetic impact on the building. This system can generate 2500kWh per year. The boxes are also equipped with a storage system, this allows the energy that is not used, can be used later. (M. Cheveraux, 2023) As Järfällahus owns many buildings that are at least 10m high and have flat roofs, this system could be a good addition to generate green energy and make their buildings self-sufficient and possibly sell the energy surplus that is not used to generate additional income.

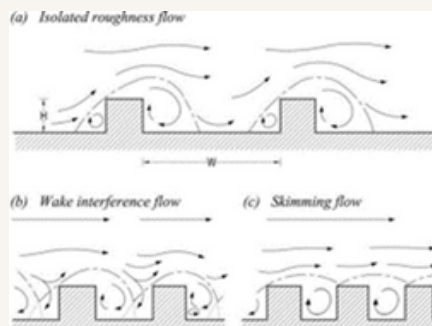


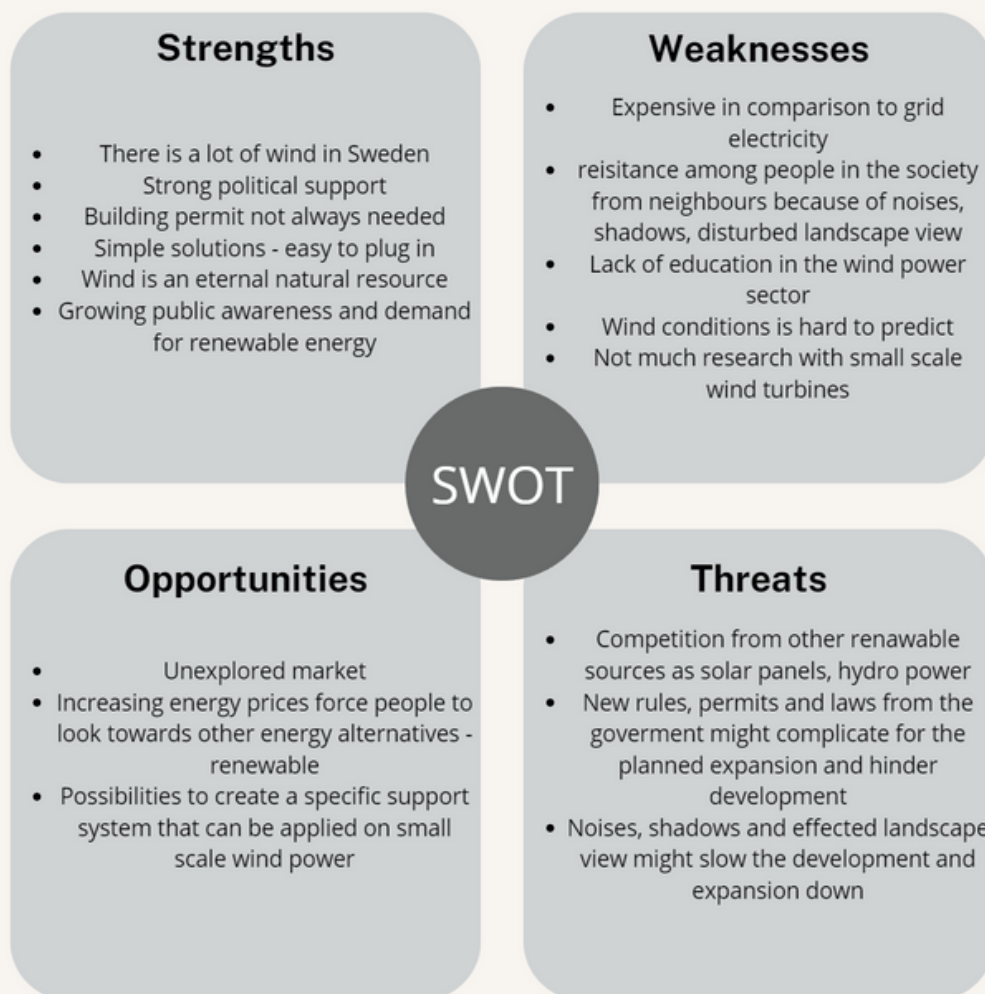
Figure 24 Airflow around buildings (Akubue, J. A. 2019).



Figure 25 Example of the "Windbox" (Buyse, N. 2023).

The big advantage of this system is that it has fewer seasonal intervals. It is often the case that when there is a lot of wind, there is also less sun and vice versa. Because it can capture both, this is not a problem to less windy or sunny days.

A SWOT analysis for this energy-generating system summarises what the strengths, weaknesses, opportunities and threats are.



Finally, using recyclable and renewable materials also plays a big role. In fact, when constructing new buildings, too often the standard materials are still chosen without thinking about their impact. Two examples are steel and cement. The production of these materials create large emissions and resource depletion. In addition, the recyclability of such materials is low. Therefore it is important that Järfälla has strict requirements when it comes to materials being used in new construction or sustainable renovation. Renewable and recyclable materials do not have large emissions when they are produced, thus ensuring a lower footprint. It also tends to have better energy efficiency, so the buildings will consume less energy which directly affects energy costs and emissions. Lastly, no resources need to be used to produce it, making it much less harmful to the environment. Some examples are bamboo, hempcrete, wood, loam, straw, cork, etc. (Utilities one, 2023)



PARTICIPATION

Participation is about increasing collaborative efforts and democratic participation in all stages of decision-making processes, including both local residents and active associations.

In order to reduce social issues caused by segregation, such as social exclusion, crime and unsafety, both theory and Swedish institutions suggest collaborative approaches. These can be executed in different ways, but all stress that dialogue and cooperative activities need to occur between institutions (municipalities, Social services, Police), local actors and (Boverket, 2022b; Järfälla kommun, 2023b).

While research has shown that collaboration does not guarantee positive effects, it is emphasised as important for democratic participation, life quality, and for organising neighbourhood development (Roelofs and Salonen, 2019).

The municipality has started conducting dialogues in the vulnerable areas to gather people's inputs on a strategy document they are working on which will outline how to promote equal life opportunities (Järfälla kommun, 2023b). They have also started with meetings in the vulnerable areas that have a cultural and mini-festival feeling to influence democracy and engagement. The dialogues are done in collaboration with different actors, such as Police, the local Rental Union and Järfällahus (Järfällahus, 2023b). They also attempt to work with dialogue in the general planning process.

This comes after several setbacks in the municipality's work with democratic engagement in their vulnerable areas. Two youth centres with great importance for the local populations, in Söderhöjden and Sångvägen respectively, were shut down in 2021 despite protests from the residents and associations (Lejdelin, 2021a, 2021b; Romefors, 2021). Today however, there are decisions that might reverse these developments, such as the new youth centre in Jakobsbergs Centrum and the decision to open a youth centre in Söderhöjden again (Järfälla kommun, 2023c; Lejdelin, 2023).

Furthermore, in the planning process, the municipality sometimes has early dialogues where Järfälla residents can provide input. Additionally, there are the legally regulated opportunities for consultation and review in the planning process (such as samråd) (Järfällahus, 2023a).

FRAMEWORK FOR PARTICIPATION

The so-called Swedish model, as it pertains to the public rental market, has several strengths. Among these strengths is the possibility for tenants to be more involved in negotiations and proceedings around the rent level. This is done through the Rental Union (Hyresgästföreningen) which is a national association with local departments responsible for negotiating rents with landlords. It is free for all tenants to join the union, and attend meetings where negotiators are elected and report back on the proceedings to the members.



According to an interview with one of the negotiators in Hyresgästföreningen Järfälla, the union has a good relationship with Järfällahus, which they state is integral for the negotiations (Hyresgästföreningen, 2023b). They say that if the relationship is lacking in different ways, proceedings are more difficult, trust is lower and there is a risk that not all information is presented to the union.

This should mean that there exists a stable negotiation climate in Järfälla's public rental market. A stable ground on which more could be built. There should be increased recruitment to the union, especially from underrepresented groups, in order to increase democratic participation.

The relationship between tenants and landlord is not the only important one, but also the relationship between tenants and the union. It is through the union one can file complaints and receive help from experienced people in matters of trouble. It is also a forum for community building. Today, the union arranges community activities, but there could be increased engagement in the participation and negotiation aspects.

There is also the Swedish association life, which is very strong. Järfälla is a municipality with many sports facilities and neighbourhood organisations. This could be utilised to increase democratic organising among inhabitants, which could improve communities and thus add to adequacy in housing. The municipality should have regular contact with associations that are very active and integrated in the community, and support their activities.

For example, the consultant groups that have been tried for the renovations could be perfected and made into permanent forums in vulnerable areas where locals can communicate with the municipality and other collaborating actors. Such other actors could be active associations, religious groups, Järfällahus, Hyresgästföreningen, Planners, Architects, Sustainability Strategists, Police officers and local school representatives who have good relationships in and knowledge of the area. Collaboration is done on the institutional level in Järfälla today but there must also be strong collaboration on a grassroot level. This could even increase social capital, trust and cooperation, which can decrease crime and unsafety (Gerell, Ivert and Mellgren, 2018).

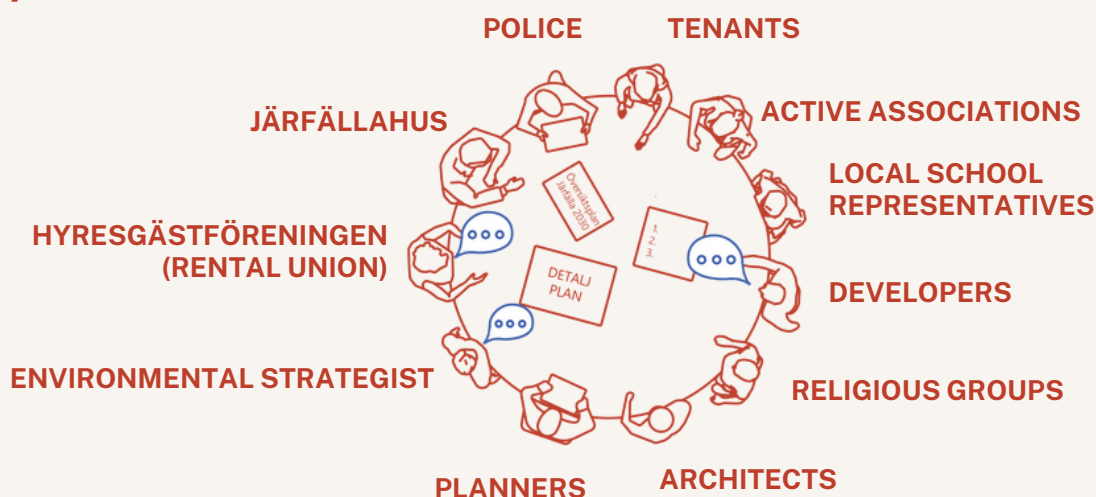
Another way to increase democratic participation is through placemaking. Placemaking is about bottom-up processes, where local communities collaborate with Architects, Urban Planners and Land Developers to both create and administer public space and housing. The locals should be involved in discussions and design processes, and be continuously part of the project from start to finish to administration/management.

Planners should be aware that research shows the later stages of placemaking, where residents participate in administering the spaces, must be upheld, otherwise it could become a source of failure for the whole project (Boverket, 2022a).

Placemaking has been shown to be able to increase safety and care for areas as people develop a relationship to them. It can increase participation of people from different backgrounds and contribute to a varied and aesthetic streetscape (Boverket, 2022a).

Researchers argue that placemaking can have long-lasting impacts if it is community-driven and prioritises inclusivity and diversity. It has also been shown to contribute to a more just and inclusive community for marginalised groups (Hewidy and Lilius, 2022).

The renovation project in Järfällahus already employs some placemaking aspects, but the need for democratic participation is not only present in vulnerable areas, it should be done across all Järfälla. Furthermore, current Järfällahus tenants should be involved in the landlord's new projects as well since they are possible future tenants of them.





EQUITABLE ACCESS

Equitable access is about fair access according to the living situation of the households. We are not proposing social housing, since we believe in a general housing policy. But we think that vulnerable groups should be prioritised when implementing policies.

The public housing queue, which in Järfälla is administered by Järfällahus, has, like all queues in Stockholm, a very long waiting time. As of now, it takes on average 6-7.5 years to receive an apartment through Järfällahus. Meanwhile, as has been stated previously, Järfälla is segregated both ethnically and socio-economically, and vulnerable areas are overcrowded.

ETHNIC DISCRIMINATION AND CULTURAL ADEQUACY

As already mentioned, Järfällahus says there are three important factors why new rentals are more expensive, that they identify. One of the factors is that there are more pressure from the municipal planners today to have facades with higher quality on new buildings. This drove up costs and thus the rent in one recent development. They also mentioned a fourth interesting point, that in some cases they choose not to construct 4- or 5-room apartments, even though this is requested in the queue, since the families in the queue often cannot afford these apartments (Järfällahus, 2023a).

The four mentioned factors are partly contributing to the housing shortage for the vulnerable class in Järfälla, in which the largest group is people with foreign backgrounds (Polisen, 2020). This unavoidably reproduces lower living conditions for non-white families.

Therefore, one can apply Critical Race Theory to this system. Critical Race Theory argues that the discrimination and oppression of non-white peoples of colour are inherent in law and legal institutions (Encyclopaedia Britannica, 2023).

The three mentioned factors lead to a housing shortage for specific ethnic groups, meaning that the result is discrimination even though there might not have been any intention of this from the start.

It is also possible that the trend in politics and professional Architecture and Urban Planning, where Million Programme aesthetics are regarded as unfashionable or outdated (Hammar and Sundebj, 2016; Lundberg, 2018), and associated with crime and vulnerability, has racist undertones due to these areas being mainly populated by the vulnerable class, which we have already stated is predominantly non-white.

The issue becomes exacerbated considering that Swedish families with foreign backgrounds have more children than the average Swedes, thus demanding more rooms in their dwellings (SCB, 2023). Since the current system cannot provide Järfällahus residents in need with 4- or 5-room apartments, the discrimination is further cemented and increases overcrowding for non-white families.

The point of these arguments is not to say that individual civil servants or politicians in Järfälla are racist, but rather that the intention to be, or not to be, racist does not matter – the oppression of racial minority groups is perpetuated in either case. But this is due to structural issues, not individuals.

The housing shortage mostly affects the vulnerable class in Järfälla, in which the largest group is people with foreign background

For Järfälla in particular, it could be said that there exists structural discrimination inherently within the institutions, and it needs to be combated in the housing policies as well. Whether this can be done through lower architectural demands or electing cheaper developers on cheaper land is debatable, but either way there might also exist a need to educate coworkers on institutional racism in order to minimise it occurring. This view is supported by Länsstyrelsen, who also point out that there exists discrimination in the Swedish housing market (Länsstyrelsen, 2021).

An important way to mitigate the discrimination is to include residents in vulnerable areas in development processes. Democratic participation can improve the outcome and public satisfaction with projects. This is further elaborated upon in the Participation section.

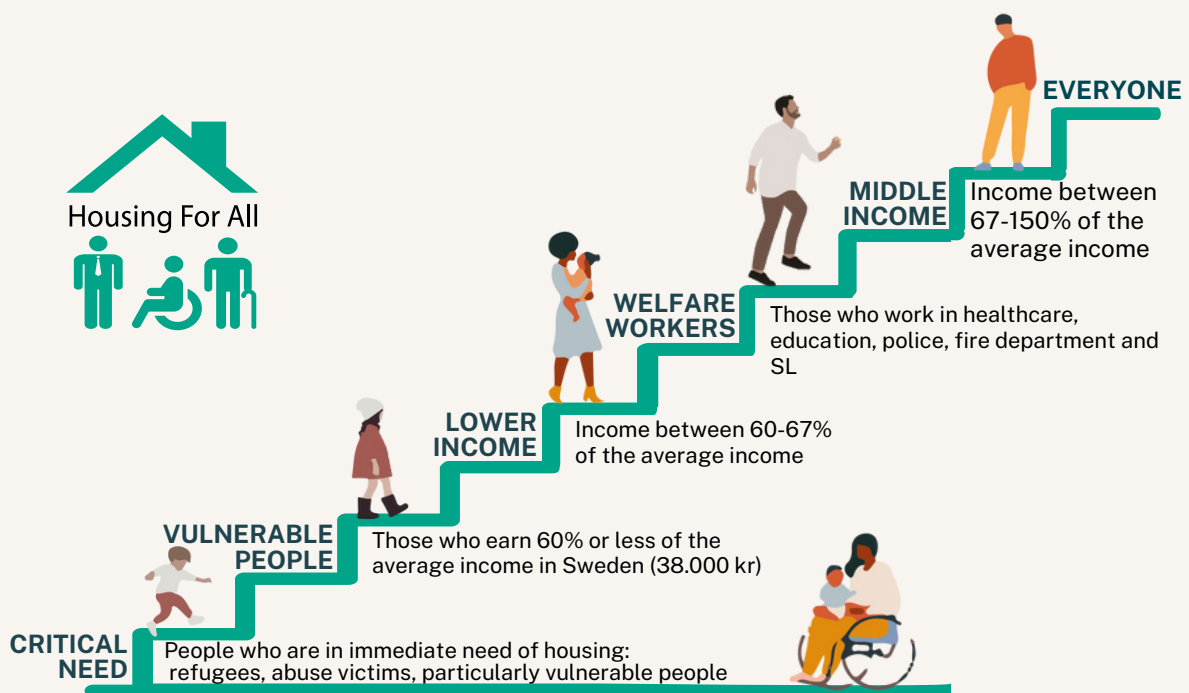
FRAMEWORK FOR EQUITABLE ACCESS

What could be done? Many countries have historically turned to social housing, and it has worked well in Vienna for example (Mari and Locatelli, 2023). Sweden's version of social housing was eradicated during the Record Years due to social stigma and a political desire for a general and equal housing policy (Sveriges Allmännyttan, no date a). Since successful social housing programs are few internationally, and would mean a thorough shift in policies if they were introduced in Sweden, this project does not propose social housing. Working within the current system is more effective and fair. Simultaneously, the current housing crisis in Stockholm and Järfälla cannot be understated– the waiting time to receive an apartment is longer today than it was before the Million Program (Christophers, 2013). Due to underserved communities being especially disadvantaged, this project proposes a priority list for admitting the most vulnerable groups first in the Järfällahus queue, meaning that social situation and income should be considered together with your queue points.

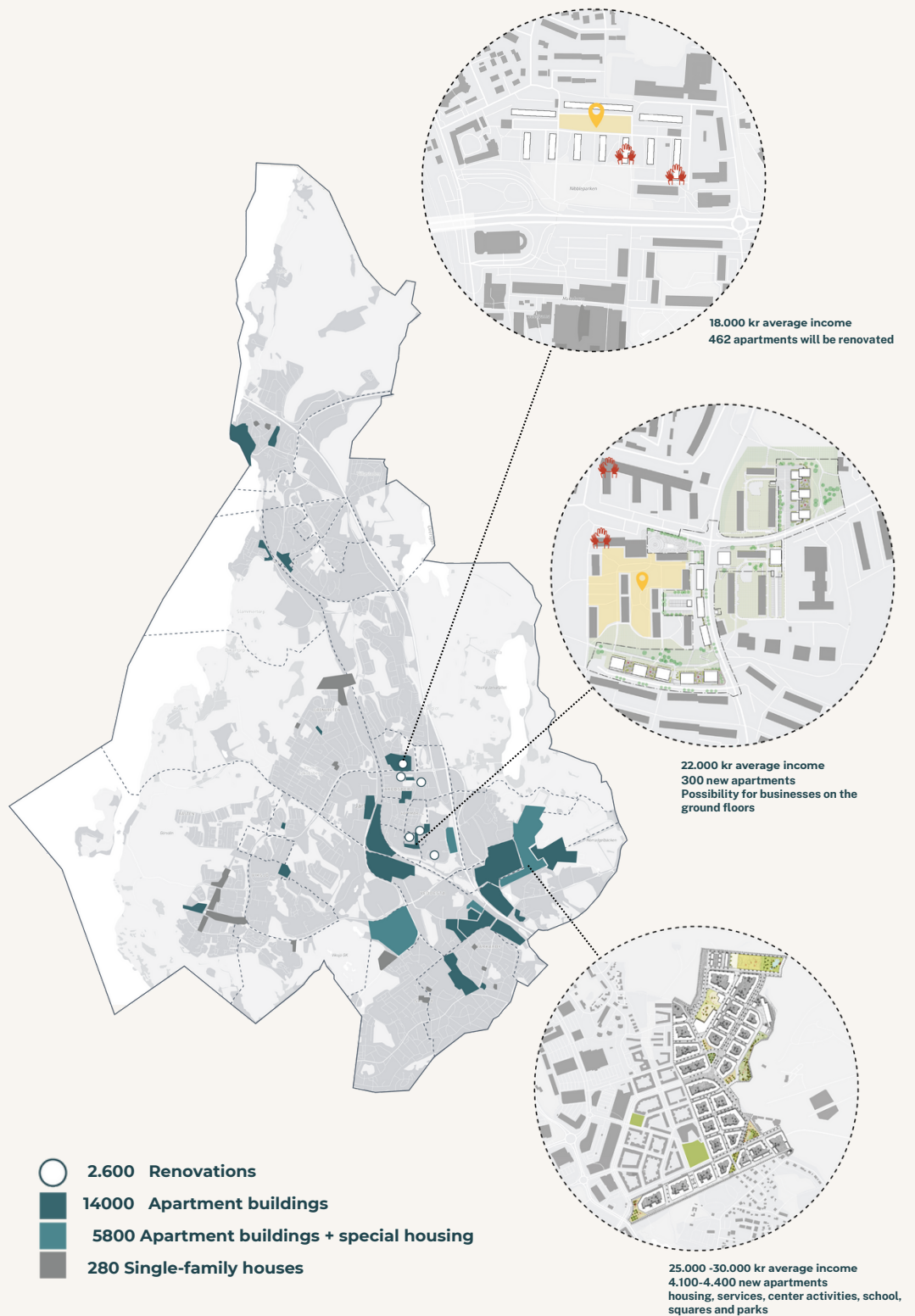
The first group who should be allowed access to public rentals within the Järfällahus queue is people who are in critical need of housing. This includes refugees, domestic abuse victims, and other particularly vulnerable people (assessments should be made in each case). The second priority group should be vulnerable people, that is those who earn 60% or less of the average income in Sweden (which is 38.000kr). This definition is taken from the official Swedish definition for relative poverty and is based on total household income. The third priority group should be low-income households, where the income is between 60-67% of the average income. The fourth priority group should be essential welfare workers, those who work in Police, Fire Departments, healthcare, education and public transport. The last priority group should be the middle-income bracket, they are the households who earn 67-150% of the average income. After these prioritizations, everyone else is admitted.

These priorities should be evaluated in each case, and Järfällahus would have to work to distribute people evenly, so as to not concentrate the most vulnerable groups to the same geographical areas and deepen the existing segregation.

Moreover, simply belonging to priority groups 2-5 should not automatically let you skip ahead of the queue, but it should be taken into consideration along with queue points. The attitude from Järfällahus should be to prioritise these groups ahead of other people who might have a roughly similar amount of queue points. The municipality should also use this prioritisation when making housing policies and Planning new areas.



EVALUATION



RENOVATIONS: SÅNGVÄGEN

Sångvägen is a Million Programme Järfällahus area comprising 462 apartments, which are all in need of renovations to maintain technical functions as well as livability, since the apartments are relatively rundown. The average income in the area is 18.000 kr a month.

PARTICIPATION

Järfällahus has initiated consultation groups for residents, where it is possible for anyone to apply and join discussions on what the renovations should include. Järfällahus stated in the interview that there will be both a base package and an elective package.

The base package includes necessary renovations which every tenant must accept if they want to stay in the apartment. The elective package has additional renovations that tenants need to actively choose and pay extra for. The Rental Union confirmed that the base package will cause “juicy” rent increases (Hyresgästföreningen, 2023b), and the landlord said that the residents in the consultation groups have chosen what is in the base package (Järfällahus, 2023a).

However, in an interview with an anonymous participant in the consultation group, it turns out that the residents do not share this perception. The interviewee confirmed that both they and their fellow neighbours often felt like they did not understand what was going on during the meetings.

They said that information would change every meeting, and while there was some discussion on a few topics, the interviewee claims that the residents have not decided what items would go into the base package. This contradicts Järfällahus’ view. When looking at the base package (see Appendix), one can notice some items stand out:

Clinker bathroom floors, self-closing kitchen drawers, corner cupboard with rotating shelves, and new kitchen locker frames and wardrobe frames. The landlord supposedly claims these items belong to overall new Swedish standards that they must follow. In any case, they were not the tenants’ ideas.

The interviewee claims that the landlord was not clear about costs for each item in both packages, as well as which items in the base package would cause rent increases and which would not.

The interviewee further said that since the landlord presented a new base package every meeting claiming additional items belonged to the new Swedish standard, the residents did not feel like they had a say in much or could discuss the base package.

They also say that while the Rental Union, who participated in the consultation group, warned the residents against opting for additional items, they still defended the base package. The interviewee specifically refers to the above mentioned items, saying that they and their neighbours did not feel like they had enough prior knowledge of renovations or proceedings of this kind, or enough information from the landlord, to make decisions.

Overall, it can be said that the consultation groups offer some participation, but they could be perfected with being better adapted to the knowledge level of the residents. The level of participation can be said to be unclear or unknown, since all interviewees have different viewpoints. The system is new so this is not surprising, and perhaps it is just what Sångvägen needs. The groups could be made permanent as a channel of communication for the locals to voice their opinions and needs. The municipality could also be involved then, and associations, religious groups, and so on.

The consultant groups could be made permanent as a channel of communication for the locals to voice their opinions and needs.

AFFORDABILITY AND EQUITABLE ACCESS

The Rental Union said in an interview (which was before the interview with the anonymous resident) that the rent increase will be “juicy” and low-income households may feel it significantly. Their view is that they have made sure in negotiations that the renovations will not be unethical or luxurious, but match what needs to be done in the apartments.

The end scenario, they say, will not be the worst thinkable one, granted that they are quite early in the process so it might be too early to say. But they say they have great respect for tenants feeling unable to manage the increase, and understand if there is fear and frustration among residents.

They advise against the elective package because it will not only cause one rent increase, but also a higher annual rent increase. Their view of the consultation groups is that it has offered some democratic insight for residents (Hyresgästföreningen, 2023b).

This also differs somewhat from both Järfällahus and the anonymous resident's view, landing somewhere in between. It should be stated here that only one resident from the consultation group was interviewed, so the person's thoughts should be treated with some caution, but their concern should not be ignored. However, the person interviewed from the Rental Union had not participated in the consultation groups.

It is concerning for the Affordability principle that the coming rent increase will be significant. Already today, a 3-room apartment costs 7.600 kr a month, which is on the limit according to the framework. A 1-2.000 kr increase would make Sångvägen unaffordable.

The area also has a problem with a second hand black market, where apartments are illegally sublet for high rents. The renovations' rent increases could worsen the issue and undermine the principle of Equitable Access. The solution to this would be to offer a more basic base package that only includes the very most necessary renovations.

LOCATION

Playgrounds are, perhaps contrary to what some may believe, meeting places that transcend generations, since adults often accompany children there, and elderly people can often be seen sitting on benches there. They enhance community building and social life, and build bridges between different ethnic and social groups, if they are strategically designed and located.

In Sångvägen, for example, elements of a placemaking effort were conducted by the municipality during the previous decade, where the local playground, which was run-down at the time, was developed significantly. The inhabitants of the area spend much time there, especially during summers when a youth centre does activities for children and lends toys and small bicycles to them.

The effort could then be considered a success and have complemented the local association life and community. The effort may not have explicitly intended to use placemaking as a theory, but the design of the playground consulted the locals.

However, there have been plans to add housing in another part of Sångvägen, a project which is currently on hold according to the municipality (Järfälla kommun, 2023e).

Although there has been no proposal for this area yet, it is our conviction that the existing green space in Sångvägen (see Figures 26 and 27), which is separate from the playground already mentioned, should be developed as a meeting space as well, rather than housing. It could be a playground or another form of social gathering place, that adds to the local urban life.

This could enhance the community and increase movement and safety in the area, which is classed as vulnerable. While there is a general need for rentals in Järfälla, one of the only small green spaces left in Sångvägen should not be removed. This is also in the context of Järfällahus planning to transform two bicycle storage rooms, in the green space referred to here, into laundry rooms to increase movement and safety. While this is positive, the space is very large and should be utilised further as a meeting space, as laundry rooms are not as regularly visited or integrated into public space as a playground is.



Figure 26. A less utilised green space in Sångvägen (authors' photo).



Figure 27. A mapping of the evaluation of Sångvägen.

INFILL PROJECT: SÖDERHÖJDEN

Söderhöjden is also a Million Programme area, where the average income is 22.000 kr a month. The infill project encompasses around 300 new apartments and possibility for businesses on the ground floors. Söderhöjden has been identified as one of the areas in Järfälla experiencing heightened concerns regarding safety among its residents.

LOCATION

Characterised by low-income families and a trend of criminality, strategic planning programs are essential to enhance safety, particularly through the thoughtful utilisation of public spaces. The existing public spaces are noisy, unconnected and located close to traffic. Furthermore, there is a need for more child-friendly zones, beyond the courtyards (see figure 28).

This should be addressed by prioritising safer areas for people and promoting accessibility for the community, strengthening the Location principle. Furthermore, a local youth centre was shut down in 2021, however recognising its importance for the local population, plans are now underway to reopen it again, which could be positive for the Location and Participation principles.

Since 2020, a proposal for an infill development in Söderhöjden, aiming to enhance the area with approximately 280 additional homes and facilities for local services, has been in consideration. This impending project featuring designated ground floors for non-housing activities (Järfälla kommun, 2023e), offers a unique opportunity for allocation of these spaces for amenities such as a new youth centre, preschool, store, restaurant or a cultural centre.

This is considered particularly vital in parts of Söderhöjden that are relatively distant from Jakobsberg Centrum and stores, currently requiring a 25-minute walk, falling short of the 15-minute city goal. This however, goes beyond mere consumption, as it could provide an opportunity for fostering neighbourly interactions and meaningful leisure activities. In addition, in proximity to these buildings, constructing a playground could also enhance the public space for everyone in Söderhöjden and improve the location aspect.

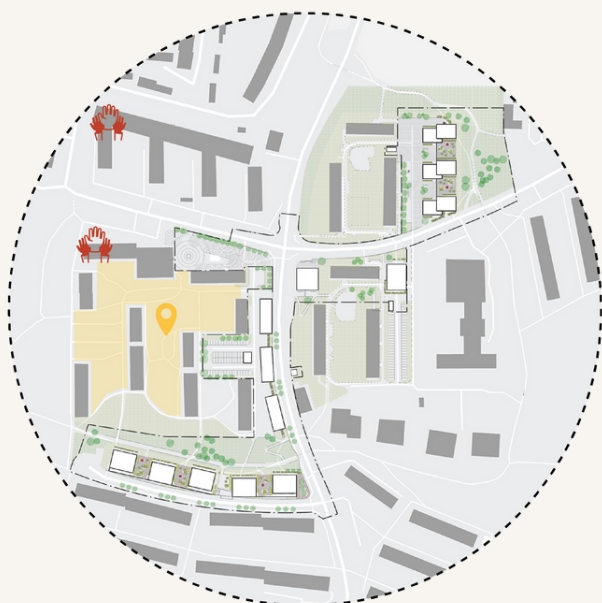


Figure 28. A mapping of the evaluation of Söderhöjden

HABITABILITY

Attention however should be brought to the existing situation in Söderhöjden, which indicates a higher-than-average level of overcrowding in the area. There is an evident need for comprehensive solutions to accommodate the growing population, however, the current infill projects appear to be primarily focused on smaller apartments tailored for individuals or couples, essentially steering away from effectively meeting this demand. Sustainable Production and Management

Moreover, as the development initiatives in Söderhöjden progress, there is a pressing need to enhance the energy efficiency standards of buildings, as the existing building infrastructure falls short of meeting energy-efficiency standards. Specifically, advocating for a more sustainable approach to energy sources by installing solar panels should be considered.

PARTICIPATION

However, it is important to note that, as of now, no dialogue with local residents (apart from Samråd) has occurred in the planning of the infill project. The introduction of consultant groups would better inform decisions, ensuring that the project aligns with the needs and preferences of the residents. Integrating the community's input into the planning process is crucial for fostering a development that not only addresses safety concerns and provides essential amenities, but also reflects the desires of the residents.

This way the proposed development can present an opportunity to improve Söderhöjden to a place where the community could enjoy inclusive living environment and improved services in a close proximity to their home.



Figure 30. A Google Streetview image of Söderhöjden today.



Figure 30. A rendering of the infill project in Söderhöjden (Järfälla kommun, 2020).

NEW DEVELOPMENT: BARKARBYSTADEN

Barkarbystaden is a large-scale new development project, encompassing 18.000 new apartments. The area chosen in this project is Barkarbystaden III which includes around 4.100-4.400 apartments. The average income in the area today is 25.000-30.000 kr a month.

AFFORDABILITY

Barkarbystaden currently faces challenges in housing diversity and affordability. Despite being an expansive project, it predominantly features new developments with high rents where a price for a 3-RoK apartment range from 12,000 to 15,500kr/ month. This renders the housing in Barkarbystaden unattainable for many families effectively excluding low-income individuals and migrants.

To attain the condos in the area, families need to be eligible for loans, but Swedish law requires a 15% deposit and the lender having a full time job, so buying is out of the question for many people. This situation is also further exacerbated by the fact that Järfällahus, one of the key housing stakeholders holding the public rental queue, was deliberately excluded from participating in the development by Järfälla municipality. The result is that all rental properties in the area are privately owned, limiting accessibility for a broader demographic.

LOCATION

Despite transport being an issue in most parts of the car-dependent Järfälla, Barkarbystaden stands out with sufficient walkability. Moreover, coinciding with the urban growth, the development of public transport including the planned subway line and existing bus connections provide accessibility within and to Barkarbystaden.

However, this positive aspect comes with the drawback of driving up housing prices in neighboring areas (Zhou et al., 2022). While planned improvements in public transport infrastructure are underway, our observations reveal concerns regarding traffic, as the only places where children could be protected from traffic noise and risks are in the courtyards, the central square, and the new small playground (which is surrounded by car roads). This underscores the need for more child-friendly spaces, that are separate from vehicular traffic. Figure 31 attempts to showcase lack of child-friendly public space.



Figure 31 A mapping of the evaluation of Barkarbystaden.

DISCUSSION

Usually, the field of Urban Planning is mostly focused on the sustainability aspects (social, economical, ecological). But the Adequate Housing for Järfälla framework has been designed to be more detailed and clear, while being adapted to the realities of the municipality at hand.

CONSEQUENCES OF THE FRAMEWORK

One advantage of designing a framework specifically for a municipality is that it can be context-based. While other municipalities can learn from it and use a similar framework, it is not as good a fit for them as it is for Järfälla. After all, many issues in planning are context-based. Simultaneously, the housing policies that municipalities must abide by are decided on the state-level, and current issues can often be traced back to the general housing structure in Sweden.

That is precisely why this framework is not focused on general solutions, but definitions. While it can seem like a weakness of the framework to not offer direct solutions for each principle, that is not its purpose. Its purpose is to define what Adequate Housing means for Järfälla and give examples where municipal projects seem to either fulfil or fall short of the mark. You will instead find the solutions in each of the three evaluations, because it is on that level the municipality has real power to make a difference.

The short-term consequences of the framework, had it been adopted by Järfälla, would probably be organisational and bureaucratic, as we have proposed a framework for civil servants. This is crucial, because what Järfälla needs is a new way to work with housing, that is Adequate Housing.

Ideally, the framework would be implemented in the Planning process of the municipality, which would make it pass by all instances and expertise involved in Planning in Järfälla. In order to work, it should be used continuously throughout the process, grounding it early on and following up on it in every phase.

The framework would be used as a base point and definition sheet, almost the way Construction Engineers look in formula sheets for their calculations to ensure their buildings stand.

But the framework should not be merely suggestive, it should be adopted as official and next to binding. It should be natural for everyone working with housing issues in the municipality to know this document and turn to it for advice and definitions. This would mean that a new perspective is introduced in the Planning process that fills in the gap missing today: a document demanding Adequacy in housing in Järfälla.

In practice, that would mean that the municipality does their own evaluations for each Planning project, using the six principles for the issue or project at hand

This is similar to what we did with the three focus areas. It could be in the form of investigations (“utredningar”) and assessments that outline how to fulfil each principle for every Planning project at hand. This all would likely take time and effort, as well as courses and walkthroughs within the departments.

The politicians also need to be on board, across the blocs, which in itself is a huge task that does not fall into the scope of this project. Nonetheless, the time and effort needed could become ground for stress and difficulties for the people working with the implementation, as it would be a large adjustment.

In the long term, the changes may become more apparent to inhabitants of Järfälla. When the municipality has implemented the framework and let it come to fruition in finished projects, the expected outcome is more Adequate Housing. Fulfilling the principle of Affordability would lower the amount of households with a strained economy, for example, because they spend less of their income on rent.

It could also unlock moving chains that are now disturbed, as elderly people in larger homes could move to cheaper units and free up the larger homes for families and overcrowded households. Younger people could also afford to move out from their parents, decreasing the overall housing shortage.

This would create better flow in the whole housing stock. The improved Affordability would also increase standard of living, as households can spend more money on other critical needs, as well as leisure activities and hobbies. However, it could cause lower profits for landlords and developers which will either need to be compensated through efficient construction and management, or accepting lower profits.

The same goes for Habitability, where increased quality of space could improve quality of life. Increased construction quality could mitigate renovation needs and prolong deterioration, thereby increasing standard of living. Moreover, achieving Habitability would mean designing new stock according to current needs, such as larger apartments, which could finally deal with overcrowding.

The framework also includes Sustainable production and management, where the long-term effect would be more sustainable materials and energy efficiency. This improves the well-being of the planet and climate, which in turn affects people’s livability. Smarter waste management and building technology also improve quality of life.

Both these principles will be difficult to balance with the principle of Affordability, but that is why all these principles are included in the framework. Affordability should not come at the cost of standard of living.

The principle of Location could influence the perceived safety in the municipality, and travelling times where the 15 minute city could become a reality in Järfälla. Increased spatial integration and urban amenities would contribute to this and make Järfälla more efficient.

The inhabitants of Järfälla might also feel more affection for their community and neighbourhoods, as the principle of Participation is included in every new Planning project. This could be especially valuable in vulnerable or isolated areas that face Urban Development, and the municipality actually includes residents' values and opinions. It could decrease prejudice and tensions between different classes and ethnic groups, as people cooperate more and feel more represented. The association life may receive an upswing and the Rental Union could become stronger and more active.

One of the most important long-term consequences would be the ones caused by Equitable Access. For the first time, people will be able to get ahead in the queue based on their income and social situation. This will most likely alleviate the public rental queue to a noticeable degree, and could potentially decrease the housing shortage as more people who are in need of housing can finally receive the unit they need.

However, this would also depend on how much Järfällahus will be chosen for new areas. The framework evaluation for Barkarbystaden argues that it is both unfair and counterproductive to the municipal housing provision responsibility to not allow Järfällahus to build there. If the municipality decides to allocate more projects to Järfällahus, either in Barkarbystaden or elsewhere, the housing shortage could in the long run be severely decreased.

If the municipality would follow the framework principles, it would likely cause more allocations to Järfällahus naturally, as the principles appeal more to public/goodwill actors rather than capitalist ones. However, it is important to stress that if Järfällahus is not used, the principle of Equitable Access would be undermined, thereby maintaining or even increasing housing shortage for vulnerable groups. When prioritising vulnerable groups in housing, there is always a risk of causing deepened segregation, and this must also be considered when applying the principle.



ECONOMIC IMPLICATIONS

The economic consequences of the framework could be subtle or substantial, depending on the outlook. On one hand, it would not cost much to implement the framework in the organisation.

On the other hand, attempting to maintain profits as a private developer, or breaking even on projects as a public landlord, is difficult in this economy already. On top of that, our framework suggests lower rents. This would require a new way of financing projects, either with cheaper building forms (such as Stockholmshusen) or by accepting lower profits.

Simultaneously, implementing smarter energy management and efficiency could also lower production and management costs in buildings, thereby affecting rent. It will undoubtedly be a challenge for Järfälla to balance the principles of Affordability, Habitability, Equitable Access and Sustainable Management and Production while still maintaining the rate of construction needed to meet demand for housing.

Meanwhile, the municipality's economy today depends a lot on selling land to private developers, which is a practice that would need to decrease severely if they were to follow the framework. However, this would also depend on how much Järfällahus is used.

If the municipality succeeds with fulfilling the principles and also keeps on selling land to private developers instead of Järfällahus, then their economy will be largely unaffected. But if they cannot and must turn to Järfällahus (which seems more likely since Järfällahus does not need to profit from each project), they would need to revamp their budgeting strategy. This would affect how the whole municipal organisation is financed, from schools and elderly care to the Social Services and association support. Therefore, this issue must be handled carefully and responsibly, and constitutes a large obstacle for implementing the framework.



OBSTACLES FOR THE IMPLEMENTATION OF THE FRAMEWORK

During our research, we have gradually encountered some obstacles when it comes to the implementation of our framework around Adequate Housing. As previously written in our research, we have done an analysis of the most important actors in Järfälla. One of these actors is Järfällahus, the housing company that is responsible for the construction, renovation and management of affordable housing and is 100% owned by the municipality.

Even though Järfällahus is responsible for the construction and management of affordable housing and should thus help the population of Järfälla with affordable and adequate housing, we still notice that the company is forced to have conflicting interests. Public housing companies are obliged to be competitive in the real estate market.

As a result, they logically have conflicting interests. This competitive behaviour is due to the fact that Järfällahus has a very limited budget. This makes it impossible for them to cover their costs solely by renting out affordable housing. As a result, the budget that can be set aside for the construction of new housing depends solely on the sales of building plots to private developers and government subsidies.

We can take the Barkabystaden project as an example. Here Järfällahus sold all the building plots they owned to private developers. This was necessary to reduce their debt ratio and to finance the construction costs of new projects. This has now resulted in there being no more affordable housing available in this area. The apartments currently being built are sold or rented to those who are financially strong enough to afford this.

The trend whereby public housing companies have to function with increasingly less budget is a national trend and is due to national housing policy and political decisions. During the Million Housing Program in Sweden, enough subsidies and cheap loans were issued to public housing companies, giving them enough financial strength to compete with the private sector and to develop a clear future strategy when it came to land acquisition, construction and renovation of affordable housing etc.

In the current political landscape, these subsidies and cheap loans have decreased enormously, meaning that public housing companies have to find money in other ways to finance the construction, renovation and management of their buildings. In addition, the shortage of financial resources also means that necessary energy renovation works are delayed or postponed.

This is primarily negative for Järfällahus itself, because the costs of gas and electricity are included in the rent. A decrease in consumption would directly ensure that Järfällahus can save more and leave more money for other things. In addition, not being able to offer energy efficient and adequate apartments completely goes against Järfällahus identity/vision. They are committed to providing affordable housing and especially quality housing to their residents. Due to the budget shortage, this is no longer possible in some cases.

In addition, during our research we noticed that there is little collaborative approach between the urban planners of the municipality of Järfälla and the public housing company Järfällahus. It is purely a contractual relationship in which the municipality orders new projects from the social housing company when it suits them best. However, this is not a constructive way of working together and can never pay off in the long term. It would be much more efficient and in the interest of everyone to properly work together and develop a concrete policy/collaboration between Järfälla and Järfällahus.

This allows concrete work to be done on a plan that involves tactically acquiring land and making decisions that enable Järfällahus to deliver high-quality construction projects and compete with private developers.

As a result, situations such as in Barkabystaden would no longer occur and there would be a better balance between affordable housing provided by the municipality and more expensive housing provided by private real estate developers.

A final major obstacle is the municipality's approach when it comes to participation. During our research it became clear that the participation process is currently quite unclear. This is mainly due to the fact that not enough information is provided when it comes to new developments and participation moments.

As a result, in many cases the population is left in the dark and they do not have the opportunity to raise their opinions and concerns with the municipality. This is even worse for the population groups in Järfälla who cannot speak the Swedish language properly. They are often not taken into account when it comes to providing information and being able to express their opinions. As previously indicated in the chapter on participation and actors, it is realistic that these people get the feeling of not being heard or not wanting to be heard by the municipality. When we speak to people who are in participation groups, they indicate that it is not clear what is actually done with the input they provide. They often feel that they actually have no say, even though they make the effort to come to participation moments.

CONFLICTS OF INTEREST

As previously indicated with the possible obstacles, there are some conflicts of interest. Our research has shown that in many cases the municipality, Järfällahus, other landowners, and political parties are not on the same page in terms of vision when it comes to urban planning for the future. Järfällahus is tasked with providing affordable and adequate housing for the residents of Järfälla. Due to the high demand for this type of housing. Despite a small budget they try to build high-quality new construction projects and renovate their existing homes to modern sustainable standards.

Since fewer and fewer subsidies and cheap loans are being issued from the government, the operation of this public housing company is becoming increasingly difficult. As a result, they are forced to sell land that can be used in the future for affordable housing projects to private companies. This creates a conflict of interest as Järfällahus is not necessarily willing to sell their land but is nevertheless obliged to do so if they want to continue to pay for their new construction and renovation projects.

Due to the sale of these lands, these lands can no longer benefit the community and they will be used by private developers to build large-scale new construction projects that are sold or rented out for a lot of money.

Given that Järfällahus faces a very large task with a small budget, to renovate half of their apartments in a sustainable way and also have to build enough new affordable housing projects given the great demand for additional affordable and adequate housing. Given the limited budgets, we believe that current homes that need to be renovated are given priority.

The current old buildings from the 1970s have a high energy cost that is covered by Järfällahus itself. In addition, people in these types of apartments live in quite poor conditions when compared to current living standards. Since public housing companies were created to provide quality housing for everyone, this should be a priority. The renovation of these outdated buildings will have an immediate impact on the quality of life within these apartments, which will directly benefit the residents. In addition, since the cost for gas and electricity is part of the monthly rent Järfällahus has to pay for energy costs and the fluctuation of it.

The renovation of these buildings ensures that Järfälla's energy bill decreases, freeing up more money that can be invested on other projects. Meanwhile private developers focus on profitability, which means they pay less attention to the spatial and social factors of large housing projects. In large housing projects, it is important to take into account a high-quality

spatial and sustainable concept that accommodates all layers of society. However, this plays a less important role for these players and is often forgotten. Because Järfällahus sells their land to these private developers, they indirectly contribute to this. Although they are forced to do so due to tight financial resources. In this story, the municipality of Järfälla is at the centre and has the most difficult position.

In the municipality, they must ensure that there is a good balance between the supply of affordable housing and enough supply for people who are more wealthy and want to buy/rent something on the private market, bearing in mind that these different projects must fit into a qualitative and sustainable urban planning concept. This is why they must both represent the interests of Järfällahus and ensure that their future decisions take this into account.

They must also take into account the many private developers who currently own a lot of land in the municipality and will therefore also play a big role in the future urban space of Järfälla. Despite the main goal of these private developers being to make a profit, Järfälla must ensure, through the necessary urban planning guidelines, meetings, etc., that qualitative urban development is done and that the private developers also have enough opportunity to keep these projects profitable.

Given the many different interests of all kinds of stakeholders, it is important that there is a general consensus around the framework created for adequate housing. When all parties are aligned and clear agreements have been made, it is possible to develop a clear policy and associated strategy. With a written policy it is possible to tackle the occurring problems in a very efficient and structured manner and thus strive for high-quality city planning in the future that takes into account adequate housing and meets the requirements previously discussed in the report.

SHORTCOMINGS OF THE PROJECT

The discussion has already brought forward some shortcomings of the project, but there are a few others worth mentioning. For example, how to achieve the need for political consensus and stability that is required to implement a framework of this character in a municipality is not addressed in the project. While academia should not only provide research adapted to political realities, it is nonetheless a weakness when there seems to be little political will to stand behind a proposal. Not only is there an overall lack of consensus in many political issues in Sweden today, there is also a lack of housing policies in all political parties.

Another weakness in the project is that it could have been more grounded in issues facing Järfälla. The group felt towards the end when time was running short, that the framework could have related to the issues more explicitly to really make an argument for it, but that would require more research which was too late to do at that point. It would not be responsible or fitting to the framework to generalise issues that face Stockholm or Sweden in general, so we did not do that, it needed to be about Järfälla. And we had focused most of our time earlier on grounding the framework in literature and the Swedish housing system, which was very important, but in hindsight more time could have been spent on researching the issues in Järfälla.

Furthermore, while the framework itself is very clear and extensive, it lacks an implementation plan in and of itself. Of course, this discussion has included the expected outcomes, but the framework would be complete if the implementation was clearer. It could also have been separate, but still included in the report and poster, but that aspect is especially lacking now.

An implementation plan could have made the framework seem more realistic and achievable, while the implementation is now arguably the most unclear aspect of the project.

Overall, the framework is intended as a base to start from, the municipality would need to put in very much additional work to make the vision of Adequate Housing a reality in Järfälla. Perhaps the politicians and civil servants would take away or add to some of the principles, or see needs and issues which we have not seen. The framework is not perfect and if it were implemented, it should not remain static.

Reality changes, so the very meaning of Adequate Housing would need to be modified in the future in any case. When looking ahead, in thirty or fifty years, this framework will still be needed, but it might look substantially different.

SUMMARY

The previous analysis has shown that Järfälla's municipal resources are not efficient enough to address structural socio-economic inequalities. In addition, they also have no concrete definition of what affordable housing means. To address these shortcomings we did 3 things.

First of all, in this study, we formulated a definition of what affordable housing actually means. Based on this definition, we have developed a new policy framework to guide the municipality so that they can assess the adequacy of existing and planned residential projects. With this, we want to ensure that municipal policy strategies are aligned with sustainable socio-economic goals to promote equality. In concrete terms, our definition of adequate housing in Järfälla is based on 6 key principles. These are affordability, liveability, location, sustainable production and management, fair access and participation.

We then chose three neighbourhoods in Järfälla to investigate and identify the specific needs of this place. We have done this to ensure that overarching goals and the development of relevant solutions are easier to achieve. Our focus areas are Sångvägen, Söderhöjden and Barkabystaden. They are selected by their own characteristics. For example, Sångvägen is a major renovation project of buildings from the 1970s. Söderhöjden is characterised as an infill project. It is a district that currently has a lot of buildings built during the Million Programme and where they want to increase residential density in this neighbourhood by building additional apartments. And lastly, we analysed Barkabystaden. This is a completely new district that is still being developed by private companies.

During the analysis of these case studies, there are a number of bad qualities that are reflected in all projects. We have noticed that there is a great need for participation. Although Järfällahuset indicates that there are participation moments in which every resident can participate, we notice that this is often not the case in reality. That is why we want to emphasise the importance of proper participation in these three projects. The residents have to be well informed and there have to be opportunities for residents to express their concerns and opinions. So that these people feel that they are heard and that something is done with their input. In addition, the presence of high-quality public space appears to be a very important factor in these neighbourhoods. In some neighbourhoods, public space is in danger of disappearing at the expense of new buildings. In other cases, the renovation and redevelopment of neighbourhoods can actually be a good opportunity to tackle bad existing public spaces. We would therefore like to emphasise the following sentence:

“Housing does not only provide a roof over your head, but immediate public space, it is where people build social bonds, find their community and live out their lives. It is where children run and play, where there are barbecues and where elderly spend long summer days.”

Finally, it is also important to monitor affordability and equitable access. It is still too often the case that residents are forced to move due to rising rents after renovation works, as is the case of Sångvägen. The Barkarbystaden project also emphasises the importance of the presence of Jarfällähus. This area is currently being developed solely by private developers, with the result that rent and purchase prices are very high. That is why we want to demonstrate that it is important to ensure that there is a diversity of stakeholders in large construction projects and that the socio-economic mix is monitored. We are also convinced that introducing consultation groups can facilitate a more inclusive decision-making process, ensuring that projects closely meet the needs of residents.

We are convinced that this research report can form an important basis for a more Adequate Housing policy in Järfälla where various basic socio-economic requirements are paramount.

**THANK YOU FOR READING
ADEQUATE HOUSING FOR JÄRFÄLLA**

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APPENDIX

01.

**Base package for Sångvägen
renovations**

02.

**Summary of Interview with
the Rental Union**

03.

Interview guide