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# Translation of social sustainability goals from *vision to life*

## A case study of a mixed-used development in Sweden.

Master's thesis in design and construction project management

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DEPARTMENT OF ARCHITECTURE AND CIVIL ENGINEERING
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CHALMERS UNIVERSITY OF TECHNOLOGY

Gothenburg, Sweden 2023

www.chalmers.se

MASTER'S THESIS ACEX30

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Examensarbete ACEX30

Institutionen för arkitektur och samhällsbyggnadsteknik

Chalmers tekniska högskola, 2023

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Cover:
Depicting the translation of Gothenburg city, Sweden
Left - Gothenburg city 400 years ago, (credits to Älvrummet.se)
Right – The future Backaplan in 2025 onwards, (credits to Framtidensbackaplan.se)

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ABSTRACT

Segregation and the housing crisis are the two societal problems that Sweden is currently facing because of its growing urbanization. This thesis report seeks to examine how the city of Gothenburg's sustainable goal aiming at "a vibrant and attractive" inner city are translated into reality within the different phases of construction. The research aims at identifying and analysing what challenges and efforts are affected in this project process. Drawing on the theoretical framework of actor network theory (ANT) of translation, the case study "The future Backaplan"(FB project)—a mixed-use development in Gothenburg, Sweden, examine the process of translating(modifying) goals connected to social sustainability during 2012 to 2022. Building on a mixed method approach, firstly the interviews focus on finding about actors' choice of decisions, negotiations, and modifications in the project. Secondly, a survey specifically focuses to find the public preference/expectation and compare them to the goal of the FB project. Furthermore, a visual analysis featuring translation elements are demonstrated in the results. The analysis illustrates how the partial strategies are taking place in architectural placemaking and identity, change in the project requirement and time phase division. The result showcases that translation entails both positive and negative consequences when viewed in a social sustainable perspective. The positive consequence is the increase in the monetary value of the project whereas the decrease of the social value constitutes to negative consequences which affects the social justice concerning the future users. The research tries to provide a few recommendations for improving governance strategies, follow-ups, and temporary measures.

Key words: Social sustainability, actor network theory (ANT), Translation process, placemaking, architectural identity.

Översättning av sociala hållbarhetsmål från vision till liv

En fallstudie av en blandstad i Sverige

*Examensarbete i Design och byggprojektledning*

MADHUSHREE MRUTYUNJAYA HAPPALAD

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## SAMMANFATTNING

Segregation och bostadskris är de två samhällsproblem som Sverige just nu står inför på grund av den växande urbaniseringen. Denna avhandlingsrapport syftar till att undersöka hur Göteborgs stads hållbarhetsmål om "en levande och attraktiv" innerstad omsätts i verklighet inom byggandets olika faser. Forskningen syftar till att identifiera och analysera vilka utmaningar och insatser som påverkas i denna projektprocess. Med utgångspunkt i det teoretiska ramverket för aktörsnätverksteori (ANT) för översättning, undersöker fallstudien "The future Backaplan" (FB-projektet) - en blandstad i Göteborg, Sverige, processen att översätta (modifiera) mål kopplade till social hållbarhet under 2012 till 2022. Med utgångspunkt i en blandad metod fokuserar intervjuerna först på att hitta om aktörernas val av beslut, förhandlingar och modifieringar i projektet. För det andra fokuserar en undersökning specifikt på att hitta allmänhetens preferenser / förväntningar och jämföra dem med målet för FB-projektet. Dessutom demonstreras en visuell analys med översättningselement i resultaten. Analysen illustrerar hur de partiella strategierna sker i arkitektonisk placemaking och identitet, förändring i projektkrav och tidsfasindelning. Resultatet visar att översättning medför både positiva och negativa konsekvenser sett ur ett socialt hållbart perspektiv. Den positiva konsekvensen är ökningen av projektets monetära värde, medan minskningen av det sociala värdet utgör negativa konsekvenser som påverkar den sociala rättvisan för framtida användare. Forskningen försöker ge några rekommendationer för att förbättra styrningsstrategier, uppföljningar och tillfälliga åtgärder.

Nyckelord: Social hållbarhet, aktörsnätverksteori (ANT), Översättningsprocess, placemaking, arkitektonisk identitet.

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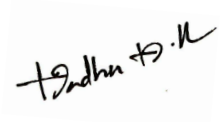
# Preface

I want to sincerely thank my academic advisor/supervisor and examiner, Martine Buser for providing constructive supervision during my master thesis and being supportive throughout my two years of master's program at Chalmers university. I am extremely grateful to have had Jaquline DeCerein as my immediate supervisor at Skanska along with Anja Skans as a supportive supervisor at Skanska, both deserve my deepest gratitude. Throughout the thesis process, Martine, Jaquline and Anja have helped me tremendously with their experience and engagement. For me to successfully complete the master thesis journey, their thorough and in-depth input from both the academic and practitioner perspectives is of utmost importance.

As the study's basis is laid by the interviewees' involvement and invaluable insights, I also like to thank those who aided me with the supporting documentation. I would like to thank Gothenburg city planning department for their support and responses in this research who accommodated me in their public consultation events. I would also like to thank Skandia fastigheter for their continuous support and involvement during the thesis period.

Finally, I want to thank Skanska for giving me the fantastic opportunity to work on this thesis. Last but not least, I want to express my gratitude to my family and friends for their emotional support in helping me finish the thesis successfully.

Gothenburg, June 2023.



Madhushree Mrutyunjaya Happalad

# Notations

English to Swedish

1. The future Backaplan (FB project)- Framtidens Backaplan
2. Translation (modification) - Översättning (ändring)
3. The river city development – Älvstaden utvekling
4. Program for Backaplan(PB) – Program för Backaplan
5. Detail plan 1 (DP1) – Detaljplan 1
6. Individual strategy plan - Individuell strategiplan
7. Structure and road map - Struktur och färdplan
8. Accommodation with Special Service - BMss - Bostad med Särskild Service
9. social consequences analysis - Social Konsekvens Analys
10. Child impact analysis - Barn Konsekvens Analys
11. BTA (Gross area) - Bruttoarea

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# Introduction

According to global estimates, by 2050, a more diverse set of urban challenges will increase than today, including migration patterns, conflicts, and spatial inequalities (U N habitat, u.d). By 2050, the growing cities of Sweden, particularly the inner cities, will be denser (Boverket, 2012). However, there is a forecast for rapid urbanization by 2030 (Woodcraft, 2011). Sweden's population is expected to reach 10 million by 2025, spread across three metropolitan regions such as Västra götaland county, Skåne and Stockholm, (Boverket, 2012).

Due to a housing shortage in Sweden during the 1960s, a million-home-building program was implemented over a ten-year period. Lack of architectural quality with the use of low-cost materials in construction resulted in the isolation of these residential sub-urban areas over time, (Lager & Kignell, 2006). The need for housing, combined with the economics of brokering and managing relationships between public and private partners, will only add to the pressure to provide homes rather than build communities., (Woodcraft et al 2011). This is because the government and public organizations lead the planning, but the private sector provides the investment. The funds are primarily used to build private residences on a big scale rather than investing in community development or affordable housing, (Woodcraft et al 2011). This is to be expected when land use is segregated. Segregation occurs in several arenas, especially social-economic segregation is increasing in Sweden. Segregation is a dynamic process; therefore, it is not just the areas with social economic challenges that are often segregated but also due to gentrification and residualization are some examples of dynamic segregation. People are forced to move as a loss of income or rising housing costs are two factors that might exacerbate segregation trends, (Region Skåne, 2021).

Since the beginning of the twenty-first century, a "mixed-use development" has been emphasized as a solution for accommodating the increased population and reducing the negative environmental impacts such as resource depletion caused by vehicle traffic pollution (Bahadure & Kotharkar, 2012). Activities such as work, leisure, shopping, and housing enclaves within "mixed-use developments" tend to bring in socially homogeneous environments that primarily serve the middle and upper-middle classes, (Kleibert & Kippers, 2016). However, SDG 11 (UN SDG, u.d.) states that sustainable cities and communities must focus on providing inclusive, resilient, and safe environments regardless of people's economic status. This is to increase the social elements of sustainability, which has recently been in focus (Vallance et al, 2011). Furthermore, because the earlier emphasis was only on biophysical and environmental issues, social sustainability has been disregarded for the past 20 years.

## 1.1 Background

To counter the challenge of rapid urbanization and issues of segregation there needs to be an increased focus on building socially sustainable regions or cities. Keeping people in focus and their problems of lack of affordable housing and segregation, this report tries to answer the gaps from concept planning to implementation of social sustainability goals in the project named "The Future Backaplan (FB), Framtidens Backaplan (Swedish). The FB project is located at Backaplan, Gothenburg. The FB project is part of the river city development (Älvstaden utvekling) an initiative from the city of Gothenburg. The FB project is a mixed-use project that includes residences, commercial spaces and public activities with a high ambition set by the city council of

Gothenburg. There are several goals that cater to providing inclusive spaces and high priority is given to social consequences analysis (SKA) and child impact analysis (BKA). These goals have been primarily set in the River City Vision document, Gothenburg(2012a), later these goals have been structured in the categories of traffic planning (Gothenburg, 2014b), green areas and parks planning (Gothenburg, 2014c), and architecture planning, Gothenburg(2015d). Further these goals have been customized in the program of Backaplan document (Gothenburg, 2019e). The specific goals regarding social sustainability that this report investigates are further explained in the case study section 4.1.

News from a reporter Arne Larsson, in (Gothenburg, May 2018) highlights the examples of failed projects of the river city development such as Frihamnen project which was delayed because of the ground conditions, Skepsbron project took break to reduce the runaway costs, (Göteborgs posten, 2018). And now, the FB is next in line being an ongoing project, attempting for an inner-city development/urban renewal. Backa's (Backaplan, neighborhood of the case study in this report) aging population has caused the municipal authorities to place more emphasis on the accommodation for elderly (Gothenburg, Backa,2008). Yet one should also encourage the growth of urban cores and improve the standard of living and living circumstances there, (Mixed city, Boverket, 2005). It's also suggested that vulnerable neighborhoods undergo renewal. Cotra and Shwan, (2020) suggest that creating a safe and inclusive environment requires shared responsibility of different actors. Although mixed activities at the neighborhood level are desirable, they frequently face administrative and financial challenges when put into practice (Mixed city, Boverket, 2005)

The term ‘housing crisis’ has been the talk of the town where 255 municipalities in Sweden have reported housing shortages (The local, 2017). Many attempts have been made by private and public actors to address the social issues in Sweden since late 20th century, (Buser & Koch 2014), especially contractors are taking interest with creating attractive, safe environments with social sustainability in focus and claim to be involving residents/neighborhood in their process. This can be seen in the report's findings of Cotra and Shwan, (2020) that shows the limited involvement of contractors in the project could not do much to foster a sense of community among the residents. On the contrary, the residents were pleased with their living conditions, despite the fact that they used the outdoor public spaces in a limited manner than it was intended. The non-usage of public spaces in the neighbourhood clearly demonstrates that the spaces are intended for a single purpose. This is also because the modern design for residential settlement has provided to be much less flexible than the older one (Mixed city, Boverket, 2005). Due to this there is lack of a sense of community belonging in the neighbourhood. According to Fallan (2008), to understand architecture one should examine what its users make of it and further explains that “the issue is not only what design does to people, but what people do with design”. According to ANT (Actor network theory) perspective it's not only the inhabitants that shape the living spaces but rather a space is transformed by many actors that are involved from the conception to completion of a society’s architecture. This report is drawing the theory of an ANT in the FB project to understand the concept of translation (modification, decision making. Fallan (2008) state one of the main challenges in making ANT work within practical case studies as, “Interviewing architects, builders, and users is far simpler than letting architectural floor plans or unique artifacts speak for themselves”. Therefore, one should not discriminate between humans and non-humans when applying the ANT theory. Section 2.3 in this report explains ANT and the theory of translation in detail.

## 1.2 Personal experience

In the modern world, social sustainability is a very intriguing and significant topic, but it is a big one with many different facets that are challenging to comprehend. I am from India, the world's most populous country today. My parents raised me in a community-based neighborhood because they thought it was the safest place for a single girl child to grow up independently. Even today, I appreciate and am grateful for growing up in such a safe environment with supportive neighbors. Cycling to school or a hobby class after school, walking and playing on the traffic free roads, proximity to playgrounds, community centres, neighbourhood shops etc where some of the wonderful childhood memories that I reminisce living in those communities, which I believe are essential opportunity for every child, regardless of where they grow up. This has likely shaped me as a positive, ambivert, and outgoing individual. Is it the spatial design/available social benefits that affect a person's lifestyle, or is it the nature of people (behavioral) or the usage of space that has the major impact? As a result, I was inspired to pursue this research on studying, how the social and spatial determinants, which can be called as "placemaking" integrate to bring vitality and community cohesion. I want to investigate this and present a comprehensive picture of a mixed-use development.

## 1.3 Aim and research

The aim of this thesis is to investigate what were the changes in the program of a mixed-use development project "The Future Backaplan" (FB project) in Gothenburg, Sweden. By drawing on the actor network theory (ANT) This process of translation(modification) of the social sustainability goals will be studied during the timeline of 2012 to 2022 of the FB project. This is done firstly, by studying the goals set by the Gothenburg city in 2012 in the "river city vision" document. Secondly, understanding the goals of the "individual strategy" and "structure and roadmap" documents that were formed during 2014 by the architecture, green and traffic departments of the Gothenburg city. Thirdly, examining the above-mentioned goals that were modified in 2019 specifically for Backaplan district in the "program for Backaplan" document. Therefore, this report aims at analysing the goal implementation by various actors/stakeholders in the inner-city development, specifically in the first development of the FB project, i.e., DP1 (Detail plan 1) during 2020. The study focuses primarily on understanding the challenges and efforts from the various actor's perspective and how the project goal develops during different phases of implementation.

### 1.3.1 Research question

How does the Gothenburg city's sustainable goal vision of a "vibrant and attractive inner city" (Gothenburg city, u.d) come to reality during the process of design, construction, and implementation of an urban development project?

1. How are the goal of social sustainability translated (being altered or modified) during the different phases of an urban mixed-use development process?
2. What are the challenges and efforts (decision making/negotiation) that affect the process of translation?
3. What are the consequences of the translation process from *vision* to *life* (reality) and what values it contributes with regards to social sustainability goals?

## 1.4 Delimitation

The overall development of the FB project includes three development plans namely DP1, DP2 and DP3 see figure 8 in section 4. This paper limits the study to only one of the development plans i.e. DP1. In the section 3.2 the motivation for choosing the case is explained. This research does not establish new goals for the study because the project goals are already established by the Gothenburg city council in coordination with property owners and other actors as part of the River City development project. The established objectives are demonstrated in a manner that combines social, economic, and environmental considerations; nevertheless, the focus of this study is exclusively on social sustainability objectives, and reflections are made on the same. This paper likewise discusses how to create social value, but it defines it in terms of quality rather than in terms of financial calculation.

## 1.5 Contribution

This study helps to highlight the importance of social sustainability, particularly in urban development projects. Readers of this report will encounter important frameworks, understandings and analysis of translations of social sustainability goals. The FB, DP1 project´s contract is awarded to the company Skanska to carry out the construction works as well as to incorporate the social sustainability works within the project. This thesis is done in collaboration with Skanska. The construction contract for Skanska is limited for three years and also due to their late involvement in the project, this thesis will help the company to learn and understand the overall goals that were set in the concept stage, following with the continuous changes during the design and development stage that were carried out by actors who were involved before Skanska and its level of implementation in the construction stage by Skanska. Furthermore, the study critically examines and elucidates the practitioners / stakeholder's decision-making processes and its implications on social sustainability. Also, the thesis will recommend certain improving aspects in strategy formulation, follow-ups, and temporary measures along with highlighting the positive and negative translations as a result of placemaking to bring in social value.

## 1.6 Composition

This thesis continues with a literature analysis on the theory of translation that is to analyse how sustainability aspects are translated in a project. Additionally carrying out the literature study for understanding the concept of social sustainability and placemaking process in the urban development that is relevant for this report. The research methodology is further explained, following a description of the case study that details a number of challenges and efforts encountered in the case. A gap analysis from the document readings is described which forms basis for the empirical investigation. The research findings from the mixed method approach are presented using a visual representation. The interview results are later described using a thematic analysis in the form of four themes. In the discussion chapter, a critical analysis is established by contrasting the theoretical ideas of translation with the empirical data from interviews and survey findings. This comparison then yields helpful pointers for recommendations, and finally, conclusions are reached by answering the said research questions.

# 2 Theory

This chapter will present an overview of the evolving concept of social sustainability and describes how this takes place in the changing context of placemaking that focuses on the social and spatial dimensions. The chapter further describes the theory of translation from the actor-network theoretical framework. Finally the relationship between the concepts and frameworks are presented along with the actor network theory applied within the context of the FB project.

## 2.1 Social Sustainability - An evolving concept

The shift from environmental planning to sustainability was an "answer" to being environmentally friendly 20 years ago, but it is now just a beginning point to orient the project. The aims of social and environmental sustainability may be conflicting rather than complementary. In Sweden the sustainable development is seen as being covered by an administrative system with “16 Environmental Quality objectives” that only considers environmental dimension with a very few links to the social objectives, (Boström, 2012), (Sverigemiljömål,u.d). As a result, defining sustainability is not enough, the idea must be expanded in practice without diluting its original focus, (Campbell 2016). Cuthill, (2010) explains due to the rapid demographic and social changes internationally there have been negative impacts on individuals and communities such as threats to social cohesion, a weakening of family and relationships, public apathy and distrust of political processes. To encounter these issues a social sustainability framework is presented in Cuthill, (2010) explaining the four components such as *social capital* provides a theoretical starting point, *social infrastructure* provides operational perspective, *social justice* and equity provides an ethical imperative and *engaged governance* provides a methodology for working together. The practice of sustainable development is incomplete unless the three pillars of economic, environmental, and social objectives are met. According to the research, the three pillars frequently have severe clashes, (Vifell & Soneryd, 2012). The significant disagreement occurs notably when the social dimension is to be incorporated as a project aim from the start, which involves equitable distribution among all economically disadvantaged groups, (Vifell & Soneryd, 2012). Another point of contention arises when stakeholders struggle to successfully implement social sustainability practices linked to land use planning processes. Taking on obstacles like inflexibility, traditional top-down approach, or failing to improve public satisfaction and boost the legitimacy of the process and result, (Rashidfarokhi et al,2018). On the same lines the two other challenges noted by Boström (2012), firstly, the theoretical and concerns about how we should define and understand the fluid concept of social sustainability. The second involves the practice of how the social sustainability aspects to be operationalized and incorporated into various sustainability projects and planning. Collaboration and community participation is also viewed as a supreme approach to social sustainability. Although these methods have an increased impact on social inclusion, transparency of the process and information flow, the stakeholders may fail achieve in using the data gathered through these methods efficiently due to lack of skills and institutional motivations, (Rashidfarokhi et al, 2018).The relation between the procedural (how to achieve) and a substantive (what to achieve) dimension of social sustainability entails participatory aspects (who is allowed to contribute). If no representatives from the social dimension are included, this pillar will most certainly remain weak, (Boström, 2012), additionally shows how social sustainability goals may

be internally inconsistent when the interests of the current generation are confronted against those of future generations.

## 2.2 Placemaking – Social and spatial dimensions

The concept of placemaking originated in spatial and design disciplines that focused on development of physical elements. The idea was also born out of the negative effects of urban sprawl on urban dwellers' behaviour. This concept of placemaking shifted in 1990, that revolves around decision making in placemaking processes/spatial arrangement by the expert policymakers (democratic actors' involvement). Therefore, stakeholders viewpoints are important in guiding with making of places, (Strydom et al, 2018). Gustavsson and Elander (2013) highlights that property owners use labels like placemaking, place marketing, place branding to market themselves. Arnaboldi & Spiller (2011) explains placemaking as a concept within tourism and states that "a well-recognised, labelled, mixed used area of a city that consists a high concentration of cultural facilities, serves as the anchor of attraction". Richards & Duif (2018) argues that place marketing is a tool to sell the city to customers whereas placemaking is an effort to improve the quality of life of the users. Further states that "An attractive external image should be a by-product of the placemaking and not the goal". Gustavsson and Elander (2013) state that, cities make great efforts in bringing identity to the place as a symbolic means of competition especially in urban renewal projects. The placemaking /place identity as a marketing element changes the image (imagined space) of the city that brings in wide range of themes and dimensions for marketing a place. Gustavsson and Elander (2013), also highlights a question of how the goal of architectural identity translate into a physical space within the three kinds of spaces from the perspective of the philosopher Henri Lefebvre: *Imagined space*- The space that is visioned from the municipality during the planning program (roads, parks schools, shops, residence) or the intention by the housing company/ developers (referring to the age group or income group). *Physical space* - The space after implementation or the perceived space that is legally binded. *Social space* - A space where physical and imagined space unite. This is a flexible space where the users interpret with intuition and change the context of usage also known as public space.

Placemaking has the ability to create a positive social change, (Strydom et al, 2018). (Woodcraft et al, 2011) have a framework of designing new communities focused on social sustainability that highlights that "it takes up to 15 years before local social networks develop fully, until then the new communities remain fragile". Silverman.et.al (2005) States that "Most mixing across social groups takes place between children. It is these contacts in nurseries playgrounds schools and in public spaces that provides opportunity for adults to meet and form relationships. Children provide a common ground and shared interest between people in different tenures". Kim (2019) states that social relations accumulate in a public space that performs a role in the city and therefore to improve the public space the author highlights the importance of designing multiple urban space. Public spaces are not static, rather dynamic in nature. It also depends on the actor that enters the space and perceives it with their social relation to the space. Kim (2019) explains with the example that the benches owned by a shop that are placed in a public space are occupied differently than the public benches that are free to use by all. Similarly Boverket, (2010) mentions that the semi-private greenery in the form of residential yards can never replace the public green areas and parks where everyone has a right to stay. The public green should always compliment the private or

semi-private green residential yards. There seems to exist behavioral constraint in private spaces, wherein public spaces tend to elevate the spontaneity and freedom, (Leclercq & Pojani, 2023). It is in these kinds of public spaces that the social cohesion improves.

## 2.3 Translation - Theoretical frame of reference

ANT (Actor network theory) has its relevance to the study of architecture as a process in action. The most obvious action in architecture occurs in planning, design, and construction, (Fallan, 2008). The action is performed not just by the architects rather, they are often "led" to a solution, they are constrained by the neighbouring properties, they must comply to regulations, their ideas are influenced by others interests etc. (Fallan, 2008). According to Latour's theory the human actors such as translators and non-human actors such as blueprints, visual drawings or regulations interact with each other in the heterogeneous network of translation, (Zheng, 2017). Translation is a process of relational (displacements of actors in a space) and temporal dimension (the passing of time in which something transforms). ANT describes translation process in which humans and non-humans constantly negotiate and adjust the social (use) and technical (functionality), (Aka, 2019). The act of translation involves a constant alteration that takes place in particular, situated practices rather than just moving something from one medium to another (Latour, 1984, 1987). With a keen observation, it can be seen that the network that builds or transforms itself through the production process, the choice of negotiations and decision making by the translators, influence the translation process, (Zheng, 2017).

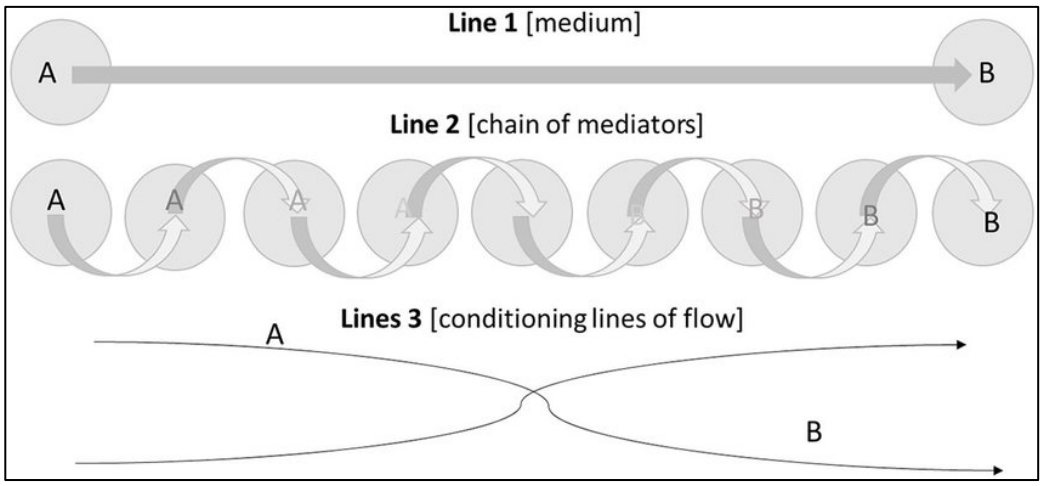



*Figure 1 Diffusion, translation and translating flow (Hultin et al., 2020).*

The figure 1, demonstrates the significant difference between the process of diffusion and translation. Line 1 is straightforward transportation from point A to point B. It signifies the initial actors involved and their power in the process of adaptation. (Hultin *et al.,* 2020). The medium in this case is the various challenges and issues in the way of implementation of goals from an initial idea of point A to translated goal of point B. The friction of the medium impacts whether consequence of translation is a positive or a negative within its own context. In comparison the line 2 is bound with the belief that the idea or goals is modified, appropriated, defected according to the action of actors in the process of translation. Therefore, the idea is shaped by the mediators in the project.

Spring and Unterhitzenberger, (2020) argues that an important part of this is 'editing', whereby the idea is retold differently in each situation, according to the particular context, in an appropriate formulation for the intended audience, and in a way that presents a logic of causality concerning the idea's adoption and the consequences thereof. Line 3 demonstrates the conditions, that lead actors and mediators to engage, translate, act, and think in the first place. This report does not go into depth regarding line 3.

These networks are potentially transient, existing in a constant making and re-making (Zheng, 2017). On the lines of Latour, Lamb and Curie (2012) state that, Scandinavian institutionalism is drawn from the actor network theory, and its concept of translation (Callon, 1986; Latour, 1986) which suggests that when people have an idea or model in their control, they shape it and act in a way that has its implication on maintenance and its existence. For instance, a significant revision maybe made by them or even reject or drop the idea or model eventually with the view of adopting an alternative one. Similarly, Czarniawska and Sevón, (2011) state that in the process of translation, actors remove institutionally rooted ideas(a strong goal decided by the institution ), such as a concept or model, and convert them into an image of an item or a prototype that can move between different time and space contexts. Some concepts might be retained during this process, while others might need to be altered to fit the environment, (Czarniawska, 2008). Hence, the focus is on why and how performers select specific concepts from a wide range of available possibilities, (Buser et al, 2021). Aka, (2019) explains translation as a mechanism that involves experimentation and improvisation. It requires ongoing efforts and time to deal with relationships between humans and nonhumans.

On the basis of the four steps of translation by Callon (1984), such as *problematization, interessement, enrolment* and *mobilisation*. Aka, (2019) demonstrate on how an innovation transforms through the displacement of actors resulting in success or failure. Additionally, these moments do not occur consecutively but rather it's a process of back and forth or interlaced. *Problematization* - the innovator identifies other actors knowing their interests, preferences and demands. *Interessement* - is a series of process in which the innovator sets OPP (obligatory passage points). According to Silva (2019), there are certain situations where actors displace from the obligatory passage points that had been imposed on them or a new spokesperson may deny the representativity off the previous one. In any case the translation continues but the equilibrium will be modified. *Enrolment* - the innovator sets strategies and defines various roles to carry out interessement. *Mobilization* – a set of methods that binds other human and non-human through recruitment based on their credibility, reputation and expertise.

In this four moments of translation that might occur betrayal and controversies at any moment and due to this the translation could also fail and the network could disintegrate if the translation was poorly conducted. The failure of translation is not due to human nature but due to certain ways of doing things (Czarniawska, 2017). These controversies give rise to a space for negotiations. (Aka, 2019). According to Silva (2019), the translator's effort may prove successful or not, but the outcome cannot be predicted. Further explains in translation as representation "as with any other form of translation, representation is fallible, and it cannot be foretold whether a representative will successfully speak for what it claims to represent".

## 2.4 Relation of ANT in the FB project

Figure 2 shows the visual relation of the actor network theory's four elements in the FB project. The figure 2 initially was outlined as a mind map for the FB project which also contributed to identifying the four moments of translation and their respective actors involved.

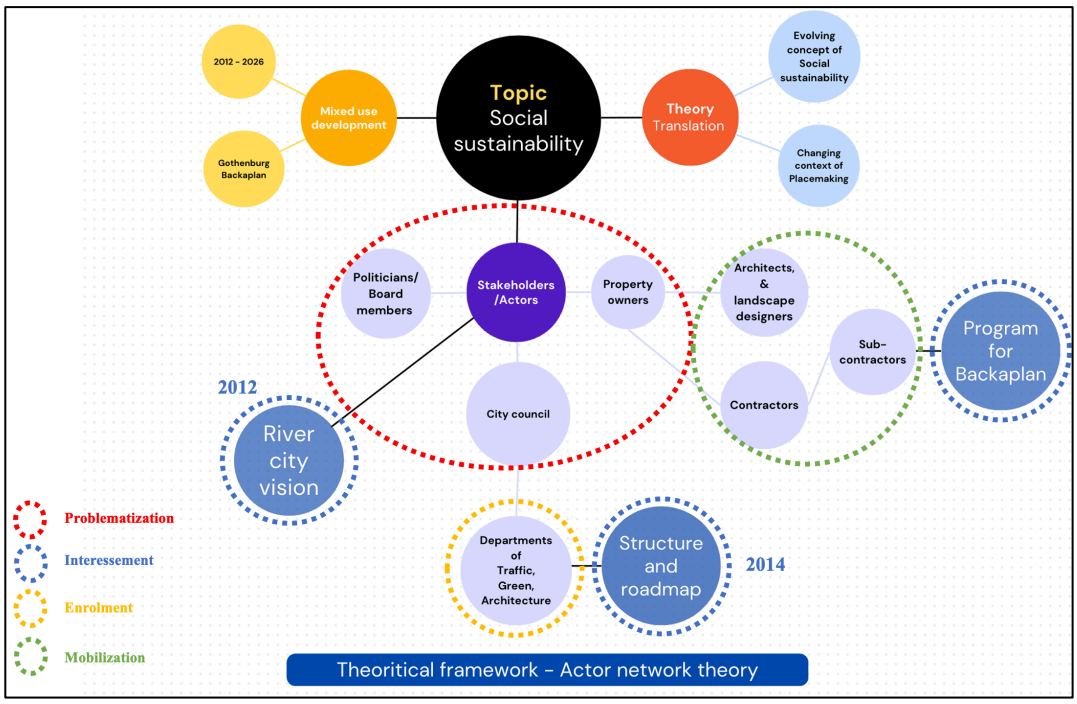



*Figure 2 ANT roles and its relation to the FB project – Made by the author*

In figure 2, the first moment of translation "*problematization",* emphasizes the innovators/stakeholders such as city council, property owners, political actors and board members initiate the RiverCity projects (Södra Älvstranden, Lindolmen, Backaplan(The FB project), Frihamnen, Centralen, Gulbergsvass, and Ringön ) with the help of primary actors i.e. master plan architects.

The second moment of translation *interessement* involves setting up project goals to which the projects work must conform. As stated in the introduction of this report, the river city vision document, Gothenburg(2012a) acts as the first OPP.

The third stage of *enrolment* entails bringing in professionals to carry out the goals and establish a road map of guidelines that will be adhered to by all participants moving ahead in the project. According to Silva (2019), the enrolment stage requires an intervention off a spokesman to balance the requirements in the network who expresses their thoughts and interests. In FB project a "structure and road map" document in 2014 that is derived from establishing individual strategies of, traffic planning Gothenburg(2014b), green areas and parks Gothenburg(2014c), and architecture planning, Gothenburg(2015d) forms the second OPP. Further these goals have been customized in the program of Backaplan document Gothenburg (2019e).

The fourth moment of translation *mobilization* contains the secondary actors who are required by a contract with the innovators/stakeholders to complete the project's work within their areas of specialty and who are also in charge of making the project a reality, make up the fourth moment of mobilization. The secondary actors in FB projects entails

architects, landscape designers and contractors for DP1 development plan who must comply to the goals of program of Backaplan document Gothenburg (2019e).

### 2.4.1 Literature (Theory) relation

The framework of social sustainability by Cuthill, M (2010) highlights "social capital, social infrastructure, social justice, and engaged governance". The concepts of placemaking by Strydom et al, (2018) highlights "spatial design /architecture" and the "democratic actors' involvement". The above-mentioned frameworks and concepts are integrated in the four moments of the ANT of translation, (Aka, 2019). The four moments are explained in this section. The arrow in figure 3 depicts the relationship between theories and concepts that are comparable.

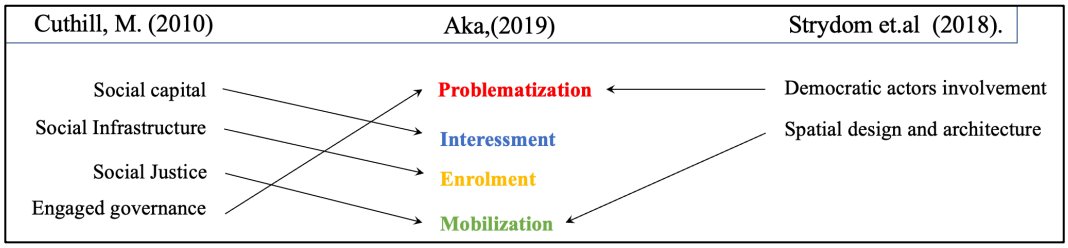



*Figure 3* *Relation of ANT roles with Social sustainability framework and placemaking concept - Made by the author*

In figure 3, Firstly, the component of "engaged governance" from Cuthill, M. (2010) framework is relevant to *problematization* because multiple stakeholders form a methodology of working together. The concept of placemaking that is relevant for this moment of translation is the "democratic actors' involvement" who are involved in making the social and spatial related decisions. Secondly, the "Social capital" from Cuthill's (2010) framework is regarded as a starting point to bring social cohesion can be compared to the goals of the RiverCity vision document during *Interessement* moment as it upholds the social sustainability goals which aims at building social cohesion. Thirdly, the individual strategists (traffic green and architecture) are enrolled during *enrolment* moment. The component of "social infrastructure" from Cuthill's (2010) framework is relevant for this moment of translation because the roads, green parks and housing forms infrastructure elements. Fourthly, the concept of placemaking that is relevant in *mobilization* moment is "spatial design and architecture" because the fourth moment involves architects, landscape designers who designed the space using placemaking as a tool. The component of "social justice" from Cuthill's (2010) framework is also relevant for this moment because the social issue such as provision of affordable housing, provision of a social life through the design of social spaces, or concerning equity, rights, access and participation of public is taken into account when making a project into a reality.

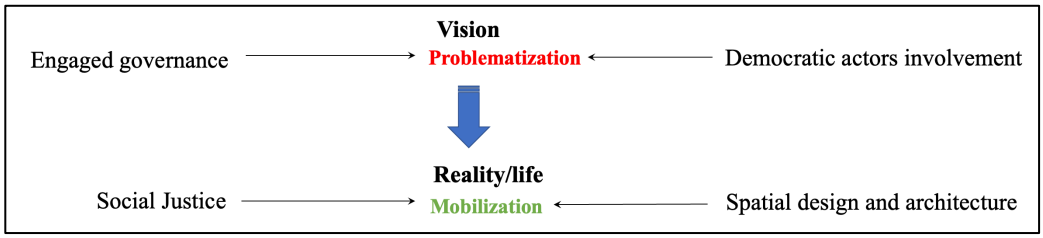



*Figure 4* *Simplified framework for this report*

Figure 4 shows the simplified version of the framework as this report focuses on the vision of goals and its translation to reality in FB project.

# 3 Research Methodology

This chapter explains the research method and its design with a mixed method approach which is based on a semi-structured interview, a public survey, and document readings along with observations in the meetings. The research process is outlined in the figure 5 . This chapter further describes the motivation for the case selection, data collection, and data analysis methodology finally summing up with a few reflections on the methodology.

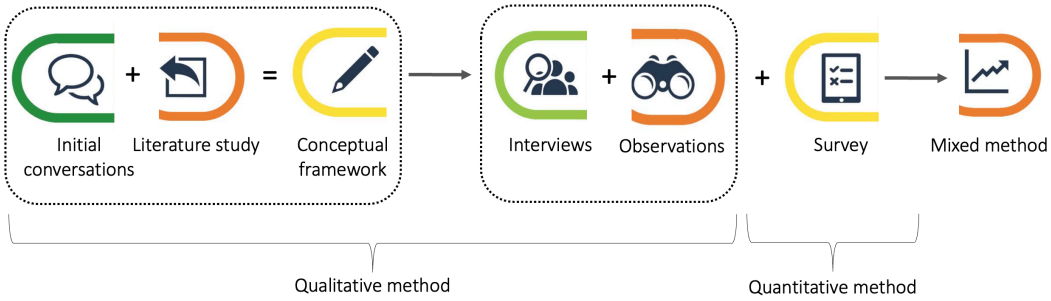



*Figure 5 Research process visualization (Made by author)*

## 3.1 Research approach and design

Social sustainability is an ill-defined notion that only takes on meaning in the performative actions taken to put it into practice. As a result, it has a wide range of interpretive flexibility, no tested answers, and frequently a substantive focus that cuts over multiple policy spheres, (Saldert, 2021). Due to this, social sustainability is a pretty diverse set of concepts. Understanding social sustainability in the built environment, particularly in mixed-use developments, was the starting point for this research. A series of ongoing interactions with specialists in academic research and practitioners within social sustainability was held.

Further a literature review was conducted in which I chose to use the framework by Cuthill, M. (2010) on social sustainability that are *social capital, social infrastructure, social justice, and engaged governance.* Also, as ANT has its relevance to architecture (Fallan, 2008), architecture concerns with spatial design and placemaking, that has the ability to create a positive social change, (Strydom et.al, 2018). As a result, the above-mentioned concepts and frameworks helped me build a theoretical understanding about social sustainability, placemaking, and ANT of translation. Due to the study's highly explorative character, a qualitative research methodology is used. Further building up the theoretical knowledge through document readings about social sustainability goals see section 4.1. A conceptual framework (see figure 6) was drawn to understand key concepts of social sustainability, main actors involved and a way to go forward in this research. The conceptual framework highlights the process aspect of construction where the translation process is affected by the challenges and efforts by the actors during design, implementation, and maintenance phases of construction.

A semi structured interview guideline was prepared (see appendix)and simultaneously carried out interviews with the actors involved in the project. This was because Fallan (2008) state that, the conception of architecture takes place in a distributed actor network of both human and non-human actors. Further adds that it's easier to interview architects, contractors then make floor plans, facades speak for themselves. See section 3.3.1 for details of the interviews. The research strategy ended up being an abductive

procedure because of the simultaneous nature of collecting empirical data and comprehending the theoretical literature, (Dubois and Gadde, 2002). The iterative approach was carried out by adjusting a few questions based on the practitioner's (interviewee) profession and role in the project after understanding the themes from the empirical data from the initial interviews. As social sustainability mainly focuses on people and their needs, Rashidfarokhi et al (2018) state that the collaboration and community participation is also viewed as a supreme approach to social sustainability, therefore I chose to additionally apply a quantitative method to study people's opinion/preference about the project and their requirements by conducting a survey in a public consultation event concerning the same case/project FB but the adjacent property/next detail development plan DP3 (see figure 8) of the future Backaplan(FB). see section 3.3.2 for survey details and section 5.1 for the survey results. As a result, mixed method approach was used in this procedure, that contributed for an insightful study of recurrent themes that assisted the author in expanding the theoretical framework of translation.

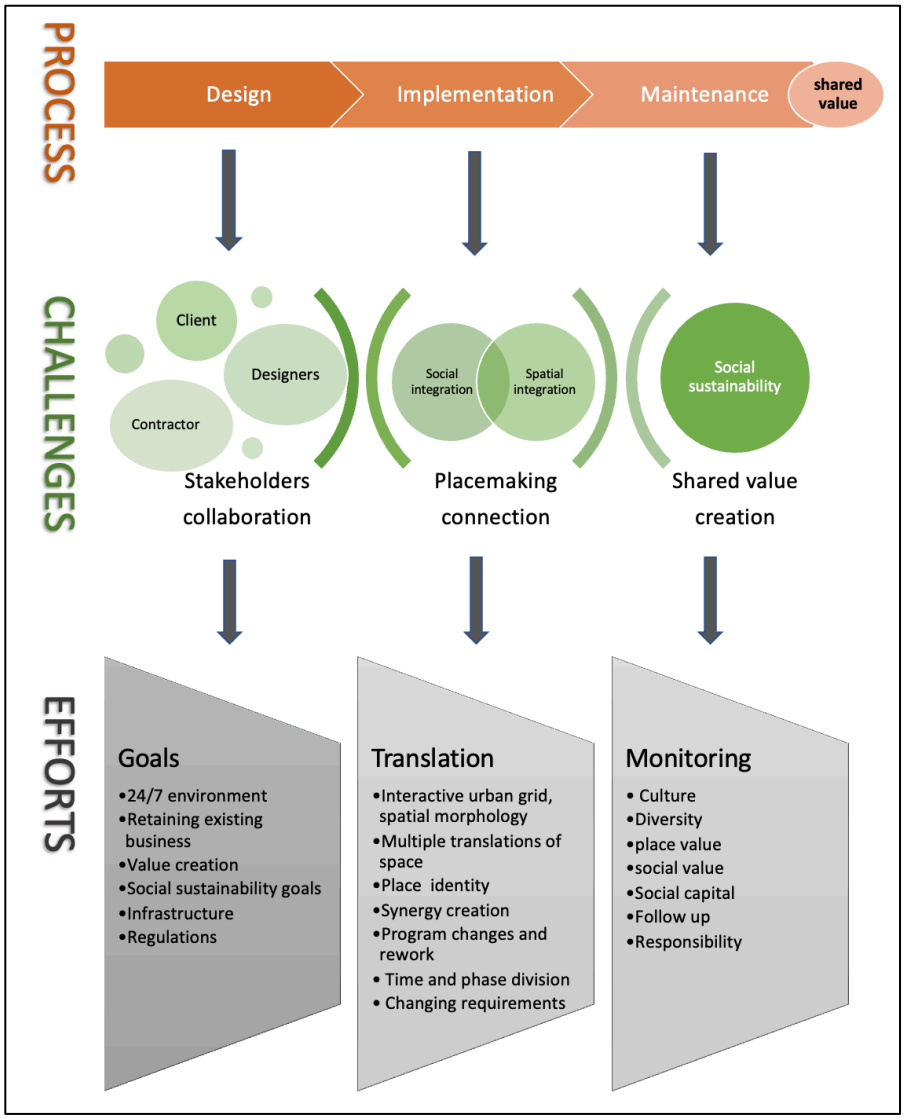



*Figure 6 Conceptual framework (Made by author)*

## 3.2 Case selection

First of all, a case is distinctive when “it is more than a singular phenomenon that serves as the basis for its thrill and justification”. Secondly, “the instance is distinct when it takes place in a particular context, such as at a certain time or location” (Aka, 2019). Since it meets both of the aforementioned selection criteria, the future Backaplan (FB), DP1 is a very intriguing case. Firstly, the FB is a mixed-use project and illustrates a situation with numerous aspects. Secondly, because of the FB project´s distinctive location within Gothenburg's inner city, which was formerly thought of as a piece of land cut off from metropolitan city life. Due to these two criteria, I created a theoretical framework for the translation process. I believe that the project changes its context from an industrial/commercial land use to a mixed-use development as a result of translation involves in the project process. Additionally, the translation from an excluded piece of land in the city will result in a “dynamic and vibrant neighborhood planning” that is based on the needs of the local community.

This thesis is in collaboration with the contractor company (Skanska) and it was started by the supervisor at Skanska who serves as the project leader for social sustainability. The FB project (case study of this report) was in the construction phase during the time of this thesis, and it was intriguing to see how the project has progressed over the years from its planning and design stages to the implementation stage.

## 3.3 Data collection

As mentioned in the previous section, I was benefited from gathering the necessary information from the ongoing project while it was still being built. The difficulties of achieving the goals were still fresh in the minds of the practitioners involved. The reality of implementation was still a long way off, but due to primary data collected through interviews, surveys, observations in meetings and visits and secondary data collection through document readings, I gained insight into how the implementation is progressing.

### 3.3.1 Interviews

For this report, the interviewees have been given reference names. Table 1 shows the reference names, the roles, and their respective organisations. Prior to the interviews, an internal project meeting was held with participants F, H, and M, see table 1, during which I learned about the project's status and future work process. This provided the first step in defining the scope of the thesis, as well as identifying the key interviewees. The study included 14 semi-structured interviews. 12 face to face interviews and 2 online interviews via Teams lasting 45- 60 minutes each were conducted. Out of the 14 interviewees, actors A, B, G,H,J,K comes under the first moment of translation i.e problematization. The initial interviews were conducted with these actors who oversee establishing the project's social sustainability goals. Interacting with the primary stakeholders who have a direct impact on the project provided me with a much deeper understanding of the subject. Actors C, D,E,F,L,M,N,O,P comes under the 4th moment of translation, i.e mobilisation, as described in the section 2.4 (refer figure 2) the role of actors in the four moments of translations in ANT. These actors are responsible for bringing the project from visionary state to reality through implementation of goals into

physical elements. The interviews were recorded with the consent of all interviewees and later transcribed for data analysis. The open-ended questions allowed interviewees to express their opinions and demonstrate their knowledge of the subject (Bell and Bryman 2015). By strategically placing fact-based questions, the interview structure was strengthened in order to obtain the most insightful findings. The study focuses on the micro-decisions and conflicts that develop within the strategic planning organization and how these manifests across the organizational entities to analyse the practitioners' role when planning toward the goal.

*Table 1 Interview list*

| Respondent | Role | Organization | Project |
|---|---|---|---|
| A | Principle architect | Architectural consultants | Backaplan |
| B | Sustainability speacialist | Architectural consultants | Backaplan |
| C | Responsible architect | Architectural consultants | DP1 - Hus 1 |
| D | Responsible architect | Architectural consultants | DP1 - Hus 3 |
| E | Landscape architect | Landscape designer | DP1 |
| F | Project manager | Project management Consultant | DP1 |
| G | Property owner representative | Property owner 1 | DP1 - program |
| H | Property owner Marketing manager | Property owner 1 | DP1 - program |
| J | Property owner partner | Property owner 2 | DP1 |
| K | Urban planner | City council | DP1 |
| L | Design manager | Contractor | DP1 |
| M | Social Sustainability project leader | Contractor | DP1 |
| N | Social Sustainability Expert | Contractor | DP1 |
| O | District head – commercial & residential | Contractor | DP1 |
| P | Development manager | Contractor | DP1 |

### 3.3.2 Survey

“The survey design provides a quantitative description of trends attitudes and opinions of a population or tests for associations among variables of a population by studying a sample of that population”, (Creswell & Creswell, 2017). With eight multiple-choice questions and two descriptive questions, a digital survey form was created. 44 respondents to the poll who were curious about the planning concept for the FB project provided their responses with their full agreement because, the work on DP1's building site had already begun; therefore, they were more eager to participate in the poll. Although the public consultation session was for DP3, I made it obvious to the public that the survey is about DP1. The respondents were both single and family households and therefore responses from a mixed set of people can be seen. This report presents the responses for only two of the multiple choice questions in the section 5.2 because these two questions shows the mismatch between the case study project and people's preference. The entire survey form with all the responses is attached as appendix.

### 3.3.3 Other data sources

The data was gathered through reading materials such as the River City Vision, (Gothenburg, 2012a), Program for Backaplan, (Gothenburg, 2019e) , DP1 detail plan report, (Gothenburg, 2020f), consultation review report, and documents addressing SKA and BKA, (Gothenburg,SKA BKA, 2018), in addition to the interviews and surveys. The supervisor assisted in obtaining the initial data by meetings with the pertinent parties involved in the project within the contractor company.

## 3.4 Data analysis and trustworthiness

The data has been analysed through thematic analysis approach, (Bell et al, 2022). Even though thematic analysis does not provide a distinctive technique/procedure, it provides flexibility for analytical strategy. By identifying repetitions and similarities, a pattern in the flow of information has been identified in the interview transcript data and have been categorised into 4 themes that is presented in the interview results section 5.3. The research analysis has been carried out with visual data analysis (Silverman, 2020) to showcase the process of translation detailed in the section 5.1. Since, the project is in construction phase and most of those data is available only in the form of documentation such as urban planning details, project drawings, concept drawings etc. And, as the project is physically not on the site to understand the implementation of goals from the concept stage to on site construction. As per the visual research methodology by Silverman, (2020) the existing materials from documents/data that were available as part of the project planning documents has been analysed. The representation and messages have been analysed through the found visual data.

One of the criterion for evaluation in qualitative study is trustworthiness (Bell et al, 2022). Through many validations, I ensured the data/information obtained from project participants or from documentation was reliable. And to achieve this, the received data is double-checked with other pertinent parties, like the project leaders. The whole report was delivered to the project managers, who gave it favourable feedback. The study gains credibility as a result, and the findings are pertinent to the target market.

## 3.5 Ethical aspects

All participants gave their informed consent after being made aware of the projects purpose and the usage of informant's statements and the audio recording method during the interview. Each participant's privacy is safeguarded by keeping them anonyms. No deliberate deception is allowed throughout any stage of the research process, including information provision and information analysis. The entire procedure is carried out with the utmost integrity and fairness to all parties concerned. If the research report makes any unfavourable statements about any parties, they do not specifically target any one person; rather, they refer to the network's overall decision-making process with a goal to providing accurate assessments of the circumstances.

## 3.6 Reflection on chosen methodology.

To understand the variety of social sustainability concepts, it was crucial to conduct interviews with various stakeholders, including the city council, property owners, contractors, architects, and landscape designers. Knowing what the public expects from this construction development(project) was another essential goal of the survey. Therefore, a pattern in the flow of information that resembled a before-and-after scenario was seen by adopting a mixed method approach of interviews and surveys as a way for collecting empirical data. This is particularly true given that the project's requirements shifted from elderly apartments to typical normal apartments. This pattern/alteration /modification in the project made it clear that there is a concept of translation in the projects planning process, which served as the inspiration for the theory concept used in this research. The translation process includes everything from setting up goals to putting them into action over the course of a decade, not just changes in project requirements.

# 4 Case description

This chapter provides the context of the case study, focusing on the social sustainability goals. Further describing the challenges faced by the various actors as well as goal implementation efforts by the project's various stakeholders, the chapter finally concludes with a compilation of gap analysis, which serves as the foundation for empirical research. The visual translation concepts from the case study are shown at the end of this section to help readers understand how the theory of this report's ANT, placemaking, and social sustainability principles are translated into practice.

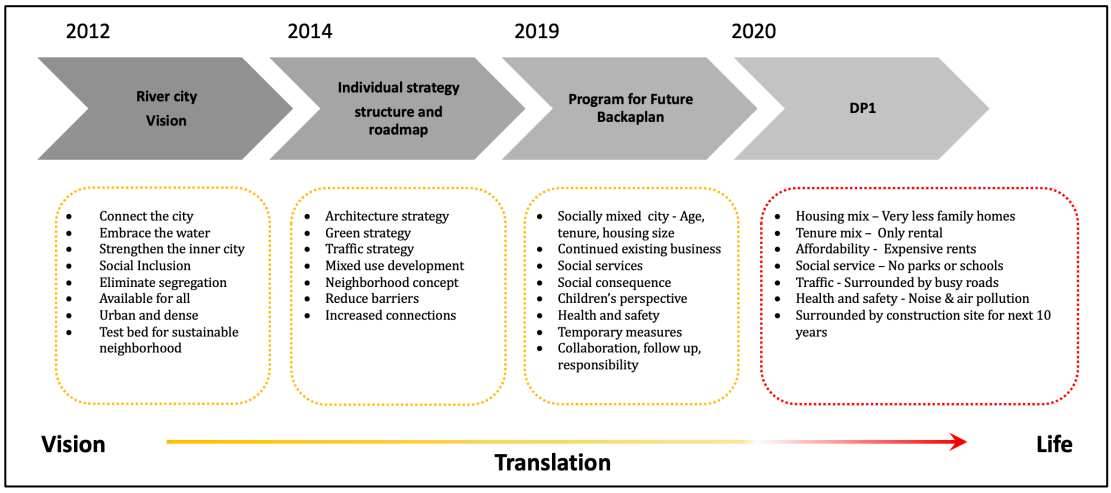



*Figure 7 Timeline of social sustainability goals (Made by author)*

One of Sweden's most prestigious urban development initiatives is the "the river city vision", (Gothenburg city, u.d). The goal in the River City vision during 2012 describes how the City of Gothenburg can grow sustainably while also enhancing West Sweden. Inner-city neighborhoods like Södra Älvstranden, Lindolmen, Backaplan, Frihamnen, Centralen, Gulbergsvass, and Ringön are the focus of the initiative. Eliminating segregation, increasing the housing shortage, and building a sustainable mixed-use metropolis can be seen as the main visions. Social sustainability is therefore assigned top priority in the River city project. The overview of the key goals from 2012 to 2019 and their respective timelines, have been demonstrated in figure 7. The points under DP1 during 2020 in the figure 7 are not the goals but the gap analysis of this report in the case study project. The next paragraph highlights few important statements from the series of documents concerning the river city projects. The statements will help in analysing the translation process in the FB project.

The first document, River city vision Gothenburg (2012a) stated that "*The project serves as a testing ground for novel activity combinations, strategies, and models with an emphasis on social inclusion*". Further in 2014 the visions were divided into individual strategies such as the green strategy, the traffic strategy and the architectural policy, by the respective committees under the leadership of the City Council. The goals of Fgreen strategy concerns-green connections (Public parks and semipublic residential yards) close to homes and businesses and the document, Gothenburg, (2014b) stated "*proximity to green areas affects the degree to which the population is physically active*". The traffic strategy document, Gothenburg, (2014c) stated that "*Emissions, noise, and road safety are all factors that greatly influence people's health*

*and sense of security, and which must therefore be given the appropriate consideration in decisions*", the objective was to reduce the negative social consequences and child impact when planning transport-intensive activities. The structure and road map document Gothenburg, (2015d) stated that "*The potential of sharing open spaces for schools and schools with parks or green spaces should be tried in all planning*". It also demonstrates the overview picture on the basis of which the document, Gothenburg (2019e) program for Backaplan (PB) was formulated,. The purpose of the PB document was to transform Backaplan from an industrial/commercial space to an attractive mixed city. The document provides overall conditions, values, and strategies for the same.

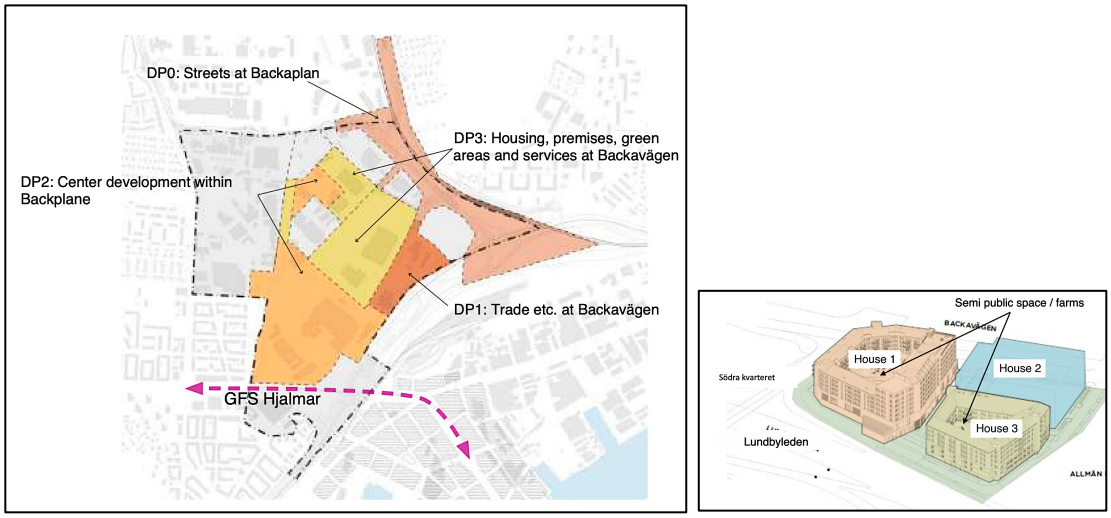



*Figure 8 Source - Program for Backaplan (left), DP1 plan document (right)*

As of today, The first development of the Backaplan, is DP1, is under construction, Gothenburg, (2020f). see figure 8 (right). It houses three blocks, houses 1, 2 and 3. Houses 1 and 3 have been given building permit by the city council. The configuration of DP1 consists of housing, offices, and other commercial activities. House 1 is proposed for a grocery store to replace today's coop store and elgiganten store at Backaplan location along with 271 housing apartments on the upper level. House 3 consists of garages/parking on the lower level and 152 housing apartments on the upper level. Three significant highways encircle the location. This made housing residences in general a difficult task in this intricate design. The original plan in 2018 was to construct 100 elderly apartments in house 1, along with 95 smaller flats, and 100 elderly apartments in house 3. It was because of the users such as elderly people and students there was no intention to provide schools or day care along with parks. In 2020, the program was revised, and the concept of an elderly residence was abandoned because the stakeholders could not afford to have elderly homes due to economic situation and high cost. The architectural plans were altered to change to 1 or 2 room apartments what they are today. The document Gothenburg, (2020f), states that the program is not very clear with the implementation but provides flexibility to accommodate any kind of residences. Figure 7 displays the accomplishments of the aims in DP1. There are several reasons as to why the project is implemented in this way. The challenges are thoroughly described in the following chapter.

## 4.1 Challenges of implementation

This section describes the challenges and issues that affected the process of translation of the initial goals within the project from different stakeholder's perspectives. Figure 9 shows the timeline for DP1 along with various actors involvement phases

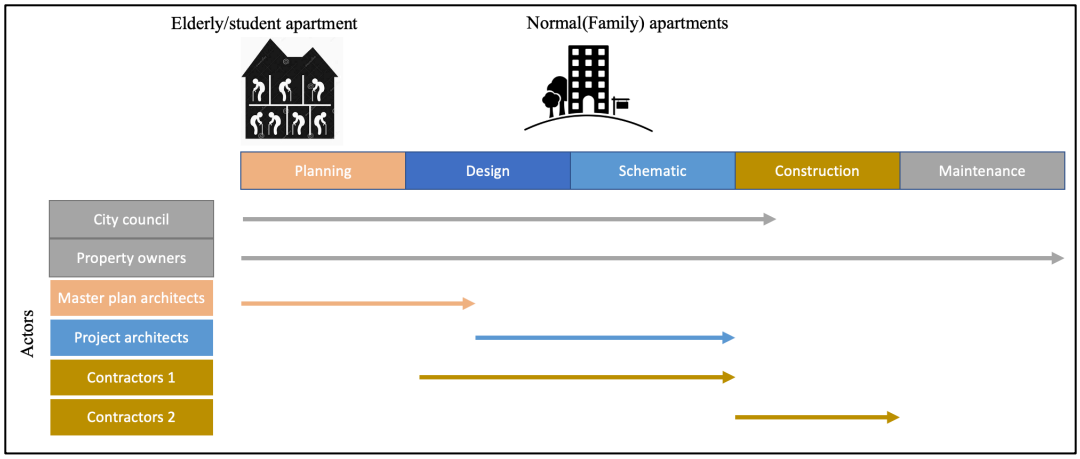



*Figure 9 – To understand the various actors involvement and stages of DP1*

### 4.1.1 Property owners' perspective

Firstly, due to the market and shifting economics caused the initial elderly housing initiative to because apartments were being extremely expensive, and as a result, the city council postponed DP1's permit for 1.5 years in order for the property owners to change the requirements. In the meantime, NCC (initial contractors 1) was replaced by Skanska (contractors as of today- 2) as the project's contractors (figure 9). Starting with the idea and continuing through the schematic design phase, NCC and Skandia (the property owners) had a collaborative agreement and according to the agreement any of the parties were free to decide if they want to continue in the project after the schematic design phase. The project was turned over to Skanska because NCC decided to discontinue through the next phases in the project was the second issue. Thirdly, the division of apartments according to their area /size resulted in 53% of 1 room, 33% of 2 rum, 12.5% of 3 rooms, and 1.5 % of 4-room apartments in DP1 house 1. The apartment area for DP1 house 3 resulted in 34% of 1 room, 57% of 2 room, 9% of 3 room apartments, refer table 2.

*Table 2- Distribution of apartment, areas and count in House 1and House 3. Source: DP1 plan construction drawings*

| *Before* | DP1 - House 1 | *After* | | |
|---|---|---|---|---|
| | Apartment type | area (sqm) | % | Count |
| 100 elderly apartments + 95 small general apartments | 1rk | 33 | 53 | 140 |
| | 2rk | 54 | 33 | 91 |
| | 2.5 | 63 | 0 | 1 |
| | 3rk | 73 | 12,5 | 35 |
| | 4rk | 112 | 1,5 | 4 |
| | Total | | | **271** |

| *Before* | DP1 - House 3 | *After* | | |
|---|---|---|---|---|
| | Apartment type | area (sqm) | % | Count |
| 100 elderly apartments | 1rk | 34 | 34 | 51 |
| | 2rk | 54 | 57 | 86 |
| | 3rk | 85-90 | 9 | 15 |
| | Total | | | **152** |

Due to the location value and high-quality construction the rents in this premise will be expensive and not affordable to all the category of businesses and heterogeneous people this was also the reason for constructing most of the small-size apartments. Lastly, Since DP1 is the first construction, it must endure a difficult period for the foreseeable future, and the neighborhood will be a dangerous construction site for a considerable amount of time additionally due to the stigmatization attached to the location today is a challenging task to eliminate.

### 4.1.2 City council administration perspective

Firstly, not all the objectives that are created for the program for Backaplan (PB) are translated into DP1. The main reason for this was, PB was being developed parallelly with the DP1 initiative because DP1 had to start the construction right away in order to move the existing businesses i.e., the largest grocery store (Coop) and other commercial stores in the current Backaplan, which was the primary reason that this development plan (DP1) was excluded of the main program.

Secondly, the housing sizes could not be regulated to have an equitable distribution of different sizes. The PBL Act also prevents the City Council from controlling housing tenure and prices. The shift from elderly homes to normal apartments is still considered as residences and hence that was not an issue for the city council. Thirdly, there is a lack of financial models by the city council to support the small businesses that exist on the premise today to be able to continue in the future Backaplan. This is because the small businesses cannot afford to pay the high rents in the future. Due to the aforementioned factors, it appears challenging to resolve the problem of segregation while maintaining affordability for a diverse population.

### 4.1.3 Designers' perspective

The master plan architects for PB faced a lot of challenges to indulging the sustainability elements within the design, and following up with the next actors that come into the project. Collaboration with the City Council was an issue as they were not flexible in accommodating sustainability and acknowledging its issues and not including its details in the detailed plan due to their lack of knowledge about the subject.

The project architects for DP1 worked within the confines of the property developer because the overall plan was already established in the structure and road map during 2015 by the master plan architects. Therefore, the breadth of their efforts and obligations was very limited to apartment design, layout and place-making collaboration, and system handling. Additionally, they were not involved in the entire design process from the very beginning and left the project as soon as the design phase was over according to their contract (see figure 9). Within this brief period of involvement, they had to make design adjustments to make the product work in regular small apartments rather than elderly homes. As there was a shift in the requirement from elderly apartments to normal apartments in between design and schematic stages.

### 4.1.4 Contractors' perspective

The contractors had very little understanding of the project because they were only involved late in the production process along with the very minimum knowledge transfer from the initial contractors. Therefore, they had to deal with stage division for execution and implementation issues. It was difficult to incorporate social sustainability elements into the project's overall scope and a short span of involvement, (see figure 9).

## 4.2 Efforts of implementation

Each participant in the project has a responsibility to carry out sustainability goals, so this section presents how each participant has made some efforts toward social sustainability.

### 4.2.1 Property owners' perspective

In order to maintain apartments over the long run, it is crucial to consider their quality. The owners contend that while the rents may be high now, the rents might work out in the long run. The neighborhood has been given a 24/7 lively atmosphere while also making efforts to keep the large local businesses that exist in the place today. In addition to providing a semi-public farm (green space) and a pocket park on the street edge to integrate social interaction and meetings, the apartment sizes have been varied to some extent in order to incorporate a social mix. Efforts have been put into indulging public in the decision-making by conducting regular meetings along with commercial stores at the location today to inform them about the development. This has been done in the collaboration with other property owners in the premises.

### 4.2.2 City council administration perspective

The city has a responsibility to make the public spaces open for everybody and therefore multiple public transport ways have been thought out in the planning along with the existing bus stop and a new tram road connecting to Brunnsbo station. The city is attempting to balance the urban life in the neighborhood with culture, activities, and temporary measures through a framework agreement with property owners. As part of the process a public consultation was conducted and the feedback from the public was gathered, but because it took place during the Covid 19 pandemic, it was somewhat unsuccessful.

### 4.2.3 Designers' perspective

The master plan architects have put in a lot of effort in producing documents for sustainability implementation in collaboration with the property owners. Many workshops and dialogues have been held in creating the sustainability goals over the period of last 10 years at the overall master plan level.

In the FB project, the project architects attempted to incorporate elements of the identity of the existing Gothenburg architecture while modernizing it, such as the curved vault design for entrance doors on the facades and balconies. Additionally, the facade designs and material selections, such as recycled red bricks and wrought iron for the frames and staircases, maintain the identity of the old industrial Backaplan. The landscape architects are presently developing a placemaking strategy to create an outdoor urban meeting space between houses 1 and 3 due to the absence of public space on the property.

### 4.2.4 Contractors' perspective

The project manager has initiated social sustainability implementation within the project DP1 along with Skanska who work with their own social sustainability framework called "Design for Social Benefit" (Skanska, u.d.) in collaborating with neighbourhood school's students and engaging them in the workshop for making them understand the construction sector and the different roles that they could make the future in. Additionally, Internships will be given to students practicing carpentry and

other construction skills. This thesis report is also part of the social sustainability efforts from the contractor to comprehend the overall objectives from the outset to execution.

Also, in the construction phase the contractors have tried to bring in sustainability aspect by using reused bricks for the facade of house 1 in DP1. The red reused breaks showcase the industrial look as visualised by the architects during the design phase. This is also one of the efforts by architects to retain the identity of the old industrial location of Backaplan.

Even though the efforts of each actor seem insignificant, they are important in that context. These efforts must be strengthened and motivated to go above and beyond the required tasks in order to be of any worth. These initiatives are put into action, but their true impact won't be felt until the building's actual occupants continue to care for it over time.

## 4.3 Gap analysis in documentation

The section presents preliminary analysis about the goal implementation in DP1 through document readings listed in the case study.

### 4.3.1 Social integration

Although efforts have been listed by the property owners regarding varying sizes of the apartments, the plan description document, Gothenburg, (2020f) does not address or describe the features in detail of a few things such as, incorporating the social mix by the division of apartments through various sizes. Although the document describes that this specific plan is intended to be flexible, it does not specify that the housing is accessible to people of all ages and socioeconomic classes. Although the PB document, Gothenburg (2019e) initially emphasized the need for accommodation with special services (BmSS), DP1, Gothenburg, (2020f) comprehensive plan does not appear to address it.

The housing deficit in the city was addressed in some manner by DP1, but this led to the provision of small (reduced ceiling heights) and expensive apartments and the exclusion of family homes from the narrative. Furthermore, the DP1 document state that “DP1 will work as a barrier for the extremely busy road at Lundbyleden”, but the fact that residents of DP1 also require protection from extremely high levels of noise and air pollution as well as evaluation from the standpoint of children must not be forgotten.

### 4.3.2 Spatial connection

By reading the documentation of DP1, Gothenburg, (2020f) and PB, Gothenburg (2019e) , it can be deduced that this detailed plan must get underway quickly because it is a requirement for the neighbourhood’s continued development to provide a new location for the grocery and other commercial stores. However, getting to this space is difficult, and there is a danger of continuing car dominance until the new tram connection is built or DP2 progress is made as quickly as possible. So, this is a challenge regarding the timeline and implementation phase which is extensively stretched and delayed.

It will be difficult to express a sense of safety and calm when it comes to public spaces or gathering places, since DP1 seems to be giving a very small pocket park on the corner of the DP1 quarter as well as the semi-public inner courtyards that are only used by the residents or not the public. Gothenburg (SKA BKA, 2018), state that "the intended farmland (the semi-public inner courtyards) will be rather tiny, this may have a negative impact on people's daily life, particularly as it relates to children. Backaplan's rapid growth carries the risk of limiting the possibility of people gathering for larger events if it doesn't allow for enough large squares and parks. This is inline with the statement by Boverket, (2010) as mentioned before "the semi-private greenery in the form of residential yards can never replace the public green areas and parks where everyone has a right to stay".

### 4.3.3 Responsibility, policy and administration

The administration believes that the goals that are missing in DP1 will be met in the upcoming expansion stages i.e., DP2 and DP3. When it comes to the timescale for completing each phase, the PB document state that "the first stages are 15-20 years old when the latest stages are built". Since the housing market is delicate today and the demography's needs are changing, an ongoing analysis will be necessary to determine what is needed to maintain socially mixed housing before each stage.

# 5 Results

This section presents firstly, the visual results of translation in “the future Backaplan” Secondly this section presents a quantitative finding through the digital survey results answered by 44 people in a public consultation event by the city of Gothenburg. Further as part of the qualitative empirical data collection the interview results have been grouped into relevant categories and presented in this section.

## 5.1 The translation of “The Future Backaplan”

Visual depiction of translation is presented in this section. Starting from micro translations(modifications) in architectural placemaking, architectural identity, residential program, to macro translations of timeline or phase division, and the change in the requirements in the detail plan, the visuals portray how the process of translation is affected.

### 5.1.1 Architectural placemaking

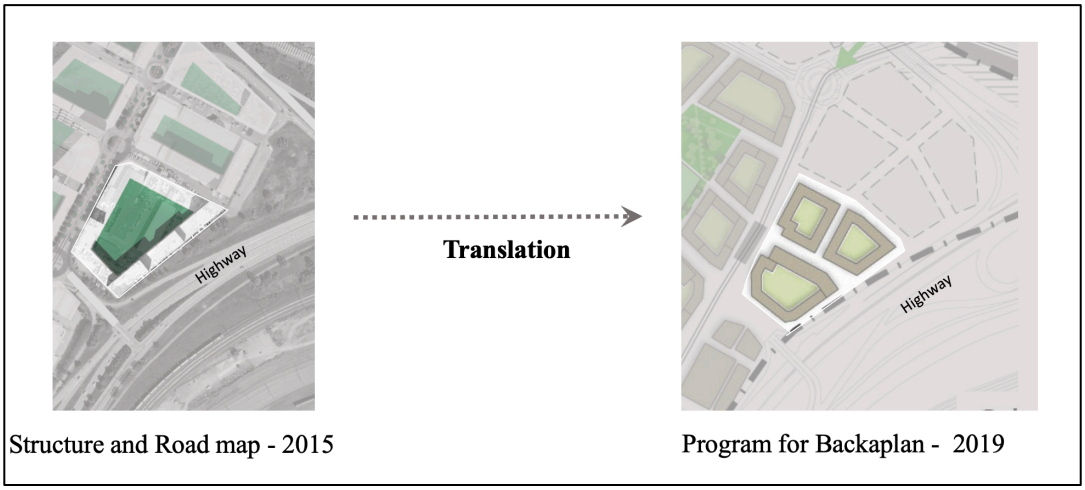



*Figure 10* *Architectural placemaking – The translation element here is, breaking the one single mass into 3 blocks*

The changes between 2015 to 2019 (translation) in the figure 10 creates a positive consequence by bringing in sunlight and synergy at the meeting points between the blocks, and by maximising BTA (Gross area). The negative consequence is that the busy road's noise and air pollutants permeate the space. The actors engaged in the translation process (property owners and designers) knew about the consequences and yet went ahead with the choice of splitting the block. This is in line with the concept of translation (Callon, 1986; Latour, 1986) which suggests that when people have an idea or model in their control, they shape it and act in a way that has its implication on maintenance and its existence. The graphic design showcasing the surrounding area plays an important role in place marketing. In Figure 10 (left) the highway and surroundings are clearly represented whereas in the figure 10 (right) the highway is blurred out, that does not catch the eye of the customer. This misleads the fact and ignores the busy motorway juxtaposing the projects premise.

### 5.1.2 Architectural identity

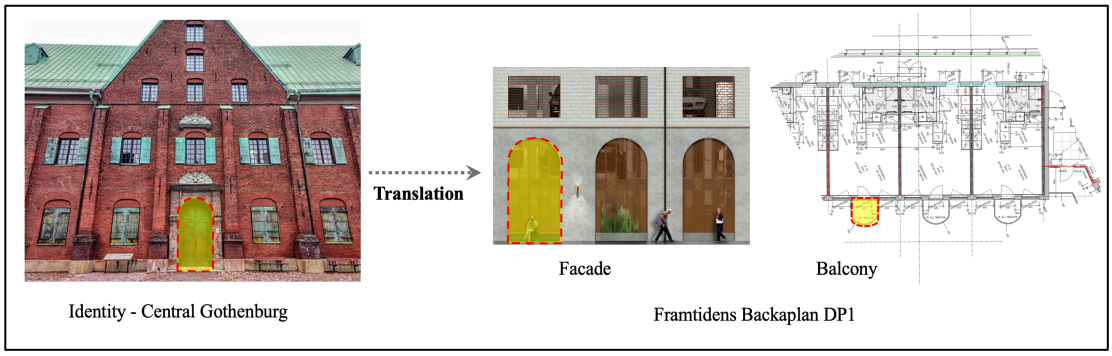



*Figure 11* *Architectural Identity - The vault/arch shape of entrances is replicated in the design of the façade and the balconies of House 3 in DP1.*

Respondent D in the interview state that the vault/ arch shape entrances of the central Gothenburg heritage buildings were an inspiration to bring an architectural identity that connects the south and north part of Gothenburg city. The design thinking in the figure 11 was to bring in architectural identity that resulted in a positive consequence of the translation of being a symbolic value to the location. The negative consequence of the translation is, in the construction stage due to lack of supply and high cost in making the custom shape the balcony railings shape does not match the design intent. This can be related to the question of Gustavsson and Elander (2013) from the theory of this report, whether the goal of architectural identity in the imagined space translate into a physical space. This results in certain artistic concepts being limited only to the design phase of the construction process. It is during the concept phase the architectural placemaking visuals are marketed to attract the potential customers. Later due to constraints in the economic situation of the project the design concepts do not come into reality as imagined/visualised. Hence the soul of the design “the concept” is lost.

### 5.1.3 Change in residential program

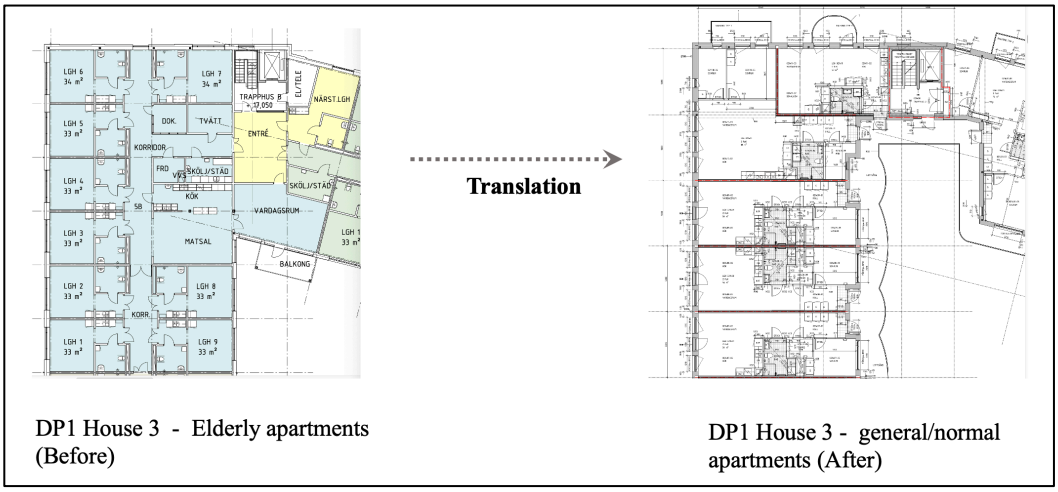



*Figure 12a Residential program - (Plan view)The elderly residences translated to normal apartments.*

Significant changes in the architectural design layout can be seen, such as- reduced depth of the building, corridors shifted from centre towards inner courtyard, apartments for elderly were 33sqm room each with shared separate kitchen and living room, changed (translated) to normal apartments in which 1room kitchen itself is 33-35sqm. In figure 12a(right), the size of the normal apartments is distorted by the graphic portrayal, giving the impression that they are larger than the elderly apartments on figure 12a(left). But the reality is most of the normal apartments are smaller than the elderly and hence the total number of apartments increased compared to what was planned, refer table 2.

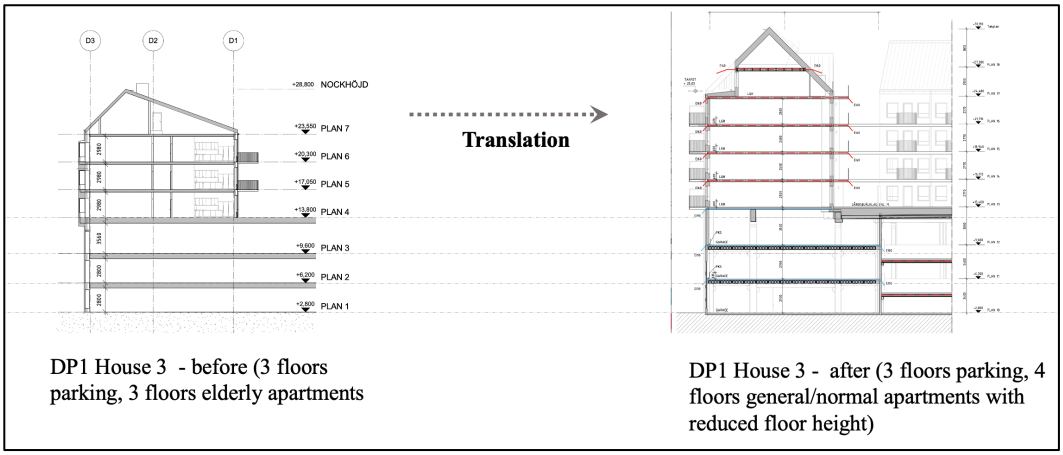



*Figure 12b* ***Residential program*** *– (Section view)The elderly residences translated to normal apartments.*

The translation has a positive consequence as it maximises the number of apartments by adding an additional floor that results in maximizing the BTA (Gross area). The negative consequence of this translation is that the rents of the apartments continue to remain expensive and the floor to height ceiling is reduced by 480mm. The reduced ceiling height indicates that the apartments are not the premium ones but rather small in the interior volume too. The architects have tried to bring in value for the property owners in two ways firstly the monetary value was increased by adding an additional

floor, see figure 12b. Secondly, they created a symbolic value through architectural design identity, see figure 11. The project benefited from the translation(modification) up until the design phase, but due to economic difficulties later in the construction phase, the designers' efforts were not so fruitful in maintaining the architectural identity.

### 5.1.4 Time/ phase division

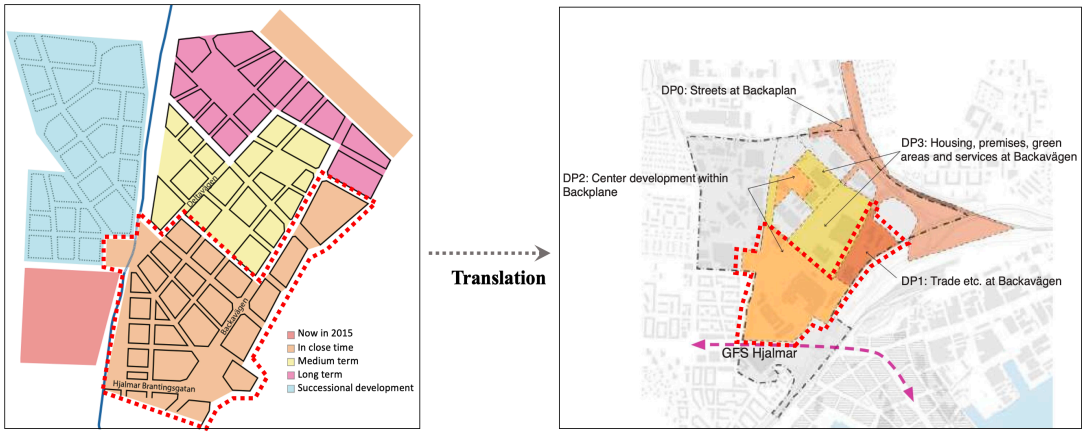



*Figure 13* ***Translation in Timeline/phase division*** *at the master plan level. Left - The marked region was treated as one complete development. Right - The marked area is shown as two separate developments.*

Figure 13, Right - DP1 was removed from the combined development and treated as a single development. The positive consequences and the reason for this translation was to shift the existing commercial activities to this area in order to keep them up and running throughout all the construction phases. The negative consequence of this translation was it resulted in a partial translation of social sustainability goals i.e DP1 was exempted from following all the goals and it was hurried to be finished early.

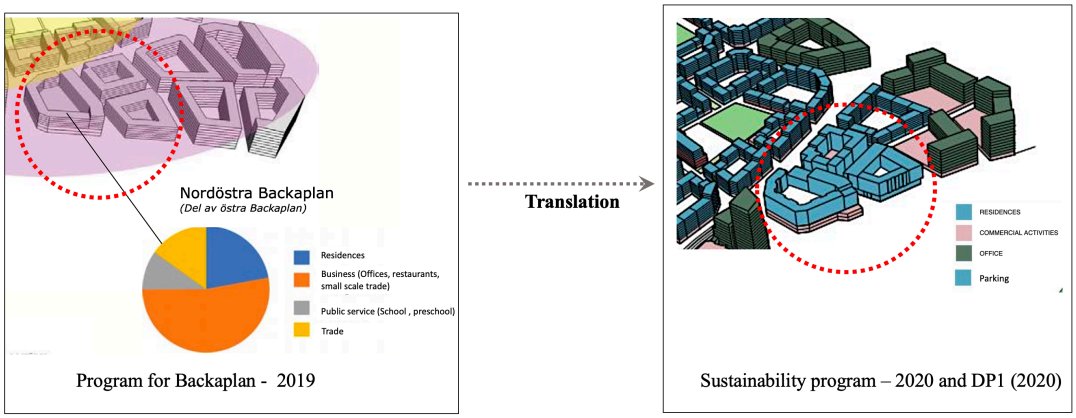



*Figure 14* ***Translation of requirement.*** *Left - Initial Master plan incorporates public services – schools. Right - Implemented detail plan excludes public services-schools*

The reason for translation in the figure 14 was due to the proximity of the detailed plan (DP1) to the busy road and as there is no possibility to have public parks which is a requirement along with schools. Hence the public services- schools as well as public parks are exempted in DP1. Therefore, schools will be part of the future detailed plans DP2 and DP3.

## 5.2 Survey results

The responses for two questions are presented below.

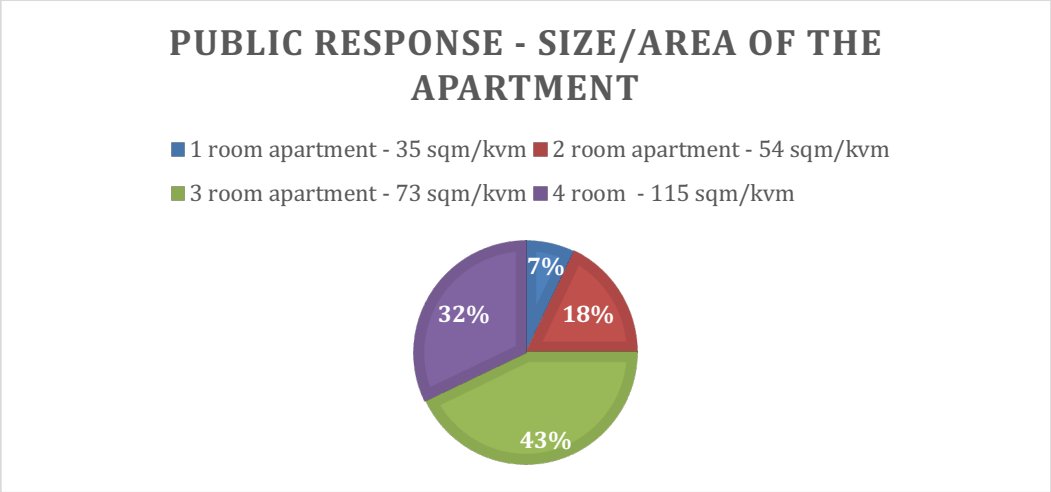



Figure 15 Survey results,Preference to size of the apartments

In the survey One of the questions asked was the people's preference regarding the size of the apartment. Figure 15 presents the response to the question "What size/area of apartment would you prefer to live in the future backaplan?". The figure visualises that 43% of people prefer three room apartment and 32% prefer for Room apartment, 18% prefer to room apartment and 7% prefer one room apartment. By comparing the above responses to table 2 in the section 4.1.1, there is a mismatch from what is planned and project to what people prefer. Detailed analysis is explained in section 6.1.

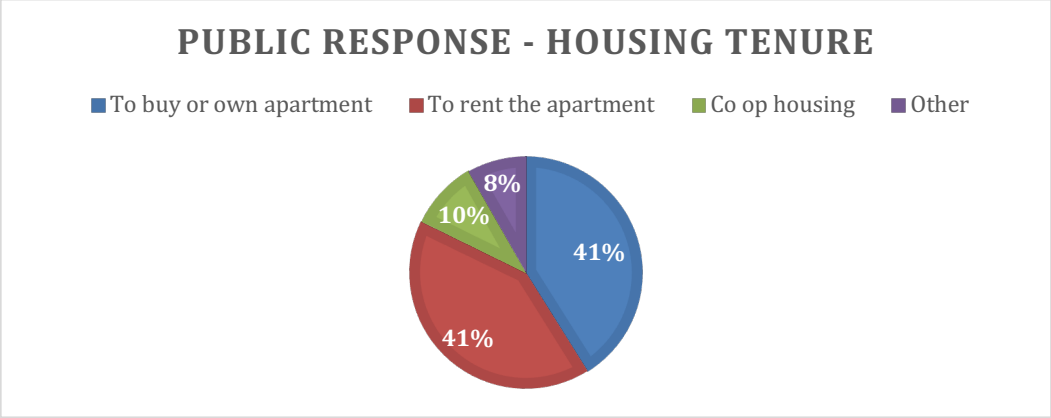



*Figure 16 Survey results, Preference to tenure of the apartment*

Figure 16 presents the result from the question "What housing tenure do you prefer in the Future Backaplan?" The figure shows that 41% of people would like to rent the apartment and 41% of people would like to buy or own the apartment 10% prefer Co-op housing and 8% refer other tenure possibilities. Through the about result it is clear that people prefer mixed tenure, but this option is not available in the FB project, DP1 as all the apartments are planned for renting purposes.

| | | |
|---|---|---|
| **Likes** | Inclusive and dynamic urban environment of mixed city, Park area, cafés/restaurants, central location | That the barrier between Backaplan and City disappears, it becomes more natural to get between and that Frihamnen becomes more accessible |
| | Green and car-free connections in the area. | Closeness to the city centre and public transport |

| | | |
|---|---|---|
| **Dislike** | Poorly planned walkways between västra backaplan and Hjalmar brantnibgsplatsen. There are no good ways to get across the creek, but you have to walk around the entire stream | A large area that will long be a construction site. Bicycle connections/proximity to other parts of the city? Hjalmar Brantingsgatan and Lundbyleden become problematic barriers. |
| | The busy trails that run along the entire Backaplan | The uncertainty as to the timetable of the speed of implementation of the project; |
| | The rumor needs to be worked on, still people think it feels like the district is "out" of town | Too many people in a concentrated area. Possible expensive prices for rent |
| | Buildings are very close to each other | The motorway right next to it. |

| | | |
|---|---|---|
| **Hope** | Larger apartments with an extra bedroom for an office. Everybody works from home or hybrid nowadays, I wish I had an extra room to turn it into an office. | More spread out population so that there is no such "quiet place" which can feel quite unsecure |
| | Want a bright apartment - risk that some apartments may get dark. Want the garage in the house I live in. | I hope that it will take some historic GBG charm into the design and not just look all brand new/modern. |
| | The idea is to have a lovely mixed community, with people from all over. Not just ghettos where others feel unsafe to visit. | |

*Figure 17 Comments from public in the digital survey*

The Figure 17 presents the comments from the public as part of the survey results. The question for this in the survey was “what do you like/dislike about the FB project? The comments are further categorised as likes, dislikes and hope for better understanding.

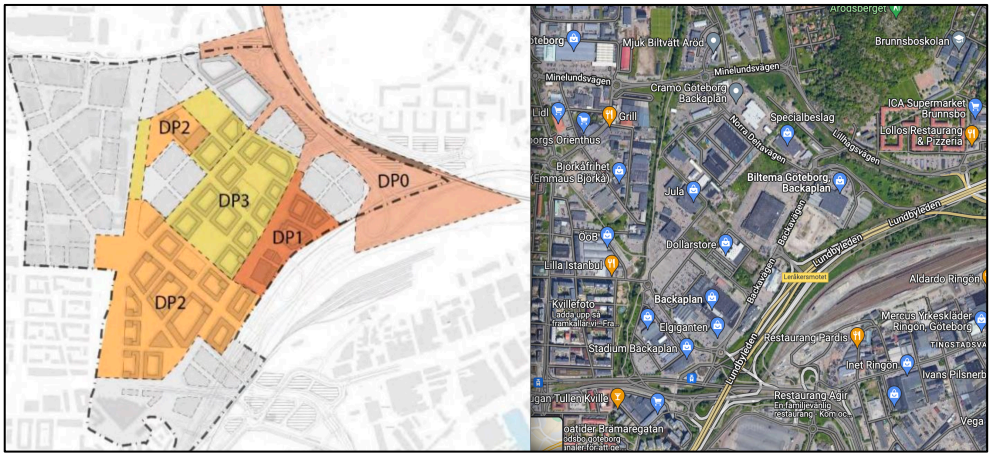



*Figure 18 - FB project phase division(left) current Google map of Backaplan (right)*

Figure 18 helps readers to orient and understand the comments of figure 17.

## 5.3 Interviews

The section presents the perspective of social sustainability by the various stakeholders and it's degree of implementation in the project. The perception depends on the economics, administration as well as location and place making.

### 5.3.1 Perception about Social sustainability implementation

When questioned about how DP1 has advanced in achieving social sustainability goals, many stakeholders have varied understandings of social sustainability. The property owner's representative, respondent G, viewed it as temporary measures to facilitate and stimulate the area before construction, and said that,

*"But perhaps with a social sustainability, we haven't been successful."*

emphasized that it isn't really taken into account in DP1 that these blocks will be standing by themselves for an extended period of time, kind of alone, excluded, and surrounded by building sites. The respondent F, further explained that the property owners believe that social sustainability in general is crucial to their own business and future, and stated that,

*"But it's not specifically described in DP1 so you (who is working on the project) have to take that information and do something in the project"*

The master plan architects understand social sustainability in terms of social consequence analysis and child impact analysis (SKA and BKA). Respondent A explained that DP1 has not been part of the plan program process and the regulation for DP1 is adopted before the program for Backaplan The reason for this is to shift the existing business on the area today to DP1. Therefore, DP1 is a hard zone, and it is not a common process and stated that,

*"Those questions regarding SKA and BKA that aren't fulfilled in this it's up to the municipalities to answer why don't we have the same goals, why don't we have the same restrictions, why don't we have the same parameters".*

To add to this the respondent K from the city council, said that there is no incentive for doing this as a socially sustainable part and declares that DP1 program was worked in parallel to the creation of program for Backaplan and was excluded as a separate regulation and stated that,

*"not everything that's in the program will be have been translated into one product"*

Respondent D, approaches social sustainability in a humanistic way and defined it as

*"Is all about open minded and openness in a sense that everybody should be welcome. In that view there is not much child friendly zones. I don't know how far you can get with those goals".*

And goes on to say that the design-build contract (total entreprenad in Swedish) is not very successful every time and the money gets in the way. The aims are frequently forgotten, and the reality that the location is for people and their subsequent living is neglected.

### 5.3.2 Expensive business as a known fact

When asked about the affordability of the apartments/the commercial spaces in the Future Backaplan, respondent G, said,

*"of course, it's much more expensive or it's more expensive to build new houses".*

It is a result of the land contamination problem; there were 80 to 90 meters of clay discovered because the area was a landfill yard, and it was expensive to remove the landfill. Additionally, the ground had to be raised so that the water would flow properly in order to align the underground pipes for the external stormwater. After understanding the consequences of the conditions and choices for the project, Respondent K, expressed concern towards the small businesses like vegetable shops that might not be able to pay higher rent as today because the economic situation won't be the same after the new development and states that,

*"So, it depends on the owners as long as they are interested in that mixture (mixed city and people with different economic status), they can give them an offer".*

Additionally, respondent K, said that given the current state of the market and the lack of incentives or subsidies for the owners to construct larger apartments, it will be even more expensive than it was previously, when subsidies were offered for the construction of as many apartments as possible. The interviewee acknowledges that this results in less of social mix in the residential block. To add to this respondent F, agreed to the situation of lack of family houses as planned in the project and states that,

*"It's very hard to make profits when you build a bigger flat because the rent per square metre is a lot lower".*

*"looking at the market today and you know cutting costs just to keep prices low to make these affordable apartments is a huge task to do specially when the world looks like it does as today"* says respondent D. Additionally Respondent A, mentions that

*"I mean we can't just continue to treat our satellites in the way we're done the past I think this is a huge question about segregation. I haven't heard any projects that refer to affordable housing here* "

Respondent K, Compared the FB project to Hammerby stad Stockholm (another project), where they believed no families could live there because it was ultimately too expensive; nonetheless, they were the ones to hunt for apartments thus they did relocate to the location and there were insufficient kindergarten schools. The town had to construct extra schools and parks nearby to balance the neighbourhood due to rising demand.

*"I think it is important with having both rental apartments and owning apartments - Mixed tenure".*

When asked about why there are no mixed housing tenures Respondent H, states that,

"*It is the same answer as we talked about public parks not being part of DP1. You cannot see this area and say this is Framtidens Backaplan. This is a small part of the bigger platform".*

### 5.3.3 Inadequate responsibility and administration

The framework of decision-making and governance is crucial in establishing these goals at the table and maintaining them across the supply chain among many actors. Regarding this, when asked how the collaboration with City Council happened over the course of ten years, it should be noted that city council are the major decision-makers, have the authority to enact any necessary reforms, and are in charge of the system. Different parties involved have different viewpoints on the administration and responsibility of the City council.

Respondent B expressed thought it was challenging to collaborate with the city. From the respondents experience the city expects the property owners to solve everything about sustainability and from the respondent's point of view that should not be the case and states that

*"it's everybody's responsibility and there should be a trust between everyone".*

The knowledge that is required for the implementation of the vision is lacking in the system (processes in the city council) this is because they follow the traditional working culture and there is a knowledge gap about sustainability. And emphasized that there is no requirement for detailed plans to describe sustainability holistically and the city does not understand what kind of issue it is if it is not described well enough and that it is difficult to follow and manage further when it comes down to construction and implementation. To this the respondent adds further stating that

*"The city is interested in sustainability but not really so flexible in their way of working and when it comes down to project leaders in the City council they don't really know how to do this and then they(the city) hold back and say* we do it as we do always *and I think that these visions are not worth"*

According to respondent A, building conventional homes was initially considered difficult due to the market economic conditions and DP1's difficult location, therefore it was decided to build homes for the elderly or students instead. The argument stated by respondent G and respondent K when the plan was later amended to eliminate the idea of having elderly homes was that they couldn't afford to hire an outside company to manage the elderly homes due to the state of the market. Respondent A declares that.

*"This is a result of the money and maybe that we have a weak municipality. if they can't stand up on their foot and speak up then the market will run it".*

And emphasized the fact that, despite changes over the past few years, Gothenburg has remained a very politically governed city, with weak internal institutions and ineffective decision-making. Respondent D adds stating that when the plan changed from elderly homes to normal apartments the politicians and municipality didn't prioritise the zoning plan and it didn't come up to the level of approval. This led to the delay in the permit. And the drawings have to be altered to fit the requirements or regulations. It was a challenging aspect with collaboration with the City Council.

Respondent G adds to this by stating that the respondent had a first-hand experience while working for the City Council several years ago and suggests that the various departments should work together to establish timelines for their interactions in order to avoid making decisions more slowly than necessary.

The city council to some extent is aware of all the above situations and when questioned about the decisions with sizes and tenure of the apartments, the city stated that they have the power to regulate when they own the land and regarding the tenure its upto the property owners to decide what fits their business and cannot be regulated by the city. Regarding the apartment sizes respondent K, stated that,

*"It will take 20 years about to build this whole area and the market will change in the future. The owners don't want to take the risk when the market changed and if they build big apartments today, but nobody wants them later."*

Also said that the city council suggested to the politicians if they could regulate at least part of the apartments could have bigger apartments to balance the mix. But this is a very controversial topic and politicians did not agree to the suggestion. The city's main tool is regulation, and without it, it is difficult to exert any control over projects.

### 5.3.4 The dynamics of location and placemaking

It is in the hands of architects to define the location with placemaking as a tool. In this project as the context of the location shifts from an industrial to a mixed-use development, but more significantly, it is the responsibility of the property owners to comprehend and add value to the new product. When asked about how this challenge was approached, Respondent C, expressed that the site itself was a challenging one to achieve all the requirements from the detailed plan and the design process was a bit on and off due to the change in the residential program and states that,

*"Previously it was continuous corridors and bigger apartments for elderly, but since the program changed and elderly homes were dropped also because of the daylight requirements we couldn't live up to the initial idea, so we had to break into smaller apartments".*

And further adds that therefore in such complex issues flexibility is one of the key things to achieve. Respondent A agreed that flexibility is vital in placemaking. The approach for the designer doesn't have to be desperate to think there is a need to come up with a structure for the future but instead the structure should hold the changing lifestyle and stated that,

*"Everything that comes in custom or if you do it too tailor made then I think there is a big risk that it's not common".*

Respondent D, mentions that there was a bit of flexibility in the zoning plan from the beginning and because of that they found a way to add economic value to the owners and states that.

*"We actually found a way to reduce the construction height of each floor so we could add another level".* (See figure 12b)

And when it comes to adding value by bringing identity to the new location the architects have tried it through the vault shape of entrances to the facades and balconies. See figure 10 for details. And the respondent mentions that the detail of the balconies had a proper solid half circle railing but now in the production line it is difficult to find the supply and due to the high cost for the customise shape, the design intent does not match the implementation, but they had to approve anyway by compromising the design. And declares that.

*"if you want to run the whole way from goal A to goal B and if Skandia wants to get prices, you can't just put it in the hands of Skanska. With that kind of framework, you have to have a more collaborating process"*

Explained further that the owners should be clear from of their requirements and if they are not firm with the intent and if they want to just know the price then it's a compromise on the design and finally, they just have to tweak with some adjustments to get more efficient product. Respondent A, mentions that there is a constant adjustment and tweaking in the design process and this affects the sustainability concept and the respondent states that,

*"First you think about sustainability goals and then you plan the number of buildings or number of floors. But this is not the case in many times they first see what is the profit that they can get from this project based on number of floors and number of apartments and then go for how it can be made sustainable* which is a wrong way of doing, *it has to be done the other way".*

On the other hand, respondent H, has worked for 4 years to create the project as a brand in collaboration with other property owners and sometime there is a need to calibrate/ tweak the goals and be honest with what is achievable and what cannot be achieved and states that.

*"You need you to consider that this project is just one part of three or five parts and then it is very great to be reminded of the bigger goals in each part but I don't think we will reach up to all of the goals in every part project. The area around in the neighbourhood does not even know that this is part of a bigger plan. And that is my job, and we are working towards it".*

Respondent H acknowledges the challenges associated with creating/ changing the mindset of people in order to accept this location positively.

# 6 Discussion

The planning process in FB project shows how social sustainability features are translated. This section will present the discussion on the three main categories comparing the results and the theoretical frame of reference. Firstly, the plan of action from ANTs translational moments *problematization* and *interessement* showcases as partial strategies, secondly the degree of execution from ANTs translational moments *enrolment* and *mobilization* results in partial implementation of goals, thirdly fragmented responsibility in the whole actor network theory of translation result as a lack of collaboration.

## 6.1 Partial strategies

The shift in the strategy over the years is evident when the primary actors (translators in problematization moment) adopted the initial definition of social sustainability that was presented in the vision documents but went ahead with shaping the idea periodically. By comparing the figure 13 and 14 along with Latour's theory of translation as stated by Zheng, (2017), the translator's negotiation and their choice of decision-making influence the translation process. This can be explained from the FB case, firstly in figure 13 when DP1 was negotiated to be treated as a separate plan program and not being obliged to follow all the goals from the vision document resulted in partial strategic goals for DP1. Secondly, in figure 14, the public services such as schools and pre-schools were excluded from the DP1 due to the actors initial decision-making regarding to have elderly apartments and residence for students rather than for families where there is no need to provide schools if there are no children in the premises. Later shifted back to building normal apartments and the property owners claim to be providing homes for families, yet there are no pre-schools in the neighbourhood. Due to this reason respondent A stated that *"those questions regarding SKA and BKA that aren't fulfilled in DP1.* Also due to the constraints of site there is no possibility of having public parks. When this situation is compared to the statement by silverman.et.al (2005) "Most mixing across social groups takes place between children. It is these contacts in nurseries, playgrounds, schools and in public spaces that provides opportunity for adults to meet and form relationships", there seems to have the lack of social capital in the DP1 premises. *Recalling the goal from, Gothenburg (2015d) document "The potential of sharing open spaces for schools and schools with parks or green spaces should be tried in all planning", is not achieved in DP1***.** This may be due to weak *interresment* as a translational moment that have been adopted by the actors in *problematization* moment of translation which resulted in partial strategic situation.

The lack of strategic decisions can be seen from the survey results shown in the figure 15 and figure 16 when comparing it the theory of social sustainability stated by Vifell & Soneryd, L. (2012), "several clashes occur especially when social dimension is to be incorporated that involves equitable distribution among various socio economic status of people". There is notable mismatch from what is planned in House 1 and house 3 of DP1 from the case study vs what is preferred by people from the survey, i.e., firstly, maximum number of (53 %) of apartments are planned as 1 room apartment but maximum number of people preferred 3 room apartments. Secondly, people prefer to own an apartment instead, but there is no possibility for owning apartments in the project DP1 as all the apartments are only for renting purpose. The reason for this can be due to the long queue system in Sweden for rented apartments, people prefer to own instead.

## 6.2 Partial implementation

The point of contention between stakeholders as stated by Rashidfarokhi et al (2018) is, “the practise of how social sustainability aspects to be operationalized or incorporated in the implementation”. This can be compared to the figures 10, 11, and 12a and 12b. The figure 10 shows the dilemma in architectural placemaking decision of whether to retain a huge block as it is or to break the mass into three blocks, both options result in a compromise/ gain on few aspects as explained in the figure. This can also be compared with the theory of translation stated by Buser et al (2021) as how the actors perform or select specific concepts from a wide range of available possibilities. This situation can also be looked from the perspective of Aka,(2019) that explains “translation as a mechanism that involves experimentation and improvisation”.

From the theoretical frame of reference, translation explained by (Hultin et al., 2020) in the figure 2, the concept of diffusion from goal A to goal B is often modified by many actors involved in the process of translation. This can be compared to the FB project in the Figure 11 that highlights the efforts from the designers(translators in the mobilization moment) to maintain the identity of the city through architecture is altered/modified by other actors(co-translators in the mobilization) in the construction phase due to economic reasons. This is in line with Czarniawska, (2008), that state “some concepts might be retained during this process, while others might need to be altered to fit the environment”. Therefore, the architectural identity was retained in the façade design but it was altered in the balcony railing design. This may be due to clash of interest in the interrelation of roles of actors during *enrollment* moment of translation. This is also reflected in the interview results in the section 5.3.4 as respondent says “if the primary actors(translators) want to control the goal implementation from point A to point B, there needs to be more collaborative process between the actors in keeping the original intent throughout the process”.

Figure 12a and 12b shows the architectural design of House 3 of FB project that highlights the translation from when the elderly apartments idea was dropped to build normal apartments. This can be compared to the results of translation by, Czarniawska and Sevón, (2011) that state “significant revisions may be made by the translators or even reject or drop the idea or model and adopt an alternative one”. In FB project the reason given by respondents for this decision in the interview reflects that, initially due to the market reasons (expensive rents for normal apartments) the idea was to have elderly homes /student apartments because having normal apartments for families was a difficult option due to the location of the project and its close proximity to the busy road. Later when the program changed and dropped the elderly apartments, the reason given by the respondents was again due to the market condition the city could not afford to have elderly homes there. With a keen observation it can be seen that, the same reason holds good for both situations. This can be compared to a theoretical statement by (Spring and Unterhitzenberger, 2020), “the important part of translation is editing whereby the idea is retold differently in each situation according to the particular context in an appropriate formulation for the intended audience”.

Due to the aforementioned factors, it is evident in figure 10 that via their experimentation with placemaking, there is partial compromise/gain and partial gain in splitting the block into three blocks. Figure 11 shows how the design of the facades somewhat reflects the architectural character “the vault shape” while the design of the balcony railings does not. Figure 12a and 12b shows that while the translation led to

increase the number of apartments by adding an additional floor, the rents are still high, which leads to only partial use of solutions.

## 6.3 Fragmented responsibilities and collaboration

In the four moments of translation as represented in figure 2, the three major actors (property owners, City Council, politicians, and the board) that form the centre stage have equal responsibilities in making the strategic decisions for the project. But that is partially adopted in the case of FB project. Through the interview results it can be seen that the Co actors within *problematization* are unhappy about their collaboration with each other. This is because the interests do not match, and the power hierarchy dominates which results in partial strategies and inadequate responsibilities and administration. Additionally due to some actor's short-term involvement within the project also leads to partial understanding of the project or it can also be due to their fear of making long term decisions. This is in line with the statement by Rashidfarokhi et al (2018), "Taking on obstacles like inflexibility, traditional top-down approach, or failing to improve public satisfaction and boost the legitimacy of the process and result, they follow the traditional working culture and there is a knowledge gap about sustainability.

Even though all the actors are aware of what is required in terms of social sustainability they often struggle to implement them. Three situations illustrate this. The first occurs when municipal council officials state that the PBL legislation prevents them from regulating the project harshly. Although they are aware of the problem in the city such as segregation, lack of affordable housing, their efforts in maintaining social sustainability by bringing in an external company to manage the social aspects also failed due to the market conditions (the elderly apartments being expensive). This situation can be compared with the theory statement by Boström (2012), "if no representatives from the social dimension are included within the project and decision making, this pillar of social sustainability will most certainly remain weak".

Second, even though the master plan architects believe that the goals can be better than those established, the power position prevails in this situation when they are limited to only plan in accordance with the goals set by the city. Another reason for fragmented collaboration might be due to lack of knowledge about sustainability, or lack of knowledge about the importance of symbolic architectural value.

Thirdly, because money always wins in the end, property owners behave in accordance with market economic realities. In each of the three circumstances, the translators' perception of the social sustainability aims is distorted. There is also clash of interest within the actors such as property owners and the City Council when it comes to providing houses with mix of sizes and with mix of tenure. This can be compared with the theory stated by Boström (2012) "on the procedural (how to achieve) and a substantive (what to achieve) dimension of social sustainability". The epistemic view on this aspect can be seen from the interview results highlighting the actor's interest in gaining economic profits, and their lack of interest in providing a mix of offers in the light of social justice.

*Recalling the goal from River city vision Gothenburg (2012a) "The project serves as a testing ground for novel activity combinations, strategies, and models with an emphasis on social inclusion", has not been achieved in DP1*

# 7 Recommendation

This section will recommend certain improving aspects in governance strategies, follow-ups, and temporary measures along with highlighting the positive and negative translations as a result of placemaking to bring in social value.

## 7.1 Improving strategies

Before establishing the goals for social sustainability, it becomes crucial to ensure that everyone understands the notion in the same way in order to address it. If the goal is equally as broad as the concept, a difficulty arises. Therefore, it is important to create firm goals so that they do not get lost in translation during the design, building, and implementation phases. The documentary readings and interview findings make it abundantly evident that there is no independent framework for social sustainability in urban planning, particularly in the city of Gothenburg. The sustainability umbrella as a whole includes social sustainability. The author of this report is aware that a single framework cannot be applied to all situations or places. However, the property owners (Skandia, u.d.) and the building contractor businesses (Skanska, u.d.) each have their own internal social sustainability frameworks that can be used to projects that are related to them (see figure 19). "The ideas for life model provide municipalities, businesses and non-profit organisations with data for planning, controlling and evaluating the operation's social initiatives", (Skandia, u.d.). Through "Design for Social Benefit" (Skanska, u.d.) model contributes to safety, cohesion and health, as well as green environments and buildings. It is the city authority's job to make sure that the visionary goals at the start of the project match to these frameworks by property owners and contractors models. The progress of the goals must be monitored periodically and make necessary positive translations in order for the goals to be implemented in a strong way.

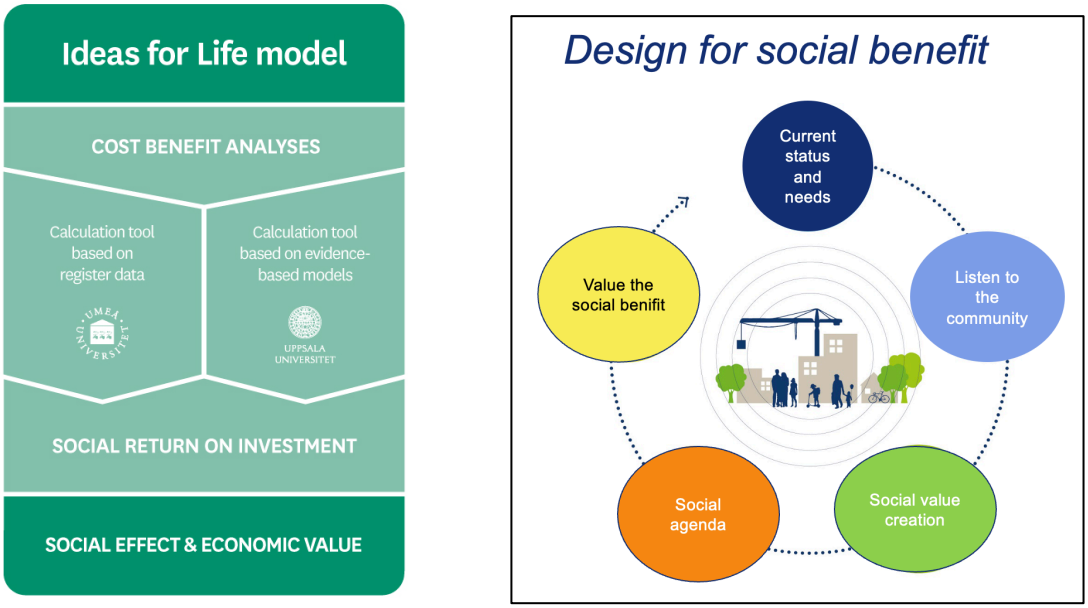



*Figure 19 (left) Skandia's model, (right) Skanska's model for social sustainability*

Additionally, looking at the framework for this report from the Figure 4, "the engaged governance" is by default a part of strategic decision-making board. But the "democratic actor's involvement" in case of FB lacks the representative from social

welfare organisation. Therefore, it is vital to involve them in setting strong strategies for social sustainability vision in the project.

## 7.2 Strengthening implementation

The overarching objective of the project was to create an extremely intricate urban design that is also children friendly. Even by itself, this objective seems to be a conflicting claim with ambiguous goals. In an ideal situation, the City Council's accountability and the property owners' follow-up will lead to the contractors' efficient completion of the project. The City Council's higher authority entails higher duties, including managing and using their power to implement required policy changes that will enable them to adopt the right decisions and strategies rather than policies or regulations that restrict their ability to do so. Therefore, since everything in the construction project is ultimately done in accordance with policies and regulations, there should be no room for the NIMBY (not in my back yard) mentality throughout the entire process.

Woodcraft et al, (2011) state that "new communities remain fragile for up to 15 years before local social networks fully develop". When it comes to the timescale for completing each phase, the program for Backaplan document states that "the first stages (DP1) are 15-20 years old when the latest stages (DP2 and DP3) are built". A person's life of 15 years is very long to be waiting for the things to happen. This is especially important to highlight that the public services- schools as well as public parks that are exempted in DP1is aspired to be part of the future detailed plans DP2 and DP3. Therefore, it is vital for property owners to take appropriate temporary measures in the event that the project's timeline is delayed or if there is a lack of social capital on the project's grounds. This is so that people may all expect the highest possible social capital, social infrastructure, and social justice when they relocate to a new neighbourhood. It is the duty of property owners to plan for temporary solutions early in the project and to be clear about the objectives that will be put into practice from the very beginning. Because this is about designing an inner city that is a part of an existing central city that will remain for more than 100 years. Therefore, placemaking also becomes a very important aspect in designing for a short-term sustainability of 15 years up until the construction ends while also keeping in mind about the long-term strategies.

It is inevitable that policies and regulations will change, lifestyles will adapt, and the economy fluctuates. Therefore, it is crucial to frequently review the goals and adjust them to meet a specific context. Goals are therefore intended to be translated, but in order to address the persistent social problems that have been a part of society, it is important to maintain the soul of the goal without ignoring the social sustainability element. In order to emphasize that translators/actors/stakeholders should work to translate goals that have positive consequences and, to the greatest extent possible, make judgments that have minimal adverse translation-related (negative consequence) effects.

# 8 Conclusion

This report aims to examine the translation process of an urban mixed-use development and more specifically in an inner-city context. The meaning of translation according to the author of this report is, modification/alteration of a project's goal over the period of 10 years by the various stakeholders involved in the project. And this report investigates, how the Gothenburg's sustainable goal aiming at a "vibrant and attractive inner city" come into reality or when a project comes to life. To answer this broad question, this research has formed three sub questions that are answered in this section.

1. How are the goal of social sustainability translated (being altered or modified) during the different phases of an urban mixed-use development process?

The decisions and negotiations made by the actor, change (translate) the project goals during the phases of construction. This translation can be understood firstly, through the experimentation as part of the placemaking process or modification in the design. Secondly the change in enrolled actors or changing the process itself; be it in policy/regulation, projects requirement, construction methods etc. Therefore, translation is relational and temporal dimension that has implication or maintenance upon shaping an idea or a goal. In the FB Project (Case study of this report), the translation of social sustainability goals has taken place through all the above mentioned translation phenomena. The actors in FB project consist of several stakeholders with varying power of authority who make an impact on the project during planning, design and construction stages.

2. What are the challenges and efforts that affect the process of translation?

The challenges encountered in the FB project were due to various actors' involvement and different goals set by them under different contexts and conditions. This was the result of a shift in market economy that raised the construction costs. For this reason, there was change in the requirements of the project which eventually changed certain actors enrolled in the project that had implications on the timeline. The other challenges were, the city's authority to regulate or prioritise the project, knowledge gap regarding social sustainability or property developer's lack of long-term goals, strategies, and temporary solutions. The effort of placemaking and value creation only increase the monetary value ignoring the social aspects resulting in partial implementation of the initial project goal regarding social sustainability.

3. What is the consequence of the translation process from *vision* to *life* and what values it contributes with regards to social sustainability goals.

This report demonstrates the translation elements through the visual depiction. The readers can understand the implications of partial strategies adopted by the actors during the different phases. The visual translation portrays that not all the decisions or alterations made in the project result in positive consequences or not all the negotiations/experimentation result in negative consequences. Hence the actors need to balance with thoughtful negotiations, improvisation or modification of the project goals that must result in positive consequences of translation. Additionally, the translation made by the actors must add value in both (monetary and social) and minimise the negative consequences of the same which takes away the value (in terms of quality) of the project.

## 8.1 Future Research

Below are few pointers for the future research within social sustainability and especially if working to improve the processes in the River City projects in Gothenburg. Investigations and the possible solutions must begin immediately if the city of Gothenburg is to have higher ambitions for these problems within Älvstaden.

- Social sustainability value evaluation and measurement
- Practical framework for the government body to follow up on the goals.
- Short term and long-term social sustainability initiatives.
- Short term and long-term temporary solutions for a project that is under construction site for several years.
- Establishing framework for the extent of modification/alteration that can take place in the construction planning process.
- Framework of timeline for the large mixed-use projects.

# 9 Appendices

## 9.1 Interview guide for Property owners

Brief presentation of your background and what your role has been in this project.

A brief presentation about the project and its goals.

### Collaboration

1. Skandia is one of the main stakeholders who can transform these goals. Apart from Skandia Who are the stakeholders from your perspective?
2. How have you introduced the project to the designers? What was the central focus as owners?
3. How are the information and knowledge shared between the actors or basically what was your way of working?
4. Have you tried to influence/buy any of the project goals that were not part of the requirements initially?
5. Have you taken any concrete steps in procurement guidelines to address the social sustainability aspect?
6. The plan description mentions the framework agreement with the municipality to carry out the community-building activities later on. Could you elaborate on this?

### Connection/integration

7. What is social sustainability according to you?
8. Did you address the social sustainability aspect (social integration, social mixing) from day one of the projects?
9. How is social mixing implemented in the project?
10. What do you say about segregation that has been the topic in Sweden regarding distribution of homes among people?
11. What is the real estate economical plan for the apartments? Rental, to buy, etc
12. What is the long-term plan? Do the prices for apartments remain the same over the years?
13. There are few elderly homes mentioned in the plan description. But it seems to be dropped out now what was the reason.
14. What was the challenging aspect with social sustainability in focus?
15. Did you find any issues that had to be addressed first or did you come up with something later?
16. 24/7 environment
17. How have you worked with SKA / BKA

### Creation

18. How do you think your project will influence to bring in social value?
19. What is your view on community-based neighborhood design what do you think is The top priority?
20. Do you have any plans for Framtidens Backaplan on how they to run the future community along with the municipality?
21. Do you have any information on DP2 and how their collaboration with DP1 would be?

## 9.2 Interview guide for architects

A brief presentation about the project and its design.

- Project goals, project block configuration, design style, users, time frame etc

### Collaboration

1. Who are the major stakeholders involved in the project?
2. How has the project been introduced to you by your clients? What was the central focus(Goals)?
3. Have you tried to influence any of the project goals that was not part of the requirements by owners but do you think was important for the project? If yes what was that.
4. How has your collaboration been with the major stakeholders in the project?
5. Did you work with NCC, when were you involved in the project?

### Connection/integration

6. What is social sustainability according to you?
7. Did you address the social sustainability aspect from day one of the project design?
8. How has the progress been in the design in terms of placemaking? what was the initial concept and how has it shaped now?
9. What social spaces in the project that you think will impact the social behavior of people?
10. What are the planned activities for the central landscape?
11. What is the planning in between hus 1 and hus 3?
12. Was there a plan to have elderly homes or retirement homes in house 3?
13. In the plan description it mentions about a farm space as interactive space where is it in the plan?
14. Is there a shared terrace for community space above?
15. Is there a plan to have any office spaces in this block?
16. What was the challenging aspect of designing a project with social sustainability in focus?
17. Did you find any issues that had to be addressed first or did you come up with something later?
18. How have you addressed social interaction in winter and cold months??
19. What was the inspiration for the curved balconies and corridors?
20. Do you have any knowledge about the economies or rents?
21. How did you work with SKA and BKA

### Creation

22. How do you think your design will influence to bring in social value?
23. What is your view on community based neighbourhood design what do you think is the top priority?
24. Do you have any suggestions for municipality or the owners of Backaplan how they can run the future community?
25. Do you have anything that you would like to add that I have not covered and that you think is important information regarding the issue or topic?

## 9.3 Survey Questionnaire

44 responses

View in Sheets

Accepting responses

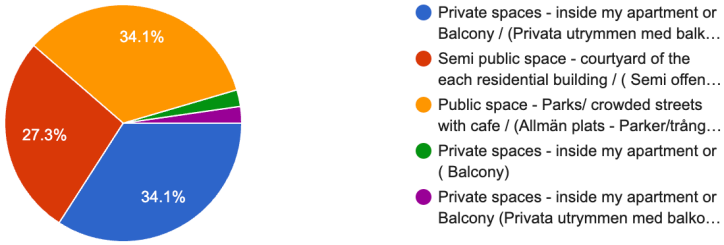
Summary Question Individual

1. The Future Backaplan will be a compact and dense area. Which spaces below would you prefer to spend time?

*Framtidens Backaplan blir ett kompakt och tätt område. Vilka utrymmen nedan föredrar du att spendera tid?*

44 responses

Copy




2. Do you feel comfortable using the central landscape(semi public space) of each block to hangout? This place is a social space to sit/play area for kids, where every apartment overlooks down)

*Känner du dig bekväm med att använda det centrala landskapet (halvoffentligt utrymme) i varje kvarter för att umgås? Denna plats är ett socialt utrymme att sitta / lekplats för barn, där varje lägenhet har utsikt över ner)*

44 responses

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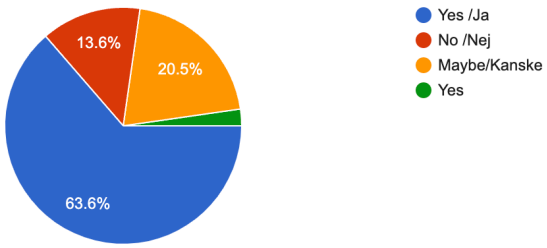

3. What size/area of apartment would you prefer to live in the future backaplan?

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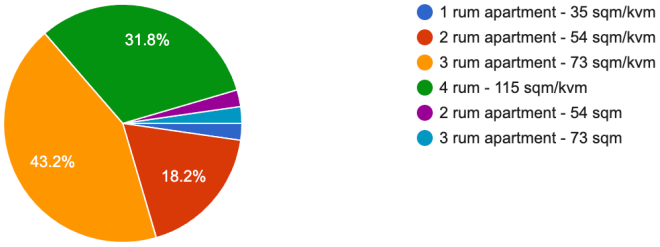
*Vilket område/storlek på lägenhet skulle du föredra att bo i framtidens backaplan?*

44 responses

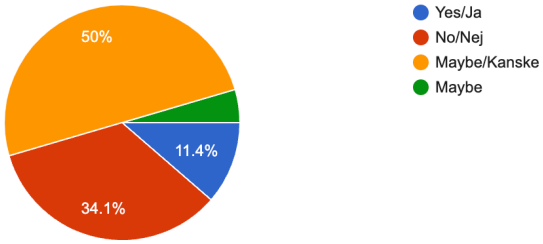



4. Because of the development and urban planning, the rents for the apartments are going to be expensive. Would you pay more to live in the Future Backaplan?

Copy

*På grund av utvecklingen och stadsplaneringen kommer hyrorna för lägenheterna att bli dyra. Skulle du betala mer för att bo i framtidens Backaplan?*

44 responses




5. What housing tenure do you prefer in the Future Backaplan

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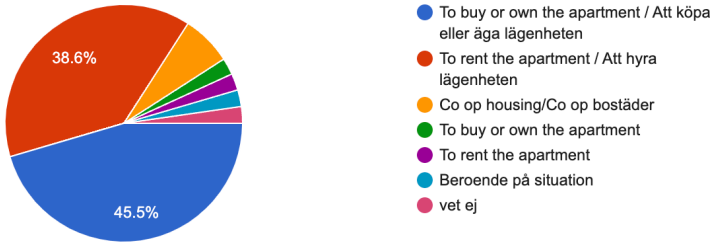
*Vilken bostadsrätt föredrar du i framtidens Backaplan?*

44 responses



6. Framtidens Backaplan is for everyone irrespective of ethnicity, gender, age. Do you feel comfortable to live in a mixed populated city?

*Framtidens Backaplan är till för alla oavsett etnicitet, kön, ålder. Känner du dig bekväm att bo i en blandad befolkad stad?*

44 responses

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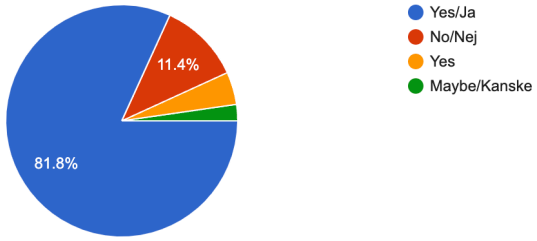


7. In 15 years the traffic situation(trams or buses) and crowd in future Backaplan will be similar to today's Gothenburg city central. Do you feel safe to commute or live in the busy city? Do you feel safe to let your children grow up in the fast paced and high volume city?

*Om 15 år kommer trafiksituationen(spårvagnar eller bussar) och trängseln i framtiden Backaplan att likna dagens Göteborgs centralen. Känner du dig trygg att pendla eller bo i den livliga staden? Känner du dig trygg med att låta dina barn växa upp i den fartfyllda staden med hög volym?*

44 responses

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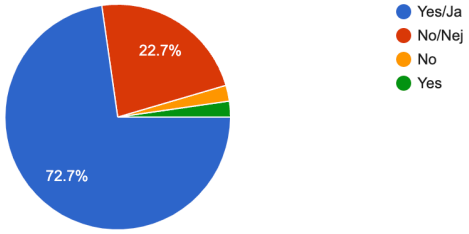


8. Pedestrians and cyclists are given importance to reduce car traffic in the Future Backaplan. How do you prefer to commute to work/ school?

*Fotgängare och cyklister får betydelse för att minska biltrafiken i Framtidens Backaplan. Hur föredrar du att pendla till jobbet/skolan?*

44 responses

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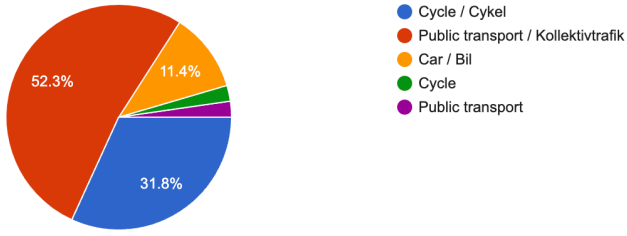

9. What do you like the best about Future Backaplan?

*Vad gillar du bäst med Framtidens Backaplan?*

31 responses

Parks and schools

Good to see a under-utilised and prime area put to good use

Good to see an under-utilised and prime area put to good use

I hope it becomes cleaner and safer

Larger apartments with an extra bedroom for an office. Everybody works from home or hybrid nowadays, I wish I had an extra room to turn it into an office.

Att det blir ett helt nytt expansivt område och att det kommer bli en stor förändring.

Att Backaplan kommer bli en dynamisk och bland stad

Blandstad

Det centrala läget och de stora planerade parkerna

10. What do you dislike about Future Backaplan?

*Vad ogillar du med Future Backaplan?*

27 responses

Buildings are very close to each other

The idea is to have a lovely mixed community, with people from all over. Not just ghettos where others feel unsafe to visit.

Being crowded

Nothing

Inget vad jag kommer på just nu, ser allt som ett stort plus bara.

Ryktet behövs jobbas på, fortfarande tycker folk att det känns som att stadsdelen är ”utanför” stan

Avsaknad av utsikt öppet vatten

The motorway right next to it.

Too many people in a concentrated area. Possible expensive prices for rent

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