social sustainability in urban renewal

A case study of Melbourne Docklands and Hammarby Sjöstad
Swedish University of Agricultural Sciences
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Examiner: Per G. Berg, Department of Urban and Rural Development
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“A socially sustainable city is marked by vitality, solidarity and a common sense of place among its residents. Such a city is characterized by a lack of overt or violent intergroup conflict, conspicuous spatial segregation, or chronic political instability. In short, urban social sustainability is about the long-term survival of a viable urban social unit.”

To all that I want to thank.

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Sammanfattning


Syfte

Uppsatsens syfte att undersöka det komplicerade begreppet stadsförnyelse med fokus på social hållbarhet. Vidare är det uppsatsens syfte att fastställa viktiga faktorer att överväga när man arbetar med stadsförnyelseprojekt för att kunna skapa ett socialt hållbar samhälle.

Den huvudsakliga forskningsfrågan för uppsatsen är:

Vilka faktorer behöver man överväga när man arbetar med stadsförnyelseprojekt för att kunna skapa en social hållbar stadsdel?

För att hjälpa att besvara dessa frågor har följande sekundära forskningsfrågor ställts:

Hur kan social hållbarhet defineras och användas i analysen av stadsförnyelseprojekt?

Hur har de studerade stadsförnyelseprojekten inkluderat samt uppnått social hållbarhet?

Avgränsningar

Uppsatsen koncentreras sig på den sociala dimensionen av hållbarhet där de omfattande sociala problemen i stadsförnyelseprojekt gör det intressant att studera just denna del av hållbarhet. Vidare är även uppsatsen avgränsad till en huvudsaklig studie av två stadsplaneringsprojekt: Melbourne Docklands och Hammarby Sjöstad. Den huvudsakliga fallstudienmetoden har varit har varit lika för de bågge projekten och består främst av djupgående litteraturstudier och kartstudier. Som ett kompliment till dessa studier har platsbesök och samtal har förts med människor i Melbourne Docklands och en social planerare intervjuats i Hammarby Sjöstad.

Målgrupp

Uppsatsen riktar sig till de som har ett intresse i stadsförnyelse och särskilt de som kan tänkas sig jobba med liknande projekt i framtiden, främst landskapsarkitekter och stadsplanerare. Uppsatsen kan också vara intressant för de som jobbar med de aktuella projekten.

Metod

Den här uppsatsen är uppdelad i två delar: en teoretisk bakgrund och två fallstudier. Den teoretiska bakgrunden har varit avgörande för förståelsen av social hållbarhet i stadsförnyelse. Detta har varit en oumbärlig del i denna uppsats, eftersom det ger en förståelse för
vad social hållbarhet är och vilka de bidragande faktorerna är till social hållbarhet. Detta i sin tur är det som var grunden till det ramverk som togs fram under den teoretiska bakgrunden och som användes för att studera sociala hållbarhet i Melbourne Docklands och Hammarby Sjöstad. Den teoretiska bakgrunden bestod främst av litteraturstudier men tre korta referensprojekt studerades även för att få utökad förståelse för social hållbarhet i stadsförnyelseprojekt.

För att studera den sociala hållbarheten fallstudierna användes ramverket från den teoretiska bakgrunden. Metoderna som användes i fallstudierna var främst litteraturstudier, och platsbesök, observationer och dialoger samt intervjuer var ett komplement till litteraturstudien.

**Theoretical background**
Social sustainability in urban renewal

**Framework**
To determine social sustainability

**Case Study**
Melbourne Docklands

**Case Study**
Hammarby Sjöstad

**Key points**
To consider in URD

**Guideline**
Creating social sustainability in urban renewal developments

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Figur 1. En illustration som beskriver arbetssprocessen i den här uppsatsen och var forskningsfrågorna besvarats.
En definition av vad social hållbarhet presenteras och åskådliggörs i ett ramverk som kan användas för att bestämma den sociala hållbarheten i stadsförnyelseprojekt. Ramverket består av dessa fyra grupper av med liknade bidragande faktorer till social hållbarhet: sociala tjänster & tillgänglighet, social blandning & social integration, övergripande form & funktion samt sociala nätverk & stabilitet.

Melbourne Docklands: en fallstudie

Hammarby Sjöstad: en fallstudie

Resultat

Det är dock min slutsats att varken
Melbourne Docklands eller Hammarby Sjöstad kan kallas socialt hållbara stadsdelar och även om man kan hävda att Hammarby Sjöstad är det bättre exemplet av de två, då området t.ex. har mer allmänna gröna ytor och har en lägre brottstasstatistik, är området fortfarande inte socialt inkluderande. Faktum är att det är sociala exkluderingen som är den största bristen i stadsdelarna och att resultatet av detta - den knappa sociala blandningen, det mest beklagliga med båda områdena.

I denna uppsats har 27 olika punkter fastställts som bör beaktas i stadsförnyelseprojekt när man vill skapa ett socialt hållbart samhälle. Av alla punkter att beakta är det en punkt av dem som framstår mer än de övriga då den fastställts i båda fallstudierena: Levnadskostnaden i ett område är den mest avgörande faktorn när man vill skapa en social blandning i en stadsdel då dyrt boende mer än något annat exkluderar de marginaliserade i samhället.


**Reflektion och diskussion**

I slutet av uppsatsen reflekteras social hållbarhet i stadsförnyelseprojekt och för vem staden är byggd. Trots att städer är i en ständig förändring kan man hävda att de ändå alltid byggs åt dess invånare – men huruvida detta inkluderar alla i staden eller bara eliten är inte särskilt säkert. Den rumsliga segregeringen av de marginaliserade i samhället är enligt mig en av de viktigaste frågorna i stadsplanering idag och något jag anser bör adresseras mer i stadsförnyelseprojekt. Man kan dock hävda att de sociala problemen i en stad inte endast kan lösas med stadsplanering, utan att grundproblematiken i hur de sociala problemen uppstår i staden först måste lösas. Förslag till nya uppsatser inkluderar en studie av de andra dimensionerna av hållbarhet i relation med stadsplanering samt en fördjupad studie av rumslig segregering och socioekonomiska skillnader i staden.

**Figur 2.** Ett antal foton som ger en uppfattning av uppsatsens innehåll. Referenserna till dessa foton finns under figurer i referenser, där dessa foton finns representerade under det figurnamn de senare har i uppsatsen, från vänster: figur 3, 8, 9, 10, 17, 21, 23, 36, 42, 46, 56 & 57.
Cities are forever transforming, never standing still; they are organisms in a constant evolution. With urbanization and globalization cities have gained importance and developed a need to compete with each other; one can say that today we live in a shrinking world where the cities nevertheless keep growing with an increasing population. With urban renewal, cities can both respond to the growing need for building more housing and provide an opportunity to stand out among other cities, why this is an approach many cities use to develop themselves. However, experiences from urban renewal projects have shown that there are many challenges associated with urban renewal, especially social challenges such as socioeconomic differences and segregation. Social challenges such as these constitute the foundation of the concept of social sustainability - the social dimension of sustainability. Therefore there is a need for landscape architects and urban planners to gain more knowledge about urban renewal developments and how to ensure that they become socially sustainable.

In this thesis the complex concepts of urban renewal and social sustainability are studied and defined. A framework to be able to study the social sustainability of a city district has also been established in this thesis. This framework is based upon four groups of contribution factors to social sustainability; social services & accessibility, social mix & social inclusion, overall form & function and social networks & stability. The framework is used to study the social sustainability of two important and current cases of urban renewal developments; Melbourne Docklands in Melbourne, Australia and Hammarby Sjöstad in Stockholm, Sweden. From these two case studies twenty-seven different key points have been established that together form a guideline as to what to consider in urban renewal developments when wanting to create a socially sustainable neighborhood.

The thesis ends with a reflection and discussion about social sustainability in urban renewal developments as well as provides ideas to new master thesis to other landscape architect students.
Definitions of terminology

Brownfield: In urban planning a piece of industrial or commercial property that is abandoned or underused and often environmentally contaminated, especially one considered as a potential site for redevelopment (Wordnik 2014a).

City district: A more or less uniformly bounded sub-area of the city, characterized i.a. by its location, architectural style, its inhabitants, that can have some administrative meaning (Nationalencyklopedin (NE) 2014c).

Community: A group of interdependent persons inhabiting the same region and interacting, sharing and participating with each other. A fellowship (Wordnik 2014b).

Demography: Population theory, a science devoted to the study of population size, composition and geographical distribution (Hoem 2014).

Docklands: “The area containing a city’s docks” (Oxford Dictionaries 2014a).

Ecological footprint: “The total amount of land required to supply all the resources a person’s lifestyle demands” (Australian Conservation Foundation (ACF) 2014a).

Globalization: A process of change whereby states and communities across the world are linked together in interdependencies (Gustavsson 2014).

Green space: “An area of grass, trees, or other vegetation set apart for recreational or aesthetic purposes in an otherwise urban environment.” (Oxford Dictionaries 2014b).

Human scale: With the definition of the human scale the author is referring to this quote: “Human scale refers to a size, texture, and articulation of physical elements that match the size and proportions of humans and, equally important, correspond to the speed at which humans walk. Building details, pavement texture, street trees, and street furniture are all physical elements contributing to human scale.” p. 77 - Reid Ewing & Susan Handy (2009). It is the author’s view that the consideration of the human scale when creating a city district provides the area a better chance to be apprehended as an enjoyable and liveable area, why this is something to strive to achieve in urban renewal developments.

Liveable: An environment that is worth living in or easy and bearable to live in (Oxford Dictionaries 2014c).

Marginalize: “Treat a person or group of people as insignificant or peripheral” (Oxford Dictionaries 2014d).

Neighborhood: An area within a city or town that has some distinctive features, with distinctive characteristics, especially one forming a community (Wordnik 2014c).

PEBOSCA: An analytic framework focusing on understanding and analyzing sustainability in city planning based on the sustainability dimensions called resources and are defined as the physical-, economical-, biological-, organizational-, social-, cultural- and aesthetical resources (Berg 2009).

Segregation: The spatial separation of populations and may be based on socioeconomic status, color, religion, ethnicity etc. Segregation can be both involuntarily and voluntarily (Levander 2014).

Socioeconomic differences: Relating to the different situation of groups of the society in the interaction of social and economic factors (Oxford Dictionaries 2014e).

Social exclusion: Defines poverty not just as in a lack of material resources but also as a lack of social participation and belonging (Knox & Pinch 2010).

Sustainable: The development that ensures that it meets the needs of the present without compromising the ability of future generations to meet their own needs (UN 1987).


Urban public open inner spaces: All areas outdoors that are open and accessible to all members of the public in a society regardless your background, economic status or gender. This does not include places where you have to buy something to be allowed to be there (Orum & Neal 2010).

Urban public open inner spaces: All areas indoor that are open and accessible to all members of the public in a society regardless your background, economic status or gender. This does not include places where you have to buy something to be allowed to be there (Orum & Neal 2010).

Urban renewal: A term that includes a broad range of different philosophies, strategies and processes in how existing urban areas are to be reorganized. It is a complex activity organized by public authorities and is concerned with the physical components of the project but also with the social aspects, economical aspects and political aspects (Nelissen 1982).

Urban sprawl: A rapid and unbalanced growth of the city in its suburban areas (Ambarwati, Verhaege, Pel & van Arem 2014).

Walkable: An environment that is easy to walk within, that are fit for walking (Wordnik 2014d).

Waterfront: The area of a city, such as a harbor or dockyard, alongside a body of water (Tyda 2014).

Well being: According to DEFRA (2007) in Konijnendijk et al (2013, p.3.), well being is defined as a “positive, social and mental state; it is not just the absence of pain, discomfort and incapacity. It requires that basic needs are met, that individuals have a sense of purpose, that they feel able to achieve important personal goals and participate in society. It is enhanced by conditions that include supportive personal relationships, strong and inclusive communities, good health, financial and personal security, rewarding employment, and a healthy and attractive environment.”
Abbreviations

ACF: Australian Conservation Foundation.
CBD: Central business district.
CCTV: Close circuit TV.
e.g.: Abbreviation for the Latin phrase exempli gratia meaning for example.
et. al.: Abbreviation for the Latin phrase et alii meaning and others.
etc.: Abbreviation for the Latin phrase et cetera meaning and so forth.
EU: European Union.
HS: Hammarby Sjöstad
i.a.: Abbreviation for the Latin phrase inter alia meaning among other things.
i.e.: Abbreviation for the Latin phrase id est meaning that is or in other words.
LDDC: London Docklands Development Corporation
IMF: International Monetary Fund
MD: Melbourne Docklands
NE: Nationalencyklopedin
ODPM: Office of the Deputy Prime Minister (of the United Kingdom)
p.: Page
PPP: Public and Private Partnership.
SCMP: South China Morning Post
U.K.: The United Kingdom.
U.N.: The United nations.
URD: Urban renewal development.
U.S.A.: United States of America
VEAC: Victorian Environmental Assessment Council.
vs.: Versus
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the renewal of the city.

In this chapter the concept of urban renewal is presented and defined. The concept is explained in a practical sense and both the objectives as well as the issues with urban renewal are presented. Furthermore is the relationship of social sustainability and urban renewal discussed. These topics make up the background to the thesis and the research problems, objective and research questions. Moreover are the delimitations of the thesis presented as well as its target group. This chapter ends with the dispositions of the thesis where every part of the thesis is explained briefly.
Cities are forever transforming, never standing still; they are organisms in a constant evolution. In that sense the redevelopment of cities is not a novelty, rather a natural phenomenon that continually occur and will keep occurring (Farid 2011). Today cities are faced with two main issues: globalization and urbanization (Colantonio & Dixon 2011). Two issues that can be described as such: we live in a shrinking world where the cities nevertheless keep growing with an increasing population.

With a shrinking world the competition between cities are growing and how the cities respond to the fact that more and more people will move to the urban areas is a way to help define them as cities (Jansson & Power 2006; Global Health Observatory 2014). In this context urban renewal projects play a significant role, not only can they answer to an increasing demand of new residential areas, if done well they can become the forefront of the city demonstrating its success and innovation.

Urban renewal vs. urban sprawl
Due to urbanization and the increase in population in urban areas cities today need to grow to give room for the incoming people. Since the 20th century urban sprawl has been the answer and being characteristic by rapid and unbalanced growth of the city in its suburban areas (Ambarwati et. al. 2014). One of the arguments against urban sprawl is that with a more compact, high density-city, journeys would be shorter and public transport could be more viable. With a more extensive use of public transport the use of car would be reduced as well as the emission and pollution that car use result in. Furthermore one could argue that with more compact cities less land use is necessary and therefore good agricultural land could be spared as well as other sensitive environments that otherwise would have been developed (Forster 2004).

If cities are not to sprawl any further they need to become denser and therefore areas within the city need to be renewed into becoming residential areas for the increasing population. Due to economical changes, areas once used for industry has now become obsolete in many cities. However, to renew such an area from scratch is a process with high complexity. The nature of the interrelationship between macro and micro scale, the economical and cultural aspects, of space, capital and power are all issues fraught by dilemmas and conflicts that makes urban renewal a truly complex matter (Gotham, 2001). The increasingly fragmented city where different social groups live further and further apart and socioeconomic differences are substantial in different areas within the city also needs to be taken under consideration when redeveloping urban areas (Bodnár 2001).

The definition of urban renewal
When discussing the transformation of the city several different terms can be used such as: urban redevelopment: the demolition of a previous structure/use to give room to a new one, urban rehabilitation: to improve the urban fabric, urban reconstruction: the demolition of residences in order to build new ones and urban revitalization: with different methods bring back the life to e.g. a city center (Nelissen 1982; Lopes Balsas 2000). What all of these terms have in common is that they all can be grouped under the wider definition of urban renewal or as it also can be called urban regeneration (Nelissen 1982).

The term urban renewal includes a broad range of different philosophies, strategies and processes in how existing urban areas are to be reorganized. This can for example mean the modernization of central business districts and the improvement of the urban fabric and can range from individual buildings to entire neighborhoods. Urban renewal is a complex activity organized by public authorities and is concerned with the physical components of the project but also with the social aspects, economical aspects and political aspects (Nelissen 1982).

Urban renewal in a practical sense
Since urban renewal projects can range from
“Cities are places of passion, hopes and dreams. However, they are entering an epoch of protracted crisis. All urban settlements face a practical crisis of sustainability, just as human beings face a comprehensive crisis of social life on this planet.”


Moreover, in the last century and still today, the effort to ensure the maximum beneficial use of the land already in urban areas has been increasingly prioritized in urban policies globally (Roberts & Sykes 2000). Hence the pressure on cities to improve those areas that are not quite up to the preferable standard keeps growing, making the need of urban renewal projects dire.

Urban renewal is however fraught by dilemmas and conflicts such as how to simultaneously work with a macro and a micro scale and to balance the different aspects of the projects such as the cultural-, economical- and physical aspect (Gotham 2001). According to Colantonio and Dixon (2011) the greatest challenge with urban renewal is the failure to prevent the socioeconomic gap from increasing. The poorer part of the residents are most often unfavorable when an area is renewed or redeveloped – dispersed from their home and not welcomed or unable to return due to the increased costs (Zhang & Fang 2004; Helleman & Wassenberg 2004; Florio & Brownwill 2000; Mayer 2014). Another issue that occur in urban renewal is the lack of sociability as a result to an uneven demography i.e. an high percentage of certain age groups and a low percentage of other age groups (Butler 2007).

Hence one could say that the social challenges of urban renewal developments is a critical factor for their success.

Social sustainability and urban renewal

In urban renewal project the phrase economical-, environmental- and social sustainability is often used (James 2015; Colantonio and Dixon 2011; KPMG & Clayton Utz 2014; Knox & Pinch 2010; Dempsey et. al. 2011) However, James (2015) questions this phrase and how its suggest that economic sustainability should be treated as the master domain, the environmental sustainability as an externality and the social sustainability “as [a] grab bag of extra things that are left over after the economic and environmental are designated and demarcated” (p. 46). Dempsey et. al. 2011 states that “surprisingly little attention has been given to the definition of social sustainability in built environment disciplines”. (p. 289).

James (2015) argues that social sustainability should not be treated as a category among others and not like something that can be sacrificed in the pursuit of some element of economic- or environmental sustainability. Moreover James argues that the social challenges and social sustainability affect all of the other dimensions of sustainability and that to be able to create sustainable cities social life always need to be considered first. The importance of social sustainability in the renewal of the city is also stressed by Cederquist (2014) who states that: “[social sustainability] is terribly important, it’s what people value when it comes to living in the area.” and by Colantonio and Dixon (2011) who states that “[in urban development] the concept of social sustainability has become vitally important to consider.”(p. 9).

Hence one can argue that there is a need to further study and consider the social dimension of sustainability, or social sustainability, in urban renewal developments.

Research problems

Cities are forever changing. With urban renewal developments cities can both answer to the increasing need to create new residential areas as well as to make them stand out among the other cities in the world. However, urban renewal is hard to implement in a satisfactorily manner and is fraught by dilemmas and conflicts, many of which are social challenges (Zhang & Fang 2004; Helleman & Wassenberg 2004; Florio & Brownwill 2000; Mayer 2014; Colantonio & Dixon 2011; Dempsey et. al. 2011). In fact, one can state that the
social challenges of urban renewal developments is a critical factor for their success. The importance of social sustainability in urban renewal today is stressed by many (James (ed.) 2015; Colantonio & Dixon 2011; Cederquist 2014; Knox & Pinch 2010; Berg 2009; Dempsey et. al. 2011) and there are those who argue that the social dimension of sustainability need to receive more recognition in urban renewal developments and in city planning in general (James (ed.) 2015; Colantonio & Dixon 2011; Cederquist 2014; Knox & Pinch 2010). Hence, there is a need for practitioners to get a better understanding for social sustainability in urban planning and what factors need to be considered when wanting to create a socially sustainable urban renewal development.

**Objective**

It is this thesis objective to investigate the complex matter of urban renewal with a focus upon social sustainability. Moreover, it is this thesis objective to determine important factors to consider when working with urban renewal projects in order to be able to create a socially sustainable neighborhood.

The main research question for this thesis is:

**What factors need to be considered when working with urban renewal developments to be able to create a socially sustainable neighborhood?**

To help answer this the following secondary research questions are:

**How can socially sustainability be understood and used in the analysis of urban renewal developments?**

**How have the studied urban renewal developments included and achieved social sustainability goals?**

**Delimitations**

In order to make this thesis manageable within the timeframe of the course several delimitations have been made. The first delimitation was to limit the thesis to focus only on the social aspect of sustainability. This since many stresses the importance to consider social sustainability in urban renewal today (James (ed.) 2015; Colantonio & Dixon 2011; Cederquist 2014; Knox & Pinch 2010; Berg 2009; Dempsey et. al. 2011) and how Colantonio and Dixon (2011) argues that the social issues are the most important challenge with urban renewal today.

Another delimitation has been made when choosing to limit the case study to two urban renewal projects, Docklands in Melbourne, Australia and Hammarby Sjöstad (Hammarby Lake City) in Stockholm, Sweden.

To widen the understanding of the projects both site visits and dialogues with the people living in the area as well as interviews with the planners of the project are important. However due to the practical difficulties to visit two sites located on two different sides of the world the delimitation have been made to only do site visits and meet with the people in one of the projects and to interview with a planner of the other project. Therefore these parts of the case studies should be considered only as compliments to the main literature study and a way to give a further understanding of the projects and not to be considered only on their own.

**Target group**

This thesis turns to all those who have an interest in urban renewal projects and especially to those who might work with similar projects in the future, primarily landscape architects, landscape planners and urban planners. The thesis may also be interesting for those involved working with the two case studies.

**Disposition of the thesis**

This thesis consists of seven chapters: the introduction, the methodology, the theoretical background, the case study of Melbourne Docklands, the case study of Hammarby Sjöstad, the results presented as a guideline and the discussion and reflection of the thesis.

**Introduction**

In the introduction chapter the background to the thesis is presented including the term urban renewal development, its objective and issues and relationship to social sustainability. In the chapter the research problems are presented as well as the objective of the thesis, its research questions and delimitations. The chapter finishes with explaining the disposition of the thesis.

**Methodology**

In the methodology chapter the work process and methods used in this thesis are presented and attested. The case study method is explained more in detail as well as the choice of projects to study. In the methodology chapter the literature studies, site visits, dialogues and interviews, and the manner of how they have been preformed, are presented.

**Theoretical background**

In the theoretical background chapter the concept of urban renewal is further investigated, its changes over time and its relationship to social sustainability. In the chapter three different urban renewal projects are investigated and discussed with a special focus on the social issues. Furthermore is social sustainability discussed and presented as well as what the contributing factors are to social sustainability. A definition of socially sustainability is stated and concretized into a framework that can be used to determine the social sustainability of a neighborhood.

**The case studies**

Both of the case studies start with presenting the contextual background of the project and why it was started – what the goals with the project were. The events leading up to the beginning of the project is conveyed as well as its different phases. The social sustainability of the project is then studied using the framework from the theoretical background chapter.

**Results**

In this chapter the results from case studies are presented and summarized into a guideline of what to have in mind when working with an urban renewal development in order to be able to create a socially sustainable society.

**Reflections**

The thesis ends with a discussion and reflection of the results of the thesis and its theme as well as the two urban renewal developments. New questions developed during the thesis are asked and ideas to new master thesis are presented.
the methodology

a work process.

In the methodology chapter the work process and methods used in this thesis are presented. The methodology chapter is divided into two main parts: the theoretical background and the case studies where the different methods used in these two main parts of the thesis are presented. In the chapter the literature studies, site visits, dialogues and interviews, and the manner of how they have been performed, are presented. Furthermore is the case study method explained more in detail as well as the choice of projects to study. Moreover, is the methodology discussed and the greatest challenges and issues with the thesis identified.
The work process
The work process of this thesis has been a continuous gathering of information where the line of work have not been straight, rather it has been a back and forth process. The research questions, objective and structure of the thesis have been rectified several times to produce a coherent thesis with a clear structure and line of thought throughout the entire project. It has been the writer’s ambition to create a relevant and interesting thesis that can inspire and guide its readers.

This thesis is built upon two main parts: the theoretical background and the case studies of Melbourne Docklands and Hammarby Sjöstad. Since the methodology has been different in these two parts has also this chapter been divided into two main parts: one describing the theoretical background and one describing the case studies. Although divided in this chapter, in the purpose of making the methodology more easily to understand, these two parts of the thesis are still interconnected with each other. Hence one can say that each part of this thesis is dependent on the previous part and the previously established results and that the final results are the results of a long work process that should be studied as a whole.

Theoretical background
The theoretical background has been essential for the understanding social sustainability in urban renewal developments. This have been an indispensable part in this thesis since it offers an understanding of what social sustainability is and what the contributing factors are to social sustainability. This in turn is what was the foundation to the framework established in the theoretical background that was used to study the social sustainability of Melbourne Docklands and Hammarby Sjöstad.

Literature review
The main method used in the theoretical background has been literature reviews of mainly books, dissertations, thesis and publications online. The method used when doing the literature review has been the so-called “snowball method”. The information that is gathered can be compared to a snowball in motion – information grows from several different sources that might refer to other sources and so on during the entire process of the thesis (Wibeck 2000). The first searches of this thesis was made to get a general understanding to what urban renewal projects can be and from this the “snowball” was pushed in motion.

Key words when searching for literature in the theoretical background have been i.a.: ‘urban renewal’, ‘urban redevelopment’, ‘urban regeneration’ and ‘social sustainability’.

Reference projects
To get a more comprehensive understanding of social sustainability in urban renewal three brief reference projects were studied in the theoretical background.

The prerequisite for choosing the project were that they needed to be urban areas that previously had been reorganized in some way e.g. renewed, revitalized or regenerated. They also needed to be of a different character from each other so that the complexity and diversity of urban renewal projects could be understood. Moreover I wanted them to be significant projects in landscape architecture; significant enough for having being presented to
me and my fellow landscape architect students during our years of studying. Considering this, three projects that were chosen; the reconstruction of Blijmermeer – a high-rise residential area built in the 1960s, the redevelopment of London Docklands and the revitalization of the Cheonggyecheon river.

The structure of the reference projects was first a general description to give insight in the projects and to get some understanding of the meaning of them. Then the contextual background to the projects were presented and the reasons to why they were started. Moreover, a description was made of how the projects were approached followed with which solutions were made to solve the issues of the areas. To get an understanding of who was involved in the projects the participating actors were then presented. Finally the result of the projects were conveyed.

Framework to determine social sustainability
To be able to study social sustainability in the case studies of Hammarby Sjöstad and Melbourne Docklands an analytic framework needed to be produced. This framework was a way to concretize the concept of social sustainability, to separate it into constituents that on their own can be studied much more easily in a neighborhood. Therefore there was a need not only to determine a clear definition of social sustainability, but also to determine and define the contributing factors to social sustainability.

Through an extensive study of existing literature on social sustainability it was possible to make a definition of social sustainability as well as establish a number of contributing factors. These factors were found using three main sources: The Social Dimension of Sustainable Development: Defining Urban Social Sustainability by Dempsey, Bramley, Power and Brown (2009), Urban regeneration & Social Sustainability. Best practice from European cities by Colantonio and Dixon (2011) and Timeless Cityland – Building the Sustainable Human Habitat by Berg (ed.) (2009), where the article by Dempsey et. al. provided most of the factors.

Although all the factors were also found to be interconnected with each other, they were grouped together into categories in order to make them more perspicuous. This division was based upon their similarities and fields of interest found during the research and was made mostly through grouping those factors that in some way affects each other e.g. how the need to social services is tightly interconnected with the general accessibility in a neighborhood.

Although this framework does not claim to be neither flawless nor complete, it is the authors’ belief that it, based upon the extensive study of several comprehensive works of numerous of other authors, can at least be a start to concretize the very complex concept of socially sustainability.

Case studies
To be able to fully understand social sustainability in urban renewal developments it is necessary to study existing and current projects. Only with real projects can the complexity of social sustainability in urban renewal developments truly be understood and recognized and due to the continuing changing city it is essential that the projects are current so that they can represent the situation found in the cities of today. Hence why the second part of this thesis consist of two case studies of contemporary urban renewal projects.

The case study research is a method that is to be used on important and complicated issues or situations and has the potential to challenge preexisting assumptions and carry powerful arguments (Gillham 2000). Moreover, Johansson (2007) argues that in practice-oriented fields of research such as landscape architecture case studies have a special importance. He notes that the practice of such professions is based on the knowledge that can be gathered from case studies and that they contributes in building the repertoire of the profession. Since this thesis is concerned with social sustainability in urban renewal - an important practice-oriented issue, case studies therefore were considered to be the best method to answer the research questions of this thesis.

The type of case study in this thesis
One can describe a case study as the investigation of a relative bounded process that is specific to a time and space in order to answer specific research questions (Johansson 2007; Gillham 2000). There are several different types of case study approaches that can be used depending on ones research questions (Baxter & Jack 2008). In this thesis an instrumental qualitative case study approach has been used.

An instrumental case study is used to accomplish something other than just understanding a particular situation. Instead than just gain understanding of a specific case it provides insight into an issue or helps to define a theory that helps us understand something else. The case is looked into in depth and may or may not be seen as typical of other cases (Baxter & Jack 2008).

In the case studies of this thesis this was done by doing an extensive literature review, studying the cases thoroughly - by studying their contextual background, how they were approached and planned, the different solutions that were given in the processes, the participating actors of the projects as well as an extensive study over the socially sustainability in each of the cases. To give a further complement to the extensive literature review other methods and sources (site observations, dialogues and interviews) were also used.

Although two case studies have been done in this thesis it is still not to be considered as a multiple-case study. With that approach the goal is to replicate findings across the studies and to explore the differences between the cases (Baxter & Jack 2008). The primary reason of the use of two case studies in this thesis is to provide as much information about social sustainability, it is not to compare the two urban renewal projects. Due to
the complexity of urban renewal developments it was also deemed close to impossible to find two projects similar enough to compare them in a satisfactory way.

Although the projects studied in this thesis do have several similarities they were not chosen because of this. Moreover, these similarities, that the projects have, in fact only make it easier to understand how very different the projects are from each other.

**Selection of case studies**

When choosing which projects to thoroughly study a few prerequisite could be detected: they needed to be urban areas that currently were being renewed, projects that are large and of great importance for their city as well as for contemporary landscape architecture. I also wanted the projects to have a significance to me and being projects that I would find interesting to study extensively.

Both of the projects that I choose to study have been cases that the two universities that I have studied in, the Swedish University of Agricultural Science and the University of Melbourne, have choose to display as important contemporary urban renewal projects. Hammarby Sjöstad was the first project ever shown to me in my studies in Sweden and I have been there several times both during my education and on my own. Melbourne Docklands was also the first project shown to me in my studies in Australia and I lived very close to the area for 6 months. The fact that both of these projects were considered significant enough to display for new students tell me of their importance for their cities and these two universities I have attended as well as for contemporary landscape architecture. Moreover, they are projects I have a personal relationship with and that I whished to study further.

Both projects are old contaminated industrial and harbor areas that started to be renewed in the 1990s and are both yet to be finished. They are of similar size, located close to the city centers and are being renewed into becoming residential areas – why studying the social sustainability is particularly interesting in these projects (Stockholm Stad 2014b & Places Victoria 2014a).

**Literature review and document analysis**

Literature reviews and document analysis where the main method in the case studies and where used to get a comprehensive understanding of the two areas. The main sources used for the case studies were the cities documents over the projects i.e. documents from Stockholm Stad (the City of Stockholm) and City of Melbourne. The Swedish and Australian Bureau of Statistics, SCB and ABS, were also used extensively to get statistics from the areas i.a. about the demography. Moreover, in Melbourne Docklands three other sources were primarily used: Destination Docklands, Docklands News and Places Victoria. In Hammarby Sjöstad the two websites hammarbysjöstad.info and hammarbysjöstad.se were primarily sources.

The site maps.google.com has also been essential in the case studies to get an understanding of the physical structures and social services of the two projects. Other sources in the case studies were articles, books, forums and publications online. Key words when searching for literature in the case studies have been i.a.: ‘Melbourne Docklands’, ‘Docklands Victoria’, ‘Hammarby Sjöstad’ and ‘Södra Hammarbyhamnen’.

To locate sources, throughout this entire thesis, the sites google.com, scholar.google.com, sciencedirect.com has been crucial as well as the library at the faculty of Melbourne School of Design in the University of Melbourne. Furthermore, has the site ne.se also been of great importance.

**Complementary methods**

To get as much information and as broad understanding for the projects as possible several sub-methods have been used in the case studies as complements to the extensive literature reviews and document analysis. However due to the vast distance between the two sites, and how I at the time lived in Melbourne, it was decided that the complementary methods of observations and dialogues would be used on Melbourne Docklands. Also since I have visited Hammarby Sjöstad frequently in the past I felt that I already had a good knowledge of the neighborhood and much more so than of Melbourne Docklands. Therefore I decided to interview a planner of Hammarby Sjöstad (something I also could do on a distance) as a complement instead, to get some deeper knowledge about the project and a planner’s point of view considering social sustainability in an urban renewal project.

**Site observations protocol:**

Site name:
Date and time:
Weather:
People density:
Activities:
Impressions:

**Dialogues questionnaire:**

Gender:
Age:
Occupation:
Do you live close by or in Docklands?
If not: do you come here often?
If not: would you like/could you consider moving here? If so why or why not?
What do you consider of the social services of Docklands, e.g. education, green areas, public services and the public transport?
What do you think of Docklands is socially mixed? If so why or why not?
What do you think of the local environment of Docklands?
Do you think there is a good balance of private- and public spaces?
Do you feel that it is easy to have social interactions in Docklands?
Do you enjoy living in Docklands?
What do you like the most about Docklands?
What do you dislike with Docklands?
Is there anything you would like to change? And if, what?
Do you consider the urban renewal project of Docklands a successful or not? Why?
Do you consider Docklands socially sustainable?

From the top to bottom: Figure 4. Protocol used for site observations in Docklands. Figure 5. Questionaire for the dialogues with the people in Docklands.
Site visits in Melbourne Docklands

When doing the site visits in Melbourne Docklands both observations and dialogues were made. Neither the observations nor the dialogues can on their own righteously described the area or the residents’ perceptions of Melbourne Docklands, neither are extensive enough to do this. They are used in this thesis merely as a complement to the extenvise literature study and document analysis and should only be looks upon as such.

The observations
Observation is a supplementary technique that gives an illustrative dimension to a thesis and can be a way to affirm what might have come up in the literature studies (Gillham 2000). The observations that were done were both participant - involved in the activities and conversations of the site and detached/structured - watching from the outside and counting and classifying what is observed (Gillham 2000).

In Melbourne Docklands nine site visits were made in total, three at lunch time on a Tuesday, three in on a Thursday afternoon and three in a Saturday evening. All were done in the same week in the early December which is late spring/early summer in Melbourne. The site visit were made to the most significant and important public places in Melbourne Docklands, sites that had been determined during the extensive literature review and document analysis of Melbourne Docklands.

The two playgrounds located in Melbourne Docklands were visited, as well as one of the neighborhood’s larger parks (one park was visited while visiting one of the playgrounds), its piazza, as well as four other larger open spaces in the area and finally the area’s large shopping center. When doing the site visits most of the neighborhood was also travelled through, mainly by bike but also by walking and taking the public transport.

A site observation protocol was made to help structure and analyze the observations (see figure 4). To further study the results from the site visits and to view which sites were visited and where they are located in Melbourne Docklands, please study the appendix 1 in the end of this thesis.

The dialogues
The dialogues were semi structured i.e. with both open and closed questions (Gillham 2000; a questionnaire was used (see figure 5), as a foundation to the dialogues but the style of the dialogues was relaxed and casual. Some of the dialogues turned out to be more extensive and some less, depending of the willingness of the subject questioned.

The people that were questioned were those that did not seemed to be in a rush e.g. on their way to work but rather those who seemed to have time to answer a couple of questions. Those that were approched were of all ages, gender and background. However, most were adults and only one child was found during the site visits willing to have a conversation. Many of the people that were questioned were only visiting the area, some only worked there, and three out of the twelve dialogues were with people living in the area.

In total twelve dialogues were made, where the youngest participant was a five-year-old boy and the oldest was a 67-year-old woman. In average one or two dialogues were made on each of the sites that were visited.

Interview a planner of Hammarby Sjöstad
The interview with the planner in Hammarby Sjöstad should, as the observations and dialogues in Melbouren Docklands, only be considerd as a complement to the extenvise literature study and document analysis. Since only one person was interviewed this cannot on its own describe the situation in Hammarby Sjöstad, but it can offer an other viewpoint and a supplement to the other studies.

The interview
When interviewing a planner in Hammarby Sjöstad I wanted to talk to someone who had been working with the project for a long time. This because this person could then tell me, not only about the project today, but also how the project has been developed and the challenges the planners faced through the entire process. I also wanted to talk to someone who has worked with the social issues of Hammarby Sjöstad since this person then would know much more about the social sustainability of the neighborhood.

With these prerequisites there was really only one man that fit all the criteria; Björn Cederquist, one of the head social planner of Hammarby Sjöstad. Cederquist, who will retire in the year to come, is employed by the municipality of Stockholm, is an architect that has worked with the social planning of Hammarby Sjöstad since 1996. Before that Cederquist worked with social issues such as the planning of elderly care and kindergarten in the municipality as well as with the Swedish National Board of Health and Welfare.

I considered it being more productive that rather than doing several interviews with several planners of Hammarby Sjöstad instead do one really thorough interview with Cederquist. This because since he have worked with the social issues of the project for the last 19 years there would be no one knowing more about the social sustainability in the neighborhood than him.

The interviews were semi structured, with both open and closed questions (Gillham 2000). The questionnaire used during the interview can be found in the appendix 2 in the end of this thesis.

The use of the analytic framework
In the case studies the social sustainability were studied using the analytic framework established in the theoretical background. Each of the four groups of contributing factors to social sustainability were studied in separate parts and in each of the groups it was the contributing factors to social sustainability (determined in the theoretical background) that were studied and analyzed. The studies are ending with a conclusion and some key points to consider in urban renewal developments. In each of the cases there were also an additional part, in Melbourne Docklands summarizing the results from the site visits and dialogues and in Hammarby Sjöstad the interview with Björn Cederquist.

Although the study of each of the groups was kept relatively objective, the conclusions are colored by my thoughts and analysis. The conclusions were done primarily by using the framework produced in the thesis. By reviewing and analyzing the factors that in the framework were considered important in social sustainability in each of the cases, strengths and weaknesses could be found in the social sustainability of the neighborhoods. These weaknesses and strengths are in the conclusions discussed and through this discussion several key points could be created that should be considered in urban renewal projects when wanting to create a socially sustainable...
neighborhood. These key points, that together make up a guideline to create a socially sustainable urban renewal development, are hence created by applying the framework on two real cases and from this important lessons of social sustainability in contemporary urban renewal developments could be learned.

Methodology discussion

In this part the methodology of the thesis is discussed; the work process, the case studies and the challenges faced in this thesis.

The work process

The focus of this thesis has changed several times throughout the work process and has above all been narrowed down from a more holistic approach. The very first delimitation that was done in the work process was the choice to study urban renewal developments. A delimitation that was quickly followed by another – that the study should be limited to the sustainability of urban renewal developments. It is this author’s strong opinion that sustainability is the most important challenge with urban planning today and it was my hope that I could with this thesis contribute to some new thoughts and reflection of this very important topic. As a landscape architect it was my hope that I might be able to give some more practical guidelines and a more holistic approach than the existing studies of sustainability.

The PEBOSCA framework with its focus on all of the sustainability dimensions (in the framework called resources); the physical, the economical, the biological, the organizational, the social, the cultural and the aesthetical was originally considered for studying th projects of this thesis. However, it soon became apparent that there would not be enough time to study all of the dimensions of sustainability in the selected case studies. The choice not to study all of the dimensions of sustainability and that the PEBOSCA framework could therefore not be used as a primarily framework, was a very tough decision to make for this thesis, but a decision that was necessary for the completion of it. The choice of studying the social dimension of sustainability soon became apparent, partly because that the social challenges constantly have been a part of urban renewal but also since the social dimension of sustainability is so closely associate with the other dimensions of sustainability as will be further discussed in the reflection of this thesis.

The fact that I, when writing this thesis, lived in Melbourne, Australia has both helped my work process and made it more complicated. It has enable me to thoroughly study the urban renewal project of Melbourne Docklands and has allowed me to study a planning system different from the Swedish one. It has allowed me to see the differences of planning and implementing urban renewal projects in different countries. However, writing the thesis in Australia has also made it possible for me to visit Hammarby Sjöstad, which could have improved this thesis. Nevertheless, it is my opinion that since I have visit Hammarby Sjöstad many times before I already have a good understanding of the neighborhood. I was therefore confident that the fact that I could not visit the neighborhood, would not hinder me from understanding and studying it.

The case studies

The choice of the cases of this thesis were not only due to their prerequisites, it was also due to the fact they both are cases that have been important in my education into becoming a landscape architect. Both of the cases are important for the city of Stockholm and the city of Melbourne, two cities in which I have studied close by to or in during my years at the university, and two cities that mean a lot to me personally. To study these two projects seemed only fitting, and an adequate way to finalize my studies at the university.

The greatest issue with the case studies in this thesis was the fact that it was not possible to make the same kind of study in both of them, due to the vast distance between the projects. It would have been preferable to be able to do both site visits and dialogues as well as an interview with a social planner in both of the cases. There might also be those that question my choice to do a single interview in the case of Hammarby Sjöstad. It was originally my plan to do more than one interview, however after completing the interview with Cederquist I felt that it was not needed. He has extensive knowledge of the project and its development and he provided much insight in all of the questions that I asked him, and perhaps most importantly, he was very objective and could question what had been done in the planning of Hammarby Sjöstad despite working with it himself. Since the interview also only is considered as a complement I thought that is was more important to focus to do a thorough of a literature study and document analysis as I could on the time allotted.

Moreover, there might also be those questioning why I choose to study two cases instead of just one. It is my belief that since urban renewal development are so versatile and the approaches to them so different from different countries and cities, to get an general understanding of what need to be considered when creating a social sustainable neighborhood, different cases from different countries needs to be studied. Some countries such as Sweden might be better at some issues such as creating enough green spaces while other countries such as Australia might be better creating community centers. Hence one can argue that by studying two urban renewal developments from two different countries a more comprehensive guideline could be created.

The challenges in the thesis

The greatest challenge in this thesis was the vast distance between the two projects. I also found the time frame challenging and that it was difficult to make the delimitations that needed to be done. Still some will think that this thesis is very ambitious for the time allotted, but for me it was an interesting and joyful time producing this thesis. However, it could not have been accomplished without some hard work and the assistance I got from my tutor and friends and family.

Other issues in the thesis were that some of the contributing factors of the analytical framework would turn out to be hard to study in the cases. This was especially true for the study of social networks, since this is something that the inhabitants of a neighborhood experience and not something that can be studied from statistics. In this thesis the conditions for having social networks were studied rather than the actual existence of any, even if the later one was preferable if more time had been allocated to this thesis. It is also the author’s belief that the study of social networks within a neighborhood is far to complex and would better serve as a master thesis on its own.

Moreover it turned out to be quite difficult to find people living in Melbourne Docklands to have dialogues with. Only three out of the twelve people I had a conversation lived in the area. The reader should acknowledge this and that it would hvae been preferably, had more time been allocated, to do more site visits and conversation to ensure that more people from the area was talked to.
How can socially sustainability be understood and used in the analysis of urban renewal developments?

**Theoretical background**
Social sustainability in urban renewal

**Framework**
To determine social sustainability

**Case Study**
 Melbourne Docklands

**Case Study**
 Hammarby Sjöstad

**Key points**
To consider in URD

**Guideline**
Creating social sustainability in urban renewal developments

**Background**
What is urban renewal?

Figure 6. An illustration describing the work process of this thesis and where the questions of issues are addressed.

How have the studied urban renewal developments included and achieved social sustainability goals?

What factors need to be considered when working with urban renewal developments to be able to create a socially sustainable neighborhood?
In the theoretical background chapter the concept of urban renewal is further investigated as well as its relationship to social sustainability. In the chapter three very different urban renewal projects are investigated and discussed focusing on the social issues. Furthermore socially sustainability is discussed and presented as well as what the contributing factors are to social sustainability. A definition of socially sustainability is presented and concretized into a framework that can be used to determine the social sustainability of urban renewal developments.
The evolution of urban renewal

The concept of urban renewal is not new; the idea of the renewal of urban areas has been present since the recognition that the slums created in the 19th century – the result of uncontrolled urban growth dictated by the industrialization – were unhealthy and provided poor living conditions. When this recognition had been accepted a series of policy interventions was implemented, mostly in form of in situ renewals that due to their high density were not guaranteed to result in better living conditions for its residents (Robert & Sykes 2000).

During the 20th century several large urban renewal projects have been implemented. Two important examples are the U.S.A. federal urban renewal program in the 1950s and 1960s and the inner-city redevelopment in China since the late 1980s (Zhang & Fang 2004).

The U.S.A. urban renewal project was launched in 1949 and aimed to revitalizing its declining cities by removing slum areas. The program intended to provide additional and more adequate housing in the places where the slum was removed. However, for 20 years people were evicted from their homes that were replaced by office buildings, luxury buildings etc. (Zhang & Fang 2004). When it became apparent that the program did not benefit people equally the opposition against it grew until it finally was demised in 1974 (Jonas & McCarthy 2010; Zhang & Fang 2004).

With its phenomenal growth rate in the late 1980s China started its own large urban renewal phase with the objective to improve the living conditions in the older neighborhoods and to modernize the old cores of its cities. This phase have greatly improved the economic and infrastructure of China’s cities, yet much like the U.S.A. urban renewal program the residents of the affected areas have been forced to move from their homes to areas that have yet to be affected by the emerging renewal of the cities (Zhang & Fang 2004).

During the 20th century urban renewal have evolved considerably. Colantonio and Dixon (2011) have identified six distinctive phases of the urban renewal in the U.K. since the 1940s.

The first two phases in the 1940s-1950s and the 1960s had an emphasis on physical redevelopment and social welfare that much like to the U.S.A. federal urban renewal program wanted to improve the living conditions of its cities. In the 1970s however, the emphasis changed from focusing on providing a better welfare towards gaining an economic prosperity with the projects. At that time the previous urban renewal policy, the government/public sector contributed to all or almost all of the capital and investments of the projects, started to be largely critiqued. In the 1980s, in a world of de-regulations and privatism, the private sector received a bigger role in urban planning. Soon, however, with the emergence of the economic recession in the 1990s, the strong influence of private sector in urban renewal was found unbalanced and limited (Colantonio & Dixon 2011).

With the 1990s the policy of urban renewal therefore swung towards a partnership-based structure between the public sector and the private sector. With the new century the policy of urban renewal has started to increasingly focus on creating sustainable projects and attempts to achieve development that promotes economic growth while simultaneously maintain social inclusion and minimizing the environmental impact (Colantonio & Dixon 2011).

Until this day public- and private partnership, called PPP, is a universal method to develop and invest urban renewal projects and is increasingly
“In removing the most inefficient factories and the worst slums from city centres, urban renewal has undoubtedly contributed not only to economic regeneration but also to the common good in terms of environmental quality and public health. But in rehousing the residents of clearance areas and replacing the built environment, planners have managed to preside over some spectacular debacles.”

p. 280, Paul Knox & Steven Pinch (2010).

used as the size of the projects increases. As the project size increases so does the size of the investment needed to it and it becomes a greater risk for the government to spend its funding on. With PPP the risk can be divided amongst all participants and the government might not need to take on dept for funding the renewal of the city (KPMG & Clayton Utz 2014). With the PPP method the emphasis of the city redevelopment has grown into being accumulation-oriented, a method that enables cities to compete more efficiency with other cities on a global scale (Knox & Pinch 2010).

Knox and Pinch (2010) argues that the primary beneficiaries of urban renewal today are the dominant political and economic elites of the city and not its ordinary citizens.

Disputative, with urban renewal today the monopoly capital, e.g. the large supermarkets, have been benefited while simultaneously wiping out small retailers (Knox & Pinch 2010). Moreover Knox and Pinch (2010) argues that the chief winners of urban renewal today are the speculative property developers. They can obtain sites that have already been cleared by the city, and are then asked to develop these areas for higher uses such as offices, conferences centers and shopping precincts that are highly lucrative. In many cities one might even say that property developers “worked” the planning system in order to secure even greater profits with their developments. Knox and Pinch (2010) also claims that the wealthy property owners, with large investments and therefore also with a lot to lose, are with the purchase of legal and technical advice more likely to prevent changes that otherwise might harm their interests.

Additionally, although public facilities such as hospitals and traffic routes often are intended to ameliorate social differences within the city, arguably that it is still those with the greatest wealth, power and/or knowledge that tend, to a greater extent, benefit from them. Furthermore the public sector services have a tendency today to be more about cost efficiency and flexibility than about needs and equality (Knox & Pinch 2010).

Hence Knox and Pinch (2010) argues that private actors have in some public planning and contemporary urban renewal a large influence due to the restructuring of the public sector and espacially in projects on highly valued land. The social consequences of this cannot be understated since it has become quite clear, that with this the most powerless, marginalized and poor are the ones that have suffered the most. All of these problems with urban renewal today challenge social sustainability and are problems that need to be conquered when wanting to achieve a socially sustainable neighborhood.

Three reference projects of urban renewal and its implications on social sustainability

To create a socially sustainable neighborhood should be something every urban renewal project strives to achieve. How projects handle the social challenges are however different from case to case since each urban renewal area has i.a. a unique context and conditions, unique characteristics, assets, and objectives (KPMG & Clayton Utz 2014).

To provide some more insight in how different urban renewal projects handles social sustainability and which implications the projects has on the social challenges, three brief reference projects of an urban reconstruction project, an urban redevelopment project and an urban revitalization project are presented and illustrated in the following spreads.

When realizing the unhealthy conditions of the slums in situ renewals started to be implemented.

<table>
<thead>
<tr>
<th>19th century -</th>
<th>40-50s</th>
<th>60s</th>
<th>70s</th>
<th>80s</th>
<th>90s</th>
<th>21st century -</th>
</tr>
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<tbody>
<tr>
<td>The focus of URD was creating social welfare.</td>
<td>Gaining economic profit becomes the greatest focus of URD.</td>
<td>The private sector gets an increasingly bigger role in URD.</td>
<td>The focus of the URD lies on creating sustainable projects; environmentally, socially &amp; economically.</td>
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Figure 7. The stages of urban renewal development in 20th century U.K.
Bijlmermeer
The renewal of the idealistic city of tomorrow

Bijlmermeer is a high-rise residential area built 1968-75 situated in the edge of Amsterdam, the capital of the Netherlands. The area was built to answer to the great housing shortage in both the Netherlands and Amsterdam and was supposed to become ‘the city of the year 2000’. The aim of the planers was to attract households with a middle-income and children since Amsterdam already had much housing for the low income group. In seven years 13 000 dwellings were built divided into 31 blocks each with 10 stories and with a width of 200-300 meters. However, not long after its completion Bijlmermeer started having problems that with time only would multiply. High maintenance due to large grounds, vandalism, segregation, lack of safety and a high degree of unoccupied apartments are some of the issues the area faced, and since the buildings were built at the same time they all started to show signs of wear simultaneously (Helleman & Wassenberg 2004).

The issues in Bijlmermeer tried to be solved many times. First the further expansion of Bijlmermeer was stopped, then public services such as a mosque and a swimming pool was built as well as the metro being connected to the area. Later on rents were reduced and the buildings got several different renovations and upgrades. Yet despite all efforts made to improve the residential area it became clear that it needed to change structurally and therefore in the 1990s Bijlmermeer started to undergo an urban renewal (Helleman & Wassenberg 2004).

The physical layout in Bijlmermeer was considered to be the biggest flaw of the neighborhood; the scale was too big and the lack of different types of dwellings fundamental. Therefore the main solution was to demolish a large part of the high-rise buildings and in their place build new types of housing – mainly low-rise buildings. Other solutions involved introducing more functions in the living area such as small shops and firms, clear the parks of bushes for safety reasons and to mix the motorized traffic with non-motorized traffic (Helleman & Wassenberg 2004).

With most of its apartments in the social sector, owned by different housing associations (Helleman & Wassenberg 2004), Bijlmermeer was planned and built by the municipality of Amsterdam. When the area needed to be reformed and renewed, the national government, the municipality and local housing corporations were all involved as well as the local business community (Verlaan 2013).

There are signs that the urban renewal in Bijlmermeer has been successful. The neighborhood is more desirable to live in today and the socioeconomic status of its residents have improved. Although some argue that since a large portion of the original residents of Bijlmermeer have dispersed to other residential areas, the socioeconomic situation of Bijlmermeer have not been solved – rather displaced to other areas (Helleman & Wassenberg 2004). Verlaan (2013) argues that the ever-increasing pressure on the housing market in Amsterdam might be a reason to why more people consider living in Bijlmermeer.

Figure 8. The high rise buildings of Bijlmermeer, the residential area located outside of Amsterdam.
London Docklands
An industrial harbor becoming a residential area

The London Docklands, situated parallel to the River Thames in east London, was an area of former docks complex and a number of industries. The area started to decline in the 1950s and 1960s when it became impractical to continue using the docks and because of this several of the area’s operations closed down (Howland, 2000). The vacant lands and closed docks gradually took over the area and the need to renew the areas grew (Florio & Brownwill 2000). However, due to its previous function the area’s soil was contaminated and before any new functions could be introduced the soil had to be cleaned – which meant high development costs and a reluctance to invest (Howland, 2000).

Under the assumption that it was only private investments that could save the declining London Docklands, the London Docklands Development Corporation (LDDC) was created (Pile 1995) and set up by Margreth Thatcher’s government in 1981. Thatcher’s government believed that urban regeneration only could be achieved by market forces (Florio & Brownwill 2000), therefore the LDDC, with the help of an investigation of the soil in the area, marketed the London Docklands with sufficient information so that potential developers could make realistic consideration on whether or not invest in the project (Howland, 2000).

The London Docklands was divided into three areas: the Isle of Dogs, Surrey Quays and the Royals (Butler 2007). The future planning of the London Docklands was in 1981 removed from its local government and the Port Authority to be handed to the London Docklands Development Corporation (LDDC), a non-elected corporation that could ignore the planning system in order to get private investors to the project. The LDDC was in charge of the London Docklands until 1998 when the local government regained the responsibility of the area (Florio & Brownwill 2000).

In 1998 24 000 dwellings had been built in London Docklands resulting in an increase of the population in the area with 144 %. This and the fact that major new infrastructure was built may point that the project have been successful (Brownwill 2011). However 40 % of the people living in London Docklands today have a second home, spending their working week in the central London and using their dwellings in London Docklands to sleep in. Due to this and the disproportionate number of single and childless people, one can argue that London Docklands lack sociability (Butler 2007). The failure in benefiting the poor and the increasing of the social polarization are other issues the developments of the London Docklands have been accused of (Florio & Brownwill 2000).
**Short facts**

**Location**
In the central part of Seoul, the capital of South Korea.

**Kind of renewal**
Revitalization of an old stream that previously had been covered by two major roads.

**Reasons why**
The roads over the river needed to undergo major repair but they were also the source of air pollutions and the deterioration of buildings and houses in Seoul.

**Solutions**
To remove both of the roads and revitalize the stream so that it could become a residential area and become a human and environmental place in central Seoul.

**Participating actors**
Seoul Metropolitan Government.

**Start date of the renewal**
2004

**Results**
In many ways the project has succeeded. The stream is now an appreciated and popular destination in Seoul that has improved the quality of life among the people living next to it. However, due to the radically increased property prices in the area the local residents in Seoul have difficulties affording the new prices of housing next to the Cheonggyecheon stream.

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**Cheonggyecheon stream**

*From highway to a recreational area*

The Cheonggyecheon is a stream that run through the central part of Seoul, the capital of South Korea. In the early 20th century the stream was started to be covered for military, sanitary and flood management purposes and in 1958 the job was completed (Chung, Hwang & Bae 2012). Upon the covered stream a 6 km long road was constructed and in 1976 an elevated four-lane highway built over the concealed stream was opened (Hwang 2004; Chung, Hwang & Bae 2012). More than 168000 cars travelled on these two roads each day in the early 21st century, 62.5 % of which were through-traffic. However, according to a study made in the early 21st century the roads would have to undergo some serious repair that would take several years and the cost of approximately 100 billion KRW (107 million AUD or 677 million SEK) (Hwang 2004).

Something needed to be done about the roads going over the Cheonggyecheon stream and with issues such as serious air pollution, the deterioration of buildings and houses and them being great obstacles to the large volume of pedestrian moving in the central of Seoul, it was decided to remove both of the roads and to bring the stream back again rather than to restore the roads. The highway was removed in 2003 and the structure covering the stream was removed in 2004-2005 (Hwang 2004).

The goal with the Cheonggyecheon stream was it to be restored as a natural stream and to create a human and environmentally friendly space in the central Seoul (Hwang 2004). The flow of the stream was to be restored as well as rehabilitate significant historical and cultural sites along the stream (Mayer 2012). Embankments were to be built to be able to withstand the 200-year floods, and 17 access points to the stream were to be created. On both sides of the stream one-way two-lane wide roads were to be built with sidewalks and spaces of loading/unloading to ensure a smooth traffic situation as well as the building of 5 bridges for pedestrian and 17 for motorist over the stream (Hwang 2004).

It was the Seoul Metropolitan Government that led the project not to restore the roads over the Cheonggyecheon stream and to instead bring the stream back to life. They calculated that even though the project would cost the city of Seoul approximately 390 billion KRW (417 million AUD or 2.6 billion SEK) and with the additional social costs of approximately 2018 billion KRW (2.1 billion AUD or 13.7 billion SEK), the project would deliver 3718 billion KRW (4 billion AUD or 25.2 billion SEK) worth of social benefits (Mayer 2014).

The Cheonggyecheon stream has become one of the most appreciated and popular destinations in Seoul. Despite the removal of the two important roads traffic problems never really occurred; people spontaneously changed their routes, which made the situation on the roads adjacent to Cheonggyecheon worse for a while but these effects gradually dispersed (Chung, Hwang & Bae 2012). The quality of life has improved for the people living in the area as well as the ecological sustainability. The project has also led to reduced noise and air pollution in the entire city of Seoul. A few criticism have been raised against the projects e.g. the difficulty to access the area for people with visual or mobility impairments and the fact that the property prices in the Cheonggyecheon area have increased radically might result in the local residential inability to afford the new living costs of the area (Mayer 2014).

**Figure 10.** The Cheonggyecheon stream, a stream that was previously covered by roads, Seoul, South Korea.
Lessons to learn from the case studies
With these three case studies the diversity of urban renewal project have been demonstrated and how the social challenges often are present in such projects. From each project one important lesson when working with urban renewal projects can be drawn.

In Bijlmermeer it was the physical structure of the area that was the real issue from the start. The area had no mix in either the function of the buildings or in type of housing and it became unsafe, segregated, exposed to vandalism and generally disliked. When the structure of the area changed and allowed different functions as well as a variety of housing opportunity the social situation in the area improved. Hence in a socially successful urban renewal project a mixed function as well as a variety of housing should be prioritized when planning the project.

The London Docklands project has received heavy criticism for its lack of sociability, which one could argue, is due to the area’s uneven demography. When almost half of the inhabitants have a second home and not spending any qualitative time in the area it is easy to understand why the area might lack a sense of community. The disproportionate number of single and childless people does not help the area that also has failed to include people of different socio-economic situations such as the less fortunate. Therefore one might argue that to create a liveable and sociable residential area it is essential to make sure the area will get a diverse demography, both considering people with different socio-economic conditions as well as age, stage in life and ethnicity.

With the Cheonggyecheon stream the necessity of green areas as well as public areas within a contemporary city become apparent. Accessibility to a recreational area might in fact, as in this case, greatly improve the quality of life for the people living in the surrounding areas as well as the city as a whole. Public spaces and green spaces therefore ought to be highly regarded in urban renewal projects and be an integral part of any major project.

The three lessons learned from the case studies are therefore as such:

1. A mixed function as well as a variety of housing opportunity should be prioritized when planning the project.

2. To create a liveable and sociable residential area it is essential to make sure the area will get a diverse demography.

3. Public spaces and green spaces ought to be highly regarded in urban renewal projects and be an integral part of any major project.

Although the three projects differ greatly from each other, social challenges have faced them all. In fact, the lessons that can be learned from the case studies have this thing in common; they all are important when creating a socially sustainable city.

Social sustainability
Ever since the concept of urban renewal became a part of urban planning the social challenges have always been present, both directly and indirectly (Robert & Sykes 2000; Zhang & Fang 2004; Colantonio & Dixon 2011). Arguably, urban renewal projects will in fact always have a major impact in the social structure of the city. However, whether this impact will be positive or negative might not be as certain.

Although the social challenges always has been and will continue to be of the greatest importance in urban planning, one could argue that there is a need today to emphasize it even more than previously. Because these challenges did not get enough focus in the last part of the 20th century that this need has occurred today. However, regardless of the reasons why, with the growing social inequality in cities today, the social challenges are the greatest challenges when creating sustainability within contemporary cities and are also considered being one of today’s greatest global threats (Knox & Pinch 2010; World Economic Forum 2014).

The definition of social sustainability
The sustainability aspect has a long history of being one of the major concerns in urban planning with a focus on the environmental consequences of urbanization. However, since the turn of the millenium this concern has gotten a new focus, the social sustainability, that answers to which factors need to be considered when creating a socially sustainable society (Knox & Pinch 2010; Dempsey, Bramley, Power & Brown 2009).

Social sustainability is a holistic multi-dimensional concept that is not a constant nor an absolute but rather changes over time (Dempsey et. al. 2009). It is a concept that Colantonio and Dixon (2011), p. 24, describes: “blends traditional social policy areas and principles, such as equity and health, with emerging issues concerning participation, needs, social capital, the economy, the environment, and, more recently, with the notions of happiness, well-being and quality of life.” The concept is closely associated with urban renewal and Colantonio and Dixon (2011) even argues that the social challenges, such as the failure to prevent the socioeconomic gap from increasing, are the greatest issues with urban renewal.

When defining what social sustainability is, it might be easier to define what the symptoms are of a socially unsustainable city: segregation, exclusion, antisocial behavior, out-migration and a loss of a sense of place. It is harder to define what a socially sustainable city could look like, but Knox and Pinch (2010) argues that some of the more crucial aspects of social sustainability are to maintain a neighborhood feeling and conviviality, to ensure good accessibility to health care and education and to minimize poverty and social inequality.

When defining social sustainability one can say that it is to strive to create a society with social cohesion, quality of life, liveability and well-being (Dempsey et. al. 2009). A place that does not exclude people from different backgrounds but rather embraces their differences and a place where people want to live and work – now and in the future. A place where people can fell safe that offers good services to its people and that is well planned, built and run (Office of the Deputy Prime Minister (ODPM) 2006). A socially sustainable community is a place with a strong neighborhood felling, where the many yet thin relationships in the society can create the sensation of being home. This community should have a strong identity and being a place its people can be proud of (Berg 2009; Eriksson 2009).

When discussing social sustainability Knox and Pinch (2010) have distinguished two opposing perspectives on social sustainability today: the technocentric approach and the eccentric approach.

Knox and Pinch (2010) argues that the technocentric approach is based on the thoughts that solving the problems of our cities and societies needs to be done without upsetting the capitalist economic framework that today
guides the development of the city. The approach stresses that existing institutions should adapt to today's challenges and that the modern science and technology will be able to solve our issues. Moreover Knox and Pinch (2010) argues that this approach claims that economic growth is the way to create social equality and that the economic growth should be driven by market forces but being regulated to best serve the interests of sustainability.

Knox and Pinch (2010) argues that the ecocentric approach, on the other hand, believes that sustainability cannot be reached without changing the current capitalist system and its dependence of a constant economic growth and consumption. The approach that is rooted in ecology, believes that the solution to the challenges within the cities today lies in smaller decentralized political units within which there can be a greater participatory democracy. Rather than reforming economical-, legal-, and politician institutions the ecocentric approach seeks to restructure or radically change these kinds of institutions so that they can better serve the needs of people and nature in a holistic sense (Knox and Pinch 2010; Woods 2015).

Arguable it is the technocentric approach that is dominant in urban renewal developments today and its strong economical and technological approach might explain the difficulties in achieving social sustainability goals in the developments.

**Socially polarised cities & the marginalized**

When considering social sustainability in cities today it is, as mentioned earlier, the increasingly socially polarized city that is of the greatest concern. Hence it is also what urban studies and the studies of social sustainability today are mostly concentrated about: the issue of the changing class and occupational structure leading to increasingly socially polarized cities (Knox & Pinch 2010; Dempsey et. al. 2009; Colantonio & Dixon 2011).

According to Knox and Pinch (2010) many well-paid manufacturing occupations have disappeared since the 1980s while both low-paying and high-paying jobs have rapidly increased, which arguable have resulted in an increasingly hour-glass structure where the gap between the rich and the poor in the society keep growing. Arguable this is as most pronounced in the “global” cities - cities that have succeeded in the competition and have a high-level business and financial services. Generally this phenomenon has lead to an increasingly growing inequality of incomes in cities all around the world and although welfare states (such as Sweden) still has less inequality than e.g. cities in the U.S., the welfare states suffers from great unemployment rates instead (Knox & Pinch 2010).

In the societies with increasing inequality it becomes clear that there are certain groups in the society that more often are excluded or marginalized from the rest. These groups are often categorized by perceived norms and standards and can be divided into three groups: the economical-, social and legal marginalized. Often the marginalized people are part to more than just one of these groups, which only reinforce their position as a disregarded part of the society (Knox & Pinch 2010).

The economical marginalized are those with a strained economic situation and these people can be divided into four groups: the unemployed – especially long-term unemployed, the impoverished elderly, students and single parents families. It is common that the economical marginalized people also are socially marginalized that includes ethnic minorities, refugees and the handicapped, mentally or physically, and the chronically sick. Furthermore there are the groups of people who are marked by legal elements such as illegal immigrants, petty criminals and participants in drug cultures (Knox & Pinch 2010).

**The social resources of the city**

There are many things that defines what social sustainability is and what it is not, however, one might say that social sustainability consider the social resources of the city. The social resources contribute to a sense of identity, significance, security and safety and can be enhanced by social generators, places to be alone and opportunities for experiences (Berg 2009).

Despite the globalized economy and the increased mobility that has come with it, the neighborhood and the feeling of belonging still play an important role in our societies, however; this feeling is slowly disappearing from our contemporary cities. This issue is central of the social resources - a close community feeling – the feeling of common security and well-being (Eriksson 2009; Berg 2009). Today more people are working from home and pensioners are much more agile in their higher years than just ten years ago, resulting in the increasing importance of the local environment. For these people and for the entire community, the local environment needs to provide people with a home, a place to rest, recreational areas, socializing opportunities and simply being an enjoyable and appealing environment (Eriksson 2009).

For urban renewal projects to create socially sustainable neighborhoods with a strong community feeling there is a need to create nodes or conglomerations within the area that can become social generators in the community. Within these areas several social services and activities such as schools, shops, parks, sports- and playgrounds as well as coffee shops and traffic nodes (tram stops, bicycle lanes and parking etc.) should be gathered and generate life and opportunities for social interactions. Hence these places should act as a combined service-, infrastructure- and green structure nodes that naturally can become the heart and soul of the community (Berg 2009).

**Contributory factors to social sustainability**

To concretize the definition of social sustainability one can specify all of the contributory factors in a community that together create a socially sustainable community. The following factors have been identified by using the review of several literature (Colantonio & Dixon 2011; Dempsey et. al. 2009; ODPM 2006; Berg 2009; Eriksson 2009) and are grouped into four groups according to the their similarities and field of interest to increase readability and to further simplify the subject.
Social services & accessibility

When discussing social sustainability one of the most commonly cited measures is accessibility to those aspects of the everyday life that people need to have sufficient access to such as education, public services, green spaces and recreational areas (Dempsey et. al. 2009). Moreover, as previously stated, conglomerations of these aspects are necessary to create social generators within the community where people can meet and socialize (Berg 2009).

Some of these aspects are connected with the built environment, e.g. through the direct provision of services or facilities in the community that one live in. However, these aspects can also be obtained by the means of accessing them e.g. by adequate public transport (Dempsey et. al. 2009). One can argue that as the quality and frequency of the public transport of the area increases the need to have all of these services and facilities in the neighborhood decreases since some of them then easily can be reached outside the community.

Nevertheless, some of these aspects are essential in a society in order to sustain social sustainability within it. One thing of particular importance is the access to open- and green spaces. Having nature and green spaces close to home (within 300 meter from ones home) is an important social resource in the city since they provide conditions for improved general health as well as democracy and welfare (Boverket 2007).

Green spaces are places where people of all background can meet, hence they contribute to an increased integration and social cohesion in the city (Boverket 2007) and are therefore substantial when wanting to obtain social sustainability within a community.

Contributory factors to social sustainabilty

- Access to open-/green spaces
- Access to schools & day care
- Access to shops (e.g. food stores)
- Access to restaurants/cafés/pubs
- Access to a library
- Access to a community center
- Access to play-, sports-, and recreational grounds
- Access to a post office
- Access to health care
- Accessibility in form of a good public transport
- Accessibility in form of a good network of bike- and walk lanes

Contributory factors to social sustainability

Mixed housings that enables social inclusion:

- Housing of different unit sizes
- Housing of different designated use (public rentals, rentals, condominiums etc.)
- Housing of different rent levels
- Housing of different market value

Mixed kind of functions within the area such as a mix of:

- Residential housing
- Offices
- Social services
- Shops etc.

Social mixing & social inclusion

With social mixing one can distinguish the physical layout of a site and its demographics as important notions. Mixing of the physical scheme of a site can i.a. include differences of the unit size and type, rent levels and market value. With the mixing of the demographics of a place one refer to its people and their social characteristics such as their income, job, age, stage in life and ethnicity (Colantonio & Dixon 2011). One can argue that these two levels are tightly intertwined since the physical scheme either can include or exclude different groups in the society, e.g. by regulating the amount of rental units of the area and the designated uses of the site’s buildings.

The concept of a mixed community has become one of the key elements of sustainable community agendas since the beginning of the 21th century. With a mixed community one can argue that a neighborhood is better to face its changing needs and may be able to preserve the age balance of the community. With a mixed type of housing people can, when undergoing life changes, still live in the same neighborhood and be able to e.g. upgrade to a larger apartment (Colantonio & Dixon 2011).

With social inclusion one is referring to empower the poor and marginalized in the society and to ensure that people have a voice in the decisions that affect their lives and that they have an equal access to markets, social services and political-, social- and physical spaces (Worldbank 2015). Essentially one can say that the social mixing - that allows people from all backgrounds to live in the area, is one way to ensure that the marginalized people are socially included in urban renewal developments.
The overall form and function

The overall form and function of the community is of great importance in order to make a community liveable. The local environment, that should both be enjoyable and useful, has a symbolic value and gives a place its identity and a reason for its inhabitants to be proud of it (Eriksson 2009). The pride/sense of place is closely connected with the built environment – for instance if it is not well looked-after people might get the feeling that it is neglected which in turn can have a negative impact of the feeling of safety within a community and can in turn reduce the level of social interactions (Dempsey et. al. 2009).

How the neighborhood is structured and its scale has a great influence in how people move in the area, especially if people choose to walk in the neighborhood or not which in turn have a great impact in people's health and quality of life. To make an area more enjoyable to walk in it need i.a. to have an aesthetical appeal and feel safe. On the contrary an area with much automobile traffic makes an area less walkable and less likely for people to walk in (Handy et. al. 2002). Moreover the scale of a neighborhood also has a great significance how people experience security, comfort, fellowship and proximity within it (Eriksson 2009).

Furthermore a socially sustainable community needs to have a good balance of private- and public space. In a sustainable city people need to find places of their own, both indoors and outdoors, where they can rest, reflect and enjoy. However, as previously stated, people also need attractive common grounds where they can meet new people and interact. Therefore there is a need to ensure a good combination of private- and public space and a gradient of places between these places that are half-private and half-public (Berg 2009).

Contributory factors to social sustainability

• An area of a sustainable urban design
• An area of a healthy local environment
• An area of both enjoyability and usefullness
• An area with a human scale
• An area with a good balance of private and public spaces
• A place its people is proud of

Social networks and stability

Social interactions and networks within a community are considered of being integral aspects of social sustainability and without these, people living in an area are merely a group of individuals living separate life without any sense of community or attachment to the place they live in (Dempsey et. al. 2009).

Social networks can be established within a community by participating in organized activities, why the accessibility to community facilities is of great importance. Still, some of the connections that people make in a community are merely recognizing people in the street and although these connections are weak – together they can build a sense of belonging, safety and well-being. Therefore it is important that a neighborhood is stable and that the turnover (in- and outflow) within the community is not too rapid since fast changes can be seen as a threat and can interrupt the feeling of community (Dempsey et. al. 2009; Eriksson 2009).

One important notion when creating a good image of a neighborhood is how the general population views the area. If the general population have a negative opinion of an area people living there are likely to be affected by this opinion and might not thrive as much in the neighborhood due to this (Eriksson 2009).

Furthermore one can discuss the necessity of the feeling of safety in socially sustainable neighborhood. In a neighborhood free of crime and disorder people can fell secure with their social interactions with their neighbors and other people and can fell safe to participate in community activities. People do not want to feel that they have something to fear from their neighbors, and in a society without crime and disorder the social networks can grove stronger and generate in a stronger sense of community (Dempsey et. al. 2009).
Conclusion of the chapter
Urban renewal and social sustainability

Although urban renewal has changed significantly since its introduction in urban planning (and most noticeable so since the middle of the 20th century) the social challenges have always been present (Robert & Sykes 2000; Zhang & Fang 2004; Colantonio & Dixon 2011). How to renew the city and improve the living situations for its people while still not exclude the socially, economically and legally marginalized in the society may in fact be one of the biggest challenges that our generation will face in our lifetime (Colantonio & Dixon 2011).

However, this issue is not a novelty, rather a remnant from the 20th century when the capitalist system got a strong hold upon urban planning and therefore also on the urban renewal policies (Colantonio & Dixon 2011). One could argue that the constant need to generate a profit in urban renewal projects has made it difficult to favor the marginalized people in the society, which might be a reason why the socioeconomic gap keep increasing (Robert & Sykes 2000; Zhang & Fang 2004; Helleman & Wassenberg 2004; Florio & Brownwill 2000), even if the outcome of the projects more often than not seemed to make the socioeconomic situation worse rather than better.

The implications that urban renewal can have to the social aspects of an area were presented in the three reference projects. From the cases three contributing factors for creating a socially sustainable community have been established: the need of mixed function and a variety of housings in an area, a diverse demography within the neighborhood and accessibility to public- and green spaces.

When establishing what social sustainability is, one definition is a society with social cohesion, quality of life, liveability and well-being, that does not exclude people and where people want to live and work – now and in the future (Dempsey et al. 2009; ODPM 2006). It should be a place where people feel safe, offers good services to its people and that is well planned, built and run (ODPM 2006). Moreover it should be a place with a strong neighborhood felling, a strong identity and being a place its people can be proud of (Berg 2009; Eriksson 2009).

To concretize this definition further one can define several contributing factors that together build a socially sustainable society. These factors can be divided into four groups according to their similarities and field of interest. The four groups that have been established are: social services and accessibility; social mixing and social inclusion; overall form and function and social networks and stability and can together be an analytic framework to determine social sustainability in a society. Although these four groups can be distinguished from each other they are still interconnected and should always be approached holistic.

Finally one can establish that both the concept of urban renewal and the concept of social sustainability are complicated, changeable and multi-dimensional. There is no one definition of either concept, no certainties of their meaning or even whether they are a positive influence to the development of the city or not. The way this thesis interprets these subjects therefore needs to be looked upon as one person’s interpretation of a complex situation (although it is built upon multiple literature reviews) and the reader should recognize this.
Going into the study of social sustainability within the two urban renewal projects of Melbourne Docklands and Hammarby Sjöstad the contributory factors of creating a socially sustainable community should be considered. The social services of the community should be studied as well as public transport and bike- and walk network existing in the areas. A special focus should be put on the open- and green spaces of the projects. Moreover should the demography of the neighborhoods be studied, along with the different kind of housing offered in the areas as well as the different functions of the buildings. The projects also need to be studied in a more overall way to distinguish whether they have succeeded into creating a sustainable urban design that is both enjoyable and useful. Furthermore the scales in the projects as well as the balance between private and public areas need to be studied. Finally it needs to be established if the projects have succeeded into creating a strong community feeling. To establish this the stability of the areas should be studied as well as the existence of community activities and community centers. Moreover should it be established whether the areas are safe and what the general opinions are of the projects from the general populations.
In this chapter the urban renewal project Melbourne Docklands is studied and discussed. A contextual background is given to the project that offers an understanding of why and under which circumstances the project was started. Moreover is the approach and planning of the project discussed as its participating actors. The first part of the case study of Melbourne Docklands ends with a synoptically map over the area of the project.

In the second part of this chapter socially sustainability is studied and discussed in Melbourne Docklands using the framework established in theoretical background. This discussion results in a number of key points to consider when working with urban renewal projects. The chapter ends in a conclusion and some final thoughts of the social sustainability of Melbourne Docklands.
Case study: Docklands

Contextual background

The contextual background offers a greater understanding of the background situation of the urban renewal project Melbourne Docklands. It offers an understanding of why and under which circumstances the project was started and a general description of both Australia and Melbourne.

One should note that in this chapter, with Melbourne and the city of Melbourne this author refers to the greater metropolitan area that is considered being the city. Although the Melbourne city center is mentioned at times this is simply to get an understanding of e.g. how dense the city center is compared to the city in general.

Australia – the land down under

Australia, or as it is officially called, the Commonwealth of Australia is the sixth largest country in the world (area wise) (Mårtensson 2014b). Australia is situated in the South Hemisphere south of Indonesia and Papua New Guinea and northwest of New Zealand (Google 2014a). The country consists of six states and two territories, where Melbourne, the second largest city in Australia, is the capital of the state Victoria (Behrens 2014). In 1901 the states where joined together and claimed their independence as a self-governing dominion of the British Empire.

Australia has a very long history, its indigenous people called aborigines, came to the continent at least 50,000 years ago. They lived undisturbed until the Europeans came in year 1788, and as a result of diseases and confrontation their number drastically receded and now make up 2.3% of the Australian population. After the first Europeans came to Australia large number of immigrants continuously come to the country and as a result, 25% of the population of Australia is born in another country; most from New Zealand, U.K., Italy, China and the Philippines (Mårtensson 2014a).

Australia is today a strongly urbanized country; off its 23.5 million inhabitants 89% lives in cities and urban areas. 60% of the people of Australia live in the five biggest cities and close to 40% live either in Sydney or Melbourne (Mårtensson 2014a). Since the 19th century there have been decentralization policies in the country, claiming that the cities are too big and that too many people live in too few cities. The argue has been that if people settle in smaller cities instead of adding to the large ones, everyone would benefit from shorter distance to work, lower energy consumption and less congestions and air pollution (pp. 169-170, Forster 2004). Despite the efforts made, the city of Melbourne is still estimated to grow with almost 50% and to have 6.5 million inhabitants by 2050 (Fogarty 2013).
Maps over Australia, the city of Melbourne and Melbourne Docklands

In this sequence an understanding is given to where Melbourne Docklands is situated in Australia, Melbourne in large as well in relation to the Melbourne CBD. Moreover, on pages 54-55 there is also a synoptically map over Melbourne Docklands, describing the area.

Figure 13. The location of Australia (in light pink), with the country’s largest cities marked out including the city of Melbourne.

Figure 14. The city of Melbourne and its extention and its major roads. Some of the city’s different districts are marked as well as the central part of Melbourne.

Figure 15. Map of the central part of the city of Melbourne, marking larger parks, institution and city districts as well as the urban renewal project of Melbourne Docklands.
“The social wealth of the city is being increasingly privatized or ‘developed’ through public–private partnerships that are wrapped in commercial-in-confidence contracts, while the unevenness of income distribution and the access to amenities are overlooked and allowed to increase”

p. 17, Paul James (2015)

The Melbourne miracle

The city of Melbourne is located in southeastern part of Australia on the large natural bay called Port Phillip with its city center (CBD) being located in the northermmost part of the bay and close to the estuary of the Yarra River (Google 2014a). The city is flat with a few small hills in the west and east and one of those hills, Batman’s Hill, is located in Docklands (p.9 City of Melbourne 2011). Melbourne has a temperate climate with hot summers, mild springs and autumns and cold winters (City of Melbourne 2014f). The city was founded in 1835 (City of Melbourne 1997) and one can say that Melbourne was born modern, inheriting all the experience and knowledge that the British learned for centuries when it came to create cities. Unlike other older cities Melbourne did not naturally and slowly grew to what it is today, it was planned from the start resulting i.a. in the lack of a public square due to rapid land sales (City of Melbourne 2011), Melbourne has had an incredible development. In less than 200 years the city has gone from being nothing but dirt into becoming a world-class city with a population of over 4 million people (Victorian Environmental Assessment Council (VEAC) 2009). This rapid growth has not been pain free for Melbourne; many issues have faced the city in the last decades due to the growth and its consequences. There are e.g. great socioeconomic differences in Melbourne with large differences between the rich that lives in the CBD and its surrounding suburbs and the poor that are being priced out from these parts of the city and dispersed to the outer suburbs (VEAC 2009; Forster, 2004). In fact the only way to remain in the central Melbourne for those not as fortunate is to get one of the few and declining public rental housing contracts that today only supply about 4% of Melbourne’s residents with housing (Forster, 2004).

Melbourne is also an extremely sprawled city with a low density of population only equal to cities such as Chicago, Atlanta and Washington (Demographia 2014). The continuing sprawling city has become a major concern for the deciding forces in Melbourne that have enforced several strategies to stop the sprawling from continuing. One of the strategies is to establish an urban growth boundary as to where the city can and cannot grow, forcing coming development to take place within the existing city and densifying it (Department of Infrastructure, 2002).

All these things considered, Melbourne have had an even bigger issue in the past. In the end of the 1970s Melbourne was describe to have an empty, useless city center and being a city that progressively had been destroyed and lost the charm it once had (Day 1978). It was a “doughnut” city – a city without a strong central core where the city center merely were a place to work and to spend the working week, but not a place to live in or otherwise visit (Adams 2005). In the 1980s and 1990s the city of Melbourne enforced many strategies, programs and development plans to bring back the liveability in its center (Adams 2009). Among these was the program called “Postcode 3000”, the name referring to the inner city’s postcode that was primarily designed to repopulate central Melbourne. This was done using financial incentives, technical support, street level support and promotion (Adams 2005).

In another attempt to improve its center, the city of Melbourne invited Jan Gehl in the early 1990s to conduct a survey of its public spaces and public life and to propose recommendation for the city’s development. Gehl proposed to improve, among the things, the pedestrian network, to introduce more sun in the city, make wider footpaths and create more active facades (City of Melbourne & Gehl architects 2005). Other projects conducted or started in this time is the Federation Square, the new Plenary Hall and the Melbourne Docklands (Adams 2005; Adams 2009).

The change in the city center in the last decades is remarkable. For example, in 1992 there were only 762 residential units within the central of Melbourne (Adams 2005), and have today grown to 22 926, with another 3699 planned to be built in 2015 (Butt & Zhou 2014). The number of cafés, restaurants and bars has quadrupled and the city center has become greener with wider footpaths and more bicycle routes (Adams 2005). From being called useless and empty some considered the city of Melbourne today to be the world’s most liveable city, a title the city has received the last four years (CNN, 2014). Jan Gehl calls this change “the Melbourne miracle”, and claims that Melbourne and its change give hope and incentive to cities all around the world that have a dying city center and wishes to change this (Gehl, 2005).
Approaching the project

In this section the background to the urban renewal project Melbourne Docklands is presented and how the project was approached and planned and the different solutions that were given in the process. Moreover are the participating actors in the project discussed.

The Docklands of the city of Melbourne

Historically the Docklands area was a low-lying swamp in which the Yarra River meandered through and had been used as hunting grounds by the aborigines for several thousand years before the Europeans arrived (Docklands Task Force 1991; Places Victoria 2014b). In the late 19th century the Yarra River was deepend, widen and shorten to enable deep-water shipping to the new harbor Victoria Dock - the area known as Docklands today. The million tonnes of earth excavated in the process were used to fill the swampland and create new land where the city could grow (Otto 2005).

From the early 20th century and until the late 1950s the Victoria Docks was the busiest harbor in Melbourne and was handling a wide range of cargo e.g. coal, steel, wheat and animals. However, in the 1960s the harbor procedure started to change and began using containers that required a new kind of ships and new kinds of harbor making the Victoria Docks inadequate. New docks and transport infrastructure were in the 1970s built further down the Yarra River to answer to the new needs, resulting in the gradual decline of Victoria Docks and Docklands importance and use as the port activity continuing to move away from the area called the Port of Melbourne (Places Victoria 2014b).

By the late 1980s the old harbor area of Docklands and its opportunity to be redeveloped became an important topic for the government in Melbourne (Dovey 2005). A successful redevelopment of Melbourne Docklands, with its close location to the CBD, was seen as yet another way to make the city center more liveable (Adams 2009) as well as an opportunity to create a connection to the waterfront in Melbourne. The waterfront had been disconnected to the city for a very long time and the revitalization of it was a key urban strategy in the 1980s and 1990s to improve the status of the city of Melbourne (pDovey 2005).

However, the redevelopment of Melbourne Docklands was never going to be easy. The land owned by the government was at parts contaminated by old industries and due to its history as a swamp it also had poor soil conditions requiring piles for any building over two floors. The area was also cut off from its surroundings by major barriers - the Spencer Street railway station and goods yard and the Footscray Road - a major north south traffic artery. Due to these complications it was thought that the project needed a kick-start and therefore a bid was made to host the 1996 Olympic games with Melbourne Docklands as the site of the Olympic village. Although the bid ultimately was unsuccessful it generated in several ideas of the development of the area and lead to the first strategic planning framework in 1989 (Dovey 2014).

The idea of Melbourne Docklands

It was a grand idea of what Melbourne Docklands could become that was presented in the first planning framework from 1989. The plan included the extension of all the five parallel streets in the CBD (Flinders-, Collins-, Burke-, Lonsdale- and La Trobe Streets) as if the railway was no obstacle, a reshape of the water edges with piers and canals, a vision of a mixed-use development and a design with two- to six- story buildings with just a few ten story buildings so that they would not overshadow the waterfront. Moreover the plan suggested lively waterfront promenades, water taxis, a protected pedestrian environment, the Southern Cross train station would become a transport interchange for the area and the large traffic artery Footscray road would be upgraded to a boulevard. With the plan Melbourne wanted to reorient, reface and globalize itself and reconnect the inner city not only with the water but also with the working-class suburbs west of Melbourne Docklands and to create a more socially sustainable city (Dovey 2014).

In 1990 the Dockland Task Force was established within the Office of Major Projects (MVP) that answers to the Minister of Major projects in Australia and is a part of the state government of Victoria. In 1990-93 the Task Force produced three major policy documents over the development of Melbourne Docklands that presented further developed urban design principles. The principles were based upon the work of Kevin Lynch and Allan Jacobs and promoted i.a. the human scale, permeability and liveability. During this time over twenty major consultant’s reports were also issued such as studies on the soil, the traffic situation and the heritage of the area. In this the costs of extending Collins-, Lonsdale- and La Trobe Streets to Melbourne Docklands were established as well as the impossibility to extend Bourke Street due to the prohibitively cost of either burying or moving the railway lines (Dovey 2014).

By 1991 the Olympic bid was declined and the Docklands Authority was formed that (after a bill had passed through the parliament) got the power to i.a. join ventures, borrow, compulsory acquire land and levy development charges. Corporate interests dominated the board of the Docklands Authority and not one of the members represented the community. Due to the current economic recession the early development of Melbourne Dockland was nevertheless slow. However, in the late 1993 the Docklands Authority adopted a new document called ”Docklands Plan”. The document did not propose any infrastructure solution for the area; rather it presented six large precincts that together would make up the new Melbourne Docklands and the most remarkable part of the document: all the design and founding of the development was to be made by the private developers. The market would dictate the development of Docklands. With the Docklands Plan all the previous work from the Task Force, e.g. the consultation reports, was abandoned (Dovey 2014).

A major problem with the development of Melbourne Docklands was still the traffic artery of Footscray Road and how to reroute this traffic from the new development area. However, with the planning of the CityLink freeway that included a bridge across the western edge of the site, the problem was considered solved (Dovey 2014). The freeway was built between 1996 and 2000 and linked three major freeways in the Melbourne area and was believed to remove most of the heavy traffic from the Melbourne Docklands area (Lay & Daley 2002).

In 1995 with the plans of the CityLink ongoing, the planning of Melbourne Docklands moved forward with yet another two plans of the area, a precinct plan and a fully developed vision. The precinct plan was much like the one from 1993, the land being divided into seven precincts presented as blank sites to be filled by the market. The second plan was labeled as an artistic impression and
First investment came in late 1996 when it was announced that a private football stadium would be built in the docks – located next to the CBD and next to the waterfront (Dovey 2005). The stadium became the much needed kick-start for the project and with it other investors came, securing the project’s future and further development (Millar 2006).

**Participating actors**

The urban renewal of Melbourne Docklands is the largest public-private partnership (PPP) project yet in Australia (Sullivan 2005a). The project has been a joint effort by private companies in partnership with the Victorian Government (Sullivan 2005b). The two governing bodies that today oversee the development of Docklands are Melbourne City Council and Places Victoria.

The Melbourne City Council is responsible for the completed public areas within Docklands as well as through the planning and continuing growth of the area ensuring prosperity, sustainability and quality community services and programs in Docklands (City of Melbourne 2014b).

Places Victoria, previously VicUrban, is an amalgamation of two government land organizations: the Urban and Regional Land Corporation (URL) – that played an important role in the development of Melbourne’s growth corridors and the Docklands Authority (Places Victoria 2014c). The Docklands Authority served the state government and was set up in 1991 to oversee the development of Melbourne Docklands. When deals had been sealed on all major precincts in 2003 the role of the Docklands Authority diminished and it was at this time that it merged together the URL (Dovey 2005).

To acquiring land in Melbourne Docklands the developers need to win a bidding for the specific land strip. The rules for the bids were made up by design guidelines such as building heights, a 30 meters setback from the water and an active waterfront, a worked out financials and a program of delivery with deadlines had to be set (Dabkowski 2005). When winning a bet the developers then needed to design and fund the infrastructure as well as found the cleanup costs of the area. However, the government has stepped in with founding and had by 2001 invested 450 million AUD (2.9 billion SEK) (Dovey 2005).

**Figure 18.** The central parts of Melbourne Docklands, with the Piazza ahead and the Melbourne Star in the background.
### Short facts: Melbourne Docklands

**Area**
- About 1.9 km² of which 0.44 km² is water.

**Population**
- 6640 (2012)

**Population density**
- 3496 inhabitants/km²

**Amount of housing units**
- 3975 (2011)

**Average size of units**
- 1.85 rooms

**People working in the area**
- 39 500

**Construction start**
- 1997

**Estimated completion date**
- 2025

**Area of offices, light industries and retail**
- 764 080 m²

**Area of public green space**
- About 9 hectares or 0.2%

**Distance to central Melbourne**
- 2 km

**Cars/capita**
- 0.56

**Average yearly income among earners**
- 63 866 AUD/year (398 488 SEK)

**Percentage of inhabitants with foreign background**
- 72%

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From top left. **Figure 19.** Short facts about Melbourne Docklands. References: ABS 2013a; ABS 2014a; CBRE 2013; City of Melbourne 2012; Places Victoria 2014a. **Figure 20.** Synoptically map over the city district Melbourne Docklands (That’s Melbourne 2014).
As seen in the map the housing structure of Melbourne Docklands consists of large but rather few buildings. Moreover one can also see that there is still large areas that still are undeveloped in the area, especially in the south and in the edges. The private football stadium, Ethiad Stadium, the first building of Melbourne Docklands is as seen positioned in prime location at the waterfront. Moreover one can note the amount of large parking areas in Melbourne Docklands.
“It’s disappointing because it could have been an incredibly large jewel in Melbourne’s crown and I think it’s less than that, much less than that.”

Mary Crooks from an article by Royce Millar (2006).

“Docklands will be one of the most liveable communities in the world’s most liveable city.”


“No trees, no birds, no grass, a lack of community but a plethora of structures.”

George Savvides cited in an article by Jason Dowling (2011).

“Like many of the world’s great urban waterfront renewal projects, Docklands effectively turns what was for most of its life a shipping, trade and manufacturing destination, and for the last 30 years an industrial wasteland, into a integral part of the now thriving metropolis of Melbourns.

In this section the social sustainability of the urban renewal project Melbourne Docklands is studied using the framework that was established in the theoretical background. It is separated in five parts, the four parts of the framework; social services & accessibility, social mixing & social inclusion, overall form & function and social networks & stability, as well as the results from the nine site visits that were done in Melbourne Docklands and the dialogues that was done during these visits.

Each of these parts has a disposal of two spreads, where the first spread is dedicated for the concrete study or interview. In the second spread a conclusion of the study or interview is done, and a number of key points are established that should be considered in urban renewal projects to create a socially sustainable neighborhood.

This section ends with the final conclusion of this entire chapter where the social sustainability of Melbourne Docklands is discussed.
social services and accessibility

in melbourne docklands

social services in melbourne docklands

when studying the social services, established in the framework, one can divide it into several subgroups: access to schools, day care and activities for children, access to shops, restaurants, cafés and pubs and access to a library, a post office and health care. moreover, since it has been establish in the framework that open spaces and green spaces as well as recreational areas are especially important to create social sustainability these services will be presented more detailed in a separate section.

day care, schools & activities for children

there are several day care facilities in or close to melbourne docklands, however there is a concern that they will not have fulfill the growing need for day care facilities in the neighborhood. there is also a concern that the workers at ANZ and NAB, two of the major offices in the area, are given priority to the facilities before the areas’ residents (Google 2014g; Kinkade 2010).

Moreover, there is no primary school in Melbourne Docklands and the schools closest to the neighborhood have already reached their capacity and cannot accept students from the neighborhood (Natoli 2014). In 2011 there were 128 children living in Melbourne Docklands between 5-14 years old while the younger children up to 4 years old were 215 (ABS 2013a). The frustrated parents of the neighborhood believe that the Government argue that this statistics show that there is too few school-age children, but for them this is a vicious cycle and that the lack of schools is the reason why there is so few children of school age. The parents believe that the fact that there is no school in Melbourne Docklands forces the families to move before their children reaches school age and that it makes families hesitate from moving to the neighborhood in the first place (Kinkade 2010). Moreover there is the issue of the cost of the schools, since the Government schools in Australia generally offer free education while private schools can be very expensive (Australia 101 2014). In the example of Melbourne Docklands, the private school Melbourne City School is one of few schools within the CBD in Melbourne and is therefore relatively close to the neighborhood. This is a school that the children in Melbourne Docklands potentially could go to, however they charge 16750 AUD/year (105 000 SEK/year) for the first four years and then 22750 AUD/year (142 000 SEK/year) for the remaining three years (Kinkade 2010).

There are two large playgrounds in Melbourne Docklands, one in the Docklands Park and one that is just about to open in Point Park. There is also an ice-skating rink, a backlight mini golf arena as well as a library with i.a. a recording studio, a big screen TV and table tennis in the neighborhood (Destination Docklands 2014).

shops, restaurants, cafés and pubs

the shopping is plentiful in and close to melbourne docklands. within the area there is a large shopping center called Harbour Town and Australia’s first Costco Wholesale (a large warehouse chain from the U.S.A). at the Southern Cross Train Station, just behind the stadium, there is also a large outlet center (Harbour Town 2014; Destination Docklands 2014d). moreover there are also plentiful of restaurants, cafés and bars as can be seen in figure 22 (Destination Docklands 2014a; Destination Docklands 2014b). Furthermore there are several small grocery stores in melbourne docklands and a larger grocery store in the area and an other one at the Southern Cross train station (Google 2014g).

library, post office and health care

In may 2014 the library at the Dock opened in melbourne docklands. the three-story, 55 meters long, 3000 m² library was the first building in Australia to receive a 6 Star Green Star building rating, the highest rating in a sustainability rating system for buildings in Australia. the library was planned to become the social heart of melbourne Docklands and a public living room and aims to be more than a typical library. the library at the Dock have i.a. a performance space, a technology and media hub, reading lounges, community meeting rooms, heritage- and art exhibitions as well as quiet study areas (Victoria Harbour 2014).

There is also a post office in melbourne docklands (Australian Post 2014) and a couple of health care facilities as well as a maternal and child health center (Health Engine 2014; City of Melbourne 2014c).

open- and green spaces & recreational areas

there are several large open spaces in melbourne docklands, e.g. the piazza that together with the open space at melbourne City Marina is about 1.2 hectares and the open space in front of ethiad stadium that is about 1.8 hectares. there are also smaller public open spaces such as Collin’s landing (Google 2014d).

there are not that many public green areas in the neighborhood. in fact the public green areas consist mainly of four areas; the Docklands Park (extending on both side of Collins Street) that is about 2.4 hectares, Parkland that is about 0.7 hectares, Point Park of about 1.1 hectares and the largest green area in melbourne Docklands that is about 4 hectares, the green area at the waterfront to Moonee Pond Creek. together these areas are about 8.2 hectares, making out
most of the total amount of green areas in Melbourne Docklands that is around 9 hectares or 6.2 % of its land area (Google 2014d). Melbourne Docklands does not have any large recreational areas close by, much due to the fact that there is no large green area west of the city center of Melbourne – rather industries and residential areas. When biking from Melbourne Docklands to large parks such as Albert Park and Yarra Bend Park the distance is around 5-8 km, and to the smaller but still considerable large green areas such as the Royal Botanical Garden, Carlton Gardens and Fitzroy Gardens the distance biking is around 2-4 km. The only larger park close by is Flagstaff Gardens. Flagstaff Garden is the only park within Melbourne CBD that is about 7.7 hectares and is located 1.5 km from the neighborhood (Google 2014f).

Except from the parks and green areas there are several pathways along the waterfront, especially around Victoria Harbor but also along Yarra River. The pathway along the south side of the Yarra River extends along the river for several kilometers leading e.g. to the Royal Botanical Garden, 4 km long walk (Google 2014f; Destination Docklands 2014).

Public transport & bike- and walk lanes
In Melbourne Docklands the most common way to travel to work is taking the car, 33% of the workers takes the car and 93 % of them drive by themselves. In Melbourne in total, however, 65 % of the workers takes the car and 93 % of them drive by themselves, while in the city center only 19,5 % take the car. The second most common way to travel to work in Melbourne Docklands is walking, close to 27 % walks to work while 26 % of the workers uses the public transport system. This is not so far from the city center’s statistics where 35 % walk and close to 30 % uses the public transport system. In the city in total there is however only close to 14 % of the workers that uses the public transport system and only close to 3 % that walks (ABS 2013a; ABS 2013b; ABS 2013c).

The public transport system consists of mainly trams with seven tramlines running from Melbourne Docklands to the CBD. With these different trams the passengers can travel on all four main roads going East-West in the CBD (that have tram rails) and can therefore access most of the trams running in Melbourne (Public Transport Victoria (PTV) 2014b). One of the trams running in Melbourne Docklands is the city circle, a free tourist tram that travel around the CBD passing major tourists attractions (PTV 2014a). Taking the tram to the city center take around 15-20 minutes, and while the trams run frequently during the day, both during the weekdays and the weekend, the trams do not run at night between 1 am and 5 am (PTV 2014c). From the Southern Cross train station people can travel by train, tram or bus all over the city as well as out of the state to other cities in Australia (PTV 2014d).

There are several bike lanes within Melbourne Docklands, both with dedicated bike lanes and as separated bike pathways making the area easy to bike within. However, few of these bike lanes continue out from the area in a clear way, in fact many of the bike lanes ends in informal bike routes that might be difficult to follow (Department of Transport 2011).

While doing the site visits, I biked from the south part of Melbourne to Melbourne Docklands and found it very difficult to find my way, as well as it was difficult to bike to the University of Melbourne. The only route that I found easy to follow in or out of the area was taking the La Trobe Street into the city center. When discussing the walk lanes in Melbourne Docklands I felt that the situation is quite similar, it is easy to walk within the area, however findings ones way out of the area can be difficult. Moreover when using the bridge on La Trobe Street into the city, one of the major roads leading to the city, I was surprised how unfriendly it felt walking on. This was mainly because of the vast size of the road (four car lanes, two tram rails as well as two bike lanes and two sidewalks) and how the walkers and bikers where not protected even with a fence from the many cars traveling on the bridge.

Compared to the city the inhabitants of Melbourne Docklands has slightly less cars per capita, 0.56 vs. 0.6, however compared to the city center, the neighborhoof has more than twice the amount of cars per capita (ABS 2013a; ABS 2013b; ABS 2013c). This might suggest that there are better conditions of having cars in Melbourne Docklands compared to the city center e.g. more parking areas.
Conclusion

The social services and accessibility of Melbourne Docklands

The social services of a neighborhood is something that people cannot live without and the lack of such might in fact lead to people moving from the area. There are many social services that are substantial in Melbourne Docklands such as restaurants, cafes, pubs and shopping opportunities. The neighborhood also just received an excellent library, which among other things can offer activities for children as well as adults. However, the fact that there is no primary school in or close to Melbourne Docklands is really unfortunate. This might be even more unfortunate in a country like Australia and a city like Melbourne where the education options play an important role when deciding where to live. Some social services are more important than others when deciding where to live, and a good school could be the one thing that in the end makes a family decides to live or not live in a neighborhood. Hence, one can argue that in urban renewal developments one need to realize that the lack of essential social services such as day care and schools can force people to move from the area or even stop families from moving to the area in the first place.

Moreover one can discuss the fact of how few public green areas Melbourne Docklands have and how unfortunate it is that the public green areas did not get to play a more important role when creating Melbourne Dockland. None of the large green areas are positioned around Victoria Harbour – the heart of the neighborhood. In fact the largest public green area of Melbourne Docklands is positioned under a large freeway in the very edge of the area. The fact that the few public green areas that do exist in Melbourne Docklands is not accentuated nor emphasized is even more regrettable since there are no large recreational areas adjacent to the neighborhood. In fact one can argue that in urban renewal developments it is crucial to have a sufficient amount of green spaces, especially if the area does not have any large recreational areas close by.

Finally one can discuss the walk- and bike lane networks of Melbourne Docklands both of which, in fact, are adequate and have a high standard compared to the standard of the walk- and bike lane networks in the city in general. It is easy to move in the area both walking and on bike, however it is a real issue that it is unclear how to bike and walk from the area to its surroundings. It was so hard for me finding my way to the city district the first time that I almost gave up finding it, this with the help of the technology of today. When working with urban renewal projects one cannot forget that it is not only the area one is planning but also its connections to its surroundings. Therefore one can argue that although it is important in urban renewal developments to create a sufficient walk- and bike lane network within the neighborhood, it is also essential to make sure that these networks are connected in a good way to the existing networks of the city.

Key points to consider in URD

1. In urban renewal developments one need to realize that the lack of essential social services such as day care and schools can force people to move from the area or even stop families from moving to the area in the first place.

2. In urban renewal developments it is crucial to have a sufficient amount of public green areas, especially if the area does not have any large recreational areas close by.

3. Although it is important in urban renewal developments to create a sufficient walk- and bike lane network within the neighborhood, it is also essential to make sure that these networks are connected in a good way to the existing networks of the city.

Figure 23. The open space between Melbourne city marina and the Piazza. Bolte bridge and the CityLink freeway in the background.
Social mixing and social inclusion
In Melbourne Docklands

The demography of Melbourne Docklands
When describing the demography of Melbourne Docklands one can divide it into several subgroups established in the framework: age & stages in life, income & education levels and ethnicity & culture differences.

Age and stages in life
As seen in figure 24 the inhabitants of Melbourne Docklands are in general young. 49 % of the people living there are between 20-34 years old, while the people between 25-29 make up close to 20 % of its population. Compared to the city, the neighborhood has more than twice as many 20-34 years olds and almost three times as many 25-29 years olds, percentage wise. Melbourne Docklands, however, has a low percentage of elderly people above 65 compared to the city, 4.6 % vs. 13.1 %, as well as children and young adults up to 19, 10.1 % vs. 24.7 %. Nevertheless, the most noticeable difference between the age demography in Melbourne Docklands compared to the city is children between 5-14 that only makes up 2.2 % of Melbourne Docklands’ total population compared to 11.9 % in the city (ABS 2013a; ABS 2013b).

Moreover, there are more lone person households than in the city, 35.5 % vs. 23.3 % as well as much more group households 12 % vs. 4.7 % and there are hence much less family households in Melbourne Docklands compared to the city, 53 % vs. 72 %. The average people per household in Melbourne Docklands are 1.9 (ABS 2013b; ABS 2014a;). One can therefore assume that the average person living in Melbourne Docklands is a young person without children that quite often lives by her or himself.

Income and education level
The people living in Melbourne Docklands are both richer and more well educated than the people living in the city. The average income is almost 50 % higher than in the city; 63 866 AUD/year (398 488 SEK) compared to 42 633 AUD/year (262 272 SEK), moreover have 75.3 % of the people living in Melbourne Docklands studied in a postsecondary school, e.g. universities, compared to 56 % in the State of Victoria (ABS 2014a; ABS 2014b).

The people in Melbourne Docklands work more than that of the people in the city of Melbourne. Close to 74 % of its people work full time and 17.6 % work part time compared to 60 % and 28.8 % in the city. Close to 63 % of the people living in Melbourne Docklands work 40 hours or more/week, while 45.5 % work the same amount of hours in the city (ABS 2013).

As seen in figure 25 it is becomes clear that although many in Melbourne Docklands works full time, it is also quite common that in a couple only one work full time while the other is working part time or not working at all. Compared to the city the most significant difference is that while in 37.7 % of the couples in Melbourne Docklands both work full time, it is only 21.8 % of the couples in the city that have two full time workers. Moreover there are much more couples in the city of Melbourne where one is working full time and one is working part time, 22.1 % vs. 13.4 %. There is however more couples in Melbourne Docklands where one works full time and the other do not work at all than in the city, 19.8 % vs. 17.3 %. Couples where both are unemployed are however

Figure 24. The age distribution in MD (ABS 2013a).

Figure 25. Employment status of couple families in Melbourne Docklands (ABS 2013a).
more than twice as common in the city than in Melbourne Docklands, 18.1 % vs. 7.4 % (ABS 2013a; ABS 2013b).

Ethnicity and cultural differences
Melbourne Docklands is more culturally diverse than the city of Melbourne. 63.4 % of the people living in Melbourne Docklands are born in another country, compared to the city where in total 36.7 % of the people are born in another country. Moreover as seen in figure 26 close to 72 % of the people living in Melbourne Docklands have at least one parent that is born abroad which can be compared with 57.9 % in the city. According to these numbers there are only at most 28.1 % of those living in the neighborhood that does not have a foreign background compared with 42.1 % in the city of Melbourne (ABS 2013a; ABS 2013b).

The housing of Melbourne Docklands
When discussing what different kind of housing that is offered in Melbourne Docklands one can, as established in the framework, discuss the units type, size and rent levels or price/market value.

Of the 2519 occupies dwellings in Melbourne Docklands 97.5 % or 2465 are apartments, flats or units while 1.8 % or 45 are semi-detached houses or town houses. The last 9 dwellings are of another kind. There are no single-family houses in Melbourne Docklands that otherwise is the most common type of dwelling in the city of Melbourne where close to 73 % are single-family houses and only 15.3 % are apartments, flats or units and 11.6 % are semi-detached houses or town houses. A majority, 61.5 %, of the people living in Melbourne Docklands rent their housing, which is quite different from the city where only 27.2 % of the inhabitants rent their housing. It is much more common in Melbourne to either own outright ones housing, 32.7 %, or to own it with a mortgage, 36.8 %. In Melbourne Docklands it is not so since only 13.8 % own outright their housing and only 22.5 % own it with a mortgage (ABS 2013a; ABS 2013b).

Although the majority living in Melbourne Docklands rent their housing, none of the rentals are public rental housing (ABS 2013a).

As seen in figure 28 a majority, 79 %, of the dwellings has either two or three rooms, three rooms being the most common with close to 54 %. Only 3.3 % of the dwellings either have one room or five rooms or more. The apartments in Melbourne Docklands are generally smaller than those in the city where close to 73 % of the dwellings has four or more rooms, however a majority of the housing in Melbourne are, as stated earlier, single-family houses that, one can assume, usually have more than three rooms (ABS 2013a; ABS 2013b).

The median rent in Melbourne Docklands is about 2180 AUD/month (13602 SEK) when the median rent in Melbourne is 1300 AUD/month (8111 SEK), making the apartments in Melbourne Docklands much more expansive in comparison (ABS 2013a; ABS 2013b). The price to buy housing in Melbourne Docklands is about 8657 AUD/m2 (54233 SEK/m2), which is about the same as one should expect to pay when buying housing in the central parts of Melbourne (around 8771 AUD/m2 or 54948 SEK/m2). However, outside the city center the house prices are around 6004 AUD/m2 or 37613 SEK/m2 (Domain 2014; Numbeo 2014).

In 2011 only 78.7 % of the dwellings in Melbourne Docklands were occupied, meaning that 21.3 % of the built dwellings were unoccupied, one of the highest percentages of the city districts in Melbourne that in total have 9 % unoccupied dwellings. Some argue that this can be due to people investing in the properties and so-called property hoarding, a problem Hong-Kong currently dealing with. With Melbourne Docklands growing in the future with several thousands apartments some argue that the neighborhood is at risk getting ghost towers, developments full of unoccupied apartments (ABS 2013a; ABS 2013b; Dow 2014).

The functions of the buildings
Melbourne Docklands has today much more people working in the neighborhood than people living there, since 39 500 people is currently working in the area. The city district is home to some of Australia’s largest companies such as ANZ, NAB and Myer and has in total over 600 000 m2 of office space (Places Victoria 2014a; CBRE 2013).

In addition to its office spaces Melbourne Docklands also have approximately 468 retailers and industries with an additional floor space of 164 080 m2 (City of Melbourne 2012). Much of the retailers and entertainment are located in the so-called Waterfront City, an area of 12.5 hectares consisting mostly of the precinct Harbour Town. In the Waterfront City there are among other things a large shopping center, the Melbourne star and industries with an additional floor space of 164 080 m2 (City of Melbourne 2012). In 2011 only 78.7 % of the dwellings in Melbourne Docklands were occupied, meaning that 21.3 % of the built dwellings were unoccupied, one of the highest percentages of the city districts in Melbourne that in total have 9 % unoccupied dwellings. Some argue that this can be due to people investing in the properties and so-called property hoarding, a problem Hong-Kong currently dealing with. With Melbourne Docklands growing in the future with several thousands apartments some argue that the neighborhood is at risk getting ghost towers, developments full of unoccupied apartments (ABS 2013a; ABS 2013b; Dow 2014).

The vast majority of the Melbourne population cannot afford to buy or rent Docklands’ housing.....while most Melbournians will visit, and many will enjoy these new waterfronts, they cannot now become an integrated part of the inner city.”


“...Melbourne Docklands are of another kind. There are no single-family houses in Melbourne Docklands that otherwise is the most common type of dwelling in the city of Melbourne where close to 73 % are single-family houses and only 15.3 % are apartments, flats or units and 11.6 % are semi-detached houses or town houses. A majority, 61.5 %, of the people living in

![Figure 26. & 27. The culture diversity in MD (ABS 2013a; ABS 2014a).](image1.png)

![Figure 28. The size of the dwellings in MD (ABS 2013a).](image2.png)
Conclusion

The social mixing and social inclusion of Melbourne Docklands

It becomes clear when reviewing the facts from above that Melbourne Docklands is not a very socially including neighborhood. The people living in there are both much more well educated and richer than those living in the state, which is needed since the housing of the area is very expensive. One can argue that the fact that the average rent is almost 70 % higher than the average rent in the city prevents people with a weaker income to move to the area and Melbourne Docklands from being a more diverse neighborhood. This fact, that the cost of living is much more expensive in Melbourne Docklands than in the city in general, is why one can argue that the cost of living in an area is the most crucial factor when creating a social mix in a neighborhood since expensive living more than anything exclude the marginalized people of the society.

Although the area does not have a socio-economic diversity it does however, have a cultural diversity. One can argue that the city of Melbourne where almost 60 % have a foreign background is quite diverse in itself but Melbourne Docklands is even more so. Moreover one need to discuss the fact that there is very few children living in Docklands, especially those between 5-14, as well as elderly people. As mentioned earlier in this thesis one can argue that these two groups of people, are people in the society that can bring life to a neighborhood at times when others are working. One can argue that these groups are therefore essential for an area’s sociability and liveability.

Another observation that one can make of Melbourne Docklands is the high percentage of unoccupied apartment, more than twice the amount of the city of Melbourne. Why there are much more unoccupied apartments in Melbourne Docklands than in the city is uncertain, but what is sure is that if Melbourne Docklands keep having such high rates of unoccupied apartment or if they get even worse, the neighborhood might not only be at risk of getting ghost towers but of becoming a ghost town in itself. Therefore one can argue that in urban renewal developments one should strive to minimize the amount of unoccupied housings, avoiding the risk of becoming a ghost town.

Moreover it is interesting to realize that there are more people, much more, that work in Melbourne Docklands than who lives there today. While not even 7 000 lived in Melbourne Docklands in 2012, close to 40 000 worked there, making it a place where people worked rather than live. The fact that there over 20 % unoccupied apartments in Melbourne Docklands does of course reduce the potential number that could have been living in the area, however even when counting that these apartment would not be empty, there would still be over four times more workers than people living in Melbourne Docklands. This is especially interesting in a city like Melbourne that had such an issue with its city center only being a workplace and not a place where people lived. Melbourne CBD that is approximately 2.4 km2 big had in 1992 only 762 residential units, a number that will in 2015 reach 26 600 after some hard work from the city. It is therefore interesting that Melbourne Docklands, a city district not that much smaller than the CBD, only have 2519 occupied apartment (3202 in total) and will by 2036 have around 9000 apartments with a potential of 17 000 inhabitants (City of Melbourne 2013). Melbourne Docklands will therefore always be a city district where people work, rather than lives and one can question if this will lead to that the neighborhood will feel as empty and useless as the CBD once did. Therefore one can argue that although it is important with a functional mix in urban renewal developments it is important to make sure that enough people live in the area to make it liveable and not just becomes a place to work and to spend the working week.

Key points to consider in URD

1. The cost of living in an area is the most crucial factor when creating a social mix in a neighborhood since expensive living (more than anything) exclude the marginalized people of the society.

2. In urban renewal developments one should strive to minimize the amount of unoccupied housings, avoiding the risk of becoming a ghost town.

3. Although it is important with a functional mix in urban renewal developments it is important to make sure that enough people live in the area to make it liveable and not just becomes a place to work and to spend the working week.

Figure 29. A common street in Melbourne Docklands; with retailers on the bottom floor and tree lines on both sides of the street.
Overall form and function

Of Melbourne Docklands

As been established in the framework, to create social sustainability a neighborhood should have a sustainable urban design. However, the city of Melbourne is not very environmentally sustainable, as can be seen in figure 30. In fact, although Melbourne is a global city with a well-educated population that has a growing consciousness about e.g. recycling and water-consumption issue, the city is becoming less environmentally sustainable. One example of the sustainability issues in Melbourne is the city’s electricity utilities that was privatized in the 1990s and uses critically unsustainable brown coal-fired power plants. These plants that primarily serves Melbourne is a major contributor to Australia’s status as one of the highest per capita greenhouse emitters in the world (James 2015). In fact 70 % of the total greenhouse gas emission in Australia comes from burning fossil fuel, mainly for electricity (Dey et al. 2007). Australia has the fourth highest ecological footprint in the world (ACF 2014a).

Sustainable urban design

Melbourne Docklands is described as a world-class sustainable development and a development project of ecologically sustainable excellence (City of Melbourne 2014d; VicUrban 2006). To ensure that Melbourne Docklands would become an ecologically sustainable development some principles were set, such as to conserve and protect natural resources, promote alternative transport opportunities and to create a healthy urban environment. The goals were i.a. to reduce the use of water, reduce the use and environmental impact of motorized vehicles and the most important issue: to reduce the energy consumption – since it emits so much greenhouse gases (VicUrban 2006). Many claim that Melbourne Docklands has succeeded to create a sustainable urban design in the area. Several of the buildings in the city district feature a range of sustainability design innovation and many have received high score in the Green Star building rating (a sustainability rating system for buildings in Australia) e.g. the library that was the first building in Australia to receive 6 Stars, the highest rating in the system (Destination Docklands 2014e; Victoria Harbour 2014). Moreover is Docklands Park collecting rainwater and stores it for later use (Destination Docklands 2014e). However, when studying the greenhouse pollution, the water use and the ecological footprint of Melbourne Docklands it becomes clear that the neighborhood in fact is much worse than both the state average and national average (ACF 2014a; ACF 2014b; ACF 2014c). In Melbourne Docklands the average greenhouse pollution per person and year is 31.63 tonnes gas, 60 % higher than the average of the state of Victoria and 56 % higher than the average...
of the nation (ACF 2014a). The average water usage in Melbourne Docklands per person and year is 960 000 liter, 28 % higher than the average of the state of Victoria and almost 30 % higher than the average of the nation (ACF 2014b). Furthermore is the average ecological footprint in Melbourne Docklands 8.19 hectares/persons/year, 36 % higher than the average ecological footprint in Melbourne Docklands has not succeeded in reaching its environmental goals and is in fact worse than the state and the nation.

One underlying cause to the negative results of Melbourne Docklands can be its many lone person households and small households as well as its wealthier households. Since in average, lone person households and small households, of whom Melbourne Docklands have plentiful, have greater environmental impacts than larger households. Moreover, does households with higher incomes e.g. tend to waste more food than those on lower incomes (Dey et al. 2007).

The scale and structure
As can be seen on the map over Melbourne Docklands on pages 54-55, the neighborhood consists of few but rather large buildings. Several of these buildings are residential towers that are over 30 stories tall, and many are between 10-20 stories. There are few residential buildings that are low; the 2-3 stories town houses located in the area’s southwest part, south of the Yarra River are some of the few ones. The tallest building in the city district will be Tower 4D at Collins square that just started being constructed, with 145 meter or approximately 40 stories (Places Victoria 2014c).

Most of major roads in Melbourne Docklands are around 25-30 meters wide, with the Harbour Esplanade 50 meters wide when it is as widest and about 40 meters all the way through the city district. However the smaller roads are about 10 meters wide (Google 2014g).

The local environment
When defining whether the local environment in Melbourne Docklands is enjoyable and walkable there is a few things one needs to consider: the complexity of the place, its enclosure and the human scale.

The complexity of Melbourne Docklands
Streets that are high in complexity or variety provides more interesting things to look at such as the buildings varying shapes, sizes, materials and colors, as well as street furniture & trees and the presence & activity of people (Ewing & Handy 2009).

From the site visits that I did in Melbourne Docklands it soon became clear that much of the city district is planned for people driving rather than walking. Because, even thought there are plenty of walkways in the area and it is easy to walk through, many areas lacks complexity and details. The buildings are large and although they are different from each other, they do not have that many details that only people walking by can enjoy. In fact most buildings in Melbourne Docklands works best from a distance. There is not much street furniture in the streets that felt empty during many of my site visits. There is, however, an abundant of street trees in the city district and most of the streets have at least two tree lines.

The enclosure of Melbourne Docklands
According to Jacobs (1993) people react positive to fixed boundaries in urban spaces and associate it as something safe, defined and memorable. Outdoor spaces are shaped and defined by the area’s vertical elements that interrupt the viewers’ lines of sight and if they do so decisively the out-door spaces can seem room-like. The buildings becomes the walls, the street and sidewalks the floor and the sky the ceiling (Ewing & Handy 2009). According to Jacobs (1993) the proportion of buildings height to street width should be at least 0.5. Others designers argue that the proportions should be between 1.5 and 0.17. However, having rows of trees can help define space both vertically and horizontally (Ewing & Handy 2009).

If calculating that each floor in a building is approximately 3 meters high, most of the buildings in Melbourne Docklands are between 30-60 meters high. However there are also buildings that are around 100 meters high as well as the townhouses of about 6-9 meters. If then calculating with the average wide of the roads of 25 meters, and the average height of 45 meters the proportion is 1.8. If one instead calculates with a height of 30 meters the result is 1.2 and it is 2.4 with a height of 60 meters. If ones does the same calculating but with the smaller roads of 10 meters the result for the 30 meters high houses is 3, for the 45 meters high houses it is 4.5 and for does with a height of 60 meters it is 6. The townhouses have a ratio of 0.9 with the smaller roads in their area, while the houses with the height of 100 meters get a ratio of 4 with the larger roads and 10 with the smaller roads.

In conclusion it is only in areas where the buildings are lower, about 10 stories high and lower, that the local environment of Melbourne Docklands is enclosed. However, the many street trees probably help to enclose the areas within the neighborhood.

The human scale of Melbourne Docklands
When defining what the human scale Alexander, Ishikawa and Silverstein (1977) argues that any building above four floors is out of the human scale when Lennard & Lennard (1987) set the limit at six floors. However, Arnold (1993) argues that street trees can moderate the scale of both high buildings and wide streets. He argues that any street wider than 12 meters need to have street trees to achieve a human scale in the streetscape.

According to this the only area in Melbourne Docklands with a human scale is the area with the townhouses, which can be seen in the diagram beneath is a rather small area of the neighborhood.

Balance between private- & public spaces
When talking with the people living in Melbourne Docklands it became clear that there is a clear division between private- and public spaces in the city district. However, it also became clear to me that, much like in the CBD in Melbourne there is not much private space in form of e.g. courtyards in Melbourne Docklands and those that do exist are spread thin over the high number of residence living in each building.
Conclusion

The overall form and function of Melbourne Docklands

It is regrettable how unsustainable Melbourne Docklands is environmentally, that the neighborhood that strived to become better than the rest of the city and state ended up being worse. This coincides with what was stated earlier, that the city of Melbourne is getting less environmentally sustainable and it is tragic for a city of world-class, a city that has been called the most liveable in the world. Since its been established in the framework that having a sustainable urban design is a contributing factor in creating social sustainability it is regrettable that Melbourne Docklands have failed with this. The dimensions of sustainability are very much interconnected and although this thesis focus on the social issues one can still argue that the failure with making Melbourne Docklands an environmentally sustainable neighborhood sets a bad precedent for coming urban renewal developments. In general one can claim that large urban renewal developments have the power to greatly impact how the issue of sustainability is handled in a city and might inspire to improve its situation.

Moreover one can discuss how so many buildings in Melbourne Docklands ended up exceeding the height limit of 60 meters in the legislative framework from 1995. There are arguments both for and against tall buildings in a neighborhood, however, when planning an area it is important to consider the visual effect and feeling that the buildings have for the entire neighborhood. In the case of Melbourne Docklands, the neighborhood was not planned in an holistic way, rather it was left for the developers to gradually plan it. This has resulted in many tall buildings (since this generate more profit), that at places overshadows the open spaces of Melbourne Docklands and that not always work that well together. Hence one can argue that when planning an urban renewal development one should make an general, holistic plan over the layout of the neighborhood to ensure positive visual effects and a general good feeling throughout the neighborhood.

One can argue that, due to its many high buildings and wide roads, Melbourne Docklands is not a city district with a human scale. In fact Melbourne Docklands seems more planned for people driving rather than walking. It is only behind the many roads e.g. along the waterfront that the cars no longer are in focus. This is not uncommon from what I have learned from Melbourne and Australia living here, the car and driving is important for many Australians and Melbournians and I am sure that Melbourne Docklands is no exception. However, one can argue that an area planned for driving through is not the best area to walk in, that the local environment is not as enjoyable and liveable. Therefore one can argue that in urban renewal developments one should consider the human scale so that the local environment can be as walkable, enjoyable and liveable as possible.

Key points to consider in URD

1. Large urban renewal developments have the power to greatly impact how the issue of sustainability is handled in a city and might inspire to improve its situation.

2. When planning an urban renewal development one should make an general, holistic plan over the layout of the neighborhood to ensure positive visual effects and a general good feeling throughout the neighborhood.

3. In urban renewal developments one should consider the human scale so that the local environment can be as walkable, enjoyable and liveable as possible.

Figure 32. The stadium in Melbourne Docklands with the neighborhood’s tall buildings adjacent, in the background the tall buildings of Melbourne CBD.
Social networks and stability
Of Melbourne Docklands

The stability of Melbourne Docklands
When studying the stability of Melbourne Docklands, one need to study the turnover (in- and outflow) within the community as established in the framework, since if the change is to rapid it can be seen as a threat and can interrupt the feeling of a community (Dempsey et. al. 2009; Eriksson 2009).

In 2011 54% of those living in Melbourne Docklands had lived there for the last year, while only 15% had lived there for the last five years, 30% of those moving to the neighborhood moved from within the state and 24% from overseas. In the city 80% had lived on the same address for the last year and 57% for the last five years. However in the city center 54% had lived on the same address for the last year and only 18% for the last five years (ABS 2013a; ABS 2013b; ABS 2013c). Hence one can argue that compared to the city, Melbourne Docklands is much less stable. However compared to the city center Melbourne Docklands is almost as stable.

Community activities and centers
In Melbourne Docklands there is a building called the Hub that has established itself as a center for community activities in the neighborhood. The Hub is located along Harbour Esplanade next to Parkland and have i.a. meeting space available for use by e.g. community groups, residents and organization. The hub also offers free Internet, playgroups, story times session, library services and sport- and recreational equipment (Melbourne Playgrounds 2014). Activities that are organized at the Hub are i.a. lunchtime table tennis sessions, Pilates for mums, gym classes for kids and fine line drawing and botanical art classes (Docklands News 2014).

The playgroups in the Hub offer i.a. a place for children to develop their social skills and to meet other children, and time for the parents to create social networks and a sense of community involvement and belonging (City of Melbourne 2014h). The playgroups will in 2015 move from the Hub to the new Docklands Family Services and Community Boating club that will be located next to the main library in Melbourne Docklands; the Library at the Dock (City of Melbourne 2014a; City of Melbourne 2014g). The library is planned to become the social heart of Melbourne Docklands and a public living room and aims to be more than a typical library and have i.a. a performance space, a technology & media hub, reading lounges, community meeting rooms, heritage & art exhibitions and quiet study areas (Victoria Harbour 2014).

The safety of the CBD & Melbourne Docklands
Melbourne CBD is, according to statistics, the most dangerous place in Victoria where an assault is taken place every five hours, a sex crime every five hours, a robbery three times a week, an abduction more than once in a month and a violent death or attempted murder every three months. This, some believe, is the price of having a 24-hour city and the cost of transforming the city into a vibrant hub of the city of Melbourne that draws close to 900 000 people to the city center every day.

“The CBD has become an unsafe place...”
Citation by Rob Moddie in an article by Chris Vedelago et. al. (2014).
However, law-enforcement authorities and the state government believe that with aggressive policing and tough new laws the crime rates will go down. The fact that new statistics has shown a decrease of crimes in the past year, they claim, is because of the significant numbers of police in the streets and the 63 CCTV cameras that has been installed all over the central city of Melbourne (Vedelago et. al. 2014).

Melbourne Docklands is not as unsafe as the CBD in Melbourne, however, it is arguable not safe either. During the last year 113 violent crimes were reported in the neighborhood e.g. one homicide, five rape cases and six cases of sexual assault. Melbourne Docklands was with this statistics one of the worse neighborhoods to live in the city of Melbourne when it comes to safety (Vedelago et. al. 2014). Melbourne Docklands has also experience a crime wave of break-ins, attempted break-ins and theft this year, which is why the neighborhood have gotten more CCTV cameras installed this year (Docklands News 2014a; Docklands News 2014b). Melbourne Docklands now has nine CCTV cameras, which are surveillance cameras that promote the city safety. The cameras are linked to a control centrum that is staffed 24 hours a day and operates in areas where anti-social behavior or criminal activities are more likely to occur (City of Melbourne 2014i). According to the Crime Prevention Minister Edward O’Donohue these cameras will make a big difference in preventing crimes in Docklands and in the CBD. He states: “They will support a safer CBD and Docklands for everyone who works, lives, trades and visits our great city.” (Docklands News 2014b).

The general opinion of Melbourne Docklands
Most of the people that I have meet in Melbourne have had something to say about the Docklands. At the University of Melbourne many seem to have the opinion that the Melbourne Docklands urban renewal project has not been successful. In fact, they asked us, the new master students in architecture, landscape architecture, urban planning and urban design to identify the issues with Melbourne Docklands as our first task in our master education. Many came to the conclusion that it was windy, not green enough and especially, that it lacked people, life and a soul.

According to a poll that was done in one of the largest new papers in Melbourne, The Age, 92 % of the 10 572 people who had answered did not find Melbourne Docklands to be a successful development. This poll was attached to an article where an important businessman in Melbourne threatened to remove his business from Melbourne Docklands due the city district’s lack of a soul. In the comments that follow the article one could read comments as such: “What a joke Docklands is. No social housing. High rise buildings with no medium density dwellings. You can tell developers had all the say in the design. All about maximizing profit with no care for the future”, “Docklands needs a lot more colour, instead of the hideous grey concrete jungle, the trees even look exhausted. It needs a few parks.” and “Docklands lacks the personality of the CBD, the hidden laneways, iconic coffee shops and some graffiti. It’s too sterile” (Dowling 2011).

However, when doing the site visits in Melbourne Docklands, the people that I talked to were all, in general, positive about the city district. Some were very positive and loved it. Others recognized some issues but were positive that these things could be dealt with. There was only really one person of nine that was in general negative about Melbourne Docklands. Maybe it is like one of the persons told me, that it takes time to find Melbourne Docklands but once you do – you will love it.
Conclusion
The stability and social networks of Melbourne Docklands

Melbourne Docklands is a very young city district; in fact much is still left to develop in the area. One can argue that the area might stabilize with time, and that the area is not enough developed to be able to study its stability yet. However, one can also argue since its statistic are similar to the one of Melbourne city center, an area (thought it still is growing) that have been established for some time, that the stability of Melbourne Docklands will not get any better in the foreseeing future.

When studying the crime rates of Melbourne Docklands one finds that being close to the city’s CBD is not always a good thing. The very high crime rates of the CBD might not be found in Melbourne Docklands, however, the city district have its share of crimes – more than would be preferred. One can argue that this might be due to the area’s close proximity to the violent CBD of Melbourne. If the CCTV cameras will help to reduce the crimes in Melbourne Docklands remains to be seen, they do seemed to have helped in the CBD somewhat at least.

One thing that is for sure is that Melbourne Docklands has a well-developed community center that will be even more developed in the near future. It is very important in a neighborhood to have a place to gather and to meet new people, a place to create social networks. In fact one can argue that one should consider in urban renewal developments that a well-established community center is the heart of a neighborhood.

Finally there is a need to discuss the general opinion of Melbourne Docklands. Before doing the site visits I was sure that this opinion in general was negative, however, the opinion of the people in Melbourne Docklands was, at most of the time, the complete opposite. They would tell you about the neighborhood i.a. as being green, quiet and with a great community feeling. Maybe it is a neighborhood that one needs to live in to really understand the magic. The fact that strong forces such as the faculty of design at the University of Melbourne and famous businessmen have given the city district such hard critique might also color the opinion of people – especially of those who have never visit the area. Nevertheless, one thing is apparent; that many seem to talk about the soul of the neighborhood and mainly that it is lacking in Melbourne Docklands.

For me the fact that Melbourne Docklands lacks a soul depends on two main things. First it is because the neighborhood, for the most part, lacks a sense of place and identity. This might be due to the fact that the neighborhood has too large of a scale, is more planned for people driving than walking and was not planned holistic. Moreover I believe that it is due because there is a lack of people moving around in the area, which makes the neighborhood less likeable, less liveable and less safe. All of these things are intertwined and depends on each other. A neighborhood with a sense of place and identity might attract more people, while a large number of people in a neighborhood might help create a sense of place and identity to it. Hence one could argue that the creation of a soul in a neighborhood depends on several different things, however, many can be accomplished with a careful and proficient planning.

Key points to consider in URD

1. One should consider in urban renewal developments that a well-established community center is the heart of a neighborhood.

2. The creation of a soul in a neighborhood depends on several different things, however, many can be accomplished with a careful and proficient planning.

Figure 34. A floating garden in the Yarra River close to Point Park, in the background - the library at the Dock.
The voice of people
A summary of the dialogues and site visits of Melbourne Docklands

Summary of the dialogues
It turned out to be quite difficult to find people living in Melbourne Docklands to have dialogues with. It was first on my sixth try that I found a woman living in the city district, a 40-year-old pregnant woman going for a short walk since her husband had come home early and could take care of their two-year-old son. They had lived in Melbourne Docklands for the last four years but were planning to move from the area in a year or so because they wanted a house with a backyard for the kids to play in. She explained to me that few families stay in Docklands once they have gotten pregnant, that most move from the area within two years from that they gotten words of the pregnancy. She said it might be due to the parents being afraid for their children climbing over the rails of the balconies and falling down. She told me that she loves the area though, its environment, the fact that it is so walkable, quite and its strong community feeling. The only thing she really did not like about Melbourne Docklands is the lack of a school and when taking about the social mix of the area she mentioned that she thinks there is almost no school children living in the area. Moreover, she said that it takes time for people to find their way to Melbourne Docklands, her included, but that they will love it when they do.

I talked to a 31-year-old man from Hong Kong that lived in Melbourne Docklands for a month when he was in Australia on a Work- and Holiday Visa. He had returned to Melbourne and the Docklands to thank the site where he started his career. He told me that although he loves Melbourne Docklands and especially its art, he would not live in the neighborhood if he were to return to Melbourne, mostly because he found it to be too expensive.

I also ended up talking to two workers in Melbourne Docklands, one who was a 35-year-old man who had worked at the ANZ bank for the last five years. He did not think that Melbourne Docklands had become a part of the city – that it is isolated. He also said that he finds the city district's restaurants and cafés to be too expensive and would prefer working in the city. He said that he thought that many of the people he worked with would to. Moreover, he said that there is a lack of life in Melbourne Docklands and that it is windy. He also said he finds the local environment to be dull and grey and not all that green. He also missed having a good gym close by and a place to do yoga before and after work.

The other worker I talked to, a 40-year-old woman, was visiting the area with her family to eat at their favorite restaurant at the Melbourne Star. She had worked in Melbourne Docklands at NAB

“It is a bit expensive actually.
It is a nice place though.”
31-year-old man visiting from Hong Kong, that previously lived in Docklands.

“The only thing that it is missing is a school...they usually say that in Docklands as soon as you fall pregnant - in two years you’re gone”
40-year-old pregnant woman living in Docklands for the past four years - planning to move from the area within the next year.

“They missed a lot of opportunities”
35-year-old man working for the past five years at ANZ in Docklands.
“There were lots of people on my tram and I noticed when I went left to the water they all went right to the shopping center”

67-year-old woman visiting from London.

for the last year and she saw a lot of opportunities in the neighborhood. Because, although she did not think it is green enough today she thought it might will become greener when it is more developed. She thought that it would be great if they could arrange more activities in Melbourne Docklands, especially for families. Like the other worker she also missed activities such as yoga, but she saw an opportunity for it to be developed with time in the neighborhood. She believed that there is a great mix of people in Melbourne Docklands. She also said that she is planning to have an apartment in the city to come up to when she has retired since she and her family then primarily will live in their country side house, and was now considering buying within Docklands.

There were a lot of people visiting Melbourne Docklands that I got an opportunity to talk to. There was a 67-year-old woman visiting from London that was surprised of the quietness of the neighborhood. She had visited the area ten years ago and thought that they have done a good job. She especially liked the lure of the water of the area and how the area is landscaped. Another woman, a 27-year-old single mom was visiting from out of the state with her son and her mother. They had come to Melbourne Docklands to ride the Circle Train and had stopped to play in the playground at Docklands Park. The mother did not think that much of the playground, she found it rather boring, but her son loved to play there. They had been in Melbourne Docklands a couple times before but had not been around that much. She had not heard anything but great reviews about Melbourne Docklands and liked the atmosphere of the neighborhood. She said that she finds that the people are less stressed than in the city center and that it is possible to get a smile from the people in Melbourne Docklands. If she would have to move to Melbourne, she would live in Docklands, she stated, since it is much nicer than some other places in the city.

During my last days of interviewing I found some more people living in Melbourne Docklands to talk to. One was a 35-year-old man originally from India who was barbequing with his family. He also worked in the area with IT and said that he really liked living in Melbourne Docklands and said that he finds it to be very green and quiet. He especially liked the courtyard of his building and the Docklands Park.

I also talked to a 62-year-old man living in the neighborhood who was working with constructions. Although he said that he also likes living in the area he thought that it could be greener, especially along the Harbor esplanade. He thought it seemed quite natural to have a park there instead of so much hard space. He was a bit worried about how much more people that will be moving to the area in the near future and was expecting the it to become more and more busy.

“I think that a lot of businesses shut down because there were not enough people coming to the area”

40-year-old woman working for the past year at NAB in Docklands.

Summary of the site visits
Most of the sites that I visited were quite empty of people. Only at three of the site visits, the Docklands Park and a seating area along Victoria Harbour at a Saturday evening and Harbour Town, the shopping center, in a Thursday afternoon, I found to have a higher people density. At the other six site visits there were quite few people around and at two site visits there were next to no people there at all.

The activities that the people of Melbourne Docklands were doing were mainly moving around: either walking, running or biking through or pass the areas. There was not that many people pausing in the areas, but those who did mainly seemed to be tourists, viewing the art, taking photographs etc. At most of the site visits the restaurants, cafés and bars that I encountered seemed to be either empty, closed or with very few customers. There was also quite a lot of traffic flowing through Melbourne Docklands – especially on the Harbour Esplanade.

There were some exceptions to this, mainly during the Saturday evening when many people where moving around and i.a. doing sports activities, barbequing and generally taking it slower. There were also more people and activities in Harbour Town – the shopping center, people perhaps doing their Christmas shopping.

“[the project] is almost successful, it is getting there”

40-year-old woman working for the past year at NAB in Docklands.

The impressions that I got was that the weather was never really bad, however, in Melbourne temperatures under 20 C° are considered being quite cold and six of the site visits had temperatures under 20 C°. It was also quite windy at many of these site visits. It was only one of the windy site visits that had a higher people density, and it was the site visit that was done in Harbour Town. Therefore one can argue that it could be the weather causing the low people density at the other five site visits, or at least that it could have played a part in it.

However, one can also argue that it might be due to the demography of Melbourne Docklands that the neighborhood felt so empty during a Tuesday at lunchtime and a Thursday afternoon. Since the area has few children and elderlies there is not that many people living in Melbourne Docklands that are not working during the day. Much like London Docklands one can argue that had the demography been better mixed this might not be the case since different social groups in the society uses the neighborhood in different ways.

My general feeling that I take from the site visits in Melbourne Docklands also coincide with what the 67-year-old woman visiting from London said:

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My general feeling that I take from the site visits in Melbourne Docklands also coincide with what the 67-year-old woman visiting from London said:

“I am surprised of how quite it is”

67-year-old woman visiting from London.
Conclusion
Of the dialogues and the site visits in Melbourne Docklands

In general the opinion of the people in Melbourne Docklands seems to be positive. Many things in the city district was brought up as positive factors making it a nice place to live in, such as it being quiet and calm, its great location – both to the city and to the water, its art and its strong community feeling. The opinions were split about the amount of green areas where some thought that it was much green areas in the Melbourne while some thought it was to few. It was interesting that the pregnant woman found that the lack of a school was Melbourne Docklands greatest flaw, while also saying that she barely ever see school children in the neighborhood and that she and her family will move from the area before her two-year-old son will come of school age. Moreover, the man visiting from Hong Kong thought that Melbourne Docklands was too expensive to live in – and it actually being one of the reasons why he moved from the area after only one month.

One can also discuss how that both of the workers that where interviewed had some negative thoughts about the area, while one of them thought that the situation might get improved with time. The lack of a gym was something they both missed and therefore one can argue that it is important to realize in urban renewal development that some social services are important not only for the people living in the area but also for those working in the area.

Another complaint that both of the workers had were that Melbourne Docklands can, at times, be very windy. This was something that I also experienced at the site visits, in fact it was more common that it was windy during the site visits than not. It also became apparent that some sites were much more exposed by the wind than others, e.g. the open space at Melbourne city marina and Point Park while e.g. the playground at Docklands Park was much more protected. The difference between the playground and the other areas was that while the playground had both trees and artificial hills surrounding the area, the other areas had nothing to protect them from the wind e.g. trees. One can therefore argue that if possible it is important to ensure that the local environment, that contribute to the social life of a neighborhood, have an enjoyable climate and i.a. trying to minimize the impact of the wind.

Finally one can discuss the fact that during most of the site visits few people were observed in the areas. The weather and wind might as previously stated, contribute to this fact. However, as this situation has previously been observed in the London Docklands it is interesting to realizing that both London Docklands and Melbourne Docklands has a poor social mix and especially lack children and elders. It feels quite natural to therefore argue that in urban renewal one should realize that the lack of a mixed demography could lead to a city district that is empty and life-less at times, why one always should strive to create a society with a mixed demography.

Key points to consider in URD

1. It is important to realize in urban renewal development that some social services are important not only for the people living in the area, but also for those working in the area.

2. If possible it is important to ensure that the local environment, that contribute to the social life of a neighborhood, have an enjoyable climate and i.a. trying to minimize the impact of the wind.

3. In urban renewal one should realize that the lack of a mixed demography could lead to a city district that is empty and life-less at times, why one always should strive to create a society with a mixed demography.

Figure 35. The residential towers on the South side of the Yarra River in Melbourne Docklands, all more than 25 storeys tall.
Conclusion of the chapter
Melbourne Docklands: A case study

It really was a grand idea; that very first idea of what Melbourne Docklands could become. The neighborhood that is being developed is very different from this idea. The area has today very few building below ten stories, only two out of the five roads from the CBD was extended into the area and water taxis are still to be introduced. Melbourne Docklands that, in the very beginning, was going to reconnect the inner city with the working class suburbs have instead simply become an extension of the very expensive CBD. A neighborhood that was planned to become more socially sustainable has, arguably, failed in that aspect as well.

With its rents so much higher than compared with the city in total Melbourne Dockland cannot be called anything else than socially exclusive. The marginalized people of Melbourne would find it very hard to afford the housing there and the area’s lack of social housing aggravates the situation even further.

Melbourne Docklands has, however, more issues than its poor socio-economic situation. Its lack of a school, poor social mix according to age, few public green areas, high percentage of unoccupied apartments, poor environmental sustainability, high turnover rates and high crime rates are some of the worst issues that the neighborhood faces today. Moreover one can also mention how the bike- and walk network is poorly connected with the surrounding networks, how some areas within the neighborhood are very windy and the fact that quite a few important people in Melbourne have been openly critical about the development.

Moreover, it is interesting for me how Melbourne Docklands a project initiated as a part of the attempts to revive Melbourne’s city center, ended up being more of a work district than a place to live in. It is interesting since this was the real issue with the city center and how, therefore, the city planned this new city district in the same way. One can argue that the city should have realized that the same issue could occur in Melbourne Docklands as it once did in the CBD, that there would not be enough people living in the neighborhood to make it feel alive at all times during the day.

There are however, several good things about Melbourne Docklands as well such as an abundant of shopping possibilities, restaurants, cafés and pubs, a good bike- and walk network within the neighborhood, a relatively good public system, a very high culturally diversity and a very well developed cultural center and library arranging plentiful of community activities. Many of those living in, working in or visiting Melbourne Docklands speak of its positive factors making it a nice place to live in, such as it being quiet and calm, its great location – both to the city and to the water, its art and its strong community feeling. Many seem to love living in Melbourne Docklands.

It is, however, my belief that Melbourne Docklands could have become so much more, a socially inclusive neighborhood that could have reconnected the city center with the adjacent working class suburbs and made a true different in the socioeconomic gap of the city of Melbourne. It could have become a neighborhood for people to live in, adjusted for them rather than the cars and their drivers - a walkable, enjoyable and livable neighborhood. A neighborhood filled with life, where people of all backgrounds, economic situations and ages could live. A neighborhood its people would be proud of instead of ashamed. This is my own idea of what Melbourne Docklands could and should have become.

Figure 36. The Webb Bridge, a bicycle- and walk bridge going over Yarra River and connecting Melbourne Docklands with Southbanks.
In this chapter the urban renewal project Hammarby Sjöstad is studied and discussed. A contextual background is given to the project that offers an understanding of why and under which circumstances the project was started. Moreover is the approach and planning of the project discussed as its participating actors. The first part of the case study of Hammarby Sjöstad ends with a synoptically map over the area of the project.

In the second part of this chapter social sustainability is studied and discussed in Hammarby Sjöstad using the framework established in theoretical background. This discussion results in a number of key points to consider when working with urban renewal projects. The chapter ends in a conclusion and some final thoughts of the social sustainability of Hammarby Sjöstad.
Contextual background

The contextual background offers a greater understanding of the background situation of the urban renewal project Hammarby Sjöstad. It offers an understanding of why and under which circumstances the project was started and a general description of both Sweden and Stockholm.

One should note that in this chapter, with the city of Stockholm or Stockholm this author is referring to the municipality of Stockholm, if nothing else is stated.

Sweden - the country in the north

Sweden, officially the Kingdom of Sweden, is one of the largest countries in Europe (NE 2014b) and is situated in the north of Europe, east of Norway, west of Finland and northeast of Denmark (Google 2014b). Sweden consists of 21 counties of which Stockholm County has the largest population and is the densest (Dahlbäck 2014). Stockholm is both the largest city and the capital of Sweden (Erlandsson 2014). In 1995 Sweden joined the European Union (EU) after a referendum and a slight majority voted for joining the EU (Larsson & Sannerstedt 2014).

The distribution of the close to 9.7 million inhabitants (Statistiska centralbyrån (SCB) 2014b) in Sweden today is extremely allocated, 80 % of the Swedes live south of Uppsala and 50 % live less than 30 km from the coast. The country is also strongly urbanized with about 83 % of its inhabitants living in urban areas. However, some of the smaller urban areas, especially those in sparsely populated areas, have a problem of being depopulated (Mårtensson 2014c). Around 15 % of the Swedish inhabitants are born in another country (South China Morning Post (SCMP) 2013), the percentage of immigrants being the largest in Stockholm County (30 %). Many of the immigrants are refugees e.g. from the Middle East and the horn of Africa (Mårtensson 2014c), but since the unrest in Syria the Syrian residents comprise the largest group of immigrants coming to Sweden (SCB 2014b).

Figure 37. Short facts about Sweden. Reference: Google 2014b; NE 2014f; SCB 2014c; Bächtold 2013.
Maps over Sweden, Stockholm & HS

In this sequence an understanding is given to where Hammarby sjöstad is situated in Sweden, Stockholm in large as well in relation to the central part of Stockholm. Moreover, on pages 88-89 there is also a synoptical map over Hammarby Sjöstad, describing the area.

Figure 38. Map of the location of Sweden (in light blue), with the country’s largest cities marked out including the city of Stockholm.

Figure 39. Map of the city of Stockholm and its extent and its major roads. Some of the city’s different districts are marked as well as the central part of Stockholm.

Figure 40. Map of the central part of the city of Stockholm, marking larger green areas, institutions and city districts as well as the urban renewal project of Hammarby Sjöstad.

Legend
- Open space/paved area
- Gamla stan
- Educational area
- Waterways
- Green or recreational area
- Industry area
- Retail area
- Motorway/Primary road/Secondary road/
- Smaller street/Railroad/Tram rail/Ferry line
Stockholm; the first green capital of Europe

The city of Stockholm is located on the south-central east coast of Sweden where the outlet of Mälaren, the third biggest fresh-water lake in Sweden, meet Saltsjön – a bay of the Baltic sea that extends from Stockholm archipelago into its inner city (Google 2014b). The city is made up by 14 islands that are interconnected with 57 bridges (Stockholm Stad 2014d), and the city center of Stockholm is known for its constant proximity to water (NE 2014d). The metropolitan Stockholm consists of 26 municipalities that each are responsible for public services such as preschools, schools, social services and elderly care in their area (Länstyrelsen Stockholm 2014; Sveriges Kommuner och Landsting 2014). Stockholm has a humid continental climate with mild to warm summers and cold winters. Due to its northern location Stockholm only receive 6 hours of sun per day during wintertime but receive 18 hours of sun per day during the summer (Wordtravels 2014).

In the 17th century Stockholm became an international metropolis and its population grew tremendously. However due to the plague, war and poor harvests the population did not grow much in the 18th century and in the beginning of the 19th century the population of Stockholm were no more than 75,000 people (Lilja 2014). In the beginning of the 19th century Stockholm was one of the unhealthiest cities in Europe. The situation was greatly improved during the 19th century due to the immense changes of the infrastructure and healthcare system in the city as well the start of modern urban planning. From the middle of the 19th century the population of Stockholm started to grow again (Nilsson 2014), and still continuous today when the population exceeds 2 million in the metropolitan area (Stockholm Stad 2014a).

The modern city of Stockholm is known for being a green city with its parks and nature reserve covering 40 % of the city’s area which result in that 90 % of the inhabitants of Stockholm live within 300 meters of a green area (European Union (EU) 2010). Stockholm has been called a city at the forefront of environmental thinking and due to this it received the first European Green Capital Award in 2010. The award seeks to recognize, promote and reward a city’s accomplishment when it comes to environmental thinking and goes to a city that constantly have high environmental standards and is committed to further develop it and also serve as a role model for other cities (EU 2010).

Stockholm does, nevertheless, have issues that also greatly define the city today. One of the greater issues of Stockholm is the segregation between the refugees and immigrants coming to Sweden and the rich educated Swedes living in the central parts of Stockholm (Öjmar 2010). In parts of Stockholm, often in the large residential areas built in the 1970s, the percentages of inhabitants with foreign background are close to or exceed 90 %. This can be compared with the inner city residential areas that have less than 20 % inhabitants with foreign background (Stockholm Stad 2013a). The last years several riots have taken place in many of the most segregated areas and although it is not always clear why, the high rates of youth unemployment and the harsh social and economic situation in the areas might suggested where the frustration is coming from. Some argue that one of the reasons to the social polarization in Stockholm is the change in the housing policies. According to Svenska Dagbladet (SvD) (2013a) the conversion of rental units to condominiums in the inner city and the fact that a market-driven force now controls the building of new housing are factors that lead to residential areas without a socioeconomic mix

Moreover, the housing shortage in Stockholm is severe. The region is one of the fastest growing in Europe and one third of the labor as well as one third of the country’s growth is located in Stockholm (Åkerberg 2014). However, the building of new housing is not keeping up with the increasing number of people that moves to the capital, and in 2012, 122,000 units of housing were considering missing in Stockholm, hence the worst housing shortage in Stockholm in modern time (Rankka & Andersson 2014).

In the last decades different political forces have tried to improve the segregation in Stockholm (Svd 2013a) as well as the housing shortage in the city. For the housing shortage there is really just one solution, more housing need to be created (Svd 2013b). The issue with segregation is much more complex, yet some argue that it is possible to deal with it through physical planning. They argue that the old segregated areas should be renovated and be supplemented with new and desirable housing and that the inner city areas should be supplemented with non-profit rental units to create a better mix of people in both the areas (Öjmar 2010).

Hence the solution of both these major issues in Stockholm is building new housing, although it needs to be done in a manner that enables people with socioeconomically differences to live in the same neighborhood.

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**Figure 41. Short facts about Stockholm. Referencer: NE 2014d; NE 2014e; Lilja 2014; SCB 2014a.**

**Area**

187 km² in the city of Stockholm  
6,526 km² in the greater Stockholm

**Population**

897,700 in the city of Stockholm,  
2,165,042 in the greater Stockholm (2014)

**Population density**

4,800 inhabitants/km² in the city of Stockholm,  
5,31 inhabitants/km² in the greater Stockholm.

**Founded**

Late 13th century

**Cars/capita**

0.36 in the city of Stockholm and  
0.39 in the greater Stockholm

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**Figure 42. The city center of Stockholm, the capital of Sweden.**
Approaching the project

In this section the background to the urban renewal project Hammarby Sjöstad is presented and how the project was approached and planned and the different solutions that were given in the process. Moreover are the participating actors in the project discussed.

The Lake City of Hammarby

The lake called Hammarby Sjö was once a part of a comprehensive and navigable lake system that could take ships from the Baltic Sea to the lake Mälaren. In the 13th century, however, due to the isostatic uplift of the land (a remnant from the last ice age), the lakes system became no longer navigable and the only remaining connection between the Baltic Sea and Mälaren was by Stadsholmen, the island in the very center of Stockholm. The lake was at that time delimited north by the residential area called Södermalm and in south by rural settings and the estate from which it had gotten its name Hammarby (meaning cliff, rocky land, waste land) (Ericson & Bodén 2002).

Södermalm and the area around the lake Hammarby were long used to build factories that were not wanted on Stadsholmen e.g. a hospital that was built in the area in the 16th century. In the 17th century the facilities built in the area started becoming more industrialized, most of it was water-consuming textile production that characterized the area. Around the factories people started building houses and taverns and it gradually become more and more populated (Ericson & Bodén 2002). In the middle of the 19th century the need for another navigable waterway in Stockholm became apparent and in 1914, after 70 years of planning, the lake Hammarby was lowered with 5 meters and supplemented with sea locks and canals. The project that was called Hammarbyleden was at that time the city's biggest infrastructure project so far. However, due to another canal project in Södertälje – that ended up handling most of the heavier shipping to Mälaren, Hammarbyleden never came to have the commercial meaning it was meant to have. Because of this its harbor- and industrial areas were already started to be phased-out in the 1960s (Inghe-Hagström 2002).

Yet it would take until the early 1990s before the idea of taking a large and comprehensive approach when renewing the area around the lake Hammarby (Inghe-Hagström 2002). The idea was intriguing for the city of Stockholm that needed to build more residential areas and that owned much of the land that had lost most of its previous use as an industrial harbor. However, there were many obstacles as well, e.g. heavy opponents to the complete removal of the industries in the area and the area's polluted soil. Despite this the first steps were taken to ensure the renewal of the project called Hammarby Sjöstad or Hammarby Lake City and in 1991 the first master plan was presented (Inghe-Hagström 2002).

The idea of Hammarby Sjöstad

That first master plan of Hammarby Sjöstad had a vision of a city expansion that would be a new kind of collaboration between the traditional city, modern qualities and the site's unique circumstances. It enabled an expansion of a 2.5 km² big area with 8 500 units and 350 000 m² of business space. The plan was schematic and produced under a short period of time and was focused upon the design of the public spaces in the area. It also gave a proposal to the expansion and rerouting of some of the major roads adjacent to the area, the extension of a tramway and new kind of block housing after contemporary examples in Berlin (Inghe-Hagström 2002).

Since the area of Hammarby Sjöstad is located on the edge of Stockholm municipality and close to Nacka municipality it became apparent that the two municipalities, along with Trafikverket (the Swedish Transport Administration), needed to work together with the infrastructure development of Hammarby Sjöstad and its surroundings. Together they planned for, and constructed Södra länken (The southern link), a motorway that connects the motorway Essingeleden or road E4/E20 to the country road 222 in Nacka. Södra länken is one of the world's longest tunnel projects; of the 6 km long road 4.7 km is in tunnels. The construction of the road started in 1997.

With public transport the three parties had a harder time to get to an agreement, but in the end Tvärbanan, a light rail line was built from Hammarby Sjöstad into the city. The light rail line was from the start planned to connect with Saltsjöbanan, a suburban rail system, however it will take until 2015 before those plans will be initiated, 13 years after Tvärbanan was completed (Inghe-Hagström 2002; SL 2014).

In 1996 Stockholm decided to apply for the Olympic games 2004 with Hammarby Sjöstad as the site of the Olympic village. The interest for the development of the site had to this point not been strong but with the possibility of hosting the Olympic games this change drastically (Inghe-Hagström 2002). In order to be even considered for the games Stockholm needed to have a forcefully strong environmental program for the area and they stated that Hammarby Sjöstad must be a role model and inspiration for environmental awareness and that it should be at the international forefront for sustainable development (Blix 2002). Stockholm never got the Olympic games; nevertheless the strong environmental program still remained for the area and would become its strongest attribute (Bächold 2013).

At the same time as the application for the Olympic games a new master plan was made for Hammarby Sjöstad. The plan was over a 2 km² big area around Hammarby Lake and was planned to hold 7 800 units and 400 000 m² of business space and have a total of around 25 000 inhabitants. The area was planned to be finished in 2012 and was calculated to cost 20 billion SEK (3.1 billion AUD) of which the city of Stockholm would pay 4 billion. Due to the high costs to sanitize the soil, the prime location in the city and at the waterfront as well as the housing shortage in Stockholm, the Hammarby Sjöstad was as developed as densely as the inner city is in Stockholm. The traditional structure of the city, with 18-meter wide roads and 70x100 meters blocks, as well as a mixed use was planned for the area that would have its heart around the Hammarby Lake. Around its beaches and shores, parks, pathways and quays was planned and the courtyards and the other parks in the area was going to be connected in a green network that would loosen up and structure the area (Inghe-Hagström 2002).

A few additions were made at an early stage of the project. A lot of them were due to the strong environmental focus of the project such as a special stormwater treatment, solar power, a new kind of windows as well as a car-pool system that would lessen the area's need for parking spaces (Inghe-Hagström 2002). At this time it was planned that in Hammarby Sjöstad 50 % of the units would be rental housing and 50 % would be condominiums. However, this goal altered in the early 21st century.
to have at least 30% rental housing in the district upon completion (Wastesson 2002).

In 1999 the first part of the construction of the urban renewal project started and although the project planned to be done in 2012 it has yet to be completed (Ericson & Bodén 2002).

The participating actors
It was the city of Stockholm and several of its administrations that developed Hammarby Sjöstad, a development that was regulated by the different laws and policies established by the city. Two administrations within Stockholm had a more central role in the development: Gatu- och Fastighetskontoret (the administration of streets and properties) that was responsible for the land management, the exploitations, the road maintenance and the implementation of the detailed plans as well as Stadsbyggnadskontoret (the administration of urban construction) that was responsible for the master plans and the detailed plans of the area. The city district of Hammarby Sjöstad was planned for in a holistic way in the first stages of the development; however, it was later divided into around 20 subprojects for the more detailed planning, implementation and management (Wastesson 2002).

The land allocation of Hammarby Sjöstad was handled by Gatu- och fastighetsnämnden (the multi-party elected council of streets and properties) that after a vote decided who would get the sole right to negotiate with the city about the acquisitions or concession of site-leasehold right of a certain land strip. The council also decided about which demands the city puts upon the developer, such as economic stability, long term environmental- and qualitative profiling and previous well executed projects. One important notion is the connection between the form of tenure and the land acquisitions of Hammarby Sjöstad that allowed those who would build rental housing to get a large subsidization when purchase the land while those who would build condominiums had to purchase the land according to its the market prize (Wastesson 2002).
Short facts:

**Hammarby Sjöstad**

**Area**
About 2 km² of which 0.4 km² is water.

**Population**
17,292 (2013)

**Population density**
8646 inhabitants/km²

**Amount of housing units**
10,800 (2013)

**Average size of the units**
2.6 rooms.

**People working in the area**
7,900 (2012)

**Construction start**
1999

**Estimated completion date**
2017

**Area of offices, light industries and retail**
290,000 m²

**Area of public green areas**
28 hectare or 17.5 %

**Distance to the central Stockholm**
5 km

**Cars/capita**
0.32

**Average yearly income among earners**
421,900 SEK (68,000 AUD)

**Percentage of inhabitants with a foreign background**
19 %

*From top left. Figure 44. Short facts about Hammarby Sjöstad. Referencer: Ericson & Bodén 2002; Inghe-Hagström 2002; Stockholm Stad 2010; Stockholm Stad 2013b; Stockholm Stad 2014b. Figure 45. Synoptically map over the city district Hammarby Sjöstad (Stockholm Stad 2011).*
As seen in the map Hammarby Lake is the heart of the neighborhood. The close proximity of large roads is also apparent, and how Södra länken is what disconnect the area to the Nacka nature reserve. Moreover one can note how much of the area that is developed and that it is mainly in its edges that the land is undeveloped.
“Hammarby Sjöstad (lake city) is probably the greatest urban eco-area being built in Europe.

p. 71, Peter Bächtold (2013).

“If everyone would live in Hammarby Sjöstad (lake city) it would be a disaster.”


“...those people will make you believe, that if you come here, you never wanna leave...the best of Hammarby Sjöstad, the joy of people I see, the water, the sun and nature; this is my Hammarby Sjöstad.”

Freely translated by the author. A part of the lyrics of the song “My Hammarby Sjöstad” by Anna Jois (2012).

“...one must also question the plausibility that Hammarby Sjöstad still is marketed eminently as a current example of sustainable urban renewal..”

In this section the social sustainability of the urban renewal project Hammarby Sjöstad is being studied using the framework that was established in the theoretical background. It is separated in five parts, the four parts of the framework; social services and accessibility, social mixing and social inclusion, overall form and function and social networks and stability, as well as an interview with Björn Cederquist a social planner in the municipality of Stockholm that have worked with Hammarby Sjöstad since 1996.

Each of these parts has a disposal of two spreads, where the first spread is dedicated for the concrete study or interview. In the second spread a conclusion of the study or interview is done, and a number of key points are established that should be considered in urban renewal projects to create a socially sustainable neighborhood.

This section ends with the final conclusion of this entire chapter where the social sustainability of Hammarby Sjöstad is discussed.
Hammarby Sjöstad was planned to become a diverse neighborhood for all ages. Despite this the area soon lacked both schools and kindergartens, essential social services as established in the framework. Moreover the area had a problem attracting social services such as grocery stores, health centers and pharmacists before the area had come more completed (Löwenfeldt 2013). Since then the area has grown closer to its completion and many of these social services has been established in the area. However, it is important to understand that the accessibility to social services for those first moving to Hammarby Sjöstad was quite different from how the situation is today 14 years later.

Social services in Hammarby Sjöstad

In the study of social services, established in the framework, there is several different areas one need to study: access to schools, day care and activities for children, access to shops, restaurants, cafés and pubs and access to a library, a post office and health care. Moreover, since it has been establish in the framework that open spaces and green spaces as well as recreational areas are especially important social services these will be presented more detailed in a separate section.

Day care, schools and activities for children

There are in total eight schools in or close to Hammarby Sjöstad that in total have room for about 2200 children between the ages of 6-16. Three of these schools are public schools that together teach 58 % of the students, and the rest, five school that together teach 42 % of the students, are charter schools. One of the public schools, hosting 253 students (11 % of the students), first opened in January 2014 while the largest of the public schools, hosting 750 students (34 % of the students), opened in 2006. The largest of the charter schools, hosting 450 students (20 % of the students) opened in 2002 (hammarbysjostad.se 2013c; Stockholm stad 2014c; Kulturama 2014). Today there are close to 1700 children between the ages of 6-16 that lives in Hammarby Sjöstad, however it is calculated that by 2018 there will be more than 2300 children between these ages and then in 2023 more than 2500 (Stockholm Stad 2010). This suggests that in the next ten years the capacity of the schools need to grow to include a further 300 students.

There are 21 day care centers in or close to Hammarby Sjöstad with the ability to accommodate 1555 children, of which 8 day care centers are private that in total take care of 37 % of the children and 13 day care centers that are public and in total take care of 63 % of the children (hammarbysjostad.info 2013c). The day care centers take care of children between the ages of 1-5. In 2013 there were 1775 children between these aged in Hammarby Sjöstad indicating that there are too few day care centers available for the neighborhood. There are, however plans of building yet another day care center in Hammarby Sjöstad that will have room for another 100 children. It will be finished in the end of 2015 or beginning of 2016. Yet even with this day care center it still will not be enough to sustain the needs of the neighborhood and although the prognosis for the development of children between 1-5 in Hammarby Sjöstad is that it will be fewer children of this age in the future, it will not be until 2023 that there will be enough places in the day care centers, and then just barely (Stockholm Stad 2013b; Stockholm Stad 2014b).

In Hammarby Sjöstad there are several options of activities for children and young adults. There is an activity center for young adults from 13-19 to socialize in the neighborhood that e.g. arrange dance sessions, concerts and sports activities. Moreover there is a culture center where children and young adults can learn how to act and to play instruments; the center also offers children with disabilities the opportunity to participate in culture activities. There is also a scout troop in the area as well as a weekend activity for small children to learn about nature and the forest. In Hammarby Sjöstad there are also several playgrounds, sports clubs, swimming pools and bathing places (hammarbysjostad.info 2013a).

However, the web editor for the local paper in Hammarby Sjöstad Nyman (2014) argue that the neighborhood does not have any background, no hidden places that children can find and play in. She argues that Hammarby Sjöstad is planned to the last centimeter and that everything is neat, tidy and undetected. Moreover she believes that it is dangerous for children to play in the neighborhood due to the constant proximity to water.

Shops, restaurants, cafés and pubs

In Hammarby Sjöstad there are several clothing stores, second hand stores and interior design shops (hammarbysjostad.info 2013g). There are also several smaller grocery stores and a larger grocery is planned to open this year (Eniro 2014a; hammarbysjostad.info 2013h).

Hammarby Sjöstad has around 40 restaurants and pubs spread out in the entire neighborhood. The kind of food the restaurants serve varies and is everything from Japanese, Chinese and Mediterranean fast food and fine dining (hammarbysjostad.se 2013a). There are also nine cafés, confectioneries and bakeries with different themes located all around the neighborhood (hammarbysjostad.info 2013d).
Open- and green spaces and recreational areas

There is no large open space in Hammarby Sjöstad, the largest open space barely being about 0.5 hectare and situated around the Stockholm Luma tram- and bus stop. The second largest open space is called Lugnetparterren and is a small open area of 0.4 hectare, located on the waterfront next to the area called Lugnet (the calm) (Stockholm Stad 2011).

When discussing the green spaces in Hammarby Sjöstad the goal for the development was to have 25 m² of green space per apartment and an additionally 15 m² of courtyard space per apartment. Hammarby Sjöstad have today 28 hectare of public green space and since the plan for the area is to have 11 000 apartments when it is completed, have this goal been reached already (Stockholm Stad 2010). The largest green area in the neighborhood is Sickla Park that is an oak forest with 150 old oaks and that is a part of the Nacka nature reserve. The park is about 4.5 hectare. Other large green areas includes the Luma Park (about 1.6 hectares) and two ecoducts or wildlife crossings that connect the area with the Nacka nature reserve. Moreover much of the other green areas are located on the waterfront next to the area’s many boardwalks (Stockholm Stad 2011).

There are many recreational areas in or close to Hammarby Sjöstad. Within the neighborhood there are many boardwalks along the waterfront and it is completed it will be possible to walk all the way around Hammarby Lake (Stockholm Stad 2011). Hammarby Sjöstad is also located next to the Nacka nature reserve that is a part of one of the green wedges in Stockholm. The reserve is 829 hectare with many pathways and jogging tracks and is a very popular destination that gets 1.5 million visitors every year (Nacka kommun 2012). There are also a number of outdoor gyms in and close to Hammarby Sjöstad where people can do strength training (hammarbysjostad.info 2014).

Public transport & the bike- and walk lane network

The goal in Hammarby Sjöstad was that 80 % of all commuting in the area either is made by using public transport, cycling or walking (Pandis Iverot & Brandt 2011). In 2007, 79 % either commute using public transport, cycling or walking (Stockholm Stad 2010). The public transport in Hammarby Sjöstad consists of ferries, a light rail line and buses. There are ferries that, free of charge, travels over the Hammarby Lake to Södermalm. There are also ferries that go directly to the city, however, these only operate in the weekdays from spring to late summer while continuing running on the weekends in the fall and in the winter. To get to the city by boat one can also take a water taxi (hammarbysjostad.info 2013e).

The light rail line that runs through Hammarby Sjöstad connects the area to the subway system of Stockholm. It will also be extended and connect with Saltsjöbanan in 2015 connecting Hammarby Sjöstad to the suburbs in the east as well as the city center (SL 2014).

It takes about 20 minutes getting to the city by taking the light rail line and the subway that start operating early in the morning until late at night. There are also a number of buses in the neighborhood that goes into the city that also operate it all through the night (SL 2014).

There are continuing bike lanes all the way from Hammarby Sjöstad in to the central parts of Stockholm. The distance is about 5 km and would take less than 30 minutes to bike. Throughout the main road in Hammarby Sjöstad there is also dedicated bike lanes and there are bike lanes that connect to Södermalm on two sides. There are as previously stated also many boardwalks and other pathways in the neighborhood. It is also possible that walk into the center of Stockholm since there is a walk lane throughout the entire way (Google 2014c).

Compared to both the greater Stockholm and the city of Stockholm Hammarby Sjöstad has slightly less cars per capita, 0.32 cars/capita vs. 0.39 and 0.36 cars/capita. 6 % of the inhabitants of Hammarby Sjöstad are a part of a car sharing pool (SCB 2014a; Stockholm 2010).
Conclusion

The social services and accessibility of Hammarby Sjöstad

The accessibility of social services is very important in a neighborhood and the lack of those essential aspects of the daily life can make it less liveable and less socially sustainable. When studying Hammarby Sjöstad as it is today one can argue that the area has plenty of social services accessible such as an abundant of shops, restaurants, pubs, cafés, health care centers, dentists, pharmacists and several of options of activities for children and young adults. However, the real question might be how long time it took until Hammarby Sjöstad had all of these social services accessible and how long time it is acceptable to wait to have a functional city district for those already living there. One can argue that the social services should have been considered early on in the planning of Hammarby Sjöstad so that they can be installed in a neighborhood early on so to make the area functional as soon as possible.

That there has been a lack of day care centers and schools for the last 14 years is an issue of real concern in Hammarby Sjöstad and the fact that there still is a lack of places in the day care centers today is real worrisome. Neither is the issue with school places really solved since there will be a lack yet again in few years time if the prognosis of the development of the demography in Hammarby Sjöstad is correct. One can argue that the city of Stockholm should have considered these two crucial social services already when planning the area so that this situation did not occur.

When considering the public green spaces in Hammarby Sjöstad the neighborhood have reached the goal of having 25 m² of green space per apartments with a total of 28 hectare of green spaces or 17.5 % of the land area. This goal is however quite low compared to the 40 % of public green spaces of the land area of the city of Stockholm, or as it also can be calculated 189 m² of green space per apartments (Stockholm Stad 2013a; NE 2014d). One can therefore argue that although Hammarby Sjöstad reached the goal it set out to reach in the amount of public green spaces it should have, the goal was not set so high from the start in the context of it being a part of the city of Stockholm.

Moreover one can argue that the public transport system in Hammarby Sjöstad seems to be quite good. One can say this by studying the system and how it e.g. operates with a high frequency and during all times of the day and how Hammarby Sjöstad has a well-developed bike- and walk lane network. However, one can also argue that the best way of determine how adequate a public transport system really is, is to study how many that are using it. The majority, 79 %, of the people in Hammarby Sjöstad either uses the public transport or the bike- and walk lane network when going to work. This results in that only 21 % of the people in Hammarby Sjöstad uses a car to travel to work despite the fact that 62 % of the households in Hammarby Sjöstad owns a car.

Key points to consider in URD

1. Social services need to be considered early on in urban renewal developments so that they can be installed and make the area functional as soon as possible.

2. Daycare and schools are two essential social services that should not be overlooked in urban renewal development and that need to be considered when planning the area.

3. There is a need to consider that in urban renewal developments if good public transport is offered people are going to use it, with less motorized traffic in the area as a result.

Figure 48. Lugnetparterren, the second largest open space in Hammarby Sjöstad.
Social mixing and social inclusion
In Hammarby Sjöstad

When the first buildings were built in the brand new neighborhood of Hammarby Sjöstad, the developers believed that its first inhabitants would be pensioners that recently sold their villas. This belief have since developed into becoming a rumor that the area was actually designed and built for pensioners and despite its inaccuracy, this rumor still colors the thoughts of Hammarby Sjöstad (Löwenfeldt 2013). As it would turn out pensioners does not overpopulate the area, they are in fact a rather small group of the demography of Hammarby Sjöstad (Stockholm Stad 2013b).

The demography of Hammarby Sjöstad
When describing the demography of Hammarby Sjöstad one can, as established in the framework, divide it into several subgroups: age and stages in life, income and education levels and ethnicity and culture differences.

Age and stages in life
Instead of becoming a neighborhood with a large population of pensioners, Hammarby Sjöstad became the home of the so-called “bugaboo” people. Bugaboo is a popular stroller brand, and when talking about the “bugaboo” people one refers in this case to the large population of people in their 30s with children that today lives in Hammarby Sjöstad (Löwenfeldt 2013). In fact when surveying the statistics from the area there is two age groups that stand out from the rest in size, babies that is not yet a year old and the 33 years old. Together these single two age groups make up 5.2 % of the population of Hammarby Sjöstad, while 50 % of the people living in Hammarby Sjöstad either are a child up to the age of 8 or between 25 to 39 year old (Stockholm Stad 2013b).

Compared to the general population of Stockholm the percentage of these two groups of people, children up to the age of 8 and adults from their late 20s to their early 40s, are higher than the rest of the city. However, Hammarby Sjöstad have a lower percentage of children and young adult from 10 years old up to their early 20s as well as people in their late 50s and older and especially of people older than 70 (Stockholm Stad 2013b). These statistics shows the very opposite of the rumor that Hammarby Sjöstad is the home of pensioners, or if it ever was planned to be, that those plans failed.

Income and education levels
Generally one can say that the people living in Hammarby Sjöstad are both richer and more well educated than the average person living in Stockholm. The average yearly income among earners in Hammarby Sjöstad was in 2013, 421 900 SEK (66547 AUD), which is 21 % higher than the average yearly income in Stockholm. Furthermore, the pensioners in Hammarby Sjöstad have with their average yearly income of 370 000 SEK (58360 AUD), 37 % higher income than the average pensioner in Stockholm (Stockholm Stad 2013b).

One can also distinguish a much higher education level in Hammarby Sjöstad compared to the average of the city, since 68 % of the
people living in the neighborhood have studied in a postsecondary schools e.g. universities, compared with 56 % in Stockholm. Compared with the average person in Stockholm Hammarby Sjöstad also have a significant lower percentage of people receiving financial assistance from the government, only 0.3 %, which can be compared with 3.2 % in the city in total. Furthermore is the open unemployment rate in the area also very low; 1.8 % when the unemployment rate in Stockholm is 3.6 % (Stockholm Stad 2013b).

Ethnicity and culture differences
When studying the ethnic and culture differences in Hammarby Sjöstad it becomes clear that the neighborhood is not as diverse as the city of Stockholm is in general. Close to 19 % of the inhabitants in Hammarby Sjöstad have a foreign background, a number that is close to 31 % in Stockholm (Stockholm Stad 2013b).

One can also distinguish a difference in the composition of the people with a foreign background in Hammarby Sjöstad compared with those in the city in total; in Hammarby Sjöstad there is a higher percentage of people born abroad among the people with a foreign background than in Stockholm. In this case people with a foreign background are those that either are born abroad or who has parents that are born abroad. In Hammarby Sjöstad 78 % of the people with a foreign background born abroad while 22 % are people with parents that are born abroad. This can be compared with the percentages 68 % and 32 % in city in total (Stockholm Stad 2013b). A

reason for this could be that there are many well-educated and wealthy foreigners that move to Hammarby Sjöstad and Stockholm for high quality job opportunities.

The housing of Hammarby Sjöstad
When discussing what different kind of housing that is offered in Hammarby Sjöstad one can, as established in the framework, discuss the units type, size and rent levels or price/market value.

In Hammarby Sjöstad the housing consist of 7848 apartments in apartments buildings that either are condominiums, public rental housing or private rental apartments, moreover there are also 8 single-family houses. As mentioned earlier the original goal with the neighborhood was that it should have 50 % rental housing, a goal that later was reduced to 30 % (Wastesson 2002). As of today the area has 31 % rental housing, 14 % public rental housing and close to 17 % private rental housing, which indicate that the later goal has been reached. These numbers are, however, quite different from how the housing situation is in Stockholm where 17 % of the housing is public rental housing, close to 28 % is private rental housing and 55 % are condominiums. An interesting notion is how the housing situation changed in Stockholm since 1990 when 34 % of the housing was public rental housing, 41 % was private rental housing and only 24.5 % were condominiums (Stockholm Stad 2013a & 2013b).

The size of the apartments in Hammarby Sjöstad are between 40-120 m², and are divided into apartments of 1, 2, 3, 4, and 5 rooms or more where the apartments of 2 or 3 rooms are the most common and make out 68 % of the apartments in Hammarby Sjöstad. Compared with the city in total Hammarby Sjöstad has more 2, 3 and 4 rooms apartments but have distinctly less 1 room apartments (11.9 % vs. 24.3 %) as well as apartments of 5 rooms or more (3.9 % vs. 9 %). The single-family houses in Hammarby Sjöstad have either 4 or 5 rooms (Stockholm Stad 2013b).

When discussing the price of the housing in Hammarby Sjöstad one need to discuss the three different kind of housing separately. The average monthly rent off the public housing in Hammarby Sjöstad is about 9000 SEK (1400 AUD) when the average monthly rent of the public housing in Stockholm is about 6000 SEK (950 AUD). It is, however, in average, slightly easier to get an apartment in Hammarby Sjöstad than in the city, it takes about 6.5 years before you can get an apartment in Hammarby Sjöstad when the average amount of time before you can get an apartment in Stockholm is close to 8 years (Bostadsförmedlingen 2014).

Since the private rental housing is handled by several different companies it is difficult to get as accurate information, however it is probable that the average rent is about the same as the public housing, 9000 SEK in this case since the laws in the Swedish rent tribunal say that two equivalent apartments should have the same rental costs (Hyresnämnden 2014). The price of the condominiums in Hammarby Sjöstad is about 59500 SEK/m² (9382 AUD/m²) when in Stockholm the price is about 57500 SEK/m² (9067 AUD/m²) (Kyhlstedt 2014; Svensk Mäklarstatistik 2014).

The functions of the buildings
Hammarby Sjöstad is mainly a residential area, 70 % of the area consist of housings. The rest, 30 % is the proportion of offices, light industry and retail which both include some of the preexisting industries as well as 290 000 m² of new offices, light industries and retailers (Stockholm Stad 2010). Today 7900 people work in the area, mainly with commerce, education or business services (Stockholm Stad 2013b).

Much of the retail in the area is situated in the bottom floor in the houses along the main street in Hammarby Sjöstad, it was thought that this would bring life to the neighborhood. However, Löwenfeldt (2013) argues there are not enough people in the area to sustain all of the businesses and since the traffic have been redirected from the street there is not much people passing by either making it hard for the business to keep open.
Conclusion

The social mixing and social inclusion of Hammarby Sjöstad

One can argue that Hammarby Sjöstad is not a very socially inclusive neighborhood. The demography shows that more than anything it is well educated and wealthy people that live in Hammarby Sjöstad. It shows that people from age groups with a weaker economy such as young adults and elderly people are not as well represented in the area. The pensioners that do live in the area have a much higher income than the average pensioners in Stockholm suggesting that the elderly people that do live in Hammarby Sjöstad also are wealthy.

One can argue that the main reason why Hammarby Sjöstad is not very socially inclusive is due the high rent levels and price to buy apartments in the area or in other words: the cost of living. In fact one can argue that the cost of living is the most crucial factor when creating a social mix in an urban renewal development. In the case of Hammarby Sjöstad one can also argue that the lack of culture diversity may be due to the expansive housing since many of the people with foreign background in Stockholm are refuges with little money.

Moreover, the fact that young adults and pensioners are underrepresented in the area might also be because of the few small and large apartments in the area. The small apartments, due to the lower rent price, could otherwise probably attract both young adults and pensioners. The lack of large apartments might also prevent families from staying in the area when their children grow up and need more space in the home, which could prevent the continuity of Hammarby Sjöstad.

The fact that urban renewal project of Hammarby Sjöstad has failed to create a social mix is disappointing. The project could have become, with the right planning, a central city district in Stockholm with socio-economic and culturally diversity. One can argue that could that with right planning an urban renewal project can act as a second chance and a way to improve the social situation in a city, not just a way to expand it and make a profit.

As previously stated there are those that argue that one of the reasons to the social polarization in Stockholm is the change in the housing policy, namely the conversion of rental units to condominiums and a market-driven force that controls the building of new housing. One can argue that this point of view is supported when studying the housing situation in Hammarby Sjöstad. The original plan in Hammarby Sjöstad was that 50% of its housing were to be rental housing, following the structure of the city of Stockholm as it is today. However, the plan changed and only 30% of the housing needed to be rental housing, which might suggest that the housing structure in Stockholm is likely to change in future as well. The housing structure in Stockholm has already changed drastically from the 1990s when more than 75% of the housing was rental when today it is only 45%. Rental housing offers those unable to purchase their home an opportunity to live in the city and one can argue that the conversion of rental housing to condominiums make a city less socially sustainable with a larger socioeconomic gap.

Key points to consider in URD

1. Urban renewal development should not merely be seen as a way to expand the city and to make a profit, rather it should be considered as a second chance and with the right planning it is an opportunity to improve the social situation of the city.

2. The cost of living in area is the most crucial factor when creating a social mix in a neighborhood since expensive living (more than anything) exclude the marginalized people of the society.

3. The conversion of rental housing to condominiums make a city less socially sustainable with a larger socio-economic gap.
Overall form and function

Of Hammarby Sjöstad

Hammarby Sjöstad was going to become a role model and an inspiration for environmental awareness and sustainable urban design (Blix 2002). This is also the way that the city district has been marketed and described by many and some even say that Hammarby Sjöstad is the best eco-area currently being built in Europe (By 2014; Skanska 2014; Bächtold 2014). Every year decision-makers and urban planners from all around the world come and visit Hammarby Sjöstad to get inspired and to learn about the closed cycle model used in the area and the sustainable urban design of Hammarby Sjöstad has stood as an inspiration for projects in countries such as China, Canada and South Africa (Almgren 2010; SWECO 2014).

However, some claim that Hammarby Sjöstad is not a sustainable community and that it is wrong to claim otherwise (By 2014; Wangel 2013). Although, some argue that since the first plans of Hammarby Sjöstad are over 20 years old and that the first parts of the area was build close to 15 years ago, it is not fair to compare the neighborhood with what is possible to achieve today when wanting to build a sustainable urban design (Wagner 2013). Wagner (2013) argue that this might mean that the area should stop marketing itself for being having a sustainable urban design.

Sustainable urban design

The environmental program of Hammarby Sjöstad has been truly ambitious. Examples of the goals were: the total amount of required energy to not exceed 60 kWh/m² of which no more than 20 kWh/m² is to be used on electricity, that all storm water from roads and parking areas is to be purified before it is let down into Hammarby Lake and that 80 % of the extractable energy from waste, and waste water, is to be utilized (Pandis Iverot & Brandt 2011).

Today it has become apparent that some of the environment goals put on Hammarby Sjöstad have not been achieved. For example the energy goal was altered already in 2005 up towards 100 kWh/m² and even this goal would prove to be too difficult to achieve everywhere in the city district. The energy consumption between different buildings would prove to vary greatly, from 95 kWh/m² (48 kWh/m² in electricity) to 220 kWh/m² (43 kWh/m² in electricity). When discussing the purification of the storm water in the area it is only on the roads with 8000 vehicles/day that the storm water is purified, the storm water coming from the roads with less traffic than that is directly let out in Hammarby Lake. However, 95 % of the waste from Hammarby Sjöstad is combusted at a combined heat and power plant where 90-100 % of the energy content of the waste is utilized (Pandis Iverot & Brandt 2011).

By (2014) argue that the greatest issue with the sustainable urban design of Hammarby Sjöstad is the fact that the people living in the area are not making the lifestyle changes that need to be done to reduce the environmental impact of the area e.g. living in smaller apartment, recycling and reusing and taking the bike instead of the car.

Figure 55. A simplification of the Hammarby model, the holistic recycling solution that aims to close the energy and material cycle (that the energy, water & sewer and waste all are resudes). The system handles the energy, water, waste and sewage of the houses and business of the area and aims to reduce the metabolic flows (Pandis Iverot & Brandt 2011).
No demands have been put on the people living in the area to strive living a sustainable lifestyle, and although many of those living in Hammarby Sjöstad considered it important and interesting with the environmental profile of the city district, it was not the main reason why they moved to the area. (Green 2006).

The scale and structure
Hammarby Sjöstad was planned to be an extension of the inner city’s dense urban structure and due to the high developing costs, the prime location and Stockholm’s acute housing shortage, the floor space index (FSI) was going to be as big as the central of the city (Inghe-Hagström 2002). The city of Stockholm has a FSI between 2 and 3, a number that Hammarby Sjöstad not quite has succeeded to reach up to with its FSI of 1.43, if the public space is excluded in the calculation, however, the FSI of Hammarby Sjöstad is between 2.2-3 (Stockholm Läns Landsting (2009); Stockholm Stad 2010). Therefore one can state that Hammarby Sjöstad has a dense urban structure.

Hammarby Sjöstad is structured after its main road, an esplanade with a width of 37.5 meters along which most of the social services in the area are located as well as the public transport and the main bike lanes. On both side of the esplanade the housing is structured in a grid-shaped block structure with roads with a width of 18 meters and blocks that is about 70x100 meters (Inghe-Hagström 2002).

The average height of the houses in Hammarby Sjöstad is 24 meters, or 7 floors. However some houses are as low as 12 meters, or 4 floors and the highest building in the area is a residential building that is 40 meters high, or 13 floors (Stockholm Stad 2010).

The local environment
When defining whether the local environment in Hammarby Sjöstad is enjoyable and walkable there is a few things one needs to consider: the complexity of the place, its enclosure and the human scale.

The complexity of Hammarby Sjöstad
Streets that are more complexed provides more interesting things to look at, such as the buildings varying shapes, sizes, materials and colors, as well as street furniture & trees and the presence and activity of people (Ewing & Handy 2009).

When studying the esplanade in Hammarby Sjöstad one finds that the buildings do vary along the road, even if they still clearly is from the same time and have a similar expression. There is not much street furniture along the esplanade; there are, however, four rows of street trees on the esplanade. Moreover, since most of the social services as well the public transport and main cycle paths all is located along the esplanade one can assume that the presence and activity of people is frequent on the esplanade (Google 2014d).

The enclosure of Hammarby Sjöstad
According to Jacobs (1993) people react positive to fixed boundaries in urban spaces and associate it as something safe, defined and memorable. Outdoor spaces are shaped and defined by the area’s vertical elements that interrupt the viewers’ lines of sight and if they do so decisively the out-door spaces can seem room-like. The buildings becomes the walls, the street and sidewalks the floor and the sky the ceiling (Ewing & Handy 2009). According to Jacobs (1993) the proportion of buildings heights to street width should be at least 0.5. Others designers argue that the proportions should be between 1.5 and 0.17. However, having rows of trees can help define space both vertically and horizontally (Ewing & Handy 2009).

In Hammarby Sjöstad the ratio between the average housing heights with the width of the streets is therefore 1.33 for the smaller roads and 0.65 for the esplanade. Moreover, since the esplanade have four rows of trees and the smaller roads at least have two rows of trees, this might help to make the areas fell even more enclosed.

The human scale of Hammarby Sjöstad
When defining what the human scale Alexander, Ishikawa and Silverstein (1977) argues that any building above four floors is out of the human scale when Lennard & Lennard (1987) set the limit at six floors. However, Arnold (1993) argues that street trees can moderate the scale of both high buildings and wide streets. He argues that any street wider than 12 meters need to have street trees to achieve a human scale in the streetscape.

One can therefore argue that Hammarby Sjöstad, that have an average building heights of 7 floors might be a bit out of the human scale. However, one can argue that the many street trees moderate this, making Hammarby Sjöstad a neighborhood with a human scale. In fact, a part of Hammarby Sjöstad received the Kasper Salin award in 2005 for having a neighborhood with a good scale with a human consideration (Swedish Association of Architects 2014).

Balance between private- & public spaces
The block structure of Hammarby Sjöstad is in places quite open and the public life can invade the private life in the courtyards. The web editor for the local paper in Hammarby Sjöstad Nyman (2014) argue that the city district and its buildings are turned outwards, that they are always seen and looked upon like a stage in the theatre. That to get privacy in Hammarby Sjöstad its people needs to pull the blinds. She argues moreover that Hammarby Sjöstad lacks a background, hidden places that can be messy and overgrown, places to hide in.

Nyman (2014) also states that all public places in Hammarby Sjöstad, except Sickla Park, already are programmed. She believes that when the environment is so completed, one of the most important components for both adults’ well being in a residential area and children’s play disappears; the ability to change and influence the environment.

“...cleverly cohesive neighborhoods around beautiful urban spaces, where the urban intensity is contrasted by soothing greenery and water. A good balance between content, scale and infrastructure that have generated a human consideration in a large and complex context.”

Conclusion
The overall form and function of Hammarby Sjöstad

Whether if one can say that Hammarby Sjöstad has a sustainable urban design compared to what can be produced today is unsure. It is, however, obvious that the area has not reached all of the very ambitious goals it set up for itself. Arguably the goals was set too high for what was possible when the project was planned and started to be built and that the city district is as sustainable as was possible at that time. However, one could also argue that the area is not as sustainable as it could have been, especially since no pressure where put on its inhabitants. Hence one can state that in order to truly create a sustainable development not only should the goals that are set out be reached, it is crucial that some demands are put on the inhabitants of the area to change their lifestyle in becoming more sustainable.

The local environment of a neighborhood is probably more important than we think when making an area liveable or not. One can argue that the scale and structure of Hammarby Sjöstad has complexity, enclosure and a human scale, the components that in this thesis are used to define if a local environment is enjoyable or not. Although these factors are not what solely define how well an area has been designed it is interesting that a constant objects that are thought to make an environment more enjoyable are street trees. One can therefore argue that having street trees are essential in urban renewal developments when making the local environment enjoyable and walkable.

When discussing the structure of a neighborhood it is important to consider the balance between private places and public places. The issue with a project like Hammarby Sjöstad, arguable, is that due to its high construction costs there is an issue that as much as possible of the land should be developed. One can argue that in the case of Hammarby Sjöstad, the project has succeeded in creating a dense urban structure while simultaneously keeping a human scale in the neighborhood. One can argue that one of the things that have suffered from this success is the fact that there is not enough private spaces or areas that are not programmed and planned to the last detail. The fact that the courtyards are open may help to make Hammarby Sjöstad fell less dense, however, it may also disrupt the private life of those living in the neighborhood. One can argue that there is a need for places in a neighborhood that are private, that is not programmed and planned to the last detail. Places that the people can change and influence while living in the area and this is something that should be considered in urban renewal projects.

Figure 56. The marina of Hammarby Sjöstad at night.

Key points to consider in URD

1. In order to truly create a sustainable development not only should the goals that are set out be reached, it is crucial that some demands are put on the inhabitants of the area to change their lifestyle in becoming more sustainable.

2. Having street trees are essential in urban renewal developments when making the local environment enjoyable and walkable.

3. There is a need for places in a neighborhood that are private, that is not programmed and planned to the last detail. Places that the people can change and influence while living in the area.
Social networks and stability of Hammarby Sjöstad

The stability of the Hammarby Sjöstad

When studying the stability of Hammarby Sjöstad one needs to (as established in the framework) study the turnover (in- and outflow) within the community since if the change is too rapid this can be seen as a threat and can interrupt the feeling of community (Dempsey et al. 2009; Eriksson 2009). In 2013, 2762 persons moved to the area while 2760 moved away, this movement represents close to 16% of the people in Hammarby Sjöstad. When comparing these numbers with the city of Stockholm the turnover percentage was in 2013, 7.4% (Stockholm Stad 2013a & Stockholm Stad 2013b). Therefore one can argue that Hammarby Sjöstad is less stable than the city in total since its turnover is more than twice as big.

Community activities and centers

There are many different organizations within Hammarby Sjöstad in which the community can get engaged in. There is for example an organization for pensioners and a local history society. There is also a special family home (previously called foster home) that takes care of people with particularly difficult problems (hammarbysjostad.info 2013f). Moreover, the Swedish church has premises in the neighborhood in which there is a common room where activities take place every day as well as a prayer room that is open daily. The Swedish church has a ceremony every Sunday in Hammarby Sjöstad (hammarbysjostad.info 2013i).

There are also, as previously mentioned, a culture center in Hammarby Sjöstad where children and young adults can learn how to act and to play instruments, a scout troop and a weekend activity for small children to learn about nature and the forest (hammarbysjostad.info 2013a). Moreover, there is an activity center called Fryshuset for young adults from 13-19 to socialize in the neighborhood. Fryshuset is an organization that is located in several different places all around Sweden and is financed from i.a. foundations and grants from e.g. the city of Stockholm. The organization arranges different happening and events such as dance sessions, concerts and sports activities. In Hammarby Sjöstad the children can also just come to the organization and socialize, e.g. play games, watch movies, play videogames or just chill out (Fryshuset 2014; hammarbysjostad.info 2013a).

There is also a community center organization in Hammarby Sjöstad, which has around 220 members and was created in 2011. The goal of the organization is to create a heart in the city where all of the citizens of the neighborhood can meet and socialize. The organization has i.a. a book club, authoring evenings, cookery courses and wine and beer tastings. The organization does not have a own premise but get to use the environmental information center's premise once a week (Sjöstadens Folketshus 2014).

The safety and general well being

According to Grändeby (2012) Hammarby Sjöstad was built to keep away crimes. The gathering of the car traffic, public transport and the major bike lanes were one of the strategies to reduce the
crime rates in the area. This because if more people are moving down a road there is more people that can see if any crimes take place and due to the fact the mere presence of people reduce the crime rates of an area. This is also why the area has a mixed function of residential housing, offices, stores etc., with this kind of planning there is always people moving around in the area and it is not empty at certain times of the day like it more like would have if the area only had one function. Moreover, the relatively low buildings in Hammarby Sjöstad means that the people in building is more likely to know one and other and can therefore react if someone is in the building that should not be there. The large windows of the stores and the housing as well as the parking being located along the roads means that more people can see what is happening (Grändeby 2012).

Hammarby Sjöstad has a low crime rate. When comparing the likelihood of being abused the risk is more than twice as big in the national average compared to Hammarby Sjöstad. This is much due to the fact that the area was built to keep away crimes. However, the socioeconomic situation in Hammarby Sjöstad also contributes to the low crime rate (Grändeby 2012).

When discussing the general well being of Hammarby Sjöstad one can note that the city district has lower sick days than the rest of Stockholm, 8.7 vs. 18.7. Moreover are the days with sickness compensations significantly lower than the city in total, 4.5 per capita vs. 12.7 per capita (Stockholm Stad 2013b). One can therefore argue that the general well being of the people in Hammarby Sjöstad is better than the one of the city in total.

The general opinion of the Hammarby Sjöstad
The opinions of Hammarby Sjöstad has been and continuing being divided. There are architecture critics who have called the city district the best that has been built in Sweden since World War II, that believe the area to be a “crown jewel” and that compare visiting Hammarby Sjöstad with a beach holiday in Spain. Other compare argue that Hammarby Sjöstad has become the IKEA or H&M of architecture and that almost everything newly built in Sweden has been inspired by the urban design of Hammarby Sjöstad (Löwenfeldt 2013).

Regular people describe Hammarby Sjöstad as a very calm and nice neighborhood – one of the nicest in Stockholm, but that it is very expensive to live in. Furthermore, the city district is described as an area with a good location close to the city and the water, with great public transport and nice apartments. However, some mention that the area was much worse when only the first parts of the area were built, with a lack of social services and people. Other mention the lack of day care centers as an issue as well as the lack of parking places. The fact that Hammarby Sjöstad does not have a background, that the entire neighborhood feels stages is also mentioned and some call Hammarby Sjöstad boring and that it lacks a soul (Familjeliv 2014; Flashback 2014).
Conclusion

The stability and social networks of Hammarby Sjöstad

In consideration of the social sustainability of Hammarby Sjöstad it is troublesome that the turnover of the city district is more than double that of the city in total. The in- and outflow of Hammarby Sjöstad is therefore twice as rapid of that of Stockholm and this might interrupt the feeling of community in the neighborhood. It is troublesome that there are so many people moving from the area since this might suggest that there is a considerable amount of people that might not like living in Hammarby Sjöstad. This could be due to that the social networks in the neighborhood is not that strong.

However, it is difficult to study the social networks within an area, especially in a thesis that does not study this phenomenon in detail. It is easier to study whether an area has adequate services and opportunities among its people so that social networks can be created, rather than the fact that social networks actually exist in the area. Nevertheless one can argue that in a social functional neighborhood the community activities needs to reach all different groups of the society i.a. young, old and families and should cover a wide range of things such as music, food, and religious activities.

It is interesting that Hammarby Sjöstad seems to be much safer than the average Swedish neighborhood, which could prove that it is possible to build away crime. Therefore one can argue that when working with urban renewal developments one needs to recognize that an area can be planned in such a way that crimes can be minimized, and that this is something to consider when planning an urban renewal development.

Moreover one can discuss the general opinion of Hammarby Sjöstad. The opinions about the neighborhood are both plentiful and divided, in fact most people seem to either love or hate the city district and it is hard to distinguish if the general opinion is positive or negative. Nevertheless, it is safe to say is that it is a neighborhood that many people have an opinion about and not just another city district in Stockholm.

Key points to consider in URD

1. Community activities needs to reach all different groups of the society i.a. young, old and families and should cover a wide range of things such as music, food, and religious activities.

2. When working with urban renewal developments one needs to recognize that an area can be planned in such a way that crimes can be minimized and this is something to consider when planning an urban renewal development.

Figure 58. The building sculpture called “Observatory” was created by the artist Gunilla Bandolin located in Hammarby Sjöstad.
The voice of Björn Cederquist
One of the social planners of Hammarby Sjöstad

Björn Cederquist, employed by the municipality of Stockholm, is an architect that has worked with the social planning of Hammarby Sjöstad since 1996. Before that Cederquist worked with social issues such as the planning of elderly care and kindergarten in the municipality as well as with the Swedish National Board of Health and Welfare.

The very first question that I asked him in my interview with him was if he could consider living in Hammarby Sjöstad, of which answered that he could but that the city district is a bit too expensive and that he would not want to spend so much money living there when he has other options. However, Cederquist believe that Hammarby Sjöstad is an important urban renewal project for the further development of Stockholm; that the city district proved that all large urban renewal projects do not have to become as one-sided as the projects in the 1960s and 1970s, that it opened the way for a new kind of city planning. Cederquist argues that Hammarby Sjöstad was the first urban renewal project in Stockholm of many where the city was started to be built from inside, densified, especially on the areas close to the city center that no longer was used as before such as old industries and harbors.

Cederquist argues that Hammarby Sjöstad is somewhat of a success. The project was more or less like building a new city and Cederquist thinks that the area with its mix of residential areas and workplaces has aesthetic qualities and is beautiful. He is also happy about the good public traffic of the area and that it was introduced do early, already in 2002 was the light railway inaugurated. To Cederquist the success of Hammarby Sjöstad is due to the planning of the area but also from the initiative from the market and the people living there.

When discussing the failures with Hammarby Sjöstad, on the other hand, Cederquist thinks that the fact that the environmental goals were not reached is one of the most prominent. He discusses the difficulty to get the developers to work towards the goals that were set up and how it is quite ironic that some of these goals, said to be have been set too high, now are new national demands on new developments and need to be enforced. Cederquist believes that although it could have become better environmentally, Hammarby Sjöstad still became an example to follow for other projects. That the area showed a way to work with the environment technically in an urban renewal project but that there is much to work with concerning the behavior and lifestyle among people.

When discussing whether Hammarby Sjöstad is socially sustainable or not Cederquist argues that the people that do afford living in the area is very happy but that due to the very high prices the area is not socially diverse. He argues that the social mix is important, more than we might realize and that it is missing from Hammarby Sjöstad and is starting to disappear in the city center of Stockholm as well. Cederquist argues that to be able to create a more socially diverse neighborhood the public rental housing needs to be utilized to social construction rather than being used to deliver profit to the city as Cederquist argues is the case now. He describes about how when visitors coming from the U.K. and the Netherlands are surprised that we dropped that ambition with the public rental housing in the city of Stockholm. According to Cederquist the rental apartments, regardless if they are public- or private rental housing, are too expensive and that people might as well buy a condominium since the cost of

“It has not reached all the way...no, not globally. Absolutely not. But it shows the way technically what could be done that way. But when it comes to behavior and lifestyle, there is still a lot to do.”


“The best [about Hammarby Sjöstad] is probably its aesthetics and the very successful places on the waterfront.”


“The mixture is certainly more important than we really understand and it has not been accomplished here and it also keeps disappearing in the inner city.”

living still will be the same. Furthermore Cederquist argues that the apartments do not need to be as expensive that they are now, but the developers want to make as big profit as possible and the fact that there is no difference between the public- and private rental housing is very disappointing for him.

To Cederquist a socially sustainable society is a place where everyone can live with an abundance of activates, that there is life in the neighborhood at all times: a city of life. Therefore the strategy with Hammarby Sjöstad was to divide up the retail spaces and not locate it all in one center since otherwise most of the neighborhood would be depopulated at times. The thought was that one could walk along the main street and that there always would be some stores and some activities. It has, however, proven difficult for the retailers in Hammarby Sjöstad since there are not enough people in the area sustaining the commerce.

“It is also a question of political will, Stockholm municipality has a pretty good economy and could prioritize differently.”


When talking about the social services in Hammarby Sjöstad Cederquist argues that it took too long for it to be established and that this was due to the fact that the initiative was left to the market and was therefore slower than usually. The lack of kindergartens and schools are especially unfortunate. According to Cederquist this was a result of an unwillingness to act by the politicians of Stockholm that e.g. put a stop to a communal school in 1998 because of a fear of not being able to fill the school places and the extra cost involved in not having a full school from the start. Cederquist thinks, however, that since the city of Stockholm has a relatively good economy it could afford to prioritize differently.

Moreover Cederquist argues that there is much to few public inner spaces in Hammarby Sjöstad, something that he believes is crucial in a city district. Cederquist explains that before in the 1940s and 1950s the city would build large public inner spaces even if they really did not have the money for it since it was considered of such importance. Today, Cederquist argues in a time of wealth very few public inner spaces are being built. He thinks there should have been built more public inner spaces in Hammarby Sjöstad that could have been used e.g. by a community center.

Cederquist argues that the open courtyards of Hammarby Sjöstad give the area suburban characteristics, something that is possible due to that there is not so much throughput in the area by people who do not live there. Cederquist believes that this makes Hammarby Sjöstad endearing and enjoyable and that it is nice that the courtyards are connected with the public green areas in Hammarby Sjöstad. He does not believe that there is any uneasiness among the people in the neighborhood today, however he add that some might want to close off their courtyards with time and that some already have put up fences and gates at their courtyards to keep strangers out.

When discussing the sizes of the housing in Hammarby Sjöstad Cederquist agree that there is both too few small and too few large apartments in the area. He describes the difficulties in Sweden to build smaller apartments than 40 m² due to certain functional requirements and that there were plans of building smaller so called Manhattan apartments but that these requirements made it impossible. The fact that the largest apartments are 120 m² result, according to Cederquist, in that families with teenagers move from the area since they want more space. Cederquist argues that this is unfortunate for the continuity of Hammarby Sjöstad. He argues, however, that we require too much space today and that streamlining ones housing is not brought up enough. Cederquist argues that we are to set in our way when we are thinking how much space that we really need and that there is a need to change this apprehension but that it is very difficult to change it in a project such Hammarby Sjöstad.

Moreover we discussed the scale of the neighborhood and Cederquist describes how people coming from Tokyo think that they have come to heaven when people coming from e.g. South America not so much. He personally believes that the scale of Hammarby Sjöstad is all right and thinks that Sweden is in the middle globally in the way we are work with scales and not with as large scales as in Tokyo nor as small scale as in places in South America. Cederquist argues that the local environment of Hammarby Sjöstad is very good, much due to the fact that the city’s aesthetic goals and the money they put in to create good parks and public areas. He believes that this is essential in a city center and says, quite ironically, that this is also what the developers use to push the prices.

We discuss the social networks of Hammarby Sjöstad that Cederquist believes are good, maybe as a result of the homogenoeus demography. He also believes the area to be quite safe but thinks that Hammarby Sjöstad gets many burglaries since there are things worth steeling in the neighborhood. Cederquist thinks that people sees Hammarby Sjöstad as Östermalm (a city district in the city center) 2.0 and have a generally positive opinion of Hammarby Sjöstad.

Finally we discussed if he believes that social sustainability get enough attention in urban renewal projects, to which Cederquist answer with a distinctive no. He describes how difficult it is to assert ones selves with the social issues since all the technical- and infrastructural issues are so heavy and cannot be overlooked. Cederquist argues that the best time to bring up the social issues is early in the planning but often when faced with real problems that these issues are somewhat forgotten in the process.

“There is a need for a public inner space...where I find public utility could do more.”


“...when it comes down to it, it is the social issues, social life, social qualities and social sustainability that perhaps is what people ask for the most [in a neighborhood].”

Conclusion
Of the interview with Björn Cederquist

Few can say that they have worked longer with Hammarby Sjöstad than Björn Cederquist and from the interview it becomes clear that he knows this project and how it has been developed. Despite the fact that he has worked with Hammarby Sjöstad for the last 18 years he can still be objective, or maybe it is due to his long time with the city district that he also can see its flaws. Because Hammarby Sjöstad has flaws, it is not a perfect neighborhood, or maybe one should put it like Cederquist did – it is perfect, if you can afford it.

However, Hammarby Sjöstad is not that socially diverse and as Cederquist argues is the social mix important and perhaps even more so than we realize. It troublesome to hear what Cederquist have to say about the public rental housing system in Stockholm and how it has lost its capacity to make the city more socially diverse. Earlier this thesis has argued that it is worrisome that the rental housing is converted into condominiums in the city of Stockholm and how drastically the housing structure has changed from having large numbers of rental housings (both public and private) to having large numbers of condominiums instead. However if the public housing no longer can benefit the marginalized of Stockholm the situation is even direr. One therefore can argue that to create a social mix in urban renewal developments the public rental housings, that need to be of a substantial percentage, also need to be utilized to make social constructions rather than act as a profit machine for the city.

Moreover, it is also troublesome to hear that it was much due to the unwillingness of the politicians that Hammarby Sjöstad soon had a lack of both schools and kindergartens and that they put a stop to the construction of a school in 1998. It is also a shame that the public inner space is not as valued as it once was, despite the fact that the economy is much better. One can therefore argue that when and how many social services such as schools and public inner spaces are established in an urban renewal development depends on political will and to make sure that the social issues are considered they need to be asserted and guarded.

Cederquist made it clear that he believes that in order to create a good local environment in a neighborhood, there is a need to have aesthetic goals that can be followed and a need to put money in to create good parks and public areas. This is something that I, the author, truly concur with and therefore the last key point to consider in urban renewal should be this, that one can argue that to create a good local environment in an urban renewal development, aesthetic goals needs to be established and money invested to create good parks and public areas.

Key points to consider in URD

1. To create a social mix in urban renewal developments the public rental housings need to be utilized to make social constructions rather than act as a profit machine for the city.

2. When and how many social services such as schools and public inner spaces are established in an urban renewal development depends on political will and to make sure that the social issues are considered they need to be asserted and guarded.

3. To create a good local environment in an urban renewal development, aesthetic goals needs to be established and money invested to create good parks and public areas.

Figure 59. Photo taken from a typical courtyard in Hammarby Sjöstad looking down at Hammarby Lake - the heart of the area.
Hammarby Sjöstad are many things but arguably not a socially sustainable neighborhood.

In the planning of the area there was a wish to create a city district of inner city qualities that Hammarby Sjöstad should be an extension of the inner city and be as dense and as full of life. One can argue that it did indeed get many of the qualities of the inner city of Stockholm but it also became as expensive, as exclusive and as segregated.

The social exclusion of Hammarby Sjöstad is arguably its largest flaw and the lack of a social mix in the neighborhood the most regrettable part about it. It is too expensive to enable a socio-economic mix and since many of the people with foreign background in Stockholm are refugees with a weak economy, this also result in that the neighborhood lack a cultural diversity.

There are also many positive qualities in Hammarby Sjöstad; it has an abundant of social services, relatively many green spaces, a good public transport system, a variety of functions of its buildings and a good and safe local environment where its people have a general good well being. It is as Björn Cederquist said, a good neighborhood to live in, if you can afford it. Still, arguably, there are things that are questionable in Hammarby Sjöstad. One can say that the lack of day care, schools and of public inner spaces, the lack of both small and large apartments, the imbalance of private- and public spaces and the rapid turnover all are things that potentially can make Hammarby Sjöstad a less socially sustainable neighborhood.

Moreover, Hammarby Sjöstad is a city district that market itself for having a sustainable urban design, which one can question its legitimacy. The truth is that those early plans of making Hammarby Sjöstad a true example in how to make a city district sustainable might not have been as successful as one would have hoped. Some of the initiative plans failed and after have been lowered they failed again, and what the developers found so hard to fulfill are now standard in Swedish developments. But with all of that said, how Hammarby Sjöstad could have been more sustainable, people are still traveling to the city district to get inspired of what can be done. It is still, as it set out to be, a role model and inspiration for environmental awareness.

Hammarby Sjöstad is almost completed, the remaining parts will probably not change the area that remarkably, only make the city district a bit larger with a larger population. But most of it is done and the urban renewal project, a process of 25 years, will be finished. One can discuss what the urban renewal project of Hammarby Sjöstad have meant to the city of Stockholm, if it indeed has been the forerunner showing the way of how a city can be densified through urban renewal on areas that no longer are used as they once was. Cederquist believes that Hammarby Sjöstad have shown that urban renewal projects does not have to became as one-sided as those built in the 1960s and 1970s and that it opened a way of a new kind of city planning.

One can argue that if Hammarby Sjöstad indeed was such an important urban renewal project for the city of Stockholm, that it is a pity that it did not became as socially sustainable as it could have become. One can argue that had Hammarby Sjöstad put extra focus upon the social issues of sustainability the extensions of the inner city of Stockholm that are being built and are inspired by Hammarby Sjöstad, could have made the city more socially sustainable with less of an socio-economic gap.
In this chapter the results from the thesis are concluded and discussed. The key points that have been established in the case studies are presented in form of a guideline of what to have in mind when working with an urban renewal development in order to be able to create a socially sustainable neighborhood.
Conclusion of the results

Social sustainability is a multifaceted concept and it is as complex and complicated as the concept of urban renewal. These two concepts are tightly interconnected and have been that way from the very beginning of urban renewal, from those very first thoughts in the 19th century, that the slums needed to be renewed to provide better living conditions. One can argue, thought, that even if the social issues initially were voiced in projects such as those in the U.S.A. in the 1950s and 1960s and those in China in the late 1980s – they tend to be forgotten in the process. In fact it seems that in many cases that the initial people the project aimed to benefit, later were excluded and forced away from the areas once they had been renewed. Karen Leeming (2010) p. 152, argues that: “It can hardly be considered a successful urban renewal when the needs and wishes of a group of people never actually make it onto the agenda of the redevelopment agencies because they do not fulfill the criteria to live there after regeneration has taken place.”

Urban renewal developments are meant to improve the city for its people, to efficiencies the areas that no longer are used, to provide e.g. new residential areas. Urban renewal is a way for cities to grow through densification instead of urban sprawl and it is a way for cities to distinguish themselves worldwide and show their success and innovations. With urban renewal there is a possibility to build away issues such as socioeconomical differences and segregation, and it is a way to develop a city into becoming more socially sustainable. When discussing the cities of Melbourne and Stockholm one can argue that they are very different from each other - a new city vs. an old located a world apart. However, they share a common problem; they are both cities with a large socioeconomic gap. With the large and innovational urban renewal developments of Melbourne Docklands and Hammarby Sjöstad the cities had an opportunity to start changing into becoming more socially sustainable with less of a socioeconomic gap. When discussing the cities of Melbourne and Stockholm one can argue that they are very different from each other - a new city vs. an old located a world apart. However, they share a common problem; they are both cities with a large socioeconomic gap. With the large and innovational urban renewal developments of Melbourne Docklands and Hammarby Sjöstad the cities had an opportunity to start changing into becoming more socially sustainable with less of a socioeconomic gap. Both of the projects could have shown the way for future projects and been role models in this matter, both within the cities but also nation- and worldwide.

It is, however, my conclusion that neither Melbourne Docklands nor Hammarby Sjöstad can be called socially sustainable neighborhoods and although one can argue that Hammarby Sjöstad might be the better of the two – mostly for its more abundant public green spaces and its closeness to a large recreational area, better environmentally sustainability, a local environment planned for walking rather than driving and its low crime rates, the city district is still not socially inclusive. One can argue that the issue of social exclusiveness, in fact, is the largest flaw in both Melbourne Docklands and Hammarby Sjöstad and the poor social mix in the areas due to this, the city districts most regrettable part.

To whom is the city built? In the cases of Melbourne Docklands and Hammarby Sjöstad it seems like the neighborhoods have been built for a rather small group of people in the city, hence excluding a large group of people and mainly those unable to afford living in the areas. Of course one can discuss the necessity of a social mix in a neighborhood, but to quote Björn Cederquist (2014): “The mixture is certainly more important than we really understand...” In the example of London Docklands the lack of a social mix has -arguable, caused the area to lack sociability and being less socially sustainable why it is unfortunate that Melbourne Docklands and Hammarby Sjöstad does not have a better social mix.

Key points to consider in URD

In this thesis 27 different key points have been
established that should be considered in urban renewal when wanting to create a socially sustainable neighborhood. Of all the key points to consider it was one of them that stood out more than the others because it was established in both of the case studies: The cost of living in an area is the most crucial factor when creating a social mix in a neighborhood since excessive living (more than anything) exclude the marginalized people of the society. As obvious as this statement might be it has still been proven to be truthful and important in the cases of Melbourne Docklands and Hammarby Sjöstad, and one can argue that social sustainability cannot truly be accomplished without the consideration of this one statement.

The key points, that all are presented on the next spread, can be divided into the four groups of contributing factors to social sustainability, 1-8 concerns social services & accessibility, 9-15 concerns social mixing & social inclusion, 16-23 concerns the overall form & function and 24-27 concerns social networks & stability. The key points are either pink, blue or white, the pink representing the key points learned from the case study of Melbourne Docklands, the blue presenting the key points learned from case study of Hammarby Sjöstad and the single white key point, number 9, is the one mentioned previously that was established in both of the case studies.

From the key points concerning social services & accessibility the necessity for some social services i.a. mentioned and especially that of schools and day care centers. The key points stress the fact that social services such these should not be overlooked, that they need to be planned early in the project and that the lack of such services can lead to that people forces to move from the area or that it even can prevent people from moving there in the first place.

From the key points concerning social mixing & social inclusion are the issues of unoccupied housing i.a. declared as well as the conversion of rental housing to condominiums. Moreover, these key points state that urban renewal should not merely be seen as a way to expand the city and make a profit but rather as a second chance and an opportunity to improve the social situation of the city.

The key points concerning the overall form & function of urban renewal states, i.a., that urban renewal developments have the power to greatly impact how the issue of sustainability is handled in a city. That one should consider the human scale when planning and that in order to create a good local environment in an urban renewal development aesthetic goals needs to be established and money invested to create good parks and public areas.

Finally the key points concerning social networks & stability states i.a., that a well-established community center is the heart of a neighborhood, that the community activities need to reach all different groups of the society and that when working with urban renewal development one should realize that an area can be planned in a way that crimes can be minimized.

In the following spread all of the key points are presented as the final results of this thesis.

Social sustainability in urban renewal - the viewpoint of a landscape architect

Many of the key points that was established from the case studies are influenced by the physical structure of the neighborhood. As a landscape architect the physical structure and form of an urban renewal development is particularly interesting to study. This is what our profession mostly can affect and alter and therefore it is important to understand how the physical structure of a neighborhood can make it more socially sustainable. One can argue that a well-planned physical structure of a neighborhood can make it more likeable and livable, hence more socially sustainable. A strong identity and a sense of place contribute to the creation of a soul within a neighborhood, which is crucial for the well-being of people.

A poor physical structure can have the opposite effect to a neighborhood. Taking the city district of Bijmermeer as an example, where the physical structure was considered the biggest flaw of the area and the main reason to its social issues and deterioration. To be able to improve the situation in Bijmermeer the physical structure needed to be renewed - it was not enough to improve e.g. the social services in the area. The effect of the physical structure is very hard to change without actually changing the layout in itself e.g. fact that Melbourne Docklands has very tall buildings is something that is very hard to correct without tearing the buildings down. Since the physical structure is difficult to alter, one can argue it should be carefully planned in an urban renewal development.

The projects of Melbourne Docklands and Hammarby Sjöstad were approached very differently. Hammarby Sjöstad was planned much more in detail than Melbourne Docklands where the developers more or less were (and continuing to be) free to do what they wanted. One could perhaps say that this represent the countries in which the projects are situated, where Sweden is much more restricted and structured, Australia is more free spirited and not as bound by restrictions. Arguable, these approaches both have positive and negative features, however (and perhaps I am a bit biased), one can argue Hammarby Sjöstad have a better physical structure indicating that in these two cases its approach is to be preferred. Arguable, many of the issues with the physical structure of Melbourne Docklands such as the lack of green spaces, the (to the most part) poor local environment and the too large of a scale resulting in a neighborhood better planned for people driving than walking are all due to the fact that the market was allowed to develop Melbourne Docklands seemingly as they pleased.

With the physical structure or layout one can also question whether there is a good balance between private- and public spaces, whether it is a good balance between the functions of the buildings and whether there is enough public green spaces in the area. The importance of sufficient public green spaces in a neighborhood cannot be overstated since it is one of the few places within the city where people of all background can meet without e.g. needing to purchase something. The public green spaces contributes to an increased integration and social cohesion and provides conditions for improved general health conditions as well as democracy and welfare. From the example of the Cheonggyecheon stream the importance of a public green space is attested, since the presence of the recreational area made the living conditions better for the people living close by as well as it improved the air quality and reduced the noise pollution in the entire city. Whether Melbourne Docklands and Hammarby Sjöstad has enough public green spaces is hard to determine, however Hammarby Sjöstad has less than half the amount of public green spaces than the city of Stockholm while Melbourne Docklands has almost only a third of the amount of public green spaces as Hammarby Sjöstad has.
Guideline to social sustainability

1. In urban renewal developments one need to realize that the lack of essential social services such as day care and schools can force people to move from the area or even stop families from moving to the area in the first place.

2. In urban renewal developments it is crucial to have a sufficient amount of public green areas, especially if the area does not have any large recreational areas close by.

3. Although it is important in urban renewal developments to create a sufficient walk- and bike lane network within the neighborhood it is also essential to make sure that these networks are connected in a good way to the existing networks of the city.

4. It is important to realize in urban renewal development that some social services are important not only for the people living in the area but also for those working in the area.

5. Social services need to be considered early on in urban renewal developments so that they can be installed and make the area functional as soon as possible.

6. Daycare and schools are two essential social services that should not be overlooked in urban renewal development and that need to be considering when planning the area.

7. There is also a need to consider in urban renewal developments that if good public transport is offered people are going to use it, with less motorized traffic in the area as a result.

8. When and how many social services such as schools and public inner spaces are established in an urban renewal development depends on political will and to make sure that the social issues are considered they need to be asserted and guarded.

9. The cost of living in an area is the most crucial factor when creating a social mix in a neighborhood since expensive living (more than anything) exclude the marginalized people of the society.

10. In urban renewal developments one should strive to minimize the amount of unoccupied housings, avoiding the risk of becoming a ghost town.

11. Although it is important with a functional mix in urban renewal developments it is important to make sure that enough people live in the area to make it liveable and not just becomes a place to work and to spend the working week.

12. In urban renewal one should realize that the lack of a mixed demography could lead to a city district that is empty and life-less at times, why one always should strive to create a society with a mixed demography.

13. Urban renewal development should not merely be seen as a way to expand the city and to make a profit, rather it should be considered as a second chance and with the right planning it is an opportunity to improve the social situation of the city.

14. The conversion of rental housing to condominiums make a city less socially sustainable with a larger socioeconomic gap.
<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
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<tr>
<td>15.</td>
<td>To create a social mix in urban renewal developments the public rental housings need to be utilized to make social constructions rather than act as a profit machine for the city.</td>
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<td>16.</td>
<td>Large urban renewal developments have the power to greatly impact how the issue of sustainability is handled in a city and might inspire to improve its situation.</td>
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<tr>
<td>17.</td>
<td>When planning an urban renewal development one should make a general holistic plan over the layout of the neighborhood to ensure positive visual effects and a general good feeling throughout the neighborhood.</td>
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<td>18.</td>
<td>In urban renewal developments one should consider the human scale so that the local environment can be as walkable, enjoyable and liveable as possibly.</td>
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<td>19.</td>
<td>If possible it is important to ensure that the local environment, that contributes to the social life of a neighborhood, have an enjoyable climate and i.a. trying to minimize the impact of the wind.</td>
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<td>20.</td>
<td>In order to truly create a sustainable development not only should the goals that are set out be reached, it is crucial that some demands are put on the inhabitants of the area to change their lifestyle in becoming more sustainable.</td>
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<td>21.</td>
<td>Having street trees are essential in urban renewal developments when making the local environment enjoyable and walkable.</td>
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<td>22.</td>
<td>There is a need for places in a neighborhood that are private, that are not programmed and planned to the last detail. Places that the people can change and influence while living in the area.</td>
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<td>23.</td>
<td>To create a good local environment in an urban renewal development, aesthetic goals needs to be established and money invested to create good parks and public areas.</td>
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<tr>
<td>24.</td>
<td>One should consider in urban renewal developments that a well-established community center is the heart of a city district and neighborhood.</td>
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<td>25.</td>
<td>The creation of a soul in a neighborhood depends on several different things, however, many can be accomplished with a careful and proficient planning.</td>
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<tr>
<td>26.</td>
<td>When working with urban renewal developments one needs to recognize that an area can be planned in such a way that crimes can be minimized, and something to consider when planning an urban renewal development.</td>
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<tr>
<td>27.</td>
<td>Community activities needs to reach all different groups of the society i.a. young, old and families and should cover a wide range of things such as music, food and religious activities.</td>
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A final reflection and discussion.

In this final chapter the issue of social sustainability in urban renewal is reflected and discussed. New questions developed during the thesis are asked and ideas to new master thesis are presented.
To whom is the city built?

Cities are forever transforming, never standing still; they are organisms in a constant evolution. However, one can argue that there are some things that are continuous in this forever-changing process such as that to whom the cities are built for. I would argue that cities always has and always will be built to benefit the people living in them. I am, however, not as certain that this include all of the people living in the city or if it merely include the elites.

In this shrinking world of ours the competition between cities are growing and it seems to me that no one wants to admit that behind those perfect facades real problems are hiding, and behind the faces of the elites in the city are the faces of those most marginalized. Perhaps it would be devastating for a city’s reputation to admit having issues such as socioeconomic differences and segregation, however it is still curious to me that opportunities such as Melbourne Docklands and Hammarby Sjöstad are not capitalized as they could have been.

To me the spatial segregation of the marginalized within the society is one of the most important issues of city planning today and it is an issue that I believe need to be addressed further in urban renewal developments. Since the city is constantly changing and areas within the city is continuously renewed there is an opportunity to create a greater social mix in the city through urban renewal developments. If the issues of social sustainability would be considered with the highest of priorities in city planning there might be a possibility that the social sustainability in cities can gradually improve.

Arguable, the social challenges in a city cannot only be solved with city planning, however, I believe that the spatial planning of the city is crucial when solving some of the social challenges of the city. Nevertheless to truly create a socially sustainable city the issue of socioeconomic differences and of marginalized people first needs to be addressed and to quote David Harvey (1996), p. 97: "...it is vital, when encountering a serious problem, not merely to try and solve the problem in itself but to confront and transform the processes that gave rise to the problem in the first place."

How do we even begin to change such rudimental issues in our society? The issues of inequality, that some have so much while so many have so little? I argue that the first step to solve such a problem is to acknowledge its existence, not to dismiss it as something that is not happening in our society but in others, to realize that we are not perfect and therefore is our society not perfect either. But we can choose to change it, to make sure that projects such as Melbourne Docklands and Hammarby Sjöstad are capitalized to make our society more equal and more socially

"Part of the problem is that too many people have convinced themselves that, given the complex challenges of the current circumstances, we are already doing the best we can...”

“Cities are the heart of the problems facing this planet, but developing a positive and sustainable mode of urban living is the only way that we will be able to sustain social life as we know it past the end of this century.”


The paradox of cities
Cities will continue to grow, in fact over the next decades it is believed that virtually all of the world’s population growth will be in urban areas (UN-Habitat 2010; UN-Habitat 2012). This growth will need to be managed in a sustainable way; otherwise I fear that some cities could become uncontrollable and unstoppable monsters, polluting the world with not only greenhouse gases, but also with the aftermath of inequality and injustice.

James (2015) talks about the paradox with cities. According to him they are the very heart of the problems facing this planet, but he also claim that cities are the only way to ensure a future. James claims that due to the current population growth, the only way we can survive is by, in a sustainable way; densify our cities along with increasing our energy efficiency and decreasing our need of resources. No longer, James claim, can we save the world through building rural idylls on small and self-contained plots of land.

The only way this world can hold the population that we are growing into is to create cities that enables sustainable urban living. However, to be able to establish this, the concept of sustainability truly needs to be understood. It has been this thesis objective to shed some light on the concept of social sustainability, and it is my hope that more studies will be made over all the dimensions of sustainability. More than anything I hope for studies that are not afraid to be critical and correct in their examinations, because I think that if we cannot even acknowledge the issues of our society today, how can we ever change it to the better?

The dimensions of sustainability
This thesis has focused upon the social dimension of sustainability; however, I argue that one cannot simply study one of the dimensions without concerning the others. I believe that this has become quite clear through this thesis. Many of the established contributing factors to social sustainability can in fact said to originate from the other dimensions of sustainability: qualitative local environment (Physical), reasonable cost of living (Economical), substantial amount of public green spaces (Biological), adequate public transport (Organizational), the presence of a library and other cultural services (Cultural) and the liveability and identity (Aesthetical).

Due to the close interconnection of the sustainability dimensions people might argue that it is best to study sustainability as a whole. However, I argue that it is a far too complex concept for it to be reasonable to study in a whole, and that when trying to, some of the aspects of sustainability will be lost in the process. I believe that people, using that strategy, will focus on things that seems easier to do something about, that are more concrete than perhaps challenges such like the social challenges. When instead each of the sustainability dimensions are brought to light, studied and concretized, we might be able to create a comprehensive understanding of what sustainability really is and what should be done when wanting to create, not only a socially sustainable neighborhood, but a generally sustainable neighborhood.

A landscape architect’s take on social sustainability in urban renewal
It is my belief that landscape architects, due to a wide knowledge of both social- and environmental sciences as well as with an esthetical comprehension, is a profession that is suited to understand and work with social sustainability and other sustainability issues. Moreover it is my belief that landscape architects along with urban planners and designers, need to acknowledge the necessity to create a sustainable city, both in a large scale as well as in a small scale. I believe that also in the small scale important work can be done, especially when promoting a socially sustainable neighborhood.

There might be those who claims that social sustainability is not something that can be designed or planned for, that it is a concept that is much more dependent on e.g. the social dynamics of the city. In contrast, I argue that the morphology of the city, its spatial structure, is a very important component to social sustainability.
For the landscape architect I believe that the issue of social sustainability is something that is very much a part of the daily work, even if this is not something many reflect upon. As presented in this thesis there are many physical attributes that can make a neighborhood more or less socially sustainable, especially a qualitative local environment. The creation of a good local environment, that I believe, greatly effect whether we enjoy living in a neighborhood or not, depends on many things such as a sufficient amount of green spaces and other open spaces, a well established bike- and walk lane network, an enjoyable climate (and the prevention of e.g. windy conditions), as well as a good balance between private- and public spaces. Moreover, I think that the work of landscape architects are crucial when it comes to creating a soul, an identity and a sense of place to a neighborhood.

When planning an urban renewal development landscape architects can ensure that the overall scale is good and that the neighborhood is planned in such way that it could minimize the crimes in the neighborhood. These are two aspects that need to be planned with a holistic approach, and I believe that this holistic approach sometimes is forgotten in the process with urban renewal developments and city planning in general. I argue that to ensure that a neighborhood become socially sustainable it needs to be planned in a comprehensive way.

Moreover I believe that it is important to also look beyond the specific area to its surroundings to get an accurate understanding of it. If an area, that is being renewed, only is considered within its boundaries much, I believe that much is lost. It might seem small when a bike-and walk lane network is not connected sufficient enough with the surrounding networks (like in Melbourne Docklands), but this tells me that some of the other planning of the area can also be like this, planned in itself but not in how it is connected with its surroundings. This might result in that some social services needed to ensure a socially sustainable neighborhood is missed from the area or not sufficient enough. From the example of Melbourne Docklands one can argue that had the planners, in a satisfactory way, looked beyond the area when planning it, they might have realized the need of green spaces in the neighborhood since there is a lack of such in its surroundings.

Finally I believe that landscape architects can be a part of a comprehensive and long-term planning of the city. Because I agree with James (2015) and the quote from him above, that to ensure a sustainable city in the future we need to plan the city long-term. We cannot only look into the needs of today, we need to realize that if we want to create a sustainable and liveable city in the future we need a plan of how this might be done, stretching from now until the goal has been reached.

In the very last section I want to bring up that according to Knox and Pinch (2010) a city is not just physical structures but also a product of our imagination. I think that this is a beautiful notion and quite poetic, it is only our imagination – our dreams and ideas that put a stop on what the city could become. If this is really true, one can therefore say that the idea of a truly socially sustainable society is just a dream away.

**Ideas to new thesis**

This thesis has approached the subject of social sustainability in urban renewal developments and this is a subject that easily could be further studied by landscape architects students. Subjects to further study could be some of the social issues approached in this thesis such as spatial segregation and socioeconomic differences, the framework established in this thesis could be more concretized and other cases could be studied to further developed the guideline to social sustainability in urban renewal developments.

Moreover could the other dimensions of sustainability be studied further in the relationship to urban renewal developments and a similar thesis be made on each of the six other dimensions of sustainability. Were studies like this to be made the collected guidelines could provide a comprehensive approach to create a sustainable urban renewal development – both physically, economically, biologically, organizationally, socially, culturally and aesthetically.

**Figure 61.** Circular Quay is very popular urban space located on the waterfront in Sydney that was revived between the 1960s and the 1990s (Droege 2004).
“...cities are not just physical structures; they are also products of the human imagination.”

p. 3, Paul Knox & Steven Pinch (2010).
“..cities represent the best and worst of us. They are the home to the most crass and the very grandest things that we can achieve. Conversely, to improve them, we need to attend to our own weaknesses.”

References

Figures
Figure 3 & 23. The picture is licensed under public domain via Wikimedia Commons and is altered from its original that can be found on: Amsterdam Zuidoost Flat Hakfort 001.jpg. http://commons.wikimedia.org/wiki/File:Amsterdam_Zuidoost_Flat_Hakfort_001.JPG [2014-11-05]
Figure 4 & 24. The picture is licensed under Creative Commons Attribution-Share Alike 3.0-de via Wikimedia Commons. http://commons.wikimedia.org/wiki/File:Amsterdam_Zuidoost_Flat_Hakfort_001.JPG [2014-11-05]
Figure 5, 6, 7, 8, 11, 12 & 15. Courtesy of Hannes Dahlberg.
Figure 5, 6, 7, 8, 9, 10, 11, 12 & 15. Courtesy of Catharina Österman.
All other figures in the thesis are the author’s own.

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Appendix 1
Site visits in Melbourne Docklands

The site visits where done at places within Melbourne Docklands that had been found interesting when doing the study over the city district. All of the areas except Harbour Town are public open spaces, the shopping center being a part of the site visits since it seems to be of great importance for Melbourne Docklands. The site visits where done in the same week, on a Tuesday around lunchtime, on a Thursday in the afternoon – around the time people stop working and in a Saturday evening just after the sunset. 30 minutes where allotted in each of the visits and although most of this time was used observing the area, some time was given to have conversations to the people in Melbourne Docklands. The sites that were visited was:

1. The playground at Docklands Park
2. The art hall at Harbour Esplanade.
3. The open space at Melbourne city marina.
4. Harbour Town shopping center.
5. The square at Collin’s landing.
6. Point Park.
7. Docklands Park - the northern part.
8. Seating area along the waterfront.

Figure 62. A synoptically map over Melbourne Docklands indicating where the site visits took place.
Playground at Docklands Park

**Date:** Tuesday 9/12-2014.
**Time:** 11.10-11.40.
**Weather:** Sunny with some clouds, 17 C°

**People density**
There are few people around, two families with three children and three adults, another couple of persons passing on the walkway next to the playground.

**Activities**
Children playing in the playground, running around and chasing each other while the parents are sitting and doing some sunbathing while watching their children.

**Impressions**
The playground is quite large, however it is still does not have that good variety of different activities offered for the children. There is a large artwork in the playground area, taking a lot of space. Since the playground is large it feels empty since so few children are playing there, which seems a bit odd since it’s a weekday and usually small children would be out and play with their parents. It makes you wonder if it is few children to begin with in the city district, or if this playground is not well liked? Moreover, it is a bit unfortunate that the artwork is not more incorporated in the playground and something that the children could enjoy playing with, instead of just something one can view from a distance.

The art hall at Harbour Esplanade

**Date:** Tuesday 9/12-2014.
**Time:** 11.50-12.20.
**Weather:** Sunny, 17 C°, a bit windy.

**People density**
Very few people in the area, a couple of people sitting, but most people are simply walking by and not stopping.

**Activities**
Walking by, sitting on one of the many benches in the area and then walking up and viewing the art.

**Impressions**
A rather large public open space with several seating arrangement, however most are not used, and the area feel empty and abandoned. There is a coffee house in the area but it is not opened, some of the people in the area are going towards it and then, when seeing that it is closed, looking disappointed and walking away. The coffee house does not seem to have any outdoor serving area, which is a bit odd in a city like Melbourne where the weather allow sitting outside most time of the year. There area has fake grass rather than real, and the only real plants are few and sparse. There is a lot of traffic on Harbour Esplanade, which disturb some. All of the people I meet in the area are tourists.

The open space at Melbourne city marina

**Date:** Tuesday 9/12-2014.
**Time:** 12.30-13.00.
**Weather:** Sunny, 18 C°, windy.

**People density**
Many people are passing the area, however there are only a couple of people that are staying in the area. There are a few people sitting in the restaurants and cafés adjacent to the area, but not many.

**Activities**
People are walking by, looking out over the marina, running- and biking by.

**Impressions**
The area feels enormous and it is really open, resulting in it feeling quite windy and cold despite the sun shining. It feels like most of the people are hurrying away from the windy area, many coming from the shopping center carrying several bags. The fact that the restaurants and cafés are almost empty feels very strange since its lunchtime. Some of the shops adjacent to the area have signs saying that they are available to rent. Most of the people stopping in the area look like tourist.
Harbour Town shopping center

**Date:** Thursday 11/12-2014.
**Time:** 16.20-16.50.
**Weather:** Sunny with some clouds, 18 C°, windy.

**People density**
There are relatively many people in the shopping center, more than I have seen in Melbourne Docklands at this point during my site visits.

**Activities**
People are walking around, sitting on the benches, shopping – probably doing Christmas shopping.

**Impressions**
There is a nice feeling in the shopping center – it felt more like a Friday afternoon than a Thursday afternoon. There are quite a lot of people moving around, even though it dose not feel crowded since the shopping center is very large. The people seem calm; they are not rushing – rather taking their time. There is a great mix of people in the shopping center, both ethnically and in age. The shopping center seems to attract all kind of people.

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The square at Collin’s landing

**Date:** Thursday 11/12-2014.
**Time:** 17.00-17.30.
**Weather:** Sunny, 18 C°, windy.

**People density**
There are not that many people around, some businessmen are coming out of the ANZ building, leaving the area or stopping to take a smoke.

**Activities**
People are smoking cigarettes, taking in their phones and walking away from the area – probably heading home.

**Impressions**
The square is a nice surprise to me; it is quite hidden but a nice open space. It is however, very empty, once again despite the fact that the area is quite big. The area is also very windy. The area’s close location to the ANZ building and its somewhat hidden location, make it feel more a backyard for ANZ than a public area for the people of Melbourne Docklands.

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Point Park

**Date:** Thursday 9/12-2014.
**Time:** 17.40-18.10.
**Weather:** Cloudy, 18 C°, very windy.

**People density**
There are almost no people around, only a few people going for a run or walking past. Only one that is sitting on the benches

**Activities**
The people moving in the area are going for runs or walks. One person is sitting down.

**Impressions**
The park that consists of one large lawn and a large playground – that is yet to open, feels empty and very windy. It is located next to some really tall buildings, which might explain why it is so windy in the area. The playground seems to be complete, but there are fences all the way around it, which seems kind of sad and depressing. The playground looks quite good (better than the one in Docklands Park) and it must be frustrating for the children in the area not being allowed to play in it yet. No one seems to know why the park has not opened yet, only that it will in the next week or so. Except from the wind, it is very quite in the area, and no life at all.
Docklands Park - the northern part

**Date:** Saturday 13/12-2014.
**Time:** 20.30-21.00.
**Weather:** At sunset, 28 C°, some warm winds.

**People density**
There are a lot of people in the park, separated into two groups, with around ten-twenty people in each group.

**Activities**
In one part of the park there are several young men playing Australian Rules football, moreover there is a large family barbequing under some trees.

**Impressions**
There is a lot of laughter and life in the park – the people seems to have fun. It is starting to get dark in the park and there are no lights in it. I can barely see the people barbequing under the tree from a distance. There is a great mix of people in the park, and there seems to be a lot going on in Melbourne Docklands because there is a lot of sounds and people going around.

Figure 69. The northern part of Docklands Park

Figure 70. The seating area along the waterfront.

Seating area along the waterfront

**Date:** Saturday 13/12-2014.
**Time:** 21.10-21.40.
**Weather:** Just after sunset, 28 C°, some warm winds.

**People density**
There are a lot of people in moving around and sitting in the seating area. There is clearly some festivity happening in Melbourne Docklands.

**Activities**
People are sitting, walking by and eating snacks and other kind of food. Some are viewing the fire trucks that have been driven to Melbourne Docklands for the event.

**Impressions**
There is a lot of laughter and life in the area. There is also a lot of lights and smoke in the area and around the corner from the seating area there is a several food stands and a small scene. The city district seem to be full of life – however I have a hard time understanding what the festivities are – if there even if a theme. I would have expected some kind of a Christmas theme so close to Christmas but I cannot see anything that would suggest that it is.

Figure 69. The northern part of Docklands Park

Figure 70. The seating area along the waterfront.

Figure 71. The Melbourne Docklands Piazza.

The Melbourne Docklands Piazza

**Date:** Saturday 13/12-2014.
**Time:** 21.50-22.20.
**Weather:** After sunset, 28 C°, some warm winds.

**People density**
There is almost no one at the square; some people are walking by, but barely even that

**Activities**
A few people are walking by, one motorcycle drive over the square with a very high speed.

**Impressions**
Since there was so much life in the rest of Docklands I was prepared to find people in the largest open public space as well. However, there is almost no one here – despite the very large area. There is nothing in the square and no stores or restaurants are open around it. The area feel kind of spooky after being around so many people – it feel desolated. There are people at the waterfront however, at the marina – but not that many people either.
Appendix 2
Interview questionnaire for interview with Björn Cederquist

A few questions about you/Lite korta frågor om dig

- During how long have you been working with urban planning?/Hur länge har du jobbat med stadsplanering?
- During how long have you been working with Hammarby Sjöstad?/Hur länge har du jobbat med Hammarby Sjöstad?
- Would you be willing to live in Hammarby Sjöstad?/Skulle du kunna tänka dig att bo i Hammarby Sjöstad?

Generally about Hammarby Sjöstad/Generellt om Hammarby Sjöstad

- What do Hammarby Sjöstad mean to you?/Vad betyder Hammarby Sjöstad för dig?
- Do you think that Hammarby Sjöstad is socially sustainable? Motivate./Anser du att Hammarby Sjöstad är socialt hållbart? Motivering.

Hammarby Sjöstad and socially sustainability/Hammarby Sjöstad och social hållbarhet

- What makes a city district socially sustainable to you?/Vad är det som gör en stadsdel socialt hållbar för dig?

Social services and accessibility/Sociala tjänster och tillgänglighet

- What are your thoughts about the lack of day care in Hammarby Sjöstad? (and that it has been a lack for several years)/Vad anser du om bristen på förskoleplatser i Hammarby Sjöstad? (och att det har varit en brist under många år)
- Do you think that there are enough public open spaces in Hammarby Sjöstad? Do you think that it is important to have a large public open space in a city district?/Anser du att det finns tillräckligt med offentliga ytor i Hammarby Sjöstad? Anser du att det är viktigt att ha en större offentlig yta i en stadsdel?
- Do you think that there is enough public green areas in Hammarby Sjöstad?/Anser du att det finns tillräckligt med gröna ytor i Hammarby Sjöstad?
- Do you think that there is enough public open spaces in Hammarby Sjöstad? Do you think that it is important to have a large public open space in a city district?/Anser du att det finns tillräckligt med offentliga ytor i Hammarby Sjöstad? Anser du att det är viktigt att ha en större offentlig yta i en stadsdel?
- What do you think is the worst with Hammarby Sjöstad, the city district’s main weaknesses? What you would have liked to change./Vad anser du är det sämsta med Hammarby Sjöstad, stadsdelens främsta svagheter? Det du helst skulle ha velat ändrat.

Social mix and social inclusion/Social mix och social inkludering

- Do you think that the housing in Hammarby Sjöstad make it possible for the area to achieve a social mix? The relationship of rental housing/condominiums, small/large apartments as well as the cost of living./Anser du att bostäderna i Hammarby Sjöstad gör det möjligt att stadsdelen kan få en social mix? Det vill säga förhållandet av hyresrätter/bostadsrätter, stora/små lägenheter samt prisnivå.
- Do you think that Hammarby Sjöstad has a mixed population?/Anser du att Hammarby Sjöstad har
en blandad befolkning?

- Do you think that Hammarby Sjöstad is socially inclusive?/Anser du att Hammarby Sjöstad är socialt inkluderande?

The overall form and function/Den övergripande formen och funktionen

- Do you think that Hammarby Sjöstad is a environmentally sustainable city district?/Anser du att Hammarby Sjöstad är en miljömässigt hållbar stadsdel?

- Do you think that Hammarby Sjöstad had a human scale?/Anser du att Hammarby Sjöstad har en mänsklig skala?

- Do you think that the local environment in Hammarby Sjöstad is enjoyable?/Anser du att Hammarby Sjöstad har en trivsam närmiljö?

- Do you think that Hammarby Sjöstad has a good balance between private- and public spaces?/Anser du att Hammarby Sjöstad har en bra balans mellan privata- och publika utrymmen?

Social networks and stability/Sociala nätverk och stabilitet

- Do you think that it is easy to create social networks in Hammarby Sjöstad? Motivate./Trots du det är lätt att skapa sociala nätverk i Hammarby Sjöstad? Motivera.

- Do you think that Hammarby Sjöstad is a safe city district?/Anser du att Hammarby Sjöstad är en säker stadsdel?

- What do you think is the general opinion of Hammarby Sjöstad?/Vad anser du är den generella uppfattningen/åsikten om Hammarby Sjöstad?

Urban renewal and social sustainability/Stadsförnyelse och social hållbarhet

- What do you think is the most important thing, the key points, to consider when creating social sustainability when working with urban renewal developments?/Vad anser du är det viktigaste att tänka på för att skapa social hållbarhet när man arbetar med stadsförnyelseprojekt?

- Do you think that social sustainability gets enough attention in urban renewal developments? Motivate./Anser du att social hållbarhet får tillräcklig uppmärksamhet i stadsförnyelseprojekt? Motivera.

- Do you think that social sustainability is important in urban renewal developments? Motivate. / Anser du att social hållbarhet är viktigt vid arbete med stadsförnyelseprojekt? Motivera.

Figure 72. The marina in Hammarby Sjöstad.