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## **The Process and Issues of Creating a Cohousing Development with Affordable Units in an Affluent Community: Stamford, Connecticut**

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# The Process and Issues of Creating a Cohousing Development with Affordable Units in an Affluent Community: Stamford, Connecticut

Jennifer M. Siciliano

*University of Massachusetts - Amherst*, [jms1970us@yahoo.com](mailto:jms1970us@yahoo.com)

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**THE PROCESS AND ISSUES OF CREATING A COHOUSING DEVELOPMENT  
WITH AFFORDABLE UNITS IN AN AFFLUENT COMMUNITY: STAMFORD,  
CONNECTICUT**

A Project Presented

by

JENNIFER M. SICILIANO

Submitted to the Graduate School of the  
University of Massachusetts Amherst in partial fulfillment  
of the requirements for the degree of

**MASTER OF REGIONAL PLANNING**

May 2009

Department of Landscape Architecture and Regional Planning

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Approved as to style and content by:

---

Ellen Pader, Committee Chair

---

Mark Hamin, Committee Member

---

Joseph Krupczynski, Committee Member

---

Elizabeth Brabec, Department Head  
Department of Landscape Architecture and  
Regional Planning

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Authority, Mike Santos of Connecticut's Department of Economic and Community Development, Robert Stein, Director of Planning and Zoning of Stamford, CT, Rodger Wilcox of the Connecticut Valley Housing Association and the members of Island and Cambridge Cohousing.

## **ABSTRACT**

### **THE PROCESS AND ISSUES OF CREATING A COHOUSING DEVELOPMENT WITH AFFORDABLE UNITS IN AN AFFLUENT COMMUNITY: STAMFORD, CONNECTICUT**

MAY 2009

JENNIFER M. SICILIANO

BA, UNIVERSITY OF CONNECTICUT STORRS

MRP, UNIVERSITY OF MASSACHUSETTS AMHERST

Directed by: Ellen Pader, Ph.D.

This project examines the process of creating a cohousing development with affordable units in the United States. It looks specifically at an affluent community, Stamford, Connecticut and analyzes its many aspects to form a framework to build this type of community within the municipality. Additionally, the project provides a model for affluent communities similar to Stamford to create a cohousing community with affordable units.

This project includes a cohousing literature review, interviews with affordable housing professionals, an analysis of Stamford's history, demographics, real estate, zoning and affordable housing environment and two case studies, Island Cohousing in Vineyard Haven, Massachusetts in Martha's Vineyard and Cambridge Cohousing in Cambridge, Massachusetts. This research provides a process for creating cohousing with affordable units with best practices and shows cohousing's many benefits. It points out



the opportunities in Stamford and other affluent community that may facilitate this type of development.

Cohousing with affordable units in an affluent community has not been researched previously. This type of housing provides the benefits of a strong community, sustainability and more affordable living than conventional housing developments. Problems of affordability afflict many municipalities, especially affluent communities such as Stamford, Connecticut and this research provides a framework to create a cohousing community that will solve this problem as well as provide additional benefits.

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## **CHAPTER 1**

### **REARCH CONTEXT AND SCOPE**

Cohousing developments provide shelter for their residents, become a catalyst for community building through their design and collaborative decision making structure, as well as lessen the impact on the environment through the sharing of resources and reducing the separation and sprawl of the developments' overall configuration. In many affluent communities, such as Stamford, Connecticut, most housing is prohibitively expensive for people of low and moderate incomes. Cohousing with affordable units can provide shelter for people with low and moderate incomes within these affluent communities and at the same time facilitate increased interaction among its residents and reduce their carbon footprints.

#### **Statement of Problem**

Stamford, Connecticut, like many affluent communities in the United States, does not currently have cohousing developments with affordable units. This project provides a framework for Stamford, Connecticut as well as other affluent communities to build these types of developments. It examines existing cohousing developments with affordable units in affluent areas in other parts of the country to learn the processes by which they are created, planned, constructed, and implemented. It also analyzes Stamford's current demographics, zoning, real estate prices, and overall climate for affordable housing creation. Using this information, I determine the opportunities and constraints that allow or obstruct the process of cohousing development with affordable units in Stamford or in other similar municipalities.

### **Significance of Project**

One of the issues facing our current federal, state and local leadership is housing affordability in the United States (Journal of Housing & Community Development, 2005). People are finding it increasingly difficult to find affordable housing, especially in affluent neighborhoods and municipalities. This is a special concern for young adults just starting their careers, wanting to remain in their community, and not having the financial means to do so. Additionally, middle-income workers, such as teachers and police officers, who work in these affluent communities are finding it difficult to afford to live near their jobs and live among the population they serve an issue known as spatial mismatch. People who live closer to work have shorter commute times. These lessened commute times enable better work/life balance, which supports a better quality of life. Furthermore, these reduced driving times lower a person's energy consumption. There are a myriad of other needs for affordable housing, for example: for the sake of diversity, for people in hard financial straits, or for residents who are disabled and not able to work full-time at all.

Using the scenario of a recent liberal arts college graduate coming back to the town of Stamford, where they grew up, their average salary in 2008 would be \$35, 378 (National Association of Colleges and Employers, 2008). Fifty percent of median family income (MFI) for one person living in the Stamford area is \$41,250 (U.S. Department of Housing and Urban Development, 2008). This person would be considered a person of very low income according to U.S. Department of Housing and Urban Development (HUD) standards. Thus, by HUD standards, if this recent college graduate were to live in

Stamford, they would be considered a person with a very low income, and would be eligible for certain government funding towards housing. This is just one of many groups of people that would be helped by a more available supply of affordable homes.

Living in a cohousing development can decrease costs for residents through the sharing of a variety of goods and by decreasing overall energy use (Meltzer, 2000). Meltzer (2000) found that cohousing residents typically share appliances, tools, and second automobiles. Sharing these items reduces the need for people to buy additional goods, which saves money, conserves resources and reduces waste. Some cohousing residents consolidate trips to the store, thus saving money on gas and reducing their energy consumption (Gardner, 1999). Many cohousers live in private units that are smaller than the traditional American standard home (Meltzer, 2000). These smaller homes take less energy and money to heat and maintain. Living in a cohousing development can provide more affordable day-to-day living than residing in conventional neighborhoods that were not specifically designed to build community.

Even though it might be less expensive to live in a cohousing unit as opposed to a standard housing unit, buying a cohousing unit can cost significantly more than a similar type unit in traditional housing (Williams, 2005). There are several reasons for this: cohousing developments in the United States are usually new construction, the private units are often customized, and the common facilities are frequently elaborate (Kozeny, 2005). Kozeny (2005) states that retrofit cohousing might be a more affordable way to develop cohousing, and he states that in standard housing developments, builders typically keep costs down by standardizing and limiting the variety of individual units, and they normally have more units sharing common facilities to divide the cost of these

amenities amongst its resident owners. Although most cohousing developments are sold at market rate, there are several that include affordable units for people of low and moderate incomes (see Appendix A).

The project examines two cohousing developments with affordable units and reviews the current literature on cohousing to develop a framework to form, plan, construct, and implement a cohousing development with affordable units in Stamford, Connecticut and in other communities like it. This framework can be one part in solving the problem of providing affordable housing within an affluent community, and it can bring about, from cohousing's unique design, a more affordable lifestyle, a stronger sense of community among its residents, and allow the occupants to use less energy and create a smaller carbon footprint.

### **Research Questions**

The following questions are answered in this report. What is the process for creating a cohousing development? How can one implement affordable units into a cohousing complex? What are the obstacles and advantages to building a cohousing development with affordable units? What are the particular issues that arise when pursuing this type of development in Stamford, CT? What kind of communities can use a similar process?

## **Research Goal and Objectives**

### **Goal**

The goal of this project is to design a framework and identify the issues that arise in creating a cohousing development with affordable units in Stamford, CT and apply this framework to similar affluent communities.

### **Objectives**

The objectives of this project are the following:

1. Review the current literature about cooperative cohousing developments.
2. Conduct case studies on cohousing developments with affordable units.
3. Uncover the issues and possible assets that would arise from building this potential project in an affluent community.
4. Develop a process for building a cohousing development with affordable units in Stamford, CT using its assets and overcoming its obstacles.
5. Develop a framework for building a cohousing development with affordable units in an affluent community.

## **Limitations and Delimitations**

The project's case studies were limited by the information, experiences and feelings provided to me from the cohousing members and professionals whom I interviewed. Since I only spoke with a few of the cohousing members and professionals, there is a possibility that those members who did not come forward to speak with me had different experiences in the cohousing process and development. Another limiting factor in this research was that there is not an official list of cohousing developments with

affordable units, so I had to generate a list from various sources discussed latter in this paper.

I put certain limitation on the project's research due to time constraints and other factors. I only conducted two case studies, and I did not look at cooperatives as an alternative method of ownership that might potentially make cohousing more affordable than condominium ownership. A mixed-income cohousing development will have people of different economic classes and potentially different races involved in the cohousing community process. I did not look at the issues of mixing class and race in the same cohousing development, but instead investigated the financial and location concerns of developing a cohousing complex. I also limited my literature review to English language or English translated research. There is additional literature that studies cohousing written in other languages which I did not read.

### **Definitions and Assumptions**

The following are definitions of terms used in this paper which are discussed at length in the literature review section of this paper.

#### **Cohousing**

Cohousing is a type of housing development with both private and common spaces, where the members operate and develop the community through consensus and are part of the design creation which includes a physical layout that enhances community interaction.

## **Affordable Housing**

The standard definition for affordable housing according to the U.S. Department of Housing and Urban Development (HUD) is that residents should not spend more than 30% of their income on housing. There are different government programs to help finance affordable housing developments. These governmental programs are geared towards giving people of moderate, low, and very low incomes the opportunity to rent or own affordable housing units. HUD defines a family making between 80% and 100% of median family income (MFI) in a given year as a family of moderate means, a family making between 50% and 80% of MFI as a low-income family, and a family making below 50% of MFI as a family with very low income. This standard will be used throughout this research (U.S. Department of Housing and Urban Development, 2008).

## **Affluent Community**

Fischer (2003) defines an affluent community in the United States as one in which the median family income is four times that of the national poverty rate for a family of four. I use this definition to determine if a community is affluent for this project.

## **Plan of Study / Chapter Outline**

The plan of study follows the following chapter outline. The first chapter discusses the nature of the research and the reason it was performed. The second chapter is the literature review where cohousing, affordable housing, and affluent communities are defined. I also supply the history of cohousing and give an overview of the cohousing literature to date. The cohousing literature review covers affordable cohousing strategies, design influence, sustainability and the future of cohousing, previous case

studies on cohousing developments, senior cohousing and consensus within cohousing communities. The third chapter discusses the methods used in this research. It describes what was studied and how the research was conducted. The fourth chapter gives a history, demographic make-up, real estate prices, zoning and affordable housing environment of Stamford, CT. The fifth chapter examines two cohousing developments with affordable units in Massachusetts. The sixth chapter gives an overview of the traditional cohousing process. The seventh chapter includes a framework for a cohousing development with affordable units that could be built in Stamford, CT, an affluent community. Chapter eight describes what type of comparable municipality could use a similar framework and includes a model for a cohousing development with affordable units. Chapter nine briefly summarizes the findings and significance of the research.



## **CHAPTER 2**

### **LITERATURE REVIEW**

Various studies have been conducted on and within cohousing since 1989. Some research has identified strategies to reduce development costs in the building of cohousing which can make it more affordable. Other studies have investigated and demonstrated that cohousing has the ability to build a strong sense of community, and that it can reduce the energy consumption of its residents. Other analyses forecast cohousing's future development in the United States. There have been multiple case studies on cohousing developments in the US and in other parts of the world. Some research has looked particularly at cohousing designed especially for seniors. A couple of studies examined the consensus process among cohousing residents. No one has yet attempted to articulate a process specifically to bring affordable cohousing to an affluent community where it is currently absent. This project research supplies this process.

#### **Cohousing History and Definition**

In the 1970s, a housing movement started in Denmark and Sweden that incorporates both private and public aspects in its design layout. The initial purpose of this arrangement was to give residents privacy, while providing communal living areas to create a stronger sense of community in Denmark and in the Swedish model, it was to reduce housework. Cohousing is called *bofoellesskaber* and *kollektivhus* in Danish and Swedish, respectively (Vestbro, 2000).

The term "cohousing" was first coined and the theory brought to the United States in the late 1980s by two architects, Kathryn McCamant and Charles Durrett. They had

visited Denmark to study *bofoellesskabers*, which translates in English to “living communities.” These housing developments were seen as a beneficial alternative to the current traditional forms of residential development in the United States (McCamant and Durrett, 1989).

McCamant and Durrett built the first cohousing development in the United States, Muir Commons, in Davis, California. It was completed in August 1991 based on their study of Danish *bofoellesskabers*. American, Danish, and other European cohousing developments share a similar purpose to build a strong community with no ideological uniformity. However American cohousing differs frequently from its European counterparts in its process of development and financing (Fromm, 2000).

According to Fromm (2000), there were 45 cohousing developments in the United States in the 1998. As of 2006, there were 60 cohousing developments in the US and by 2009 there were 97. (See Appendix B for full list as of 2009.) Most of these are clustered in California, Massachusetts, Washington, and Colorado. In the United States, cohousing continues to be driven by market demand and built by the private sector. In Northern Europe however, the public sector has recognized that cohousing is a sustainable type of housing that builds community, and it has built many of these types of units (Williams, 2008).

McCamant and Durrett (1989) define the common characteristics, the varied forms, and usual development process of forming and building cohousing units. The four common characteristics are participatory process, intentional neighborhood design, extensive common facilities, and complete resident management. In the initial stage, when a cohousing development is being planned and designed, the future residents are

usually part of this participatory process. The design of the development physically supports a sense of community with mutual living areas which is reinforced by residents collectively deciding how to manage their development through community meetings. A residential development needs to meet these four criteria to be considered a cohousing development. Yet, a cohousing development can vary in size, location, design, financing, ownership, and priorities (McCamant and Durrett, 1989).

### **Affordable Housing Definition**

The standard definition for affordable housing according to the U.S. Department of Housing and Urban Development (HUD) is that residents should not spend more than 30% of their income on housing. There are different government programs to help finance affordable housing developments. These governmental programs are geared towards giving people of moderate, low, and very low incomes the opportunity to rent or own affordable housing units. HUD defines a family making between 80% and 100% of median family income (MFI) in a given year as a family of moderate means, a family making between 50% and 80% of MFI as a low-income family, and a family making below 50% of MFI as a family with very low income. This standard will be used throughout this research (U.S. Department of Housing and Urban Development, 2008).

HUD estimates the annual MFI in 2008 for a family of four living in Stamford to be \$117,800. In Stamford, a family of four making between \$76,550 and \$117,800 would be a family of a moderate income. If this same family made between \$58,900 and \$76,550, they would be a low-income family, and if they made below \$58,900 a year,

they would be a very low-income family relative to other families in Stamford (U.S. Department of Housing and Urban Development, 2008).

Depending on where a person lives defines their level of income. People who live in affluent areas such as Stamford tend to have much higher incomes than people who live in an average US town. Thus people who are eligible for governmental affordable housing programs can have much higher incomes than in less affluent areas of the country. Housing in affluent areas can be much more expensive than in other parts of the country. Housing that is considered affordable in one area is not necessarily affordable in another. In Stamford, affordable housing could be used to house recent college graduates making an average salary which would be considered a person with very low income. It could house a double-income family with each spouse making \$50,000 a year with two children which would be a family of moderate means. Affordable housing can be used to house these residents, and a variety of people including the disabled among others.

### **Definition of an Affluent Community**

Fischer (2003) defines an affluent community in the United States as one in which the median family income is four times that of the national poverty rate for a family of four. I use this definition to determine if a community is affluent for this project.

Stamford, CT, as of 2006, has a median family income of \$88,492 a year (U.S. Census Bureau, 2006). The national poverty line for a family of four in 2006 is \$20,000 per year (United States Department of Health and Human Services, 2006), which makes Stamford, CT an affluent community by Fischer's classification.

### **Affordable Cohousing**

Hasell & Scanzoni's (2000) research discusses the problems and prospects of working with HUD to build a cohousing development for a group of African-American single mothers receiving Aid to Families with Dependent Children (AFDC) benefits. The study wanted to find out if these mothers would voluntarily participate in this type of common housing, and if it would lead to economic self-sufficiency. They sent letters to 35 mothers fitting the above profile, and seven of the mothers were interested in the idea. When they first talked to them about the idea of exchanging goods and services, and helping each other with childcare, they brought up concerns about being able to trust the other mothers. The researchers thought the mothers needed to complete a task together to form a bond. The group task was to design their future living space. They worked with architects and landscape architects to come up with designs to renovate the interior and exterior of their future homes. The idea was for all these families to move to one shared cul-de-sac. Since HUD did not allow separate buildings for community activities, they needed to make sure that one of the mother's homes was big enough to fit all the families for community functions and for combined childcare. After a year, they took their designs to the HUD officials for feedback. The mothers were ready to move ahead in the process. The officials then asked for transcripts from the group's conversations. The researchers informed them that they would not supply them. After this experience, HUD officials stalled and said they were finding out if the move was possible. The researchers theorized different motivations behind HUD's actions, such as HUD wanting to use the transcripts of the group's conversations to inform them about drug dealers. The

researchers came to the conclusion that groups should look beyond HUD to make an all affordable cohousing development (Hasell & Scanzoni, 2000).

Reuer (1995) studied strategies to reduce costs in cohousing developments in the United States and Canada. He studied eight different cohousing communities and examined various ways they lowered costs to make units affordable. He suggests having members of various incomes join the founding group. He found that when groups included members with moderate or lower incomes, they more often had units that were affordable. One reason was that members with lower-incomes pressed for affordable units. Also when there were members with higher incomes, they were able to supplement the upfront costs more than the members with less income. Reuer also suggested having members working as consultants to reduce costs. Cohousing developments should have at least 15 households to divide the upfront costs of development and spread out the risk among numerous members. Cohousers should partner with a developer, so that the members are not carrying all the risk. People with low and moderate incomes have a hard time carrying a large financial risk. Due to the expense of getting zoning changed, Reuer suggests picking a property for development that is already zoned for higher densities, since it can cost a lot in attorney's fees to get zoning changed. Urban areas often have properties targeted for redevelopment. These targeted properties might be obtained at a reduced price, will also have infrastructure and be close to schools and shopping. Cohousing developers should look for municipal property that might supply land in exchange for supplying affordable units. Additional strategies are to look for subsidies from various governmental agencies. Reuer also suggests making the units

smaller, with open floor plans, and to use sweat equity from its members to reduce costs for these developments (Reuer, 1995).

### **Design's Influence on Cohousing Communities**

Marcus (2000) studied six different cohousing communities in Denmark, Sweden, and Holland. The research looked at two elements of site design and how they affected these communities. One site design factor analyzed was whether people outside of the community could walk through the shared open space or not. The second aspect examined whether the cohousing development looked similar to the surrounding buildings in the area or stood out from the neighborhood. From the analysis, Marcus (2000) came up with six different findings, with the most significant for creating a strong community first and moving down in order of strength. They are:

- 1) If an outdoor space is shared, bounded by the communities' units and offers activities for both adults and children, the community will be stronger.
- 2) In colder climates, a covered common space can work as well as an outdoor space.
- 3) When residents walk from where they park, past other units before they get to their front door, there are more chances for casual meetings that can strengthen the community.
- 4) There are more conflicts over invasion of privacy in cohousing developments that don't offer both shared and private outdoor areas.

- 5) There is a greater sense of community among residents in developments where outsiders are not allowed in the shared outdoor spaces.
- 6) When the cohousing development looks different from the surrounding buildings in the neighborhood and doesn't mix in, there is a stronger sense of community among its residents. Marcus (2000) states that this is the weakest finding from his research (Marcus, 2000).

Williams (2005) examined two cohousing communities to see if different elements of housing design layout affected community interaction. The aspects she studied were clustering of units into smaller communities within the larger cohousing community and restrictions imposed on private units. She felt that cohousers made good subjects for testing community interaction since they are predisposed to desiring social contact, seeing as they chose to live in a cohousing development. She believes that the differences in social interaction were caused by the design layout in these communities rather than being influenced by the various levels of individual's needs for community interaction. She found that clustering units into smaller groups helped increase a sense of community in large cohousing developments at 80 units per acre, but in a smaller cohousing development at 19.2 units per acre it could lead to disharmony between different factions. She also found when kitchen and laundry facilities were limited in private units, social interaction increased. The lack of facilities, rather than the lack of space in private units, increase social contact (Williams, 2005).



## **Sustainability in Cohousing Communities**

Many cohousers in the United States desire to live in a sustainable pro-environmental manner (Meltzer, 2000). The following research was conducted to determine whether living in cohousing is more sustainable than living in more traditional housing.

Meltzer (2000) surveyed residents of eighteen different cohousing communities to quantify and qualify the change in attitudes and practice of environmentalism. He states that about one half of these communities had a written mission statement that declared their desire to be pro-environment, and that most communities implicitly had this objective, whether written down or not. Since these residents had the desire to live in an environmentally friendly way, Meltzer wanted to know if living in the cohousing development would increase their sustainable activities. He defined sustainability to cover matters of environment, economics, and equity, so his questions dealt with these issues. He surveyed the participants about the quantity of goods they owned, their consumption levels, and their pro-environmental behavior before and after moving into their cohousing community (Meltzer 2000).

Meltzer also found that even though many residents moved to a less dense area, they owned fewer automobiles and more bicycles. He also found there were a great reduction in the number of lawn mowers, and a moderate reduction in freezers, washing machines and dryers that were individually owned. People continued to own the same number of refrigerators, televisions, and dishwashers. He established that cohousing developments usually clustered the units to leave continuous areas of open space, thus preserving land. On average, the cohousing units were smaller than the average

American dwelling, and the residents moved into units that were 15% smaller than their previous homes, which lead to less energy being expended to heat and maintain them. Cohousing communities used a variety of different sustainability techniques when constructing their developments, such as renovating buildings, recycling construction waste, using passive solar design, and using some unconventional energy conservation technologies. Recycling practices improved after moving into the cohousing development even if survey participants already recycled before moving into the community. Almost all the communities shared common meals once a week; some did it as many times as six. He noted that most cohousing communities did not buy food or goods in bulk, which is unlike cohousing communities in Denmark. Cohousers strive for diversity, but Meltzer (2000) found that 95% of the residents were of European decent, 80% were college educated, and most were in their 30s and 40s with a few elderly adults as well. The cohousing communities did not have many members in their 20s. In general, cohousing costs as much as, and is not any more affordable than, traditional housing. He also found that not many developments had wheelchair access. Equity and economics are some parts of sustainability that were lacking in cohousing developments (Meltzer, 2000).

Williams (2005) argues that cohousing is overall more sustainable than traditional housing. She also examines how the California cohousing movement has continued to grow and how elements of the movement could be used to help cohousing grow in the United Kingdom. People who live in cohousing communities have increased social exchanges, a great quality of life; they adopt more pro-environmental activities, and live in a more affordable way. Cohousing misses its sustainability objective with its usual

costs; it isn't commonly affordable. Williams believes that marketing to potential members of lower income might lead to more affordable units. She led focus groups with cohousers, developers, architects, and real estate agents in California and the United Kingdom. She determined that cohousing in California follows a standard process, and marketing is done through real estate agents. In the United Kingdom there is a lack of professionals with the knowledge of the process for developing cohousing (Williams, 2005).

### **Cohousing's Future in the United States**

Cohousing fills a niche market in the United States. Williams (2008) did research to determine if it could become more widespread in America. As of 2006, cohousing is clustered in only a few states. There were 3,500 residents of cohousing developments in 2006 and of these 41% lived in California, 16% lived in Massachusetts, 16% lived in Washington, and 13% lived in Colorado. Due to this regional clustering, adoption rates have been slow elsewhere. Williams (2008) defines key elements that influence adoption rates of new ideas. They are relative advantage, compatibility, complexity, trainability, and observability. There are various relative advantages and disadvantages to cohousing, and Williams suggests that the advantage of high resale prices and increased security should be promoted to increase the adoption rate of cohousing in the United States. These advantages are compatible with conventional residents' values, but cohousing, she argues, is viewed as conflicting with American values of freedom and individuality. On the other hand, Americans place a value on the pro-environmentalist movement, which cohousing complements, so this value can also be publicized to bring

cohousing to the mainstream. Williams considered cohousing a complex idea, so it needs to be explained in an understandable way. In terms of trainability, cohousing does not provide many opportunities to try the lifestyle out. There are not many rental units. If there were more opportunity to observe cohousing, it might be adopted and spread more quickly. Opportunities to experience cohousing in action can be increased by having social gatherings and inviting the outside community to participate. Williams argues that if these suggestions are utilized, cohousing will become more widespread throughout the United States (Williams, 2008).

### **Cohousing Case Studies**

Two case studies have been conducted on cohousing developments which include all affordable housing units. One is in Chicago and another is in Australia. Neither of these housing complexes are in an affluent area, but they both show that all affordable cohousing has been built. The cohousing development in Chicago received financing from many different organizations and the cohousing development in Australia was built by a governmental body which had some unique issues involving the cohousing members and the surrounding community.

One of the first cohousing developments built to be completely affordable is Greenway Park Cohousing, located in the gentrifying Woodland section of the South Side of Chicago, near the University of Chicago (Global Green USA, 2007). The Woodlawn Development Association (WDA) developed Greenway Park Cohousing by taking an abandoned three-story building made up of six units and changing it into a 10-unit affordable cohousing project by remodeling the interior and tearing down walls.

Four of the apartments are for people making up to 60% average median income (AMI), and six are for households making no more than 50% AMI. This development became the first affordable housing building in Chicago to not have a professional manager; the residents manage their own building. Current residents select new tenants using guidelines from fair housing. The developer received funds for the project through the state of Illinois for using environmentally responsible building and green materials, and received grants to make the building energy efficient. Additional money was raised from a Chicago foundation, the federal government and private individuals (Global Green USA, 2007).

Crabtree (2005) discusses two sustainable housing developments in Australia, one a cohousing development called Pinakarri Cohousing. This cohousing development took eight years to create from start to finish. It was a partnership between its members, an architect/developer and a public housing organization. The members went to the public housing organization, Homeswest, to make the housing affordable, but they ran into problems. Homeswest did not want to give the residents a say in the proposed development or design. The architect ended up being a mediator between the members and Homeswest. The finished development included four units of rentals and four units that were owned. The buildings had sustainable passive solar elements and solar panels. Even though the cohousing community functioned well, they were not accepted by some in the surrounding community and suffered indignities such as getting bricks thrown through their windows. This animosity was caused by long-time residents being disenchanted with the area's redevelopment and the multiple projects developed by Homeswest (Crabtree, 2005).

## Senior Cohousing

Senior cohousing is an alternative to mixed-income cohousing. Research in these senior developments shows that seniors are generally satisfied living in this type of housing (Choi, 2004). Senior cohousing can combat loneliness and the government can play a key role in its propagation (Brenton, 1998). In the United States, senior cohousing is in its infancy and is starting in states where there are previously existing mixed-aged cohousing developments (Durrent, 2005).

Choi (2004) investigated life satisfaction in senior cohousing communities throughout Sweden and Denmark. She interviewed, observed, and provided questionnaires for residents living in senior cohousing as well as making trips to different cohousing developments. She visited 16 different communities, and questioned residents from 28 various senior cohousing developments. About 2/3 of the residents were female, the majority were in their seventies, and a slight majority were single. Ninety percent of the respondents felt their common facilities were just the right size. Choi did not supply dimensions or ratios of these common facilities, but rather asked in a questionnaire if the residents were pleased with the size. The residents questioned were satisfied with most of the facilities except the common sauna, exercise room and the individual storage areas. No reasons were given as to why residents were not pleased with these particular facilities. The common activities included steering committees, coffee meetings, and shared meals. The most preferred common activity were the morning coffee meetings. Two thirds of the respondents had a positive response to the common activities. Yet, a few residents never participated at all. Two thirds agreed that there was more cooperation among residents than in traditional housing and they would never consider

moving from cohousing. Ninety-five percent of the respondents said the living conditions were good or very good and ninety-nine percent said they would recommend senior cohousing to other people. Choi also found that when the developer involved future residents in the design, this led to more satisfied residents living in senior cohousing (Choi, 2004).

Brenton (1998) believes that the Netherlands senior cohousing model might be modified to fit the current cultural environment in Britain. Senior cohousing members in the Netherlands usually move into this type of housing to avoid loneliness and Brenton conducted research to see if Britain could create this beneficial housing for its senior citizens. Brenton (1998) studied 15 senior cohousing communities in the Netherlands, ranging from rural to urban, small to large, and with a broad range of residents' income. In her book, she discusses four Dutch senior cohousing case studies in depth: a rural, urban, women-only, and an immigrant only senior cohousing. She found that most of these senior cohousing communities start with members in their 50s and 60s. It is usually a four year process from start to move-in time. There are two ways to become a member of a senior cohousing community. One is to either be in the initial starting group, the second to be put on a waiting list. There are usually units both to rent and to own, with all residents belong to the residents' association that runs the cohousing community, regardless of tenancy type. In selecting new residents they cannot discriminate on the basis of race, but they can say they want someone who will fit in with the particular cohousing culture. Some communities are mixed income, and others are more homogenous. Most of these senior cohousing developments make health and independence a requirement for moving into the community. Many developer-lead

communities have not been successful, but a few are. She also noted that in the Netherlands the government has moved from spending money on social services to encouraging these self-help communities. They have a national organization financed by the government to help older adults start cohousing. With certain modifications, cohousing might be successful in Britain (Brenton, 1998).

A senior cohousing handbook written by Charles Durrett (2005) includes case studies of five different senior cohousing developments in Denmark and two projects in the United States. The two US cohousing developments are ElderSpirit in Abingdon, Virginia, and Silver Sage in Boulder, Colorado, the first senior cohousing developments in the United States (Durrett, 2005). Both were finished in 2005. ElderSpirit was started in 1995 by a group of women who are members of a non-profit organization that started in 1967, and had known each other for a long time. They were granted a three year grant for pre-development costs. The project manager of the development coordinated with housing agencies to supply affordable units. A little over half of the units are owned and the rest are rentals, with some of the rentals are restricted to tenants with modest incomes. Silver Sage Cohousing also has permanently affordable homes. They have ten owned condos and six rentals. The developer also worked with non-profit housing agencies to make some of the development affordable. This cohousing development is adjacent to an existing mixed-age cohousing community (Durrett, 2005).

### **Consensus Research in Cohousing Communities**

Cohousing communities typically use consensus for their decision making. It is an important part of the cohousing community to understand all members' opinions to



maintain strong community bonds. Research has been conducted to find some of the best ways to facilitate the consensus process and how members view this process.

Cohousing residents want to make good decisions that meet members' needs and at the same time keep the community strong and intact. Mary Ann Renz (2006) conducted research on the consensus process within a cohousing setting. Research had been done on the consensus process in a non-voluntary environment, but Renz wanted to analyze consensus within a voluntary atmosphere like cohousing. One study examined a cohousing communities' decision to pave a parking area. The study found that members need to share information between meetings. When members miss meetings, it can lead to negative feelings in the decision making process. Facilitators should encourage members to talk about values, which will enhance community building, and members can see that they might have different priorities, but share the same values. Waiting late in a decision to voice opposition can heighten emotions. To counteract this situation, the facilitator should check in regularly with group members especially the introverted (Renz, 2006).

Renz also examined the meaning of consensus and blocking among the residents of different cohousing communities. When asking members to describe consensus, their answers fit into nine different metaphors. Six metaphors illustrated consensus as a process, as either a tool, magic, traveling a path, a river, an open space or circle, a massaging or modeling, or as a battle. The other three metaphors described consensus as a product, as a synthesis, an insight or as a mortar. Blocking consensus can be perceived by the group as either a negative action by the blocking member, or part of a positive process. Blocking is considered constructive when the blocker is seen as either having

the fundamental interest of the group, or having a genuine personal issue, and the community can appreciate the blocker's apprehension, and if the group maintains a discussion of the dilemma. If matters continue to be unsettled, it can tear the fabric of the community (Renz, 2006).

Cohousing is a relatively new phenomena starting in the 1970s in Denmark and Sweden and coming to the United States in the 1990s. Research has shown that through its design and consensus process it can strengthen community bonds, lead to more sustainable living, and help seniors avoid loneliness. Cohousing developments containing all affordable units and cohousing with all seniors residents have been built in the United States, but only on a limited basis. This might change once cohousing becomes more widespread in America. There has been research conducted on how costs can be lowered in cohousing, but cohousing in the United States continues to mostly be for people with high and moderate incomes. My research will show how additional affordable cohousing units can be built in affluent areas.

## **CHAPTER 3**

### **METHODS**

The purpose of this project is to form a process for developing an affordable cohousing development in an affluent area, particularly in Stamford, CT. I used literature review, multiple interviews, and case studies to create a viable proposal to build a cohousing community in Stamford, CT with affordable units. I chose Stamford, CT because of my personal connection to the city; I was born and raised there.

#### **Cohousing Literature Review**

My first step was to examine research to define the terms of affordable housing and an affluent community. I then undertook an extensive literature review on cohousing research to understand its history, process, design, benefits and possible problems, sustainable aspects, future prospects, financing and affordability in the United States and abroad. From this, I selected two cohousing developments which included affordable units, and included other criteria that are explained in the case studies section of this chapter.

#### **Interviews with Affordable Housing Professionals**

Being acquainted with an affordable housing professional in Rhode Island, I spoke with her about affordable housing in general. I also did research on the history of affordable housing in the United States, and non-profit affordable housing developments to understand affordable housing terminology when speaking to professionals. To understand Connecticut state incentives and the situation of affordable housing, I spoke

with professionals at the Connecticut Department of Economic and Community Development. Through online searches, I found several non-profit developers who build affordable housing in Stamford. I interviewed them on the telephone to understand what kind of incentives and programs they utilized to obtain financing and other grants for affordable housing development. I also discussed whether they would be willing to work with a group of people with low and moderate income to obtain financing and help them develop a cohousing community. I used the Affordable Housing Summary for 1995 to 2008 on Stamford's Department of Social Services' website to clarify the amount of rental and owner-occupied affordable housing in Stamford and understand the priorities for administration of grants from Stamford's capital fund for affordable housing and its federal money from Community Development Block Grants (CDBG).

### **Planning and Zoning in Stamford, CT**

Speaking with Stamford's Director of Planning and Zoning and another planner in the department, I queried them about the likelihood of a cohousing development being built in Stamford, and how feasible it would be within the current environment of planning and zoning in Stamford. Additionally, I studied Stamford's zoning regulations and subdivision regulations and obtained GIS parcel and zoning data for further analysis to determine which area is optimal for a cohousing development in Stamford.

### **Stamford, CT's History and Demographics**

To study the history of Stamford, I searched the Stamford Historical Society's website, spoke with the Society's librarian, and I was directed towards a book that

comprehensively explains Stamford's history. All of Stamford's demographic information was acquired online from the US Census website.

### **Case Studies**

I collected data from the Cohousing Association of the United States' website, and parsed through the list to elicit only those developments that have been completed. Then I looked through all the literature research, magazine articles, and books to come up with a full list of all finished cohousing developments in the United States. Next, I wanted to know which had affordable units. Again, I went through the cohousing reading and determined which cohousing developments had affordable units. To get a more complete list of affordable cohousing units that exist, I joined the Cohousing email list which is run through the Cohousing Association of the United States, and I asked about the existence of a particular type of cohousing with an affordable element. Multiple people responded and I noted on my list of cohousing developments which ones were known to have affordable housing units.

I wanted to conduct case studies on cohousing developments with affordable units that are located in municipalities similar to Stamford, CT in affluence, density, and region. For affluence, I looked up the median family income for 2000 from the US Census for all the municipalities where the cohousing communities were located. I used 2000 data because not all municipalities had data estimates from 2007. If the MFI was four times the 2000 MFI of poverty line, then it was considered an affluent area. Subsequently, I collected the 2000 population and square footage of each of the cohousing developments' locations from the US Census and came up with a density ratio.

I divided the total population by square feet of the municipality to arrive at a density figure. Stamford had a density of 2247 so I noted any location with a density between 1247 and 3247 as having a similar density as Stamford. Then, I categorized whether each cohousing development was in the same region as Stamford, CT. I included all New England states, and New York and New Jersey as being in the same region as Stamford, CT. Stamford is part of New England, but also part of the Tri-States New York Metropolitan area.

Using these criteria, I determined which cohousing met at least three aspects affordable, affluent, density, and regional (to see the full list, see Appendix C). I determined that three cohousing developments fit my criteria; they are Island Cohousing in Vineyard Haven, MA, Pioneer Valley Cohousing in Amherst, MA, and New View Cohousing in Acton, MA. I first choose to conduct a case study on Island Cohousing. I did not choice Pioneer Valley Cohousing because case studies were already conducted on it. I picked Island Cohousing over New View Cohousing because it fit the density parameters, and even though it did not come up as an affluent community, I felt it had a reputation for having expensive housing and for not being affordable. The second cohousing case study I performed was on Cambridge Cohousing in Cambridge, MA. I didn't use the same criteria as Island Cohousing, but I wanted to pick a cohousing development that would complement Island Cohousing. Island Cohousing has affordable units, is in a similar region, and has a similar density to Stamford, CT. Cambridge Cohousing has affordable units, and is in a similar region as Stamford, CT. My impression of Cambridge, MA is that it is affluent and very dense. By my definition of an affluent city, Cambridge does not fit the criteria, but I thought it would give a strong

density contrast to Vineyard Haven. Stamford's density ratio is very misleading, because it is made up of various densities from three-acre zoning to multifamily high density. Having such large areas zoned at very low density brings down the overall density ratio of the city, so I think Cambridge Cohousing made an appropriate case study.

### **Member Interviews**

For each case study, I visited the cohousing community's website to obtain all the available information about each cohousing development before contacting any member. I used these websites to contact the members through email. I received responses from multiple members in each cohousing community. I made appointments for telephone interviews and called them at the pre-selected time. I developed a list of questions for the founding members. I started the conversation with the same first question, but let the conversation unfold naturally thereafter. I made sure that all the questions were answered directly or indirectly. These were the following questions:

- How did you first hear about cohousing in general?
- How did you first hear about your particular cohousing development?
- How was the cohousing project marketed?
- What appealed to you about living in cohousing?
- What were your apprehensions about living in cohousing, if any?
- How did your friends and family perceive cohousing before and after you moved in?
- How did you feel about the process of forming a cohousing development?
- How long did it take from the beginning to completion?

- How frequent were the meetings to design and organize before construction?
- Were there any problems in the process? If so, how were they resolved?
- Is there anything you would have done differently in the pre-construction phase?
- What were the costs involved?
- How did members feel about these costs?
- Was affordability an issue for you?
- How was affordability addressed?
- What were the member's perceptions of the affordable units and the residents that would be moving into them?
- Once you moved in, was it what you expected?
- Does the cohousing process run by consensus?
- How well does the process work?
- How often do you have meetings?
- How often do you have shared meals?
- Do members perform any required work for the community?
- How well does this operate?
- How well does the design of the development function?
- What is the general layout of the community?
- How would you design the development differently?
- Would you like to make any additional comments?



The free-flowing discussion approach allowed me to obtain information that I hadn't thought about before developing the questions. This gave me a deeper understanding of the cohousing process. One of the founding members of Island Cohousing was the builder, and he spoke with me about the development from the builder's point of view, discussed the permitting issues and the community's reaction to the development. He was able to supply me with a rendered sketch of the development. At Cambridge Cohousing, the members were the developers, builders, and architects, so I was able to see cohousing development through their eyes. In addition to telephone interviews, I toured both cohousing communities, took pictures, and gained a personal impression of the development. The members of both groups gave me a thorough understanding of the process, difficulties and successes of forming their respective cohousing communities. From this information, I made a matrix comparing the two different cohousing communities and wrote a narrative describing the process of each cohousing development.

The case studies, interviews, and literature review became the basis for my development process of an affordable cohousing community in Stamford, CT. I then took this information and generalized it to make it more appropriate for a wider audience in affluent communities throughout the United States. The next chapter will supply and examine information gathered about Stamford, CT and chapter five will discuss the two case studies in-depth.

## CHAPTER 4

### HISTORY AND CURRENT CONDITION OF STAMFORD, CONNECTICUT

This chapter includes a condensed history of Stamford, Connecticut sufficient to acquire a better understanding of how the city progressed to its current conditions. The history of Stamford, CT has been summarized from *Stamford: An Illustrative History* written by Estelle F. Feinstein, Joyce S. Pendery, and Robert Lockwood Mills (2002)<sup>1</sup>. This chapter also examines the development of the city's transportation networks, demographic make-up, and a variety of economic drivers. It supplies statistics regarding Stamford's current population, real estate market, zoning, and affordable housing milieu.

Currently, Stamford is the fourth largest populated city in Connecticut. It has an estimated population of 118,008 (US Census 2008) and is about 52 square miles. It is located in the Southwest corner of Connecticut on the coast of Long Island Sound and is very close to New York City about 40 miles away.

#### **History of the Stamford, Connecticut**

The history of Stamford has been greatly influenced by its proximity to New York City and Long Island Sound. Its transportation networks to these locations have led to a diverse population and an economically affluent community.

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<sup>1</sup> *Stamford: An Illustrative History* written by Estelle F. Feinstein, Joyce S. Pendery, and Robert Lockwood Mills was recommended by the Stamford Historical Society as containing an accurate, and through historical account of Stamford, CT. It has no footnotes, but it does contain an extensive bibliography.

## **Population Trend**

Originally an English colony, Stamford's population has continued to grow from its foundation in 1642 with a population of 55 families to today's dense community.

Overall, the population growth has increased over the years (see table 1 to see the overall population trend in Stamford). The only exceptions to this were between the years from 1830 to 1840 and 1980. The exception of 1830 to 1840 was caused not by actual population density decrease, but by Darien and New Canaan, CT breaking off from Stamford to become their own communities. Stamford's land area became smaller. It is unclear why the population decreased in 1980. There was a notable increase in population in the 1840s due to manufacturing companies moving to the city bringing many jobs for recent Irish immigrants from the potato famine. Also the railroad was built connecting New York City to Stamford at this time. Transportation connections had a great impact on the population increase in Stamford.

**Table 1: Population Over Time in Stamford, CT**

<b>Year</b>	<b>Population</b>
1644	55
1680	300
1701	600
1735	1,640
1754	2,768
1774	3,563
1790	4,051
1810	4,440
1830	3,707
1840	3,516
1850	7,185
1870	9,714
1880	11,297
1890	15,700
1900	18,838
1910	28,836
1920	40,000
1930	56,765
1940	61,326
1960	92,713
1970	108,798
1980	102,466
1990	108,056
2000	117,083

### **Transportation Networks**

From the beginning transportation networks and Stamford's connections to coastal waters and New York City influenced not only the City's population, but its economic viability. As far back as the British conquest of New York (New Amsterdam) in 1664, Stamford residents were able to buy and sell directly with West Indies merchants on their way to New York City due to its position on Long Island Sound. The residents benefited economically by not having to pay for a middleman. In the first decade of the

1800s, the Connecticut Turnpike, a toll road, was built connecting Greenwich, CT to Fairfield, CT because of this goods and people could move more easily to neighboring towns. In 1833, a canal was built in Stamford, the United States decreed it an official port of call and the US Postal Service was using Stamford as a midway stopping point between New Haven, CT and New York City. Stamford proprietors supplied travelers with places to rest which brought in additional income to Stamford. As stated above, the train was built in 1848 connecting Stamford to New York City. By 1913, there were 80 trains a day going back and forth from Stamford to New York City. This train route still shuttles people to this day. During the 1930s, the transportation connections were enhanced with the building of the Merritt Parkway providing connection to Westchester County, NY. More connections were made in the 1950s when the federal government built I-95 which linked Stamford to New York and rest of New England. In 1983, the Stamford train station was updated making an attractive selling point for corporations to move to Stamford.

### **Economy**

Before transportation advanced the growth in Stamford, it was an agricultural community. Its economy continued to advance. The first newspaper was established in 1829, the present-day *Stamford Advocate*, and also the first town bank was formed in 1834. By the 1840s, the economy in Stamford started to take off with many manufactures building factories here due to its transportation links and location. One of those factories that came to town in 1869 was Yale and Towne Manufacturing. They were an internationally renowned company. They made a large impact on the town by employing 10% of the population by 1881. Until the 1950s Stamford was called “Lock

City” after this company. As these manufacturing business continued to come to Stamford, the city started implementing public infrastructure to support a more dense population. The public water was built in 1871 and public sewer in 1871. In 1919 another large manufacture came to Stamford, Pitney Bowes. Even during the Great Depression, Stamford continued to increase jobs and manufacturing. Machlett Laboratories, American Cyanamid, Clairol, and Schick Razors took advantage of inexpensive industrial properties in Stamford during the 1930s and opened factories here. By the 1950s, the city was looking past manufacturing to grow the economy and started looking to promote Stamford as a “Research City”. It housed the research divisions of American Cyanamid, Clairol and CBS Laboratories. The business landscape began to change again in Stamford. In the 1970s, many corporations left New York City due to the city’s financial troubles and moved to Stamford. Corporate parks were built and white collar jobs increased. Throughout the 1980s and 1990s, Fortune 500 companies continued to flock to Stamford. Many high rise buildings were erected. “Research City” became “Corporate City”. In the 2000s, Stamford continues to thrive economically and now has become a city in its own right, rather than a suburb of New York City.

### **Diversity**

Another common thread in Stamford’s history is its diversity growth. The mixture of races and ethics make-up of its residents has increased over time. At the very being of its foundation, it included white Congregationalists, African-American slaves and freemen, and Native Americans from the Pequot tribe. An English colony bought the land from the Pequot Native Americans. They continued to live there until 1701. This one of the only times in Stamford’s history it lost some of its diversity. On the other

hand, the religious make-up of the town continued to grow. Along with the Congregationalists, Anglicans moved to the town. In 1708, any Christian religion was allowed in Stamford other than Roman Catholic, but not until the end of the 1700s did more Christian religions move to Stamford. In 1773, the first Baptist church was built. The first Methodist service in town was in 1788. The first Quaker church was constructed in 1811 and the first Universalist church was built in 1833. Then with the immigration of the Irish, the first Roman Catholic Church was erected in Stamford in 1842. The first Jewish synagogue was built in 1889, the first black church was built in 1888 and the first Greek Orthodox Church was built in 1905.

Along with religious diversity growth, there was an overall increase in ethnic and racial make-up of Stamford's population. The African-American population continued to grow in the colony starting with two known residents in 1642 and by 1754, there were 120 African-Americans, which was around 4% of the population. The percentage went down in 1900 to 1.5%, and grew to 3.7% in 1930. By the 1960s it jumped to 8.3%. During this time in the 1960s, Stamford's schools were integrated and one of the major employers, Pitney Bowes, was known for the equal opportunities it gave to African-Americans for managerial jobs. By 1980, the African-American population had grown to 15% of the total population of Stamford, yet now the estimates have shown the African-American population has shrunk to 13.70%.

The population of ethnic groups increased over the years in Stamford. During the late 1800s and early 1900s with the manufacturing jobs increasing in Stamford, there was an increase in the number of Southern and Eastern Europeans including Poles, Italians, Germans, Slavs, Greeks, and Jews. At this time, there were certain ethnic enclaves in the

city, but the center of the city was known to house people of various races and ethnic groups living together. In 1897, Stamford showed its acceptance of its heterogeneity by electing its first Irish-American mayor. By 1910, Stamford's population was composed of 1/3 foreign born residents. Even today, about 1/3 of the population in Stamford is foreign born (US Census, 2008).

Not only was Stamford racially and ethnically mixed, it had a mix of classes. There was an arrival of the wealthy when the train station was built. Many of these residents wanted to live in the "country" and still work in New York City. There was also an influx of the rich during the Gilded Age, when wealthy New Yorkers build summer homes on Stamford's shoreline. Affordable housing projects were built as early as the 1930s, some later in the 1960s and affordable housing developments are still being built today. Stamford was a place for the rich, but also a place where housing was built for people with moderate means.

Stamford started as a Puritan colony and has grown to a flourishing urban center. It has been influenced by and prospered due to its proximity to New York City and its location on Long Island Sound. Through planning it has been ahead of the curve when transitioning from a manufacturing economy to one that is based on a white collar economy. Its population has continually diversified both ethnically and racially to make it a true cosmopolitan city. Today it is an affluent dense community with a high-quality of life.



### **Current Demographics of Stamford, Connecticut**

According to the 2005-2007 American Community Survey (US Census 2008) Stamford, with its estimated 2007 population of 118,008 has a greater percentage of minorities and foreign born residents than the United States as a whole. There are a higher percentage of citizens that speak a language other than English in their homes than the national average. At the same time, Stamford, with its melting pot of citizens, has residents with greater median incomes, higher education attainment, lower poverty rates, and fewer disabilities than the United States as a whole (see Table 2).

**Table 2: Demographics of Stamford, CT**

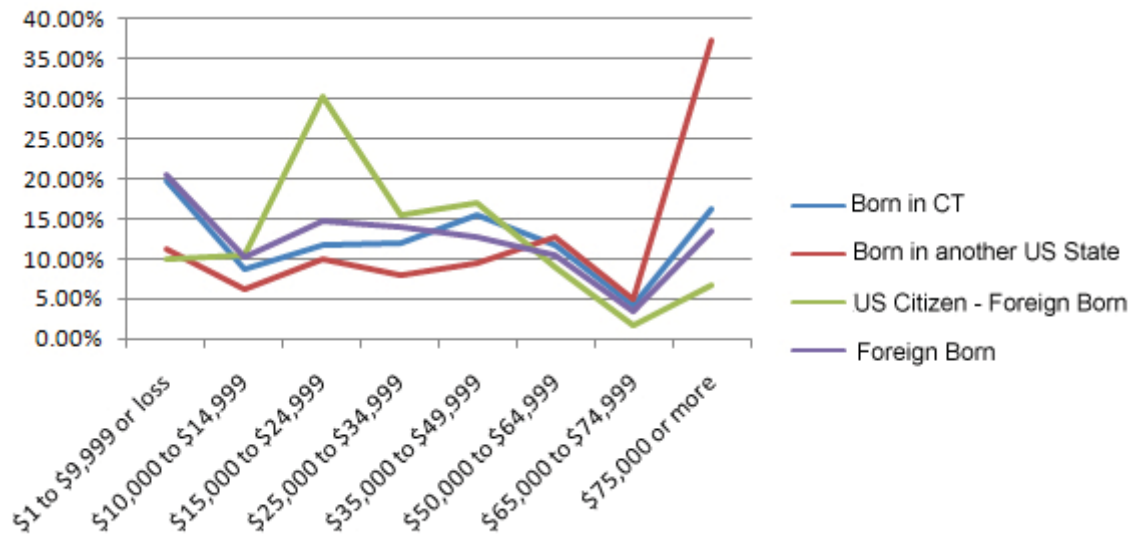
	Stamford	United States
African American	13.70%	12.40%
Hispanic	21.60%	14.70%
Asian	6.30%	4.30%
Caucasian	64.50%	74.10%
Foreign born	34%	12.50%
Speak a language other than English at home (age 5+)	40.60%	19.50%
Per capita income	\$47,196	\$26,178
Median household income	\$72,315	\$50,007
Median family income	\$88,205	\$60,374
Individuals below poverty level	8.30%	13.30%
Families below poverty level	5%	9.80%
Disability status (age 5+)	9.90%	15.10%
High school graduate (age 25+)	87.90%	84%
Bachelor's degree (age 25+)	43.10%	27%

Source: U.S. Census Bureau, 2005-2007 American Community Survey

A large percentage of Stamford residents, 41%, have jobs in management and professional fields (US Census 2007). There are a considerable percentage of people, above the age of 16, who are part of the workforce in Stamford, 71.6%, as compared to 64.7% in the entire United States (US Census 2007). The fact that there is a larger percentage of Stamford citizens in the labor force, a smaller percentage of people under the poverty level and with disabilities, might be caused by the high cost of living in the city. People who are retired, poor, or disabled might find it hard to live in a place with Stamford's current housing expenses and other costs of living. The US Census states that 47% of renters in Stamford spend more than 30% of their income on rent. These renters are living in unaffordable situations according to governmental definitions of affordable housing. This problem is exacerbated by the fact that 40.4% of people in Stamford are renters (US Census 2007). This percentage is much higher than the United States as a

whole where the percentage is 32.7% (US Census 2007). Stamford is contains 47% single-family homes and 53% multi-family homes (US Census 2007).

The US Census divides individual income by where a person was born. This data shows what types of people, either foreign or US born, citizen or not, or born in-state or out and how much of an income they have relative to the rest of the community. The estimates from the period of 2005 to 2007 show that the people with the highest incomes in Stamford, CT were not born in Connecticut and were born in the United States. It is likely that people with high incomes move to Stamford from other states. There are also a large percentage of low wage earners who are United States citizens who are foreign born that individually make between \$10,000 and \$34,999 a year. The lowest percentage of income for people born anywhere is from \$65,000 to \$74,999 a year. Residents of Stamford are least likely to make this amount of salary a year. Figure 1 shows the percentage of individuals making an income in a certain range compared to where they were born.



Source: US Census - 2005-2007 American Community Survey 3-Year Estimates

**Figure 1: Percent of Residents Making an Individual Salary by Place of Birth and Citizenship**

**Real Estate Prices in Stamford, Connecticut**

Examining the home prices in Stamford, it can be seen how unaffordable housing is in the city for many people with moderate and low incomes. According to the Warren Group (2009), the median price of a single-family home in 2008 was \$640,000, \$420,000 for a condominium, and \$479,000 for all home sales combined. The rents are high. RentBits.com (2009) states the median price of all rentals from September 2008 to February 2009 in Stamford were \$2025 a month. A one-bedroom unit’s median price is \$1,810, a two-bedroom is \$2,300, and a three-bedroom is \$2,910 a month. A family of four making the median income of \$88,205 could afford housing expenses up to \$2205 a month, 30% of their income. These housing expenditures should cover rent plus utilities, so a two-bedroom rental unit would be too expensive to rent, unless utilities were

included. There is a skew between the average income and average rental price in Stamford. For all those families and individuals making less than median income, it becomes even harder to make needs meet.

### **Zoning in Stamford, Connecticut**

Stamford, CT has many different zones from 3-acres single-family lots to multi-family housing from commercial to mixed-use. Many zones in Stamford would allow for cohousing, an alternative form of housing development and Stamford's zoning regulations have aspects to help build affordable housing and live affordably.

Stamford is comprised of 38 zones (see Appendix D for full list), 19 of which are designed districts and need site plan review from the Zoning Board for any building construction. There are many zones that would allow a cohousing development to be built. The zones that allow for multi-family dwelling, defined as “a building or portion thereof containing three (3) or more dwelling units” (City of Stamford, 2007, page 3-12) would allow cohousing. There are also several commercial and business zones that permit the use of multi-family dwelling without design plan design review. They are:

- C-N Neighborhood Business District
- C-L Limited Business District
- C-I Intermediate Commercial District
- C-G General Commercial District
- C-S Shorefront Commercial District
- C-B Community Business District

The C-B Community Business District allows multi-family dwellings, but only with retail on the ground floor. Two other districts would allow multi-unit housing with a special exception, M-L Light Industrial District and C-D Designed Commercial District, which needs a design review by the zoning board. The following zones allow cohousing, and need a design review:

- RM-1 Multiple Family, Low Density Design District
- R-5 Multiple Family, Medium Density Design District
- R-H Multiple Family Design District, High Density
- R-MF Multiple Family Residence Design District
- R-D Designed Residence District
- MX-D Mixed Use Development District
- SRD-S South End Redevelopment District, South
- SRD-N South End Redevelopment District, North
- MRD-D Designed Mill River District
- TCD-D Designed Transportation Center District (City of Stamford, 2007)

All of these districts have requirements for affordable housing. All except R-D Designed Residence District, TCD-D Designed Transportation Center District, and MRD-D Designed Mill River District need to meet the standard of having at least 10% of Below Market Rate (BMR) units for people having incomes of 50% or less of Stamford Standard Metropolitan Statistical Area (SMSA) Median income or they to meet certain requirements which are explained latter in this section of this chapter. The TCD-D Designed Transportation Center District and MRD-D Designed Mill River District have a higher standard. They need 12% of the units at BMR. The R-D Designed Residence

District requires at least 10% of its units at BMR, but they have a higher threshold of SMSA of 100%. This district allows a clustering of single-family homes, so cohousing units can be grouped together near a common house with the rest of the land left open. This zone allows for homes to be built closer together than other conventional zoning in zones R-3, R-2, R-1, R-20, R-10 and R-7 1/2 which allow single family homes on three acres, two acres, one acre, 1/2 acre, 1/4 acre, and 7,500 square feet, respectively (City of Stamford, 2007). (See table 3.)

**Table 3: Needed Affordable Housing Units**

Zone	% Units	SMSA
RM-1 Multiple Family, Low Density Design District	10%	50%
R-5 Multiple Family, Medium Density Design District	10%	50%
R-H Multiple Family Design District, High Density	10%	50%
R-MF Multiple Family Residence Design District	10%	50%
MX-D Mixed Use Development District	10%	50%
SRD-S South End Redevelopment District, South	10%	50%
SRD-N South End Redevelopment District, North	10%	50%
MRD-D Designed Mill River District	12%	50%
TCD-D Designed Transportation Center District	12%	50%
R-D Designed Residence District	10%	100%

Developers have several different options if they chose not the build the BMI units in the development. They can donate vacant land, build BMI units on another site in Stamford, restrict rental or sales prices on other units they own, or make a payment in lieu of the units. The payment amount depends on how many BMI units are required for residents with a certain income. For each unit for persons with an income of 25% or lower of AMI, a payment of 240% of SMSA will need to be paid. For each dwelling for people who make 50% or lower AMI, a compensation of 145% SMSA needs to be made,

and for each unit for households making 60%, a payment of 110% SMSA needs to be paid (City of Stamford, 2007).

These inclusionary zoning regulations are a way to ameliorate affordable housing deficiencies in Stamford. According to several affordable housing professionals, Stamford is either the only one or two municipality in Connecticut to have inclusionary zoning (Kluetch, 2009 and Burkhardt, 2009).

Stamford has enacted additional ordinances to encourage the production of affordable housing in the city. To maintain the current amount of affordable housing units, it has a One-for-One Housing Replacement Ordinance. In 2001, Stamford's Board of Representatives voted on a law which mandated that any subsidized, affordable housing units that were demolished or converted must be replaced by the same amount of units with the same or greater affordability. The developer has to submit a Housing Replacement Plan to the Director of Public Safety, Health and Welfare. The residents who are displaced have the first right of occupancy at the new replacement units (City of Stamford, 2008).

The Linkage Ordinance was also enacted in 2001. Stamford lawmakers realized that commercial development was demolishing housing units. They wanted the employment that comes with more commercial development, but recognized that with fewer housing units the demand for affordable housing would increase. The Board of Representatives directed that starting from 2001, the total of commercial building permit fees over \$3,300,000 would go to fund affordable housing. The threshold for funding will go up by 5% every year (City of Stamford, 2008).



The zoning can affect a resident's ability to live affordably through its regulation of in-law apartments, home occupations, childcare facilities, the ability to grow and sell food, and the definition of a family (Thomas and Ritzdorf, 1997). One of the main inhibitors to making more affordable housing is Stamford's prohibition of accessory dwelling units in all zones. Citizens who own their own dwelling in residential single-family zones cannot build or retrofit their home to house an additional area with a separate kitchen (City of Stamford, 2007). Usually these types of accessory dwellings are called in-law apartments and can lower the cost of housing for the owner and the person residing in the apartment. Stamford's zoning does allow for two people to rent out rooms in a single unit dwelling, so an owner can make some additional income through this lease and supply more affordable housing within the city. A single-family dwelling unit can only contain one family, but the definition of a family in Stamford's zoning code is somewhat open-ended (City of Stamford, 2007). A family is defined as people who are closely related by blood, marriage or adoption, and up to four unrelated people (City of Stamford, 2007). It does not define what a closely related person is, so it is imprecise, and up to some discretion.

Home occupations are also defined in an indefinite way and are allowed in all residential zones except one, R-3. As long as the use is "entirely within a dwelling," and the "use is clearly incidental and secondary the use of the dwelling" it is allowed (City of Stamford, 2007, page 3-18). There are no restricted home occupations, parking requirements, or sign prohibitions. As for childcare, family daycare with up to six children is allowed in any residential dwelling (City of Stamford, 2007). Group daycare, which is caring for up to 12 children, is allowed in any residential dwelling with a special

permit (City of Stamford, 2007). If a person has children, being able to work and care for children from home brings in income and at the same time eliminates expenses for personal childcare costs which provides for a more affordable way of living (Thomas and Ritzdorf, 1997).

Another approach to inexpensive living is through growing and selling of food. In Stamford, all zones allow one to grow food, raise livestock, and have a temporary stand for the sale of products produced on the grounds (City of Stamford, 2007). Not only can a person provide food for themselves, but they can receive extra income from their sale.

### **Affordable Housing Environment in Stamford, CT**

There are many affordable rental and owner-occupied housing units in Stamford, CT. Currently more than 10% of the housing stock in Stamford is considered affordable under the HUD definition (Freiser, 2009). Stamford has developed various methods to obtain financing for affordable housing development. Most approaches include developers acquiring money from loans or grants from the State of Connecticut and the City of Stamford. Some of the gifts and incentives deriving from the federal government are then doled out by the state or city, and some of the money comes directly from the state and city. These grants and loans are predicated on the organization's non-profit status. Some of these programs are widespread in many areas of the country, but within Connecticut, Stamford has various unique methods of incentivizing and financing affordable housing within its borders.

## Grants

Stamford uses one method that is unique among municipalities in Connecticut, its capital fund for affordable housing through which it sets aside capital funds exclusively for affordable housing (Kluetch, 2009). Since 1996, Stamford has set aside \$7.6 million for loans and grants towards the production and renovation of affordable housing in the city (City of Stamford, 2008). In 2008, the capital fund budgeted \$905,000 for the year (City of Stamford, 2008). More than 500 affordable rentals and 65 condominiums have been partially subsidized through this fund (City of Stamford, 2008). The Community Development Department of Stamford decides which non-profit organizations will receive the funds. The city's priorities are to fund housing for people with an AMI of 50% or less (Kluetch, 2009).

Stamford's Community Development Department also dispenses funds from the federal HOME Investment Partnerships Act (HOME) and Community Development Block Grant (CDBG) programs (Kluetch, 2009). The priority of these programs is to subsidize housing for people with an income of AMI of 60% or lower (Kluetch, 2009). These programs are not unique to Stamford or Connecticut, but are found throughout the United States (Hecht, 2006). All states receive money from the federal government through the HOME program, so a non-profit organization can apply to their state for this funding (Hecht, 2006). Municipalities that meet certain eligibility standards are also allocated money (Hecht, 2006). Stamford is one of these jurisdictions (City of Stamford, 2008). A non-profit could potentially receive money through the HOME program through the State of Connecticut and the City of Stamford. Most of Stamford's funds

from the federal HOME program have been used to support residents with low-incomes to buy homes (City of Stamford, 2008).

Additionally, Stamford, as an Entitlement Community, receives CDBGs directly from HUD (Kluetch, 2009). There are three different ways a jurisdiction can be an Entitlement Community 1) they are the primary city of a Metropolitan Statistical Area, 2) they are a city with at least 50,000 people or 3) they are a county with a population of at least 200,000 minus any entitlement cities (U.S. Department of Housing and Urban Development, 2009). If a municipality doesn't fit into these categories, they might still receive money from the state (Hecht, 2006). States also receive money through CDBG which they can allocate to non-entitlement communities (Hecht, 2006). Half of the money that Stamford receives from CDBG is put towards housing associated projects (City of Stamford, 2008). The priority of this money goes towards people making 60% or lower of AMI (Burkhardt, 2009).

Not only does the City of Stamford grant money directly from its budget and through federal government grants, but it also grants land to various non-profit organizations (City of Stamford, 2008). Since land is especially expensive in Stamford, this is done on a very limited basis (Kluetch, 2009). In the last 12 years, the only real estate donated was a parking lot, a conversion of a road for buildable land, and four units of housing (City of Stamford, 2008).

Along with these regulations and grants to promote affordable housing, the city also provides tax abatements to organizations that own and rent property solely to people with low and moderate-incomes (City of Stamford, 2008). The owners apply to the Tax Abatement Committee, which ascertains if the housing development fits the requirement

(City of Stamford, 2007). In May 2008, a total of over \$500,000 of city taxes were forgiven through this program (City of Stamford, 2008).

### **Financing**

There are numerous ways to access financing for affordable housing projects. There are affordable housing consortia that are composed of various banks and loaning organizations. These associations lend money to riskier projects than they would finance by themselves. The Housing Development Fund of Lower Fairfield County, Inc. is an affordable housing consortium in Stamford. There are many of these consortia around the country. Other organizations called community development financial institutions not only loan money, but they also give technical assistance to non-profit developers of affordable housing. In Stamford, there is one called the Housing Development Fund, Inc. (Hecht, 2006).

A way to increase the amount of loans for a certain project is by obtaining Section 8 vouchers. Section 8 vouchers can be acquired from the state or municipality where the housing development will be located. By guaranteeing federal government subsidies for a certain number of housing units risk is lower for the lender, who will then be able to lend more money for the project (Burkhardt, 2009).

A further method to attain capital is by the selling of federal or state tax credits. The state and federal government only give out a certain amount of tax credits. Whether a development receives tax credits depends on what percentage of units are affordable, for what income bracket, and for what segment of the population. The housing developer acquires tax credits and then sells them to corporations or individuals who owe taxes either equal to or greater than the credit amount. The buyer will not have to pay taxes on

this amount of money. This situation is advantageous for the buyer since credits usually sell for less money than face value, and it is beneficial to the housing developer, because they can use the sale of these credits as capital or as a down-payment on a loan (Hecht, 2006).

### **State Incentives for Affordable Housing**

Another funding technique not used in Stamford, but used in municipalities in CT without 10% affordable units is Section 8-30g, Affordable Housing Land Use Appeals Procedure of CT State law. Any development providing 30% or more of affordable units that comes before the zoning board or planning board but is not approved, puts the burden on the board to show that the development will be a detriment to health and public safety. This law can be beneficial for many affordable housing developers in other areas in CT, but not within Stamford since the city's housing stock is over 10% affordable according to HUD standard. Though section 8-30g does not pertain to developments in Stamford, the city has many programs that other municipalities in CT do not have which have been mentioned above (Kluetch, 2009).

## **CHAPTER 5**

### **CASE STUDIES**

The purpose for conducting the Island and Cambridge Cohousing case studies was to understand the problems, solutions and activities that worked well in various aspects of these developments. The features that I looked at were the process of creating and marketing of the cohousing development, how sustainability was applied into the community, how affordable units were implemented into the complex, what affordable housing incentives were used if any and how the cohousing development currently functioned. I wanted to understand the member's experiences living in a cohousing development and whether the reality of living in a cohousing community lived up to their preconceived notions. I observed how the design and layout functioned in the community. I learned about potential issues and solutions to these various aspects to form a model for creating a cohousing development in an affluent community with affordable units.

#### **Island Cohousing**

Island Cohousing was built in 2000 and is located on Red Arrow Road in West Tisbury, Massachusetts (Abrams, 2009b). To gather the information for this case study, I spoke with the builder of the development, John Abrams, and examined Island Cohousing website and official documents. Mr. Abrams put me in touch with three other members of Island Cohousing and I conducted telephone interview with them before I came to visit the complex. I visited the cohousing development on Saturday, April 4th, 2009 and at that time was able to speak with Mr. Abrams in a more in-depth manner, take pictures of the development on my visit and experience how the community functions.

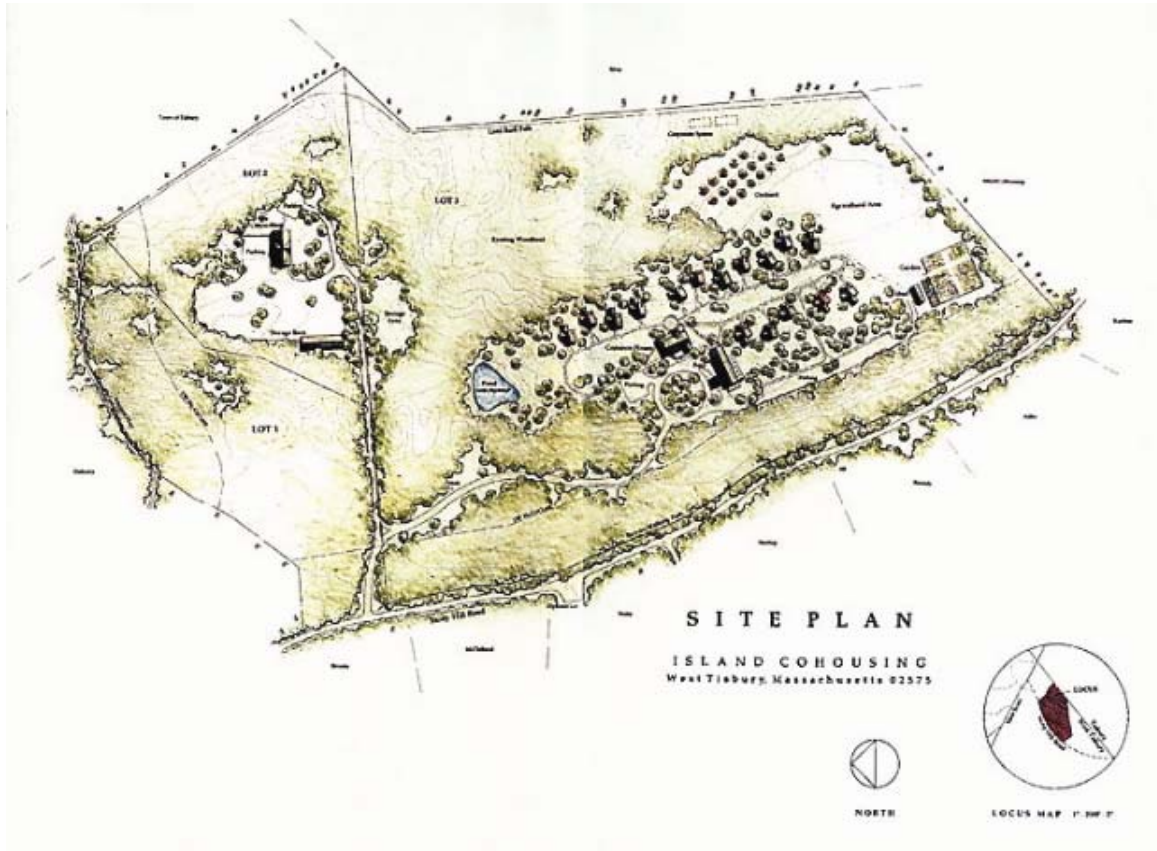
John Abrams also supplied me with an overall sketch of the development. In this case study, I discuss the description of the community, the common amenities, the design layout, its sustainability aspects, the affordable units, the process of creating the development and how the current community functions.

### **Description of the Community**

Island Cohousing is located in West Tisbury, Massachusetts, on the Island of Martha's Vineyard. During the summer Martha's Vineyard is filled with tourists and only a small percentage of this overall summer population is made up of year-round residents. Island Cohousing is a community of these year-round residents; it houses 26 adults and 15 children (Abrams, 2009b). The official community policy encourages owners to sell or rent to dwellers who will spend at least nine months a year in the community (Abrams, 2009a).

The housing development is situated on a large 30-acre piece of land with houses clustered in a 4 ½ acre area (Abrams, 2009a). There are 16 housing units: 4 4-bedroom homes, 6 3-bedroom homes, and 6 2-bedroom homes (Abrams, 2009b). The homes are 1750 square feet, 1340 square feet, and 1140 square feet, respectively (Abrams, 2009b). See figure 2 to view the overall site plan. All are 1 ½ story, grey, wood-singled, Victorian farmhouse structures with porches and full basements (see figure 3). Each house has its own private small yard surrounding the unit. The homes are positioned around a common green area. Mature trees are found between homes and in the common green space. There is also a dirt pedestrian path that circles the common green space (see figure 4) and the homes. This dirt path is paved underneath for emergency vehicles to drive up to the homes if necessary (Abrams, 2009a).





**Figure 2: Island Cohousing Site Plan**



**Figure 3: Island Cohousing Housing Unit**



**Figure 4: Pedestrian Path with Common Green**

### **The Common House**

The two-story Common House is located in the middle of homes on the west side of the development. It blends in with the same grey wood-singled design as the housing units. It is 2800 square feet and includes a dining room, large kitchen, sitting room, two guest rooms, and screened-in porch (Abrams, 2009a). The dining room faces the South side of the common house overlooking the playground area with floor to ceiling windows. This enables adults to supervise the children while still being indoors. The kitchen is next to the dining room with an open countertop, which makes it easy to view the cooking area from the dining room. The sitting area is off the dining room on the West side of the building, providing a smaller, more intimate space. The screened porch is also off the dining room, on the East side of the building, overlooking the common green area. On the second floor of the common house are two guest rooms where guests of cohousing members can stay for \$10 a night (Abrams, 2009a). Members are required to supply sheets and towels and to clean up after the guest has left the room (Abrams,

2009a). The dining room is rented out for non-profit group meetings and yoga classes (Abrams, 2009a). The renters need to be sponsored by a cohousing member (Abrams, 2009a).

### **Parking and Path Layout**

The parking consists of a large unpaved lot on the West side of the housing development. It is standard practice in cohousing communities to place parking away from the central area of the community and the housing units. People use green plastic carts to bring goods to and from the parking lot to individual homes along dirt walking path (see figure 5) (Abrams, 2009a).



**Figure 5: Green Plastic Cart to Carry Goods**

### **Amenities**

In addition to the Common House, there is a community sauna and a pond with a rope swing to the North of the housing units (see figure 6). To the South of the homes are a basketball hoop, a vegetable garden with a small orchard, and some chickens (see

figure 7 and 8). Farther to the south is a forested area with walking trails which is protected from development in perpetuity (Abrams, 2009a).



**Figure 6: Island Cohousing's Pond**



**Figure 7: Island Cohousing's Basketball Hoop**



**Figure 8: Island Cohousing's Garden  
Sustainability**

As in many cohousing communities in the United States, one of Island Cohousing's guiding principles is to "strive to employ ecological design principles", and other sustainable goals (Island Cohousing, 2002, page 1). The founding members see their community as a model for sustainable living. When building the cohousing community they reduced site disturbance by only developing a small percentage (15%) of the property. They employed reused materials by building homes with salvaged wood whenever possible, when using new materials they used Forest Stewardship Council (FSC) certified wood. They built the houses and common house with composting toilets which fertilize their garden (see figure 9). They used a permeable surface for the parking lot. The homes are oriented with the roofs facing south to be ready for solar panels equipment. Some residents have installed solar panels on their homes (figure 10) (Abrams, 2009a).



**Figure 9: Composting Toilet**



**Figure 10: Solar Panel  
Development Process**

One of the original members of Island Cohousing had an interest in alternative housing types and communities. He had heard about cohousing in the late 1980s and later took a trip to Denmark to see cohousing in action. In 1996 he gave a presentation about cohousing, and there were two couples in the audience who were friends of his. They were inspired by the presentation and wanted to create this type of community. The

presenter, his wife and the two couples became the original founding members of Island Cohousing. They had meetings twice a month where they envisioned their new community, and designed and consulted with various professionals to construct the cohousing development. These meetings were open to the general public. There were articles written about the group in the local newspaper. Additional people started to come to the meetings and then became members themselves. In the beginning, some individuals came out of curiosity, and many of the final members joined later in the process (Island Cohousing Members, 2009).

The process from formation to move-in took four years. One of the founding members was a builder and constructed Island Cohousing. The group took on the role of developer and obtained the financing for the project. Martha's Vineyard Co-op Bank and Cape Cod Five Cents Savings Bank provided the loans for the development. Coldham Architects, who had planned cohousing communities before, designed the cohousing community with the members. A landscape architect, Hilary Noyes, was hired and Marc Rosenbaum was employed as a consultant for sustainable building systems (Abrams, 2009b).

Zoning in West Tisbury did not allow for a cohousing community to exist in town. The town did not allow for clustered development. The Island Cohousing members found a 30-acre piece of land that was in an agricultural zone that only allowed one single family home on 3-acres. There were sensitive natural water resources in and around the location. The cohousers proposed the idea that they would cluster the development, cut down on sprawl, and protect open space. They were also going to lessen the water pollution with composting toilets. To facilitate this development, they

needed eight different variances to be waived, so they used the leverage of Massachusetts's 40B statute. The permitting process took a total of nine months to be approved (Abrams, 2009b).

The Chapter 40B Comprehensive Permit Law allows developers to file a permit that does not require compliance with local zoning bylaws as long as the proposed development provides at least 25% affordable units. This law is only in effect when the town's affordable housing stock is under 10%. West Tisbury falls into this category so it was useful in Island Cohousing creation. The community proposed to build 4 affordable units out of the developments' total of 16 units. The four units are for people with an AMI of no more than 80% and affordability is monitored by Dukes County Regional Housing Authority (Abrams, 2009b).

After the general designs were agreed upon, the builder developed a list of housing options and their costs for people wanting to modify their homes (Abrams, 2009a). To keep costs down, the community had a limited selection for customization. For example, they used the same shingles and tile colors throughout the development (Abrams, 2009a). The initial costs of the market-rate homes in 2000 were \$325,000 for a 4-bedroom home, \$275,000 for a 3-bedroom home, and \$230,000 for a 2-bedroom home (Abrams, 2009b). The affordable units were built comparably to the market-rate units and sold for \$140,000 for a 3-bedroom home, and \$125,000 for a 2-bedroom home (Abrams, 2009b).

The affordable units were sold by lottery near the time of the development's completion. These residents were not part of the design phase, but were seeking an affordable home on Martha's Vineyard; they were not necessarily looking to live in a



cohousing community. According to some of the current residents, not all of the members living in the affordable units participate in group activities. There has been an effort to bring them into the community, but with only marginal success. Some residents felt that the affordable housing buyers would have felt stronger sense of community if they had been brought into the cohousing process sooner (Island Cohousing Members, 2009).

### **Current Community**

Island Cohousing currently functions by consensus. There are shared meals twice a week. On Thursdays there is a potluck, and on Sundays residents take turns cooking for the community. The costs of these Sunday meals are split and an invoice is sent out once a month. Committees that residents sit on oversee various functions within the community. All community labor is voluntary; nothing is required. I was informed by one member that in the past the community did require a certain amount of hours of community labor to be performed. This system ran into problems. There were difficulties with keeping a tally of how many hours were performed by each resident, so the community abandoned this system for the current one. In the Island Cohousing community, a resident can participate as much as or as little as they desire (Island Cohousing Members, 2009).

## **Cambridge Cohousing**

Cambridge Cohousing is located in densely populated urban environment, has more cohousing members and is on a much smaller parcel of land than Island Cohousing. The contrast between Cambridge Cohousing and Island Cohousing shows how cohousing can still have the overall benefits of a close community, but can be different sizes, configurations and be in various locations.

Cambridge Cohousing was built in 1998 and is located on 175 Richdale Avenue in Cambridge, Massachusetts (Cambridge Cohousing Members, 2009). To gather the information for this case study, I examined Island Cohousing website, official documents and joined the Cambridge cohousing listserv. I asked if any members would agree to a telephone interview and a few did. Another member offered to show me around the cohousing development. On Wednesday, April 15, I visited the cohousing development and was able to take pictures of the development and experience how the community functions. I also spoke with the Cambridge Housing Authority about the Section 8 rentals that they manage in the Cambridge Cohousing Community. In this case study like the Island Cohousing case study, I discuss the description of the community, the common amenities, the design layout, its sustainability aspects, the affordable units, the process of creating the development and how the current community functions.

### **Description of the Community**

Cambridge Cohousing is in a residential neighborhood with closely spaced single and multiple-family homes in Cambridge, Massachusetts. Cambridge, MA, which is adjacent to Boston and home to Harvard University, is densely populated with a total population of over 100,000 residents in 6.5 square miles (City of Cambridge, 2004).

The development has 41 units (Cambridge Cohousing Members, 2009). See figure 11 to see an overhead aerial view. They range in size from studios to 4-bedroom townhouses (Cambridge Cohousing Members, 2009). Twenty-nine of the units are laid out in a U-shaped configuration with the open area facing the street, which is made private with a white picket fence (see figure 12) (Cambridge Cohousing Members, 2009). The other 12 units are in three-story townhomes separated by a green space to the left of the main buildings that runs along train tracks, and behind two single-family homes. Commuter trains run on tracks behind the entire complex (see figure 13). The development blends in with the surrounding community and has a sign in-front with the community's name (see figure 14). The main entrance is off the street to the left of an open space green area facing the front (see figure 15). The main building houses the indoor common areas, access to the parking, and mailboxes.



**Figure 11: Cambridge Cohousing Overhead View**



**Figure 12: Cambridge Cohousing**



**Figure 13: Train Tracks**



**Figure 14: Cambridge Cohousing Sign**



**Figure 15: Main Entrance**

### **Amenities**

There are various common amenities with the main building and outside. On the first floor of the main building walking to the left side of the building is a lobby sitting

area (figure 16), residents' mailboxes (figure 17), the community dining area (figure 18), the common kitchen (figure 19), and a children's play area (see figure 20). To the immediate right of the main entrance on the first floor of the main building is an elevator going to the two other floors in the building. Farther down on the right is a storage area, library (see figure 21), and a pathway green area connecting to the townhomes. The two floors above house three studio apartments and two guest rooms. The basement level includes an underground parking garage (see figure 22), a teen room (figure 23), a gym (figure 24), bicycle storage (figure 25), office space that is rented out to members, a tool room (figure 26), a laundry room (figure 27), and a recycling area (figure 28). Cambridge Cohousing also has common outdoor areas, a large open space in the front (figure 29) with a playground (figure 30), common organic garden (figure 31), and a small, more private, sitting area (figure 32) (Cambridge Cohousing Members, 2009).



**Figure 16: Lobby**



**Figure 17: Mailboxes**



**Figure 18: Dining Room**



**Figure 19: Common Kitchen**



**Figure 20: Children's Play Area**





**Figure 21: Library**



**Figure 22: Underground Parking Garage**



**Figure 23: Teen Room**



**Figure 24: Gym**



**Figure 25: Bicycle Storage and Office Space**



**Figure 26: Tool Room**



**Figure 27: Laundry Room**



**Figure 28: Recycling Area**



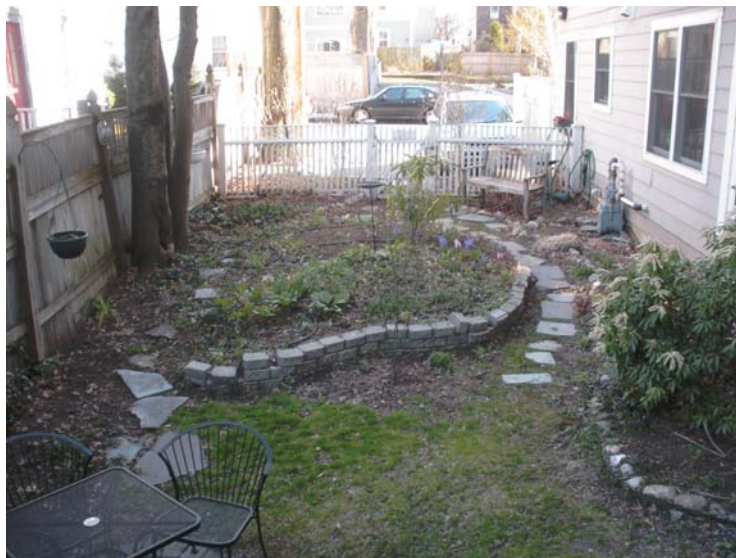
**Figure 29: Front Yard Open Space**



**Figure 30: Playground**



**Figure 31: Organic Garden**



**Figure 32: Outdoor Sitting Area  
Design Layout**

The cohousing development was designed to encourage community. Having a multitude of common facilities helps build community, and so does the placement of these elements. Locating the parking beneath the main building strengthens community by making all residents arriving by car pass through the main building common areas before going to their individual units. The mailboxes are also located centrally in the

common area. When arriving by car or checking their mail, the residents must walk past the common areas where they might run into other members, thus making informal interactions a part of living in the development. Some of the units have common laundry facilities which have been shown, through previous studies, to increase social interaction. Another design placement that increases social ties is having most of the residential units and the dining area overlooking the outdoor green space and the playground area. This gives residents the opportunity to view the outdoor activities of adults and children without going outside. Along with being able to watch children play safely, it also gives the chance of observing informal activities the resident might want to participate in, and they can go outside and be part of the experience.

### **Sustainability**

Cambridge Cohousing wanted sustainability to be part of the developments' design. They use renewable geothermal energy to heat most of their units. There are problems with the geothermal system that make it necessary for some residents to use electricity to heat their homes. The members wanted to use the land as efficiently as they could and still have green open spaces and garden areas, so they built underground parking. To limit unnecessary consumption, they share many resources such as tools, videos, books, gym equipment, laundry appliances, garden tools, such as lawnmowers and rakes. The videos in the teen room and the books in the library are all donated by members for residents to share. The treadmills, weight-lifting machines, and the laundry appliances also permit the consolidation of resources. Not all residents use the common laundry; some of the townhouses have laundry facilities within individual units. Also, supplying areas for recycling, bicycle storage, and swapping encourage sustainable

activities. The swapping area is where a resident can offer something for free that they do not want any longer, and if no one takes it within a month the resident must remove it from the area (Cambridge Cohousing Members, 2009).

### **Diversity**

The cohousing community wanted to design their community for various kinds of diversity. They accomplished making Cambridge Cohousing handicapped accessible and economically diverse. They wanted at least parts of the buildings and units to be handicap accessible to bring people in the community with physical disabilities. In the main building, the elevator allows wheelchair accessibility to the residential units on the second floor and access to all common areas. The members also wanted to make the community economically diverse by offering smaller and affordable housing units. This gave people with various income levels the ability to live in the development. Race, age and ethnic diversity was not discussed with the Cambridge Cohousing members (Cambridge Cohousing Members, 2009).

### **Affordable Housing Units**

One way economic diversity was accomplished was through the availability of units of different sizes, from small studios to larger 4-bedroom townhomes. People who only wanted a small space could pay less and still be part of the community. The members also made three units of the development permanently affordable. One unit was brought by a first time home buyer, and two units were donated and are currently owned by Cambridge Housing Authority, who rents them out to people receiving Section 8 housing vouchers. The municipality did not have inclusionary zoning at the time of construction and Cambridge had its share of affordable housing, so 40B would not apply



to this case. The affordable units were included in the design by a desire for diversity, not by public policy incentives (Cambridge Cohousing Members, 2009).

### **Development Process**

The original members of Cambridge Cohousing were part of an umbrella group of people in Massachusetts who wanted to form cohousing communities. In 1995 when they started planning their community, they held meetings about twice a month and established various committees such as finance, development oversight, affordable housing, environment, childcare, and bylaw creation. To obtain additional members, they put advertisements in local newspapers promoting their meetings. The members hired one of their own to develop the cohousing development. Residents I interviewed have different feelings about the process they used. For instance, some felt that they were not given a choice of builders, but they had to go with the developer's choice. Some are not satisfied with the current condition of the finished development, pointing to construction problems such as leaking roofs and the failures of the geothermal heating system. The construction took longer than expected which was a problem for many people who followed the construction timeline they were given and sold their home a year before moving in; they then had to find temporary dwellings while waiting for the development to finish. The process ended up taking three years, and in 1998 the cohousing complex was open for residents to move in (Cambridge Cohousing Members, 2009).

### **Current Community**

Despite the issues during the construction, the residents are happy with the design layout of the development and community ties. The strong community bonds are shown through their many collective activities. The community has three shared meals a week,

with the volunteer cook preparing dinner for those who signed up. Residents usually sign up to help out with cooking or cleaning three times over a two month period. There are no chores that are required, but helping out with chores is encouraged. The community has a general meeting once a month, run by consensus, and there are over twenty subcommittees. The community also interacts with the outside neighborhood by having monthly poetry readings and art displayed on the walls by local artists (figure 33). During my guided tour of the community there was evidence of informal social meetings throughout the community. Several residents were introduced to me along the way as I viewed various areas of the development (Cambridge Cohousing Members, 2009).



**Figure 33: Artist's Display**

## **Case Study Discussion**

Island and Cambridge Cohousing, along with most other cohousing developments, have common goals; they have a design layout that enhances community bonding with common facilities where founding members influenced design and a housing development that is consensus run. I discuss how each of the case study communities implements these goals to their own unique situations in a rural and urban environment. I found that these two developments have similarities in their development process, design layout, sustainability, and the way they currently function; they have dissimilarities in their density, initial formation, financing, and the incentives used and for budgeting the affordable housing.

### **Comparisons**

Island and Cambridge Cohousing have similarities in group formation and pre-construction phase. Although their initial formation was different, they used local newspaper advertisements to obtain new members. This technique was successful for both cohousing developments. Both cohousing communities used members as developers working in tandem with hired consultants. Island Cohousing used consultants to help with designing their composting toilets and Cambridge Cohousing used a development consultant, Oaktree. Island Cohousing members took on the development of the complex as a group while Cambridge Cohousing had a member that was a developer who took on the development himself with a consultant. Island Cohousing was very successful with this structure of the group being the developers. This process took a total of three years. Cambridge Cohousing on the other hand, only used one member as a developer and it wasn't as successful. Members were unhappy with the overall

construction, and with the delay of one year before they could move into their units.

Possibly, the members believed putting development in the hands of one person would make the process go faster, since they initially determined it would take only two years to develop. It ended up taking three years.

Both cohousing developments used standard cohousing design elements such as common open space bounded by the housing units. In Island Cohousing, the units encircle the central green area, and in Cambridge Cohousing the units surround the green area in a U-shape and are closed in by a white picket fence. Another traditional element both use is having parking situated away from the housing units, so that the members need to walk by numerous housing units and common shared areas increasing the chance of informal meetings. Both developments positioned the dining room to overlook an outdoor common area, providing an opportunity to view fully both shared activities, at the same time strengthening community ties. Additionally, developments blended in with the surrounding neighborhood.

Both cohousing developments use conventional ownership and meeting arrangements, as well as offering similar amenities despite being in radically different physical environments. Island and Cambridge Cohousing are owned as condominiums, which is how most cohousing developments in the United States are arranged. Both cohousing communities have general meetings once a month run by consensus, and subcommittees. All labor for the community is done on a voluntary basis. Both residences share meals in their common dining room. Island Cohousing does this twice a week, whereas Cambridge Cohousing does it three times a week, usually at a lower cost. The food costs might be higher on Martha's Vineyard because it is an island. They use

the same process with cooks buying the food, and dividing the costs among the members who eat at the common meal. Both cohousing communities have common kitchens and dining rooms which is essential for cohousing communities to build strong community bonds. They also have guest rooms, vegetable gardens, and a playground. Having extra guest rooms allows individual housing units to be smaller and not contain an extra guest bedroom for only occasional use. This lowers costs and energy to heat and cool smaller areas, making it more sustainable than traditional housing units. Not only was open green space important in a less dense area in West Tisbury, but it was also very important in the extremely dense city of Cambridge. Cambridge Cohousing spent a substantial sum of money to build underground parking so that they could have their common green areas. The extent to which the affinity for the natural environment or desire for sustainability played into the decision is unknown.

Sustainability is an aspiration for both cohousing communities, yet they have different manners of implementation appropriate to their locations. They both use renewable energy in their developments. Island Cohousing has some solar panels, and south-facing roofs for additional panels to be added if desired, and Cambridge Cohousing uses a geothermal system to heat its units. Both communities used site design in a sustainable way. Island Cohousing clustered their development to maintain open space areas, and Cambridge Cohousing located its development near public transportation. Both complexes also have farming on site allowing food to be grown right in the community.

Island and Cambridge Cohousing engage the surrounding neighborhood to experience cohousing in-action. Island Cohousing does this indirectly by allowing

outside groups to rent the common house, as long as they are sponsored by at least one member. Cambridge Cohousing shares activities directly with the surrounding neighborhood by having monthly poetry readings and artistic displays to which they invite the outside community.

Affordable housing units are part of both communities. There is a higher percentage in the Island Cohousing development, with four out of sixteen units being permanently affordable. Cambridge has three affordable housing units, but it is out of forty-one total units. Cambridge cohousing has a wider variety of affordable units than Island Cohousing. It offers both owner-occupied and rental units which allow for more diversity in the community. There are differences in incentives and permitting used in each of these development's affordable housing units, which will be discussed in the next section of this chapter.

### **Contrasts**

Island and Cambridge Cohousing also have significant dissimilarities in location, housing unit layout and demographics. These two developments were picked for case studies due to their complementarity. Island Cohousing is located in a rural tourist community, and Cambridge Cohousing is situated in a dense city, yet both of the cohousing developments are in places where affordable housing is an issue. To fit with the rural area, Island Cohousing has detached single-family housing units with a detached common house, and Cambridge Cohousing has a variety of attached units from studios to 4-bedroom townhouses, which fits with its city environment. There is a higher percentage of children in Island Cohousing than in Cambridge Cohousing, 37% versus 25%, respectively. Members of Cambridge Cohousing with whom I spoke felt that

raising children in a cohousing community is beneficial and there have been many that have left and gone off to college recently. Cambridge Cohousing was built two years before Island Cohousing, so this could be one reason for the difference in percentages of children. In two years, there might be more children from Island Cohousing leaving the community than Cambridge Cohousing community, but I did not take full demographic data from all residents.

Initial formation was different for both cohousing communities. At Island Cohousing, it started as a presentation about cohousing presented by one of its future members. On the other hand, Cambridge Cohousing initially started from a cohousing umbrella group with members who had a desire to locate a cohousing development in Cambridge. As mentioned previously, both cohousing communities increased membership by advertising general meetings and welcoming the public to attend.

The two cohousing communities used different mechanisms for financing their projects. Island Cohousing used a more conventional approach by borrowing money from two local banks. Cambridge Cohousing used a less conventional financing process through a consortium of organizations that consolidate money to loan to projects more financially risky. This allows the consortium to spread out the risk among multiple organizations. These consortiums are in place to benefit to communities by financing risky affordable housing developments. Cambridge Cohousing obtained funding from Massachusetts Housing Investment Corporation, a consortium, to develop their mixed income housing community. Massachusetts Housing Investment Corporation's mission is to fund affordable or mixed income housing developments.

Affordable housing incentives were used in Island Cohousing, but not in Cambridge Cohousing. Island Cohousing used the Massachusetts 40B statute that facilitates the development of affordable housing. As long as a development includes 25% affordable units, they can obtain variances on zoning regulations. They needed these variances not just to help with the cost to develop affordable housing, which the law addresses, but also to allow homes to be built closer together in the standard cohousing manner. Cambridge Cohousing, on the other hand, had no problem with permitting or zoning. They were allowed to build the development as it is today, but out of their desire for diversity, they built three affordable units.

The goals of cohousing are to build a housing development with a strongly bonded community through design layout, common facilities and to have member input into the design of the development and day to day operations. The development process to build such a community is similar in these two case studies by having meetings and hiring consultants for development. The design layout is comparable in these two cohousing communities. They both have units surrounding an open green area, but on two completely different scales, one on 1.5 acres and one on 30 acres. They both have elements of sustainability in their own unique ways: geothermal versus solar power and composting toilets. They share meals together, are run by consensus and have various subcommittees. The initial formation was different in the two case studies, yet they both formed communities that came together and made a cohousing development. They used different types of financing but built a solid community and they both have affordable housing units using various means of incentives. The end result is that they both



succeeded in creating a close knit community with affordable housing unit in two very different locations.

To view a list of similarities and differences, see table 4. These two case studies helped to develop a way implement an affordable cohousing development in Stamford, CT.

**Table 4: Case Studies**

<b>Name of Community</b>	<b>Island Cohousing</b>	<b>Cambridge Cohousing</b>
Location	West Tisbury, MA	Cambridge, MA
Year Founded	1996	1995
Year Completed	2000	1998
Developer	Members	Members
Builder	South Mountain Company	CB Construction
Architect	Coldham Architects	Bruce Hampton
Landscape Architect	Hilary Noyes	Halvorson Design Partnership
Financing	Martha's Vineyard Co-op Bank Cape Cod Five Cents Savings Bank	Massachusetts Housing Investment Corp.
Size of Land	30 acres	1.5 acres
Size of Development	4 1/2 acres	1.5 acres
Open Space	25 1/2 acres, Protected in Perpetuity	
Amount of Housing Units	16 Ranging from 2 to 4-Bedrooms	41 Ranging from studios to 4-Bedrooms
Amount of Affordable Housing Units	4  1 3-Bedroom  3 2-Bedroom	3  2 2-Bedroom Units - Section 8 Rentals 1 2-Bedroom Units - Owner-Occupied
AMI for Affordable Units	80%	50%
Affordable Housing Monitor	Dukes County Regional Housing Authority	Cambridge Housing Authority

Zoning Issues	Used 40B to Waive of 8 Zoning Violations	No Zoning Issues
Population	26 adults, 15 children	68 Adults, 23 Children
Common House Size	2800 SqFt.	7455 SqFt.

**Table 4 Continued**

Amenities	Common Dining Room Common Kitchen Sitting Room 2 Guest Rooms Screened in Porch Sauna Pond Walking Trails Vegetable Garden Chickens Basketball Hoop Playground	Common Dining Room Common Kitchen Lobby with Fireplace and Piano 2 Guest Rooms Children's Playroom Library Teen Room Gym Vegetable Garden Rentable Office Space Tool Room Playground Bicycle Storage Laundry Room Outdoor Sitting Area
Ownership	Condominium with Monthly Fees	Condominium with Monthly Fees
Decision Making	Consensus	Consensus
Labor Required	Voluntary	Voluntary
Shared Meals	Twice a week	Three Times a Week
Sustainable Elements	Composting Toilets  South Facing Roofs Some Solar Power Farming on Site Clustered Development Using Salvaged and Certified Wood	Near Public Transportation  Geothermal Heat Recycling Room Farming on Site Areas Designated to Share Items

## **CHAPTER 6 CONVENTIONAL COHOUSING PROCESS**

The following chapter explains a process that can be used in any location in the United States to build a cohousing development. The process was formulated from a variety of sources, *The Cohousing Handbook* written by Chris and Kelly Scotthanson (2005) and interviews with members of Island and Cambridge Cohousing (2009) describing the cohousing creation process. The next chapter will build on this chapter by supplying specific information unique to building a cohousing development in Stamford, CT with affordable housing units.

### **Group Formation**

Group formation explains how members interested in cohousing can find others who are amenable to the cohousing idea and start a group to build and design a cohousing development.

Usually, only a few people, and sometimes only one person, has the idea to form a cohousing development in a particular geographic area. This small group of people, or individual person, first has to advertise that they are looking for others to build a cohousing community, there are many to promote this idea. Some founding member cohousers rent a space to give a presentation, advertising it in the local paper. Another way people can promote it is on craigslist.com which is inexpensive and has the potential to reach a larger audience.

### **Pre-Construction Phase**

The pre-construction phase covers the process after an initial group of people have come together and committed to building a cohousing unit up to the point of finding a piece of property appropriate for cohousing.

Once a core group comes together in the group formation phase, the next step is to schedule regular meetings, usually two to four times a month. There tend to be far more meetings before construction when many important decisions about the social and special designs of the community are worked out. Because most cohousing communities are run by consensus, the process can take longer than majority vote, but usually ends up with decisions that are agreeable to all.

First on the agenda of a new group should be this discussion of a common vision of what the cohousing community should be. Each cohousing group is different. Although most have a vision of wanting to encourage community building and many envision living in a sustainable, environmentally friendly way (Meltzer, 2000). In addition to these overarching philosophical issues, the group has to consider some very pragmatic issues such as how they will define what an official member is. An official member could be someone who has come to a certain number of meetings, paid a fee or other criteria. Since it takes time to build trust between group members, housing consultants do not suggest asking for money right away; after awhile the group members do have to demonstrate their commitment to the project through graduated financial investment.

The group has to decide on who will develop the project. There are three ways this can be accomplished; the group is the developer, the group partners with a developer, or they hire a developer to build it for them. The benefit of the group developing the housing is that they do not have to pay a developer. The drawbacks are that they have to take on the total financial risk of the development and, unless there is a developer in the group, they are unlikely to have the expertise, which might lead to more expenses than necessary. If the group hires developers to build the project, it generally costs more, since the developers take on the entire financial risk. If however, the members take on some of the financial risk, the developers might accept a smaller profit margin than usual, because they have a reduced risk. Overall, cohousing is probably a lower-risk endeavor than speculative since there is a group of people ready to buy the units.

Regardless of whether the group develops the project themselves or partner with a developer, they need to decide what types professional consultants they need, and who to choose. The group will also need to search for land. Finding the right professionals and suitable land can be time consuming. The group often splits into subgroups to carry out these tasks and other assignments. The members also have to explore different financial options. Financial contributions from the members will be needed to pay any consultant fees, and for a down payment on land. The members should have already decided on a general location they were envisioning for their future community.

When investigating possible properties for purchase, the group has to be mindful of the zone where the piece of land is located. The town's zoning bylaws or ordinances need to be examined to see if a cohousing development is allowed in any of the zones.

Traditionally, cohousing is built close together with a common house. If the town only allows large lot zoning or has certain setbacks, building a cohousing development might be an issue. The group might need to petition to the zoning board for the town to rewrite the zoning codes or to obtain a variance for their project. This might involve hiring a lawyer that specializes in land use law or a developer that knows how to deal with these zoning issues.

### **Financing**

The financing phase includes the process of paying for the property, construction and permanent individual loans for each cohousing unit. A down payment will have to be placed on the chosen property and financing obtained. The developer, whether this includes the members, a hired professional or both, will be responsible for the expense. Then a construction loan needs to be taken out for the building of the development. Once the construction is finished, the construction loan will need to be paid off, that is usually taken care of by permanent individual financing obtained by each member. Financing for all these steps can be accomplished in a variety of ways including traditional banking or other alternative methods (see chapter 7).

### **Design Phase**

Since one of the essential elements in cohousing is its community enhancing design, the design phase is one of the most important steps in a cohousing development. It includes the layout of the particle community on a specific piece of real estate.

Once the land is selected, an architect needs to be chosen. There are several architects who specialize in cohousing developments and they might be able to better

understand the vision the group would like to produce. The architect, collectively with all the members, will carry out the initial design with a programming workshop. Programming is where the group develops the overall feeling they are trying to create. They will determine their priorities, the size of rooms and the common house, and the general costs of the final units. The next step in the design process is for the architect to do a schematic design, which is similar to bubble diagrams. It is easy for the architect to move around doors and rooms, and the group can have an idea of how the area will be laid out. Once the design is set, drawings are depicted to scale. Then the architect will produce construction drawings for the builder, and usually the architect will make sure that the buildings are being built in concert with the construction drawings (Scotthanson & Scotthanson, 2005).

### **Construction and Move-In**

The construction phase takes place when the cohousing development is being built up to its completion and the move-in follows this phase.

By this point the community has already chosen a builder or developer, depending on whether the group is working as the developer or not. If a developer has been hired, the developer will hire the builder. The builder will be in charge of the construction and the developer will oversee the finances that the builder gets paid. The construction is standard process which is similar to any other development. Cohousing construction is no different than another housing construction.

During the construction phase, the members should get together and organize a staggered move-in. It might be difficult to have everyone move in on the same day.

After everything is finished, it is time to move in and enjoy the development. After the community has lived in the development, alterations might be necessary and helpful. Cohousers often ask the architects to do a post-occupancy evaluation. A certain flaw in the design might not show up until after the community actually lives in the development. Hopefully, the design flaws can be alleviated (Scotthanson & Scotthanson 2005).

Some steps in the cohousing process are the same for any housing development, but some are different and essential to cohousing. The financing and construction phase can be similar to any residential development. The group formation, pre-construction, design and move-in phases have elements that are unique to cohousing. Group formation isn't usually a step that is needed in conventional residential development. Typically, there is a pre-construction and design phase in housing development, but that is generally the developer's exclusive domain. The move-in phase doesn't have to be considered in traditional residential housing, because residents already buy units in a staggered manner and a process for organization is formed by the developer.



**CHAPTER 7**  
**A FRAMEWORK FOR COHOUSING WITH AFFORDABLE UNITS IN**  
**STAMFORD, CT**

This section builds on the last chapter to provide a process specifically tailored to creating a cohousing development in Stamford, Connecticut with affordable units. The framework extends from group formation to a complete functional community. It takes into account Stamford's unique set of characteristics including its affluence and its need for affordable housing. Some of the other critical aspects that affect its ability to develop cohousing with affordable units are: it has a population with a higher degree of education than the nation as a whole, it does not currently have cohousing developments, it is zoned for multifamily homes and it has incentives and funds available to build affordable housing units. The following process is organized in the same manner as Chapter 6.

**Group Formation**

Creating an affordable cohousing community in Stamford, CT can start with as few as one or a two people. Many cohousing developments have started small, including Island Cohousing, which was discussed earlier in the case studies chapter. One person or a small group of people need to get general cohousing information out into the local community since there are no cohousing developments in the entire New York Metropolitan Area of which Stamford is a part. People in Stamford, who potentially would be interested in this type of housing community, might have never heard of this alternative housing configuration.

People initially looking for members to start a cohousing community in Stamford should market to people who are college educated, in their 30s and 40s, pro-environmental, with moderate to high incomes, and are new to the area. As previously stated, Meltzer (2000) found that most cohousing development members in the year 2000 in the United States were of European decent, college educated, had moderate to high incomes, and where in their 30s and 40s. Meltzer (2000) also found that most cohousing group members have a desire to live sustainably, and living in a cohousing community is a fulfillment of that desire. I have found the same pro-environment aspiration in my two case studies, Island Cohousing and Cambridge Cohousing. One member of Island Cohousing said that one of the reasons she moved into the cohousing development was to increase her social ties since she was new to the area and did not have many existing connections in the surrounding community. Williams (2005) also mentions that many people moved to California, severed their ties, and are looking to increase their social capital by moving into a cohousing community. This is one possible reason cohousing is more prevalent in that state. Cohousing is not currently widespread, and these are the types of people that have initially been interested in this type of housing in other parts of the country. Possibly, once cohousing becomes more prevalent in an area, a wider audience could be encouraged to join. Since cohousing is not in Stamford yet, it would make sense to gear the cohousing development towards the most likely candidates for its adoption.

Overall Stamford has a higher percentage of people who fit the criteria as the type of person that typically joins a cohousing community than an average municipality in the United States. Stamford has a higher percentage of people 25 and over with college

degrees than the country as a whole; it does by 16 percentage points (US Census, 2007). The per capita income in Stamford is \$21,018 higher than the United States as a whole. Residents with the highest incomes have moved from out of state and about 31% of Stamford's population is estimated to be in their 30s and 40s (US Census, 2007). There is a strong likelihood that cohousing would be adopted by people living in Stamford.

When affordable housing units are implemented into a cohousing development, they allow for class diversity which is usually desirable in a cohousing community. This was shown in the Cambridge Cohousing case study. Not only do affordable housing units bring diversity, they also help to supply needed affordable housing in the area. To make an affordable cohousing development in Stamford, I would suggest early in the formation process to encourage people with lower incomes to join the group. In Reuer's research (1995), he found that when people with low incomes were part of the organizing group, developments were more likely to have affordable units. As discussed earlier, even with Stamford residents' high median incomes there is still a need for affordable housing in Stamford, so it would not be difficult to find people with low median incomes to join the cohousing group. By HUD estimates, a family of four making between \$76,550 and \$117,800 would be a family of a moderate income in Stamford. My suggestion is to have a mixture of people with various incomes for the initial group of cohousers for a development in Stamford.

There are various ways the initial person or people can promote the idea of cohousing in Stamford. They could place a free ad in the housing section of Fairfield County subsection of New York City's Craigslist or a place a paid ad in either the *Stamford Advocate*, or in the free *Fairfield County Weekly* which covers the entire

county. These ads should either promote a presentation explaining cohousing, or once the group forms advertise upcoming meetings. A free PowerPoint presentation explaining cohousing and its process can be found at Kraus Fitch Architects, Inc.'s website at <http://www.krausfitch.com/portfolio/cohousing/>. This presentation can be used to explain the idea of cohousing to people living in the Stamford area who might be unfamiliar with the concept and in turn motivate them into forming a cohousing community themselves. In addition, an ad could be placed on the Cohousing Association of the United States website where fellow cohousers usually look for additional members or new cohousing developments.

### **Pre-Construction Phase**

After a group of interested people have come together, the next stage is to come up with a vision of this community, define the eligibility for membership (while staying within the Fair Housing Act), decide on the method of development, and decide what consultants are needed to be hired if any (see Chapter 6 for details). As suggested by Reuer (1995), a cohousing community should either partner with a developer or hire a developer to build the complex, because people with lower incomes aren't able to take risks with the money they do have. My suggestion is for the group to partner with a developer so they can have less risk, and at the same time have input into the housing development.

Another goal that needs to be accomplished at this point is to find a piece of property. Reuer (1995) also suggests choosing property that is currently zoned for multifamily or cluster housing, which will allow cohousing to be built, to cut down on the

cost of petitioning for a zoning variances. Stamford has many areas that allow a cohousing development to be built (see figure 32). Figure 32 does not include zones R-3, R-2, R-1, R-20, R-10, and R-7 1/2 which allow cluster development of single-family homes if the total lots owned are eight times the minimum lot size as I was not able to obtain the parcel sizes within these zones. I left them out of the map. Additionally, building a cohousing development using large amounts of land in these zones would cost more than using less land and building a multifamily cohousing complex.

Since most cohousers have a desire to live in a sustainable manner, the cohousing development property should be located within walking distance to food shopping, post offices, schools, and libraries or public transportation to take them to these places. According to Peter Calthorpe (2001), an urban designer, walking distance is ¼ to ½ mile area. Stamford operates local buses along its major roads (see figure 34 and figure 33). Places to go food shopping, post offices, schools, and libraries are also along these routes. Figure 36 shows major roads in thicker black lines. Most of the parcels located in zones that allow cohousing developments are within walking distance to either local services or transportation to them. The larger lot zones which would allow cluster housing are not shown on this map are possibly located farther away than walking distance to certain conveniences. This is another reason to locate the cohousing development in these multifamily zones shown on the map in figure 36.

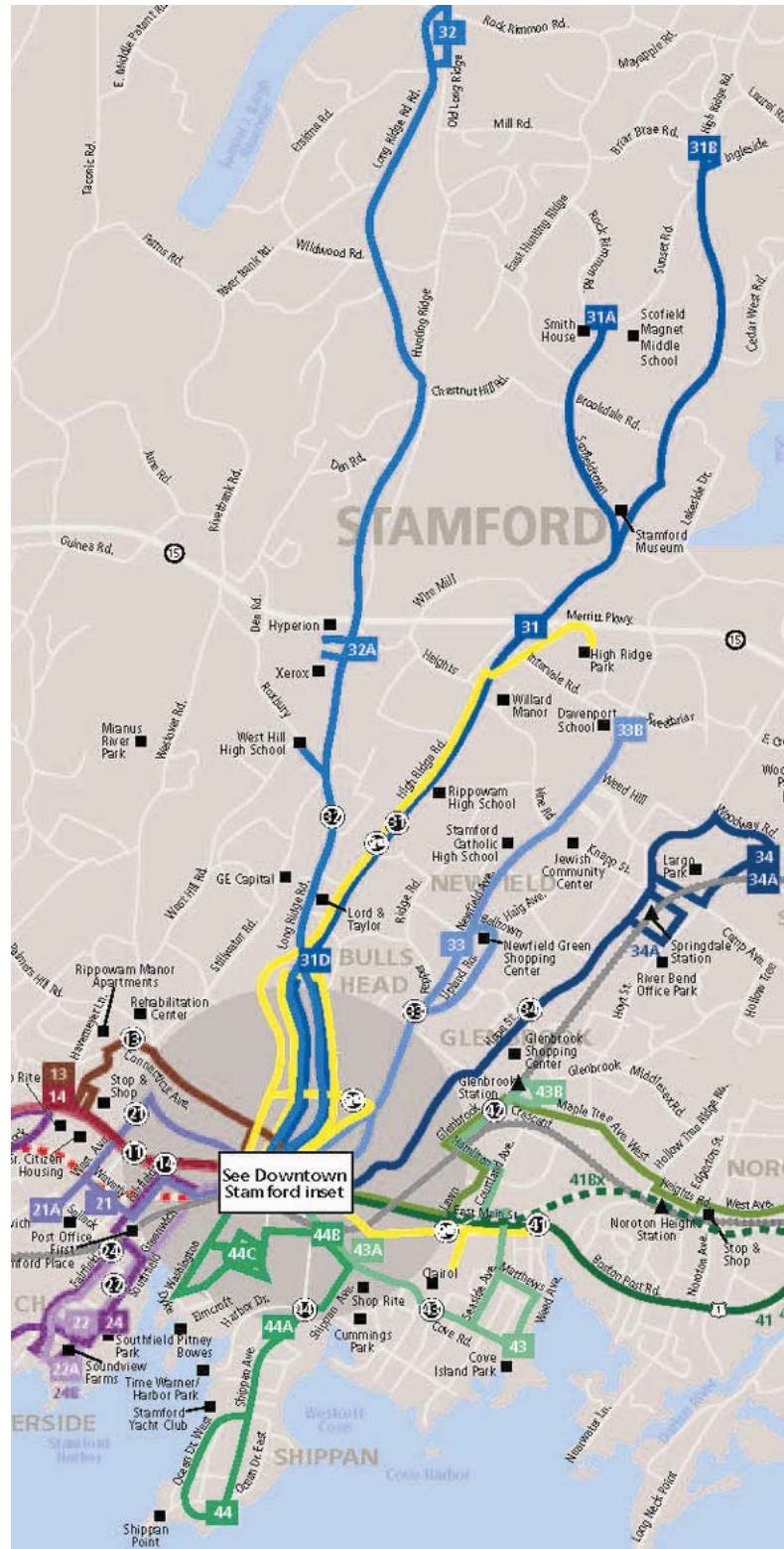
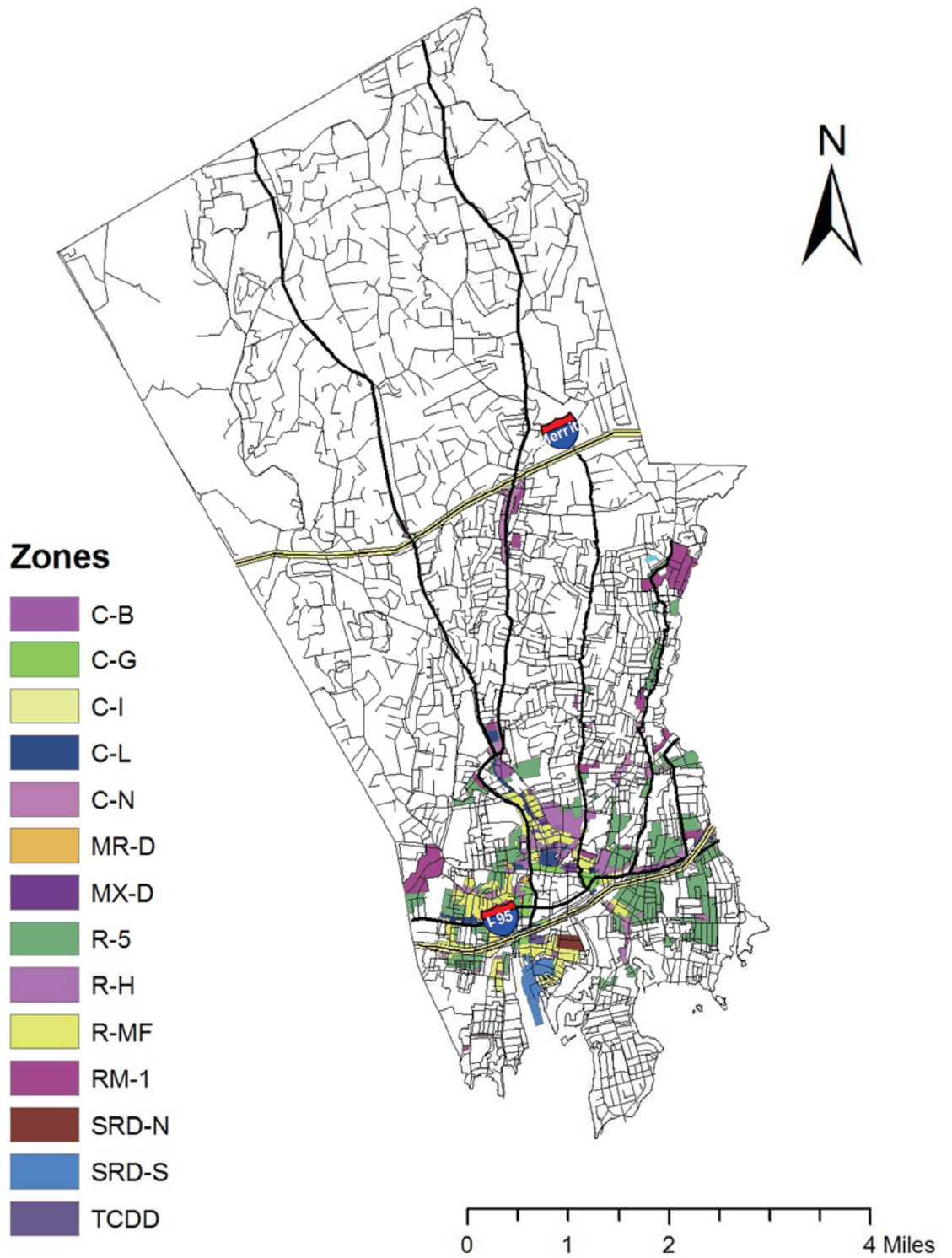


Figure 34: Stamford Bus Map



**Figure 35: Stamford Bus Map Insert**



**Figure 36: Zoning Areas that Allow Cohousing in Stamford, CT**



## **Financing**

There are several different ways to divide up ownership which will affect how the cohousing project will be financed. Since my suggestion is to work with a developer, and the usual way of dividing up ownership in a cohousing complex is to use a condominium structure, I would suggest using this same organization. In a condominium organization, all members own their own units, but the common areas are owned in common. Banks and developers are familiar with condominiums and more likely to finance these projects rather than projects with an alternative ownership structures such as cooperatives. There is a potential that an alternative cooperative structure might be more affordable. This is discussed in the concluding chapter in the further research section in this project.

There are various ways to gain access to loans, grants and optimal financing for a cohousing project with affordable units. Along with the suggested condominium organization, the ownership of the cohousing project should be structured as a non-profit to take advantage of affordable housing incentive financing. There are many ways to obtain money for mixed-income projects that include affordable housing units within Stamford (see chapter 4). With affordable units, the cohousing project can utilize a couple of ways to make the project less risky and more lender friendly which can lead to better loan rates. Receiving tax credits through the federal and state governments can allow for a larger down payment for a project which might allow for better financing. Procuring Section 8 subsidies is another way to lower the risk for banks to agree to improved funding. There are other alternatives to banks to get financing. Receiving funds through a consortium like Cambridge Cohousing is another option to acquire loans for the project. Housing Development Fund of Lower Fairfield County, Inc., which loans

money to developments in Stamford (see chapter 4). Developments with affordable units can receive Community Development Block Grants money from the city and the state, and there are grants that can be applied for from Stamford's capital funds. Most of these programs to acquire these grants are competitive. My suggestion is to have a mixture of units including rentals and owner-occupied units for people with a variety of different average median incomes (AMI). This will allow the development to take advantage of various programs and grants for different types of affordable housing as well as building diversity in the cohousing community. Grants are more likely to go to developments with units for people with incomes of 50% or less AMI. Another suggestion is to partner with a non-profit developer such as New Neighborhoods, Inc. or Mutual Housing Association of Southwest Connecticut to help with the paperwork and the expertise of obtaining these affordable housing grants and financing from various agencies. These non-profit organizations might be able to help build a mixed income cohousing development. HOME programs can also help first time homebuyers to finance units within the development.

### **Design Phase**

The design should enhance community ties, sustainability and affordability. After a piece of property is acquired the design phase is started. Each parcel of property is unique and so is its design. Community strength has been increased from elements in cohousing design. These elements are having an outdoor shared open space surrounded by housing units (Marcus, 2000), making the path from parking to housing units pass other housing units in the complex (Marcus, 2000), and having limited kitchen and

laundry facilities in the housing units (Williams, 2005). These first two elements are present in Island Cohousing and all three elements are present in Cambridge Cohousing. The residents I spoke to in each development were pleased with the level of community attachment. My suggestion is to use these three elements in a cohousing development in Stamford, as well as using an architect that specializes in cohousing developments. They will be familiar with the goals of cohousing and how design can enhance the community.

Along with enhancing the community, a cohousing development should be designed in a sustainable manner. This not only makes it desirable for people who are environmentally conscious, but over the long term it can make living in the complex more affordable. Using solar power, geothermal or other types of infinite power sources lessen energy costs. Designing the complex with passive solar heating can also reduce costs. Reusing materials is also sustainable and can reduce expenditures. Many sustainable elements have been used and discussed in the case studies for Island and Cambridge Cohousing.

Retrofitting a building for a cohousing community is another way to be sustainable and cost efficient (Reuer, 1995). Much of Stamford is already built up, especially in the multifamily zoning areas which allow cohousing. My suggestion is to retrofit a current building and design it in such a way as to make it cohousing friendly through enhancing community bonds. If many households are part of the cohousing community, clustering the units into smaller groups with common areas can lead to stronger bonds (Williams, 2005).

### **Construction Phase**

The construction phase needs to follow the design plans to implement the affordable, sustainable and community enhancing elements. The architects will oversee that construction is being built to their specifications and the developer will have to make sure the payments are being made and within budget. During construction, cohousers should plan a staggered move-in and organize how the community will operate. By staggering move-in, members eliminate the congestion of all members moving in at the same time.

### **Move-In Phase**

Once members have moved in, there should be general meetings and community enhancing events. Usually in cohousing developments, as seen in Island and Cambridge Cohousing, the members hold consensus run meetings once a month to discuss issues involving the whole community. Subcommittees should be formed to permit people with diverse interests to divide up responsibility of various community activities. It will have to be decided if community activities will be voluntary. They were in the two case studies in this project, but there is an option to require a certain amount of hours of labor. To help build and keep community ties, there should be community meals once a week. My suggestion would be to have meals more often than once a week. It is more sustainable and cost effective. If food is bought in bulk, it can be less expensive than buying or cooking food individually. Additionally, I would suggest that the cohousing community invite the surrounding neighborhood to shared activities like Island and

Cambridge Cohousing. This will led to more people experiencing cohousing and being able to spread the cohousing concept. In Island Cohousing, they rented their common area which is another way to increase income and decrease expenditures for the cohousing community.

**CHAPTER 8**

**THE FRAMEWORK TO CREATE A COHOUSING DEVELOPMENT WITH AFFORDABLE UNITS IN AFFLUENT MUNICIPALITIES WITH CERTAIN CHARACTERISTICS**

This chapter explains a framework to create a cohousing development with affordable units in certain types of affluent communities. These affluent communities will be described in more detail and then steps for this type of development will be outlined. The steps and framework are based on the previous two chapters where the process for any cohousing community is explained and then a more specific process is explained particularly for Stamford, CT, an affluent community (see chapter 6 and 7).

**Preliminary Considerations**

For the following framework to work as a best practice the municipality which will be home to a cohousing development with affordable units should fit a certain demographic as well as contain certain zoning and non-profit organizations. The municipalities should have higher incomes and education than the national average, a population of people in their 30s and 40s and currently not have a cohousing development in the area. If a municipality does not already have cohousing, it benefits a development to be marketed towards members that have been shown to accept the cohousing concept in other areas of the United States. The municipality should already have areas that are zoned for multifamily units, so there are no zoning issues for a cohousing complex to be built. There also should be non-profits in the area who develop

affordable housing to rely on their expertise of incentives for affordable housing in this area. The following is a model to be used for this type of municipality.

### **Group Formation**

Group formation is the process of initially bringing people together to create a cohousing development. There are certain elements to this process which will make cohousing with affordable units successful in an affluent community. Since cohousing is not currently in the area, it is important to make presentations about this alternative housing configuration; there might be people who would be interested in this type of housing, but might never heard of it. It is essential to market to the right demographic to be successful and to enhance affordability. Understanding the benefits and issues with consensus is another crucial element in the group formation process. Here is a list of important elements needed in this phase:

- Assemble a group of people interested in cohousing by arranging an educational presentation about the cohousing concept
- Market to people with higher incomes and education, in their 30s and 40s, with an emphasis on people new to the area, who have a pro-environment mindset since they are more likely to be the first to join a cohousing group.
- Market to people at low and moderate income levels to ensure representation in the initial group to come up with a mixed income community with affordable housing units

- Conduct meetings run by consensus from once to twice a month to come up with a common vision, and organize subcommittees to take on certain responsibilities.
- Hire a moderator to run consensus meetings if no one in the group knows how this is done effectively.
- Advertise the general meetings in the local newspaper to encourage additional members.
- Decide on how membership will be determined, either through a financial contribution and/or by coming to a certain amount of meetings.

### **Pre-Construction Phase**

The pre-construction phase is the time period after the initial group is formed and before the development or design of the cohousing community has taken place. This phase includes finding the right consultants and looking for the most suitable property for sustainability and affordability. Sustainability is important part of marketing to people with a pro-environmental mindset since this type of person has been found to be more likely to adopt the cohousing concept. Affordability is important so that the residents living in the affordable units will be able to live in other affordable ways. Here is a list of important elements needed in this phase:

- Partner with a developer to spread out the financial risk for the development and to obtain their expertise.



- Hire professionals, including a builder, an architect who specializes in cohousing developments, a landscape architect and any other consultants the community requires.
- Partner with non-profit organizations to help finance affordable housing units.
- Organize in a condominium structure to facilitate financing.
- Buy property already zoned as multifamily so there won't be issues with zoning changes.
- Locate property near food shopping, post offices, libraries, and schools or near public transportation to these places to limit car trips to create an environmentally friendly community and help people without cars live more economically.

### **Financing**

The financing phase includes finding the most advantageous and affordable loans for construction and permanent individual mortgages. Here is a list of important elements needed in this phase:

- Use a consortium for alternative financing if unable to obtain traditional bank financing with a competitive rate.
- Research the local housing authority to see what non-profit groups, if any, build affordable housing in the municipality.
- Get a construction loan and secure permanent financing.

## **Design Phase**

The design phase is when the community is planned with the use of experienced cohousing architects. The design effects community strength, sustainability and affordability. To make sure these elements are addressed, here is a list of important elements needed in this phase:

- Conduct programming with the hired architect and the members to enable the architect to build a schematic design, scale drawings, and construction drawings for further consideration.
- Create outdoor shared areas with housing units surrounding it to increase social ties in the community.
- Strength of the community interaction with walking paths to parking that pass housing units.
- Limit the size of kitchen and laundry facilities in the common house of individual housing units.
- Retrofit, reuse materials, and use infinite power sources for heat and electricity to increase affordability and sustainability.

## **Construction and Move-In Phase**

The construction phase takes place from the building of the cohousing community and its completion and the move-in follows this phase. Construction can include many elements of sustainability and affordability. Here is a list of important elements needed in this phase:

- Oversee construction and keep finances in order and on budget which is accomplished by professionals and developers.
- Stagger move-in to eliminate confusion of all members moving in at the same time.
- Continue to have monthly general meetings run by consensus
- Share meals to build social bonds.
- Invite the outside community to promote the cohousing concept.
- Conduct a post-occupancy evaluation six months after move-in to deal with any unforeseen issues with design.
- Form committees for social, cleaning and community responsibilities.

In a certain type of affluent municipality in the United States it is possible to create a cohousing community with affordable units. With certain demographics, zoning and organizations, a group of people can create a community with strong bonds and class diversity in an affluent municipality.

## **CHAPTER 9**

### **PROJECT CONCLUSIONS**

#### **Summary of Findings**

Cohousing can provide affordable units for people with low and moderate incomes in affluent municipalities such as Stamford, Connecticut. Stamford, like many communities in the United States, has an insufficient amount of housing for people with low and moderate incomes. Not only can cohousing supply these needed affordable units, but it can provide a sustainable and affordable living environment with increased social bonds through the sharing of resources, use of renewable energy systems, compact and communally enhanced design and consensus decision making.

The literature review demonstrates that researchers have examined various aspects of cohousing. The aspects studied are affordable strategies in cohousing development, the design's influence on the community, the members' desires to be pro-environment and their actual sustainable behavior, the future of cohousing, general case studies, case studies of cohousing development with all affordable units, the successfulness of senior cohousing and issues with consensus decision making in a cohousing setting. Cohousing with affordable units in affluent communities has not been previously researched. The literature review provides definitions of cohousing, affordable housing and affluent communities. It also supplies a brief history of cohousing. The key finding from the literature review are:

#### **Economic Aspects**

- Initial cohousing members with low and moderate incomes often facilitate affordable cohousing units (Reuer 1995).

- Members working as consultants in the development of a cohousing complex can reduce costs (Reuer 1995).
- Including at least 15 households can divide the upfront costs of development and spread out the risk among numerous members making cohousing more affordable (Reuer 1995).
- Partnering with a developer can reduce financial risk for people with low and moderate incomes so they can afford to live in a cohousing community (Reuer 1995).
- Obtaining a property for development that is already zoned for higher densities can reduce costs of getting a property re-zoned (Reuer 1995).
- Costs can be reduced in a cohousing development by making units smaller with open floor plans and using sweat equity from its members (Reuer 1995).
- Cohousing in the United States usually costs the same or more than conventional housing (Meltzer, 2000).
- There have been successful entirely affordable cohousing communities in the United States and Australia (Global Green USA, 2007 and Crabtree, 2005).

### **Social/Community Aspects**

- If outdoor space is shared and bounded by housing units in a cohousing development offering activities for both adults and children, the community will be stronger (Marcus, 2000).

- When parking is located so that a resident must pass other members' housing units, this can lead to a strengthening of the cohousing community from increased informal meetings (Marcus, 2000).
- In larger cohousing developments, clustering units into smaller groups can increase a sense of community (Williams, 2005).
- When kitchen and laundry facilities are limited in private units, this increases social interaction in a cohousing community (Williams, 2005).
- Most cohousing communities have shared meals at least once a week (Meltzer, 2000).
- Senior cohousing can combat loneliness and government can play a key role in its development (Brenton, 1998).
- Senior citizens are generally satisfied with living in cohousing (Choi, 2004).
- Within the cohousing consensus process, negative feelings can form when members miss meetings or when residents wait to voice opposition to decision (Renz, 2006).
- Cohousing members have differing concepts of consensus and blocking which do not interfere with the process (Renz, 2006).

### **Sustainability Aspects**

- Most cohousing communities have the objective of living in a sustainable way (Meltzer, 2000).

- Residents who moved from conventional housing to a cohousing community own fewer cars, lawn mowers, freezers, washing machines, dryer and more bicycles (Meltzer, 2000).
- Cohousing units on average are smaller than an average American dwelling (Meltzer, 2000).
- Recycling practices improved after residents moved into a cohousing development (Meltzer, 2000).
- Most cohousing communities in the United States do not buy food or supplies in bulk which is unlike cohousing communities in Denmark (Meltzer, 2000).

### **Marketing Aspects**

- An overwhelming majority of cohousers in the United States are of European decent, college educated and in their 30s and 40s (Meltzer, 2000).
- Cohousing in the United States is clustered in a few states: California, Massachusetts, Washington and Colorado (Williams 2008).
- Adoption rates of cohousing have been slow in the United States due to regional clustering (Williams 2008).
- Cohousing fits with Americans' value to live in a pro-environmental manner (Williams 2008).
- Cohousing might be adopted more quickly if it was observed more often (Williams 2008).

- Senior cohousing is in its infancy in the United States with only a few developed (Durrent, 2005).

Analyzing Stamford, CT's history, demographics, real estate, zoning and affordable housing environment shows that it supports many aspects that are needed for a successful cohousing development with affordable units to be created. It has a specific type of population that traditionally is accepting of the cohousing concept and it already has zoning that will allow cohousing development and non-profit organizations that build affordable housing. The other key finding in this analysis are:

- Stamford has a diversity and affluent population.
- Stamford's proximity to New York City and its transportation networks influence its demographic make-up and economy.
- There is a need for affordable housing units for people with low and moderate incomes in Stamford.
- The most affluent people in Stamford are non-native to Connecticut.
- Stamford's current zoning allows for the compact design of a cohousing development.
- Non-profit agencies are at present are building affordable housing in Stamford.
- Stamford has inclusionary zoning and additional ordinances which help maintain and support added affordable housing units.
- Stamford has supportive home occupation, farming and childcare zoning to help live more affordability.



- Grants for affordable and mixed-income housing (including cohousing) are available from Stamford, the State of Connecticut and the Federal Government.
- Opportunities for alternative financing are available in Stamford.

The two case studies, Island and Cambridge Cohousing, show many similarities and some differences. Both cohousing complexes had affordable units, sustainable aspects and community enhanced design, but are located in two completely different environments: one rural and the other urban. Even though they have extremely different density, they were able to provide green open space with units surrounding the area. They both have shared meals each week, consensus decision making, monthly general meetings with various subcommittees and they invite the outside neighborhood to experience the community in action. The individual key findings from Island Cohousing are:

- Island Cohousing started with presentation about cohousing.
- Some members, who were new to the area, were attracted to cohousing
- All members acted as developers.
- The Massachusetts's state incentive 40B allowed the cohousing's compact design with 25 % affordable units.
- Using similar materials lowered the cost of the development.
- Island Cohousing obtained traditional financing from a local bank.
- People who reside in the affordable housing units were not part of the initial group of cohousing members and years later they still do not participate in many community activities.

- Voluntary labor that is not always successful and some members feel that not everyone pulls equal weight.

The key findings from Cambridge Cohousing are:

- One member acted as the developer which led to negative feelings between members and unsatisfactory construction.
- They choose to have three affordable housing units: one owner-occupied and the other two rentals.
- The mixed-income cohousing development allowed the community to obtain alternative financing.
- Cambridge cohousing chose a costly underground garage so they could have green open space.

The finding from the literature review, Stamford analysis and the two case studies supplied the information to form a framework to build a cohousing community with affordable units in Stamford, CT and other similar affluent municipalities. If a municipality has these certain characteristics, it can use a similar model as the one formulated for Stamford.

### **Conclusions**

Affordable housing is a problem in affluent areas such as Stamford, CT and cohousing can be a solution to this problem as well as a supplying many additional benefits. Cohousing facilitates stronger community building, allows people to live more sustainability and more affordably. If a community has zoning which permits multi-family housing or cluster housing, residents who are educated with higher-incomes, in

their 30s and 40s with a pro-environment bent and there are currently affordable housing professionals building housing in the community, cohousing with affordable units might be possible.

### **Significance for Planners**

This cohousing research demonstrates to planners that cohousing can help solve issues of community isolation, sprawl, sustainability and affordable housing. Since cohousing can enhance social bonding, contain sustainable elements such as clustered development and renewable energy systems and include affordable housing units, it should be promoted. With certain demographics, zoning and non-profit groups building affordable housing, a community can help support cohousing development with affordable units.

Planners can support this type of housing in their community by making sure that zoning allows clustered or multiple family housing. This will permit cohousing developments to be built with more easily. Planners can also present this type of housing development to the public as an alternative to traditional housing because many people are not familiar with it.

Affordable housing professional can also be guided by this research. Building affordable housing in affluent areas can be difficult. Cohousing with affordable housing units can not only supply affordable units but provide an affordable way of living by the sharing resources and have the added benefit of building strong communities.

### **Recommendations**

People who want to create a cohousing development with affordable units in an affluent community should realize in certain communities it is possible. It can start with

just one person and following the framework provided in this paper could lead to a successful development. The framework combines the best practices of previous research and my own research. With the help of an area's affordable housing professionals and cohousing specialists, a cohousing development with affordable units can be developed.

I recommend that people interested in building a cohousing development with affordable units should read the available handbooks on creating cohousing and see if their community has similar characteristics to Stamford. If the community fits the demographics, zoning and affordable housing environment parameters, they should feel free to use the framework supplied in this paper to help with the creation of the community.

I also recommend that planners and city and town legislators enact zoning which supports cohousing and affordable housing. This will serve not only cohousers and people with low and moderate incomes, but it will help the entire community by allowing less disruptive development and limit residents' carbon footprint.

### **Further Research**

There are many avenues for further study and research on this topic. I supplied a framework for a cohousing community with affordable units in an affluent area with conducive zoning, non-profit affordable housing developers and a certain demographic. Additional research could be done to see if this type of housing can be created in municipalities with all or one of these elements missing. More research could be conducted to see if a fully affordable development could be built in an affluent

community. There are fully affordable cohousing developments in the United States, but not in affluent areas.

I did not explore issues and problems of mixing people of different cultures and classes in the same housing complex. In a fully affordable complex, these same problems may arise when mixing people of different types of people in certain neighborhoods.

Cooperative housing could be a way of making a housing development even more affordable, but this wasn't explored. The New York City metropolitan area, which includes Stamford, has a history of cooperative housing. Cooperative cohousing might be easier to create in the Stamford area than other parts of the country because of its history. Since some people in the community are familiar with cooperative housing, there might be supportive professionals and developers in place to help create this type of housing.

When I started this research, I was skeptical that a cohousing development with affordable housing units could be built in an affluent community such as Stamford. After conducting the research, it now seems possible. Further cohousing research might illuminate more possibilities for affordable cohousing units.

## APPENDIX A: LIST OF AFFORDABLE COHOUSING DEVELOPMENTS

Muir Commons	Davis	CA
N-Street Cohousing	Davis	CA
Southside Park Cohousing	Sacramento	CA
Nomad Cohousing	Boulder	CO
Nyland Cohousing	Lafayette	CO
Wild Sage	Boulder	CO
Takoma Village	Washington	DC
Lawndale Cohousing	Chicago	IL
Ujima Place	Chicago	IL
Cambridge Cohousing	Cambridge	MA
Cornerstone Cohousing	Cambridge	MA
Island Cohousing	Vineyard Haven	MA
Jamaica Plain Cohousing	Boston	MA
New View Cohousing	Acton	MA
Pioneer Valley Cohousing	Amherst	MA
Rocky Hill Cohousing	Northampton	MA
Eastern Village Cohousing	Silver Spring	MD
Monterey	St. Louis Park	MN
Wasatch Commons	Salt Lake City	UT
ElderSpirit Community	Abingdon	VA
Rosewind Cohousing	Port Townsend	WA
Sharingwood Cohousing	Snohomish county	WA

Sources:

Abraham Paiss & Associates

<http://www.abrahampaiss.com//docs/2008CommunityList.doc> 03/04/09

The Cohousing Association of the United States website <http://www.cohousing.org>  
03/04/09

**APPENDIX B: LIST OF COHOUSING DEVELOPMENTS IN THE US**

Manzanita Village	Prescott	AZ
Milagro Cohousing	Tucson	AZ
Sonora Cohousing	Tucson	AZ
Stone Curves	Tucson	AZ
Allelous Cohousing	Pasadena	CA
Berkeley Cohousing	Berkeley	CA
Coyote Crossing Cohousing	Santa Cruz	CA
Doyle Street Cohousing	Emeryville	CA
FrogSong Cohousing	Cotati	CA
Glacier Circle Retirement Community	Davis	CA
Mariposa Grove	Oakland	CA
Marsh Commons	Arcata	CA
Nevada City Cohousing	Nevada City	CA
Oak Creek Commons	Paso Robles	CA
Pleasant Hill Cohousing	Pleasant Hill	CA
Sacramento Street Cohousing	Berkeley	CA
Swan's Market Cohousing	Oakland	CA
Temescal Cohousing	Oakland	CA
Temescal Creek Cohousing	Oakland	CA
Tierra Nueva	Oceano	CA
Two Acre Wood	Sebastopol	CA
Valley Oaks Village	Chico	CA
Western Drive	Santa Cruz	CA
Yulupa Cohousing	Santa Rosa	CA
Muir Commons	Davis	CA
N-Street Cohousing	Davis	CA
Southside Park Cohousing	Sacramento	CA
Casa Verde Commons	Colorado Springs	CO
Greyrock Commons	Fort Collins	CO
Harmony Village	Golden	CO
Hearthstone Cohousin	Denver	CO
Heartwood Cohousing	Durango	CO
Highline Crossing	Littleton	CO
River Rock Commons	Fort Collins	CO
Silver Sage	Boulder	CO
Nomad Cohousing	Boulder	CO
Nyland Cohousing	Lafayette	CO

Wild Sage	Boulder	CO
Takoma Village	Washington	DC
Daystar	Tallahassee	FL
East Lake Commons	Decatur	GA
Lake Claire	Atlanta	GA
Acme Artists Community	Chicago	IL
Greenway Park	Chicago	IL
Harrabee Homes	Chicago	IL
Lawndale Cohousing	Chicago	IL
Ujima Place	Chicago	IL
Alchemy Farm	East Falmouth	MA
Pathways Cohousing	Northampton	MA
Pine Street Cohousing	Amherst	MA
Cambridge Cohousing	Cambridge	MA
Cornerstone Cohousing	Cambridge	MA
Island Cohousing	Vineyard Haven	MA
Jamaica Plain Cohousing	Boston	MA
New View Cohousing	Acton	MA
Pioneer Valley Cohousing	Amherst	MA
Rocky Hill Cohousing	Northampton	MA
Eastern Village Cohousing	Silver Spring	MD
Two Echo Cohousing	Brunswick	ME
Great Oak Cohousing	Ann Arbor	MI
Sunward	Ann Arbor	MI
Touchstone	Ann Arbor	MI
Monterey	St. Louis Park	MN
Arcadia Cohousing	Carrboro	NC
Blue Heron Farm	Pittsboro	NC
Eno Commons	Durham	NC
Pacifica	Carrboro	NC
Solterra	Durham	NC
Westwood	Asheville	NC
Commons on the Alameda	Santa Fe	NM
Tres Placitas del Rio	Santa Fe	NM
Cantine's Island Cohousing	Saugerties	NY
Community Now	Rochester	NY
Ecovillage at Ithaca	Ithaca	NY
Cascadia Commons	Portland	OR
Higher Ground	Bend	OR
On-Going Concerns	Portland	OR



Trillium Hollow	Portland	OR
Wasatch Commons	Salt Lake City	UT
Blueberry Hill	Vienna	VA
Shadowlake Village	Blacksburg	VA
ElderSpirit Community	Abingdon	VA
Cobb Hill	Hartland	VT
Ten Stones	Charlotte	VT
Bellingham Cohousing	Bellingham	WA
Duwamish Cohousing	Seattle	WA
Jackson Place	Seattle	WA
Maxwelton Creek	Clinton	WA
Puget Ridge Cohousing	Seattle	WA
Songaia Cohousing	Bothell	WA
Talking Circle	Langley	WA
Vashon Cohousing	Vashon	WA
Winslow Cohousing	Bainbridge Island	WA
Wise Acres Cooperative	Indianola	WA
Rosewind Cohousing	Port Townsend	WA
Sharingwood Cohousing	Snohomish county	WA
Village Cohousing	Madison	WI

Sources: The Cohousing Association of the United States website  
<http://www.cohousing.org> 03/04/09

See Works Cited

**APPENDIX C: AFFORDABLE, AFFLUENT, DENSITY AND REGIONAL  
COHOUSING CHART**

<b>Name</b>	<b>City</b>	<b>State</b>	<b>Affordable</b>	<b>Affluent</b>	<b>Density</b>	<b>Region</b>
Muir Commons	Davis	CA	YES	YES	OUT	OUT
N-Street Cohousing	Davis	CA	YES	YES	OUT	OUT
Southside Park Cohousing	Sacramento	CA	YES	NO	OUT	OUT
Nomad Cohousing	Boulder	CO	YES	YES	OUT	OUT
Nyland Cohousing	Lafayette	CO	YES	NO	YES	OUT
Wild Sage	Boulder	CO	YES	YES	OUT	OUT
Takoma Village	Washington	DC	YES	NO	OUT	OUT
Lawndale Cohousing	Chicago	IL	YES	NO	OUT	OUT
Ujima Place	Chicago	IL	YES	NO	OUT	OUT
Cambridge Cohousing	Cambridge	MA	YES	NO	OUT	YES
Cornerstone Cohousing	Cambridge	MA	YES	NO	OUT	YES
Island Cohousing	Vineyard Haven	MA	YES	NO	YES	YES
Jamaica Plain Cohousing	Boston	MA	YES	NO	OUT	YES
New View Cohousing	Acton	MA	YES	YES	OUT	YES
Pioneer Valley Cohousing	Amherst	MA	YES	NO	YES	YES
Rocky Hill Cohousing	Northampton	MA	YES	NO	OUT	YES
Eastern Village Cohousing	Silver Spring	MD	YES	NO	OUT	OUT
Monterey	St. Louis Park	MN	YES	NO	OUT	OUT
Wasatch Commons	Salt Lake City	UT	YES	NO	YES	OUT
ElderSpirit Community	Abingdon	VA	YES	NO	OUT	OUT
Rosewind Cohousing	Port Townsend	WA	YES	NO	OUT	OUT
Sharingwood Cohousing	Snohomish county	WA	YES	NO	OUT	OUT
Manzanita Village	Prescott	AZ	NO	NO	OUT	OUT
Milagro Cohousing	Tucson	AZ	NO	NO	YES	OUT
Sonora Cohousing	Tucson	AZ	NO	NO	YES	OUT
Stone Curves	Tucson	AZ	NO	NO	YES	OUT
Allelous Cohousing	Pasadena	CA	NO	NO	OUT	OUT
Berkeley Cohousing	Berkeley	CA	NO	YES	OUT	OUT
Coyote Crossing Cohousing	Santa Cruz	CA	NO	NO	OUT	OUT
Doyle Street Cohousing	Emeryville	CA	NO	NO	OUT	OUT
FrogSong Cohousing	Cotati	CA	NO	NO	OUT	OUT
Glacier Circle Retirement Community	Davis	CA	NO	YES	OUT	OUT
Mariposa Grove	Oakland	CA	NO	NO	OUT	OUT

Marsh Commons	Arcata	CA	NO	NO	YES	OUT
Nevada City Cohousing	Nevada City	CA	NO	NO	YES	OUT
Oak Creek Commons	Paso Robles	CA	NO	NO	OUT	OUT
Pleasant Hill Cohousing	Pleasant Hill	CA	NO	YES	OUT	OUT
Sacramento Street Cohousing	Berkeley	CA	NO	YES	OUT	OUT
Swan's Market Cohousing	Oakland	CA	NO	NO	OUT	OUT
Temescal Cohousing	Oakland	CA	NO	NO	OUT	OUT
Temescal Creek Cohousing	Oakland	CA	NO	NO	OUT	OUT
Tierra Nueva	Oceano	CA	NO	NO	OUT	OUT
Two Acre Wood	Sebastopol	CA	NO	NO	OUT	OUT
Valley Oaks Village	Chico	CA	NO	NO	YES	OUT
Western Drive	Santa Cruz	CA	NO	NO	OUT	OUT
Yulupa Cohousing	Santa Rosa	CA	NO	NO	OUT	OUT
Casa Verde Commons	Colorado Springs	CO	NO	NO	YES	OUT
Greyrock Commons	Fort Collins	CO	NO	NO	YES	OUT
Harmony Village	Golden	CO	NO	NO	YES	OUT
Hearthstone Cohousing	Denver	CO	NO	NO	OUT	OUT
Heartwood Cohousing	Durango	CO	NO	NO	YES	OUT
Highline Crossing	Littleton	CO	NO	NO	YES	OUT
River Rock Commons	Fort Collins	CO	NO	NO	YES	OUT
Silver Sage	Boulder	CO	NO	YES	OUT	OUT
Daystar	Tallahassee	FL	NO	NO	YES	OUT
East Lake Commons	Decatur	GA	NO	NO	OUT	OUT
Lake Claire	Atlanta	GA	NO	NO	YES	OUT
Acme Artists Community	Chicago	IL	NO	NO	OUT	OUT
Greenway Park	Chicago	IL	NO	NO	OUT	OUT
Harrabee Homes	Chicago	IL	NO	NO	OUT	OUT
Alchemy Farm	East Falmouth	MA	NO	NO	OUT	YES
Pathways Cohousing	Northampton	MA	NO	NO	OUT	YES
Pine Street Cohousing	Amherst	MA	NO	NO	YES	YES
Two Echo Cohousing	Brunswick	ME	NO	NO	OUT	YES
Great Oak Cohousing	Ann Arbor	MI	NO	YES	OUT	OUT
Sunward	Ann Arbor	MI	NO	YES	OUT	OUT
Touchstone	Ann Arbor	MI	NO	YES	OUT	OUT
Arcadia Cohousing	Carrboro	NC	NO	NO	OUT	OUT
Blue Heron Farm	Pittsboro	NC	NO	NO	OUT	OUT
Eno Commons	Durham	NC	NO	NO	YES	OUT
Pacifica	Carrboro	NC	NO	NO	OUT	OUT
Solterra	Durham	NC	NO	NO	YES	OUT
Westwood	Asheville	NC	NO	NO	YES	OUT

Commons on the Alameda	Santa Fe	NM	NO	NO	YES	OUT
Tres Placitas del Rio	Santa Fe	NM	NO	NO	YES	OUT
Cantine's Island Cohousing	Saugerties	NY	NO	NO	OUT	YES
Community Now	Rochester	NY	NO	NO	OUT	YES
Ecovillage at Ithaca	Ithaca	NY	NO	NO	OUT	YES
Cascadia Commons	Portland	OR	NO	NO	OUT	OUT
Higher Ground	Bend	OR	NO	NO	YES	OUT
On-Going Concerns	Portland	OR	NO	NO	OUT	OUT
Trillium Hollow	Portland	OR	NO	NO	OUT	OUT
Blueberry Hill	Vienna	VA	NO	YES	OUT	OUT
Shadowlake Village	Blacksburg	VA	NO	NO	YES	OUT
Cobb Hill	Hartland	VT	NO	NO	OUT	YES
Ten Stones	Charlotte	VT	NO	YES	OUT	YES
Bellingham Cohousing	Bellingham	WA	NO	NO	YES	OUT
Duwamish Cohousing	Seattle	WA	NO	NO	OUT	OUT
Jackson Place	Seattle	WA	NO	NO	OUT	OUT
Maxwelton Creek	Clinton	WA	NO	NO	OUT	OUT
Puget Ridge Cohousing	Seattle	WA	NO	NO	OUT	OUT
Songaia Cohousing	Bothell	WA	NO	YES	YES	OUT
Talking Circle	Langley	WA	NO	NO	OUT	OUT
Vashon Cohousing	Vashon	WA	NO	NO	OUT	OUT
Winslow Cohousing	Bainbridge Island	WA	NO	YES	OUT	OUT
Wise Acres Cooperative	Indianola	WA	NO	NO	OUT	OUT
Village Cohousing	Madison	WI	NO	NO	YES	OUT

OUT = Not in Parameters

Affordable is determined by previous list of affordable cohousing developments

Affluent was for a municipality with a 2000 median family income of \$68,200 or above which is four times the poverty rate for that year.

Density is anything from 1247.27 to 3247.27 people per square foot which is 1,000 lower to 1,000 higher than Stamford's density respectively in 2000.

Region in parameters are New England States, New York and New Jersey (the Tri-State Area).

Source for Demographics: 2000 U S Census

## **APPENDIX D: ALL ZONES IN STAMFORD, CT**

### **ALL OF STAMFORD, CT'S ZONES**

- RA-3 One Family Residence District
- RA-2 One Family Residence District
- RA-1 One Family Residence District
- R-20 One Family Residence District
- R-10 One Family Residence District
- R-7-1/2 One Family Residence District
- R-6 One Family, Two Family Residence District
- R-D Designed Residence District
- R-H Multiple Family Design District, High Density
- R-5 Multiple Family, Medium Density Design District
- R-MF Multiple Family Residence Design District
- RM-1 Multiple Family, Low Density Design District
- B-D Designed Business District
- C-D Designed Commercial District
- M-D Designed Industrial District
- IP-D Designed Industrial Park District
- HT-D Designed High-Technology District
- DW-D Designed Waterfront Development District
- MX-D Mixed Use Development District
- P-D Planned Development District

- TCD-D Designed Transportation Center District
- CSC-D Designed Community Shopping Center District
- MRD-D Designed Mill River District
- ARD-D Architectural Review Design District
- SRD-S South End Redevelopment District, South
- SRD-N South End Redevelopment District, North
- C-N Neighborhood Business District
- C-B Community Business District
- C-L Limited Business District
- C-I Intermediate Commercial District
- C-G General Commercial District
- CW-D Coastal Water Dependent District
- C-S Shorefront Commercial District
- CC-N Central City District North
- CC-S Central City District South
- M-L Light Industrial District
- M-G General Industrial District
- P Park District

## WORKS CITED

- Abrams, John. Interview by author. April 4, 2009a
- Abrams, John. Email message to author. April 7, 2009b.
- Brenton, Maria. *We're in Charge*. Bristol, UK: The Policy Press, 1998.
- Burkhardt, Ross. Telephone interview by author. April 13, 2009.
- Cambridge Cohousing Members. Telephone interviews by author. April, 2009.
- Calthorpe, Peter and William Fulton. *The Regional City*. Washington, DC: Island Press, 2001.
- City of Cambridge. *City of Cambridge - Living in Cambridge - About Cambridge* [database online]. 2004 [cited 04/16 2009]. Available from <http://www.cambridgema.gov/lvw2.cfm?aud=liv&cat=LivAbout>.
- City of Stamford. 2007. *Zoning regulations: City of Stamford, Connecticut*.
- City of Stamford. 2008. *Affordable Housing Summary (1995 - 2008)*.
- Choi, Jung Shin. 2004. *Evaluation of Community Planning and Life of Senior Cohousing Projects in Northern European Countries*. *European Planning Studies* 12, (8): 1189 - 1216
- Crabtree, Louise. 2005. *Sustainable Housing Development in Urban Australia: Exploring Obstacles to and Opportunities for Ecocity Efforts*. *Australian Geographer* 36, (3): 333-350.
- Durrett, Charles. *Senior Cohousing: A Community Approach to Independent Living*. Berkeley: Habitat Press, 2005.
- Feinstein, Estelle F. , Joyce S. Pendery and Robert Lockwood Mills. *Stamford: An Illustrated History*. Sun Valley, CA: American Historical Press, 2002.
- Fischer, M. J. 2003. *The relative importance of income and race in determining residential outcomes in US urban areas, 1970-2000*. *Urban Affairs Review* 38, (5).
- Fromm, Dorit. 2000. *American Cohousing: The First Five Years*. *Journal of Architectural and Planning Research* 17, (2): 94 -109.
- Freiser, Jeffrey. Telephone interview by author. February 9, 2009.
- Gardner, Gary. "Shared Destinies." *Utne Reader*, Nov. - Dec. 1999.



- Global Green USA. 2007. Blueprint for greening affordable housing. 87 - 94. Washington, D.C.: Island Press.
- Hasell, Mary Joyce and John Scanzoni. 2000. Cohousing in HUD Housing - Problems and Prospects. *Journal of Architectural and Planning Research* 17, (2): 133 -145.
- Hecht, Ben L. *Developing Affordable Housing: A Practical Guide for Nonprofit Organizations*. Hoboken: John Wiley & Sons, 2006.
- Home sales increases, but affordability index drops. 2005. *Journal of Housing & Community Development* 62, (5): 3.
- Island Cohousing. 2002. Purpose and Guiding Principles Version 5.16.02.
- Island Cohousing Members. Telephone interviews by author. April, 2009.
- Kluetch, Larry. Telephone interview by author. February 9, 2009.
- Kozeny, Geoph. "Cohousing: Affordable Housing?." *Communities*, Summer. 2005.
- Marcus, Clare Cooper. 2000. Site Planning, Building Design and a Sense of Community: An Analysis of Six Cohousing Schemes in Denmark, Sweden, and the Netherlands. *Journal of Architectural and Planning Research* 17, (2):146 -163.
- Mccamant, Kathryn M. and Charles Durrett. *Cohousing: A Contemporary Approach to Housing Ourselves*. Berkeley: Ten Speed Press, 1989.
- Meltzer, Graham. 2000. Cohousing: Verifying the Importance of Community in the Application of Environmentalism. *Journal of Architectural and Planning Research* 17, (2): 110 -132
- National Association of Colleges and Employers. Salary survey. in National Association of Colleges and Employers [database online]. 2008 [cited 04/16 2008]. Available from [http://www.naceweb.org/pubs/salsur/salary\\_by\\_degree.asp](http://www.naceweb.org/pubs/salsur/salary_by_degree.asp).
- RentBits.com. Rental Rates, Prices, Stats, Statistics for Homes, Condos, Townhomes and Apartments in Stamford. in RentBits.com [database online]. 2009 [cited 2/1 2009]. Available from <http://rentbits.com/rb/t/rental-rates/stamford-ct>.
- Renz, Mary Ann. 2006. The Meaning of Consensus and Blocking for Cohousing Groups. *Small Group Research* 47, (4): 351-376.
- . 2006. Paving Consensus: Enacting, Challenging, and Revising the Consensus Process in a Cohousing Community. *Journal of Applied Communication Research* 34, (2): 163-190.

- Reuer, John-Phillip. 1995. Strategies for Reducing Costs in the Development of Cohousing in the United States and Canada. Thesis for Master of Architecture. McGill University, Montreal
- Thomas, June Manning and Marsha Ritzdorf . Urban Planning and the African-American Community: In the Shadows. Thousand Oaks, CA: Sage Publications, Inc, 1997.
- Scotthanson, Chris and Kelly Scotthanson. The Cohousing Handbook. Gabriola Island, BC: New Society Publishers, 2005.
- U.S. Census Bureau. Stamford city, Connecticut - fact sheet. in U.S. Census Bureau [database online]. 2006 [cited 11/11 2008]. Available from [http://factfinder.census.gov/servlet/ACSSAFFacts?\\_event=ChangeGeoContext&geo\\_id=16000US0973000&\\_geoContext=&\\_street=&\\_county=stamford&\\_cityTown=stamford&\\_state=04000US09&\\_zip=&\\_lang=en&\\_sse=on&ActiveGeoDiv=&\\_useEV=&pctxt=fp&pgsl=010&\\_submenuId=factsheet\\_1&ds\\_name=ACS\\_2006\\_SAFF&\\_ci\\_nbr=null&qf\\_name=null&reg=null%3Anull&\\_keyword=&\\_industry=](http://factfinder.census.gov/servlet/ACSSAFFacts?_event=ChangeGeoContext&geo_id=16000US0973000&_geoContext=&_street=&_county=stamford&_cityTown=stamford&_state=04000US09&_zip=&_lang=en&_sse=on&ActiveGeoDiv=&_useEV=&pctxt=fp&pgsl=010&_submenuId=factsheet_1&ds_name=ACS_2006_SAFF&_ci_nbr=null&qf_name=null&reg=null%3Anull&_keyword=&_industry=).
- U.S. Department of Housing and Urban Development. FY 2008 income limits documentation system -- summary for Stamford town, Connecticut. in U.S. Department of Housing and Urban Development [database online]. 2008 [cited 11/11 2008]. Available from [http://www.huduser.org/datasets/il/il2008/2008summary.odn?INPUTNAME=METRO14860MM8040\\*0900173070%2BStamford+town&selection\\_type=county&stname=Connecticut&statefp=09&year=2008](http://www.huduser.org/datasets/il/il2008/2008summary.odn?INPUTNAME=METRO14860MM8040*0900173070%2BStamford+town&selection_type=county&stname=Connecticut&statefp=09&year=2008).
- U.S. Department of Housing and Urban Development. Community Development Block Grant Entitlement Communities Grants [database online]. 2009 [cited 2/9 2009]. Available from <http://www.hud.gov/offices/cpd/communitydevelopment/programs/entitlement/>.
- Vestbro, DU. 2000. From collective housing to cohousing - A summary of research. Journal of Architectural and Planning Research (Summer): 164 - 178.
- The Warren Group. Town Stats. The Warren Group [database online]. 2009 [cited 2/1 2009]. Available from <http://www.thewarrengroup.com/portal/TownStatsLogin/tabid/470/Default.aspx>.
- Williams, Jo. 2008. Predicting an American Future for Cohousing. Futures 40, (2008): 268-286.
- Williams, Jo. 2005. Designing neighborhoods for social interaction: The case of cohousing. Journal of Urban Design 10, (2) (06): 195-227.
- . 2005. Sun, surf and sustainable housing—cohousing, the Californian experience. International Planning Studies 10, (2) (05): 145-77.