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Abstract

Today, we no longer realize public perception of home ownership in the United States is primarily shaped by government sponsored programs. In the 1940’s, however, it was these programs that created a change in the options for where to buy homes. What was previously the country became a place to live. Starting with the upper classes of society, white Americans began leaving the city for the suburbs. Buying a home, or investing in a future home through the purchase of war bonds, was a patriotic duty. With money from the GI Bill, developments like Levittown made it easy for Americans to invest in this government “propaganda.”

Much like the “white flight” of the 1940’s, numerous upper class families are relocating to now up and coming neighborhoods within the city; the direction is reversed, the effect is the same. If we take it as a given that this gentrification of the city is the first step in the “white flight” of today, we can hypothesize that the rest of suburbia is bound to follow.

This thesis proposes that community based housing projects, located in the inner towns surrounding cities, be recast as a new alternative to the suburban detached single family home. In light of the 2008 housing crash, numerous Americans are no longer able to afford their homes in either the suburbs or the city. With rents in the cities so high, and bound to go higher with the current demand, a two-bedroom apartment may be all some families can afford. However, two bedrooms in city are not an acceptable alternative to today’s equally unaffordable suburban detached reality. Through the government sponsored programs of today and a focus on community living, a new housing type can emerge to re-house those displaced by today’s housing crisis.

Thesis Supervisor: Michael Dennis
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Many Thanks

My committee
My teachers
My family
My friends
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When facing foreclosure, what do you do? Drive to the city? No, no! Stay in the suburbs. Ride your economic stimulus check to your home of tomorrow!

Damn:  
-verb  
1. To pronounce adverse judgment on, affirm to be guilty; to give judicial sentence against.  
2. To condemn to a particular penalty or fate; to doom.¹


Dam:  
-verb  
1. To stop up, block, obstruct; to shut up, confine.¹

Research
History of the Suburbs

Throughout the history of the settlement of America there is a perpetual shift from urban to suburban living. From dense east coast towns to large open tracts out west, from city to suburban living. Americans have constantly shifted from one population density to the next depending on current fashion. The rise and fall of current American suburbs can be viewed as one of these shifts. Post WWII Americans transitioned from city living, to suburban living, and are now shifting back toward city living. 1940’s White Flight and today’s Gentrification are responsible for this current iteration of American shifting populations.
The rise and fall of suburbia

Marissa Grace Desmond

The Urban Micro Home: redefining the shrine of freedom

STEP 1: Gather up emergency rations of food, water and clothing.

STEP 2: Move to a rich, white neighborhood.

FEMA's guide to avoiding disaster

And this shall be our Victory!
In a free nation—as the birthright of every American
—each home shall be a shrine of freedom.

The Home of your Dreams!

U.S. Victory Highway

GENERAL ELECTRIC

Dle and efficient Home Refrigerators
In the 1940’s white Americans began to stream out of the cities. Post WWII governments programs were instituted to allow for rapid growth in suburban America. White Americans flocked to the suburbs in great numbers. As a result the suburbs saw 60% growth from 1950-1960 while city population remained stagnant. Seen as the manifest destiny of the time, the “American Dream” was to own a home in suburbia. “Suburbia, both as product and condition, has since the late nineteenth century consistently been posited as America’s dominant ambition[...] With suburbia as the principal aspiration substantially realized, it has assumed its role as America’s crowning achievement.”1 With the suburbs being marketed as good for your health, better for your children, a fiscal advantage and much more, city dwellers flocked to the suburbs beginning with upper classes and followed by lower income citizens.

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Gentrification

Today we higher income Americans streaming into up and coming neighborhoods within the city. Moving to the suburbs is no longer seen as the ‘America’s dominant ambition’. For reasons such as culture, schools, public transportation, society, and many more, Americans are abandoning their SUV’s to return to city living. As a result, suburban population is no longer seeing the growth it was seeing up until the late 1970’s. Today we are seeing shrinking suburbs as Americans re-urbanize the city centers.
Traditionally, populations leave the city for the suburbs and return to the city when the amenities of the suburbs are no longer adequate for a given lifestyle. Historically, we have seen the upper classes of society following this trend. From the white flight to the suburbs and re-population due to gentrification, the zone between city and suburbs remains neglected.

Here, we first see the original flight to the suburbs. However, due to foreclosure and gentrification, lower income Americans can no longer afford to stay where they are or to return to the city. Likewise, those who remained in the city can no longer afford to stay there. Instead, people from both city and suburb move to re-populate inner towns, reinvigorating the previously ignored, dying communities.
Re-Population of Inner Towns

How do we then deal with this shift in both urban and suburban settings? For the upper classes of America, there is no problem. They can afford to return to the cities or stay in the suburbs. In the city, neighborhoods that were traditionally lower income, are being redeveloped for new, higher income inhabitants. In the suburbs, with fallout of the 2008 Housing Crash around us, lower income Americans, given sub-prime mortgages, are seeing their homes foreclosed around them. In both cases, lower income Americans are left with nowhere to live. A new alternative is needed where the stresses of both urban and suburban living are alleviated. By re-locating to the inner towns, located in the traditionally neglected zone between city and suburb, this new influx of people can have both a place to live and help to bring new life to the neglected communities. By placing the emphasis of this new housing on community based living and community outreach, a single housing project can function as a thriving center for a neighborhood fallen on hard times.
While this idea of co-housing is by no means a new phenomenon, it has traditionally been available to higher income inhabitants. Taking a look at co-housing in America, we see that a majority of the units available in co-housing communities are in the $700,000 realm. Most function on a private ownership or condominium style ownership method with communal facilities being co-owned or managed by a non-profit comprised of the unit owners. Very few of these communities are available to lower income families who may benefit the most by community living.
Condominium style ownership
residents own their houses and co-own the
communal facilities

3.3 acres with 23 units
affordable housing units available

Amenities include:
common house
walkable community
shared garden space

Delaware Street Commons, Lawrence KA
Berlin, Massachusetts

Condominium style ownership
residents own their houses and co-own the communal facilities

12 acres with 34 units
10 of the units are Chapter 40B Housing

Amenities include:
- common house
- walkable community
- shared garden space

Mosaic Commons, Berlin MA
Nubanusit Neighborhood and Farm

Peterborough, New Hampshire

Private home ownership
residents own their houses and co-own the
communal facilities

70 acres with 29 units and a farm

Amenities include:
common house
walkable community
shared garden space
communal farm
Blue Ridge Cohousing

Crozet, Virginia

Private home ownership
residents own their homes and common
land and space is owned by a non-profit
association the members are a part of

8 acres with 26 private homes

Amenities include:
common house
walkable community
shared garden space
detached units
Co-op City

Bronx, New York

Private home ownership
residents own shares of their homes and common
land and space is owned by a non-profit
association the members are a part of

320 acres with 15,372 units in 35 buildings

Amenities include:
houses of worship
walkable community
shared green space
stores
public transport stops
day care facilities
Determining Ownership Style

There are three types of homes traditionally available for ownership. They are the house, the condominium, and the cooperative. All three ownership styles have different benefits.

House:
When you own a home you own the plot of land and everything on it and it will gain equity.

Condominium:
In a condominium you own everything within the walls of the unit you purchase. The ownership of the unit also guarantees you a stake in the governing board that makes decisions on the remaining shared spaces.

Cooperative
In a cooperative you don’t own the physical property at all. Instead you own shares in a corporation that owns the building. The size of the unit is directly proportionate to the number of shares you have in the corporation as well as the amount of say you have when it comes to governing the shared spaces of the building or complex.
Everett, Massachusetts is located 5 miles north of downtown Boston. Bordered by Malden, Revere, Chelsea, Medford and the Mystic River, Everett is situated amongst the first ring of Boston suburbs. 25% of the area of Everett is given over to the shipping industry and goods warehouses. Of its neighbors, Chelsea is the closest in terms of population demographics as well as industrialization while Revere, Medford and Malden are much more residential cities. With a population of 38,000 and a 3.4 square mile area, the population for Everett is about 11,000 people per square mile while the Massachusetts average is about 809 people per square mile.
The City and Surrounding Area
Zoning for the City and Surrounding Area
In Everett, 56% of housing units are renter occupied units, while 44% are owner occupied. These statistics are very different than other parts of the United States where renter occupied units make up 30% or units and owner occupied make up the remaining 70%.
There are 16,000 total units of housing in Everett with 9,000 renter occupied and 7,000 owner occupied. Of these units 31% are occupied by single inhabitants, 30% are occupied by two inhabitants and the remaining 39% are three or more inhabitants.
Everett Housing Costs: Average Monthly

There is a substantial gap in monthly housing fees between owner occupied and renter occupied units of the same size. In Everett, the average monthly rental price is $1,100 while the average monthly mortgage payment on an owned property is much higher, $1,700 a month.

owner occupied: $1,700

renter occupied: $1,100
Within the 16,000 housing units the average number of rooms differs from owner occupied and renter occupied. In an owner occupied unit the average room number is 6.35 rooms per unit. While in a renter occupied unit the average number of rooms is 4.25 per unit.
Annual Household Income

In Massachusetts the median household income is $51,000 a year. In Everett it is $41,000 a year. Boston, as well as other surrounding inner towns, have a much lower median household income than the rest of Massachusetts. In spite of this, we can assume that for Everett, the percentages of income remain about the same as the Massachusetts average while the actual income is about 20% less.
According to the 2000 Census, 11.8% of citizens in Everett are living below the poverty line. In Everett, 5.8% of married people, 26.65% of single parents and 19% of people living alone fall below the poverty line.
This thesis concentrates on the main spine through the city. It is zoned general business with residential zones flanking either side. The site is one quarter of a mile north of downtown Everett and one tenth of a mile from Everett City Hall.
Urban Plan

Institutional
Business
Residential

Site Scale 1/128"=1'

Site Boundary

0.4 mile

Residential
Institutional
Business

Site Boundary

n
0.4 mile
Photographic documentation of the site proved to find many different building types in a very small stretch of space. Broadway, the front boundary of the site, is zoned general business so there are many different types of buildings along the street. However, amidst the flanking residential zones, there is still a lot of variation in building type. There are many buildings in the residential zones that predate the zoning. They supply a varying character to the residential zone and also prove to muddy the line between the general business and residential zones.
Current Site Condition: Foreclosed and Free to Develop
Alternate Side Street Condition
Everett High School: Currently Abandoned
South of High School
Masonic Temple: Currently Abandoned
Residential Condition Surrounding Site
Alternative Housing Type Surrounding Site: Elderly Housing
Alternative Housing Type Surrounding Site: Apartment Building
Current Housing Surrounding the Site
Project
Project Breakdown

Breakdown of the program is based on minimizing individual space and maximizing shared facilities. Guest bedrooms, storage, large dining rooms, etc. are all removed from the individual unit and clustered in the common facilities. What would be needed to create a community housing facility that would serve not only its residents, but also the neighborhood around it? These communal facilities were chosen based on the needs of the residents. Guest bedrooms for out of town relatives just moving to the area. Day care for parents needing somewhere for their children to go while they are at work. Computer clusters so those unable to afford a computer can start to bridge the digital divide. These communal facilities are available to both the residents and those living in the neighborhood.
Programmatic Requirements

The site, foreclosed and free to develop, had an existing FAR of 0.5. By doubling the FAR, the same number, if not more people can be housed as well as prove space to add communal facilities without bringing down the number of people per square foot. As this site is zoned general business, there is no zoning law keeping the FAR from doubling.

Common House: 5,000 square feet

37 Total Units: 30,900 square feet
  8 Studio
  8 One Bedroom
  10 Two Bedroom
  6 Three Bedroom
  5 Four Bedroom

Area of Total Inhabited Space: 35,900 square feet

Area of Site: 35,000 square feet

FAR of Proposed Project: 1.01
Programmatic Breakdown

Common House: 5,000 square feet
- Industrial Kitchen - 225 sq ft
- Pantry - 100 sq ft
- Dining Rooms - 780 sq ft
- Extra Bedrooms - 680 sq ft
- Computer/Study - 130 sq ft
- Media Room - 240 sq ft
- Day Care Center - 780 sq ft
- Laundry Center - 260 sq ft
- Mail Center - 120 sq ft
- Restrooms - 260 sq ft
- Multi-purpose Room - 500 sq ft
- Greenhouse - 500 sq ft

Studio: 400 square feet
- Bedroom/Living - 250 sq ft
- Eat in Kitchen - 100 sq ft
- Bathroom - 50 sq ft

Two Bedroom: 875 square feet
- Master Bedroom - 200 sq ft
- Living Room - 125 sq ft
- Eat in Kitchen - 150 sq ft
- 1 Bathrooms - 50 sq ft
- Child’s Bedroom - 105 sq ft

One Bedroom 600 square feet
- Bedroom - 200 sq ft
- Living Room - 125 sq ft
- Eat in Kitchen - 125 sq ft
- Bathroom - 50 sq ft

Three Bedroom: 1,150 square feet
- Master Bedroom - 200 sq ft
- Living Room - 125 sq ft
- Eat in Kitchen - 150 sq ft
- 1 Bathrooms - 50 sq ft
- Child’s Bedroom x 2 - 105 sq ft

Four Bedroom: 1,450 square feet
- Master Bedroom - 200 sq ft
- Living Room - 125 sq ft
- Eat in Kitchen - 150 sq ft
- 1.5 Bathrooms - 70 sq ft
- Child’s Bedroom x 3 - 105 sq ft

The number of each unit type comes from Everett demographics. We saw that the highest percentage of people living below the poverty line fell to single people living alone and single parents. As a result, of the 37 unites, a majority of the units will be sized for these inhabitants.
Space Comparison Between the Single Family Home and the Cohousing Cooperative

The average single family home is 2,400 square feet. The total area of 37 average single family homes would be 88,800 square feet. This would bring the FAR to 2.54. In this project, 37 units total 30,900 square feet. Even with 5,000 additional square feet of community space the project only totals 35,900 square feet. The total area of this project comes to 40% of the space needed for the equivalent number of single family homes.
The relationship of public to private space is important in this project. This axonometric shows the breakdown of that relationship. Circulation space hugs the central courtyard. This circulation space functions as meeting and interaction space for both residents and community members. The circulation space widens in places to allow for stopping, resting, talking and meeting. The public space links into the circulation space. It exists predominantly on the first floor and the front face of the building. Linked to the back side circulation space are the private spaces. The residential units take over more and more of the floor the higher you go in the building.
Breakdown of Zones: Circulation, Public, Private
Interaction of Zones

- Bike Storage
- Industrial Kitchen and Large Dining
- Storage Units
- Large Media Room
- Roof Garden
- Guest Bedrooms
- Multi-Purpose Room
- Public Restrooms
- Computer Lab
- Multi-Purpose Room
- Day Care Center
- Roof Terrace
Drawings
Fourth Floor Plan 1/32"
Fifth Floor Plan 1/32"
Section A 1/32"
Section B 1/32"
North Elevation 1/32"
South Elevation 1/32”
East Elevation 1/32”
Model Photographs
Massing Development
Overall Model
Model Details
Facade Details
Each apartment is optimized to create the ideal layout for placement within the building. The apartments open onto larger hallways that allow for a “front stoop” to each apartment. The stoop acts as a buffer between interior and exterior. It strengthens the break between public and private. All units are on the lower end of the average unit size. This slimming down of the units is acceptable as each resident would have access to the community spaces within the building to supplement their individual living space.
Proposed Unit Layouts 1/8” = 1’

Studio: 400 sq ft

One Bedroom: 600 sq ft
Two Bedroom: 875 sq ft
Proposed Unit Layouts 1/8” = 1’

Three Bedroom: 1150 sq ft
Four Bedroom: 1450 sq ft
Renderings
Photomontage
Hallway and Courtyard
Courtyard from Entrance
Areal View of Courtyard
Hallway and Courtyard
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Appendix
Challenging the idea of single family home ownership in the US.

There are currently countless programs in the United States government – state and national – encouraging Americans to become home owners. In 2005, 68.9% of Americans owned their own homes, a statistic that has maintained fairly consistent since the 1960’s. Government sponsored policy agencies like Federal National Mortgage Association, Federal Home Loan Mortgage Corporation and Federal Home Loan Banks – better known as Fannie Mae, Freddie Mac, and FHLBanks – are currently responsible for backing an astronomical 6.5 trillion dollars of home loans. These government sponsored programs have been a part of United States government policy for decades. As early as 1866, with the passing of the first Civil Rights Act, on to the 1930’s and the great depression accompanied by the housing market crash, and into the 1980’s with Fair Housing Act and its prohibition of discrimination, the American government has been promoting legislation allowing more and more Americans to qualify for a mortgage loan, predominantly encouraging single family home ownership. In light of today’s sub-prime mortgage crisis, is individual home ownership still something the government should be pushing for or should the idea of the “starter home” begin to take on a new meaning? Instead of funneling billions of dollars into the current, failing system, is it possible to reevaluate the idea of individual home ownership creating an alternative to those who aren’t qualified for a traditional mortgage loan?

In the United States, mortgages are commercial paper and are thus free to be bought and sold on the open market.
THE VEHICLE
The project will create an urban housing project that will replace the suburban "starter home". Working within the framework of the current public housing legislation, how can you create an affordable option to the detached single family home? Is there a way to restructure the system of payment that will allow for users to build credit or capital while living there? In order to bring the cost of the housing down I will have to look to different ways of maximizing the usable space of the unit. How much space does a family actually need to function on a day to day basis? Looking at presidents such as Ernst May's and the minimum dwelling I'll work on developing a unit that will function as the new urban "starter home". These units will have to fit together to create a new type of urban housing project that has the feeling of individual ownership while minimizing the risk associated with sub-prime lending.

RESEARCH TOPICS
- The history of home ownership in the United states
- The history of government assist in relation to housing in the United States
- Urban renewal projects in Midwestern cities that I can plug my thesis into
- The sub-prime mortgage crisis
- Ernst May’s minimum dwelling

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situating projects

friends

Stanley Saitowitz: Yerba Buena Lofts and 1234 Howard St.

enemies

Herman Jessor: Co-op city
locating the project

sites that have been ruled out due to their singular nature

New York Metro Area, New England, Texas, Louisiana, California, Florida

sites chosen for their adherence to the urban rural continuum

Minneapolis, Chicago, Denver
Economic Stimulus Plan

Passed February, 2009
Keynesian Economics Throughout US history

The general belief in Keynesian Economics is that when private sector decisions lead to a dip in the economy, it is sometimes necessary for the public sector to step in, monetarily, in order to stabilize the wavering economy to keep it from dipping even further.

John F. Kennedy was the first to implement deficit spending during a recession in an attempt to stimulate the economy. While his tax cuts did eventually have an effect, the rate at which change was seen was so slow that economists were forced to doubt the potential of Keynesian Economics.

Rapid and unregulated inflation led to this recession. While Richard Nixon tried to cap wages and control prices, his implementation of Keynesian Economics failed. Fiscal and monetary policy lead to the recession of the early 80’s. Jimmy Carter’s Fed chairman’s raising of federal funds caused this recession. Ronald Regan’s increased spending and tax cuts (while not intentionally Keynesian) allowed for the recovery.

The Persian Gulf War and rising inflation caused this recession. Unemployment benefits were increased by the federal government but most aide came from the Federal Reserve. Alan Greenspan cut the federal funds rate to allow for the economy to rebound.

The Technology Bubble Burst drained massive amounts of wealth around the country. This, in conjunction with the September 11th terrorist attacks led to a recession. George W. Bush’s tax cuts as well as a cut in federal funds allowed for the economic recovery.

Subprime mortgage lending combined with the war in Iraq led to a recession. Barack Obama’s 789 billion dollar Economic Stimulus Package intends to use Keynesian Economics to pull the economy out of its current recession.

In February of 2009, the US passed a 789 billion dollar Economic Stimulus Package. “Economic stimulus refers to the use of fiscal policy – government spending of tax measure – to support or revive an economy in recession.”

With 282 billion dollars going toward tax breaks the remaining 507 billion dollars were allotted to different agencies in an attempt to pull the economy out of its biggest slump since the great depression. This stimulus package is the closest, in scale and scope, to reaching the largest stimulus package in history, the New Deal.

The Economic Stimulus Package is broken down into eight target issues. Each issue is allotted a sum of money that they are free to distribute as they see fit and in whatever manner they deem appropriate.

**Targeted Issues**

- **Clean, Efficient, American Energy:** 54 Billion
- **Transforming our Economy with Science and Technology:** 16 Billion
- **Modernizing Roads, Bridges, Transit and Waterways:** 90 Billion
- **Education for the 21st Century:** 141.6 Billion
- **Tax Cuts to Make Work Pay and Create Jobs**
- **Lowering Healthcare Costs:** 24.1 Billion
- **Helping Workers Hurt by the Economy:** 102 Billion
- **Saving Public Sector Jobs and Protect Vital Services:** 91 Billion

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Modernizing Roads, Bridges, Transit and Waterways

30 billion dollars will go towards highway and bridge construction projects
1 billion dollars will go towards new commuter rail and light rail systems to try to increase public use of mass transit
2 billion dollars will go towards modernizing existing transit systems
6 billion dollars will go to the purchase of new busses and other equipment to increase the amount of public transportation
1.1 billion dollars will go towards improving speed and capacity of Amtrak and intercity passenger rail lines
3 billion dollars will go towards improving airports to reduce congestion and improve safety
500 million dollars will go towards Aviation Explosive Detection Systems in US airports
150 million dollars will go towards repairing and removing bridges deemed hazardous to marine navigation
3.1 billion dollars will go towards the construction of parks and on public lands

Clean, Efficient, American Energy

2.5 billion dollars will go towards energy efficient housing retrofits. The money will go towards upgrading low-income housing sponsored by HUD in an attempt to increase the efficiency of the units. Insulation, windows and furnaces will be replaced in an attempt to increase energy efficiency
6.2 billion dollars will go towards weatherization of low-income housing in an attempt to reduce their energy costs
300 million dollars will go towards the purchase of “smart appliances”

Helping Workers Hurt by the Economy

5 billion dollars will go toward the repair and modernization of public housing capital fund
1.5 billion dollars will go toward helping local communities build and rehabilitate low-income housing through the use of green technologies
500 million dollars will go toward the rehabilitation and improve energy efficiency of housing units for Native Americans
4.2 billion dollars will go toward neighborhood stabilization by helping communities purchase and rehabilitate foreclosed and vacant properties to create more affordable housing
1.5 billion dollars will go toward sheltering the homeless
500 million dollars will go toward supporting rural housing insurance fund to help rural families buy homes
10 million dollars will go toward sustainable and energy-efficient building and rehabilitation in rural areas
200 million dollars will go toward the creation of rural community facilities

Types of Home Ownership

Owning
Renting
Rental With the Option to Buy
Condominium
Cooperative
Types of Home Ownership

Detached House

Owning

Pros:
A sense of security in owning your property
A sound investment for the future
Potential for growth in equity
Any improvements add value to the property
Tax benefits - deductions are allowed for all interest paid on a mortgage loan obtained for the purpose of purchasing, constructing, or improving a primary residence

Cons:
Risk in not being able to continually make payments
Risk in the supply and demand of owning – what if market prices fall and you paid more that it is now worth
Supply of housing – when there is a housing shortage prices go up and more housing is built thus pushing housing prices down

Types of Home Ownership
Condominium
In 1960 there were very few condos but mostly in retirement or resort communities
By 1985 there were 60,000 projects comprising over 3 million units
Today 1 in 4 new housing sales is a condo
65% of buyers are first time buyers
Considered luxury housing in many places and thus prices are on par with single family homes in many parts of the country
HUD calls them “air space estates” because you don’t own the land or the building but the space within the walls. “You own all the finished surfaces on the walls (such as wallpaper) but not the walls themselves; you own the light fixtures and carpeting but not the ceilings and floors. Everything within the confines of the unit is yours […]” The remainder of the facilities – hallways, grounds, pools, etc. – are shared by the unit owners.
Types of Home Ownership

Cooperative

Not very popular in the US

131,000 purchases in 1987 with 62,000 in New York Metropolitan area
(presumably Co-op city)

Don't own any real property – own shares in the corporation that owns the complex

You buy the shares that are allotted to a particular unit and they give you say in the governing of the complex

Co-op corporations usually have an outstanding mortgage on the property so monthly maintenance charges are typically higher than they would be in a condo

The co-op owner is paying off their share of the interest on the mortgage however these fees are tax deductible if it is your primary or secondary residence
Situating Projects

Stanley Saitowitz
Herman Jessor
This is not an offer to sell, but is intended for information only. The developer reserves the right to make modifications in materials, specifications, plans, designs, scheduling, and delivery of the homes without prior notice. All dimensions are approximate and subject to normal construction variance and tolerances. Plans and dimensions may contain minor variations from floor to floor. Furniture and appliances indicated in floor plan are for display purpose only.

Stanley Saitowitz: 1234 Howard Street
San Francisco, California
Built 2003-2008

Long, linear site - 50’ by 165’ - results in two rows of lofts separated by a central court
Addresses the individual nature of a “house”
Bridges connect east and west bar providing a more private feel for residents
Service walls - bands of bathrooms, kitchens, etc - create a sense of spaciousness within the units
Open plans allow for indeterminacy and thus personalization

Transition from 25 % porosity in a traditional yard mentality to 25 % porosity as a throughway
Stanley Saitowitz: Yerba Buena Lofts
San Francisco, California
Built 1998-2002

Modeled on the city - the grid of the city is extruded vertically create “lots” for lofts
Each unit has a double height interior and a private exterior
Minimization of space for the kitchen, storage and bathroom to maximize free space
Becomes a mediator between the tall buildings of the city center and the low rise of its surroundings
Stanley Saitowitz: Yerba Buena Lofts

Inhabiting the zone between densities

The unit

Flipping the unit and aggregating it to create a varied facade with a single flipped unit
Herman Jessar: Co-op City

Bronx, New York City, New York
Built 1968-1971

15,372 units built in 35 high rise towers and low rise town houses
Include many more traditional elements defined as essential to a home - dining area, foyer, ect.
The scale of the project is what kept construction costs down - $55 million in concrete is very negotiable, the building could function as its own general contractor as costs exceeded the NYS requirements
Government aid is a large reason prices can be kept so low
Currently discussing privatization which would drive the price of the unit up but also create one of the largest transfers of capital to minorities in America
While the success of the Bronx Co-op City is questionable, the ideas behind a housing co-operative are a model that may be taken forward in the future

Co-operative Housing
Co-operative living becomes extremely affordable as you are not buying the unit but a share in the company that does own the unit
Tenants maintain a traditional landlord lessor arrangement
Depending on the type of co-op the number of shares you own reflects the amount of input you have in co-op concerns
Today, we no longer realize public perception of home ownership in the United States is primarily shaped by government sponsored programs. In the 1940’s, however, it was these programs that created a change in the options for where to buy homes. What was previously the country became a place to live. Starting with the upper classes of society, white Americans began leaving the city for the suburbs. Buying a home, or investing in a future home through the purchase of war bonds, was a patriotic duty. With money from the GI Bill, developments like Levittown made it easy for Americans to invest in this government “propaganda.” Favorable financing made new home ownership more viable and rewarding than continuing to rent in the city. As a result, the American suburbs saw 60% growth from 1950-1960 compared to the 3% growth seen in most American cities.

Much like the “white flight” of the 1940’s, numerous upper class families are relocating to now up and coming neighborhoods within the city; the direction is reversed, the effect is the same. If we take it as a given that this gentrification of the city is the first step in the “white flight” of today, we can hypothesize that the rest of suburbia is bound to follow.

In light of the current housing crash, it seems almost inevitable. No longer able to afford their homes or cars, many are looking for another option. Poorer suburbanites could rent in the city where personal vehicles are no longer necessary. While this sounds like it could be an acceptable alternative to the current crisis, simply following the flock will not work this time. With rents in the cities so high, and bound to go higher with the current demand, a two-bedroom apartment may be all some families can afford. However, two bedrooms in city are not an acceptable alternative to today’s suburban detached reality. There needs to be a new option for those who can no longer afford to live in the current iteration of suburbia.

Can we find a way to use the government programs of today in the same way the GI Bill was used in the past? Instead of riding war bonds to the suburbs, we can ride our government surplus checks to their new replacement. This thesis proposes that a community based housing project be recast as a new alternative to the suburban detached single family home.
When you're facing foreclosure, what do you do? Drive to the city? No, no! Stay in the suburbs. Ride your economic stimulus check to your home of tomorrow!
This design project intends to explore the changing perception of housing in suburban America. Contemporary perception of suburban architecture has created a sprawling, unaffordable, unsustainable environment. In light of the current housing crisis, we now, more than ever, need a new alternative for the suburban detached single family home. With poorer suburbanites, no longer able to afford their homes or cars, many are looking for another option. While renting in the city, where personal vehicles are no longer necessary, sounds like it could be an acceptable alternative to the current crisis, simply reverting back to previous living situations will not work. With rents in the cities as high as they are, and bound to go higher with the current demand, a two-bedroom apartment may be all some families can afford and is in no way an acceptable alternative to the suburban single family home.

The design will explore a new housing type that can function as a stopper for the impending flood of suburbanites to the cities

The goal of the project is to develop, in detail, a housing project that addresses the above scenario on three different scales: the individual unit, the building form, and the community scale. The majority of the design focus will be placed on developing the unit and building form. Following unit and building studies, time will be spent on developing a projection for the community scale focusing on the lifestyle changes that would come with living in a suburban community as opposed to on a street in the suburbs.

**Unit:**
The line of inquiry will begin with a detailed focus on the unit. Within studying the unit, there are many different aspects to focus on: types of ownership, types of units for different kinds of families, relationships of units to one another. Within each of these aspects there are many subcategories to be considered:

- Types of unit ownership:
  - Owner occupied
  - Condominium
  - Co-operative
- Develop unit types for different kinds of families:
  - Single person
  - Young Couple
  - Couple with children
  - Elderly Couple
- Develop relationships of unit types:
  - Spatial
  - Financial

**Building:**
Following the unit studies, focus will shift to the scale of the building. The building will have 25-35 individual housing units. These units will be an intermingled assortment of the unit types developed in the first line of inquiry. The shared public amenities will be aligned with the unit types determining if they best fit within the building or in nearby community facilities.

**Community:**
Lastly, the line of inquiry will focus on the scale of the community. How will living in this new housing option affect everyday lifestyle? Will it become a self sustaining community with work, education, etc. all happening within the project or will it simply function as an alternative place to live within the existing suburban fabric.
Boston and the Inner Suburbs

The Urban to Suburban Continuum

The City of Boston covers 48 square miles with a population around 520 thousand. This dense urban center is surrounded by countless smaller towns, all with their own character. The density, affluence, family size and many other factors change from town to town, just minutes apart. This diagram shows the one common thread between the surrounding suburbs, density. As you move further and further from Boston, shown here in white, the density of the suburbs decreases along a steady slope.
Everett Massachusetts

Everett, Massachusetts is located 5 miles north of downtown Boston. Bordered by Malden, Revere, Chelsea, Medford and the Mystic River, Everett is situated in amongst the first ring of Boston suburbs. About a quarter of the cities area is given over to the shipping industry and goods warehouses. Of its neighbors, Chelsea is the closest in terms of general population demographics as well as industrialization while Revere, Medford and Malden are much more residential cities. With a population of 38,000 and a 3.4 square mile area, the population per square mile is about 11,000 while the Massachusetts average is about 809.
Situating the Site in the Area

- Project Site
- Britney Place Condos
- Malden River
- Housing/Apartment Buildings
The Project Site

This thesis concentrates on the western part of the city, just north of the city's Big Box shopping district and shipping industry. The site for the project is at the corner of Wyllis Ave and Green Street in Everett, MA. To the West of the site is the Malden River, to the south is a condominium complex and to the east are single family homes and apartment buildings.
Site Mobility: Walk, Bike, Run

74% of Everett citizens use personal vehicles to get to and from work while 20% use public transportation and the remaining 6% either walk or bike. The percentage of people using either public transportation or walking to get to work, 27%, is 3.5 times higher than the United States average. Capitalizing on this would definitely be possible. In an area where it is already normal to use alternative means of transportation to get to and from work, it would be more easily accepted to propose a walkable community. If 10 minutes travel is the most you would want in a walkable community, it would be important to include all essential daily items within the radius of 10 minutes walking (0.3 miles), running (1 mile) or biking (1.5 miles).
In Everett, there are 16,000 total units of housing with 9,000 renter occupied and 7,000 owner occupied. Of these units 31% are occupied by single inhabitants, 30% are occupied by two inhabitants and the remaining 39% are three or more inhabitants.

Within the 16,000 housing units the average number of rooms differs from owner occupied and renter occupied. In an owner occupied unit the average room number is 6.35 rooms per unit. While in a renter occupied unit the average is 4.25 per unit.
In Everett, 56% of housing units are renter occupied units, while 44% are owner occupied. These percents are very different than other parts of the US where renter occupied units make up 30% of units and owner occupied units make up the remaining 60%.

The average rental price is $1,100 a month while the average mortgage payment is much higher, $1,700 a month.
In Massachusetts the median household income is $51,000 a year. In Everett it is $41,000 a year due to the fact that it is an inner suburb. Boston, as well as other surrounding inner suburbs, has a much lower median household income than the rest of Massachusetts. In spite of this, we can assume that, for Everett, the percentages of income remain about the same while the actual income comes down 20%.

According to the 2000 Census, 11.8% of citizens in Everett are living below the poverty. In the United States in general 5.8% of married people, 26.65% of single parents and 19% of people living alone all fall below the poverty line. This could gear the project toward single parents and individual inhabitants as they are the most prevalent citizens below the poverty line.

<table>
<thead>
<tr>
<th>Annual Household Income: Massachusetts</th>
<th>Assumed Annual Household Income: Everett</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 10,000</td>
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</tr>
<tr>
<td>10,000 to 15,000</td>
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<tr>
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</tr>
<tr>
<td>200,000 or more</td>
<td>160,000 or more</td>
</tr>
</tbody>
</table>
Types of Ownership

Three types of homes available for ownership are the house, the condominium, and the cooperative. These three modules have very different ownership styles. When you own a home you own the plot of land and everything on it. Anything that sits on the plot you purchase is yours. In a condominium you own everything within the walls of the unit you purchase. You own all the fixtures, the wallpaper, the carpeting etc. Everything that is not a part of the structure or enclosure belongs to you. The ownership of the unit also guarantees you a stake in the governing board that makes decisions on the remaining shared spaces. In a cooperative you don’t own the physical property at all. Instead you own shares in a corporation that owns the building. The size of the unit is directly proportionate to the number of shares you have in the corporation as well as the amount of say you have when it comes to governing the shared spaces of the building or complex.
In the 1940s white Americans began to stream out of the cities. Post WWII governments programs were instituted to allow for rapid growth in suburban America. White Americans flocked to the suburbs in great numbers. As a result the suburbs saw 60% growth from 1950-1960 while city population remained stagnant. Seen as the manifest destiny of the time, the "American Dream" was to own a home in suburbia. "Suburbia, both as product and condition, has since the late nineteenth century consistently been posed as America’s dominant ambition. [...] With suburbia as the principal aspiration substantially realized, it has assumed its role as America’s crowning achievement."

Today we white Americans beginning to stream to up and coming neighborhoods within the city. No longer is moving to the suburbs seen as the ‘America’s dominant ambition’. As a result, suburban population is no longer seeing the growth it was seeing up until the late 1970’s. Today we are seeing shrinking suburbs as Americans re-urbanize the city centers.

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During WWII the US government solicited American Citizens to fund its war. Through the purchase of war bonds, American Citizens did their part to help with the war effort. Beginning in the 1970s US currency has not been backed by gold. It has made it possible for the US government to issue as much money as they see fit. Instead of using citizens’ money to fund programs, the government is now able to insert large quantities of money into the economy in an attempt to give it a jump start, Keynesian Economics. The general belief in Keynesian Economics is that when private sector decisions lead to a dip in the economy, it is sometimes necessary for the public sector to step in, monetarily, in order to stabilize the wavering economy to keep it from dipping even further. The current economic stimulus plan is just one in a long string of Keynesian Economics in United States History. Instead of issuing war bonds for citizens actual money the government is now giving citizens Economic Stimulus checks of speculative money in an attempt to stabilize the current dip in the economy.
John F Kennedy was the first to implement deficit spending during a recession in an attempt to stimulate the economy. While his tax cuts did eventually have an effect, the rate at which change was seen was so slow that economists were forced to doubt the potential of Keynesian Economics.

Rapid and unregulated inflation led to this recession. While Richard V tried to cap wages and control prices, his implementation of Keynesian Economics failed.

Fiscal and monetary policy lead to the recession of the early 80’s. Jimmy Carter’s Fed chairman’s raising of federal funds caused this recession. Ronald Reagan’s increased spending and tax cuts (while not intentionally Keynesian) allowed for the recovery.

The Persian Gulf War and rising inflation caused this recession. Unemployment benefits were increased by the federal government but most aid came from the Federal Reserve. Alan Greenspan cut the federal funds rate to allow for the economy to rebound.

The Technology Bubble Burst drained massive amounts of wealth around the country. This, in conjunction with the September 11th terrorist attacks led to a recession. George W. Bush’s tax cuts as well as a cut in federal funds allowed for the economic recovery.

Sub prime mortgage lending combined with the war in Iraq led to a recession. Barack Obama’s 789 billion dollar Economic Stimulus Package intends to use Keynesian Economics to pull the economy out of its current recession.

In February of 2009, the United States issued its most recent foray into Keynesian Economics by passing an 789 billion dollar Economic Stimulus Package. “Economic stimulus refers to the use of fiscal policy — government spending or tax cuts — to support or revive an economy in recession.” With 282 billion dollars going toward tax breaks the remaining 507 billion dollars were allotted to different agencies in an attempt to pull the economy out of its biggest slump since the great depression. This stimulus package is the closest, in scale and scope, to reaching the largest stimulus package in history, the New Deal.

The Economic Stimulus Package is broken down into eight target issues. Each issue is allotted a sum of money that they are free to distribute as they see fit and in whatever manner they deem appropriate.

**Targeted Issues**

- **Clean, Efficient, American Energy**: $54 Billion
- **Transforming our Economy with Science and Technology**: $16 Billion
- **Modernizing Roads, Bridges, Transit and Waterways**: $90 Billion
- **Education for the 21st Century**: $141.6 Billion
- **Tax Cuts to Make Work Pay and Create Jobs**: $14 Billion
- **Lowering Health Care Costs**: $24.1 Billion
- **Helping Workers Hurt by the Economy**: $102 Billion
- **Saving Public Sector Jobs and Protect Vital Services**: $91 Billion

Three areas can be isolated as possible sources of funds:

- Clean, Efficient, American Energy
- Modernizing Roads, Bridges, Transit and Waterways
- Helping Workers Hurt by the Economy

These three areas have been allotted a total of 246 billion dollars of the total 518.7 billion dollars allocated to the stimulus package. Within these three categories, there are numerous sub-categories of things either directly or indirectly related to the creation and maintenance of housing. By looking at the source of these impending improvements, it is possible to isolate a set of requirements that will allow these housing units to benefit from the increased spending.

Modernizing Roads, Bridges, Transit and Waterways

- 30 billion dollars will go towards highway and bridge construction projects
- 1 billion dollars will go towards new commuter rail and light rail systems to try to increase public use of mass transit
- 2 billion dollars will go towards modernizing existing transit systems
- 6 billion dollars will go towards the purchase of new buses and other equipment to increase the amount of public transportation
- 1.1 billion dollars will go towards improving speed and capacity of Amtrak and intercity passenger rail lines
- 3 billion dollars will go towards improving airports to reduce congestion and improve safety
- 500 million dollars will go towards Aviation Explosive Detection Systems in US airports
- 150 million dollars will go towards repairing and removing bridges deemed hazardous to marine navigation
- 3.1 billion dollars will go towards the construction of parks and on public lands
2.5 billion dollars will go towards energy efficient housing retrofits. The money will go towards upgrading low-income housing sponsored by HUD in an attempt to increase the efficiency of the units. Insulation, windows and furnaces will be replaced in an attempt to increase energy efficiency.

6.2 billion dollars will go towards weatherization of low-income housing in an attempt to reduce their energy costs.

300 million dollars will go towards the purchase of “smart appliances.”

Helping Workers Hurt by the Economy

- 5 billion dollars will go toward the repair and modernization of public housing capital fund
- 1.5 billion dollars will go toward helping local communities build and rehabilitate low-income housing through the use of green technologies
- 500 million dollars will go toward the rehabilitation and improve energy efficiency of housing units for Native Americans
- 4.2 billion dollars will go toward neighborhood stabilization by helping communities purchase and rehabilitate foreclosed and vacant properties to create more affordable housing
- 1.5 billion dollars will go toward sheltering the homeless
- 500 million dollars will go toward supporting rural housing insurance fund to help rural families buy homes
- 10 million dollars will go toward sustainable and energy efficient building and rehabilitation in rural areas
- 200 million dollars will go toward the creation of rural community facilities

Bibliography


Frazier, Ian. "Utopia, the Bronx; Co-op City and its people." The New Yorker. 26 June 2006: 54


**Timeline**

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<thead>
<tr>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>September</th>
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</table>
| - site analysis  
- document site  
- diagram findings  
- programmatic studies  
- sizes and square footage studies  
- meet with Michael | - defining the unit  
- spatial requirements  
- room requirements  
- demographic studies  
- who lives in the area  
- who is the building for  
- how many units in the project  
- meet with Michael | - defining the building  
- unit requirements  
- common requirements  
- community studies  
- what makes a community  
- what are the communal elements  
- unit form studies  
- how do the rooms layout within the unit  
- meet with Michael | - defining the community  
- spatial requirements  
- common requirements  
- building form studies  
- how do the units interact spatially and financially  
- meet with Michael | - urban scheme studies  
- how does the building interact with the surrounding context  
- meet with Michael |