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Redefining Affordable Housing in MA

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I. INTRODUCTION: What is affordable housing?

Housing is considered affordable if it costs 30% or less of a household's income, and "is deed-restricted to income-eligible low- or moderate-income residents" (MAPC, n.d.). According to the Joint Center of Housing Studies (JCHS), as of 2017, 31.5% of all American households were considered cost-burdened by rent, meaning they spent more than 30% of their income on rent. That same year, the percentage of severely cost-burdened households (those who spent over 50% of their income in rent) was 15.2%. This means that almost half of all Americans struggled to pay rent in 2017 (Veal & Spader, 2018).

Housing is the single biggest expense a household has to face ("Affordable Housing Guidebook", n.d.). The Housing Guidebook also states that "basic needs consume a higher fraction of income for lower income households" and that "[i]n reality, many extremely- and very-low-income households cannot afford to spend 30% of their incomes on rent without cutting back on basic needs" (p. 1). According to the Affordable Housing Guidebook for Massachusetts, "the federal government (HUD) uses a definition of affordability that applies specifically to households with incomes at or below 80% of the area median family income, adjusted for household size (...). It currently calls housing affordable if housing for that income group costs no more than 30% of the household's income" (p. 1). People living at 80%, 50%, or 30% of the area's median income are considered low income, very low income, and extremely low income, respectively. All three of those categories qualify for public housing: "For Section 8 housing, your household income cannot surpass 50 percent of your area's median income" (Pendola, 2018).

According to Housing.MA, affordability can be measured in any one of four ways. The first one is the percent of "cost burdened" households (those who pay over 30% of their income in housing), and the percent of "severely cost-burdened" households (those who pay over 50%). The second one is “the percent of housing units listed on the Massachusetts Subsidized Housing Inventory (SHI)” (“Housing Brockton MA”, n.d.). The third one is how many houses, as a percentage, are being sold at affordable prices to low and medium level income households. The fourth and last one is the “gap between the number of households by income level, and the number of housing units affordable by income level” (“Housing Brockton MA”, n.d.). In this thesis, priority will be given to the first method, that of measuring the percentage of severely- and cost-burdened households. The areas of analysis will be three towns in southeastern Massachusetts: Mansfield, Attleboro, and Brockton. These municipalities were chosen to represent different kinds of communities.

Many towns or cities are “entitled” communities, meaning they are still developing and do not have many resources. As such, a portion of federal and state grants always goes out to them as priority funding, because their need entitles them to it. Brockton would be an example of an entitlement community. Then there are gateway communities, which are low-income communities located on state lines, such as Attleboro. The last category is affluent communities, which, because of their wealth, have to be very competitive in order to receive grants, thus needing to keep their policies and plans very updated and well written so they get preferential funding over less up-to-date towns. Mansfield qualifies as an affluent community. This thesis will analyze Brockton, Attleboro, and Mansfield’s housing policies, seeing how different types of communities confront the issue of affordable housing, and analyzing whether demand is higher in one type of community over the other, and whether there are any especially vulnerable demographics. But before we look at specific towns, different federal and state housing laws will be analyzed. The purpose of this thesis is to understand the way affordable housing is currently measured, and to explore alternative ways to measure poverty and the need for affordable housing in the US.

FEDERAL LEVEL: Section 8 Housing and Section 203(k)

The Housing Choice Voucher Program, also known as Section 8 housing, is the way the federal government helps those who are very low income, elderly, or disabled, to afford "decent, safe, and sanitary housing in the private market" ("Housing Choice Voucher Program Section 8", n.d.). Those who qualify for it are able to find their own place to live, as long as the landlord accepts Section 8 vouchers. Single-family homes, apartments, and townhouses are all options. Once the family has found suitable housing, a subsidy is paid to the landlord on behalf of the local public housing agency (PHA). "The family then pays the difference between the actual rent charged by the landlord and the amount subsidized by the program" ("Housing Choice Voucher Program Section 8", n.d.). There are times when, if authorized by the local PHA, families may be able to purchase a modest home through the Housing Choice Voucher Program.

To be eligible, one needs to be a US citizen, or be a non-citizen with an eligible immigration status. As a general rule, the family's income may not exceed 50% of the local average median income (AMI). PHAs are required to give 75% of its voucher to families whose income is below 30% of the AMI. Income limits are published by HUD and vary according to family size and location. When a family is deemed eligible (after all their data has been confirmed by an employer and a bank), they are put on a waiting list. When a name reaches the top of the list, the PHA gives the family a call and issues them a housing voucher ("Housing Choice Voucher Program Section 8", n.d.).

Section 203(k), called "Rehab Mortgage Insurance", is a type of insurance that enables homebuyers and homeowners to buy or refinance a house, and to pay for rehabilitation costs at the same time, all through one mortgage payment. The loan is long-term, at either a fixed or adjustable rate. Section 203(k) loans "protect the lender by allowing them to have the loan insured even before the condition and value of the property may offer adequate security ("203(k) Rehab Mortgage Insurance", n.d.). To be eligible for it, the house must be at least a year old, and the cost of rehabilitation must be $5,000 or more. The total value for the property must also be within the FHA mortgage limit of the area.

STATE LEVEL: Massachusetts' 40B Housing

Chapter 40B, also known as the Comprehensive Permit Law, is a state law that enables local Zoning Boards to "approve affordable housing developments under flexible rules if at least 20-25% of the units have long-term affordability restrictions" ("Chapter 40B Planning and Information", n.d.). Chapter 40B also requires that any given town or city has to meet a 10% housing stock affordability. In other words, 10% of all year-round dwelling units need to be affordable to those households that make less than 80% of the average median income. If a town or city does not meet the required 10%, "a developer can apply for a 'Comprehensive Permit' that enables them to build more densely than municipal zoning bylaws would permit, if at least 25% (or 20% in certain cases) of the new units are affordable" ("Housing Mansfield," n.d.). A community can also decide to appeal this decision by designing their own housing production plan. If, however, the state wants to create affordable housing in a town or city that already meets the 10% quota, the town is able to decline, or to accept and play a part in where the new development goes. According to the Citizens Housing and Planning Association (CHAPA, n.d.), 40B is responsible for creating over 70,000 homes across the state. Most of the residents in affordable homes make less than $50,000 a year (CHAPA, 2014).

As mentioned above, when a community has less than 10% of its housing stock in affordable housing (or 1.5% of its land area), they can receive up to a two-year exemption from State appeals if they create a housing production plan, plus meet any short-term goals the state has set for them in affordability (CHAPA, 2014). To count units towards the 10% affordability goal, the unit must first be part of a subsidized development built by a public agency or non-profit. At least 25% of those units must be restricted for households that make less than 80% of the AMI; the rents or sale prices must also be affordable and kept so for the next 30 years, after which it can either be renewed as an affordable unit, or return to market-rate. The housing development must be monitored by a public agency or non-profit to make sure it meets requirements, and finally, owners have to meet affirmative marketing requirements (CHAPA, 2014).

Chapter 40B developments can be a mix of different housing types: homes, apartments, condominiums; they can also be either market-rate or affordable homes. Market rate units are for working families making between 100-150% of the AMI, while affordable units are for seniors or families making less than 80% of the AMI. Alternatively, if the units are rental housing, the developers may set aside 20% of their units for families making less than 50% of the AMI. Developers need to restrict the amount of profit they make in affordable units: for in-sale, it's a 20% profit limit, while for rental developments it’s 10% (CHAPA, 2014).

SUBSIDIZED HOUSING INVENTORY (SHI)

Chapter 40B provides affordability standards to classify housing units according to a) how expensive they are to occupy, and b) a household’s ability to pay for housing. To asses a community’s progress towards the 10% goal, they apply the following criteria:

- It must be part of a “subsidized” development built by a public agency, non-profit, or limited dividend corporation

- At least 25% of the units in the development must be income-restricted to households with incomes at or below the 80% of area median income and have rents or sale prices restricted to affordable levels.

▪ Restrictions must run at least 15 years for rehabilitation, 30 years for new rental construction, and in perpetuity for new homeownership construction.

- Development must be subjected to a regulatory agreement and monitored by a public agency or non-profit organization.

- Project sponsors must meet affirmative marketing requirements. (“Mansfield Housing Production Plan”, 2016, p.8)

STATE LEVEL: First Time Homebuyer Program (FTHB)

ONE mortgage, offered by the Massachusetts Housing Partnership, is specifically designed for low- and moderate-income first-time homebuyers ("Mortgage Products and Resources”, n.d.). It gives qualifying families a discounted 30-year fixed-interest rate. Because it is discounted and fixed-rate private financing with state support, mortgage payments are 20% lower than usual. A minimum of 3% of the purchase price is needed as a down payment for condos, single-family or two-family dwellings, or 5% for a three-family dwelling. To be eligible, you need to meet your area’s income and asset limit guidelines. You must also be a first-time homebuyer, meet credit requirements, have enough money for the down payment, plan to reside full-time in the new house, and complete a first-time homebuyer education course.

MassHousing offers the lowest payments for those who make 100-135% of the AMI. Second-time homebuyers also qualify, it includes the opportunity to refinance, and it also protects homebuyers for up to 6 months in case of job loss. Yearly income limits to qualify for

MassHousing vary according to the town or city you live in. For example, in Mansfield, the limit is $101,200; Attleboro's is $120,150; Brockton's $153,900 ("MassHousing Income Limits", n.d.).

There are also FHA plans, which have lower interest rates than MassHousing, but it charges homeowners mortgage insurance. The FHA plan is a good option for people who make 100-135% of the AMI and who are looking to buy a house, but don't have the necessary 20% property value down payment. Mortgage insurance is, essentially, a fee for not meeting the 20% minimum down payment. In private insurance (PMI), insurance charges a certain amount each month until the 20% has been reached. In the case of the FHA, homeowners pay $180 monthly (as of 2016) until the property has been paid off. "Unlike PMI for other loans, these insurance costs continue even after the homeowner has reached 20% equity in their home. FHA also charges an additional mortgage insurance fee of 1.75% of the loan amount due at closing," ("Affordable Mortgage Comparison Chart", 2016).

LOCAL PREFERENCE UNITS

Up to 70% of a community's affordable units may be set aside for local preferences, in its Affirmative Fair Housing Marketing Plans (AFHMP). According to the 2016 Mansfield Housing Production Plan:

> Under fair housing laws, an AFHMP is required when marketing and selecting residents for affordable units. The AFHMP must be approved by DHCD and not have the effect of excluding, denying, or delaying participation of groups of persons protected under the fair housing laws (p.9).

Allowable preferences include local residents, town employees (firefighters, teachers, town hall employees, etc.), and households with children attending the local schools.

HOUSING PRODUCTION PLANS (HPPS)

According to the Massachusetts' Metropolitan Area Planning Council ("What is a Housing Production Plan?", n.d.), HPPS are "plans that help municipalities better understand local housing need[s] and demand, development constraints and opportunities, and their vision for future Affordable Housing and sometimes market-rate housing". HPPS are a useful tool to influence how many and what kinds of affordable housing there are or will be in a community. They also help communities meet Chapter 40B's 10% affordability requirement. HPPS need to be approved by the Massachusetts Department of Housing and Community Development (DHCD) and are valid for five years "What is a Housing Production Plan?", n.d.)

HPPS consist of five elements: data, limitations, locations, goals, and strategies. "Data" refers to a current assessment of housing need and demand, taking into account trends and population patterns. "Limitations" address any physical or regulatory constraints a community may face when facing new developments. "Location" identifies ideal sites for housing production, while "Goals" includes a numeric amount of new housing developments the community should strive for. Lastly, "Strategies" are ways to accomplish these goals "What is a Housing Production Plan?", n.d.). A community may become DHCD certified if, during a 12-month period of time, it "produces SHI eligible affordable housing equal to 0.5% or 1% of its year-round housing stock [...]. Certification means that the town's Housing Production Plan has met its regional need for affordable housing for one year (by meeting 0.5% threshold) or two years (by meeting 1%)" ("Mansfield Housing Production Plan", 2016, p. 9).

According to Mass.gov, out of the three communities mentioned in the introduction (Mansfield, Attleboro, and Brockton), only Mansfield has a DHCD-approved plan. Brockton does not have an HPP because the city has exceeded the minimum threshold of subsidized housing that is needed for a plan. In other words, is a town or city has more than 10% of its year-round housing as affordable housing, they are not obligated to draft a DHCD-approved plan. However, they are still subject to Chapter 40B's provisions, which allows affordable housing projects to supersede local zoning with the approval of the DHCD. In total, 158 communities throughout Massachusetts have a DHCD-approved plan.

II. HOUSING PROFILE: MANSFIELD

According to Housing.ma, Mansfield has a population of 23,184 as of 2010. Its median age is 37.4. It is a predominantly white community: 90.1% of its habitants are non-Hispanic white, 2.6% are black, 3.4% are Asian, and 2.1% are Latino. The remaining 1.8% are Pacific Islanders, native Americans, or mixed-race. The predominant household type are families with children (40.98%), followed by non-family households with children (28.31%). 23.03% of households are people living alone, and 7.05% are seniors living alone. Most households are owner occupied (72.43%), and 27.57% of residents are renters. The average household size is 2.76. Most housing units in Mansfield are single-family units (66%), 12% are 2-4 family buildings, and 21.9% are multi-family buildings (5+ families). The rest are mobile homes ("Housing Mansfield MA", n.d.).

As for affordability, Mansfield's average median income is $114,000 as of 2017 (US Census Data). 6.6% of households are extremely low income (< 30% of AMI), 7.6% are moderately low income (30-50% of the AMI), and 11% are low income (50-80% of the AMI). This means that 25.2% of households in Mansfield would qualify for affordable housing. Housing.ma estimates that 26.86% of owner-occupied households are cost burdened, meaning they pay more than 30% of their income in rent, compared to 36.21% of renter-occupied households. As for severely cost-burdened households (those who pay over 50% of their income in rent), 9.7% are owner-occupied, and 15% are renters. Mansfield currently meets Chapter 40B's requirements, as 10.82% of their total housing units are subsidized housing. Mansfield is doing very well compared to the nearest 10 municipalities (5.40%) or the state (5% affordable housing).

Income Level	1-Person	2-Person	3-Person	4-Person	5-Person	6-Person	7-Person	8-Person
Extremely Low Income (30%)	17000	20000	22000	25000	27000	29000	31000	33000
Very Low Income (50%)	29000	33000	37000	41000	45000	48000	51000	55000
Low Income (80%)	45000	51000	58000	64000	69000	74000	79000	84000

Low income households in Mansfield, by household income and size (“Housing Mansfield MA”)

According to the 2016 Mansfield Production Plan, "Mansfield’s median sales price for a single-family home was the third highest compared to its neighboring communities and averaged approximately $53,000 higher than the Commonwealth’s average” (p.2). As for single-family house ownership, the HPP estimates that only 3.8% of houses are affordable to those making less than 80% of the AMI ($80,200), while less than 1% of houses are affordable to those who qualify as low income. The HPP goes on to note that these numbers come from a community that has already met the 10% minimum quota of Chapter 40B (“Mansfield Housing Production Plan,” 2016).

EXISTING BYLAWS

Mansfield has adopted an "Inclusionary Housing" bylaw, which applies to all developments with 6+ dwelling units. "In any development subject to the bylaw, the sixth housing unit and every seventh unit thereafter shall be an affordable housing unit" ("Mansfield Housing Production Plan," p.6, 2016). The developers have several options: they can include the affordable units in their development, build the equivalent number of units in a separate location, donate usable land to town for them to build the affordable housing, or pay a fee instead of building the units. This bylaw has resulted in the creation of many affordable units since it was adopted.

Mansfield also has overlay districts that encourage mixed-use development in particularly favorable areas: downtown, and the train station. This results in affordable housing in areas close to public transportation and economic centers ("Mansfield Housing Production Plan", 2016). Finally, Mansfield has a "Cluster Residential Special Permit", which is allowed in industrial and in all residential districts. This special permit allows the Planning Board to grant additional density "if a certain percentage of the one-family detached dwelling units produced are assured in perpetuity to be affordable to low- and moderate-income households" ("Mansfield Housing Production Plan", p.7, 2016).

EXISTING CONDITIONS

It is worth noting that over half (52%) of all housing stock in Mansfield is over 35 years old. Older houses are more costly to live in, but older houses are usually rented or sold at more affordable prices. Rehabilitation programs are necessary to ensure a stable and safe housing stock, and are especially important in helping low-income communities.

> The age of housing also has impacts on energy usage and home financing. Programs to support necessary home improvements may be needed, including energy efficiency, "de-

leading," and septic repairs for units occupied by low-and moderate-income households, particularly older residents living on fixed incomes ("Mansfield Housing Production Plan," 2016, p. 22).

Vacancy rates in Mansfield, according to the 2017 US Census Data, are at 3.6%, which indicates a very tight housing market. As a general rule, anything below 5% indicates a competitive market. The result is expensive properties due to high demand (Mansfield Housing Production Plan, 2016, p. 28).

AFFORDABILITY GAP

The affordability gap is the difference between the median selling price of houses and what purchasers are able to pay for them. The 2014 AMI for a low-income household was $80,200. By multiplying the AMI*3, one gets the "affordable housing price" for this income group: $248,700. In 2014, the median sales price for a home in Mansfield was $370,000, meaning the "affordability gap" is $121,300 (median sales price – affordable price = affordability gap). Only 3.8% of houses in Mansfield would be affordable for people making less than 100% of the AMI.

BARRIERS TO HOUSING DEVELOPMENT

The Mansfield Housing plan identifies six barriers to affordable housing, but the main one problem is that zoning is too restrictive and does not allow for smaller, denser development. Mansfield's R1 (Natural Resource and Scenic Residential) district, which covers 46% of the town, has a minimum lot size of 60,000 sq. ft (1.38 acres). This lot sizes usual lead to suburban sprawl, and "contributes to the construction of large single-family units that, due in part to their property's embedded land costs, are unaffordable to low-to moderate-income families" ("Mansfield Housing Production Plan", 2016, p. 31). Another zoning problem Mansfield faces is the accessory apartment bylaw. This bylaw is too restrictive, as it requires that (1) at least one of the two units be occupied by a person 55 or older, (2) gross floor area of the dwelling should be at least 2,000 sq. ft, and (3) no enlargements or extensions of these dwelling units are permitted, unless their purpose is to comply with building or health codes. The Accessory Apartment bylaw does not provide any incentives for owners to build such a unit. The third zoning problem Mansfield faces is the fact that two-family dwellings are not permitted in the medium density residential district (R2), even though it has access to municipal water and sewer (which makes it more affordable when buying and maintaining a house), and varying lot sizes.

Other barriers mentioned in the document are the fact that Mansfield is very well located (halfway between Boston and Providence), as well as has excellent highway and rail access. Mansfield schools are also known for their quality, so the housing market is very tight. Another barrier is Mansfield's limited sewer service. There are areas in the R1 district in West Mansfield, as well as in East Mansfield, do not have sewer service, and expanding service to those areas is costly. 3,300 households are affected by this. "Generally, limited sewer service contributes to higher development costs and can constrain the development of a diversity of types and smaller lot housing" ("Mansfield Housing Production Plan", 2016, p. 31). In response to this, Mansfield, Foxborough and Norton have formed a wastewater district to work together on expanding and improving their wastewater services. And finally, there is the Mansfield Housing Corporation, a non-profit created in 2004 to be in charge of producing more affordable housing. Sadly, the MHC lacks experience and resources, such as having limited board members.

PROPOSED SOLUTIONS

Mansfield's R1 Zone (Natural Resource and Scenic Residential) has an exorbitant 60,000 square feet as a minimum lot size. The minimum size used to be 40,000 square ft. in the 1990s, but at the time, there were many young families with school age children moving into Mansfield and the town's schools were overwhelmed. New schools had to be built or expanded, and financed through tax increases (at the time, this was the largest tax increase in the state). The town voted to increase the lot sizes in R1 to give the school system time to adjust. Bigger lots meant pricier homes, which meant less people moving in. Bigger lots also meant less possible houses at buildout. Now, 30 years later, schools have a lot more room that is not being filled due to the aging population in Mansfield, and the housing market is incredibly tight and as such, not very competitive. Changing the lot sizes in the R1 district, which covers 46% of Mansfield, would allow the town to slowly readjust, create more homes, and open up a competitive and more affordable market. Changes in zoning require a Mansfield resident or a board member to bring forward a petition to be voted on. The petition passes if 2/3 of those present vote for it. It is a simple process that would slowly bring more affordability and balance into Mansfield.

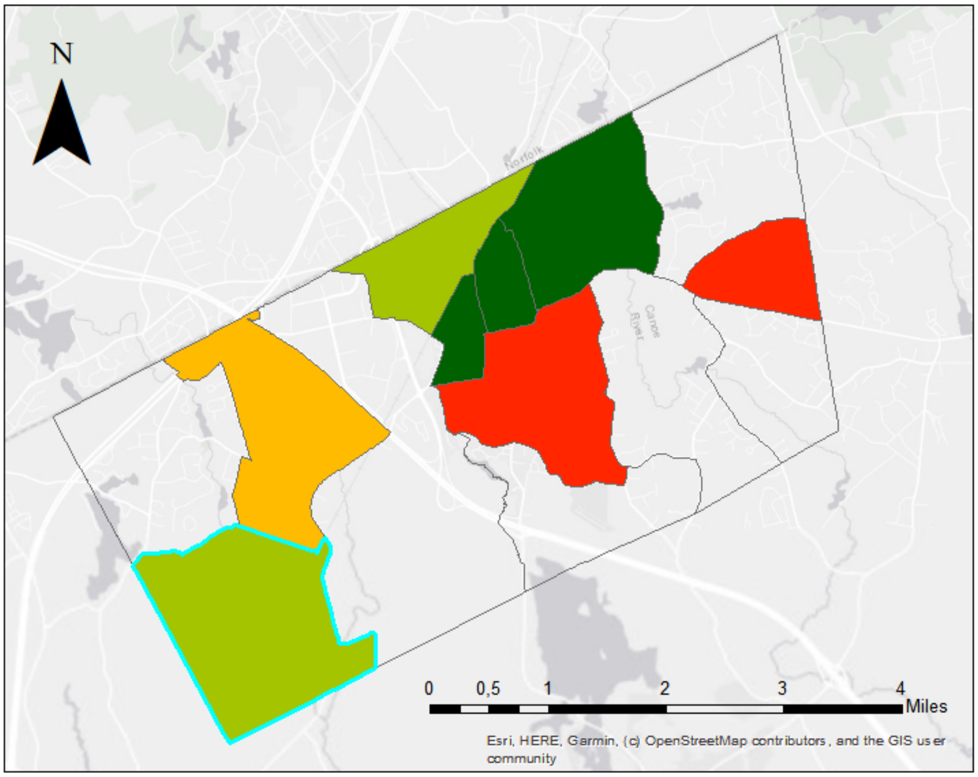
Previously mentioned were the accessory apartments, which at the time of this study are age-restricted to 55+. However, in light of the 2020 Mansfield Masterplan, the town has called a meeting to eliminate the age restriction, opening up this option to more people. Accessory apartments are also allowed in the R1 district, which is where the biggest houses are (there's a 2,000 square feet minimum applicable to the main dwelling the apartment will be attached to). Providing a tax incentive for tenants would be a good way to encourage more accessory apartments to be built.

Another zoning change would be to allow two-family dwellings in the R2 District (Medium Density Residential). This would increase the number of houses being built, and some of those units could be declared affordable. Two-family dwellings and multi-family dwellings already exist in the R2 district, as they were allowed up to the late 1990s. Then local residents decided they did not like how their neighborhood looked and wanted their neighborhoods to be primarily single-family houses. This issue could be brought forward at a town meeting and voted upon. Sentiments may have changed, and this would be a great area to build affordable new houses on, as it already has municipal water and sewer.

It is worth mentioning that, when building a new house that is not in an area already connected to municipal sewer and water, the owner of the house needs to pay anywhere between $10,000-$15,000 to connect their house to the town's sewer system. The other alternative is to keep using a septic system, which, when well maintained, lasts up to 20 years. If owners do not drain their septic system regularly, it can break or malfunction. Neighborhoods can request the town to connect their street, and when done in bulk the cost of the project per house naturally goes down. Neighboring towns, such as Norton and Foxboro, have drastically increased their connections to municipal services, but the residents in those streets have no choice but to pay for the connection (which is an unexpected expense they did not choose), making it an unpopular approach that Mansfield has decided not to adopt. The best way to do this affordably is to inform the residents of the advantages of municipal water and sewer and the advantages of doing it in bulk.

MANSFIELD: MAPS

Mansfield, MA Housing Characteristics



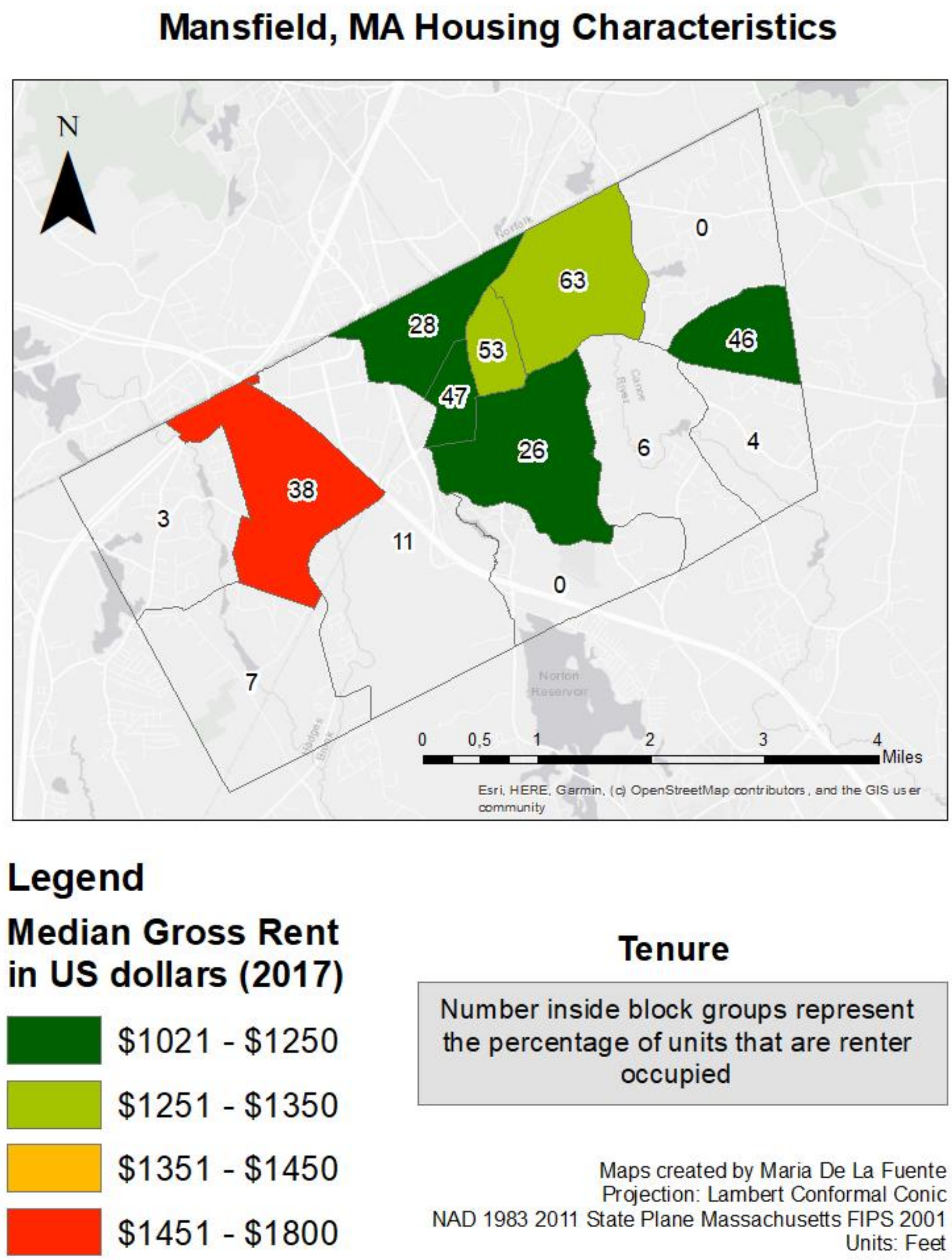
Legend

Median Gross Rent as a Percentage of Household Income (2018)

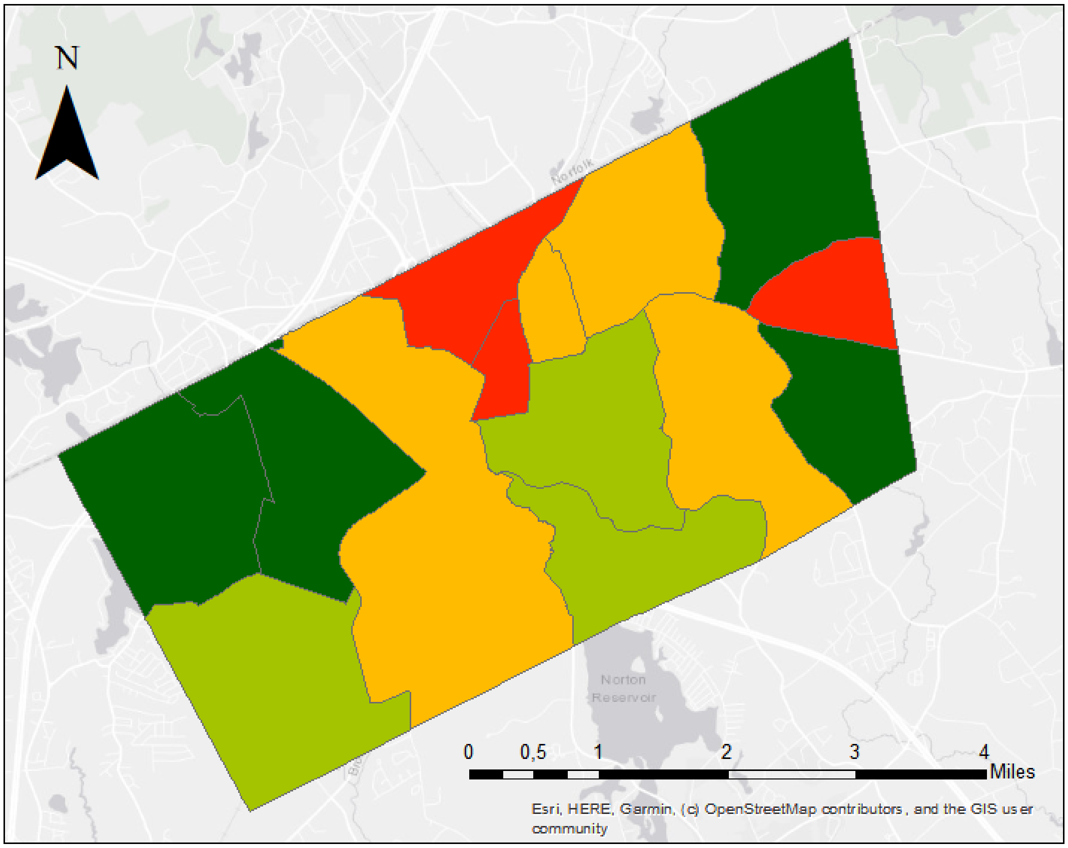
- 17% - 20%
- 21% - 25%
- 26% - 30%
- 31% - 40%

Housing is considered affordable when a household spends less than 30% of their income on rent.

Maps created by Maria De La Fuente
Projection: Lambert Conformal Conic
NAD 1983 2011 State Plane Massachusetts FIPS 2001
Units: Feet


Mansfield, MA Housing Characteristics
N
0
63
28
53
46
47
26
6
4
38
3
11
0
7
Norton Reservoir
0 0.5 1 2 3 4 Miles
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
Legend
Median Gross Rent in US dollars (2017)
$1021 - $1250
$1251 - $1350
$1351 - $1450
$1451 - $1800
Tenure
Number inside block groups represent the percentage of units that are renter occupied
Maps created by Maria De La Fuente
Projection: Lambert Conformal Conic
NAD 1983 2011 State Plane Massachusetts FIPS 2001
Units: Feet

Mansfield, MA Housing Characteristics



Legend

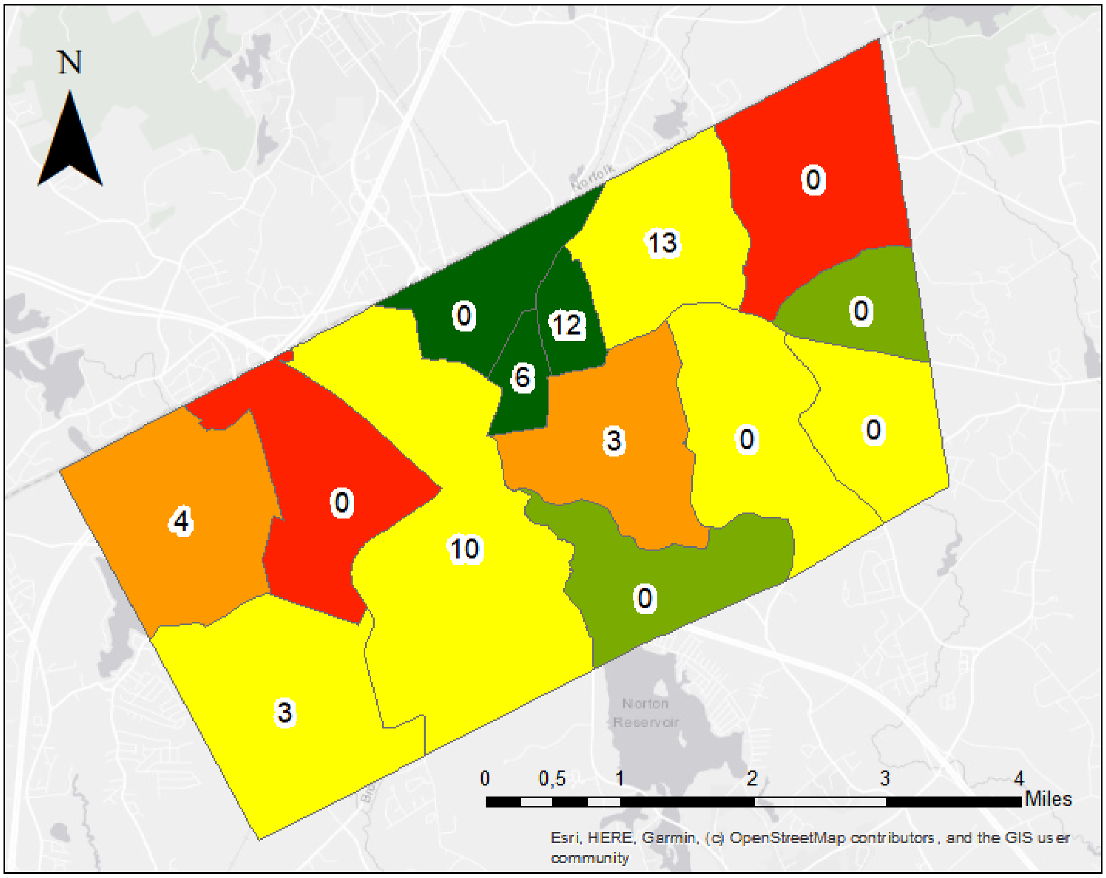
Median Household Income in US dollars (2017)

- $68194 - $91200
- $91201 - $114000
- $114001 - $136800
- $136801 - $171000

Median HH Income in Mansfield: $114,000
Low-income: $91,200

Maps created by Maria De La Fuente
Projection: Lambert Conformal Conic
NAD 1983 2011 State Plane Massachusetts FIPS 2001
Units: Feet

Mansfield, MA Housing Characteristics



Legend

Median Property Values (dollars)

[in adjusted quantiles]

- $248600 - $318600
- $318601 - $370000
- $370001 - $400000
- $400001 - $440000
- $440001 - $480000

Numbers within Block Groups represent the BG's vacancy rates for property.
Median property value: $378,200
Average vacancy rate: 3.6%
[Note: a rate of less than 5% indicates a highly competitive market]

Maps created by Maria De La Fuente
Projection: Lambert Conformal Conic
NAD 1983 2011 State Plane Massachusetts FIPS 2001
Units: Feet

III. HOUSING PROFILE: ATTLEBORO

According to Housing.ma, Attleboro has a population of 43,593 as of 2010. Its median age is 39.4. It is a predominantly white community: 83.97% of its habitants are non-Hispanic white, 2.86% are black, 4.53% are Asian, and 6.34% are Latino. The remaining 2.3% are Pacific Islanders, native Americans, or mixed-race. The predominant household type is non-family households with children (33.59%), followed by family households with children (30.55%). 26.42% of households are people living alone, and 9.78% are seniors living alone. Most households are owner occupied (66.36%), and 33.62% of residents are renters. The average household size is 2.55. Most housing units in Attleboro are single-family units (59.38%), 21.13% are 2-4 family buildings, and 15.85% are multi-family buildings (5+ families). The rest are mobile homes ("Housing Attleboro MA", n.d.).

As for affordability, Attleboro's average median income is $67,460 as of 2017 (US Census Data, 2017). 8.32% of households are extremely low income (< 30% of AMI), 9.45% are moderately low income (30-50% of the AMI), and 16.59% are low income (50-80% of the AMI). This means that 34.36% of households in Attleboro would qualify for affordable housing. Housing.ma estimates that 35.77% of owner-occupied households are cost burdened, meaning they pay more than 30% of their income in rent, compared to 45.31% of renter-occupied households. As for severely cost-burdened households (those who pay over 50% of their income in rent), 12.46% are owner-occupied, and 20.19% are renters. Attleboro currently does not meet Chapter 40B's requirements, as 6.65% of their total housing units are subsidized housing ("Housing Attleboro MA", n.d.). Attleboro is doing better than the nearest 10 municipalities (4.75%) or the state (5% affordable housing).

Income Level	1-Person	2-Person	3-Person	4-Person	5-Person	6-Person	7-Person	8-Person
Extremely Low Income (30%)	15000	17000	20000	22000	23000	25000	27000	29000
Very Low Income (50%)	25000	29000	32000	36000	39000	42000	45000	48000
Low Income (80%)	40000	46000	52000	58000	62000	67000	72000	76000

Low income households in Attleboro, by household income and size (“Housing Attleboro MA”)

Still, in the 2019-2024 Community Development Block Grant (CDBG) Plan, Attleboro has expressed concern about not being able to meet the needs of available affordable housing for those ages 55 and over and those who make less than 50% of the AMI. The City has vowed to provide CDBG funds to developers to help them rehabilitate or acquire units in exchange for housing with a set affordable, rent restricted term (“CDBG Plan”, 2019, p.9). “Developers will be encouraged to work with the Housing Authority to address the persons and families on the waiting list. The City will also make CDBG funds available to the Housing Authority for the rehabilitation of existing housing,” (“CDBG Plan”, 2019, p.9). For the years 2019-2023, the CDBG money available for “Affordable Housing” is $300,865. With this money, the city plans for build 30 affordable rental units and rehabilitate 10 more.

For the construction of new affordable units, the City also gets funds from the Greater Attleboro/Taunton HOME Consortium. Thanks to it, in 2006, 42 new affordable rental units were created. The City also receives Neighborhood Stabilization Program 3 grant (NSP3) from the DHCD. A certain number of units created from this NSP3 fun are set aside for families earning less than 50% of the AMI ("Attleboro Comprehensive Plan", 2012, p. 36).

HOUSING MARKET ANALYSIS

Households who are severely cost burdened (spend over 50% of their income on rent) struggle to cover other basic needs. In Attleboro, the percentage of the population that is severely cost burdened is roughly 15% of all households. As a Gateway City, Attleboro has additional state resources and incentives such as the "development of fair market rent housing through the Housing Development Incentive Program" (HDIP) ("CDBG Plan", 2019, p. 27). The HDIP provides tax incentives to developers to construct new or rehabilitate old multi-unit market rate residential housing. The tax incentives are, according to MassGov's HDIP guidelines:

- A local-option real estate tax exemption on all or part of the increased property value resulting from improvements (the increment), and
- State tax credits for Qualified Project Expenditures (QPEs) that are awarded through a rolling application process. ("HDIP Guidelines", 2020).

The result is new or rehabilitated units at 80% of market price. The CDBG money set aside for "Housing Rehabilitation" is $58,000. With that money, the city plans to rehabilitate 3 dwelling units.

HOUSING REHABILITATION

The city sets aside Block Grant money each year for housing rehabilitation. Its Housing Rehabilitation Program is funded through grants and low interest loans given out to families who make less than 50% of the AMI (=$40,000). "Loans are amortized at 0% interest for up to 25 years.

The amortization terms of the loan will be based on the owner's availability to pay back the funds" ("CDBG Plan", 2016, p. 34). As for de-leading, the city offers special financing if the cost of lead removal exceeds $20,000.

For Emergency Repairs, the City will continue to give loans for anything under $10,000 with a 5-year forgivable term. Emergency repairs are usually (but not exclusively) repairs that could endanger the residents' health. Attleboro also has a privately funded Senior Emergency Repair Program, in cooperation with the Council on Aging. This program offers seniors emergency grants to deal with housing rehabilitation issues such as roof repairs, ramp installations, window and furnace replacements. They can give up to $1,000 per project ("Attleboro's Comprehensive Plan", 2012, p.34).

There are also federal HOME funds available through the Greater Attleboro/Taunton HOME Consortium. These funds provide aid for single-family and non-profit housing rehabilitations, funds to construct new affordable housing units, and funds to help first-time homebuyers with their down payments ("Attleboro's Comprehensive Plan", 2012, p.34).

EXISTING CONDITIONS

It is worth noting that over half of all housing stock in Attleboro is over 60 years old. Older houses are more costly to live in, and older houses are usually rented or sold at more affordable prices. Rehabilitation programs are necessary to ensure a stable and safe housing stock, and are especially important in helping low-income communities. Fortunately, Attleboro has plenty of rehabilitation plans to help its residents.

Vacancy rates in Attleboro, according to the 2017 US Census data, are at 7.2%, which indicates a healthy, competitive housing market.

AFFORDABILITY GAP

The affordability gap is the difference between the median selling price of houses and what purchasers are able to pay for them. The AMI for a low-income household in Attleboro is currently $58,000. By multiplying the AMI*3, one gets the “affordable housing price” for this income group: $174,000. In 2017, the median property value for a home in Attleboro was $247,100, meaning the “affordability gap” is $73,100 (median sales price – affordable price = affordability gap).

PROPOSED SOLUTIONS

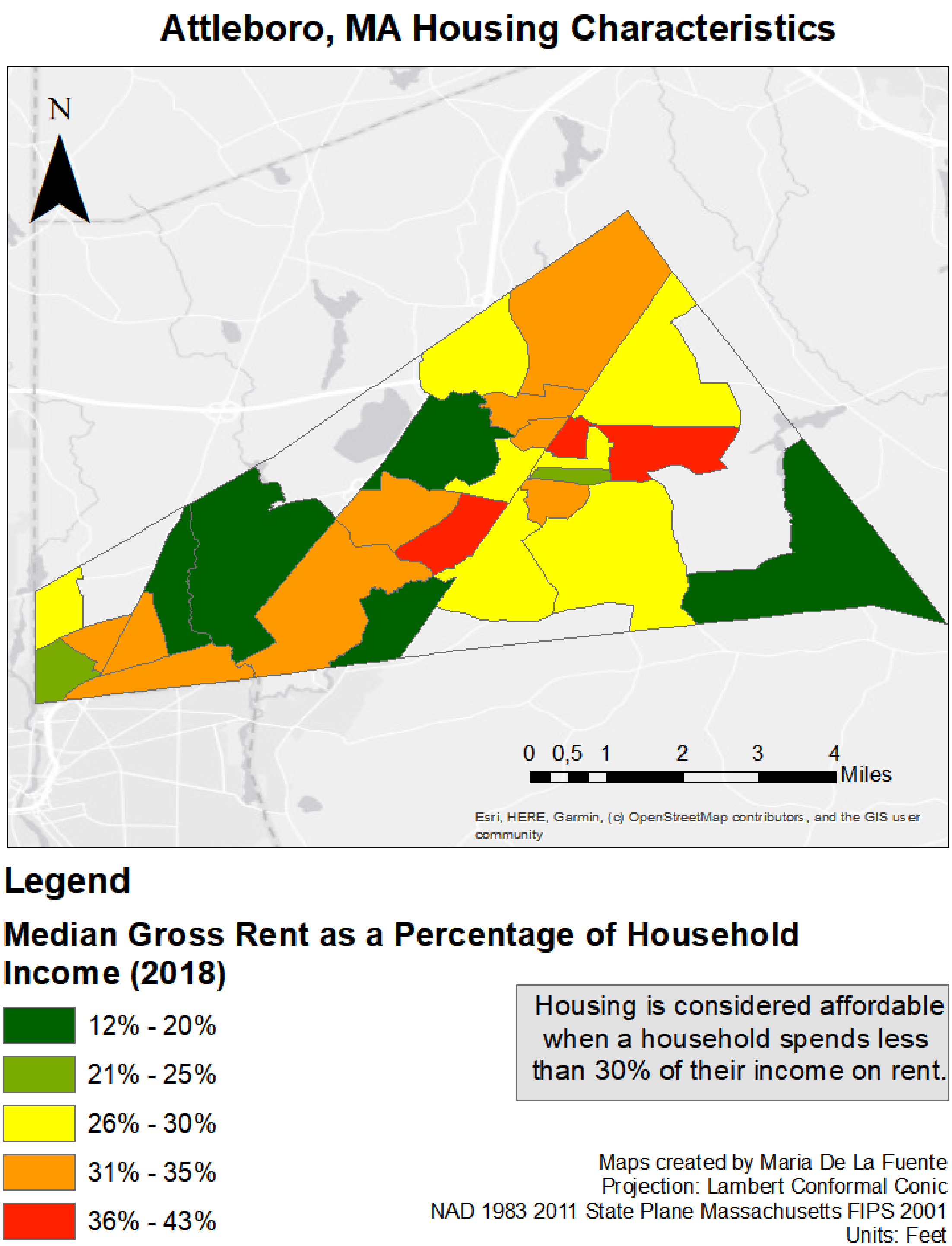
Attleboro should draft a Housing Needs assessment in order to better understand priority areas. The City should continue encouraging the reuse and rehabilitation of old buildings into affordable units. Attleboro’s 2012 “Comprehensive Plan” cites underutilized housing stock, abandoned industrial buildings, and surplus municipal buildings (p. 121). More specifically, this Comprehensive Plan suggests adopting an accessory apartment ordinance, and an inclusionary zoning ordinance.

Accessory apartments are a good way to maximize space usage. Accessory apartment ordinances requirements vary by town, but not having an age restriction and allowing these units to function as a studio or one-bedroom apartment seem to be the optimal approach. Allowing the renters of the accessory apartments to have their own kitchen and living space, for example, would maximize the attractiveness of this ordinance to renters. Providing the tenants with tax breaks is a great way to encourage these units to be built. Attleboro could look at the way surrounding municipalities do accessory apartments, and adapt their regulations to fit the City.

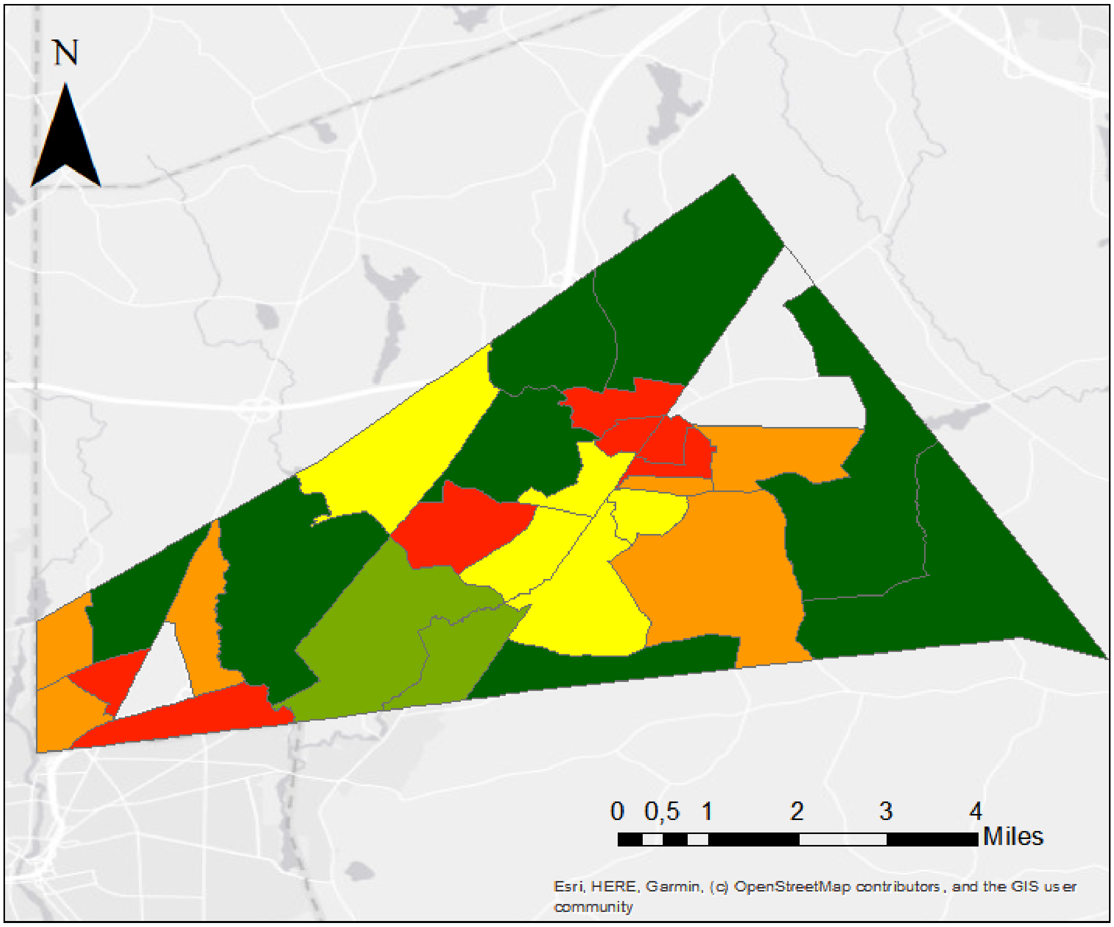
Inclusionary Zoning is a simple way to guarantee a certain amount of new affordable units are being built each year. Mansfield’s “inclusionary zoning” would work well for Attleboro: the

6th unit in a development (condos, single family houses, townhouses, etc.) and every 7th unit after that should be set aside for those making 80% or less than the AMI. Another zoning recommendation suggested in the 2012 “Comprehensive Plan” is to create a new zoning district that allows for smaller lots (5,000 – 7,000 square feet) to create affordable and new starter homes.

ATTLEBORO: MAPS



Attleboro, MA Housing Characteristics



Legend

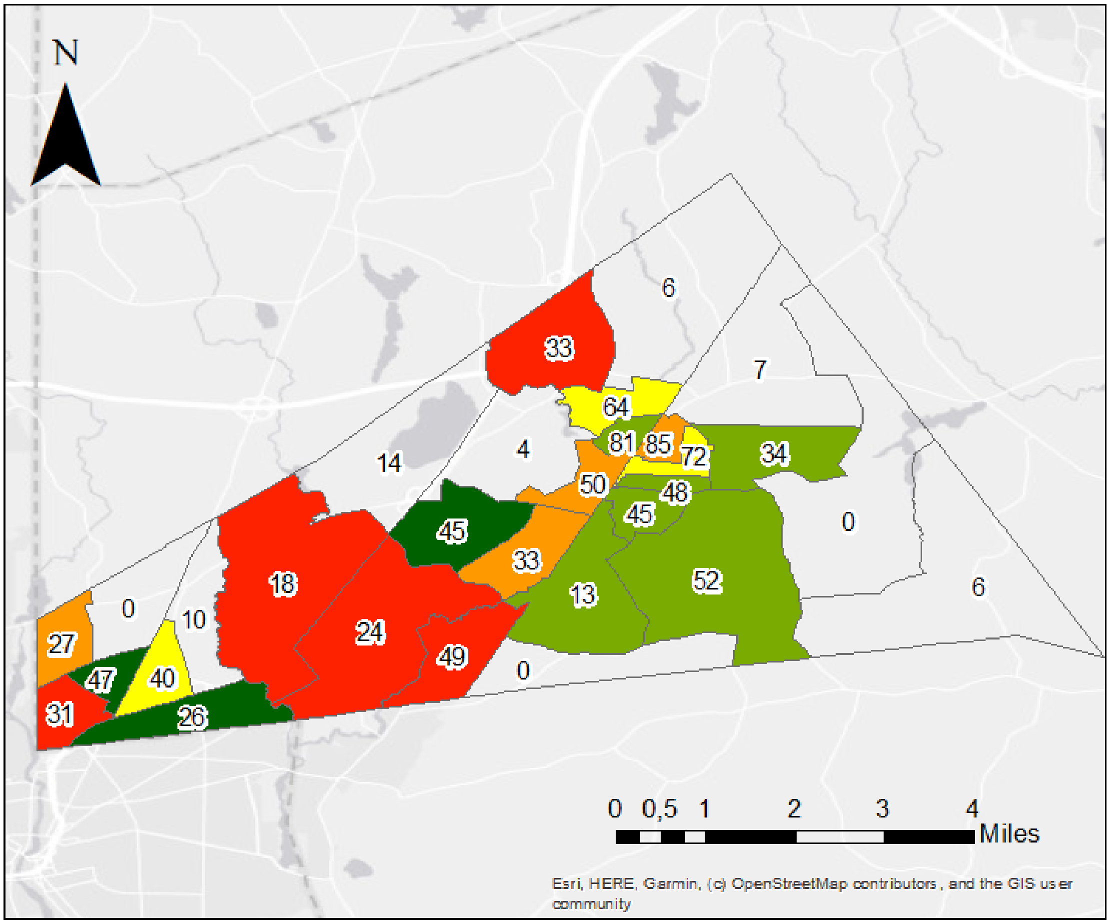
Median Household Income in US dollars (2017)

- $34688 - $50000
- $50001 - $65000
- $65001 - $75000
- $75001 - $100000
- $100001 - $150000

Median HH Income in Attleboro: $67,460
Low-income: $54,048

Maps created by Maria De La Fuente
Projection: Lambert Conformal Conic
NAD 1983 2011 State Plane Massachusetts FIPS 2001
Units: Feet

Attleboro, MA Housing Characteristics



Legend

Median Gross Rent in US dollars (2017)

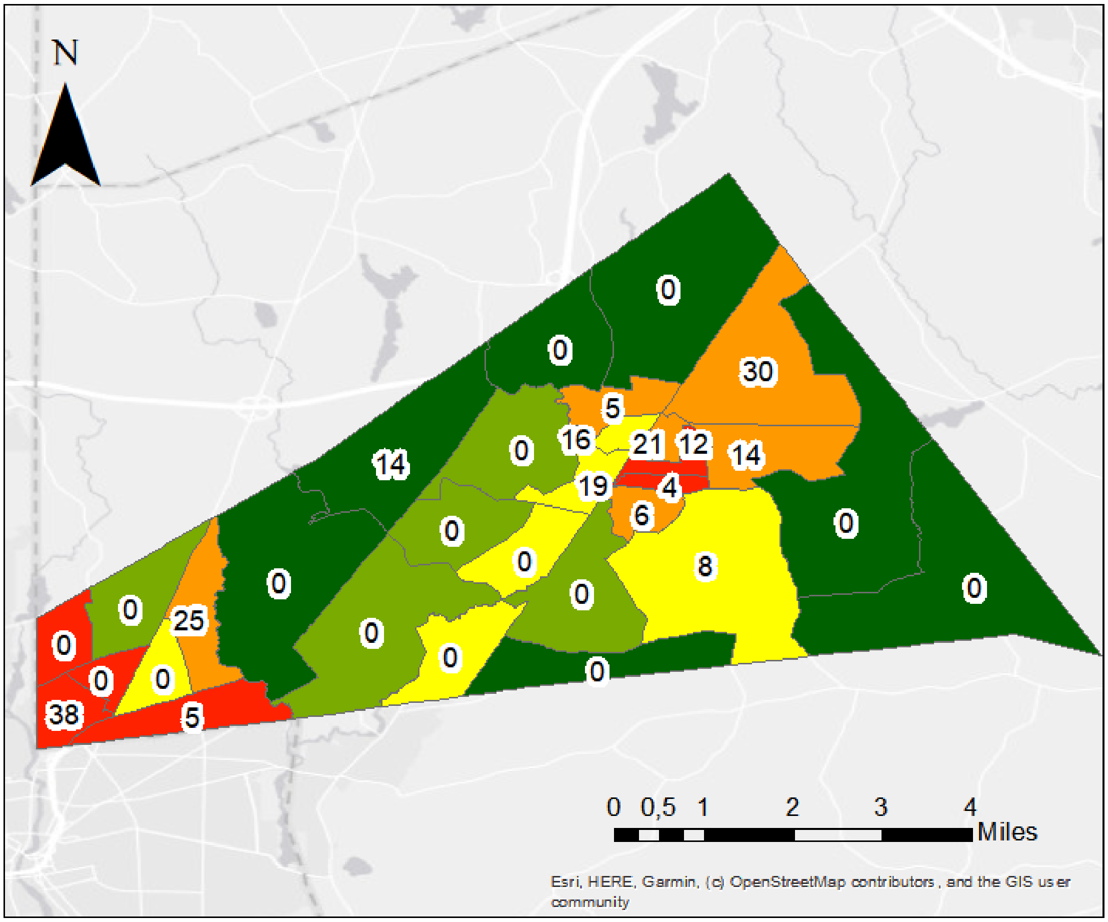
- $386 - $850
- $851 - $1000
- $1001 - $1100
- $1101 - $1450
- $1451 - $1842

Tenure

Numbers inside block groups represent rhe percentage of units that are renter occupied

Maps created by Maria De La Fuente
Projection: Lambert Conformal Conic
NAD 1983 2011 State Plane Massachusetts FIPS 2001
Units: Feet

Attleboro, MA Housing Characteristics



Legend

Median Property Values (dollars)

[in adjusted quantiles]

- $184100 - $220000
- $220001 - $235000
- $235001 - $275000
- $275001 - $315000
- $315001 - $350300

Numbers within Block Groups represent the BG's vacancy rates for property.
Median property value: $247,100
Average vacancy rate: 7,2%
[Note: a rate of less than 5% indicates a highly competitive market]

Maps created by Maria De La Fuente
Projection: Lambert Conformal Conic
NAD 1983 2011 State Plane Massachusetts FIPS 2001
Units: Feet

IV. HOUSING PROFILE: BROCKTON

According to Housing.ma, Brockton has a population of 93,810 as of 2010. Its median age is 35.6. It is a mixed-race community: 42.9% of its habitants are non-Hispanic white, 29.8% are black, 2.3% are Asian, and 10% are Latino. The remaining 15% mixed-race (5.9%), or other race (8.9%). Brockton's Housing Strategy (2017) states that "the city has 74.2% of the region's "non-white" population, and the non-white population drops off greatly as you cross into adjacent communities" (p.7). The Plan goes on to state that every area of the City had minority populations, although no one minority predominates in any area. This makes Brockton much less segregated that other metropolitan areas.

The predominant household type are families with children (33.22%), followed closely by non-family households with children (32.5%). 26.89% of households are people living alone, and 9.74% are seniors living alone. The majority of households are owner occupied (55.81%), and 44.19% of residents are renters. The average household size is 2.76. Most housing units in Brockton are single-family units (50.17%), 27.83% are 2-4 family buildings, and 21.83% are multi-family buildings (5+ families). The rest are mobile homes ("Housing Brockton MA", n.d.).

As for affordability, Brockton's average median income is $62,000 as of 2017 (US Census Data), lower than the area's median income of $87,100. "The City's median income is well below the 80% Low Income threshold of $69,680" ("Brockton Housing Strategy, 2017, p. 11). 21.9% of households are extremely low income (< 30% of AMI), 15.7% are moderately low income (30-50% of the AMI), and 18.35% are low income (50-80% of the AMI). This means that 55.95% of households in Brockton would qualify for affordable housing. The City of Brockton's data indicates that out of those cost-burdened households, 26% are severely cost burdened. Brockton currently meets Chapter 40B's requirements, as 13% of their total housing units are subsidized housing (“Brockton Housing Strategy”, 2017). Brockton is doing very well compared to the nearest 10 municipalities (6%) or the state (5% affordable housing) (“Housing Brockton MA”, n.d.).

Income Level	1-Person	2-Person	3-Person	4-Person	5-Person	6-Person	7-Person	8-Person
Extremely Low Income (30%)	18000	21000	24000	26000	28000	31000	33000	35000
Very Low Income (50%)	31000	35000	39000	44000	47000	51000	54000	58000
Low Income (80%)	45000	51000	58000	64000	69000	74000	79000	84000

Low income households in Brockton, by household income and size (“Housing Brockton MA”)

According to the 2017 Brockton Housing Strategy, most houses in Brockton sell for around $200,000. The average cost for a 3-bedroom house is $239,719 (p.22). Condos sell for an average of $120,000 as of 2017.

EXISTING BYLAWS

The City of Brockton Comprehensive Policy Plan of 1998 indicates what a community should do in various situations. Its housing related policies include:

1. To protect older stable neighborhoods, which are assets, from unsympathetic encroachment (e.g. high-density development and non-residential uses). The implied policy is to zone those out and to encourage sympathetic uses.
2. To salvage older residential structures by renovation. The implied policy is to avoid demolition and seek means to rehabilitate and re-use such structures.
3. In contrast, to reduce densities through selective demolition "in neighborhoods with substandard lot sizes and which lack off street parking".
4. To prevent non-local traffic from passing through residential neighborhoods.
5. To respond to the potential of selected neighborhoods through a Comprehensive Neighborhood Renaissance Program /Neighborhood Improvement Strategy.
6. To increase home ownership while working with diverse agencies to rehabilitate older housing stock and revitalize neighborhoods.
7. To maintain community facilities in all neighborhoods where possible.
8. Strictly regulate condominium conversion.
9. To encourage diverse housing in mixed use centers Downtown and near MBTA commuter rail stations. ("Brockton Housing Strategy", 2017, p. 36)

EXISTING CONDITIONS

Brockton housing tends to be in good condition, as many units are newer as a result of urban renewal. However, there are certain spots where exterior deterioration is visible, and it calls for rehabilitation programs. As an "Entitlement Community", the City of Brockton gets a certain amount of money by the state. Part of the money goes to Housing Rehabilitation, and it is managed by the Brockton Redevelopment Community. The City also offers de-leading services, and there are HOME grants for low and moderately low-income families. Currently, the City is planning on putting the “Community Preservation Act” up to vote. If adopted, a portion of funds would exclusively be dedicated to the rehabilitation of affordable housing.

The City is currently working on adopting, at a local level, the recent House and Senate Bill, “Neighborhood Stabilization Act”. This would allow for the use of 121A (“Spot Evident Domain”, allows the City to buy houses from absentee landlords, rehabilitate them, and resell them to first-time homebuyers at an affordable price). If 121A is adopted at a local level, the Neighborhood Hub Grant ($300,000) could be used to set up a Housing Corporation to spearhead renovation efforts, and this Housing Corporation would work side by side with banks to provide affordable housing.

Brockton also has a high number of foreclosures, most of them in the central area. Foreclosures happen when people take on mortgages they cannot pay. The numbers fluctuate, but Brockton often has the highest number in the state. “As of January 2014, Brockton had 478 distressed units, while Fall River had 243 and New Bedford had 274” (Brockton Housing Strategy, 2017, p. 26). Foreclosed properties usually sell for lower than what the previous owner paid.

In response to this high number of foreclosures, agencies such as the Housing Solutions for Southeastern Massachusetts offer “foreclosure prevention assistance with counseling, loan modification, mortgage refinancing, buying foreclosed properties for favorable resale to original owners, and other options while protecting tenants from early eviction” (“Brockton Housing Strategy”, 2017, p. 27).

Vacancy rates in Brockton, according to the 2017 US Census Data, are at 7.02% which is higher than the recommended 5%.

> Concentrations of such [vacant] units could indicate distressed neighborhoods need closer examination and more than housing rehabilitation. This could involve remedying dangerous environmental conditions, resolving dangerous or degrading land use conflicts, improving neighborhood amenities, resolving traffic hazards, and improving public safety through a neighborhood revitalization program ("Brockton Housing Strategy", 2017, p. 18)

AFFORDABILITY GAP

The affordability gap is the difference between the median selling price of houses and what purchasers are able to pay for them. The 2014 AMI for a low-income household was $64,000, however the median Brockton income of $62,000 is below that and as such, the number to be used here to get a more accurate number of what people can afford. By multiplying the AMI*3, one gets the "affordable housing price" for this income group: $186,000. In 2017, the median sales price for a home in Brockton was $236,350, meaning the "affordability gap" is $50,350 (median sales price – affordable price = affordability gap).

HOUSING STRATEGY

Brockton has had several plans regarding housing throughout the years. The 2014 Draft Old Colony Regional Housing Plan proposed the following actions: revise zoning to increase density as per Chapter 40R's Smart Growth zoning; encourage upper floor residence in the Central Business District; create accessory apartments and provisions for converting duplexes; adopt inclusionary zoning. The Plan also mentions institutional changes, such as creating a housing trust. This includes having a regional housing rehabilitation program, fair housing efforts, equity buy-downs and programs to assist with transferrable development rights, adopting the Community

Preservation Act, etc. ("Brockton Housing Strategy", 2017, p.32). Another proposed strategy is to adopt an accessory apartment bylaw.

It is worth noting the meaning of some of these terms. Chapter 40R's Smart Growth zoning is a way to encourage communities to allow higher densities and concentrate on creating affordable units near transit zones, city or town centers, or other areas of high development.

> Chapter 40R seeks to substantially increase the supply of housing and decrease its cost, by increasing the amount of land zoned for dense housing. It targets the shortfall in housing for low- and moderate-income households, by requiring the inclusion of affordable units in most private projects ("Chapter 40R", n.d.).

A "buydown" is a technique people use to finance their mortgage: the buyer tries to get a lower interest rate for at least the first few years of the mortgage, or perhaps for the entirety of the loan. An equity is how much of the home the buyer has paid. Equity buydowns are a way to help create affordable housing by buying property and transferring it to a developer who will make it into affordable housing.

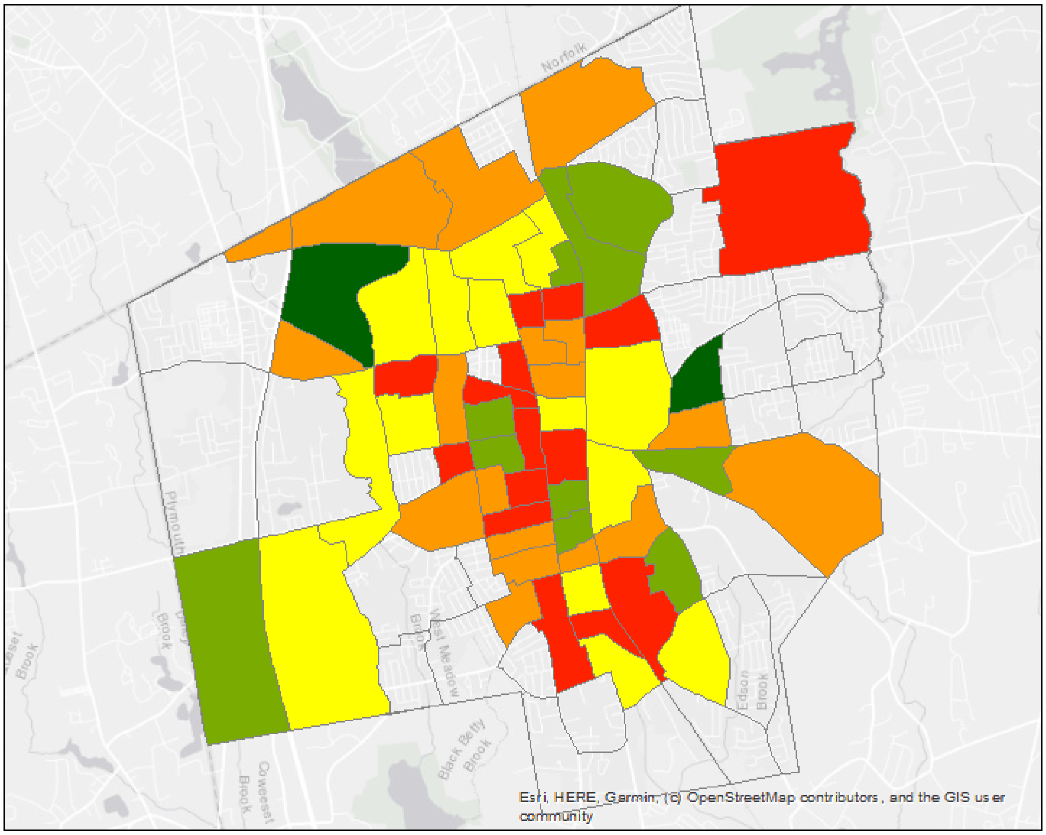
PROPOSED SOLUTIONS

The City of Brockton has numerous housing programs in place or in the process of being adopted. While the City exceeds the minimum requirement for affordable housing, the reality of the issue is that Brockton had a much higher need for affordable housing than surrounding communities. Affordable housing stock is at 13%, but 55% of the population would qualify as cost burdened. Still, the City has tried to build more affordable housing developments, but Brockton residents do not want to build more now that they meet the minimum criteria.

That being said, the minimum lot size on the outer part of Brockton is 30,000 square feet. A Zoning change in this area could make housing more affordable; it would require a supermajority vote to pass. Currently, the City is trying to adopt the Community Preservation Act, which would guarantee a minimum amount of funds go to the rehabilitation of affordable housing each year. The City is also trying to adopt 121A at a local level, which would allow the City for more control in housing rehabilitation. A Housing Corporation could try contacting absentee landlords, offer to buy the house from them, rehabilitate it and turn it into affordable housing for first-time homebuyers. Brockton is taking many positive steps towards better meeting the housing needs of their citizens.

BROCKTON: MAPS

Brockton, MA Housing Characteristics



Legend

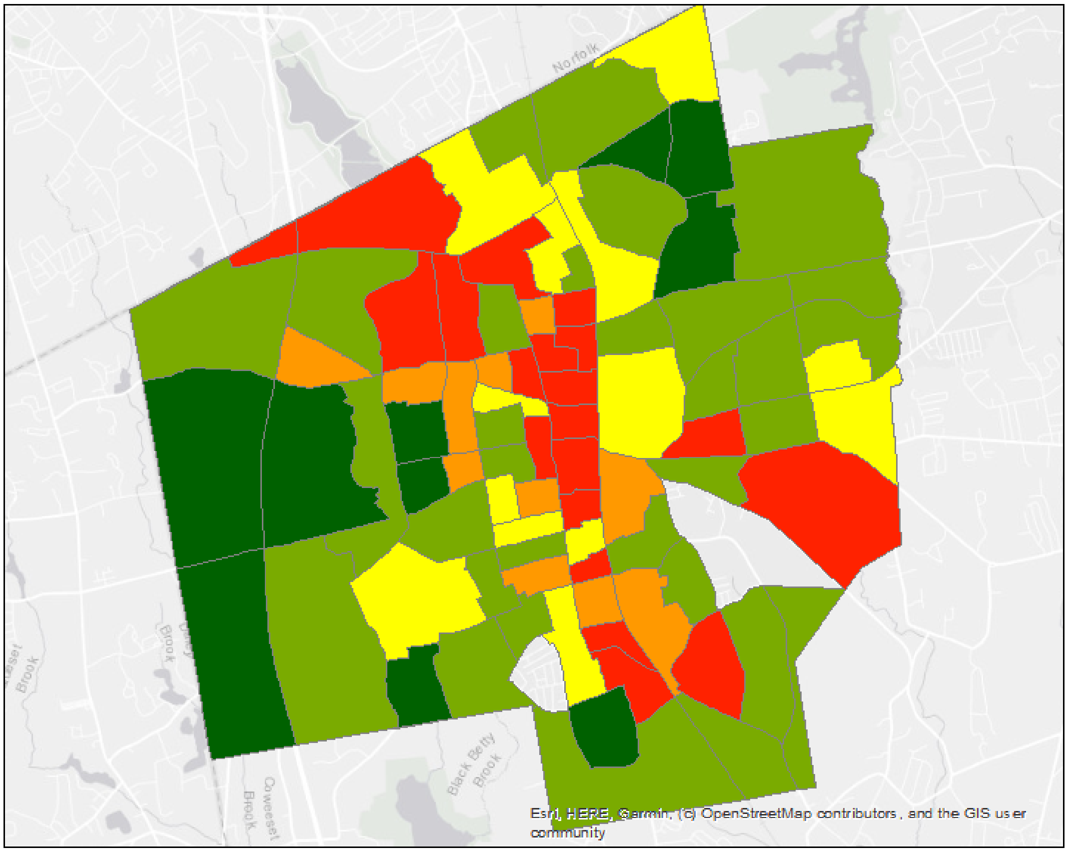
Median Gross Rent as a Percentage of Household Income (2017)

- 10% - 20%
- 20% - 25%
- 25% - 30%
- 30% - 40%
- 40% - 50%

Housing is considered affordable when a household spends less than 30% of their income on rent

Maps created by Maria De La Fuente
Projection: Lambert Conformal Conic
NAD 1983 2011 State Plane Massachusetts FIPS 2001
Units: Feet

Brockton, MA Housing Characteristics



Legend

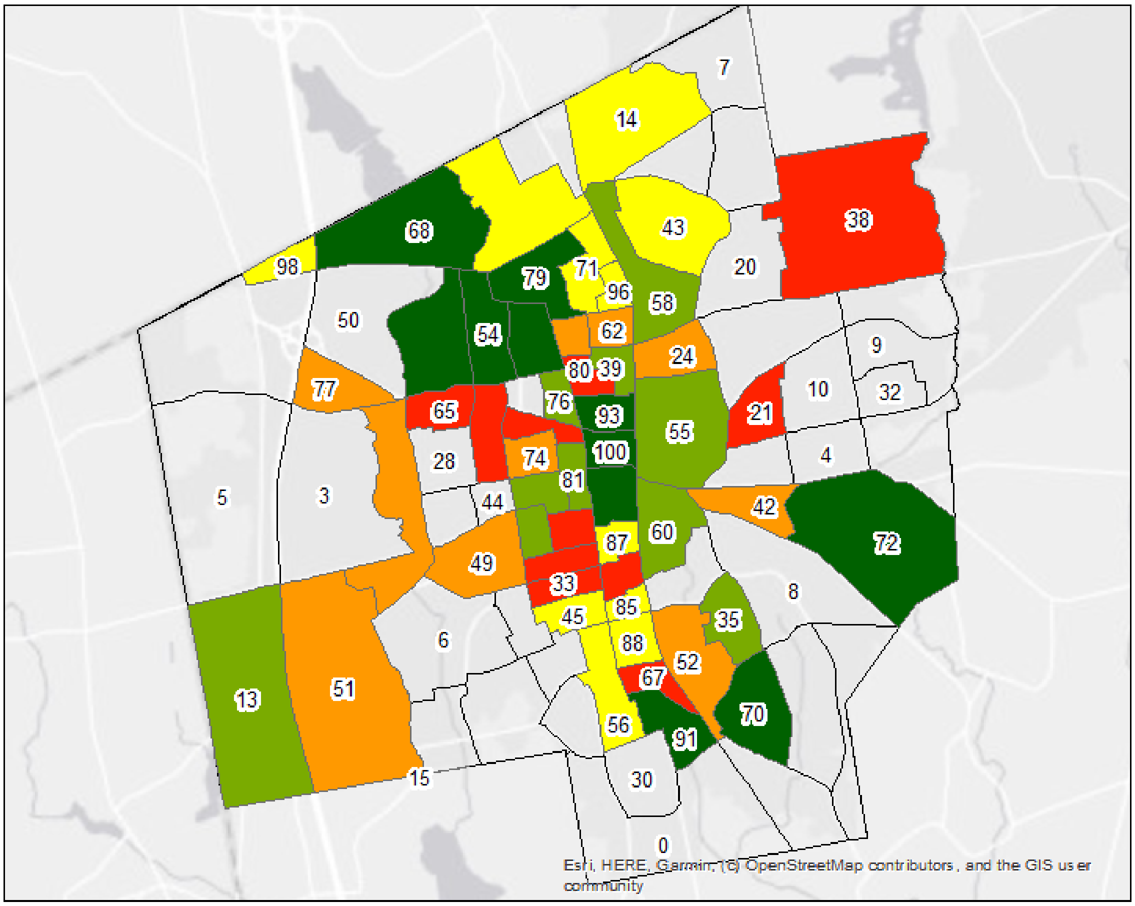
Median Household Income in US dollars (2017)

- $11925 - $36000
- $36001 - $50000
- $50001 - $60000
- $60001 - $90000
- $90001 - $125000

Median HH Income in
Brockton: $62000
Low-income: $49600

Maps created by Maria De La Fuente
Projection: Lambert Conformal Conic
NAD 1983 2011 State Plane Massachusetts FIPS 2001
Units: Feet

Brockton, MA Housing Characteristics



Legend

Median Gross Rent in US dollars (2017)

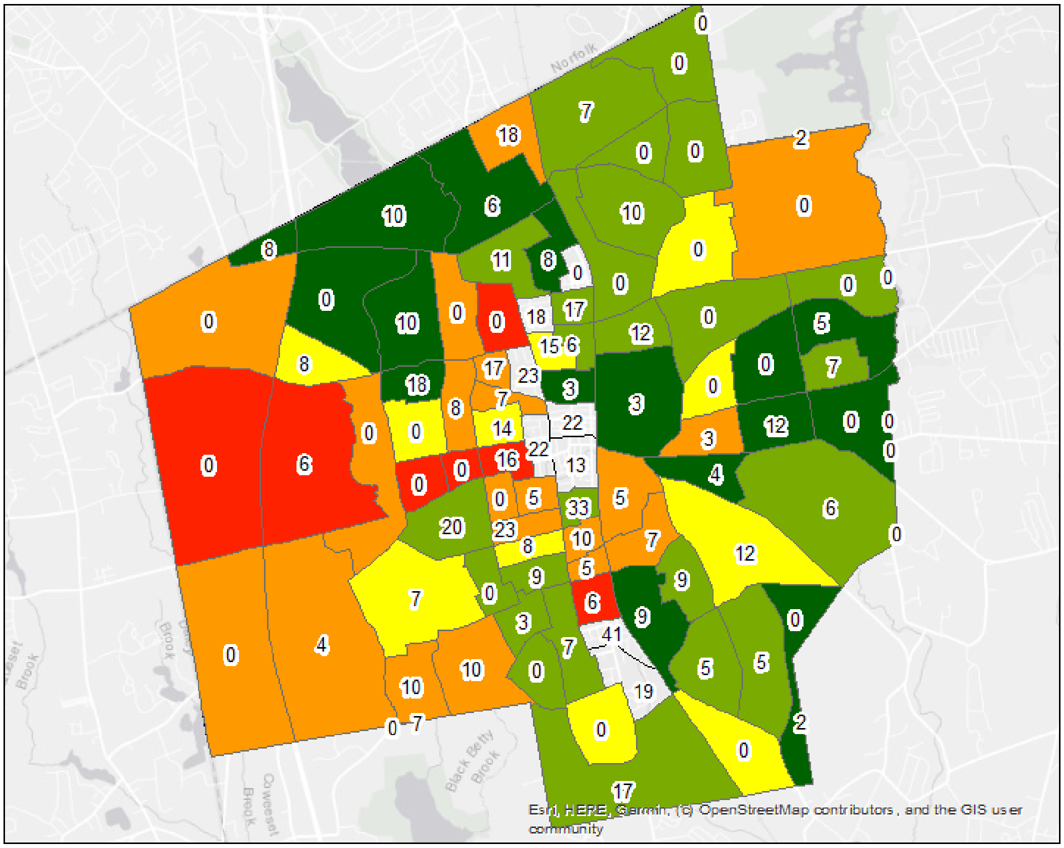
- $280 - $799
- $800 - $1050
- $1051 - $1150
- $1151 - $1250
- $1251 - $2028

Tenure

Numbers inside block groups represent the percentage of units that are renter occupied

Maps created by Maria De La Fuente
Projection: Lambert Conformal Conic
NAD 1983 2011 State Plane Massachusetts FIPS 2001
Units: Feet

Brockton, MA Housing Characteristics



Legend

Median Property Values (dollars)

[in adjusted quantiles]

- $108600 - $210000
- $210001 - $230000
- $230001 - $250000
- $250001 - $300000
- $300001 - $438000

Numbers within Block Groups represent the BG's vacancy rates for property.
Median property value: $236,350
Average vacancy rate: 7.02%
[Note: a rate of less than 5% indicates a highly competitive market]

Maps created by Maria De La Fuente
Projection: Lambert Conformal Conic
NAD 1983 2011 State Plane Massachusetts FIPS 2001
Units: Feet

V. THE NEED FOR AN ALTERNATIVE AFFORDABILITY MEASURE

In order to qualify for state or federal aid, most programs use the federal poverty level as their measure of poverty. This is an insufficient and outdated measure that is not adjusted for local cost of living, nor does it take into account real cost of living. In many cases, the amount suggested by the FPL can cover nothing but rent, so a person might be left with nothing to pay for food, childcare, transportation, medical expenses, etc. In the case of local governments, they use the 30% affordability rule as their standard, but this is also misleading, as sometimes a person may be able to afford their house, but still cannot make ends meet due to other costs of living. In this second half of this thesis, alternative methods of measuring poverty and affordability will be explored.

VI. FEDERAL POVERTY LEVEL: WHY IT IS OUTDATED AND INSUFFICIENT

The Federal Poverty Level (FPL) is an economic measure that sets income thresholds that vary according to family size. These income thresholds determine whether individuals and families qualify for certain federal programs, such as Medicaid, Food Stamps (SNAP), National School Lunch Program, etc. It is updated by the Department of Health and Human Services (HHS), "illustrating the set minimum amount of income that a family needs for food, clothing, transportation, shelter, and other necessities, once a year, adjusted for inflation" (Hayes, 2020). The FPL somewhat varies according to location to take into account the cost of living. The following chart illustrates the 2021 FPL for all of the 48 Contiguous States (Alaska and Hawaii have higher costs of living, so they have their own adjusted FPLs):

Household Size	100% of Poverty	125% of Poverty	200% of Poverty	300% of Poverty
1	$12,880	$16,100	$25,760	$38,640
2	$17,420	$21,775	$34,840	$52,260
3	$21,960	$27,450	$43,920	$65,880
4	$26,500	$33,125	$53,000	$79,500
5	$31,040	$38,800	$62,080	$93,120
6	$35,580	$44,475	$71,160	$106,740
7	$40,120	$50,150	$80,240	$120,360
8	$44,600	$55,750	$89,200	$133,800
each additional person	$4,540	$5,675	$9,080	$13,620

from the US Department of Health and Human Services and The Federal Register Volume 86, Number 19 (Monday, February 1, 2021) pp. Pages 7732-7734

The first problem with the FPL is that a federal standard for poverty should not be applied evenly to all 48 states. Cost of living varies greatly from state to state, and even within states. For example, the average rent for a 1-bedroom apartment in Wyoming's biggest city, Cheyenne, is $733. The average rent for a 1 bedroom in Boston, Massachusetts is $2,050 (Zumper, n.d.). This means that in Cheyenne, WY, a person would spend $8,796 on rent alone in any given year, plus $2,428 on all utilities ($147 a month for home utilities, plus $60 a month for home internet ("Cost of Living in Boston", n.d.), excluding phone bills. This would leave a single adult with only $1,600 to spend on food, transportation (gas and car insurance), medical expenses, clothing, and other miscellaneous expenses.

Now compare the cost of living in Boston, MA. The average rent for a one bedroom is $2,050/month, totaling $24,600, already twice the federal poverty level for a single adult. Average on home utilities ($172/month) plus internet usage ($60/month) add up to $2,784. The total thus far is $27,384, without taking into consideration food, transportation, medical insurance, clothing, and other miscellaneous expenses. It is impossible to apply a single federal poverty standard to 48 states that differ so much in cost of living. Individual states should be encouraged to create their own poverty levels based on local expenses in order to guarantee safe and dignified living for all.

Another problem with the FPL is that, in calculating the amount of money someone should need to live a decent lifestyle, they are not taking into account childcare costs. According to Michael Stone (2006), the federal poverty level would only be an acceptable living standard if we assume the thresholds are the budgets people have after having paid for both shelter and childcare. There are, however, other measures of poverty that are more inclusive.

VII. STONE'S (1983) SHELTER POVERTY THEORY

In 1983, Michael E. Stone described the concept of Shelter Poverty in his essay, "Shelter Poverty in Boston: Problem and Program". Stone argues that most housing problems, not only in Boston, but in the U.S., are the result of inadequate incomes and high housing costs. He believes the current, percentage method of calculating whether a house is affordable or not is absurd, as housing costs are large and inflexible, and as such take first claim on a family's disposable income. The smaller the family, the less they will pay for cost of living. A bigger family, say, two adults and four children, may be paying the 'adequate' amount of 30% of their income on housing, but they will face much higher costs when trying to afford childcare, and when clothing and feeding their household. In Stone's words, "Obviously the large household would need substantially more for its non-shelter necessities than would the small household to achieve comparable material quality of life. This implies that a larger household can afford to spend less for housing—if they are to meet their non-shelter needs at the given level of adequacy—than can the small household" (Stone, 1983, p. 3).

This is where shelter poverty comes in: after paying for housing costs, some families may not have enough income to afford other basic necessities. Therefore, to determine what affordable housing is, one must first determine what is an adequate budget for non-housing necessities, adjusted for family size. As an example, Stone argues the following:

> [I]n 1983 on average a family of four with a gross income of under $21,500 could not afford as much as 25 percent for shelter; indeed, if their income is under $14,000, they cannot afford anything for shelter and still meet their non-shelter necessities at the minimum level specified by the BLS Lower Budget. One-person, elderly households, on the other hand, can afford 25 percent for shelter at an income of about $4,300, and a greater percentage at higher incomes (if they have full medical insurance), but six-person households need incomes of nearly $38,000 to be able to afford 25 percent of income. (Stone, 1983, p. 5).

Stone uses the Bureau of Labor Statistics Lower Budgets for determining the cost of non-shelter needs. This approach will be explained on more detail in the next section, but for now, it suffices to say that when taking into account basic necessities along with housing costs, Stone found that "more than 58,5000 renter families—37 percent of all renter households in Boston—were shelter poor in 1980. Among those renters with incomes of under $10,000 [approximately $31,700 in 2021 dollars], over 45,000 families (59 percent) were shelter poor" (Stone, 1983, p.5).

Stone also highlights the fact that bigger families face more obstacles when trying to make ends meet: "[W]hile 37 percent of all renter families in Boston were shelter poor in 1980, just 26 percent of one- and two-person households were shelter poor, by contrast, 61 percent of three- and four-person renter families and 84 percent of five-or-more-person families were shelter poor" (p. 7). Most households (76% at the time) were just one or two person households, and while only about 25% of one to two person households were shelter poor, this translates to 56% of all shelter poor households at the time. Three or four person households occur at a rate of 17% of all renters, but account for 29% of all shelter poor households. Five or more person households, on the other hand, are much more uncommon, at about a rate of 7% of all renter families, but they account for 17% of all shelter poor households in 1980 (Stone, 1983, p. 7).

When looked at from the individual level, nearly half of all individuals living in shelter poverty were from households of three or more people. If an individual belongs to a household of five or more people, then they are four times as likely to be shelter-poor than a one-person household (Stone, 1983, p. 9).

Another problem Stone addresses is the lack of rental units for bigger households. Using a survey of 2,700 apartments posted on the Boston Sunday Globe, he found that 56% of advertised apartments were one-bedroom units, 37% were two-bedroom, 6% were three-bedroom, and only a bit over 1% were four or more bedrooms. This reveals the new problem of non-availability along with the old problem of non-affordability.

In this paper, Stone's Shelter Theory will be the basis for developing an alternative way of measuring affordable housing and creating realistic family budgets (Stone, 1983, p. 10).

VIII. BUREAU OF LABOR STATISTICS: CONSUMER EXPENDITURE REPORT

The Bureau of Labor Statistics (BLS) has a program that provides data on things such as expenditures, incomes, and demographics of consumers at a national level. Data is collected by the Census Bureau in two surveys, one for major and recurring items (Interview Survey) and one for minor or frequently purchased items (Diary Survey). This data is the only Federal household survey of its type.

The 2019 report has average dollar amounts spent on major categories. It is worth noting that this is a national average for an average consumer, that is, it is not a guide for low-income families, but it is a good guide to create a general picture of expenditures. This is the latest table:

Table A. Average income and expenditures of all consumer units, 2017–19

Item	2017	2018	2019	Percent change 2017–18	Percent change 2018–19
Number of consumer units (000's)	130,001	131,439	132,242	1.1	0.6
Average income before taxes	$73,573	$78,635	$82,852	6.9	5.4
Average annual expenditures	60,060	61,224	63,036	1.9	3.0
Food	7,729	7,923	8,169	2.5	3.1
Food at home	4,363	4,464	4,643	2.3	4.0
Food away from home	3,365	3,459	3,526	2.8	1.9
Housing	19,884	20,091	20,679	1.0	2.9
Shelter	11,895	11,747	12,190	−1.2	3.8
Owned dwellings	6,947	6,678	6,797	−3.9	1.8
Rented dwellings	4,167	4,249	4,432	2.0	4.3
Apparel and services	1,833	1,866	1,883	1.8	0.9
Transportation	9,576	9,761	10,742	1.9	10.1
Vehicle purchases	4,054	3,975	4,394	−1.9	10.5
Gasoline, other fuels, and motor oil	1,968	2,109	2,094	7.2	−0.7
Healthcare	4,928	4,968	5,193	0.8	4.5
Health insurance	3,414	3,405	3,529	−0.3	3.6
Entertainment	3,203	3,226	3,050	0.7	−4.2
Personal care products and services	762	768	786	0.8	2.3
Education	1,491	1,407	1,443	−5.6	2.6
Cash contributions	1,873	1,888	1,995	0.8	5.7
Personal insurance and pensions	6,771	7,296	7,165	7.8	−1.8
Pensions and Social Security	6,353	6,831	6,645	7.5	−2.7
All other expenditures	2,010	2,030	1,891	1.0	−6.8

Note: Only selected subcategories are shown; as a result the subcategories do not sum to their respective major item category.

They also summarize their findings into percentages:

Table B. Shares of average expenditures on selected major components by composition of consumer unit, 2019

Item	All Consumer Units	Married couple only	Married couple with children	Other married couple consumer units	One parent, at least one child under 18	Single person and other consumer units
Housing	32.8	31.0	30.7	33.2	35.7	35.9
Transportation	17.0	16.4	17.9	16.9	17.5	16.7
Food	12.9	12.3	13.3	13.9	14.9	12.8
Personal insurance and pensions	11.4	11.5	13.6	13.6	8.4	9.3
Healthcare	8.2	10.2	7.1	9.1	5.4	8.0
Apparel and services	3.0	2.4	3.3	3.2	4.4	3.0

Tables retrieved from https://www.bls.gov/news.release/cesan.nr0.htm

As we can see, housing is still roughly 30% of a family's expenses-- for the average consumer. The lower income a family is, the higher the percentage spent on housing and food is, and the bigger the family, the higher the childcare costs, food costs, and other miscellaneous costs are.

VIX. BASIC FAMILY BUDGETS: THRESHOLDS FOR WORKING FAMILIES

Sylvia A. Allegreto, in her essay “Basic Family Budgets: Working Families’ Incomes Often Fail to Meet Living Expenses Around the United States”, lays out the foundations for geographically adjusted family budgets. She takes into account 400 different U.S. communities and 6 different family types. One of her major findings is the different expenditure ranges: “The range of basic family budgets for a two-parent, two-child family is $31,080 (rural Nebraska) to $64,656 (Boston, Massachusetts). The median family budget of $39,984 is well above the $19,157 poverty threshold for this size family” (p. 444). Another major finding is the fact that “over three times more working families fall below the basic family budget levels as fall below the official poverty line” (p. 444). Allegretto also establishes the difference these new thresholds make:

> When using poverty thresholds, approximately 37% of families fall below “twice poverty” (i.e., double the poverty line), whether they reside in cities or rural areas. But when using family budget measures, which embody the higher cost of living in cities, one finds that 42% of families living in cities and 30% of families residing in rural areas fall short of basic family budget thresholds (p. 444).

Allegretto uses the following categories for her family budgets:

1. **Housing** based on fair-market rents (FMR) which represent “40th percentile rents (shelter rent plus utilities) for privately owned, decent, structurally safe, and sanitary rental housing of a modest (non-luxury) nature with suitable amenities” (p. 445). If a family has one or two children, two-bedroom apartment rents were used, and three bedrooms for three children (based on HUD guidelines that state that persons of opposite sex [except spouses] or different generations should have separate bedrooms). The FMR is based on the 2000 decennial census, the biannual American Housing Survey, and random digit phone surveys. FMR’s are supposed to include household utilities (no phone or cable). Massachusetts has

"17 metropolitan counties FMRs and 2 nonmetropolitan counties" ("Self-Sufficiency Standard", 2006, p. 2).

2. **Food** costs based on the "'low-cost plan' taken from the Department of Agriculture's report, "Official USDA Food Plans: Cost of Food at Home at Four Levels." The USDA food plans represent the amount families need to spend to achieve nutritionally adequate diets (p. 446).
3. **Transportation** based on the "costs of owning and operating a car for work and other necessary trips. The National Travel Household Survey is used to derive costs that are based on average miles driven per month by size of the metropolitan statistical or rural area multiplied by the cost-per-mile" (p. 446).
4. **Childcare** "based on center-based childcare or family childcare centers for four- and eight-year-olds, as reported by the Children's Defense Fund" (p. 446)
5. **Health care** "based on an amount that recognizes that not all families receive employer-provided health care", which uses a "weighted average of the employee share of the premium for employer-sponsored health insurance and non-group premium costs from an online insurance quote, plus the cost of out-of-pocket medical expenses" (p. 446)
6. **Other necessities** such as "clothing, personal care expenses, household supplies, reading materials, school supplies, and other miscellaneous items of necessity from the Consumer Expenditure Survey" (p. 446)
7. **Taxes** based on Citizens for Tax Justice (CTJ)'s computed taxes for tax year 2004. Allegretto calculates taxes by adjusting for the following: "The six-line items from above represent after-tax budgets. CTJ determined the amount of tax liability that each after-tax budget would incur. Therefore, the after-tax budget along with the additional tax burden

> represents the total pre-tax budget. Taxes included federal personal income taxes, federal Social Security and Medicare payroll taxes (direct worker payments only), and state income taxes. Local income or wage taxes were also included. Included in the calculation are federal tax credits for children and the earned-income tax credit" (p. 446).

The following chart further illustrates the importance of adjusting family budgets per location (from p. 499):

Table 1

Sample family budgets in eight areas for a family with two parents and two children

Budget item	Casper, Wyo.	Johnstown, Pa.	Charlotte, N.C.	Denver, Colo.	Oakland, Calif.	Minneapolis-St. Paul, Minn.	Washington, D.C.	Boston, Mass.
Housing	$470	$428	$719	$888	$1,342	$928	$1,187	$1,266
Food	587	587	587	587	587	587	587	587
Child care	595	954	866	1,001	892	1,364	1,316	1,298
Transportation	375	375	358	358	358	358	321	321
Health care	335	338	368	334	345	345	398	592
Other necessities	285	274	353	398	521	409	479	500
Taxes	−40	243	310	394	406	588	832	824
Monthly total	*$2,607*	*$3,199*	*$3,561*	*$3,960*	*$4,451*	*$4,579*	*$5,120*	*$5,388*
Annual total	**$31,284**	**$38,388**	**$42,732**	**$47,520**	**$53,412**	**$54,948**	**$61,440**	**$64,656**
Percent of poverty threshold	163%	200%	223%	248%	279%	287%	321%	338%

Almost 30% of families fall beneath these basic family budgets, which is similar to the twice-poverty number of 28%. Two out of 10 working families headed by at least one full-year, full-time worker fall beneath these basic levels. A majority of African American or Hispanic headed households also fall beneath these levels, as well as ⅔ of families headed by those who do not have a high school degree or equivalent. Furthermore, 8% of households headed by someone with a college degree still fall beneath recommended guidelines (p. 450). These are alarming numbers.

Single parents also face a struggle when trying to make ends meet. “Households headed by single parents rarely attain incomes above family budget thresholds: just 40.1 percent, 26.3 percent, and 7.5 percent of single-parent families with one, two, or three children, respectively, have incomes that meet basic family budget thresholds” (p. 450). Allegretto provides the following tables to further analyze differences by demographics and location:

TABLE 2
Share of families with income less than family budget, poverty line, and twice poverty (by demographic characteristics)

	Share of families below:		
	Family budget	Poverty line	Twice poverty line
ALL	29.7%	9.4%	28.0%
Race/ethnicity			
White	20.1%	5.5%	19.8%
African American	52.8	21.2	47.6
Hispanic	56.8	18.7	52.8
Other	28.3	7.3	25.3
Education			
Less than high school degree	69.2%	28.9%	68.7%
High school degree only	41.5	13.6	40.5
Some college	29.8	7.8	26.9
College degree	8.7	1.7	7.4
Age			
18-30	47.9%	17.9%	46.8%
31-45	21.3	5.4	19.5
46+	21.9	6.0	20.1
Work status			
Full-time, full-year	22.8%	4.2%	20.6%
Less than full-time, full-year	42.5	19.0	42.1
Family type			
One adult with one child	59.9%	20.8%	50.8%
One adult with two children	73.7	31.4	67.0
One adult with three children	92.5	55.6	86.9
Two adults with one child	18.5	3.7	16.0
Two adults with two children	19.8	5.5	22.1
Two adults with three children	36.2	10.4	34.4
Location			
City	42.5%	14.2%	37.6%
Suburbs	23.3	5.7	19.7
Rural	30.5	12.3	37.0
Region			
Northeast	30.4%	7.4%	22.5%
Midwest	23.4	7.6	24.1
South	31.3	11.8	32.6
West	32.7	8.9	29.2

TABLE 3
Percentage and number of persons in families with incomes less than family budgets (by state)

State/region	Below family budgets: Percent	Below family budgets: Number (in thousands)
Northeast	**28.5%**	**2,638**
Maine	28.9	47
New Hampshire	21.9	43
Vermont	20.3	22
Massachusetts	31.8	350
Rhode Island	28.9	50
Connecticut	22.3	151
New York	35.3	1,106
New Jersey	23.3	383
Pennsylvania	23.5	485
South	**29.9%**	**5,494**
Delaware	23.4	31
Maryland	20.2	179
District of Columbia	48.0	31
Virginia	23.4	284
West Virginia	38.1	86
North Carolina	32.7	476
South Carolina	25.2	177
Georgia	25.6	451
Florida	31.0	822
Kentucky	27.7	217
Tennessee	25.8	287
Alabama	33.8	308
Mississippi	29.6	134
Arkansas	26.8	124
Louisiana	28.2	227
Oklahoma	34.9	198
Texas	35.0	1,462

State/region	Below family budgets: Percent	Below family budgets: Number (in thousands)
Midwest	**21.6%**	**2,445**
Ohio	22.3	439
Indiana	24.1	267
Illinois	22.0	488
Michigan	22.6	409
Wisconsin	17.8	172
Minnesota	18.3	169
Iowa	20.5	96
Missouri	22.6	200
North Dakota	26.2	25
South Dakota	14.9	15
Nebraska	19.5	61
Kansas	22.5	102
West	**32.1%**	**3,728**
Montana	40.3	44
Idaho	37.5	92
Wyoming	16.3	11
Colorado	27.6	255
New Mexico	35.3	119
Arizona	33.5	345
Utah	26.9	120
Nevada	32.0	126
Washington	26.9	292
Oregon	29.9	176
California	33.7	2,048
Alaska	28.2	35
Hawaii	37.2	63
United States	**28.3%**	**14,305**

X. THE SELF-SUFFICIENCY STANDARD

The Self-Sufficiency Standard (SSS) is a project created by the Center for Women's Welfare. It is an extensive, budget-based approach to redefining the poverty line by creating family budgets to set a standard for working families "to meet basic needs at a minimally adequate level, taking into account family composition, ages of children, and geographic differences in costs" ("Self-Sufficiency Standard", 2006).

It is worth noting that for many low-income families, public assistance is a must to meet the high costs of child-care, housing, and appropriate food. This is also a budget that excludes longer term needs such as saving for retirement, or big purchases such as buying a car. In other words, it takes into account only day to day expenses. The SSS also highlights the fact that true self-sufficiency can only be achieved with "access to education, training, and jobs that provide real potential for skill development and career advancement over the long-term" (p. 1).

The Self-Sufficiency Standard is divided into the following categories:

1. **Housing:** The most recent of HUD's Fair Market Rents are used.
2. **Child Care:** does not include free or unpaid childcare provided by close relations, and does not include public or private subsidies. Massachusetts provides childcare assistance at market rate for low-income families who are employed or enrolled in school or training. States usually conduct cost surveys every two years to determine what the market rate currently is. "Data for the 2006 Self-Sufficiency Standard for Massachusetts is from the 75th percentile of the most recent childcare market rate survey, completed in 2002 and effective in 2003" ("Self-Sufficiency Standard", 2006, p. 3).
3. **Food:** based on the U.S. Department of Agriculture (USDA) Low-Cost Food Plan. The Low-Cost Food Plan is a more realistic standard than the Thrifty Food Plan that was used to set the FPL. Food preparation time and consumption patterns are more accurate, while still trying to keep the costs at a minimum. The LCFP does not include take-out or fast food. "Geographic differences in Massachusetts' grocery costs were varied by using

ACCRA's Cost of Living Index for grocery costs. Overall food costs range from 3% lower to 25% higher than the national average" ("Self-Sufficiency Standard", 2006, p. 3).

4. Transportation:

a) Public transportation: This cost is assumed when, in a given area, more than half the region has a public transportation usage of over 7%. Otherwise, private transportation is assumed. Transportation rates are based on the Census Transportation Planning Package. "If more than half of a Region's population has a public transportation usage of over 7%, public transportation costs are used. In Massachusetts, five of the 33 Regions are assumed to have public transportation (all in the Boston-Cambridge-Quincy MA-NH HMFA). Costs are calculated using the Massachusetts Bay Transportation Authority Combo Pass (unlimited travel on all rapid transit service and all local bus service)" ("Self-Sufficiency Standard", 2006, p. 4).

b) Private transportation: Private transportation costs are based on the costs of owning and operating an average sized car. One car is assumed for the single-parent family and two cars, used to commute from work 5 days a week, as well as trips to the daycare if the family has children. "For per-mile costs, driving cost data from the American Automobile Association is used. The commuting distance is computed from the most recent national data available, the National Household Travel Survey 2001" ("Self-Sufficiency Standard", 2006, p. 4).

Auto insurance premiums are taken from the National Association of Insurance Commissioners (NAIC), and general variation ratios are created using sample premiums from the five biggest automobile companies in the state. "However, the Automobile Insurers Bureau of Massachusetts publishes private passenger auto insurance rates for 27 transportation territories. Therefore, this data was used to create population- weighted auto insurance ratios, which were then applied to the 27 Self-Sufficiency Regions with private transportation" ("Self-Sufficiency Standard", 2006, p. 4). Monthly variable costs are included, as well as fixed costs that come with owning a car. To estimate these costs, Consumer Expenditure Surveys usually use the 20-40th percentile by national geographic region.

5. **Health care:** Includes health insurance plus out-of-pocket costs. "In Massachusetts, 77% of non-elderly individuals in households with at least one full-time worker have employer-sponsored health insurance coverage. [...] In Massachusetts, the full-time worker pays an average of 21% of the insurance premium for individual coverage and 26% of the total premium for family coverage, with the employer paying the balance" ("Self-Sufficiency Standard", 2006, p. 5). The Standard uses health care premiums from The Henry J. Kaiser Foundation, which "bases the cost of health insurance premiums on the average premium paid by a state's residents, according to the national Medical Expenditure Panel Survey (MEPS) and adjusted for inflation using the Medical Care Services Consumer Price Index". To vary health insurance premiums for each of the 33 Self-Sufficiency Regions, seven Health Insurance regions from the state's Blue Cross Blue Shield were used. Out of pocket costs are also abstained from the MEPS and adjusted for region and inflation.

6. **Taxes:** include federal and state income tax, payroll taxes, and state and municipal sales tax where applicable. Federal payroll taxes for Social Security and Medicare are calculated at 7.65% of each dollar earned. Although the federal income tax rate is higher than the payroll tax rate, federal exemptions and deductions are substantial. As a result, while payroll tax is paid on every dollar earned, most families will not owe federal income tax on the first $10,000 to $15,000

or more, thus lowering the effective federal tax rate to about 7% for some family types [...] ("Self-Sufficiency Standard", 2006, p. 5).

7. Tax credits:

a) The Earned Income Tax Credit (EITC): "a federal tax refund intended to offset the loss of income from payroll taxes owed by low-income families with earned income" ("Self-Sufficiency Standard", 2006, p. 6). Working adults may receive the tax credit whether or not they owe any federal taxes, usually received annually. Massachusetts' refundable state EITC is 15% of the federal EITC.

b) The Child Care Tax Credit (CCTC), "a federal tax credit that allows working parents to deduct a percentage of their childcare costs from the federal income taxes they owe" ("Self-Sufficiency Standard", 2006, p. 6). CCTC is also deducted from the total amount of money a family needs to be self-sufficient. Because it is not a refundable federal tax credit, a family may only receive it as credit against federal income taxes owed. "Therefore, families who owe very little or nothing in federal income taxes will receive little or no CCTC. In 2006, up to $3,000 was deductible for one qualifying child and up to $6,000 for two or more qualifying children" ("Self-Sufficiency Standard", 2006, p. 6).

c) The Child Tax Credit (CTC), on the other hand, is a refundable federal tax credit. "In 2006, the CTC provided parents with a deduction of $1,000 for each child under 17 years old, or 15% of earned income over $11,300; whichever is less. For the Standard, the CTC is shown as received monthly" ("Self-Sufficiency Standard", 2006, p. 6).

XI. PROBLEMS AND SOLUTIONS TO BASIC FAMILY BUDGET MEASURES

Something both Allegretto's Basic Family Budget and the CWW's Self-Sufficiency Standard lack are market-accurate housing rates. Both budgets use HUD's Fair Market Rents, which ideally represent 40 percentile safe and decent households with utilities included. The problem is, these kinds of units are rarely available in the market. What families may instead find are rents that are significantly higher than the local HUD standard. Take for example the Mansfield HUD FY 2020 rate for a one-bedroom apartment: $953. This is the 40th percentile. The median, or 50th percentile, is $1,017. This number is supposed to include utilities as well.

Now, using data from private websites where people post apartments for rent, we have the following numbers for a one-bedroom in Mansfield: $1,597 (Zumper), $1,630 (ApartmentFinder), between $1,259-$2,180 (RENTcafe). An average of those numbers would be approximately $1,660. The average cost of heating and electricity is $235.76 (AreaVibes). To this we add the cost of wi-fi, which is nowadays a necessity, at around $60 per month, for a total of $296. This adds up to approximately $1,955 in household expenses alone, a figure that is twice higher than HUD's and the Self-Sufficiency Standard's estimate. This $1,002.76 difference is very important when trying to calculate a basic family budget. Therefore, the first revision to the SSS approach will be to update housing to reflect available market rentals and their averages.

For this adjusted approach, we will be using rental data only. To adjust for different family sizes, such as Stone mentioned, the following family categories will be used:

1. Single adult
2. "DINKs": "Double income, no kids" household.
3. One adult, one child
4. Two adults, two children
5. Two adults, four children

These family categories will be applied to the previously analyzed areas: Mansfield, Brockton, and Attleboro. Mansfield represents a wealthy suburb, Brockton represents an entitlement community (a community which receives more State aid to help it develop), and Attleboro represents a gateway community (located at key boundaries, in this case, the MA-RI line). In addition, Boston will be analyzed too, to represent a big city; Pittsfield will be our example of a municipality in a more rural setting (while still being a city, bringing with it all the benefits and challenges of one).

The Self-Sufficiency Standard Tax category is being taken to represent sales tax only, not federal or state income tax, as this varies greatly according to the tax bracket a person belongs to, how many dependents they have, and how many deductions they can claim. In an effort to keep this standard universal, the childcare tax credits have also been removed, as it does not necessarily constitute as a monthly income, and because not everyone qualifies, and those who qualify do so for different amounts, which is hard to account for accurately.

XII. UPDATED HOUSING PROFILE: MANSFIELD

As previously discussed, the percentage of cost-burdened renters (those paying over 30% of their income on rent) in Mansfield is 36.21% of all renter households, while 15% are severely cost burdened (those paying over 50% of their income on rent).

ONE BEDROOM: single adult, DINKs.

The average rent for a one-bedroom apartment ranges from $1,597 (Zumper), $1,630 (ApartmentFinder), between $1,259-$2,180 (RENTcafe). An average of those numbers would be approximately $1,660. As discussed above, the average price for utilities would be $236 a month. This adds up to $1,956 in household expenses for a single adult, or a double income with no children household. These are the updated Self-Sufficiency Standard tables:

MONTHLY COSTS	SINGLE ADULT
Housing	$1,956
Child Care	$0
Food	$287
Transportation	$319
Health Care	$216
Miscellaneous	$177
Sales Taxes	$428/year ($36/month)
MONTHLY TOTAL	**$2,991**
YEARLY TOTAL	**$35,892**

MONTHLY COSTS	DOUBLE INCOME, NO CHILDREN
Housing	$1,956
Child Care	$0
Food	$546
Transportation	$618
Health Care	$592
Miscellaneous	$271
Sales Taxes	$567/year ($47/month)
MONTHLY TOTAL	**$4,030**
YEARLY TOTAL	**$48,360**

TWO BEDROOMS: single parent with one child, two parents with two children

The average rent for a two-bedroom apartment ranges from $2,000 (Zumper), and between $1,259 and $2,535 (RENTcafe). An average of those numbers would be approximately $1,931.

The average utility cost is $296. This adds up to approximately $2,227 in household expenses alone, a figure that is 84% higher than HUD's and the Self-Sufficiency Standard's estimate for a two-bedroom household, which is $1,205. That's a difference of $1,022.

MONTHLY COSTS	SINGLE PARENT, SCHOOL AGE CHILD
Housing	$2,227
Child Care	$1,046
Food	$515
Transportation	$327
Health Care	$555
Miscellaneous	$365
Sales Taxes	$912/year (76/month)
MONTHLY TOTAL	**$5,111**
YEARLY TOTAL	**$61,332**

MONTHLY COSTS	TWO PARENTS, TWO SCHOOL AGE CHILDREN
Housing	$2,227
Child Care	$2,092
Food	$956
Transportation	$626
Health Care	$630
Miscellaneous	$551
Sales Taxes	$1,391/year (116/month)
MONTHLY TOTAL	**$7,202**
YEARLY TOTAL	**$86,424**

THREE BEDROOMS: two adults with four children

The average rent for a three-bedroom apartment ranges from $2,000 (Zumper), and between $1,820 and $2,535 (RENTcafe). An average of those numbers would be approximately $2,118. The average utility cost is $296. This adds up to approximately $2,414 in household expenses alone, a figure that is 56% higher than HUD's and the Self-Sufficiency Standard's estimate for a three-bedroom household, which is $1,543. That's a difference of $871.

MONTHLY COSTS	TWO PARENTS, FOUR SCHOOL AGE CHILDREN
Housing	$2,414
Child Care	$4,183
Food	$1,344
Transportation	$626
Health Care	$669
Miscellaneous	$837
Sales Taxes	$2,635/year (219/month)
MONTHLY TOTAL	**$10,292**
YEARLY TOTAL	**$123,504**

<u>XIII. UPDATED HOUSING PROFILE: ATTLEBORO</u>

As previously discussed, the percentage of cost-burdened renters (those paying over 30% of their income on rent) in Attleboro is 45.31% of all renter households, while 20.19% are severely cost burdened (those paying over 50% of their income on rent). As for utilities, the average cost of heating and electricity is around $235.76 (AreaVibes). To this we add the cost of wi-fi, at around $60 per month, for a total of $295.76.

ONE BEDROOM: single adult, DINKs.

The average rent for a one-bedroom apartment in Attleboro ranges from $990 (BestPlaces), to $1,100 (Zumper). An average of those numbers would be approximately $1,045. The average utility cost is $296. This adds up to approximately $1,341 in household expenses alone, a figure that is 46% higher than the Self-Sufficiency Standard's estimate for a one-bedroom household, which is $915. That's a difference of $426.

MONTHLY COSTS	SINGLE ADULT
Housing	$1,341
Child Care	$0
Food	$287
Transportation	$322
Health Care	$205
Miscellaneous	$173
Sales Taxes	$411/year ($34/month)
MONTHLY TOTAL	**$2,362**
YEARLY TOTAL	**$28,334**

MONTHLY COSTS	DOUBLE INCOME, NO CHILDREN
Housing	$1,341
Child Care	$0
Food	$546
Transportation	$624
Health Care	$557
Miscellaneous	$264
Sales Taxes	$545/year ($45/month)

MONTHLY TOTAL	**$3,377**
YEARLY TOTAL	**$40,524**

TWO BEDROOMS: single parent with one child, two parents with two children

The average rent for a two-bedroom apartment in Attleboro ranges from $1,180 (BestPlaces), to $1,350 (Zumper). An average of those numbers would be approximately $1,265. The average utility cost is $296. This adds up to approximately $1,561 in household expenses alone, a figure that is 40% higher than the Self-Sufficiency Standard's estimate for a two-bedroom household, which is $1,115. That's a difference of $446.

MONTHLY COSTS	SINGLE PARENT, SCHOOL AGE CHILD
Housing	$1,561
Child Care	$1,046
Food	$515
Transportation	$330
Health Care	$520
Miscellaneous	$353
Sales Taxes	$867/year ($72/month)
MONTHLY TOTAL	**$4,397**
YEARLY TOTAL	**$52,764**

MONTHLY COSTS	TWO PARENTS, TWO SCHOOL AGE CHILDREN
Housing	$1,561
Child Care	$2,092

Food	$956
Transportation	$632
Health Care	$596
Miscellaneous	$539
Sales Taxes	$1,347/year ($112/month)
MONTHLY TOTAL	**$6,488**
YEARLY TOTAL	**$77,856**

THREE BEDROOMS: two adults with four children

The average rent for a three-bedroom apartment ranges from $1,480 (BestPlaces) to $1,745 (Zumper). An average of those numbers would be approximately $1,612. The average utility cost is $296. This adds up to approximately $1,908 in household expenses alone, a figure that is 35% higher than the Self-Sufficiency Standard’s estimate for a three-bedroom household, which is $1,408. That’s a difference of $500.

MONTHLY COSTS	TWO PARENTS, FOUR SCHOOL AGE CHILDREN
Housing	$1,908
Child Care	$4,183
Food	$1,344
Transportation	$632
Health Care	$635
Miscellaneous	$820
Sales Taxes	$2,538/year ($211/month)
MONTHLY TOTAL	**$9,733**
YEARLY TOTAL	**$116,796**

XIV. UPDATED HOUSING PROFILE: BROCKTON

The percentage of cost-burdened renters (those paying over 30% of their income on rent) in Brockton is 55.95% of all renter households, while 26% are severely cost burdened (those paying over 50% of their income on rent). As for utilities, the average cost of heating and electricity is around $214 (AreaVibes). To this we add the cost of wi-fi, at around $60 per month, for a total of $274.

ONE BEDROOM: single adult, DINKs.

The average rent for a one-bedroom apartment in Brockton ranges from $1,413 (BestPlaces), to $1,200 (Zumper). An average of those numbers would be approximately $1,306. The average utility cost is $274. This adds up to approximately $1,580 in household expenses alone, a figure that is 37% higher than the Self-Sufficiency Standard's estimate for a one-bedroom household, which is $1,155. That's a difference of $426.

MONTHLY COSTS	SINGLE ADULT
Housing	$1,580
Child Care	$0
Food	$317
Transportation	$379
Health Care	$205
Miscellaneous	$206
Sales Taxes	$532/year ($44/month)
MONTHLY TOTAL	**$2,731**
YEARLY TOTAL	**$32,772**

MONTHLY COSTS	DOUBLE INCOME, NO CHILDREN
Housing	$1,580
Child Care	$0
Food	$603
Transportation	$738
Health Care	$557
Miscellaneous	$305
Sales Taxes	$690/year ($57/month)
MONTHLY TOTAL	**$3,840**
YEARLY TOTAL	**$46,080**

TWO BEDROOMS: single parent with one child, two parents with two children

The average rent for a two-bedroom apartment in Brockton ranges from $1,600 (Zumper), to $1,670 (BestPlaces). An average of those numbers would be approximately $1,635. The average utility cost is $274. This adds up to approximately $1,909 in household expenses alone, a figure that is 25% higher than the Self-Sufficiency Standard's estimate for a two-bedroom household, which is $1,522. That's a difference of $387.

MONTHLY COSTS	SINGLE PARENT, SCHOOL AGE CHILD
Housing	$1,909
Child Care	$1,046
Food	$569
Transportation	$387
Health Care	$520
Miscellaneous	$404

Sales Taxes	$1,059/year ($88/month)
MONTHLY TOTAL	**$4,923**
YEARLY TOTAL	**$59,076**

MONTHLY COSTS	TWO PARENTS, TWO SCHOOL AGE CHILDREN
Housing	$1,909
Child Care	$2,092
Food	$1,055
Transportation	$747
Health Care	$596
Miscellaneous	$601
Sales Taxes	$1,577/year ($131/month)
MONTHLY TOTAL	**$7,131**
YEARLY TOTAL	**$85,572**

THREE BEDROOMS: two adults with four children

The average rent for a three-bedroom apartment in Brockton ranges from $1,839 (BestPlaces) to $1,850 (Zumper). An average of those numbers would be approximately $1,844. The average utility cost is $274. This adds up to approximately $2,118 in household expenses alone, a figure that is 10% higher than the Self-Sufficiency Standard's estimate for a three-bedroom household, which is $1,911. That's a difference of $207.

MONTHLY COSTS	TWO PARENTS, FOUR SCHOOL AGE CHILDREN
Housing	$2,118
Child Care	$4,183

Food	$1,484
Transportation	$747
Health Care	$635
Miscellaneous	$896
Sales Taxes	$2,989/year ($249/month)
MONTHLY TOTAL	**$10,312**
YEARLY TOTAL	**$123,744**

XV. HOUSING PROFILE: PITTSFIELD

The city of Pittsfield was chosen to represent an urban center in the Berkshires, where property prices tend to be lower. According to Zillow, for example, the average home price in Pittsfield is $200,000.

The percentage of cost-burdened renters (those paying over 30% of their income on rent) in Pittsfield, according to Housing.MA, is 54.69% of all renter households, while 28.75% are severely cost burdened (those paying over 50% of their income on rent). As for utilities, the average cost of all electric bills is $173 (PayScale), and according to Numbeo all basic utilities for a 900 sq. ft, apartment are around $150. This averages out to approximately $161 in utilities a month. To this we add the cost of wi-fi, at around $60 per month, for a total of $221 a month.

ONE BEDROOM: single adult, DINKs.

The average rent for a one-bedroom apartment in Pittsfield ranges from $831 (Apartments.com), $860 (BestPlaces), to $1,225 (Zumper). An average of those numbers would be approximately $972. The average utility cost is $221. This adds up to approximately $1,193 in household expenses alone, a figure that is 46% higher than the Self-Sufficiency Standard's estimate for a one-bedroom household, which is $815. That's a difference of $378.

MONTHLY COSTS	SINGLE ADULT
Housing	$1,193
Child Care	$0
Food	$296
Transportation	$316
Health Care	$230
Miscellaneous	$166
Sales Taxes	$385/year ($32/month)
MONTHLY TOTAL	**$2,233**
YEARLY TOTAL	**$26,796**

MONTHLY COSTS	DOUBLE INCOME, NO CHILDREN
Housing	$1,193
Child Care	$0
Food	$564
Transportation	$613
Health Care	$633
Miscellaneous	$262
Sales Taxes	$539/year ($45/month)
MONTHLY TOTAL	**$3,310**
YEARLY TOTAL	**$39,720**

TWO BEDROOMS: single parent with one child, two parents with two children

The average rent for a two-bedroom apartment in Pittsfield ranges from $1,070 (BestPlaces), $1,074 (Apartments.com), to $1,350 (Zumper). An average of those numbers would be approximately $1,164. The average utility cost is $221. This adds up to approximately $1,385 in household expenses alone, a figure that is 35% higher than the Self-Sufficiency Standard's estimate for a two-bedroom household, which is $1,026. That's a difference of $359.

MONTHLY COSTS	SINGLE PARENT, SCHOOL AGE CHILD
Housing	$1,385
Child Care	$765
Food	$532
Transportation	$324
Health Care	$596
Miscellaneous	$324
Sales Taxes	$762/year ($63/month)
MONTHLY TOTAL	**$3,989**
YEARLY TOTAL	**$46,868**

MONTHLY COSTS	TWO PARENTS, TWO SCHOOL AGE CHILDREN
Housing	$1,385
Child Care	$1,531
Food	$986
Transportation	$621
Health Care	$672
Miscellaneous	$484
Sales Taxes	$1,142/year ($95/month)

MONTHLY TOTAL	**$5,774**
YEARLY TOTAL	**$69,288**

THREE BEDROOMS: two adults with four children

The average rent for a three-bedroom apartment in Pittsfield ranges from $1,350 (Zumper), to $1,370 (BestPlaces). An average of those numbers would be approximately $1,360. The average utility cost is $221. This adds up to approximately $1,581 in household expenses alone, a figure that is 20% higher than the Self-Sufficiency Standard's estimate for a three-bedroom household, which is $1,309. That's a difference of $272.

MONTHLY COSTS	TWO PARENTS, FOUR SCHOOL AGE CHILDREN
Housing	$1,581
Child Care	$3,062
Food	$1,387
Transportation	$621
Health Care	$710
Miscellaneous	$709
Sales Taxes	$1,875/year ($156/month)
MONTHLY TOTAL	**$8,226**
YEARLY TOTAL	**$98,712**

XVI. HOUSING PROFILE: BOSTON

The city of Boston was chosen to represent life in a big city, where cost of living tends to be much higher. According to Zillow, for example, the average home price in Boston is $660,000.

The percentage of cost-burdened renters (those paying over 30% of their income on rent) in Boston is 51.85% of all renter households, while 27.72% are severely cost burdened (those paying over 50% of their income on rent). As for utilities, the average cost of all electric bills is $236.57 (PayScale), and according to Numbeo all basic utilities for a 900 sq. ft, apartment are around $174. This averages out to approximately $205 in utilities a month. To this we add the cost of wi-fi, at around $60 per month, for a total of $265 a month.

ONE BEDROOM: single adult, DINKs.

The average rent for a one-bedroom apartment in Boston ranges from $1,836 (BestPlaces), $2,090 (Zumper), to $2,780 (Apartments.com). An average of those numbers would be approximately $2,235. The average utility cost is $265. This adds up to approximately $2,500 in household expenses alone, a figure that is 22% higher than the Self-Sufficiency Standard's estimate for a one-bedroom household, which is $2,048. That's a difference of $452.

MONTHLY COSTS	SINGLE ADULT
Housing	$2,500
Child Care	$0
Food	$347
Transportation	$128
Health Care	$209
Miscellaneous	$273
Sales Taxes	$783/year ($65/month)
MONTHLY TOTAL	**$3,522**
YEARLY TOTAL	**$42,264**

MONTHLY COSTS	DOUBLE INCOME, NO CHILDREN
Housing	$2,500
Child Care	$0
Food	$662
Transportation	$256
Health Care	$569
Miscellaneous	$353
Sales Taxes	$868/year ($72/month)
MONTHLY TOTAL	**$4,412**
YEARLY TOTAL	**$52,944**

TWO BEDROOMS: single parent with one child, two parents with two children

The average rent for a two-bedroom apartment in Boston ranges from $2,238 (BestPlaces) to $2,600 (Zumper). An average of those numbers would be approximately $2,419. The average utility cost is $265. This adds up to approximately $2,684 in household expenses alone, a figure that is 8.3% higher than the Self-Sufficiency Standard's estimate for a two-bedroom household, which is $2,478. That's a difference of $206.

MONTHLY COSTS	SINGLE PARENT, SCHOOL AGE CHILD
Housing	$2,684
Child Care	$1,161
Food	$624
Transportation	$128
Health Care	$533
Miscellaneous	$492

Sales Taxes	$1,468/year ($122/month)
MONTHLY TOTAL	**$5,744**
YEARLY TOTAL	**$68,928**

MONTHLY COSTS	**TWO PARENTS, TWO SCHOOL AGE CHILDREN**
Housing	$2,684
Child Care	$2,322
Food	$1,157
Transportation	$256
Health Care	$608
Miscellaneous	$682
Sales Taxes	$1,905/year ($159/month)
MONTHLY TOTAL	**$7,868**
YEARLY TOTAL	**$94,416**

THREE BEDROOMS: two adults with four children

The average rent for a two-bedroom apartment in Boston ranges from $2,805 (BestPlaces) to $3,000 (Zumper). An average of those numbers would be approximately $2,902. The average utility cost is $265. This adds up to approximately $3,168 in household expenses alone, a figure that is 2.6% higher than the Self-Sufficiency Standard’s estimate for a two-bedroom household, which is $3,086. That’s a difference of $82.

MONTHLY COSTS	**TWO PARENTS, FOUR SCHOOL AGE CHILDREN**
Housing	$3,168
Child Care	$4,643

Food	$1,627
Transportation	$256
Health Care	$647
Miscellaneous	$1,026
Sales Taxes	$3,762/year ($313/month)
MONTHLY TOTAL	**$11,680**
YEARLY TOTAL	**$140,160**

XVII. COST OF LIVING: VISUAL COMPARISON

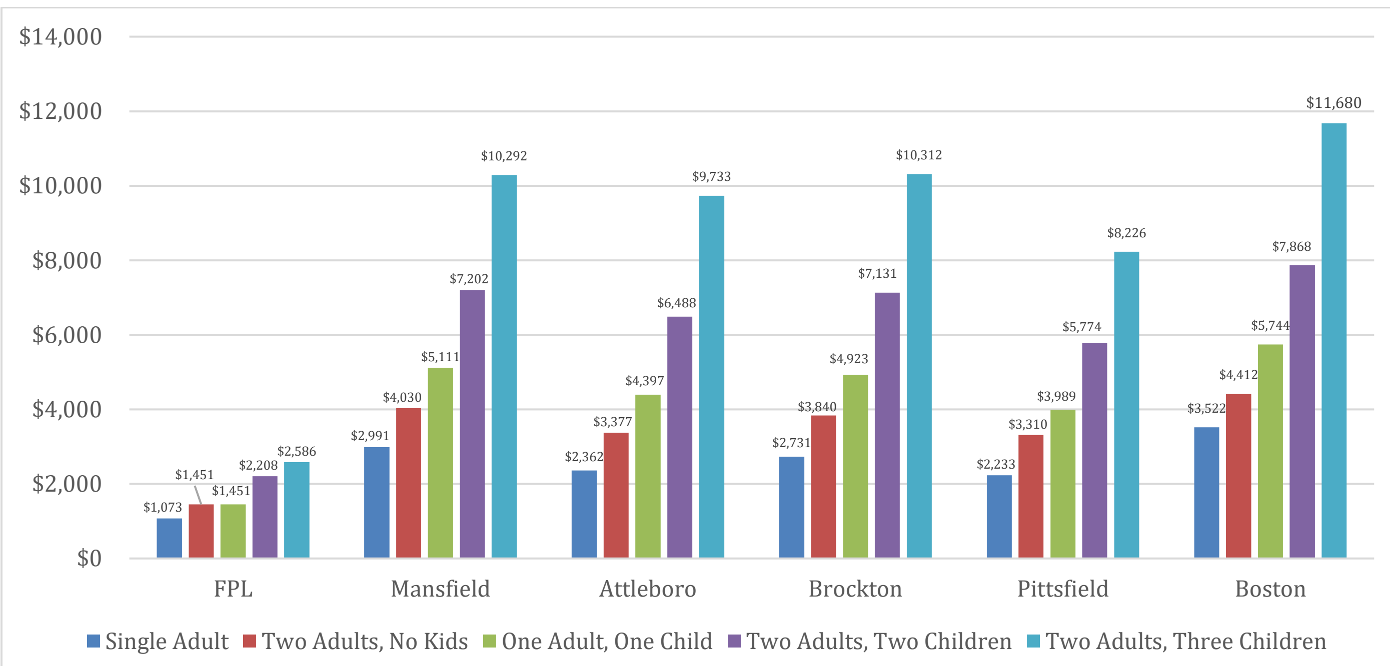
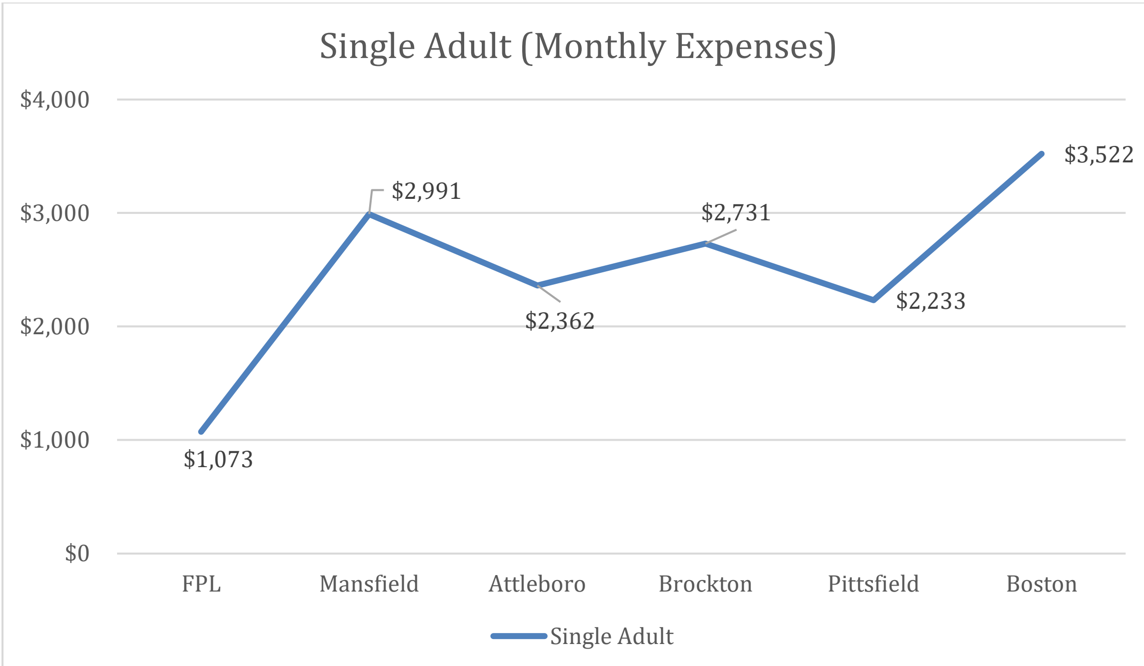
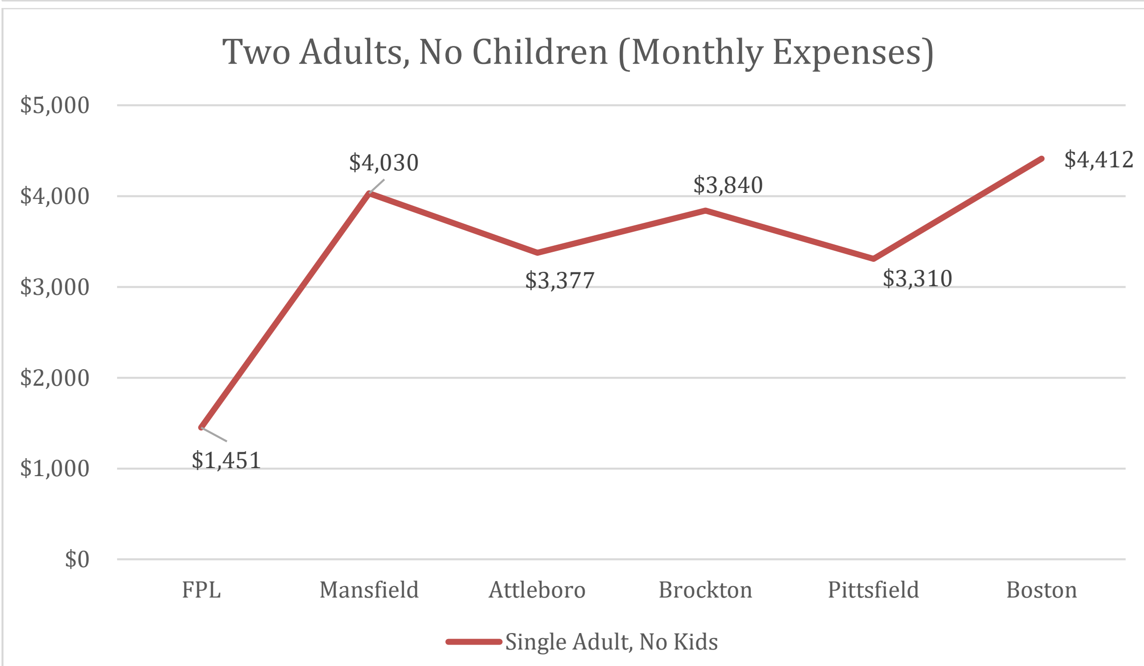
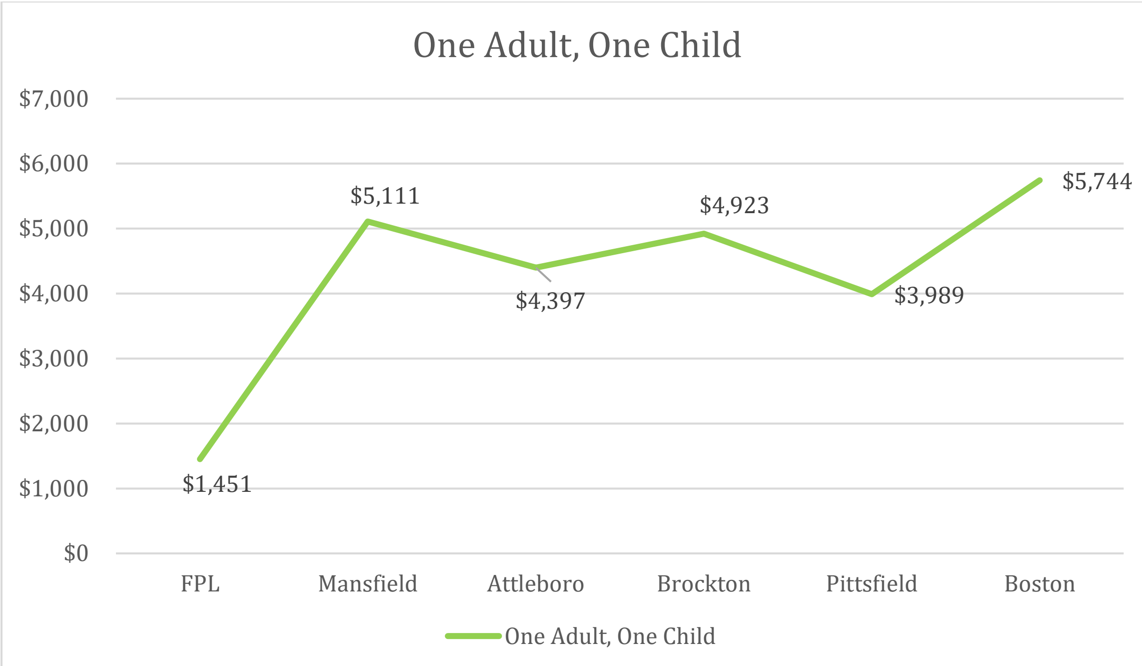
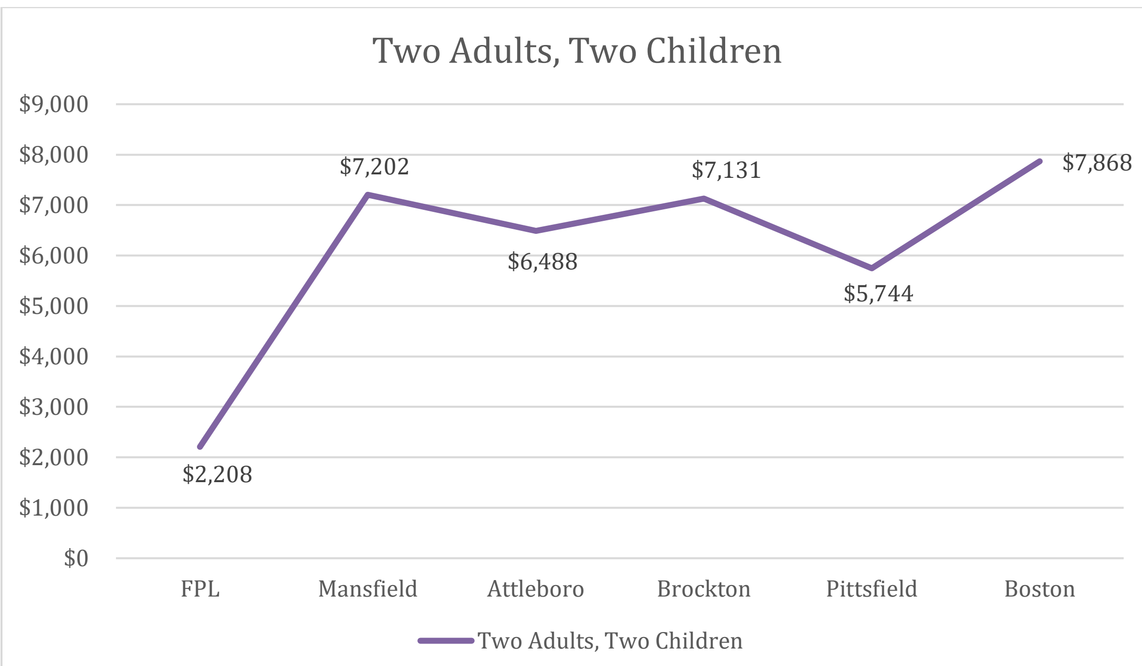


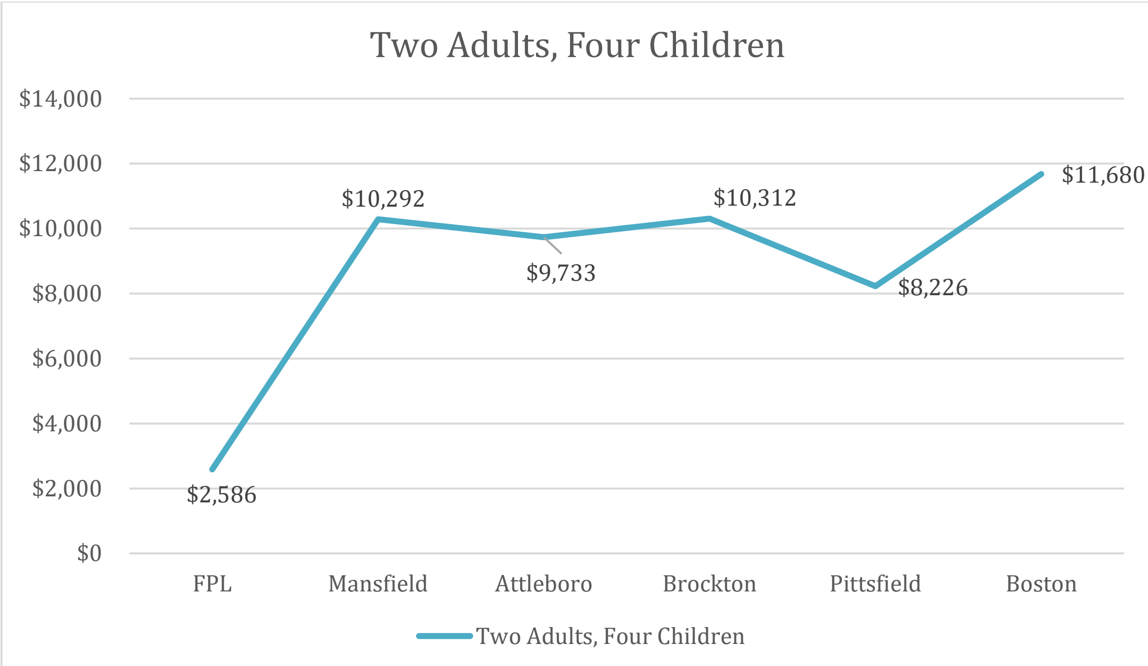
Figure 1: Monthly Cost of Living per Municipality and Family Type


Single Adult (Monthly Expenses)
$4,000
$3,000
$2,000
$1,000
$0
$1,073
$2,991
$2,362
$2,731
$2,233
$3,522
FPL
Mansfield
Attleboro
Brockton
Pittsfield
Boston
Single Adult


Two Adults, No Children (Monthly Expenses)
$5,000
$4,000
$3,000
$2,000
$1,000
$0
$1,451
$4,030
$3,377
$3,840
$3,310
$4,412
FPL
Mansfield
Attleboro
Brockton
Pittsfield
Boston
Single Adult, No Kids


One Adult, One Child
$7,000
$6,000
$5,000
$4,000
$3,000
$2,000
$1,000
$0
$5,111
$4,923
$5,744
$4,397
$3,989
$1,451
FPL
Mansfield
Attleboro
Brockton
Pittsfield
Boston
One Adult, One Child


Two Adults, Two Children
$9,000
$8,000
$7,000
$6,000
$5,000
$4,000
$3,000
$2,000
$1,000
$0
$7,202
$7,131
$7,868
$6,488
$5,744
$2,208
FPL
Mansfield
Attleboro
Brockton
Pittsfield
Boston
Two Adults, Two Children



XVII. CONCLUSION: REDEFINING AFFORDABILITY

Providing affordable housing to those making 80% or less of the AMI was a good start towards providing shelter, the single biggest expense a household faces, to people who might need it. This method of measuring and providing affordable housing is better than using the FPL, for example, as using Average Median Incomes takes into account local cost of living, which the FPL does very poorly. The problem is that the FPL is still widely used to measure who is or isn't qualified for social programs. The Federal Poverty Level simply cannot meet the most basic requirements for decent living. In many areas, the FPL is simply enough to cover rent and nothing else. In order to guarantee affordable housing, or said more accurately, eradicate shelter poverty, we need to have a good grasp on the population's needs in order to be able to help those who cannot make ends meet.

Furthermore, how much of a family's income goes for housing and whether this is less or more than 30% does not really mean anything—the real question is, how much residual income do they have after covering the costs of shelter? Do they have enough to feed themselves and their children, to cover the costs of transportation to and from work, enough money to cover medical expenses and day to day necessities? A different approach towards measuring poverty is needed if we want to adjust supply to match the existing demand.

Taking a family budget approach would be a good first step towards solving the housing issue. The most complete family budget approach would be the Center for Women's Welfare Self-Sufficiency Standard. It covers all major day-to-day costs a family might face, and it has over 70 different family types (a combination of family size and of each family member's age). It also has data for every single town or city in the United States. This makes it a wonderful, flexible base for the family budget approach. Some of its drawbacks, which I have tried to correct in this work, is that its housing budget simply does not reflect market prices. Some differences were as small as $82, others were as big as $1,022 per month. On average, the difference between the Standard's housing budget and market price is $469, or a 38% increase. Another drawback is that taxes and incentives cannot be effectively calculated in a budget, as every family's situation is different.

Taking these drawbacks into account, I have updated the Self-Sufficiency Standard to include current housing prices (which are currently lower than before, because of the COVID-19 pandemic; under normal circumstances, the difference in the Standard and my proposed adjusted method would have been higher). Additionally, I have taken tax credits out of the equation. It is also worth noting that the family budget approach takes into account day to day expenses alone and is a good starting point, but families also need to save for their future and for emergencies. In other words, family budgets are a good minimum income threshold, but is by no means an absolute formula.

As for policy implementation, actually changing the way we measure poverty, from the FPL to an alternative method such as a budget-based approach, is very unlikely to happen. No politician will want to be the one to adopt an alternative measure of poverty that would result in more people qualifying as poor. While nothing in people's lives would actually have changed, the number of those we consider poor will most likely double. No politician or elected public official would want to shoulder this bigger responsibility that could portray them in a negative light.

What I suggest instead is that the FPL stay in place as the bare minimum requirement to meet, but states should have a higher threshold when adjusting for local cost of living. A federal poverty line is simply too broad and too general for such a big and varied country such as the United States. States should take responsibility for their resident's wellbeing an adopt a state poverty line (SPL), adjusted for family size. This amount is what should be used as a guideline for determining who would qualify for government aid and social welfare. The SPL should be based on an average of all municipalities' adjusted self-sufficiency standard, adjusted for family size. To be able to actually and realistically tackle poverty, we need to portray it in a more accurate light. This would be the first step towards redefining poverty and adjusting our affordable housing supply.

As for local governments, I suggest they make this adjusted Self-Sufficiency Standard available in public documents such as their Master Plans and Housing Production Plans, as well as their websites. Public documents, while incredibly useful and readily available, are not usually read by the average resident. Therefore, if there is a tab on a local government website titled

‘Thinking of moving here? This is what you need to know’ or something similar, people would be more likely to access this information. Before people decide to move, they should be aware of the cost of living of their new destination. Someone moving from Pittsfield to Mansfield will most likely be shocked at the increased cost of child-care, or find that the lack of supply in rental housing in Mansfield has driven the prices up higher than they thought. Households should be able to make informed decisions about where to move, and know how much basic services cost to know whether a certain town or city is the right fit for their budget.

While I believe an adjusted Self-Sufficiency Standard is the most accurate way of measuring poverty and cost of living, I understand that its very local nature makes it hard to implement at a wider scale, which is why I have suggested a State Poverty Line as a bigger-picture approach. But when dealing with localities, I believe the Self-Sufficiency Standard should be widely and publicly available, and used by the public and public officials as a ‘soft’ guideline to follow. The reason I say a ‘soft’ guideline instead of a set rule is because people should have the freedom to move anywhere they want, as that is their personal choice and no government should stop them. But people should have the government looking out for their best interests and providing information like cost of living to help them make an informed choice.

By providing a breakdown of the way affordability is calculated, and having analyzed current laws and methods of measuring housing demand, I hope to have shed some light on the way housing is set up in the United States. Additionally, by having shown alternative methods of measuring poverty and proposing possible policy approaches, I hope to help change the way we understand poverty, as it is only through understanding of a subject that we can achieve lasting change.

Bibliography

Allegretto, S. A. (2005). Basic Family Budgets: Working Families' Incomes Often Fail to Meet Living Expenses Around the United States. Retrieved from (https://www.researchgate.net/publication/6811945_Basic_Family_Budgets_Working_Families'_Incomes_Often_Fail_to_Meet_Living_Expenses_around_the_United_States

Areavibes. (n.d.). Attleboro, MA Cost of Living. Retrieved from https://www.areavibes.com/attleboro-ma/cost-of-living/#utilities

Areavibes. (n.d.). Brockton, MA Cost of Living. Retrieved from https://www.areavibes.com/brockton-ma/cost-of-living/#utilities

Attleboro, Massachusetts (MA) income map, earnings map, and wages data (n.d.). Retrieved from http://www.city-data.com/income/income-Attleboro-Massachusetts.html

BestPlaces. (n.d.). Cost of Living: Pittsfield. Retrieved from https://www.bestplaces.net/cost_of_living/city/massachusetts/pittsfield

Brockton, Massachusetts (MA) income map, earnings map, and wages data (n.d.). Retrieved from http://www.city-data.com/income/income-Brockton-Massachusetts.html

Bureau of Labor Statistics. (2020, September 09). Consumer Expenditures: 2019. Retrieved from https://www.bls.gov/news.release/cesan.nr0.htm

Bureau of Labor Statistics. (n.d.). Consumer Expenditure Report. Retrieved from https://www.bls.gov/cex/.

Center for Women's Welfare. (2006). Self-Sufficiency Standard. Retrieved from http://www.selfsufficiencystandard.org/

CHAPA (2014). Chapter 40B Fact Sheet [PDF]. Retrieved from https://www.chapa.org/sites/default/files/40%20B%20fact%20sheet_0.pdf

CHAPA (July 2008). Affordable Housing Guidebook for Massachusetts [PDF file]. Retrieved from https://www.chapa.org/sites/default/files/f_122952789640BUpdateDec2008_3.pdf

City of Attleboro (2012). Attleboro Comprehensive Plan [PDF]. Retrieved from http://www.cityofattleboro.us/DocumentCenter/View/394/Comprehensive-Plan-PDF

City of Attleboro (2019). Community Development Block Grant Program (CDBGP) [PDF]. Retrieved from https://www.cityofattleboro.us/DocumentCenter/View/3578/2019-2023-Con-Plan

Department of Housing and Community Development. (2017). Chapter 40B Subsidized Housing Inventory (SHI). Mass.gov.

Economic Policy Institute. (n.d.). Family Budget Calculator. Retrieved from https://www.epi.org/resources/budget/

Hayes, A. (2021, March 23). Federal Poverty Level (FPL). Retrieved from https://www.investopedia.com/terms/f/fpl.asp

Housing Brockton MA. Retrieved 26 February 2020, from http://www.housing.ma/brockton/report

HousingMA (n.d.). Attleboro Profile. Retrieved from http://www.housing.ma/attleboro/profile

HousingMA (n.d.). Brockton Profile. Retrieved from http://www.housing.ma/brockton/profile

HousingMA (n.d.). Mansfield Profile. Retrieved from http://www.housing.ma/mansfield/profile

HousingMA. (n.d.). Housing Data Profile: Boston. Retrieved from http://www.housing.ma/boston/profile

HousingMA. (n.d.). Housing Data Profile: Pittsfield. Retrieved from http://www.housing.ma/pittsfield/profile

HUD.Gov (n.d.). Housing Choice Voucher Program Section 8. Retrieved from https://www.hud.gov/topics/housing_choice_voucher_program_section_8

Joint Center of Housing Studies (2017). Nearly a Third of American Households were Cost-Burdened Last Year. Retrieved from https://www.jchs.harvard.edu/blog/more-than-a-third-of-american-households-were-cost-burdened-last-year/

Mansfield, Massachusetts (MA) income map, earnings map, and wages data (n.d.). Retrieved from http://www.city-data.com/income/income-Mansfield-Massachusetts.html

MAPC (n.d.). What is a Housing Production Plan?. Retrieved from https://www.mapc.org/resource-library/whatishpp/

MassGov (2019). Income Limits for State and Public Housing [PDF File]. Retrieved from https://www.mass.gov/doc/income-limits-for-state-aided-public-housing/download

MassGov (2020). Housing Development Incentive Program (HDIP), Retrieved from https://www.mass.gov/service-details/housing-development-incentive-program-hdip

MassGov (n.d.) Chapter 40B Planning and Information. Retrieved from https://www.mass.gov/chapter-40-b-planning-and-information

MassGov (n.d.) Chapter 40R. Retrieved from https://www.mass.gov/service-details/chapter-40r.

MassHousing (n.d.). Income Limit Search. Retrieved from https://www.masshousing.com/home-ownership/homebuyers/income-limits

Methodology for the Self-Sufficiency Standard (Publication). (2006). Retrieved http://selfsufficiencystandard.org/sites/default/files/selfsuff/docs/MA2006_methodology.pdf

My Mass Mortgage (n.d.). ONE Mortgage. Retrieved from https://www.mymassmortgage.org/mhp-product

My Mass Mortgage. Affordable Mortgage Comparison Chart. Retrieved from https://www.mymassmortgage.org/affordable-mortgage-comparison

Numbeo. (n.d.). Cost of Living in Boston. Retrieved from https://www.numbeo.com/cost-of-living/in/Boston

Numbeo. (n.d.). Cost of Living in Cheyenne. Retrieved from https://www.numbeo.com/cost-of-living/in/Cheyenne

Numbeo. (n.d.). Cost of Living in Pittsfield. Retrieved from https://www.numbeo.com/cost-of-living/in/Pittsfield-MA-United-States

OCPCRPA (2017). Brockton Housing Strategy. Retrieved from http://www.ocpcrpa.org/docs/projects/DLTA/Brockton_Housing_Strategy_Plan.pdf

PayScale. (n.d.). Cost of Living in Boston, Massachusetts. Retrieved from https://www.payscale.com/cost-of-living-calculator/Massachusetts-Boston

PayScale. (n.d.). Cost of Living in Pittsfield, Massachusetts. Retrieved from https://www.payscale.com/cost-of-living-calculator/Massachusetts-Pittsfield

Pendola, Rocco. What Do I Need to Qualify for Low-Income Housing? Retrieved from http://homeguides.sfgate.com/need-qualify-low-income-housing-1902.html.

SRPEDD (2016). Mansfield Housing Production Plan [PDF]. Retrieved from http://www.srpedd.org/manager/external/ckfinder/userfiles/resources/Comprehensive%20Planning%20and%20Zoning/2016-Mansfield-HPP.pdf

Stone, M. E. (1983). *Shelter Poverty in Boston: Program and Problem* (Publication). Boston, MA: University of Massachusetts.

Stone, M. E. (2006, January). What is Housing Affordability? The Case for the Residual Income Approach. Retrieved from https://www.researchgate.net/publication/239923487_What_is_Housing_Affordability_The_Case_for_the_Residual_Income_Approach