



AFFORDABLE HOUSING NEEDS ASSESSMENT: MADISON COUNTY, NY

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PART I: *INTRODUCTION*

I. Introduction

Interviews with Local Organizations & Stakeholders

Madison County Department of Social Services

We spoke with Mr. Mike Fitzgerald, Director of the Madison County Department of Social Services regarding the county's need for affordable housing.

Stoneleigh Housing

We spoke with Mr. Robert (Bob) Napoli, Director of Stoneleigh Housing Authority regarding the current stock of affordable housing units within Madison County as well as current weatherization and energy efficiency programs available to Madison County residents.

Colgate University Physics Department

We spoke to Professor Beth Parks regarding her involvement with the Weatherization Assistance Program in Hamilton and Madison County.

Onondaga County Executive Office

We spoke with Martin Skahen, Director of Community Development about lead hazard programs and housing health in neighboring Onondaga County.

Oneida Housing Authority

We spoke with Mrs. Mary Griffin, Project Manager, about the homeless population in Oneida County.

Liberty Resources

We spoke with Sara Haag, Divisional Director of Family Services, about subpopulations in Madison County who are at risk of needing affordable housing.

Mohawk Valley Homeless Coalition

We spoke with Mr. Steven Darman, Chair of the Coalition, about the potential implementation of a housing shelter in Madison County based on his experiences in the coalition.

Madison County Health Department

We spoke to Geoff Snyder, Director of Environmental Health at the Madison County Health Department, about the presence of lead as an environmental health hazard in homes in Madison County.

New York State Environmental Research and Development Authority (NYSERDA)

We spoke with Mishel Filisha, Assistant Project Manager at New York State Environmental Research Authority.

Executive Summary:

This Community-Based Research Project aims to provide a general needs assessment for affordable housing units in Madison County, NY. Through a three-section approach, this report first provides an in-depth summary of the specific groups in Madison County that are in need of affordable housing, analyzes the state of the existing housing stock, and lastly, describes the current policy-gap analysis for affordable housing in the County. Research was conducted through interviews with community representatives, synthesis of census data, as well as analysis of historical regional reports. In the conclusions of these sections, our analysis shows that Madison County would benefit from the construction of additional affordable housing as well as a potential homeless shelter. This conclusion was derived through the findings that the current housing stock does not meet the needs of the existing population in Madison and that the state of the current housing stock is not sustainable for future growth.

Critical Findings on Madison County:

- While the poverty rate in Madison County in 2015 was about 12.2%, about 43% of Madison County residents qualify as ALICE, which is an acronym that stands for asset limited, income constrained and employed (ALICE, 2016). These residents struggle to support themselves as they live above the poverty line, but below the basic cost of living for the county (ALICE, 2016).
- About 16% of the total population in Madison County receives some sort of assistance from the Madison County Department of Social Services, and close to half of the households in Madison County receive aid from the Madison County Department of Social Services (Fitzgerald, 2017).

- As construction standards for homes in Central New York were not implemented until the early 1990s, many households in Madison County lack the structural stability that is mandated by law (CNY Fair Housing, 2014). Furthermore, due to the age of the current housing stock in Madison County, the prominence of lead-based paint in homes is one of the primary reasons that Madison County is deserving for the construction of an additional affordable housing complex (EPA, 2017).
- Individuals suffering from mental illness, victims of domestic violence, and the homeless are the sub-populations in Madison County, most in need of additional affordable housing
- The county currently has 17 active affordable housing complexes with 1,096 units serving low-income families, the elderly, and people with disabilities.
- There is a need for affordable family housing developments that are near grocery stores, county services, schools, etc. because most clients do not have cars and there is no real public transportation in Madison County.

Recommendations

In order to address the county's future housing needs, we have established the following recommendations. Specific action steps and potential funding sources are detailed later in this report.

#1: Environmental Solution (Existing Stock): Preserve the existing housing stock in Madison County through retrofitting to address environmental concerns.

#2: Short Term Solution: Create an emergency shelter or homeless shelter in Madison County in the locality that has the largest demonstrated need that abides by environmental protocols regarding lead paint and energy efficiency standards.

#3: Long Term Solution: Development of additional affordable housing in the town with the largest demonstrated need that abides by environmental protocols regarding lead paint and energy efficiency standards.

#4: Innovative Solution: Establishment a homeless shelter that is connected to affordable housing units with long term competitive apartments that abides by environmental protocols regarding lead paint and energy efficiency standards.

Introduction

The housing crisis of 2008 caused one of the worst recessions of the last century. Declining home values, foreclosures and defaults fueled an economic crisis in the United States which had noticeable impacts on the larger global economy. While much of the country has recovered from this crisis, rural America is still facing noticeable barriers to affordable and sustainable housing. These housing problems are largely due to the lack of economic vitality and diversification within small, rural communities. Therefore, this issue is not only a Madison County specific challenge, as many communities throughout rural America face affordable housing shortages due to these factors. To complicate this issue even further, the federal support for affordable housing is under increasing financial pressure and has been diminishing in recent years (HAC, 2012, p. 3). This housing assessment attempts to identify the target populations within Madison County who are in need of affordable housing. We also aim to provide plausible solutions to the daunting problem of affordable housing within the community by analyzing previous solutions rural communities throughout the United States have implemented while taking Madison County's demographics and resources into account.



PART II: *NEEDS ASSESSMENT*

II. Needs Assessment

In order to properly identify the need for affordable housing within Madison County, we developed partnerships with many local leaders and government officials. Through constant communication and the completion of eight interviews, we identified which residents within Madison County face significant barriers to finding affordable housing.

There are a number of organizations within Madison County that work to address the issues surrounding affordable housing in the area. From a governmental standpoint, according to Madison County Social Services, there are 27 programs/services with a collective budget of about \$30 million that help address the needs of Madison County residents (Fitzgerald, 2017). These programs range from cash assistance programs such as Family Assistance (FA) or Safety Net Assistance (SN) to Child Care Assistance Programs as well as Home Energy Assistance Programs (HEAP). Overall, this funding serves about 12,000 individual residents monthly (Fitzgerald, 2017). To benchmark this number, the 2010 U.S. Census found that the population of Madison County was 73,442 (U.S. Census Bureau, 2010). This indicates that about 16 percent of the total population in Madison County receive some sort of assistance from Madison County Social Services. According to the U.S. Census, there were 26,407 households in Madison County in 2010 (U.S. Census Bureau, 2010). This means that close to half of the households in Madison County receive aid from Madison County Social Services.

Another way to analyze the affordable housing need in Madison County is to examine the percent of people who qualify as ALICE, an acronym that stands for Asset Limited, Income Constrained and Employed residents (ALICE, 2016). These residents live above the poverty line but below the basic cost of living for the county (ALICE, 2016). The 2016 ALICE report found that 43 percent of households in Madison County are below the ALICE threshold (ALICE, 2016).

The New York State average by county for residents that qualify as ALICE is 44 percent (ALICE, 2016). The large number of Madison County residents that qualify as ALICE help to paint a more authentic and well rounded picture of the need for affordable housing in Madison County.

While government organizations like the Madison County Department of Social Services work to help low income residents and families find affordable and sustainable housing in Madison County, there are other non-governmental organizations in Madison County that also work to provide residents with affordable housing. Many of these organizations address certain subgroups of residents within communities in order to target a specific, smaller group of residents that need housing assistance. For example, the Stoneleigh Apartments in Canastota, New York is a private, non-profit organization that specializes in housing for seniors, families and the disabled. Stoneleigh Apartments are managed by Stoneleigh Inc., which is a development and management company that works to build and properly manage affordable housing units in the community (Christopher Community, 2017). Currently, the organization manages 3,000 units within 104 buildings across Onondaga County and Madison County (Christopher Community, 2017). The Stoneleigh Apartments are rent subsidized by the Department of Housing and Urban Development (Christopher Community, 2017). The Stoneleigh Apartments work under the Federal Housing Choice Voucher Program (often referred to as Section 8), providing more than 1,000 rent subsidies for seniors, families and the disabled (Christopher Community, 2017). The Federal Housing Choice Voucher Program applies to New York residents that are paying more than 30 percent of their monthly income on rent and utilities each month (HUD, 2017). New York residents that qualify for the Federal Housing Choice Voucher Program are eligible to receive rental assistance payments to their landlords to help cover their rent costs every month (HUD, 2017).

The Federal Housing Choice Voucher Program application process is often long and complicated. In order to receive aid from the Federal Housing Choice Voucher Program, a local public housing agency (PHA) will collect information on family income, assets, and family composition and will then determine program eligibility (HUD, 2017). Once eligibility is confirmed, the applicant will be placed on a waitlist if the program cannot assist them immediately (HUD, 2017). Long waiting periods are common and preferential treatment is given to those that are homeless, paying 50 percent of their income on rent, or applicants that have been involuntarily displaced (HUD, 2017). In Madison County, 15 out of the 17 affordable housing developments receive at least some funding through the Federal Housing Choice Program Section 8. This demonstrates that a large majority of residents who are living, or want to live, in affordable housing developments within Madison County often face the difficult and complex process of obtaining affordable housing aid through the Federal Housing Choice Program.

In addition to the Stoneleigh Apartments in Canastota that provide affordable housing units for seniors, families, and the disabled, there are 16 other developments that provide affordable housing assistance in the county. These developments are managed by many organizations including Canastota Housing, Oneida Housing and Madison Business. Canastota Housing and Oneida Housing are federal programs while Madison Business is a state program (Fitzgerald, 2017). These organizations help to fund and support affordable housing complexes across the county. Overall, with government services as well as independent NGOs, Madison County receives aid for affordable housing through many different outlets. This is often referred to as lasagna financing, which refers to funding that comes from an array of different sources and programs (Gibula, 2015).

In order to truly assess the effectiveness of affordable housing programs and developments within Madison County, as well as identify any gaps in affordable housing assistance, we conducted interviews with community partners such as Mike Fitzgerald, from the Department of Social Services, Robert Napoli of Stoneleigh Housing, and Sarah Haag of Liberty Resources.

Mike Fitzgerald reported that the Department of Social Services (DSS) is aware of an average of 30-40 people per month that are in danger of utility shut offs and eviction as they live paycheck to paycheck, either because they lose their job, an income-earning adult moves out of the home, medical expenses add up, or many other situations that can lead to financial stress and the inability to pay rent. He noted that in 2016, there were about 1,600 people that were in danger of being homeless.¹ The Department of Social Services in Madison County does provide cash assistance to residents in need, but the department expressed that it is not nearly enough (Fitzgerald, 2017). In addition to cash assistance, the monthly allotments of about \$350 per single person and no more than \$500 for a family of three do not meet the average monthly rental costs in Madison County of \$600 per month for a two-bedroom apartment. The DSS tries their best to find the apartments that rent for less, but these are usually in unsafe or unreliable conditions as they may not be up to date on building codes, have proper installation for the winter, or there are environmental toxins present such as lead paint (Fitzgerald, 2017). Another complicating factor is that with cash assistance, the people receiving the money experience difficulty trying to acquire it because of complex eligibility requirements and a tedious application process.² For example, some

¹ A homeless individual is defined as “an individual who lacks housing (without regard to whether the individual is a member of a family), including an individual whose primary residence during the night is a supervised public or private facility (e.g., shelters) that provides temporary living accommodations, and an individual who is a resident in transitional housing” (NHCHC, 2017).

² Temporary Assistance is a financial assistance program that offers temporary help to individuals and families on a short-termed basis until the household is able to achieve self-sufficiency. The programs are Family Assistance for families with minor children and Safety Net Assistance for individuals, childless couples, and households who have met their 60-month time limit. Eligibility for cash assistance varies per specific program (Madison County, 2017).

agreements in the contract include showing up for work and getting mental health/substance abuse treatment (Fitzgerald, 2017). This causes a lot of people who are eligible for cash assistance to choose to not seek it (5%-30% of total). Mike estimated that there are probably another 200 people in Madison County who could use cash assistance, but do not want to deal with all of the compliance, hassle, and eligibility requirements that comes along with obtaining it (Fitzgerald, 2017).

In addition to examining the total number of people who are in need of affordable housing in Madison County, we also looked into information on subpopulations of people who are most in need of housing assistance. Sarah Haag, the Divisional Director of Family Services at Liberty Resources, and Robert Napoli, the Director of Stoneleigh Housing Authority, were helpful in understanding the groups of people most in need. Both Sarah and Robert stressed that the population of Madison County residents experiencing mental illness is in great need of affordable housing options, as many mental health facilities across New York state have closed over the last decade. During his time in office, “Governor Cuomo and the NYS Office of Mental have closed Kingsboro Psychiatric Hospital, Mohawk Valley, and Sagmore Psychiatric Center have closed. These came on top of previously announced closings at Rockland Psychiatric Center, Pilgrim Psychiatric Center, Mid-Hudson Forensic Psychiatric Center, Hudson River Psychiatric Center, and Buffalo Psychiatric Center” (Jones, 2016). In 2012 alone, “New York went from 599 psychiatric beds per 100,000 citizens down to twenty eight” (Jaffe, 2012) Since there are fewer places that those struggling with mental illness can go to for help, this places them at a high risk for not being able to find safe and affordable housing.

In addition to those with mental illnesses, Sarah Haag stressed that domestic violence victims are another group of people in need of affordable housing in Madison County. This is

because there are very few options in Madison County, and even fewer options that are safe and affordable for a parent and their children fleeing from an abuser. She mentioned that, “sometimes we have to relocate domestic violence clients in another county or city because there’s literally nothing here in our area, especially in the winter” (Haag, 2017). Sarah emphasized the need for more safe and affordable family housing developments that are near grocery stores, county services and schools. She explained that this is essential because most clients do not have cars and there is no real public transportation in Madison County.

Lastly, both Robert and Sarah stressed the importance of creating a solution for the homeless population in Madison County. The DSS reports an average of 10 homeless people in Madison County per month, and even though this number may seem relatively small, it still represents a community need and a gap in services. Sarah acknowledged that homeless shelters are expensive to run and that there is sadly a lot of stigma against the homeless.³ In moving forward with our recommendations for how to improve affordable housing in Madison County, we believe it is important to recognize that allowing those struggling with mental illness, or those vulnerable to mental illnesses to become homeless is placing them in a vicious cycle of poverty and mental illness. As mental illness makes it difficult to maintain a job, not only does mental illness lead to poverty, but poverty can also bring about mental illness issues. In a study of the rates of severe mental disorders among homeless persons in Philadelphia, which used longitudinal administrative treatment and shelter records, found that, “18 percent of homeless adult without accompanying children had received services for a severe mental disorder” (Draine, 2002). Both mental health issues developed prior and following homelessness decrease an individual's chances of finding

³ It costs a shelter on average \$2,100 a month per person or \$17,500 to \$23,600 a year per person just to feed and house the homeless (Daigneau 2009).

employment or support that will provide them with security, food and housing. Now that we've completed our needs assessment, which gives us an idea as to what group are in need as well as how many people are in need of affordable housing in Madison County, we will discuss the housing inventory data that we have gathered for Madison County.



PART III: *CURRENT HOUSING INVENTORY*

III. Housing Inventory

Important Notes

One important detail worth clarifying is the difference between the concept of affordable housing and the existence of affordable housing units. The latter refers to projects that were funded through local, state, and/or federal funding, whose main purpose is to provide affordable housing to those in need. Thus, the units within these complexes are by definition affordable housing units. The Department of Housing and Urban Development (HUD) refers to the former as, “housing for which the occupant(s) is/are paying no more than 30 percent of his or her income for gross housing costs, including utilities” (HUD, 2017). When looking at the Area Median Income (AMI) of a specific geographic region, this 30% income-to-rent ratio is used to calculate that area's fair market rent rate. Studies have utilized the fair market rent concept in determining the stock of affordable housing in different geographic regions by looking at the number of units that are above or below the fair market rent rates. Furthermore, the 2016 Out of Reach report states that, “in no state, metropolitan area, or county can a full-time worker earning the prevailing minimum wage afford a modest two-bedroom apartment” (Yentel et al., 2016). The findings of this report are extremely significant, as they not only address the issue of affordable housing in the national level, but also provide Madison County specific numbers, which we will discuss in greater detail later on in Housing Inventory section.

We also wanted to acknowledge that most of our data is cited from the 2010 U.S Census. While we realize that these numbers can be outdated, we wanted to remain consistent throughout our analysis. Where applicable, we used numbers from more recent reports such as the ALICE report. However, we did not utilize many non-census numbers in order to avoid confusion and remain consistent.

Demographic Information

According to the 2010 U.S. Census, Madison County, NY had a total population of 73,442 in 2010, and 95% of the total population identified as white alone (U.S Census Bureau, 2010). In terms of setting, 58.9% of the total population lived in a rural setting while the other 41.1% lived in an urban area (U.S Census Bureau, 2010). Given Madison County's mostly rural makeup, the population distribution between rural and urban settings is important to note. According to the 2010 U.S Census, around 60 million Americans (19% of the total population) lived in rural areas (Fields et al., 2016). Moreover, the U.S Census Bureau notes that, "Urban areas and urban clusters make up 3 percent of the entire land area in the country but contain 80.7 percent of the population while rural areas spread across 97 percent of the land area and contain 19.3 percent of the population" (Fields et al., 2016). These statistics are significant because they allow us to understand both the distribution of land as well as people in the U.S as a whole. Moreover, this highlights the fact that urban areas tend to be highly concentrated, whereas rural areas typically have lower population densities due to their abundance in land and shortage of people. Given the land distribution in rural America, some of the unique challenges that Madison County faces in providing affordable housing to its population are the lack of public transportation within the county, and the location where affordable housing exists is extremely significant in terms of accessibility. This is because these units need to be 1) accessible to those living in them, and 2) placed within the vicinity of different resources such as grocery stores and doctor's offices.

Moreover, the 2010 median household income (measured in 2014 dollars) in Madison County was \$53,584 (U.S Census Bureau, 2010). Additionally, the 2010 per capita income in the past 12 months (measured in 2014 dollars) was \$25,786 (U.S Census Bureau, 2010). The median monthly gross rent in 2010 was \$730, which was lower than both the national (\$920) and New

York State (\$1,117) numbers (U.S Census Bureau, 2010). Additionally, there were a total of 26,407 households in Madison County in 2010 (U.S Census Bureau, 2010). The average number of people per household in Madison County was 2.55, which was in consonance with the national (2.63) and New York state averages (2.62) (U.S Census Bureau, 2010). Given the 30% income-to-rent ratio that lies at the core of the definition of affordable housing, we calculated what the rent values for Madison County should have been in 2010 for both households and individuals. These numbers were calculated by dividing both annual per capita and household incomes by 12 in order to go from an annual value to a monthly value, and multiplied by 0.3 which represents the 30% income ratio devoted to rent. Since the median monthly gross rent value of \$730 from the 2010 U.S Census represented an individual's cost of living in Madison County, we compared the calculated fair market rent rate for households in Madison County to the median monthly gross rent (\$730) times the average number of people per household (2.55).

$$\mathbf{\$730 \text{ (median monthly gross rent)} \times 2.55 \text{ (avg \# of people/HH)} = \mathbf{\$1,861.5}}$$

$$\mathbf{\$53,584 \text{ (median HH income)} \times 1/12 \times 0.3 = \mathbf{\$1,339.6}}$$

$$\mathbf{\$25,786 \text{ (per capita annual income)} \times 1/12 \times 0.3 = \mathbf{\$644.65}}$$

When compared to the 2010 U.S Census reported median monthly gross rent of \$730, the per capita value is approximately \$85.35 (\$730-\$644.65) lower than the above calculated cost of renting a unit in Madison County. Additionally, the estimated rent for households in Madison County during the 2010 year was \$1,861.5. Compared to the fair market rent value of \$1,339.6, this number was \$521.9 (\$1,861.5-\$1,339.6) higher than the calculated cost of renting a unit in Madison County. This means that the median monthly gross rent value of \$730 was too high in relation to the average income that both households and individuals were earning on an annual basis. Thus, the need for more affordable housing in Madison County is extremely important.

Furthermore, in 2010, a total of 11.8% of the people living in Madison County were living in poverty (U.S Census Bureau, 2010). This correlated with the national (13.5%) and the New York state percentage (15.4%) of people living in poverty (U.S Census Bureau, 2010). In terms of population density, Madison County's population per square mile in 2010 was 112.2 (U.S Census Bureau, 2010). This was higher than the national (87.4), but much lower than the New York State population per square mile (411.2) (U.S Census Bureau, 2010). In addition to this, there were a total of 31,757 housing units in Madison County in 2010. The reason why the number of households and the number of housing units differ is because they describe two separate things. The U.S Census Bureau explains that, "A household consists of all the people who occupy a housing unit", whereas, "A house, an apartment or other group of rooms, or a single room, is regarded as a housing unit" (U.S Census Bureau, 2015).

Lastly, the owner-occupied housing unit rate in Madison County in 2010 was 75.6% (U.S Census Bureau, 2010). This was higher than both the national (64.4%) and New York State (53.8%) percentage rates (U.S Census Bureau, 2010). This means more people own rather than rent their homes in Madison County. It is important to note, however, that owning a home (either fully or through a mortgage/loan) does not mean that the housing is affordable. While the decision to invest in a home is certainly driven by an individual's willingness and/or ability to pay for it, it can also be due to other factors such as a shortage of quality rental housing units.

Housing Data

Of the 31,757 housing units in Madison County in 2010, a total of 27,754 units (87.4%) were occupied, while the other 4,003 (12.6%) units were vacant (U.S Census Bureau, 2010). The figures for both the occupied and vacant housing units mentioned above are used to draw conclusions regarding the state of the housing stock in Madison County, and are used to create

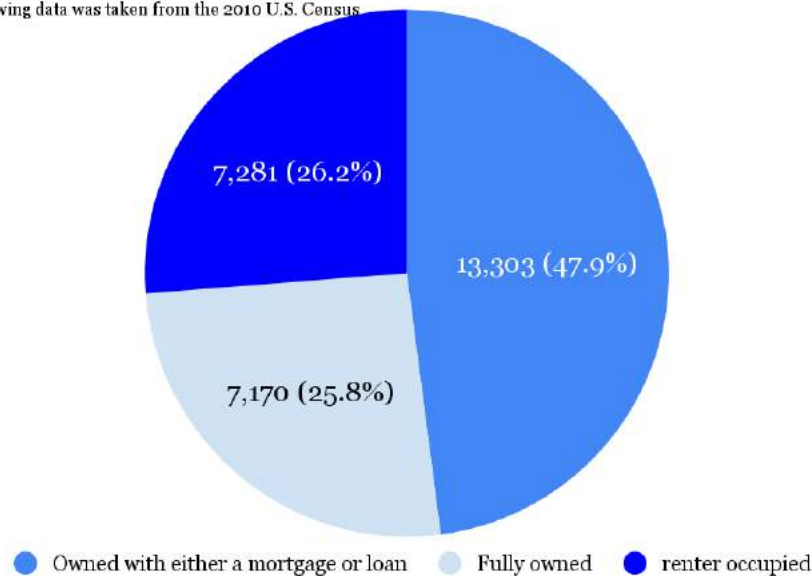
policy recommendation that are both well informed and relevant to Madison County. The following subsections aim to look more closely at the housing unit occupancy/vacancy status.

Occupied Housing Units Breakdown

In Figure 1, we look at the breakdown of the occupied housing units in Madison County for the 2010 year. We gathered this data from the *General Housing Characteristics* section for Madison County in the 2010 U.S Census.

Figure 1. Occupied Housing Units Breakdown

The following data was taken from the 2010 U.S. Census



Of the total 27,754 occupied housing units, 13,303 (47.9%) were owned with either a mortgage or loan (U.S Census Bureau, 2010). This means that those occupying these units did not have full ownership, but rather owned their homes through either a mortgage or a loan. On the other hand, 7,170 (25.8%) were fully owned without the need for a mortgage and or loan (U.S Census Bureau, 2010). Lastly, 7,281 (26.2%) units were renter occupied (U.S Census Bureau, 2010). According to the 2016 New York State ALICE Report, 24% of owner-occupied units in Madison County were considered to be “housing burdened”, meaning that more than 30% of their income was being allocated to pay for rent (ALICE, 2016). A total of 37% of renter-occupied units in 2014 were also

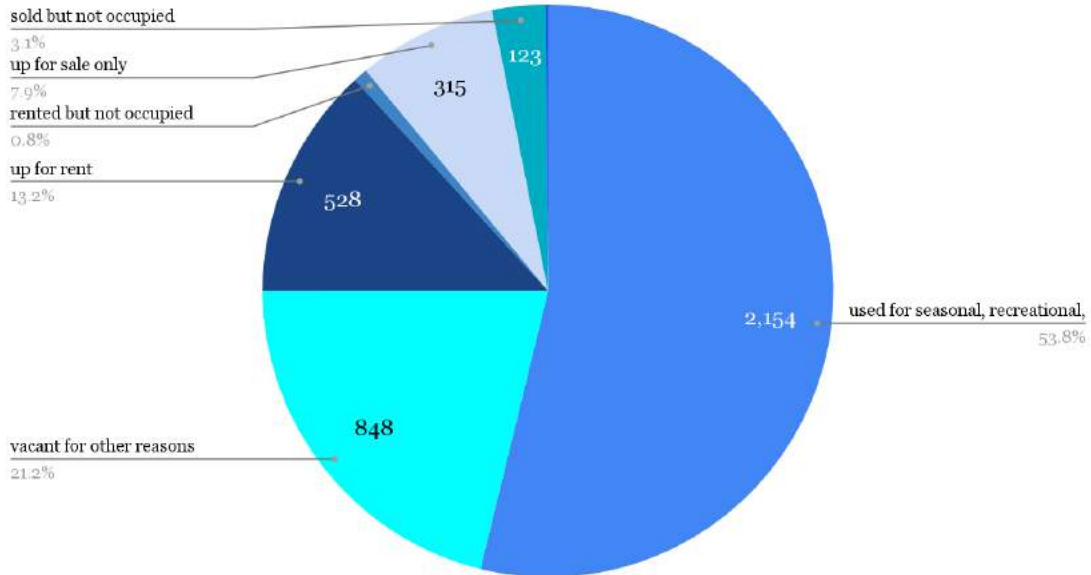
considered to be “housing burdened”, meaning that more than 30% of their income was allocated to paying rent (ALICE, 2016). Thus, if a total of 7,281 units in Madison County were renter occupied, and around 37% of renter-occupied units were housing burdened, then an estimated 2,694 ($7,281 \times 0.37$) of renter-occupied housing units in Madison County were housing burdened. Additionally, an estimated 4,913 ($20,473 \times 0.24$) of owner-occupied households in Madison County were housing burdened. We acknowledge the fact that these calculations do not accurately represent the current situation in Madison County since they use both 2010 and 2016 figures. However, for the purpose of this project, we believe it is important to attempt to quantify the number of housing burdened units for both renters and owners, as these values serve as numerical indicators that there is a real need for more affordable housing in Madison County due to the fact that many of the residents that currently live in homes are housing burdened.

Vacant Housing Units Breakdown

In Figure 2, we look at the percentage distribution breakdown of the vacant housing units in Madison County in 2010. We gathered this data from the *General Housing Characteristics* section for Madison County in the 2010 U.S Census.

Figure 2. Vacant Housing Units Breakdown

The following data was taken from the 2010 U.S. Census

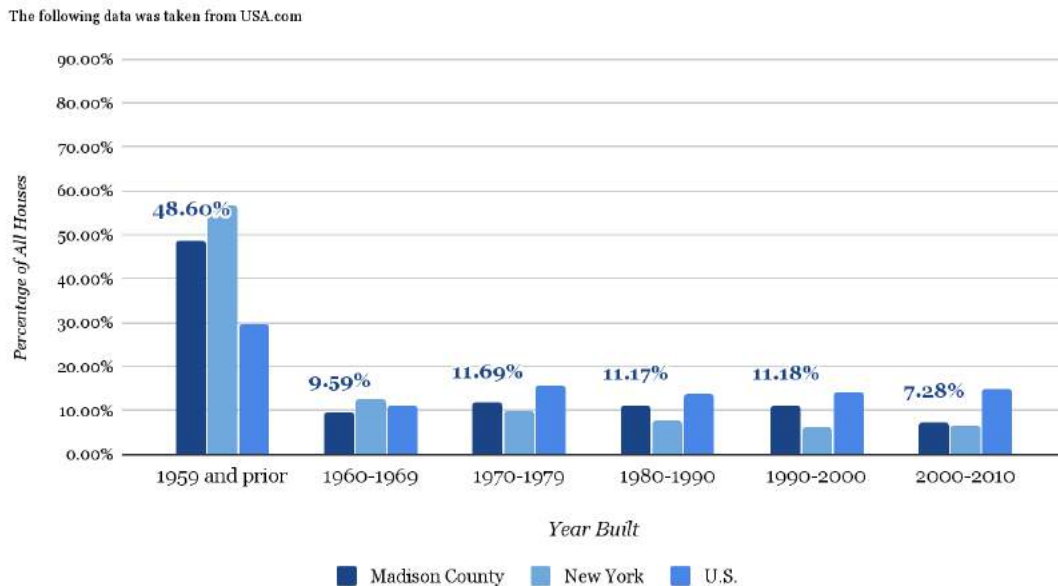


The most important takeaway here is the fact that a total of 2,154 (53.8%) vacant housing units were vacant because they were mainly used for seasonal, recreational, or occasional use (U.S. Census Bureau, 2010). We wanted to highlight this particular value/percentage, as we believe it suggests that these units were not intended to be occupied for long periods of time. While it may appear no shortage of existing housing units in Madison County, we hypothesize that not all of the existing housing units in Madison County are meant to be occupied by those that are in need of affordable housing, such as the elderly, the disabled, and low-income families. The other sections represented in this pie chart include other reasons why housing units in Madison County were vacant in 2010. A total of 848 (21.2%) were vacant for other reasons, 528 (13.2%) were up for rent, and 315 (7.9%) were up for sale only (U.S. Census Bureau, 2010). Furthermore, 123 (3.1%) of the housing units were sold but not occupied, 32 (0.8%) were being rented but not occupied, and 3 (0.1%) were for migratory workers (U.S. Census Bureau, 2010).

Age of Housing Stock

In Figure 3, we look at the age of houses distribution in Madison County. We gathered this data from USA.com.

Figure 3. Age of Houses Distribution



The x-axis in Figure 3 represents the year a house was built in Madison County. The range extends from 1959 to 2010, and is grouped by decade after the year 1959. The y-axis represents the percentage of all homes in Madison county. As this figure shows, the majority (48.6%) of homes in Madison County were built on or before the year 1959 (USA.com). This implies that for the most part, Madison County has an aged housing stock, especially when compared to the national (29.5%) average. This is especially relevant when taking into consideration the issue of lead paint, which we will discuss in more detail later on. Moreover, only 7.28% of the existing homes in Madison County were built from 2000-2010 (USA.com). Compared to the national percentage of 14.92%, this means that Madison County has half as many newer homes than the U.S as a whole. The declining trend in percentage of homes built over time in Madison County depicted in the

graph above reinforces our claim that Madison County is in need of more safe and affordable housing.

Affordable Housing Units Data

Table 1 represents the current total affordable housing stock in Madison County. We gathered this data from affordablehousingonline.com (AHI). We also compiled our data by cross-referencing the website pages for the existing affordable housing complexes listed in Table 1. We did this in order to ensure that the information provided on AHI was up to date and/or accurate. According to their website, AHI gets their data from a variety of sources including; the Council for Affordable and Rural Housing (CARH), the National Affordable Housing Management Association (NAHMA), HUD Databases, USDA databases, U.S Census Bureau, as well as data from affordable rental property owners and managers (AHI, 2017).

#	Name	Geographic Location	# of units
1	Stoneleigh Apartments	Canastota, Madison County, NY	100
2	MH Armstrong Apartments	Canastota, Madison County, NY	6
3	State of New York	Canastota, Madison County, NY	32
4	Erie Canal House	Canastota, Madison County, NY	6
5	Cazenovia Village Apartments Monahan Development	Chittenango, Madison County, NY	328
6	Bolivar Landing (Rhi)	Chittenango, Madison County, NY	24
7	Maloff Towers	Chittenango, Madison County, NY	108
8	Deruyter Senior Housing	Deruyter, Madison County, NY	24
9	Eaton 6 Family	Eaton, Madison County, NY	6
10	Madison Lane Apartments	Hamilton, Madison County, NY	144
11	Eaton Apartments for the Elderly	Morrisville, Madison County, NY	24
12	Cedar Street Apartments	Morrisville, Madison County, NY	24
13	Wilcox Apartments	Morrisville, Madison County, NY	24
14	Oneida Towers I	Oneida, Madison County, NY	100
15	Oneida Towers II	Oneida, Madison County, NY	100
16	Herbert D. Brewer Apartments	Oneida, Madison County, NY	40
17	Madison Community Residence Project	Oneida, Madison County, NY	6
Total # of units=			1096

In Madison County, there are a total of 17 affordable housing developments which make up a total of 1,096 affordable housing units. Moreover, there are a total of 723 rent assisted units in Madison County, meaning that rent is based on one’s income instead of on a market rate. According to AHI,

the programs that allow for these rent assisted units to exist are funded mostly by HUD, whereas Section 515 properties are funded by the United States Department of Agriculture (USDA) (AHI, 2017). AHI also mentions that, “From 1991 to 2008, 8 low income apartment communities containing 168 rental apartments have been constructed and made affordable to low income persons in Madison County by the Low Income Housing Tax Credit Program (LIHTC)” (AHI, 2017). Lastly, there are 140 units that are subsidized by the Section 8 Housing Choice Voucher Program, which is a program supported by the federal government set to assist low income families, as well as the elderly and disabled, with housing costs (HUD, 2017).

Spatial Distribution of the Current Affordable Housing Stock

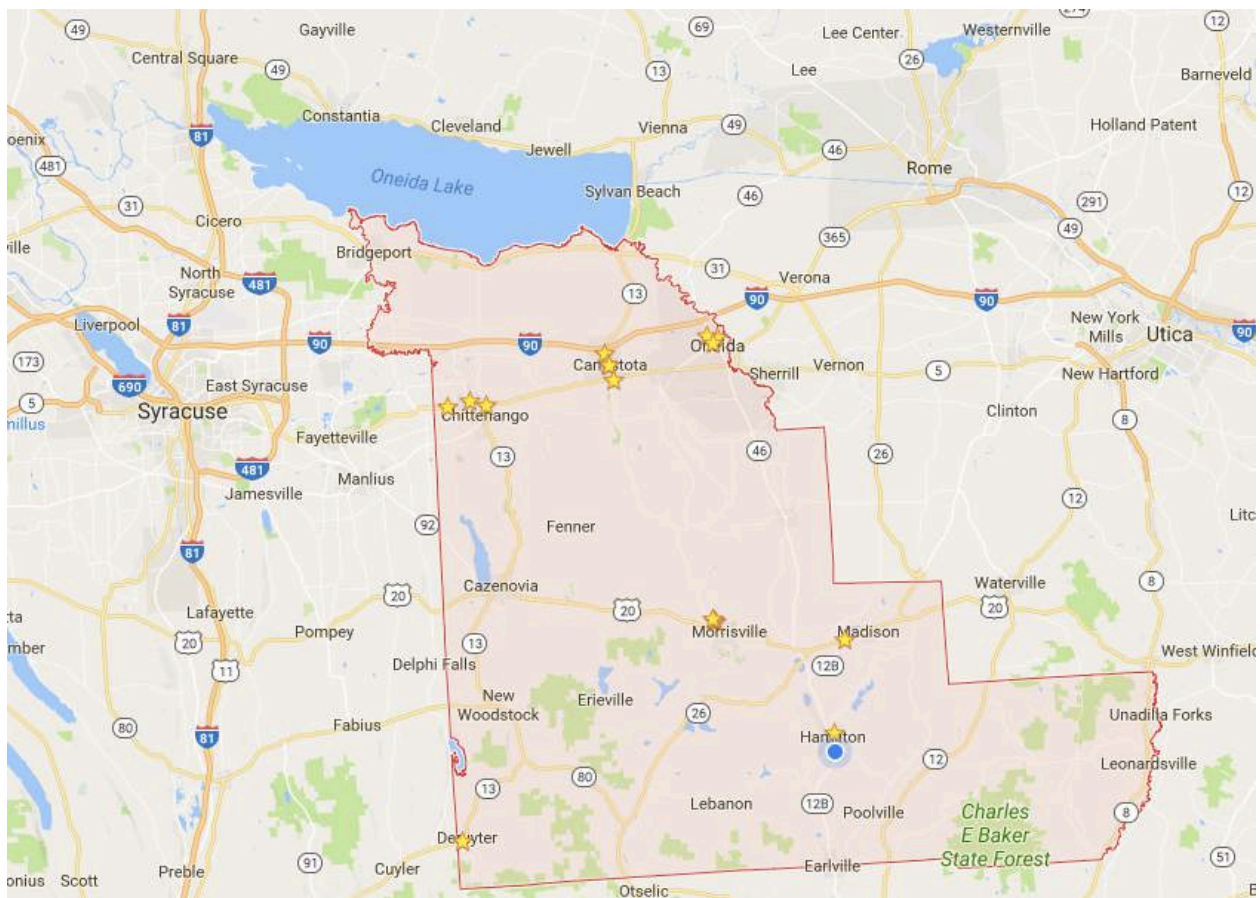


Figure 4 depicts the spatial distribution of the 17 affordable housing complexes currently in Madison County. The red outline represents Madison County as a whole, and each yellow star

represents an affordable housing complex in Madison County. As shown in the image above, there are small clusters of affordable housing developments in Chittenango, Canastota, Oneida, and Morrisville. Additionally, the yellow lines in Figure 4 represent the different roads/highways that run through Madison County. In Figure 4, it appears that the clusters of affordable housing complexes tend to be near major roads, such as U.S Route 20, New York State Route 5, and the New York State Thruway. Of the 17 affordable housing complexes within Madison County, one worth mentioning is the Madison Lane Apartments, located near the St Thomas Church and an eight-minute walk away from the No. 10 Tavern and the Colgate Inn.

Health of Current Housing Stock

The need for both sustainable and affordable housing is one that is widespread in Madison County. With about 43 percent of the general housing stock below ALICE standards and 69.88 percent of the housing built before 1977, Madison County qualifies as a county in direct need of sustainable and affordable housing improvements (ALICE, 2016).^{4,5} Over the next few paragraphs, this section will provide an in-depth overview of the health of the existing housing stock in Madison County. The major issues covered include the prominence of lead-based paint in homes, household age, as well as household functions & efficiency. Additionally, this section includes a brief overview of some of the current programs in place in the U.S. that aim to benefit the health of low-income houses.

As discussed above, the majority of the housing stock in Madison County was constructed in the early 20th century, more than half being built before the 1960s (Figure 3, Age of Household

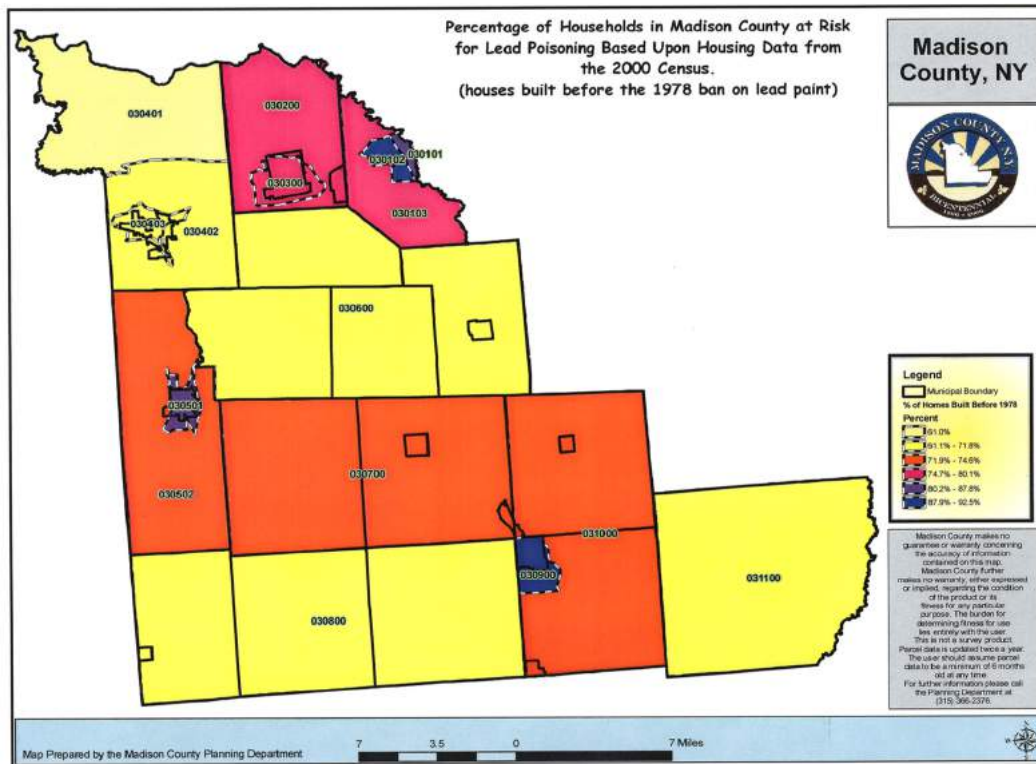
⁴ ALICE representing “Asset Limited, Income Constrained, Employed” - residents living above the poverty line, but below the basic cost of living for the county (ALICE, 2016).

⁵ 1977 being the year in which the U.S. Consumer Product Safety Commission (CPSC) banned lead paint in the construction of new residential properties and public buildings.

Distribution). This is especially noteworthy because the age of homes in Madison is considerably higher than the average age of households in all of the U.S. Additionally, the age of structures is one of the main reasons that the typical household in Madison faces structural issues, lead-based paint products and lack of building efficiency. More specifically, because the construction standards for homes in CNY were not implemented until the early 1990s, many households lack the structural stability that is mandated by law (CNY Fair Housing, 2014). Not only is this problematic for structural health, but also for sustainability issues such as longevity. Without proper construction standards, households are at risk of falling apart after years of heavy snowfall, cold winters, and limited repairs. After looking into eight of the seventeen local affordable housing complexes available in Madison County, our analysis found that many of the complexes had to replace old infrastructure in areas where necessary to meet modern standards (Affordable Housing Online). More specifically, we found that older complexes consistently needed lead-based product checks, as well as the replacement of insulation to better accommodate residents.

Another issue related to the age of the current housing stock is the prominence of lead-based paint in local homes. According to the EPA, all houses constructed before the implementation Residential Lead-Based Paint Reduction Act of 1992 are at a high risk of lead toxicity. This issue is integral to our analysis in that the direct effects of lead poisoning can be irreversible and mainly target children under the age of ten years (EPA, 2017). Additionally, as many low-income houses frequently contain mold, pests, radon and other toxic materials such as lead, this issue cannot be overlooked (EPA, 2017). In fact, the prominence of lead-based paint in homes is one of the primary reasons that Madison County is deserving for the construction of an additional affordable housing complex. For further context on the extent to which lead-based paint

effects households in Madison County, the following map shows the percentage of homes currently at risk for lead poisoning (Madison County Planning Department, 2000).



While this figure reflects, data based on the 2000 census, it provides an accurate representation to-date of the severity of this issue (Snyder, 2017). In any case, an updated version of this map would prospectively reveal a marginal decrease in “at-risk” homes due to the success of lead targeted reduction.⁶ These programs and their relative success are discussed in detail below.

According to the Madison County Health Department, there are two main national programs that target lead reduction in households - the Lead Hazard Reduction Program (LHRD) & the Lead-Based Paint Hazard Control Program (LHC) - that are supported by other municipal programs. In Madison, there is also a Lead Poisoning Prevention Program and a Childhood Lead

⁶ An updated version of this map was not located in this study due to time constraint. To update this map, the Director of Environmental Health in Madison County, Geoffrey Snyder, cited the use of GIS and property assessment data provided by the Madison County Township (Snyder, 2017).

Poisoning Program that provides education and information on how to reduce lead levels through working with community members, healthcare providers, and local schools (Lead Poisoning Prevention, Madison County, 2017) (Snyder, 2017). The latter of these programs also directly incorporates the Community Health and Environmental Health Divisions of the Madison County Health Department and relies on risk assessment investigations as well as referrals from local Community Health nurses (Snyder, 2017). According to a study conducted by the National Center for Healthy Housing, these programs have been successful in raising awareness of lead-based illness as well as reducing lead content (Wilson, 2004). In accordance to an interview with a representative of neighboring county, Onondaga, local lead hazard programs are typically very well run with the available funding they have and that the larger issue with these programs revolves around the allocation of funding to different localities (Skahen, 2017). In order to receive funding for these programs, counties are required to apply for a specific grant and they are not always guaranteed to receive funding. This issue will ultimately become a larger problem to the vast budget cuts the Trump Administration has announced to HUD for the 2018 fiscal year, which is discussed at the end of this section. As a collective, this analysis has pointed to the fact that lead potency in local homes may actually be higher than expected and that additional assistance would be integral to benefiting the existing housing stock (Central NY Regional Report, 2009).

The final issue facing the current housing stock in Madison County discussed here is the health of home's existing functions and their respective energy efficiency. While this study chose to focus more directly on the environmental issues of lead-based products in low-income households, this issue holds similar importance. Due to the age of the housing stock as well as the lack of historic efficiency programs targeted towards housing in CNY, many households would greatly benefit from efficiency improvements such as high efficiency heating systems, added

insulation and energy efficient lighting (NYSERDA, 2017). Therefore, when proposing the construction of additional affordable housing units, it would be extremely beneficial for the local community if a new housing complex was constructed in Madison County that directly met energy efficiency standards. Not only would this provide additional units to those in need as discussed above, the efficient complex could serve as a catalyst in the movement to constructing greener buildings in CNY. According to Breyse et al. (2011) there is a direct correlation with improvements in overall health of residents and the “green” renovation of affordable housing (Breyse et al., 2011). Therefore, increasing the awareness of desire of an energy efficient complex would be an extremely beneficial transition to the residents of Madison County.

In summary, the age of the current housing stock in Madison County is one of the primary reasons the County can justify the construction of new affordable housing. However, the largest issue facing the construction of new units surrounds the adding of funding to existing programs versus providing funding to the construction of new buildings. While the current administration’s HUD budget cut metrics for Madison County were not individually available on the Affordable Housing Online Registry, the website shows that Onondaga County and Madison County will collectively lose nearly ~\$13 million in funding next year as a part of the ~23 percent statewide cuts applied to New York (Affordable Housing Online, 2017). Therefore, while the age of homes in Madison county may be detrimental to many of the low-income families in the region, this analysis has not shown whether or not funding to assist current programs should take precedent over the construction of new units.



PART IV: ISSUES OF ENVIRONMENTAL JUSTICE

IV. Issues of Environmental Justice

In addition to fulfilling the basic human need for shelter, safe and decent affordable housing is crucial in achieving financial stability, health and overall well-being. Unfortunately, safe and affordable housing is scarce due to disproportionate impacts of environmental contaminants on low-income and minority communities. The co-occurrence of exposure to hazardous environmental toxins and social adversities related to health and mental functions in this society represents a type of environmental injustice, in which those who can least afford the adverse health consequences, carry the greatest burdens. Rauh et al. (2008) refers to the term environmental injustice as, “the disproportionate and inequitable exposure of poor and minority populations to hazards in the environment” (Rauh et al., 2008). This unequal distribution of environmental hazards can be seen in many forms, but specific to housing in Madison County, as we can see from the above assessment of the health of the housing stock in Madison county, it is most important to discuss the prevalence of lead paint in many homes and the detrimental health impacts associated with its presence.

Exposure to the toxins that come from the hazards of lead paint appear to contribute significantly to “neurodevelopmental disability and other chronic health problems” (Rauh et al., 2008). Beyond childhood, the exposure to environmental toxins in early life sets the stage for a lifetime of suboptimal health and developmental disabilities, and thus helps to perpetuate intergenerational cycles of underachievement and cyclical poverty. In fact, the CDC calculates that, “an additional increase in 1 µg/dL of lead in a child’s blood decreases lifetime earnings by \$1,147 because of lowered intellectual ability” (Kraft & Scheberle, 2004). This means that with one additional microgram of lead per deciliter of blood, lifetime earnings will decrease by \$1,147 because of the effect of lead on health. According to data from the New York State Department of

Health, the incidence rate of high levels of lead in blood is declining, but elimination of this preventable condition has not yet been achieved. Available data is slightly outdated, but “In 2001, 5,258 children, or 2.7 percent of all children under six years of age in New York State (excluding New York City) had elevated blood lead levels of 10 mcg/dL or higher” (New York State Department of Health 2004). Clearly, for low-income families, environmental inequities in safe and affordable housing, as well as the overall housing stock, can have detrimental impacts on health and economic stability in the present and the future.

As mentioned above, one of the most common issues with substandard housing in Madison County includes the presence of lead-based paint, which exposes tenants to harmful toxins. However, even if tenants know they are occupying environmentally dangerous housing, it is often difficult for them to improve their situations on their own. Many low-income tenants tend to live in rental properties, which means that they have little or no decision-making power to fix structural problems. Moreover, the programs mentioned above, such as the Lead Hazard Reduction Program (LHRD) & the Lead-Based Paint Hazard Control Program (LHC) and in Madison, the Lead Poisoning Prevention Program, are extremely underfunded and inefficient. It is important to note that rates of children with elevated lead levels vary geographically across the state, and “Much of this variation can be attributed to the age of housing, use of leaded paint, poverty rates of communities, and property values” (New York State Department of Health 2004). The Department of Health analyzed rates of children with elevated blood lead levels by zip code, finding that there were thirty-six high-incidence zip codes, and “Not surprisingly, these thirty-six high-incidence zip codes have a substantially higher proportion of pre-1950 housing stock (59%) than the statewide (37%) and county figures” (New York State Department of Health, 2004). As discussed earlier,

the majority of the housing stock in Madison County was constructed in the early 20th century, more than half being built before the 1960s, increasing incidences of lead paint.

It is also important to address that relocating from a home with a hazardous environment to a place with a healthier one is economically difficult for the poor. This lack of mobility can be seen across all low-income communities, “After one of the worst economic recessions in the last century, rural America is still struggling with housing problems -- the region that feels the effects longer than anywhere else due to its lack of economic vitality and diversification” (HAC, 2012, p. 3). The lack of availability of safe and affordable housing leaves residents throughout the U.S. and in Madison County without options, stuck in homes, absorbing the impacts of the environmental toxins such as lead based paint or other harmful pollutants. Socioeconomic status is a powerful predictor of lead exposure, as “NHANES III data found that 13 percent of Medicaid recipients had BLL at or above 10 mcg/dL, and 42 percent had levels at or above 5 mcg/dL. Poor children are more likely to live in lead-contaminated environments, including older and dilapidated housing” (New York State Department of Health 2004). It is clear that exposure to lead disproportionately affects children and the poor.

Many of the factors that influence housing quality can be mitigated by changes in policy, such as decisions about where to build a housing project, what materials to use in construction, enforcement of municipal codes, rehabilitation of existing residential units, etc. However, environmental justice and equity concerns have proven to not be sufficient on their own when it comes to influencing policy decisions. Kraft and Scheberle argue:

Resolving environmental inequities would seem to demand three things: a) Documenting the existence of inequities in a manner consistent with prevailing norms of judgment; b) ensuring that such information is brought to bear on the policymaking process and c) integrating environmental equity issues with other policy concerns, such as cost-effectiveness, that presents compelling

arguments to policymakers in the context of present fiscal constraints and demands for risk-based priority setting in environmental policy (Kraft & Scheberle, 2004).

When working to address the need of more affordable housing in Madison County, New York, it is crucial to use an environmental justice framework to ensure that all populations have access to safe and affordable housing. Development of affordable housing must be equitable and sustainable, by increasing accessibility to structurally and environmentally safe housing.



PART V: *POLICY GAP ANALYSIS*

V. Policy Gap Analysis: (Using case studies)

Our Approach

Based on the needs of the Madison County residents and the resources available to the region, a community-based approach to affordable housing is most appropriate. Some of the key aspects of community-based participatory research are as follows (Israel et al., 2005, p. 1464):

Involve collaborative relationships of trust and respect between all stakeholders

Our team has developed collaborative relationships with several community leaders such as Mike Fitzgerald of the Madison County Department of Social Services, Steve Darman of the Mohawk Valley Housing & Homeless Coalition, and Robert Napoli of Stoneleigh Housing Inc. We have been fortunate to have very involved, energetic community partners who are eager to help us compile this report.

Recognize the community as a cohesive unit of identity

While there are many different peoples who live within Madison County, we have done our best to hear the concerns and voices of all residents through research and interviews with our community partners who provide services to and are active members of the community. This report will impact all residents within the county and thus, we must acknowledge them as a single cohesive unit.

Foster co-learning and capacity building among all partners

This report aims to compile the most up to date information regarding the current housing stock in Madison County as well as the current affordable housing policies in place. We hope to educate the larger community on the need for more affordable housing through the equitable dispersal and access of this report to all community members.

Facilitate a collaborative, equitable partnership in all phases of research, including an empowering and power-sharing process that attends to social inequities

We have aimed to hear all sides of the housing issue when compiling this report through our interviews and conversations with local officials and agency leaders across the county. We believe we have vocalized all sides of the issue and have proposed the most equitable plan for future housing policies and developments.

Integrate and achieve a balance between knowledge generation and intervention for mutual benefit of all partners

Through strong communication, we have developed guidelines with our community partners that are most practical for our project while keeping the goal of addressing affordable housing within Madison County in the most equitable manner in mind. Thus, the voices and opinions of those Madison County residents in need will be of paramount importance with regards to moving forward in developing proposals for affordable housing and a potential homeless shelter in the region. According to interviews with staff at Stoneleigh Housing Agency, Mohawk Valley Housing & Homeless Coalition and the Oneida Housing Authority, we believe that the greatest opposition to such programs would come from residents in neighboring land plots and wealthier individuals. This concern is rooted in the notion of NIMBY-ism, an acronym which refers to the Not In My BackYard movement. This concept and its connection to affordable housing opposition will be further discussed and critiqued in the recommendation section of this paper. Thus, the concerns and voices of the aforementioned organization leaders have been of utmost importance in developing these approaches. In order to understand the true views and voices of our partners, we conducted nine interviews over the course of the semester to better understand how we could effectively remove barriers to affordable housing in Madison County and provide equitable access

to housing programs and opportunities. These solutions can only be accomplished through innovative creativity and effective responsiveness through community partnerships which will be addressed in the next section of this paper.

Current Policies in Madison County

Madison County has several affordable housing programs in place that have been essential to improving the housing options, conditions, and affordability for residents in need within the county. Due to the fact that the vast majority of housing programs available within Madison County are funded by the federal and New York State government, eligibility guidelines are quite stringent. Affordable housing program eligibility is determined by an individual's income which is considered in reference to the Area Median Income (AMI) (Affordable Housing Online, 2017). According to United States Department of Housing and Urban Development (HUD), Madison County has an AMI of \$68,000 for a family of four. Individuals who qualify for a variety of affordable housing programs that Madison County offers can utilize funds from the government such as Section 8, Section 202, RDRA (Rural Development Rental Assistance), HOME (HOME Investment Partnership Program), LIHTC (Low-Income Housing Tax Credits), Section 515, and Section 811 to assist in paying off housing expenditures.

The aforementioned sources of funding all assist in providing specific housing expenditures to residents within Madison County.

- Section 8: this federally, HUD-funded program through NYS Housing Authority provides housing choice vouchers to eligible low-income households with an AMI below 50% (Supportive Housing Network of NY, 2016).

This is the most popular source of funding in Madison County. Most tenants use their vouchers in rental housing. Voucher recipients are required to pay 30 percent of their income while the voucher

covers the difference provided to landlords. Essentially, this program provides monthly vouchers which greatly subsidize the cost of rent each month for low-income families (Affordable Housing Online, 2017).

- Section 202: this federally, HUD-funded program provides housing assistance to the elderly individuals with an AMI below 50% (Supportive Housing Network of NY, 2016).

This funding is traditionally used for new construction, rehabilitation and/or acquisition in permanent supportive housing projects for non-profit organization. This enables the eligible elderly populations to live independently through supportive services such as cleaning, cooking and transportation. Once awarded a grant, non-profit organizations are provided with three years of project rental assistance contracts which can be renewed noncompetitively through the Section 8 budget. Eligible populations must contribute 30 percent of their income to support tenant costs.

- RDRA provides vouchers, subsidies, and rental assistance to landlords for their low-income tenants (Affordable Housing Online).

Only residences with a USDA housing mortgage qualify for rural rental assistance which has a 25 year limit. Landlords can utilize these funds to modernize and improve the quality of units they provide either for environmental or aesthetic means.

- HOME: this federally funded program provides grants to states and localities for building, buying and/or rehabilitating permanent supportive housing and affordable housing (Affordable Housing Online, 2017).

This program must serve households with incomes at or below 60 percent of AMI. There are special incentives where 15 percent or more of the units are set aside for special needs populations such as homeless, mentally ill, substance abusers, domestic violence victims and physically

disabled individuals and families. However, due to funding cuts, HOME funds have been cut in half over the last three years (Affordable Housing Online, 2017).

- LIHTC: this federally funded program provides tax credits to state and local agencies who build, acquire or rehabilitate rental housing units for low income families for the first ten years of the property's operation (Sally, 2015).

Since its establishment in 1987, the LIHTC program has become the largest funding mechanism in use in the United States for developing rental housing with below-market rents for low-income households (Sally, 2015).

- Section 515: this program provides rental housing loans to very low and low income families, elderly persons and persons with disabilities.

These funds are typically used to assist in paying off mortgages but can also be used for improving or acquiring land and providing necessary facilities such as water and waste disposal systems (Affordable Housing Online, 2017).

- Section 811: this federally funded HUD program provides assistance to expand the supply of affordable housing with the availability of supportive services for persons with disabilities. (US HUD, 2013).

This program provides very low-income persons with disabilities options that allow them to live independently but in an environment that provides support through cooking, cleaning, transportation and the like.

Madison County has received funding from each of these sources over the last few decades. Unfortunately, due to the time constraints and limited resources, we were not able to identify as many sources of federally funded housing assistance within Madison County as we would have liked to. However, the following are the funding sources we were able to identify. In 2009,

Madison County had two subrecipients for a grant that provided temporary and disability assistance through HUD funding. These funds were part of the Homelessness Prevention and Rapid Re-Housing Program which provides assistance to households that have been identified as at-risk and who otherwise, without such assistance, would experience homelessness (Pro Publica, 2015). The two subrecipients were Mohawk Valley Community Action Agency, Inc and the Community Action Program for Madison County, Inc. These recipients received \$1,030,149 and \$746,685 respectively to fight homelessness within Madison County (ProPublica, 2015). Similarly, in 2009 the Madison Community Residence Project was award \$2,268 from HUD for Section 8 Housing Assistance Payments Program through special allocations (Pro Publica, 2015). However, this award was extremely small given the fact that Section 8 was awarded \$9.73 billion dollars in 2015 across the state; Madison County only received a portion of these funds, amounting to \$1,314,070 (Supportive Housing Network of NY, 2015).

The following table reveals all 17 of the current affordable housing developments within the county along with their respective funding sources, populations served, date of establishment, and initial grant size for the development of the complex. Unfortunately, due to time constraints and limited resources, we were unable to completely identify three critical aspects of the funding behind affordable housing in Madison County: the number of people served by each of the following programs, how much each program receives annually, and the number of individuals waiting on the waitlist. We were able to identify the initial funding allocations for the construction and development of six of the affordable housing developments in Madison County. However, given more time, we would have liked to provide a clearer picture on the current affordable housing practices in Madison County by compiling a full list of the funding and populations served by all of the affordable housing developments.

#	Name	Type of Government Assistance						Population Served	Year Established	Initial Grant Size
		Section 8	Section 202	Section 515	LIHTC	HOME	RDRA			
1	Stoneleigh Apartments	✓	✓	X	X	X	X	Elderly	1982	\$3,000,000
2	MH Armstrong Apartments	✓	X	X	✓	X	✓	Low Income Families	N/A	N/A
3	State of New York	✓	X	✓	✓	✓	X	Low Income families	N/A	N/A
4	Erie Canal House	X	X	✓	X	X	✓	Low Income Families, Elderly, People with Disabilities	N/A	N/A
5	Cazenovia Village Apartments Monahan Development	X	X	✓	X	X	X	Low Income Families, Elderly, People with Disabilities	N/A	N/A
6	Bolivar Landing (Rhi)	✓	X	✓	✓	X	✓	Low Income Families, Elderly, People with Disabilities	2007	\$3,891,363
7	Maloff Towers	✓	X	✓	X	X	✓	Low Income Families, Elderly, People with Disabilities	N/A	N/A
8	Deruyter Senior Housing	✓	X	✓	✓	X	X	Low Income Families, Elderly, People with Disabilities	1992	\$3,200,000
9	Eaton 6 Family	✓	X	X	✓	X	X	Low Income families	N/A	N/A
10	Madison Lane Apartments	✓	X	✓	X	X	✓	Low Income Families, Elderly, People with Disabilities	N/A	N/A
11	Eaton Apartments for the Elderly	✓	X	X	✓	X	X	Low Income families	N/A	N/A
12	Cedar Street Apartments	✓	X	✓	✓	X	✓	Low Income Families, Elderly, People with Disabilities	2006	\$2,721,293
13	Wilcox Apartments	✓	X	✓	✓	✓	✓	Low Income Families, Elderly, People with Disabilities	2005	\$3,851,000
14	Oneida Towers I	✓	X	X	X	X	X	Low Income families	2016	\$11,900,000
15	Oneida Towers II	✓	X	X	X	X	X	Low Income families		
16	Herbert D. Brewer Apartments	✓	X	X	X	X	X	Low Income families	N/A	N/A
17	Madison Community Residence Project	✓	✓	X	X	X	X	Elderly	N/A	N/A

7

We were fortunate to receive the annual grant size, waiting list size, and populations served for Stoneleigh Apartments through interviews with executive director, Robert Napoli. In 2016, Stoneleigh Apartments served 403 people who lived in one of their 325 units. On average, the wait list for the elderly population in the senior projects is filled with 30 to 40 people each year. However, some of these people are not ready to move in immediately, revealing a potential overrepresentation of true housing needs on the waitlist. For low-income families, the wait time is significantly longer because of the need to find an appropriate fit that has enough space for an entire family. Families usually remain on the waitlist for a year and in certain cases, families can

⁷ The initial grant size refers to the funding each development received to initially build the complex. This does not refer to the funding that was distributed to recipients through the various programs listed. As previously addressed, the incomplete data is a result of time constraints and limited resources.

wait up to two years for an appropriate fit. Unfortunately, more data of this detail could not be obtained due to constraints on time and resources.

Three of the major agencies in Madison County that receive funding through Section 8 of HUD are New York State Homes and Community Renewal, Canastota Housing Authority, and Oneida Housing Authority (Affordable Housing Online, 2017). While each of these agencies provide substantial services to individuals in need throughout the county, there is simply more demand that cannot be met with the current policies. For example, the Canastota Housing Authority offers a housing choice voucher program which is composed of 102 vouchers; each year approximately three new eligible families are taken off the waitlist and receive a voucher (Affordable Housing Online, 2017). These monthly vouchers provide participants with \$318 towards their rent which are traditionally utilized for 5 years and 4 months on average (Affordable Housing Online, 2017). The average Madison County resident receiving this voucher has a household income of \$14,244 per year – significantly lower than the county’s AMI (Affordable Housing Online, 2017). These vouchers subsidize housing costs substantially each month, which enables recipients to spend no more than 30 percent of their incomes on housing a month. On average, voucher recipients personally contribute approximately \$346 a month for rent and \$103 for utility expenses -- the remainder of their housing costs are covered through these Section 8 vouchers. These services enable residents to have a significantly larger portion of their household income at their disposal for other needs such as educational expenses, gas money, grocery money along with a host of other basic needs. 78 percent of voucher recipients are for households with a female head of household and 41 percent of households include children (Affordable Housing Online, 2017). This speaks directly to the demographic in need of affordable housing that is addressed in the needs assessment of this paper. However, there is still a very high demand for

these services, as demonstrated by the wait list which residents must stay on for approximately 4 months on average (Affordable Housing Online, 2017).

This sentiment of dire need for affordable housing within Madison County is echoed by the waitlist for housing choice vouchers distributed by New York State Homes and Community Renewal. The agency's local administrator in Madison County is the Madison Business Development Corp located in Morrisville. Unfortunately, it appears that this agency is no longer active -- revealing a clear gap in Madison County affordable housing policy leadership. We reached out to the agency's local administrator in Oneida County, Mohawk Valley Community Action Agency Inc, to get a better sense of what the community needs and services are in the region. Unfortunately, due to time constraints, we were unable to determine how long the waitlist currently is at the Mohawk Valley Community Action Agency along with how long the average applicant waits, how much assistance the average applicant receives or how many families are served. The agency's waitlist for Madison County is not noted on its website; however, the majority of the 42 counties the agency serves have had their waitlists closed for a significant portion of the last 10 years. On average, waitlisted applicants often remain on the waitlist for around 3 years (Affordable Housing Online, 2017). Similarly, depending on the family's needs, current monthly voucher assistance per family ranges from \$8 to \$2,446 (Homes and Community Renewal, 2017). The statewide average monthly voucher assistance payment is \$725. As of October 1, 2017, New York State Homes and Community Renewal assisted 526 families, demonstrating their wide reach (Homes and Community Renewal, 2017).

The Oneida Housing Authority is the only agency within Madison County that has an open waitlist for Section 8 funding. Voucher recipients live in Oneida Towers 1, Oneida Towers 2 and Herbert D. Brewer apartment complexes; the Oneida Towers support seniors and disabled

individuals while the Herbert D. Brewer complex assists families with low incomes (Affordable Housing Online). The agency has 85 vouchers which provide recipients with \$364 of assistance each month. On average, recipients usually remain on the waitlist for 27 months prior to receiving funding. Each year approximately 9 vouchers are available although voucher recipients typically utilize funds for just under 10 years (Affordable Housing Online). Although this waitlist time is significantly longer than that of the Canastota Housing Authority, its waitlist is indefinitely open which enables more Madison County residents to potentially receive government assistance for housing expenses.

Madison County does not currently have a homeless shelter within its county limits. However, several non-profit organizations and agencies within the county provide intensive care services for individuals in need to help get their lives back on track. As previously mentioned, Madison County received a total of \$1,776,834 in 2009 through HUD funding for the Homelessness Prevention and Rapid Re-Housing Program. This program provided assistance to households that have been identified as at-risk and who otherwise, without such assistance, would experience homelessness specifically for the disabled community (Pro Publica, 2015). The two subrecipients were Mohawk Valley Community Action Agency, Inc and the Community Action Program for Madison County, Inc. who received \$1,030,149 and \$746,685 respectively to fight homelessness within Madison County (ProPublica, 2015). Unfortunately to the best of our knowledge, Madison County has not received a grant of this size for homeless prevention in the last 9 years. While this grant and the services it enabled are a tremendous addition to the current housing policies in Madison County, many homeless individuals suffer due to the lack of an emergency or homeless shelter within the county. Once again, we were unable to identify any additional details regarding the fight against homelessness in Madison County due to limited resources and time constraints.

A more comprehensive analysis of the programs in place would have led to a richer recommendation in the next section of our paper.

Case Studies

Unfortunately, much of rural America is still struggling with housing issues nine years after the housing crisis of 2008. Rural America feels disproportionate effects of recessions compared to urban regions due to its lack of economic vitality and diversification (HAC, 2012, p. 3). However, this disproportionate burden has provided several examples of how rural communities have combatted the housing crisis and implemented programs to better the living arrangements for their residents.

A key advocate in solving the housing crises in rural America over the last 46 years is The Housing Assistance Council (HAC), a national nonprofit that aims to increase the availability of decent and affordable housing for rural low-income people through below-market-rate financing, technical assistance, training, research and information services to nonprofit, for profit and public sectors (2012, p. 3). The most influential solution to solving housing crises in these rural low-income areas is the proactive analysis of the changing resource needs for housing production in rural areas, designing national programs to address resource gaps, and seeking partnerships to help fund them. Several communities have worked with this nonprofit to combat the dire housing issues facing their communities and below we will highlight two counties that have positively combatted their affordable housing issues.

Fayette County in rural Ohio provides a great example of how a low-income rural community has combatted housing issues plaguing their residents. In order to combat this issue, the Community Action Commission of Fayette County in Rural Ohio was formed. This commission has 5 Homeless Programs for local residents which include a Homeless Shelter,

Transitional Housing, Rapid Re-Housing, Fayette Landing, and Destination HOME (CACFC, 2017). Each of these programs are funded by state or national governmental agencies or the local community due to their desire to help those in poverty build strong foundations to live productive, self-sufficient lives. The Homeless Shelter welcomes all individuals regardless of criminal background who have submitted to a report by the police or sheriff to ensure the protection of other families within the shelter. This option is funded by the Ohio Department of Health and provides participants with self-sufficiency planning, job search assistance, credit counseling, budgeting, transportation, and assistance locating housing. Transitional Housing provides quality supportive services and rental subsidies to families who are homeless to provide strong foundations for their future. This option is supported by HUD's Continuum of Care process and the Ohio Development Services Agency. Eligible individuals must reside in an emergency shelter in Fayette County and make under 35 percent of the area median income (CACFC, 2017). Rapid Re-Housing provides clients with case managers who help participants move into their own homes, by addressing any barriers that prevented them from owning houses in the past. This assistance is provided through short-term rentals and utility assistance through intensive case management services. Destination Home provides chronically homeless and disabled individuals with shelter, care and permanent supportive housing programs. This program is federally funded by HUD and thus follows HUD protocols.

Each of these programs in Fayette County have been successful due to the strong community network established through the Community Action Commission of Fayette County. This Commission has terrific communication with the larger community and engages in constant educational programs in addition to their federally funding housing services. The organization's website is essential to effectively reaching the community and engaging in constant dialogue. By

understanding the needs of their fellow residents, this coalition has been able to provide the appropriate services to combat homelessness and poverty in their community. While Madison County has several similar services and programs in place, they have not been nearly as successful due to the variations in communication with the community. It also appears that Madison County does not have one unified coalition that tackles affordable housing in the community, which leaves many agencies providing the same services that are not as effective as they should be due to lack of communication and organization. By consolidating all of the services, programs, and agencies that work towards safe, affordable housing options in Fayette County, the Community Action Commission of Fayette County has optimized the fight for affordable, equitable housing by being transparent in the services they provide for both the government, their residents and the larger community. This allows the county to acknowledge where they are insufficiently meeting county needs as well as where they can collaborate due to the similar goals and initiatives of several organizations in the area. Madison County would benefit greatly from a coalition with clear communication.

Another great example of how a low-income rural community has combatted housing issues plaguing their residents is demonstrated by the Little Dixie Community Action Agency (LDCAA) in rural Oklahoma. Little Dixie Community Action Agency has been aiding communities in providing low-income families with decent, safe and affordable housing since 1973 (LDCAA, 2017). These programs and services include Self-Help Housing, Loans, T&MA Contractors, Weatherization, Homebuyer Education, Credit Counseling, and Apartments. The Self-Help Housing program enables families to perform construction on each other's homes under qualified supervision which is often referred to as "Sweat Equity" (LDCAA, 2017). This saves participants between \$10,000 and \$20,000 per home enabling an additional 1,700 low-income

families to own houses (LDCAA, 2017). This program is so successful due to the staff participation; during the predevelopment phase, staff work to market the program, provide homeownership training, identify groups that will work together, and assist families with their loan applications to USDA Rural Development and securing a site for home construction. (LDCAA, 2017). Four to ten families work together building and constructing each home until every home in the group is completed. This program has been so successful that the agency has expanded to reach eight separate counties in Oklahoma. The loan program allows families to borrow money in order to purchase a home, gain assistance with down payments or closing costs, or for making home improvements. The Weatherization Assistance program enables low-income families to permanently reduce their energy bills by making their homes more energy efficient, in which over 1,000 households have benefitted from this program through both reduced energy costs and safer households. Possibly the most beneficial program LDCAA offers is their 129 apartment rental units (LDCAA, 2017). LDCAA owns and operates apartment complexes which provide residents with rental housing options that are safe, decent and affordable. Similarly, this program offers three senior supportive housing complexes which are all funded by federal sources such as the United States Department of Housing and Urban Development as well as local sources such as Oklahoma Department of Commerce and Oklahoma Housing Finance Agency.

While Madison County has many of the same programs that Little Dixie offers, such as Weatherization, Apartments, Credit Counseling and Loans, the success in Little Dixie stems from their Self-Help Housing program. From what we understand, Madison County does not have a similar program. While this may not be a feasible option due to the colder climate of upstate New York, the Self Help Housing Program emphasizes the need to be innovative in affordable housing solutions. The Little Dixie Coalition has pushed us to be more creative and innovative in our

housing solutions; since Madison County already provides multiple affordable housing services, we were enlightened by the creativity and originality that Little Dixie engaged in, and will address the impacts this has had on our recommendations in the next section of this paper.

Environmental Approach:

While it is important to look at the issue of housing through a social justice lens, it is equally as important to note how housing can provide great environmentally proactive opportunities as well. In 2010, Madison County emitted 777,338 metric tons of CO₂ emissions (CO₂e). The environmental impact of energy use in the residential sector alone accounts for 18% of Madison County's carbon emissions, second only to transportation (54%) (Ingmire et al. 2013) (Phil Hofmeyer, Morrisville State's Renewable Energy Technology department). More specifically, 50% of residential energy costs in New York State come from the energy used to heat and cool resident's homes, with an additional 16% of energy costs being derived from residential water heating (NYSERDA).

Prior to the Department of Energy Organization Act of 1977, there was little to no regulation or energy code for residential construction in New York to be conscious of and held accountable to (DOE History Timeline, 2017). New York State has since regulated residential construction through the State Energy Conservation Construction Code in accordance with current international energy conservation code and expect annual energy savings of nearly \$250 million from home energy improvements by 2030 (New York Building Energy Codes Program, 2016). 70 percent of residential homes in Madison County were constructed prior to 1977, leaving a large percentage of Madison County residents living in subpar energy efficient homes and left out of the state's home energy savings (USA.com, 2017). As the 2016 ALICE Report concluded, 43% of Madison County is employed but struggling to support themselves and their families, as they live

near or below the poverty line (ALICE, 2016). On top of this, the quality of life in an energy-efficient homes in Madison County is higher due to the increased physical comfortability home energy-efficiency measures provide residents.

One way to help increase home energy-efficiency is through public programs funded by the federal, state, and local governments. The New York State Energy Research and Development Authority (NYSERDA) is a public benefit corporation established in 1975 as New York's premier player in advancing energy solutions and protecting the environment. NYSEDA utilizes over \$1.2 billion in total assets to support over fifty programs focused on improving energy efficiency through community works projects, subsidized private contracting, educational programs, research and development, and more (NYSEDA).

Most prevalent to this research project, however, are the programs NYSEDA has partnered with to reduce home energy costs for New York State residents. Weatherization Services, in particular, can reduce the amount of fossil fuel required to heat homes and provide hot water for Madison County residents. One such initiative these Madison County residents can take advantage of is the free or low-cost weatherization of their home through the New York Weatherization Assistance Program, WAP and EmPower New York. Funding from the US Department of Energy and other social services organizations in partnership with NYSEDA such as the Low-Income Home Energy Assistance Program and the US Department of Health and Human Services give low-income residents access to home energy cost reducing measures through WAP's four step process. First, an application is submitted to your local Madison County service provider, the Stoneleigh Housing Inc, to determine program eligibility. Households with incomes at or below 60% of state median income are eligible for assistance. Additionally, if a household contains a member who receives Supplemental Security Income (SSI), Public Assistance, Food

Stamps, or Home Energy Assistance Program (HEAP) benefits, the household is automatically eligible for WAP services. After being approved, an energy audit of the resident's home is conducted by a licensed BPI GoldStar contractor or another certified local contractor to perform the work and identify needs. Homes are weatherized with the use of materials that meet state and federal government standards. For example, services may include but are not limited to: the sealing of cracks and holes to reduce heat loss, insulation of attics and walls, heating system repairs or replacement, providing efficient lighting and refrigeration, window and/or outside door repair or replacement, minor repairs which are needed to ensure maximum efficiency of the weatherization services performed, mitigation of energy-related health and safety issues. After home alterations are completed, the home is inspected to ensure quality of work. Burdensome home energy costs are often cut by as much as 50% after weatherization.

On top of these services, Stoneleigh Housing Inc. is very knowledgeable in the additional assistance programs from NYSERDA, the Office for Temporary and Disability Assistance, and gas and electric utility companies. Stoneleigh weatherization staff can help residents apply for grants or loans associated with these agencies to help overcome any resident's financial obstacles in meeting their home energy needs.

Unfortunately, this program remains underutilized by Madison County residents. While Stoneleigh Housing has received \$325,000 annually in regular weatherization grants for the last 30 years, the organization believes it can reach a larger residential pool. Robert Napoli, executive director at Stoneleigh Housing, shared that the agency has provided significant furnace replacements over the last three decades but believes there are many more households that should make the switch. "We built a \$14 mill complex, NYSERDA gives \$80,000 to \$2,300 per apt for energy needs."

Similar home energy-efficiency services available to qualifying low-income Madison County residents boast multi-million dollar budgets that utilize the highly skilled labor and the expensive raw materials necessary to give New York residents who are in need of these home energy improvement services. Renewable Heat New York (RHNY), for example, is a program under NYSERDA with a \$3 million budget claiming to offer free to low cost boiler replacement for qualifying New York State residents, but community leader Bob Napoli explains that no one in Madison County has applied for RHNY because of the massive disconnect between this listed service and the population of New York and Madison County the program is intended to serve. These ‘find and apply,’ programs lack the community oriented engagement that has been the staple of much more effective initiatives with humble and well managed budgets.

Statewide conferences jointly supported by NYSERDA and the New York State Public Service Commission are held biennially, with single day regional meetings occurring in alternating years focused on educational workshops for low-income energy stakeholders. However, according to Colgate University Physics Professor, Beth Parks, “Even with the existence of these conferences, not enough information is relayed to the residential public.” This reveals the information gap and lack of familiarity that is still present within rural upstate areas with regards to these home energy services.

The Solarize Madison initiative, provides a success story and the blueprint for galvanizing Madison County residents to participate in home energy projects. Between 2003-2011, only 19 residential solar PV systems had been installed in Madison County. In 2011, current Morrisville State College student, Jan Myers, approached Madison County Planning Department with the idea for a community focused renewable energy program promoting sustainable energy production to stabilize current and future energy costs. Starting with only a \$28,000 grant from the Central New

York Climate Change Innovation program (C2IP), the Solarize Madison's positive development allowed it to grow by tenfold with an additional \$100,000 from NYSERDA and \$185,000 in private investment.

This would not only help low-income Madison County residents save money, but also generate clean energy to reduce Madison County's carbon footprint, create local jobs in the short term, and promote equity through creating new local economic opportunities and career pathways in the long term.

In collaboration with the NYSERDA sponsored Central New York Regional Planning and Development Board, the Madison County Planning Department and the Renewable Energy Training Center (RETC) launched Solarize Madison in 2012 (Myers, 2012). In a four-month span, the campaign resulted in 28 new residential solar PV systems and 205 applicants, one and a half times the amount of solar installed countywide in the previous eight years combined and mitigating 44 metric tons of CO₂e annually into the atmosphere (Myers, 2012). Solarize Madison key to success was tackling each of the primary market barriers for their target audience: prohibitive cost, empathizing with potential discomfort with the installation and sales process, residents' unfamiliarity with the solar technology, customer commitment, and simplicity the program needed to be simple to engage and enroll in (Myers, 2012). To this end, the project featured several key elements of sponsorship: community leaders, academic leaders, and local organizations. A Steering Committee of 12 community leaders were responsible for this overall program design. These dedicated volunteers understood how to personally bridge the gap between this government funded renewable home energy program and the target program residents (Myers, 2012). For example, Sustainability Coordinator for Colgate University John Pumilio helped in informing the Hamilton community about the project. Through his relationships with local interest group

Citizens for Safe Energy and a not for profit Environmental Education Center in Sherburne, Pumilio was able to host an informational Q&A forum to build outreach in in Hamilton, NY. Solarize Madison conducted six Q&A informational meetings throughout Madison County. 170 people attended with 30-40 attendees per night (Myers, 2012). The steering committee also diversified their marketing strategy by not only focusing on Q&A and other ‘word of mouth’ marketing, but also posters in local businesses, articles in community papers and newsletters, announcements at community meetings, distribution of flyers at events, plus local television and radio spots to solicit participation in this Solarize Madison program (Myers, 2012). After gaining interest and initial participation in Solarize Madison, the committee team required residential participants receiving grant money to become Solar Ambassadors for two years and continue promoting the cause (Myers, 2012). Phil Hofmeyer, professor in Morrisville State’s Renewable Energy Technology department, integrated the Solarize Madison initiative in his course curriculum. By teaching his students about the solar technology and having them be hands on in the installation process, Hofmeyer is setting up the local community with the right knowledge and understanding of energy efficiency technology to bridge the gap between the government funded and the residential population these funds are allocated for (Myers, 2012).

Other community based initiatives have likewise shown to be an effective way of increasing home energy efficiency. In 2012, the Central New York Energy Challenge sponsored by C2IP and partnered with NYSERDA designed a friendly competition between teams of households to see who could save the most energy through informative measures and exercises on how to be more conscious of your carbon footprint. For example, the program walks Madison County residents on how to determine their energy intake, how to mitigate energy use in household lighting, heating and cooling, and electronics, and the benefits of having a home energy audit done.

Overall, 9 team composed of 63 people participated in the pilot program, with the goal of reducing electricity consumption by 10%. Data showed that the average participant in the program used 29% less energy than the average control group participant for the month of June 2012. Starting with an initial investment of \$497,793, \$208,000 was used for seed funding seven sub-grant pilot projects the communities were able to leverage an additional \$1.94 million in regional, state, and private funding to complete the demonstration projects. An integral part of the program is taking the Climate Smart Community pledge. This ten step program outlines how becoming a climate smart community recognizes communities for their accomplishments through rating system consisting of Bronze, Silver and Gold certifications. Madison County is the first municipality in CNY to become a Certified Climate Smart Community. The challenge was so successful that it was expanded to surrounding localities such as Skaneateles, Preble, and Syracuse.

The aforementioned home energy-efficiency programs are essential steps to providing the low-income residential population of Madison County the proper energy assistance they need. While proper funding is necessary to create the large infrastructure and lifestyle changes required of improving home energy efficiency, a massive public energy budget has not been enough alone to spur significant participation home energy efficiency initiatives. Seed funding for community based projects in Madison County, however, have been proven effective in increasing home energy efficiency and in turn, long term investments for a multitude of reasons: community leaders act as role models for further participation from their peers, the educational opportunities in both academic and municipal settings bridge the knowledge gap, and the competitive nature of these projects bridge the gap between the well-resourced government sponsored energy organizations and the homeowners of Madison County with expensive and wasteful energy use. Additional marketing measures of radio and television spots, local articles in community papers and

newsletters, announcements at community meetings, distribution of flyers at events, and ‘word of mouth’ are also important aspects to bridging this gap and increasing participation in increasing home energy efficiency.



PART VI: *RECOMMENDATIONS*

VI. Recommendations

Possible Solutions

There are several ways to address the issue of affordable housing in Madison County. Due to the community's limited resources, several options require extensive federal funding to pursue. According to University of Pennsylvania Professors John Landis and Vincent Reina, "In 2015, federal tax expenditures that went toward supporting affordable rental housing were approximately 21 percent of what was spent on homeownership, which represents a roughly three percentage-point decrease from 2000, despite the fact that there are three times more rent-burdened low-income households than there are subsidized rental units in the country." (Reina, 2017). This emphasizes the difficulty Madison County could potentially face when applying for federal grants. However, we are optimistic that through community-based participatory research and involvement, there are several options that Madison County can pursue to develop affordable housing within the region. As Cook et al. (2009) point out in their article, housing plays a large role in rural community vitality. Through 134 interviews with informants in small rural communities in 9 north-central states, Cook et al. (2009) examined the notion that "rural communities are enhanced when local leadership builds a network of relationships and resources to invest in and plan for the maintenance and expansion of local housing options" (p.114). Cook et al. (2009) emphasizes the need to propose recommendations that are proposed and produced mainly by local impulses and grounded largely on local resources. Essentially, the need to partner with strong local leaders such as Mike Fitzgerald of the Department of Social Services is essential to the mission to development safe, affordable housing options in the town of Hamilton and the larger Madison County community.

Based on our needs assessment, there is a strong demonstrated need for additional affordable housing services within Madison County. Last year alone there were nearly 1,600 individuals who were in need of affordable housing services which amounts to 2.2 percent of the entire county population (Fitzgerald, 2017). This is most likely an underestimate of the demonstrated need due to the limited processes for quantifying homeless and needy populations within the United States. Wayne State University Psychologist, Paul Toro and member of the American Psychological Association, Melissa Warren validate this claim when they state, "... studies attempting to count them (the homeless) will inevitably lead to underestimates." (Toro, 1999, p. 123). Thus, it is more likely that close to 1,800 people were in need of affordable housing services last year in Madison County which is a relatively conservative estimate. Unfortunately, each of the housing programs Madison County offers has had a long waitlist for the last few decades. Several of those waitlists are permanently closed due to excess demand while others have wait list applicants idly waiting for a phone call that they have received assistance for anywhere from 4 months to 5 years (Affordable Housing Online, 2017). It was also identified that over 30 percent of Madison County residents are housing burdened, spending more than 30 percent of their disposable income on housing expenditures (HUD, 2017). This need emphasizes that even with the many housing programs Madison County offers, more programs are necessary to properly address the affordable housing demand within the county.

Thus, our team has chosen to address the dire need for equitable housing within Madison County instead of the issue of sprawl. We acknowledge that each of these solutions could lead to additional sprawl concerns such as traffic congestion and increased habitation in Madison County. However, the focus of our recommendations lies in the equitable and affordable placement and

distribution of affordable housing developments and services within Madison County. Thus, the four promising affordable housing recommendations we are proposing for Madison County are:

- 1. Short Term Solution: The creation of a small-scale emergency shelter or homeless shelter in the locality that has the largest demonstrated need. This shelter must abide by environmental protocols lead paint and energy efficiency standards.**
- 2. Long Term Solution: The development of additional affordable housing units within the county concentrated in localities with the highest identified need. These units must abide by environmental protocols regarding lead paint and energy efficiency standards.**
- 3. Innovative Solution: The creation of a homeless shelter that is connected to affordable housing units with long term competitive apartments that abides by environmental protocols regarding lead paint and energy efficiency standards.**
- 4. Environmental Solution (Existing Stock): The preservation of the existing Madison County housing stock through retrofitting to address environmental concerns in accordance with current New York State Energy Code. The reallocation of NYSERDA assets from underutilized programs for seed funding in community based home energy efficiency projects.**

According to our community partners, Madison County does not have the need for a 50-bed homeless shelter. However, there are needs for both temporary and permanent means of addressing the issue of affordable housing. Our community partners have been deliberating over the creation of a homeless shelter that is connected to affordable housing units with long term competitive apartments. This innovative combination of both a long and short term solution to affordable housing is a very progressive option. We acknowledge that one development would not solve all

of the county's housing problems, and therefore, we are proposing three potential options that Madison County can pursue to address the issue of affordable housing. Each of these options implement an environmentally friendly approach through the required lead and energy efficiency standards we are proposing. We are also proposing an additional environmental recommendation which would retrofit all existing affordable housing units to meet these aforementioned environmental standards.

Long Term Solution

The long-term solution we are proposing to Madison County's affordable housing problem is the development of additional affordable housing complexes in the localities and towns with the largest demonstrated need that currently do not provide affordable housing services. As evidenced by NYU Urban Researchers, this proposal is likely to succeed in "addressing the current rental affordability challenge" (Reina, 2017). Their research suggests "... that a supply-side response is essential, but that housing demand is so high that these new units need to come in at every level of rental market, not just the top." (2017). By placing affordable housing complexes in towns that do not currently have programs, we are addressing the environmental justice issue we posed earlier in this report. Essentially, due to the spatial composition of rural counties, it is very difficult for low income individuals to live outside of the communities they live and work in. By placing these complexes in communities that do not have any services currently, we are enabling residents to live affordable, productive lives that are not inconvenient. For example, if a family that lived in Smithfield required housing assistance, they currently would have to apply for housing assistance within Cazenovia which has a closed wait list for most affordable housing services. This could potentially result in the family moving to a town 30 minutes away from their home if they receive funding after waiting on the waitlist for anywhere from 5 months to 5 years. By placing an

affordable housing development in Smithfield, the supply of affordable housing units would increase providing more needy individuals with the assistance they need. This would also enable families to maintain their current jobs, schooling, and community relationships without having to pick up and move. This example is just a hypothetical one, we were not able determined which towns and cities had the largest demonstrated need and are not sure Smithfield would be the best location for developing an affordable housing complex.

This development could apply for several different federally funded government grants if it were truly serving the neediest populations in the region. According to our needs assessment, the elderly and disabled were in disproportionate need of affordable housing itself and the corresponding services. Thus, it would be justified to apply for funding from Section 202, HOME, Section 515, and Section 811. It is likely that other funding sources could be pursued due to the environmentally friendly practices the complex hopes to abide by.

Short Term Solution

The short-term solution we are proposing is an emergency shelter or homeless shelter in the locality with the largest demonstrated need. This proposal is largely based on our conversations with community partners and the success of the homeless shelter in Fayette County, Ohio (CACFC, 2017). Madison County does not currently have a homeless shelter and the nearest facility is in Syracuse within Onondaga County. The homeless shelter we are proposing would be very similar to that in Fayette County, Ohio. The Homeless Shelter in Fayette County, Ohio welcomes all individuals regardless of criminal background who have submitted to a report by the police or sheriff to ensure the protection of other families within the shelter; this option is funded by the Ohio Department of Health and provides participants with self-sufficiency planning, job search assistance, credit counseling, budgeting, transportation, and assistance locating housing

(CACFC, 2017). While we acknowledge there can be several negative ramifications from developing a homeless shelter, we believe this service could provide many more benefits than harms in Madison County. As the Ohio case study reveals, homeless shelters provide their participants with many assistance-based programs that eventually lead to independent living in addition to a bed to sleep in. Due to the geographic location of Madison County, it is quite cold for the vast majority of the year -- often covered in snow; this service would enable our homeless residents to spend the night in a warm bed, free from the cold. A homeless or emergency shelter would be a tremendous service for many residents within the county. As Toro and Warren point out, "most homeless people come from extremely poor backgrounds, are in regular contact with family members and are not transients but are longtime residents of the cities on whose streets they are found" (1999, p. 122). The majority of homeless individuals in Madison County however do not reside on streets but rather on the couches of their friends and family. Reaching out to close relatives and friends can greatly impact a homeless individual's sense of self worth and value, leaving them feeling embarrassed, worthless and completely dependent (Toro, 1999, p. 126). Instead of needing to ask family members or friends to crash on their couches, many residents could spend a few nights in the proposed shelter until they can figure out a more permanent solution. Due to the supportive services provided within this facility, it is likely that participants would be able to locate these more permanent housing solutions in a rather rapid timeframe.

Funding for this recommendation would be a bit trickier than the other options. Due to the fact that this facility would be a short term option for users, the users would not be required to pay any form of rent or fee. Thus, this facility automatically becomes ineligible for many grants and sources of funding. We are hopeful that Section 811 funding could be pursued for this facility because it is likely most of the participants of this shelter will have mental disabilities -- as

evidenced by the large proportion of this population in the general homeless population. Once again, since this facility intends to abide by environmental codes and standards, we are hopeful that additional funding could be acquired through grants for environmental purposes.

Innovative Solution

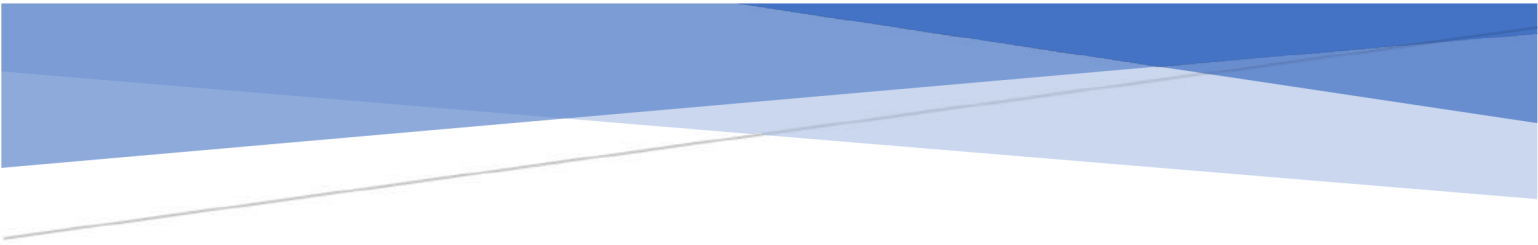
Our last recommendation is much more creative and innovative than the last two options. Based on the success of the Little Dixie County Self Help Housing Program, we pushed ourselves to come up with an original solution to the affordable housing issue in Madison County. Unfortunately, such a program appears to be unfeasible due to the frigid temperatures during the majority of the year in region along with the limited time residents have to build their own homes. As demonstrated by the needs assessment portion of this paper, a large percentage of the Madison County community qualifies as low income or very low income. Thus, it is high unlikely that residents would be willing to quit their jobs for a year to help build four to ten homes to ameliorate the cost of their housing. Thus, we have decided that the creation of a homeless shelter that is connected to affordable housing units with long term competitive apartments that abides by environmental protocols regarding lead paint and energy efficiency standards is the best option for the community. This would solve both temporary and permanent housing needs in one swift development. This hybrid facility would also be eligible for the most sources of funding. We cannot take sole credit for development this solution. Our community partners such as Robert Napoli, Mike Fitzgerald and Steve Darman were the true brains behind this solution. We believe that the community has the right amount of support and leadership to truly move forward with this recommendation and we hope to see that come to fruition in the coming years.

Limitations to all Recommendations

There are several limitations to any additional developments to Madison County's current affordable housing services. According to Mike Fitzgerald of the Madison County Department of Social Services, the greatest potential difficulty in developing a homeless shelter with long term affordable housing units is the siting of the complex. This complex would have to be located in a very accessible region that is in close vicinity to grocery stores, doctors, schools and other essential services; this is the main challenge for a rural county because of the spatial distance within communities. This complex would also have to be a great length from bars, casinos and other services that could distract those in need of this service and further hinder their path back to independence and self-sufficiency. According to our community partners Mike Fitzgerald, Robert Napoli, and Steve Darman, the largest opposition to the establishment of affordable housing units would arise from the residents who live on neighboring plots of land. This form of resistance is commonly referred to as NIMBY which is an acronym that stands for Not in My Backyard (Scally, 2015). According to Scally and Tighe (2015, p. 753), this resistance stems from fears that using the land for affordable housing complexes "might negatively impact property values" and thus is "viewed as a threat" in terms of "personal assets and finances, school capacity and funding, public safety, and other local services and amenities". Thus, the negative stigma associated with affordable housing and homeless shelters is a real issue. The belief that affordable housing recipients are former criminals, drug addicts and unproductive members of society is widely held. Neighbors fear their families will be exposed to people who will degrade the value of their land and put their community in danger. Scally and Tighe (2015, p. 758) justify these common fears through surveying affordable housing developers which revealed "64% of developers indicated safety and crime concerns of paramount importance to communities, followed by tax burden concerns at 50%". These fears are extremely flawed; in order to live in one of these facilities, there

is a very extensive application process that requires several background checks and screenings. Therefore, the individuals who ultimately end up living in these facilities are not former criminals and often are enrolled in rehabilitation programs if they had previous issues with illicit substances. Most of the time however, these individuals are just victims of circumstance and need some additional assistance due to an unfortunate chain of events. The expectation is that these services are not a handout but rather a hand up. Applicants who are accepted into these facilities are actively doing things to make their lives better and affordable housing units are one way the community can help them achieve that goal.

The largest hindering factor we see in pursuing any of these recommendations lies in the weak affordable housing coalition that currently exists in Madison County. While our community partners are clearly very passionate about providing more equitable, affordable housing options within Madison County, we discovered that there is not a widespread, constant level of knowledge across these partners. Similarly, the availability of these services is not well publicized or widely known. In our understanding, it appears that Madison County residents are unaware of many of the phenomenal services that are available to them. Therefore, we believe that the coalition needs to work on developing more transparency with the community with regards to the services and programs that are available within their own neighborhoods. We noticed this flaw when we were analyzing the Fayette County case study. Fayette County created a Community Action Commission that has an affordable housing coalition that matches the passion and expertise of our community partners here in Madison County. However, the Community Action Commission of Fayette County in Rural Ohio has a terrific stream of communication with its constituents and a great organizational structure. The main mode of communication this commission pursues is through their active website which Madison County would benefit from in many ways. With that



are honored to have been a part of this process and look forward to developments in the future.

PART VII: *CONCLUSION*

VII. Conclusion:

Madison County is in need of more safe and affordable housing, but increasing the supply of affordable housing is no simple task. Complexities include finding the funding for these projects and siting issues due to the rural makeup of the county. Even in rural counties, NIMBY issues still exist due to the stigmas associated with the populations who might be in need of affordable housing and homeless shelters. In order to address the need for more affordable housing within Madison County, we have had many conversations with community partners where we determined the best proposal would include both a short and long term solutions for affordable housing. Our community partners believe there is a way to combine these two solutions with the establishment of an emergency shelter or homeless shelter that is attached to competitive affordable housing units. This progressive proposal addresses the immediate needs of the homeless population, as well as the low-income families at high-risk of being homeless. This would be a tremendous service for many residents within the county, especially in the winter months. It is important to note that the shelter would also provide supportive services with a goal of finding permanent housing solutions in a rapid timeframe. In addition, we recommend the creation of additional affordable housing units in the cities and towns with the largest demonstrated need that currently do not provide services, so that families can maintain their current jobs, schooling and community relationships without having to pick up and move. With these potential solutions, we continue to work to solve the complexities within the realm of funding and siting, in order to develop equitable and sustainable solutions for all in need of safe and affordable housing in Madison County.

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