

Home Sweet Home: Keene Housing Resident Satisfaction Survey

Michael Mozzar, John Riordan, Keith Pancake, and Ashley Joyal

Keene State College
Department of Geography



Acknowledgements

We would like to acknowledge Dr. Christopher Brehme of Keene State College for his time and dedication through the duration of the semester. Our research and Seminar experience would not have been possible without his patience and guidance. We would also like to acknowledge April Buzby for being our liaison with Keene Housing. Additionally, Keith Thibault and Susy Thielen provided new insight and perspective regarding the housing services in Keene, New Hampshire. Lastly, we acknowledge the residents of Keene Housing who participated in the Resident Satisfaction Survey. We are very grateful for everyone's contributions.

Abstract

This study uses a mixed methods approach to examine the topic of public housing in Keene, New Hampshire, a small city in central New England. We are interested in housing residents' perceptions of access, safety and satisfaction with their homes, properties, and neighborhoods. We used surveys, interviews, and GIS to collect data that informs this topic. A Resident Satisfaction Survey was designed to inform Keene Housing about their property managers' performance and learn more about residents' needs. This survey evaluated Keene Housing tenants' attitudes regarding safety, food security, and access to childcare programs, healthcare and technology. Other survey questions explored elements such as criminal activity and technology access. Quantitative and qualitative survey results were synthesized and were statistically analyzed to explore differences between public housing properties. Interviews were conducted with housing coordinators, contractor/carpenters, and directors to gain knowledge about the history of, and recent developments in, local public housing. GIS was used to analyze spatial relationships between housing properties and schools, grocery stores, public transportation, and emergency health facilities. The results indicated that there is a lack of programs for Keene Housing tenants to utilize, and confirmed that residents have unequal access to key services within the community. We found a significant difference among housing properties with regard to resident satisfaction.

TABLE OF CONTENTS

CHAPTER ONE: INTRODUCTION.....	1
KEENE, NEW HAMPSHIRE.....	4
DIRECTORY OF KEENE HOUSING PROPERTIES.....	7
CHAPTER TWO: LITERATURE REVIEW.....	10
THE QUALITY HOUSING AND WORK RESPONSIBILITY ACT OF 1998.....	14
1980-1990.....	15
2000-2010.....	15
LOW INCOME HOUSING TAX CREDIT.....	16
MOVING TO WORK.....	18
FOUR PILLARS OF CONCERN IN PUBLIC HOUSING.....	21
CHAPTER THREE: RESIDENT SATISFACTION SURVEY.....	26
METHODS.....	27
RESULTS.....	30
ADDITIONAL FIGURES.....	35
CHAPTER FOUR: INTERVIEWS.....	36
INTERVIEW METHODS.....	37
KEITH THIBAUT.....	38
SUSY THIELEN.....	39
CHAPTER FIVE: GIS ANALYSIS.....	41
METHODS.....	42
RESULTS.....	43
CHAPTER SIX: CONCLUSIONS.....	46
LITERATURE CITED.....	50
APPENDICES.....	54

LIST OF FIGURES

Figure 1: Survey Return by Property.....	28
Figure 2: Results from Personal Vehicle and Primary Grocery Store Chi-Square Test.....	34
Figure 3: KH Residents in a Resident Self-Reliance Program.....	34
Figure 4: KH Residents with Access to the Internet.....	34
Figure 5: Number of times KH residents have called maintenance, in the last year.....	35
Figure 6: KH residents' ability to afford nutritious food.....	35
Figure 7: Number of meals with every member of family, per week.....	35
Figure 8: Primary Grocery Store Usage.....	44
Figure 10: Average Distances from Keene Housing Properties to Key Locations.....	45

LIST OF TABLES

Table 1: Return Rate of Surveys by Property.....	28
Table 2: Property Management Responses using Kruskal-Wallis Test.....	31
Table 3: Safety Responses using Kruskal-Wallis Test.....	32

CHAPTER ONE: INTRODUCTION



Along with access to food and water, one of human's primary basic needs is shelter. Unfortunately, many families today can neither find nor afford a suitable, safe place to live. This is why Public Housing Authorities (hereinafter "PHAs") and other related affordable housing providers are so important. According to the U.S. Department of Housing and Urban Development (hereinafter "HUD") website:

Public housing was established to provide decent and safe rental housing for eligible low-income families, the elderly, and persons with disabilities. Public housing comes in all sizes and types, from scattered single family houses to high rise apartments for elderly families. There are approximately 1.2 million households living in public housing units, managed by some 3,300 PHAs." (U.S. Department of Housing and Urban Development 2013).

Regardless of whether these people are elderly, disabled, or simply struggling to make ends meet, it is important for both them and their communities that affordable housing options be made available.

During his 1964 State of the Union address, Lyndon B. Johnson stated, "This administration today, here and now, declares unconditional war on poverty in America." Further, in his address, he stressed the need to focus on the causes rather than the consequences. "Our aim is not only to relieve the symptom of poverty, but to cure it and, above all, to prevent it." November 8, 2014 marked the fiftieth anniversary of this address and the beginning of the War on Poverty. From this War on Poverty, many organizations were created to serve those in need, including Keene Housing (KH) and Southwest Community Services (SCS).

There are five housing organizations in Keene, New Hampshire with Southwest Community Services and Keene Housing being the dominant providers of low-income housing. Each functions in a different way, but they both serve the same purpose and provide services to those in need. Additionally, both organizations were established in 1965, but with different missions. The mission statement of Keene Housing is concerned with the need of “safe, sanitary dwelling accommodations for the elderly and persons of low-income in Keene.” The mission statement of Southwest Community Services states that, “With dignity and respect, SCS will provide direct assistance, reduce stressors, and advocate for such persons and families as they lift themselves toward self-sufficiency.” SCS is a United Way affiliate and provides its residents with many programs and resources to ensure the wellbeing and overall success of the individuals involved. Although Keene Housing provides its residents with services beyond housing, the services are not funded the same and are not as varied as those of SCS. Another difference is that KH reports to the U.S. Department of Housing and Urban Development and SCS does not.

Each public housing agency across the United States offers a unique set of programs and services, based on specific guidelines set by a governing agency for the particular area. The governing agency for Keene Housing is the U.S. Department of Housing and Development. One of the predominant issues associated with housing agencies is funding. In order to continue to receive federal funding, housing authorities are required to meet certain criteria. Also, PHAs have to deal with revisions to and refinements of the laws and policies. These modulations often make it harder for PHAs to effectively serve those who need assistance.

Keene, New Hampshire

The city of Keene is located in the southwest corner of New Hampshire in Cheshire County. Keene has a relatively stable population of 23,419 according to the 2010 Census. Keene State College is located in the downtown area, and has an enrollment of about 5,500, which has a significant effect on the demographics of the small city. Many of these students have jobs within the community that are on the lower end of the hourly wage scale. This discrepancy has a potentially negative effect on the per capita annual income. According to the most recent census data, per capita income for an individual living in Keene, NH is \$26,432, and median household income for Keene is \$50,530. Both figures are lower than the respective national averages. The 2010 Census also reports that 14.9% of persons in the nation are living below the 2008-2012 poverty level, Keene reports in above that level at 17.4%.

The most recent Department of Health and Human Services 2013 report by the State of New Hampshire estimates that there are 1,725 homeless people in the state, and 103 of those reside in Cheshire County (State of New Hampshire Department of Health and Human Services 2013).

There is a seasonal shelter in Keene that operates primarily during the winter months to offer a place for homeless or displaced persons to spend the night. However, there is no year-round facility in Keene to assist in housing the homeless. Considering the segment of the population living in or near poverty, combined with the homeless population in Keene, one can quickly gather how important it is for the area to have a robust Public Housing Authority.

Keene Housing manages over 500 housing units for families, seniors and people with disabilities through their various assistance programs. Southwest Community Services offers another 500 units of affordable housing for both senior and workforce families.

Keene Housing has many “scattered” properties within and outside the city limits, in the neighboring towns of Winchester and Swanzey, New Hampshire. These towns differ from Keene in that their populations are much smaller and do not have the necessary tax base or other means of revenue to support their own public housing authorities. Winchester has only 1,733 residents, and Swanzey has 1,308 residents. Nevertheless, Keene is an urban area in comparison to these rural towns. As a regional service center, Keene provides medical services, shopping, schools, and employment for towns within a twenty to thirty mile radius. It is the largest city in the southwest corner of the state, making it a magnet for surrounding residents. The concentration of people, businesses, services, and a stable economy lead to an influx of people.

Our research investigates the effectiveness and administration of programs offered by Keene Housing at each of their thirteen properties. The main objective is to conduct an original survey that addresses potential hardships of the residents, their access to information, and spatial relationships which could affect their quality of life. The research we conducted during the development of our survey questions pointed to four significant categories of major hardships: food insecurity, access to healthcare, housing problems, and inadequate child care. We included a fifth category in the survey, access to information, due to the need for information to support residents’ decision making about where to shop, what health care options are available, and services available in the area.

Keene Housing has not administered a resident satisfaction survey since 2007.

Considering there has not been any formal attempt to obtain substantial feedback from residents since then, it was a bold task to generate a survey that accommodates the goals of Keene Housing and encourages participation from residents. By evaluating residents' responses from the survey, any spatial relationships among different locations scattered throughout Cheshire County were realized. Separating properties by type allowed us to categorize the data into Family, Workforce, Senior and Disabled sites, as well as joint sites that have a combination of these diverse populations.

Keene Housing was formerly known as Keene Housing Authority. In an effort to promote advocacy rather than authority, the name was changed. This seems to be a trend among other public housing authorities around the United States. For example, the Housing Authority of Portland (Oregon) has been newly identified as Home Forward.

This research also explores whether Keene Housing is a supply or demand-side housing situation. The waiting period within the Keene Housing's system as of April 2013 stands at nineteen months for a family in need of a one bedroom unit and thirty-five months for elderly or disabled candidates in need of one bedroom units. These extended waiting periods may be a result of an organizational decision to implement a reduction in services to the poorest households due to strategic policy actions that have been taken to adjust to changes in federal dictates.

DIRECTORY OF KEENE HOUSING PROPERTIES



Stone Arch Senior

835 Court Street
33 units
Senior/Disabled
Bus route access
Community room



Central Square Terrace

5 Central Square
90 units
Senior/Disabled
Bus route access
Community room



Riverbend

836 W Swanzey Road, Swanzey
24 units
Family
Playground



Forest View

28 Harmony Lane
38 units
Family
Community room, Playground



Brookbend West

82 Meadow Road
35 units
Family
Bus route access
Playground



Meadow Road

72, 74, & 76 Meadow Road
18 units
Family



North & Gilsum

28 North Street
29 units
Family
Bus route access
Playground



Brookbend East

27 Ivy Drive
40 units
Family
Bus route access
Playground



Stone Arch Family

829 Court Street
24 units
Family
Bus route access
Playground



Bennett Block

32 Washington Street
14 units
Family/Senior/Disabled
Community room
Playground



Harper Acres

103-169 Castle Street & 109 Ashuelot Street
112 units
Family/Senior/Disabled
Bus route access
Playground

Photo Credit: Keene Housing

CHAPTER TWO: LITERATURE REVIEW



Public housing policy has remained in a state of flux since the 1980s, with discussions focusing on whether affordable housing should be provided privately or publicly. This debate is partly driven by the visibly dilapidated condition of many public housing units and the desire to reduce the concentration of poverty in public housing (Page and Kleit 2008). Local PHAs are finding it more challenging to provide affordable housing because they are facing a different set of mandates than they did before 1980. Some local PHA jurisdictions have received greater flexibility in deciding which housing policies to pursue. Much of this flexibility comes from changes enacted by Congress in the late 1980s and early 1990s. Programs must be tailored to the demographics and housing characteristics of each area. PHAs believe that state and local governments are more familiar with local conditions and needs than are federal agencies (Bogdon and Can 1997).

After 1980, PHAs were faced with an entirely different set of mandates than they were in the previous two decades. These policy changes placed emphasis on the removal and replacement of unsightly and visibly deteriorating housing units. The mandates also placed emphasis on de-concentrating areas of public housing in favor of developing mixed-income housing units. The main concern with the geographic concentration of poverty in and around subsidized housing stemmed from evidence suggesting that the problems associated with living in poor areas are different in both kind and magnitude from those living in other geographic settings (Schill and Wachter 1995; Galster and Zobel 1998). These changes caused great upheavals in local housing authorities' ability to create opportunities and eventually led to the loss of tens of thousands of units of affordable housing. This de-concentration of areas with high levels of poverty dramatically shaped and influenced the current priorities of today's PHAs.

Kuecheva (2013) points out the concerns related to geographic concentration of poverty in and around subsidized housing. The research suggests that there are more problems associated with people living in these concentrated areas of poverty than there are with those who live in other geographic settings such as middle-class neighborhoods. According to the author, a person has a higher likelihood of being exposed to or witnessing criminal acts such as drug trafficking in areas of concentrated urban poverty than they would in areas of mixed income or middle-class neighborhoods. As a result, the National Commission on Severely Distressed Public Housing was enacted by Congress to identify the physical and social problems within these housing projects and to propose a plan for addressing them.

The findings of the Commission prompted Congress and HUD to initiate what would become the fourth version of the Housing Opportunities for People Everywhere (hereinafter “HOPE”) program. Building on HOPE I-III, HOPE IV provided funding for PHAs to demolish these distressed, inadequate housing projects nationwide. One of HOPE IV's primary foci was to eliminate concentrated urban areas of poor people and move them into housing projects within mixed income neighborhoods. The subsequent demolition of public housing has removed from the urban landscape the highly stigmatized structures of the “projects” (Crump 2002).

Empirical studies of the relationship between the density of subsidized housing and the concentration of poverty before the reforms of the 1990s indicate that the presence of building-based (supply-side), or non-voucher based (demand-side) housing, led to an increase in neighborhood-level poverty. In contrast, this has been proven through cross-sectional studies that challenge the conventional wisdom that building-based (also known as supply-side)

subsidies are necessarily bad because they concentrate poverty around them while vouchers (also known as demand-side or Section 8 Housing) are necessarily good because they allow low-income households to be dispersed across different neighborhoods (Wiley 2008). There is much discussion within PHAs nationwide comparing concentrated areas of urban poor and the practice of de-concentrating areas of subsidized housing. On the one hand, people who reside in areas of concentrated poor urban housing are almost certainly exposed to high levels of crime, violence and other illicit activities, as these residents have few or no role models other than those engaged in criminal behavior. They have fewer opportunities to access and interact with individuals or network with people within a community who can open up positive economic opportunities to them.

Schill and Wachter (1995) further explore and suggest spatial separation, which is created by concentrating urban poor in certain areas, can become a barrier that prevents low income individuals from experiencing mainstream social conventions, networking with middle-class role models, and developing cultural norms which could lead them out of the low income housing system.

Research indicates that from their inception in 1965 through today, PHAs in the United States have been constrained in their missions by federal law and by state and local statutes (Page and Kleit 2008). PHAs are challenged to develop and implement business plans while navigating numerous policy and administration changes. These changes may come around as fast as an election cycle or be longer in duration, as adjustments are made to existing legislation. The Quality Housing and Work Responsibility Act of 1998 (hereinafter “QHWRA”)

was a major Public Housing Reform Act designed to address policy constraints and give local PHAs the tools they need to meet their missions. Among the many components of QHWRA the most visible and dramatic was its emphasis on de-concentration of public housing.

The Quality Housing and Work Responsibility Act of 1998

QHWRA had five major goals it was directed to accomplish, of which the most relevant to our research was that it combined mandates and discretion to continue the de-concentration thrust of the 1990s to foster more mixed-income communities and decrease poverty concentration. QHWRA offered much hope with its promise of discretion; however, HUD had to begin scaling back discretionary funding of PHAs. This caused financial and administrative complexities, and further hampered the ability of the PHAs to meet their multiple policy goals (Page and Kleit 2008). Cabrini Green in Chicago, Illinois is the most infamous example. In the case of Cabrini Green, the rule for one-to-one replacement of low-income housing was abrogated by HUD Secretary Henry Cisneros. QHWRA continued the combination of discretion and obligation made under the HOPE IV which was passed during the Clinton Administration. Under the Clinton Administration, the allotment of low-income housing was severely scaled back, and stringent tenant screening criteria, including strict work requirements, assured that only a handful of displaced residents would be allowed to remain in public housing, which was now mainly limited to new mixed-income development (Wilén and Nayak 2006).

Research states that, in the future, public housing authorities may have to reduce services to the poorest households, and serve fewer poor clients. These cuts would be in

addition to those dictated by federal policy because PHAs are having to perform dual roles as both property and asset managers while continuing to meet the needs of residents. PHA administrators recognize that the changes in the federal funding formulas they rely on to cover their annual operating costs are limiting their ability to cover the actual costs (Page and Kleit 2008).

1980-1990

The role of the private housing market in providing affordable housing to low income families is constantly expanding as the public sector shrinks. In 1985, the federal government expanded the Section 8 voucher program, and stopped supporting large supply-side efforts which tend to be consolidated housing projects typically found in urban areas, like Cabrini Green. Section 8 provides low income families vouchers to choose where they live, as long as the property meets the program requirements (Page and Kleit 2008). As a result of this shift in policy, funding for construction of new public housing was significantly cut. Hayes (1995) claims that this shift resolves the debate over the relative merits of supply-side subsidies versus demand-side subsidies as his research showed the successes of the Section 8, or demand-side housing program.

2000-2010

According to Williams and Hauge (2011), from 2006 to 2007 an initial investment of \$260 million in affordable housing from various markets across the U.S. leveraged roughly \$470 million in additional public and private funds for public housing and resulted in nearly \$1.4 billion in direct, indirect, and induced economic activity. These are privately funded projects,

unlike publically funded Cabrini Green. These privately funded projects do not have the same legislative and funding restrictions that PHAs do. This economic activity yielded roughly \$62.5 million in state and local tax revenue. Privately funded affordable housing agencies represent a specific variety of public housing different from the PHA template in that they have more flexibility in how they administer their properties and programs. But in any situation where public housing is to be built, jobs will be created in construction and new consumer spending will increase, once residents occupy the units. The affordability of living is what draws buyers to these properties, thus helping to reduce the issue of poverty clusters in urban areas by spreading out low income housing developments.

Low-Income Housing Tax Credit

Research has shown that stability increases within families when an affordable rent or mortgage is available to them, and can significantly improve the health of families, individuals, and help increase child development in schools Wardrip (2011). In the case of Low-Income Housing Tax Credit (hereinafter “LIHTC”) housing, Lubell and Brennan (2007) offer evidence to support the idea that subsidized or low-income housing creates a path toward a stronger economy and more stable residents. Just providing the opportunity through LIHTC to build public housing, regardless of location, immediately creates jobs in that area.

One potential negative result of the push to deconstruct or spatially de-concentrate areas of urban poor is the emigration of affluent residents already living in these areas, which further depresses the neighborhood around the subsidized housing. This is a contrasting viewpoint to Waldrip’s (2011) research which showed that creating public housing

subconsciously encourages these families or individuals to stay within a poorer class as opposed to moving up in the class system. Neighborhoods that were considered mixed-income could begin to have more low-income families move in, inadvertently re-creating the concentrated urban areas of poor. These social mechanics have to be weighed when selecting neighborhoods in which integration of low-income housing is implemented. Measures have to be taken to ensure proper resegregation of areas when new subsidized housing units are added to mixed-income neighborhoods. Issues such as maintaining the physical appearance of the properties and developing relationships with the residents are a few examples of challenges that can assuage concerns of existing residents.

Bluestone et al. (2009) explains how studies of migration patterns, among other factors, indicate that people are settling in areas of more affordable housing and moving away from those areas with high costs. Migration patterns appear to support the ideas that some households choose lower-cost metropolitan areas over higher-cost regions. Between 2000 and 2006, twenty-three of the twenty-five metropolitan areas in the United States with the highest housing cost lost population to domestic emigration, by an average of six percent. New York, Boston, and San Francisco are included on that list. Although these cities have maintained steady growth throughout the millennia, these populations would have been higher without the offsetting loss of lower income residents (Bluestone et al. 2009).

Smirniotopoulos (1996) used Alexandria, Virginia, to explore how cities must adapt to declining funding for public housing. The Alexandria Regional Housing Authority (hereinafter “ARHA”) faced a shortage of federal funds needed to renovate some of its public housing. After

a study of five solutions, the ARHA decided to go with the “Mixed-Density Redevelopment Alternative.” This plan allowed for the largest number of new replacement units for public housing, compared to the other proposed plans. The old housing in this area contained 100 public housing units. In this new plan the same area will have only fifty-two public housing units. However, the plan also included 158 market-value units, which will be used to build the remaining public housing units off-site. The addition of 158 market-value units helped lower the project’s budget in order to assist in offsetting declining funding from the government.

One concern about the ARHA project was the potential for resentment from the public housing residents toward the new market-rate residents, who would be mixed throughout the city in middle-income neighborhoods (Smirniotopoulos 1996). The older public housing units are much smaller than the newly proposed units. The plan the ARHA chose avoids that resentment by renovating all of the existing public housing, and making the new public housing units much larger.

Moving To Work

The 1996 Moving To Work (hereinafter “MTW”) initiative sought to demonstrate the benefits of deregulation by enlisting eighteen PHAs, including Keene Housing (hereinafter “KH”). MTW offers PHAs the opportunity to design and test innovative, locally sensitive initiatives. The 1996 Personal Responsibility and Work Opportunity Reconciliation Act (hereinafter “PRWOR”) required welfare recipients to look for work and has made it more difficult for nonworking recipients to remain on the welfare rolls. The majority of the literature reviewed by Danziger et al. (2002) on this topic has shown that the benefits of working are

outweighed by the economic cost associated with work, such as childcare and transportation costs. In other words, it does not pay to return to work due to numerous costs and additional stresses that accompany moving to work.

There has been a tremendous amount of research and attention paid to the results of the 1996 PRWOR and whether it made it worth moving from welfare to work for the program's recipients. Much of the literature from before 1996's welfare reform showed mixed evidence on whether or not it was beneficial to leave the welfare rolls for work. Danziger et al. (2002) points out that those who left welfare and were working had a higher household income and lower poverty rate, experienced a similar level of material hardship, and had the ability to engage in fewer employment opportunities to make ends meet.

The MTW program provides flexibility to PHAs in how they implement and spend the funds provided by HUD. This includes Section 8 housing assistance and operating funds. According to a report by the Inspector General of HUD (HUD 2012), the public housing authorities that participate in the MTW program have been unable to generate a system of metrics to gauge whether or not the program is working. Some MTW programs have been able to operate self-sufficiently, thereby increasing choices for low-income families, others have been cautious and made moderate changes, while others have taken greater risk and had success by creating more mixed-income communities and decreasing poverty concentration. Even with these successes, other PHAs that are eligible to participate in MTW have chosen to opt out of the program entirely.

PHAs have discretion on how to implement the funds provided by HUD's MTW program; however they still must operate within the complex overall policy goals mandated by HUD. The fact that MTW has no written framework on how an agency should operate has made it extremely difficult for PHAs to develop and implement business plans that are financially sound. PHAs have concerns about funding shortfalls and micromanagement from HUD. The responsibilities of PHAs have been manipulated by federal policy changes putting them at risk of organizational incoherence and ineffectiveness simply trying to fulfill their obligations (Quercia and Gaster 1997; Page and Kleit 2008). Likewise, HUD has serious concerns about how the PHAs are using their discretion to create their own organizational strategies. This back and forth conversation has resulted in a congressional stalemate which has stalled further expansion of funding for the MTW program, thus keeping funds at their current levels. According to (Page and Kleit 2008) PHAs either react to federal policies and risk spreading themselves too thin, or pursue their own organizational strategies ranging even further from their ultimate goal of serving the poorest with affordable housing options. MTW programs are just one option for people who need a housing subsidy or a housing unit. Similarly, various cities around the United States are developing new programs and solidifying others.

Four Pillars of Concern in Public Housing

We identified four general hardships for residents in public housing: a safe environment, access to childcare, access to healthcare, and food security. PHAs also place these as high priorities along with educational opportunities, particularly for younger children.

Rosenblatt and Deluca (2012) note that, by the 1980s, housing projects were synonymous with violence, social disorder, and crumbling infrastructure. Rosin (2008) claims that voucher users bring the social pathologies of public housing with them, inadvertently raising the crime rates in the destination neighborhoods. When considering moving to affordable housing, individuals and families must seriously consider safety. Howard (2008) outlines three basic types of crime within public housing: drug use, ongoing conflict, and interpersonal crime. The author also identified three types of resident complaints in the Yesler Public Housing Community: heavy foot traffic and suspected drug use; chronic conflict and disturbances between residents; and allegations of interpersonal criminal acts between residents. It is universally agreed by PHA administrators that drug use decreases residents' safety and the possibility of violence increases when the drug use of residents and guests goes unchecked. Repeated 911 calls for disturbances also create a burden on police departments and negatively affect the goal of safety due to the "cry wolf" effect. Howard (2008) stresses the importance of collaboration between police departments and housing authorities to combat these issues. When the author reviewed the mission statements of the Seattle Housing Authority and the Seattle Police Department, he found there was one key word common to

both statements: safety. The creation and maintenance of safe environments is essential for police and housing authorities to work together and create a shared mission.

Understanding the mental health of residents is another key component of safety in public housing. Many times, residents with mental health problems create disturbances and commit minor crimes. As Howard (2008) explains, the process of referring the individual to a mental health court, rather than arresting them, can be ultimately beneficial. This court focuses on helping criminal defendants restore their health, rather than punishing them. These referrals have been successful with public housing residents, and in some cases, residents have been able to continue living independently in public housing without affecting the safety of their neighbors (Howard 2008).

In any residential situation, there are environmental and safety conditions that prospective or current residents may need to consider. Since federal funding for low-income housing is particularly limited, it is important to be selective when choosing potential residents. Curtis, Garlington, and Schottenfeld (2013), analyzed the bans and regulations regarding alcohol and drug abuse in public housing. The authors collected data from 40 PHAs across the country through recording and studying the results of drug tests and contacting third parties, such as social workers and police officers, to determine eligibility for residency. The results of this study were inconclusive. However, the authors found that each situation and housing development is case specific. This environment of crime and drug abuse is toxic for adults who suffer from the destructive behaviors that hinder progression through, and out of public housing. More importantly, exposure to criminal behavior may leave the youth of these

places misguided. Nevertheless, there are programs and venues that can help children navigate a path out of poverty.

Lack of affordable child care is another hardship experienced by families in public housing. Families want their children and grandchildren to have access to positive after school activities. The resident youth are significant to the future of public housing. It is important to accommodate these children and educate them to be self-sufficient and resourceful through programs that teach nutrition, healthy activities, and social skills. A program called Talk/Read/Succeed at the Springfield, Massachusetts Housing Authority is designed to achieve that goal (Lowney et al. 2013). Talk/Read/Succeed targets approximately 185 families with children from infants to age nine. This program attempts to bring educational values and awareness to its youngest residents. Talk/Read/Succeed is similar to the Building Bridges program which is supported by Keene Housing. The Building Bridges program at Keene Housing is designed for children between the ages of five and ten. The objective of both programs is to encourage participating children to become self-sufficient and eventually live without the program. Talk/Read/Succeed, more specifically, reaches out to children so that they can learn to break the cycle in which they unfortunately remain. William Abrashkin, a former trial judge and contributing author of *Breaking the Cycle of Disadvantage for Public Housing Residents*, said, "One of the reasons I came to the Springfield Housing Authority was to see what could be done to reach the next generation before the damage was done" (Lowney et al. 2013:19). Abrashkin believes reaching out and educating the youth should help to break the cycle.

Talk/Read/Succeed has created a more open and personal relationship between public housing authorities and public schools. Despite their hardships, parents in public housing have increased their participation because of the support this Springfield program has established. This could be a model for the Building Bridges program at Keene Housing, which focuses on youth-driven activities that positively impact child development, educational trajectories, and long term economic independence of the children that live in KH communities (Keene Housing 2013).

As our initial research evolved, access to technology emerged as an additional potential hardship. With its rapid progression and increasing accessibility, technology, the internet, and social media such as Facebook are becoming essential tools in public housing. Keene Housing is trying to create a stronger presence on social media for their residents. Keene Housing has installed Wi-Fi in some of the community areas of select properties. In turn, KH hopes to gather a larger audience for their website and Facebook page.

Fredericks (2012) examines efforts of the Housing Authority of the City of Santa Barbara (hereinafter “HACSB”) to use social media for helping homeless and low income residents. In March 2011, HACSB recruited volunteers to calculate the homeless population in the county through its Facebook page. After extensive advertising on social media, “Common Ground Santa Barbara,” assembled 500 volunteers to conduct a survey and collect data. The participating volunteers are now part of a network of people ready to call on for further projects.

HACSB also used Facebook to advocate a new Low-income Housing Tax Credit Project (Fredericks 2012). When the initial plan was repealed, HACSB turned to Facebook to gain

support for this project from the community. The turnout was impressive. Individuals gave public testimonies expressing their support for the project. Because of the overwhelming support, the project was approved. In turn, fifty-four studio units will house low-income workers, special needs populations, and those moving from homelessness (Fredericks 2012).

Social media creates a level playing field by providing an accessible communication tool. The initial capital investment for Wi-Fi infrastructure in smaller PHAs comes at a relatively low cost. For example, KH offers free Wi-Fi for their residents in the community rooms of several properties. This tool has the potential to reach more people in a quicker amount of time. This exemplifies why Keene Housing wants to ensure that their technological advances are being received and utilized in a productive manner.

Also, social media can connect residents to articles, discussions, and resources that they would otherwise miss. For example, if a resident is not able to attend a community gathering within their property, they have another opportunity to voice their issues or comments in a public setting. Thus, technological communication is something PHAs and residents have to consider and integrate into their programs.

CHAPTER THREE: RESIDENT SATISFACTION

SURVEY



Survey Methods

Our survey (Appendix 1) consisted of twenty-seven questions based on the five hardships we identified earlier. April Buzby provided us with survey examples that we studied and emulated for our survey design. She gave us examples of surveys from the Seattle Housing Authority and Cambridge Housing and Urban Development. We broke the survey into sub-topics which included: Customer Service, Communications, Youth Services, Maintenance & Safety, Demographic Information, and Other. The surveys were distributed by April Buzby on November 10, 2014 and periodically collected through November 17, 2014. The three-page survey, along with a cover letter created by April Buzby, was placed inside a plastic bag and was hung on the door handle of each Keene Housing property household. In the cover letter on the survey, residents were asked to drop the surveys off in the community rooms, if applicable. If they did not have a community room, the surveys were dropped off near mailboxes. In each of the given return areas, there was a collection box. Placing a collection box at a central location saved time so we did not have to go door to door on multiple occasions. Residents were given seven days to return the completed survey. Each survey was coded to identify which property the survey came from. Of the 489 surveys sent out, 147 were returned. Out of the 147 surveys received, the majority of feedback provided from the surveys was from senior and disabled sites: Central Square Terrace, Stone Arch Senior, and one joint family and senior/disabled site Harper Acres (Table 1).

Return of Surveys			
Property	Number Administered	Number Received	Return Rate Percentage
North and Gilsum	29	4	13.8%
Forest View	38	6	15.8%
Harper Acres	112	49	43.75%
Bennett Block	14	2	14.3%
Central Sq. Terrace	90	39	43.3%
Stone Arch Senior	33	20	60.6%
Brookbend East	40	6	15%
Brookbend West	35	9	25.7%
Meadow Road Apts.	18	2	11%
Stone Arch Family	24	4	16.6%
Riverbend	24	6	25%
Evergreen	32	0	0%

Table 1: Return of Surveys by Property

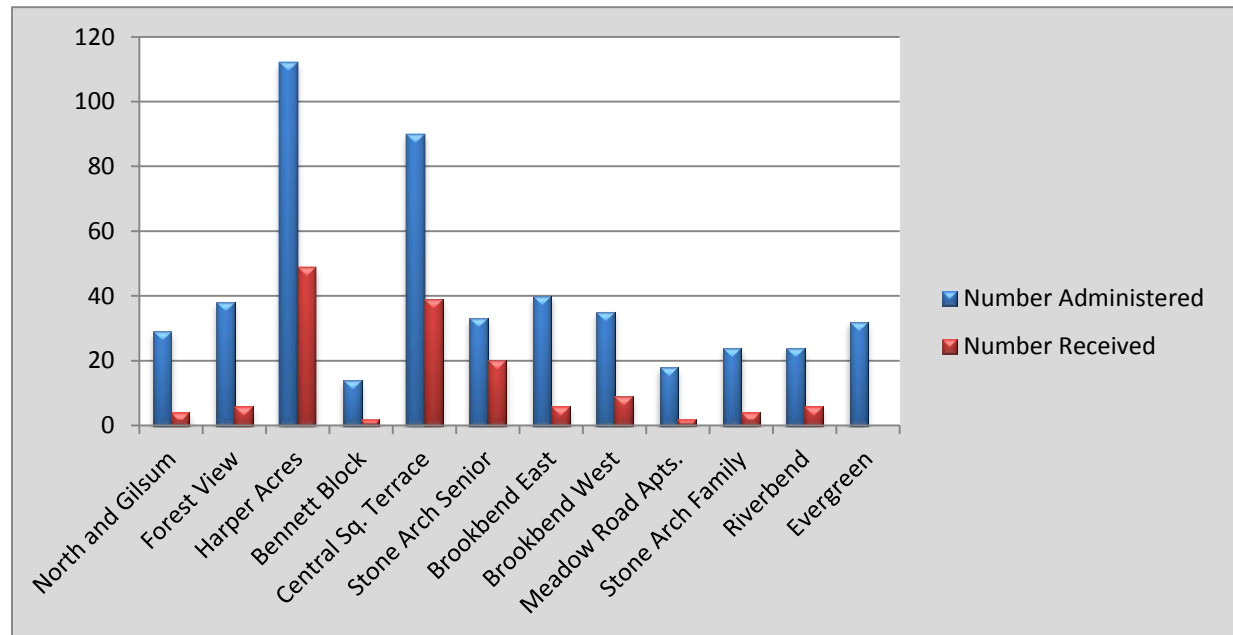


Figure 1: Return Rate of Surveys by Property

Our hypotheses were based on the Likert scale questions within our survey. These were within the categories of KH property management staff, maintenance, safety, and transportation. Possible responses on our Likert scale are: Very Satisfied, Satisfied, Neutral, Dissatisfied, and Very Dissatisfied. All of the data from the surveys were entered into Microsoft Excel. Each row of data in the Excel file signified a specific survey respondent, and the columns represent individual questions. The Likert scale question data were put into Excel in a way that easily translated into SPSS.

A primary goal of our survey was to identify the level of satisfaction among residents regarding quality of service, safety, and access to services. As can be seen from Table 1 on the previous page, the majority of surveys were returned from just three properties, which are also the primary homes for senior and disabled residents. Five of the eleven properties saw fewer than five surveys returned. These represent many of the family properties owned by KH. The large skew toward a few types of properties and low return rate from family properties limited our ability to properly analyze the results.

In order to test our null hypothesis that there was no significant difference between properties on the various measures our survey explored, we turned to a non-parametric test, Kruskal-Wallis. This is an alternative to the ANOVA, which requires a normal distribution of residuals about the mean (Gaten 2000). The Kruskal-Wallis works by ranking data values from lowest to highest and testing differences among these ranks, not among the data values themselves. In our case, the possible Likert scale options ranged from 1 (very satisfied) to 5 (very dissatisfied). Among the 147 respondents, a large number could have answered 1 to a single question.

For our Likert scale data, only five ranks were possible, so there are many possible ties. For example, if five respondents chose “very satisfied”, each of those rankings would be equal. Running the test on Likert scale questions on the Keene Housing resident satisfaction survey allowed us to interpret the rankings. For instance, since the ranking is based on individual number score, the lower the number is, the lower the mean rank would be. Higher mean ranks signify less satisfied residents, while a low mean rank would be very satisfied. The ranks were grouped by property.

Survey Results

We were interested in identifying differences among the eleven properties on the various categories we posed Likert scale questions about: KH property management, KH maintenance, safety and transportation. None of the maintenance tests were significant as most respondents were satisfied with maintenance. Also, none of the transportation tests came back with a significant value. We feel this is because most of the essential places in Keene can be reached through public bus routes or by walking. Three of the four tests run about the safety of KH residents came back with significant results. The one question about safety that was not significant was the question about children. We expect this is because most of the respondents did not have children. The results suggest that there was a significant difference in these categories: KH property management responsiveness, accuracy of information, timeliness, and treatment, as well as safety in the apartment, indoors and outdoors.

Table 2 shows the responses of all properties.

Under the Maintenance & Safety portion of the survey, residents were asked about their experiences with Keene Housing maintenance staff within the past year. The four variables measured included: ease of requesting repairs, response time, quality of work, and how maintenance staff treated Keene Housing residents. Using a Kruskal-Wallis test, we were unable to distinguish a significant difference between the eleven properties and these four maintenance questions.

Property Management				
Property	Responsiveness	Accuracy	Timeliness	Treatment
	Mean Rank (n)	Mean Rank (n)	Mean Rank (n)	Mean Rank (n)
North and Gilsum	108 (4)	100 (4)	102 (4)	114 (4)
Forest View	82 (6)	73 (6)	70 (6)	83 (6)
Harper Acres	75 (48)	75 (47)	79 (47)	73 (48)
Bennett Block	63 (2)	34 (2)	73 (2)	38 (2)
Central Sq. Terrace	60 (36)	56 (34)	55 (32)	58 (34)
Stone Arch Senior	57 (19)	60 (19)	58 (19)	55 (19)
Brookbend East	68 (6)	78 (6)	65 (6)	78 (6)
Brookbend West	102 (9)	94 (9)	76 (9)	95 (9)
Meadow Road Apts.	34 (2)	34 (2)	30 (2)	38 (2)
Stone Arch Family	59 (4)	75 (4)	56 (4)	63 (4)
Riverbend	104 (6)	99 (6)	96 (6)	110 (6)
Chi-Square	23.5	21.58	18.706	28.586
df	10	10	10	10
Asymp. Sig.	.009	.017	.044	.001

Table 2: Results of Kruskal-Wallis Test for Property Management Responses

Additional questions inquired about how safe a resident feels in their apartment, in indoor common areas, and in outdoor common areas. For those residences with children, a fourth question asked how safe they felt allowing their school-aged child or children to play outside without supervision. The Likert scale answers included Very safe, Safe, Neutral, Unsafe, Very unsafe, and Not applicable. We used a Kruskal-Wallis test to test the results between

properties. We found a significant difference for three of the safety questions: within apartment, within common areas, and outdoors. Within residents' apartments, three properties for which we received the most surveys reported the feelings of highest safety were indoors. However, we noted a large difference in reported safety "in the apartment" and safety indoors compared to the other two environments at Stone Arch Senior. Table 3 shows the responses for the safety portion of the survey.

Safety			
Property	Apartment	Indoor	Outdoor
	Mean Rank(n)	Mean Rank(n)	Mean Rank(n)
North and Gilsum	62 (3)	31 (2)	76 (3)
Forest View	51 (6)	80 (5)	75 (6)
Harper Acres	69 (48)	54 (41)	59 (45)
Bennett Block	117 (2)	110 (1)	110 (2)
Central Sq. Terrace	68 (37)	62 (32)	63 (36)
Stone Arch Senior	86 (19)	79 (17)	94 (18)
Brookbend East	88 (6)	80 (6)	82 (6)
Brookbend West	65 (9)	56 (9)	71 (9)
Meadow Road Apts.	41 (2)	31 (2)	26 (2)
Stone Arch Family	41 (4)	50 (4)	59 (4)
Riverbend	103 (6)	85 (6)	88 (6)
Chi-Square	19.29	18.67	20.08
Df	10	10	10
Asymp. Sig.	.037	.045	.028

Table 3: Results from Safety Portion using the Kruskal-Wallis Test

Next, we examined transportation issues and access to services. Question nineteen asked how residents' current transportation affects their access to employment opportunities, medical services, recreational activities, and participation in their children's education. Potential responses included Not at all, Somewhat, Neutral, A lot, and Not applicable. We did not use any of the surveys that were marked with not applicable because there was no information there for us to use. The same property grouping method was used and the Kruskal-

Wallis test was implemented again to find significant variances. We found no significant difference between properties' reported effects of transportation on any of these facets.

The survey results also showed a large discrepancy by tenants that answered choosing Market Basket and Hannaford with margins of 52 and 62 respectively, with the remaining three stores selected chosen less than five times each. Since most of the responses from KH residents about primary grocery stores were similar, we decided to run a Chi-Square Test. This determines if there is a correlation between people who had a personal vehicle and where they shopped for their primary grocery stores. Our hypothesis states that if they had a personal vehicle, they were more likely to shop at Market Basket. The Market Basket in Swanzey, New Hampshire is farther from most of the KH properties. On the other hand, if the residents did not have a personal vehicle, we assumed they were more likely to shop at the Hannaford Supermarket in Keene. This is because Hannaford is at a more centralized location to most of the properties. If at a 95% confidence interval, this test is not quite significant, as shown by the figure to the right.

Referring to Figure 2 on the following page, the asymp. sig. tells us if there is not a significant correlation between access to a vehicle and grocery store. If it is lower than .05, then there is a correlation between the variables. In this case we were close to a significant level at .056. Because Hannaford is located in a more centralized place, the number of residents that had a car and those that did not have a car was the same for Hannaford. However, because we had fewer residents that shopped at Market Basket, there was a difference in people who had a car and those that did not. If we had an equal amount of people for each grocery store, we could have had a more significant result

Chi-Square Test			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.647 ^a	1	.056

		Store		Total
		Hannaford	Market Basket	
Vehicle	No Car	30	16	46
	Car	32	36	68
Total		62	52	114

Figure 2: Results from Personal Vehicle and Primary Grocery Store Chi-Square Test

Additionally, we found it interesting that some residents were not even sure if they were part of the RSR program, represented by Figure 3 below. Also, we found that KH's efforts to create more of presence in social media is attainable seeing as how the majority of their residents have access to internet, which can be seen in Figure 4 shown on the bottom right.

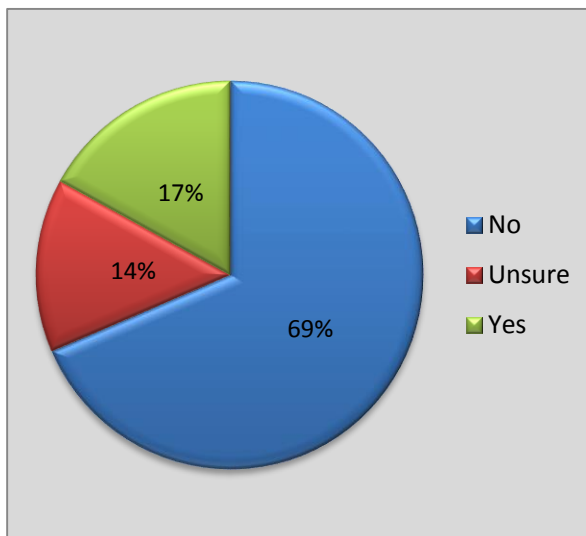


Figure 3: Percentage of KH residents enrolled in the RSR program

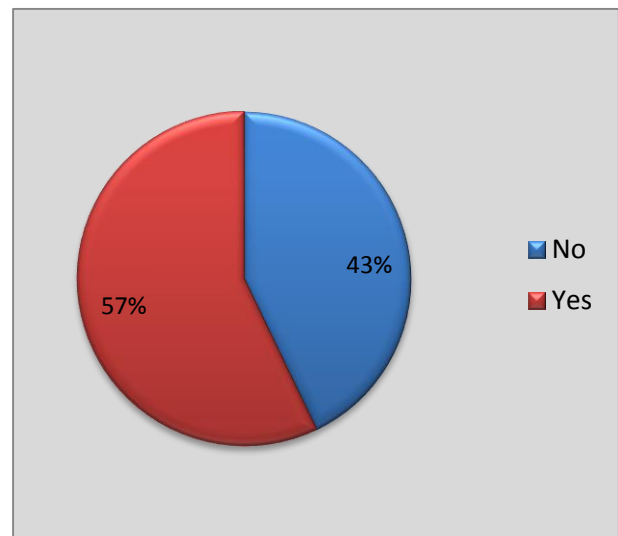


Figure 4: Reported Access to Internet

Additional Figures

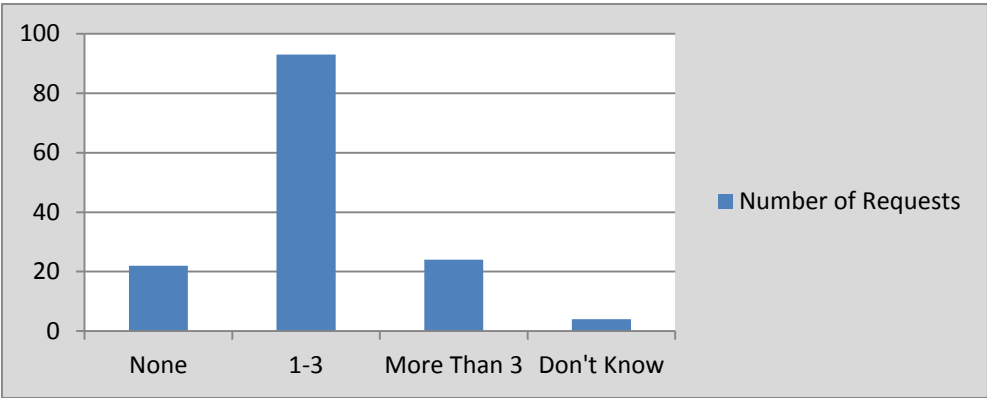


Figure 5: Number of times KH residents have called maintenance, in the last year

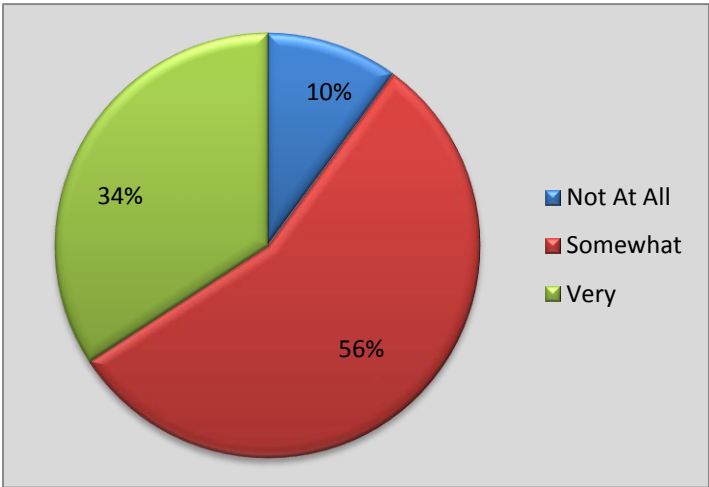


Figure 6: KH residents' ability to afford nutritious food

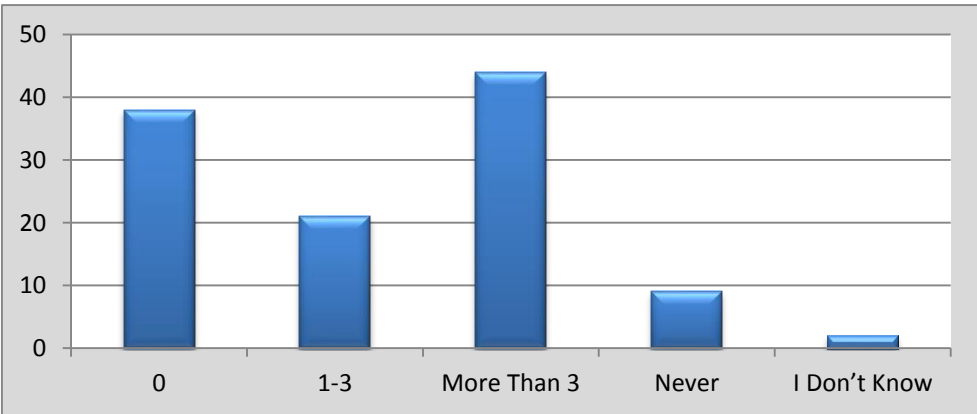


Figure 7: Number of Meals with entire family, per week

CHAPTER FOUR: INTERVIEWS



Interview Methods

Attempting to get a broad view of affordable housing, our Seminar professor recommended two individuals actively involved in affordable housing in the region. These two individuals are Keith Thibault, Development Director for Southwestern Community Services and Susy Thielen, coordinator for Heading For Home, the affordable housing coalition for the region. Each interview consisted of nine questions (Appendix 7) and was conducted in a semi-structured fashion. Three group members were able to attend the first interview conducted with Keith Thibault, and one group member attended the second interview with Susy Thielen. The interview with Thielen was recorded to further interpret her remarks throughout. Both interviews provided useful information to supplement our research data.

The varying viewpoints from each interviewee presented valuable insight into the past of affordable housing in the region, recent developments, and future plans. With a focus in affordable housing by Keith Thibault and a focus in workforce housing by Thielen, these specialized areas contribute to a dynamic new perspective on housing in Keene, New Hampshire. Provided that Keith Thibault works as a development director, he is involved in the planning and building of affordable housing with Southwestern Community Services. Thielen is a part of an advocacy board that designates certain areas with a 'need' of workforce housing. With the assistance and cooperation of board members, local organizations and businesses, Heading For Home is able to fulfill the need of workforce housing for elderly and young adults in the Monadnock region.

Keith Thibault-Southwestern Community Services

For our first interview we met with Keith Thibault, a development director for Southwestern Community Services. SCS came about as part of the 1965 Community Action Plan, which was a part of Lyndon B. Johnson's "War on Poverty." SCS supplies fifty units of workforce and senior housing in thirteen locations in and around Keene. Keith works with cities and towns, zoning and planning boards, and other groups that support or otherwise assist in developing affordable housing and the services and amenities that accompany it.

Some programs offered by SCS include Head Start, winter heating fuel assistance programs, WIC, and a twenty-four bed transitional housing property next to the Cheshire County Correctional Facility. Rather than competing with Keene Housing, SCS collaborates with them to better support residents in the city. Thibault mentioned that infrastructure development, particularly water, is a huge limiting factor for his type of work. This region is lacking when it comes to providing public water and there are numerous challenges when using a well or a community well as a public source. The state of New Hampshire requires commercial operators of public wells to employ the services of a water system operator to maintain and monitor the system, which creates an additional overhead cost of property ownership.

Another challenge is the zoning laws in these communities, most of which were written in the 1970s and have been modified very little since. Thibault also spoke about how the housing stock in Keene has changed as a result of Keene State College. The off campus units that are rented to students represent the same housing stock that lower income, working families were once able to afford. Students effectively compete with working individuals and

families, as developers and landlords stand to make considerably more income from students. Our meeting with Keith Thibault enlightened us on the collaboration and unity that propels family workforce, student projects and housing opportunities in the city of Keene, New Hampshire.

Susy Thielen-Heading For Home

Susy Thielen is the coordinator for Heading for Home, one of seven regional housing coalitions in New Hampshire. These housing coalitions are focused on efforts that encourage affordable 'workforce' housing in the state. Heading For Home is a collection of businesses and individuals working to address affordable workforce housing in this region. Committees oversee areas such as fundraising, development guidelines, community outreach, land stewardship, legislative and policy issues. Businesses and Organizations who have pledged support to Heading for Home include: Cheshire Medical Center, Keene State College, C&S Wholesale Grocers, Public Service Company of New Hampshire and New Hampshire Housing. Members of the board, donors, and sponsors have also pledged support (Heading For Home 2014).

During the interview, Thielen discussed how New Hampshire does a poor job supporting affordable housing. According to Thielen, people are only supposed to spend about 30% of their income on housing. Yet, residents of New Hampshire spend closer to 50 to 75%. Renters, including Keene State College students, are not immune to these high costs, since mortgages and taxes are passed on in the form of higher rents. This is one reason landlords would generally rather rent a 3-4-bedroom home to multiple single students at \$400 to \$500 dollars each month, compared to \$1,200 total for families.

Like most parts of the country, Keene has seen renting become a more popular housing option after the housing market collapse in 2008. Thielen observes that both young singles and couples and the senior population are competing for the same kind of housing. As a renter, there are minimal responsibilities. Young people can enjoy the freedom that renting provides, whereas, the older population benefits from not having to maintain the property.

Thielen also mentioned Healthy Monadnock 2020, a community initiative designed to make the Monadnock Region of New Hampshire the healthiest community in the nation. Its goals include, but are not limited to the following: healthy eating, active living, educational attainment, access to quality healthcare, and increased social connections. This initiative is pertinent to Thielen's work because some of the new buildings managed by these coalitions have been created as nonsmoking buildings. Members of these housing organizations realize that housing affected by smoke is very costly to repair and harmful to surrounding residents.

In addition, Thielen mentioned other regional coalitions that do work similar to that of Heading For Home. In New Hampshire there are seven other regional workforce housing coalitions. These coalitions include CATCH neighborhood housing in the greater Concord area, Eastern Lakes Regional housing coalition, Workforce Housing Coalition of the Greater Seacoast which extends into Maine, Greater Nashua Workforce Housing Coalition, NeighborWorks Southern New Hampshire in the greater Manchester Area, Mt. Washington Valley Housing Coalition, and Upper Valley Housing Coalition which extends into Vermont. From this interview, our group was provided with new insight about the efforts of organizations that work for affordable housing in New Hampshire.

CHAPTER FIVE: GIS ANALYSIS



GIS Methods

In order to build the study's Geographic Information System database (hereinafter "GIS"), we investigated several key descriptive elements for properties operated by both Keene Housing and Southwest Community Services--the two primary providers of affordable housing in Keene, NH. These key elements included the number of units at each property, number of bedrooms and bathrooms within the units, and the type of residents that occupy the units. The three primary types of tenants are: family (also known as workforce), senior citizens, and people with medical disabilities. Some properties have combinations of these tenants. Access to healthcare, and the availability of parking and other amenities like child care, a community room and free WiFi were also gathered for analysis. These descriptive elements were chosen in part to match the four major hardships identified during the literature review.

Data was gathered from two sources: each organization's webpage had a significant amount of information for each property; and from interviews with property managers. Once the data was collected, Esri's Arc Desktop version 10.2 (Esri 2014) was utilized to create shapefiles for each property and maps showing spatial relationships between key elements. The data for the key elements was added to the property's attribute table by using the 'Add Field' function and then populating those fields with the collected data.

Building on the survey questions about access to education, healthcare, and other services, shapefiles were also generated for Keene and Swanzey's public elementary, middle and high schools, Keene's only hospital, (Cheshire Medical Center), and nine locations where residents can purchase groceries. Each of these shapefiles contain fields indicating the facility name and address.

Transportation was another key element used throughout the survey. The New Hampshire Department of Transportation's road centerline shapefile was downloaded from the New Hampshire GIS Clearinghouse website, NH GRANIT. From this statewide roads shapefile, the geoprocessing tool 'Clip' was used to create a roads shapefile specific to Keene and Swanzey, NH.

An organization known as Home Healthcare Hospice and Community Services operates a public bus service called City Express. The service operates three routes complete with stops. Patrons are also allowed to flag the buses down as long as it is safe for the bus to stop. Two of the three routes mirror each other, with the only difference being the direction of travel. The third route serves primarily as transport for Keene State College students and only operates during the spring and fall semesters. For this reason, the Keene State College route was not included in the final bus route shapefile. Using the 'Select by Attribute' function and also the Field Calculator, the road segments from the clipped road shapefile were identified, selected, and made into a bus route shapefile. This shapefile was a line file, and was buffered by 10 feet to stand out graphically from other roads on the maps.

GIS Results

The location of KH and SCS properties are distributed throughout Keene (Appendix 8). Much of the literature we reviewed focused on efforts to reduce areas of concentrated urban poverty. Keene and Swanzey, NH are small cities which could be considered completely mixed-income. However, when the 'Buffer' tool was applied at 250 feet to the properties, two areas can be seen in the more urban and built up portions of Keene where there are higher

densities of public housing from KH or affordable housing from SCS (Appendix 2). It should be noted that several of these properties are either newly renovated or new facilities.

Keene has five elementary schools which are distributed throughout the community. Keene Middle School is closer to the northern and western properties and Keene High School is situated west of all properties (Appendix 4). The properties in Swanzey have a similar spatial distribution with elementary, middle, and high schools (Appendix 5). The elementary school in Swanzey is within one mile of both KH properties, and similar to the KH properties in Keene the Regional Middle and High School is three miles to the east. The properties without families were excluded from the school maps.

The survey asked tenants to list where they most frequently purchased their groceries. Nine grocery stores in Keene were identified and mapped. This was not an exhaustive list of stores but does represent the majority of the region's choices. Another map shows the location of all stores relative to each property as well as the bus route (Appendix 6).

The survey results showed five stores where tenants shopped. Another map shows the location and proportional usage of each store selected and the stores location in reference to each property and the bus route (Appendix 7). The City Express bus route makes stops at the closest major supermarket, Hannaford, along with others. Hannaford was chosen by

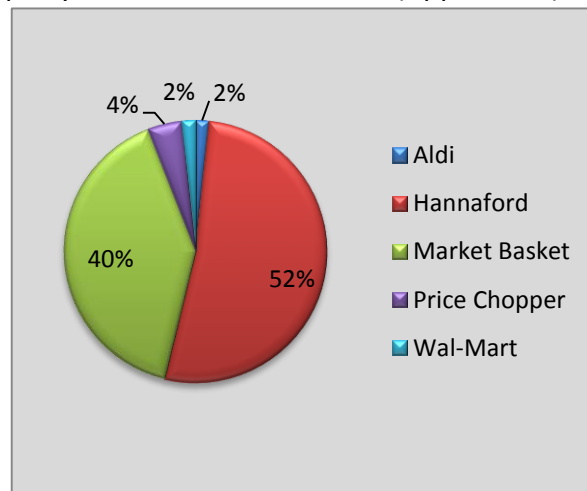


Figure 8: Primary Grocery Stores of KH Survey Responders

respondents as the most frequented grocery store (Figure 8). The second most reported

choice for grocery shopping, Market Basket, was not on the bus route. Another anomaly from the survey and the maps showed that the three places closest to the downtown tenants, which are served by the bus as well as within walking distance were not selected as places tenants shopped. However, they were only allowed to select one location.

After observing the survey results, we calculated average distances of key locations in relation to Keene Housing properties (Figure 9). Market Basket stands out because it is further than other grocery stores, yet still a primary grocery store for many residents. Also, the bus route does not have a stop near Market Basket. Therefore, there must be other factors contributing to Market Basket's following.

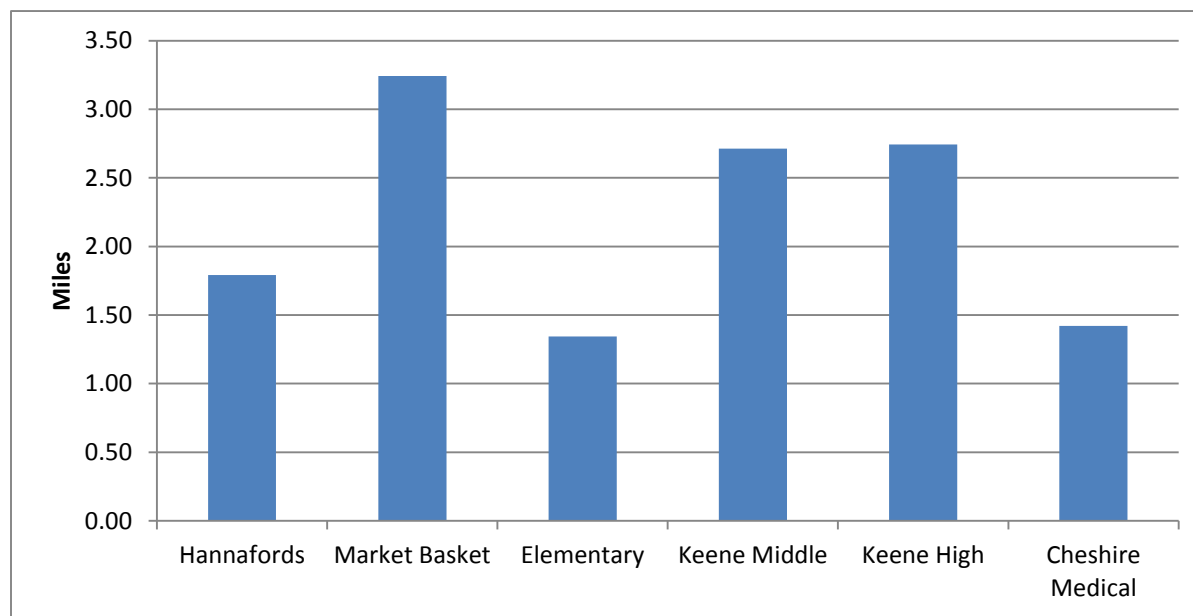


Figure 9: Average Distances of Key Locations from Keene Housing Properties

CHAPTER SIX: CONCLUSIONS



For our research we reviewed several aspects of Public Housing in the United States and more specifically public housing in Keene New Hampshire. Because Keene Housing had not administered a Resident Satisfaction Survey since 2007, we partnered with them to design and administer an updated survey. The survey was the primary method our group used to gather data about Keene Housing for analysis. Using GIS and statistical analysis, we were able to recognize the spatial relationships among properties and services, create maps, and make connections to our survey.

We identified four pillars that can be major hardships for people living in public housing to either successfully manage their situation or move out of public housing completely. The four pillars identified through the literature review were: access to childcare, access to healthcare, food security, and safety. We also determined that access to technology was important enough to be considered a pillar even though the literature did not specifically mention it as a factor which could cause a major hardship.

Due to Keene's smaller population we were able to gather and analyze the spatial and quantitative relationships relatively fast over a period of five months. Research indicated certain trends related to the four pillars due to proximity and access. Once the survey results were processed we compared the pillars and trends through statistical analysis. The survey responses and research presented us with results.

The properties with the greatest return rates were from senior and disabled sites which may account for a skew in significant results. Even though the majority of surveys collected were from the senior and disabled demographic of KH, we gained a greater understanding of how they live and what they need from Keene Housing.

It is easy to assume that proximity to services determines access, but based on our results we found that most residents of Keene Housing uses Hannaford's as their primary grocery store although it is not the closest to various Keene Housing properties. Additional findings were that the second most used grocery, Market Basket, was not on the bus route. The groceries within walking distance from KH properties were not selected as the residents' primary choice for shopping. It should be noted that the survey only provided respondents with the ability to choose one location where they shop. These results led us to question the relationships between personal vehicle ownership and store choice and also the perceived costs at the various stores.

Safety is a key issue within public housing systems. The survey results and ensuing analysis provided conclusions about which properties within KH are safer than the others.

Certain resident's responses to questions about KH maintenance staff were very satisfied while others were dissatisfied.

Of the nine KH properties that had families as residents, only two offered programs for children on site. There are other opportunities within the community such as the Keene Recreation Center and the Keene YMCA that have activity offerings.

Keene's population is served by Cheshire Medical Center, which provides primary and specialized care along with Emergency Room services and various clinics. The KH properties, as well as the properties operated by SCS were on average 1.42 miles from Cheshire Medical Center. We determined that this proximity along with the bus route servicing the hospital had little negative effect on KH or SCS residents' access to healthcare.

As previously stated, Keene Housing has been attempting to create a stronger social media presence. From our survey results, we found that this goal is not unattainable as the majority of residents have access to the internet.

LITERATURE CITED

Bluestone, B., M H. Stevenson, and R Williams. 2009. Are the High Fliers pricing Themselves Out of the Market? The Impact of Housing cost on Domestic Migration Rates in U.S. Metropolitan Areas. *Urban Affairs Association Annual Meeting*. _____

Bogdon, A., Can, A. 1997. Indicators of Local Housing Affordability: Comparative and Spatial Approaches. *Real Estate Economics*. 25(1):43-80

Curtis, M., S. Garlington, and L. Schottenfeld. 2013. Alcohol, Drug, and Criminal History Restrictions in Public Housing. *Cityscape: A Journal of Policy Development and Research*. 15(3): 37-52.

Danziger, S, Helfin, C. Corcoran, M. Oltmans, E, H. Wang. 2002. Does it Pay to Move from Welfare to Work? *Journal of Policy Analysis and Management*. 2(4): 671-692.

Fredericks, R. 2012. We Facebook. Do You? *Journal of Housing and Community Development*. July/Aug 2012: 20-21.

Gaten, T. 2000. Kruskal Wallis non-Parametric ANOVA. *University of Leicester Department of Biology*. <http://www.le.ac.uk/bl/gat/virtualfc/Stats/kruskal.html>

Gorman, K. 2011. NAHRO's Awards of Excellence in Resident and Client Services. *Journal Of Housing & Community Development* 68(5): 27-31.

Hague, S., K. Wardrip, and L. Williams. 2011. The Role of Affordable Housing in Creating Jobs and Stimulating Local Economic Development: A Review of Literature. *Center for Housing Policy* January 2011. 1-19

Hayes, R. 1995. The federal government and urban housing authority: Ideology and change in public policy. *Albany: State University of New York Press*.

Heading For Home. 2014. <http://www.headingforhome.org/> (last accessed 20 November 2014).

Healthy Monadnock 2020. 2014. <http://www.healthymonadnock.org/> (last accessed 20 November 2014).

Home Healthcare Hospice & Community Services. 2014 <http://www.hcsservices.org/> (last accessed 20 November 2014).

Howard, R. 2008. Safety in Public Housing: A Police Officer's Point of View. *Journal of Housing and Community Development*. 65(2): 6-9.

HUD. 2012. HUD IG Calls for Better Oversight of Moving To Work Demonstration Program. <http://1.usa.gov/1a4LRZC> (last accessed 20 November 2014).

Kleit, R, and S. Page. 2008. Public Housing Under Devolution. *Journal of the American Planning Association* 74(1): 34-43.

- Kuecheva, A. 2013. Subsidized Housing and the concentration of poverty, 1977-2008: A comparison of eight U.S. metropolitan Areas. *City and Community*: 12(2): 113-133
- Keene Housing. 2014. <http://www.keenehousing.org/> (last accessed 20 November 2014).
- Keene Housing. Moving to Work FY 2013 Annual Report. 2013. 1-43.
- Keene Housing. Moving to Work FY 2014 Annual Plan. 2014. 1-53.
- Lowney, M., W. Abrashkin, S. Fuller, and M. Geary. 2013. Breaking the Cycle of Disadvantage for Public Housing Residents. *Journal of Housing and Community Development*. 70: 16-27.
- Lubell, J., and M. Brennan. 2007. Framing the Issues- the Positive Impacts of Affordable Housing on Education. *Washington DC: Center for Housing Policy*. 1-23
- National Low-Income Housing Coalition. 2013. HUD IG Calls for Better Oversight of Moving to Work Demonstration Program. <http://nlihc.org/article/hud-ig-calls-better-oversight-moving-work-demonstration-program>
- New Hampshire GRANIT. 2014. *Earth Systems Research Center, Institute for the Study of Earth, Oceans and Space, University of New Hampshire*.
<http://www.granit.unh.edu/aboutus/aboutgranit.html>
- Pasi, E. 2011. Spotlight on Senior Housing Initiatives. *Journal Of Housing and Community Development* 68(5): 22-25.
- Peters, G. and J. Woolley, 1999. Lyndon B. Johnson: "Annual Message to the Congress on the State of the Union.," January 8, 1964. *The American Presidency Project*.
<http://www.presidency.ucsb.edu/ws/?pid=26787>. (last accessed 17 November 2014)
- Quercia, R and G. Galster. 1997. The Challenges Facing Public Housing Authorities In A Brave New World. *Housing Policy Debater*, 8(3): 535-569.
- Rosenblatt, P. and S. Deluca. 2012. "We don't live outside, we live in here": Neighborhood and residential mobility decisions among low-income families. *City and Community* 11(3): 254-284.
- Schill, M. and S. Wachter. 1995. The Spatial Bias of Federal Housing Law and Policy: Concentrated Poverty in Urban America. *University of Pennsylvania Law Review* 143(5): 1285-342.
- Smirniotopoulos, P. E. 1996. Alternative Approaches to Public Housing. *Journal Of Housing and Community Development* 53(4): 29.
- Southwestern Community Services. 2014. <http://www.scshehelps.org/> (last accessed 20 November 2014).

State of New Hampshire Department of Health and Human Services. (NHDHHS) 2013. <http://www.dhhs.state.nh.us/dcbcs/bhhs/documents/2013-bhhs-report.pdf> (last accessed 17 November 2014)

Stats Direct. 2014. <http://www.statsdirect.com/help/Default.htm> (last accessed 20 November 2014).

U.S. Department of Housing and Urban Development (HUD). 2013. http://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/programs/ph (last accessed 17 November 2014)

Vale, L. J. and Y. Freemark. 2012. From Public Housing to Public-Private Housing. *Journal of the American Planning Association* 78(4): 379-402.

Ward, M., and M. Doherty. 2008. Public Housing Authorities: Helping to End Homelessness through Permanent Supportive Housing. *Journal of Housing and Community Development*. 65: 18-21.

Wilen, W., and Nayak, R. 2006. Relocated Public Housing Residents Have Little Hope of Returning. *Where Are Poor People to Live? Transforming Public Housing Communities*, ed. Larry Bennett, Janet L. Smith, and Patricia A. Wright. 216–36.

APPENDICES

1. COVER LETTER/SURVEY.....	55
2. KRUSKAL-WALLIS TEST RESULTS.....	61
3. MAP OF CONCENTRATED AREAS OF PUBLIC HOUSING.....	68
4. MAP OF FAMILY HOUSING PROPERTIES AND SCHOOLS – KEENE PROPERTIES.....	69
5. MAP OF FAMILY HOUSING PROPERTIES AND SCHOOLS – SWANZEY PROPERTIES.....	70
6. MAP OF PUBLIC HOUSING LOCATIONS AND GROCERY STORES IN KEENE, NH.....	71
7. MAP OF GROCERY STORES AND THEIR USAGE IN KEENE, NH.....	72
8. MAP OF PUBLIC HOUSING LOCATIONS IN KEENE, NH.....	73
9. SEMI-STRUCTURED INTERVIEW QUESTIONS.....	74

Appendix 1

Dear Resident,

Keene Housing wants to know what you think about your community and our performance. Please take a few minutes to fill out the enclosed Resident Survey. Your feedback will help KH set benchmarks for tracking the quality of services provided to residents. You should find the questions interesting and we will definitely find your answers useful. Please participate!

Please have **the head of household, co-head, or spouse** spend a few minutes to answer all the questions. When you're done, please place the survey in the drop box located near the mailboxes or in your community room no later than 4pm on November 17th. **Your responses will remain completely anonymous.**

Keene State College students will stop by during the survey period to collect surveys from the drop boxes. Your participation is very important to us. If you have any questions, please contact April Buzby at abuzby@keenehousing.org or 352-6161.

We won't know how we're doing if you don't let us know. Thank you for your time and participation.

Sincerely,

Joshua Meehan
Executive Director

Keene Housing 2014 Resident Survey

Customer Service

1. Over the past year, how many times have you called or visited KH property management staff?

None 1–3 Times More than 3 Times Don't Know

2. Over the past year, if you needed to speak with management or other KH staff, which

Made an appointment at Court Street Office

Walk– in to Court Street Office

Made an appointment during on–site/FAC
office hours

Walk–in during on–site/FAC office
hours

were you more likely to do? Circle One

3. Based on your experience with KH property management staff in the past year, how satisfied were you with:

	VERY SATISFI ED	SATISFI ED	NEUTR AL	DISSATISFI ED	VERY DISSATISFI ED
RESPONSIVENESS TO YOUR QUESTIONS AND CONCERNS?	1	2	3	4	5
ACCURACY OF THE INFORMATION PROVIDED?	1	2	3	4	5
TIMELINESS OF RETURNING YOUR CALLS?	1	2	3	4	5
HOW KH PROPERTY MANAGEMENT STAFF TREATED ME?	1	2	3	4	5

4. Would you like to provide additional comments about staff?

Maintenance & Safety

5. Over the past year, how many times have requested repairs from KH for your building or apartment?

None 1–3 Times More than 3 Times Don't Know

6. Based on your experience with KH maintenance staff in the past year, how satisfied were you with:

	VERY SATISFIE D	SOMEWH AT SATISFIE D	NEUTR AL	DISSATISFI ED	VERY DISSATISFI ED
EASE OF REQUESTING REPAIRS?	1	2	3	4	5
MAINTENANCE RESPONSE TIME?	1	2	3	4	5
QUALITY OF THE WORK?	1	2	3	4	5
HOW KH MAINTENANCE STAFF TREATED ME?	1	2	3	4	5

7. How safe do you feel ...?

	VER Y SAFE	SAF E	NEUTR AL	UNSA FE	VERY UNSA FE	NOT APPLICAB LE
IN YOUR APARTMENT?	1	2	3	4	5	N/A
IN THE INDOOR COMMON AREAS?	1	2	3	4	5	N/A
IN THE OUTDOOR COMMON AREAS	1	2	3	4	5	N/A
ALLOWING YOUR SCHOOL-AGED CHILD(REN) TO PLAY OUTSIDE UNSUPERVISED?	1	2	3	4	5	N/A

8. What one improvement would you make in your home?

9. What one improvement would you make in your community/building?

10. Would you like to provide additional comments about maintenance and/or safety?

Communications

11. How are you informed of events/programs/changes about Keene Housing? Please circle all that apply.

Bulletin board

Email from KH

Other

Mailings

KH Facebook or website

Not informed

12. Do you or anyone in your household have access to the internet at home? Yes
No

If no, why? Circle one

Too expensive

Don't Have computer

Don't want/need

Other

If yes, what type?

Dial-up

High Speed/Cable Modem

Cell

KH WiFi at my

property Other

Youth Services

13. Do you have children living with you at least some part of the week? Yes
No

If yes, please answer questions 14 and 15:

14. KH partners with several organizations (MoCo Arts, Keene Rec Center, Keene YMCA) to provide children access to activities in the community at a significantly discounted price. Has your child participated in any of these programs? Yes
No

If no, why not? Circle all that apply.

Did not know

Cost

Transportation

Schedule

Other:

15. **Residents of North & Gilsum and ForestView only:** Do your children participate in programming at the Clubhouse? Yes No

If no, why not?

16. Is there any other programming for youth you would like to see?

Other

17. Is there any programming for adults you would like to see?

18. How do you travel locally? Please circle all that apply.

Personal vehicle Bicycle Taxi Other_____

Bus Walk Friend/family/carpool

19. How does your current transportation affect your access to:

	NOT AT ALL	SOMEWHAT	NEUTRAL	A LOT	NOT APPLICABLE
EMPLOYMENT OPPORTUNITIES?	1	2	3	4	5
MEDICAL SERVICES?	1	2	3	4	5
RECREATIONAL ACTIVITIES?	1	2	3	4	5
PARTICIPATING IN YOUR CHILD(REN)'S EDUCATION?	1	2	3	4	5

20. What is your primary grocery store? _____

21. How secure do you feel that you are able to afford nutritious food for your family?
Circle One

Not at all Somewhat Very Prefer not to answer

22. How many times a week do you have dinner (or a meal) with every member of the household?

0 1-3 More than 3 Never I don't know

times times

Demographic Information

23. Do you participate in the Resident Self-Reliance Program (RSR)? Yes
No Unsure
24. Which KH owned and managed property do you live in? _____

25. What is your gender? Female Male I prefer not to say
26. How many people in your household? _____
27. Is the Head of Household disabled or elderly?
Elderly Disabled Neither I prefer not to say

Appendix 2-A

Accuracy

Ranks			
	Property	N	Mean Rank
Accuracy	1000.00	4	100.38
	1001.00	6	72.67
	1002.00	47	74.68
	1003.00	2	34.00
	1004.00	34	55.72
	1005.00	19	60.18
	1006.00	6	78.25
	1007.00	9	94.00
	1008.00	2	34.00
	1009.00	4	74.63
	2009.00	6	99.08
	Total	139	

Test Statistics^{a,b}

	Accuracy
Chi-Square	21.576
df	10
Asymp. Sig.	.017

a. Kruskal Wallis Test

b. Grouping Variable:
Property

H₀: There is no significant difference in property management accuracy between KH properties.

Significant

Appendix 2-B

Timeliness

Ranks			
	Property	N	Mean Rank
Timeliness	1000.00	4	102.25
	1001.00	6	70.08
	1002.00	47	78.57
	1003.00	2	72.50
	1004.00	32	55.02
	1005.00	19	57.89
	1006.00	6	64.50
	1007.00	9	75.67
	1008.00	2	29.50
	1009.00	4	56.00
	2009.00	6	95.67
	Total	137	

Test Statistics^{a,b}

	Timeliness
Chi-Square	18.706
df	10
Asymp. Sig.	.044

a. Kruskal Wallis Test

b. Grouping Variable:

Property

H₀: There is no significant difference in property management timeliness between KH properties.

Significant

Appendix 2-C

Treatment

Ranks			
	Property	N	Mean Rank
Treatment	1000.00	4	114.25
	1001.00	6	82.83
	1002.00	48	73.02
	1003.00	2	37.50
	1004.00	34	58.26
	1005.00	19	55.03
	1006.00	6	78.17
	1007.00	9	95.06
	1008.00	2	37.50
	1009.00	4	62.75
	2009.00	6	109.83
	Total	140	

Test Statistics^{a,b}

	Treatment
Chi-Square	28.585
df	10
Asymp. Sig.	.001

a. Kruskal Wallis Test

b. Grouping Variable:
Property

H₀: There is no significant difference in property management treatment toward residents between KH properties.

Significant

Appendix 2-D

SAFETY

Apartment

Ranks			
	Property	N	Mean Rank
Apartment	1000.00	3	61.67
	1001.00	6	51.33
	1002.00	48	68.65
	1003.00	2	116.75
	1004.00	37	67.89
	1005.00	19	86.39
	1006.00	6	88.33
	1007.00	9	64.72
	1008.00	2	41.00
	1009.00	4	41.00
	2009.00	6	103.25
	Total	142	

Test Statistics^{a,b}

	Apartment
Chi-Square	19.290
df	10
Asymp. Sig.	.037

a. Kruskal Wallis Test

b. Grouping Variable:
Property

H₀: There is no significant difference in attitudes regarding apartment safety between KH properties.

Significant

Appendix 2-E

Indoor

Ranks			
	Property	N	Mean Rank
Indoor	1000.00	2	30.50
	1001.00	5	79.50
	1002.00	41	54.04
	1003.00	1	109.50
	1004.00	32	62.44
	1005.00	17	78.74
	1006.00	6	80.17
	1007.00	9	56.11
	1008.00	2	30.50
	1009.00	4	50.25
	2009.00	6	84.50
	Total	125	

Test Statistics^{a,b}

	Indoor
Chi-Square	18.673
df	10
Asymp. Sig.	.045

a. Kruskal Wallis Test

b. Grouping Variable:

Property

H₀: There is no significant difference in attitudes regarding indoor safety between KH properties.

Significant

Appendix 2-F

Outdoor

Ranks			
	Property	N	Mean Rank
Outdoor	1000.00	3	76.17
	1001.00	6	74.58
	1002.00	45	58.66
	1003.00	2	110.00
	1004.00	36	63.31
	1005.00	18	94.36
	1006.00	6	81.83
	1007.00	9	70.67
	1008.00	2	25.50
	1009.00	4	58.50
	2009.00	6	88.00
	Total	137	

Test Statistics^{a,b}

	Outdoor
Chi-Square	20.084
df	10
Asymp. Sig.	.028

a. Kruskal Wallis Test

b. Grouping Variable:
Property

H₀: There is no significant difference in attitudes regarding outdoor safety between KH properties.

Significant

Appendix 2-G

Vehicle * Store Crosstabulation

Count

	Store		Total
	2	3	
Vehicle 0	30	16	46
1	32	36	68
Total	62	52	114

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)		
Pearson Chi-Square	3.647 ^a	1	.056		

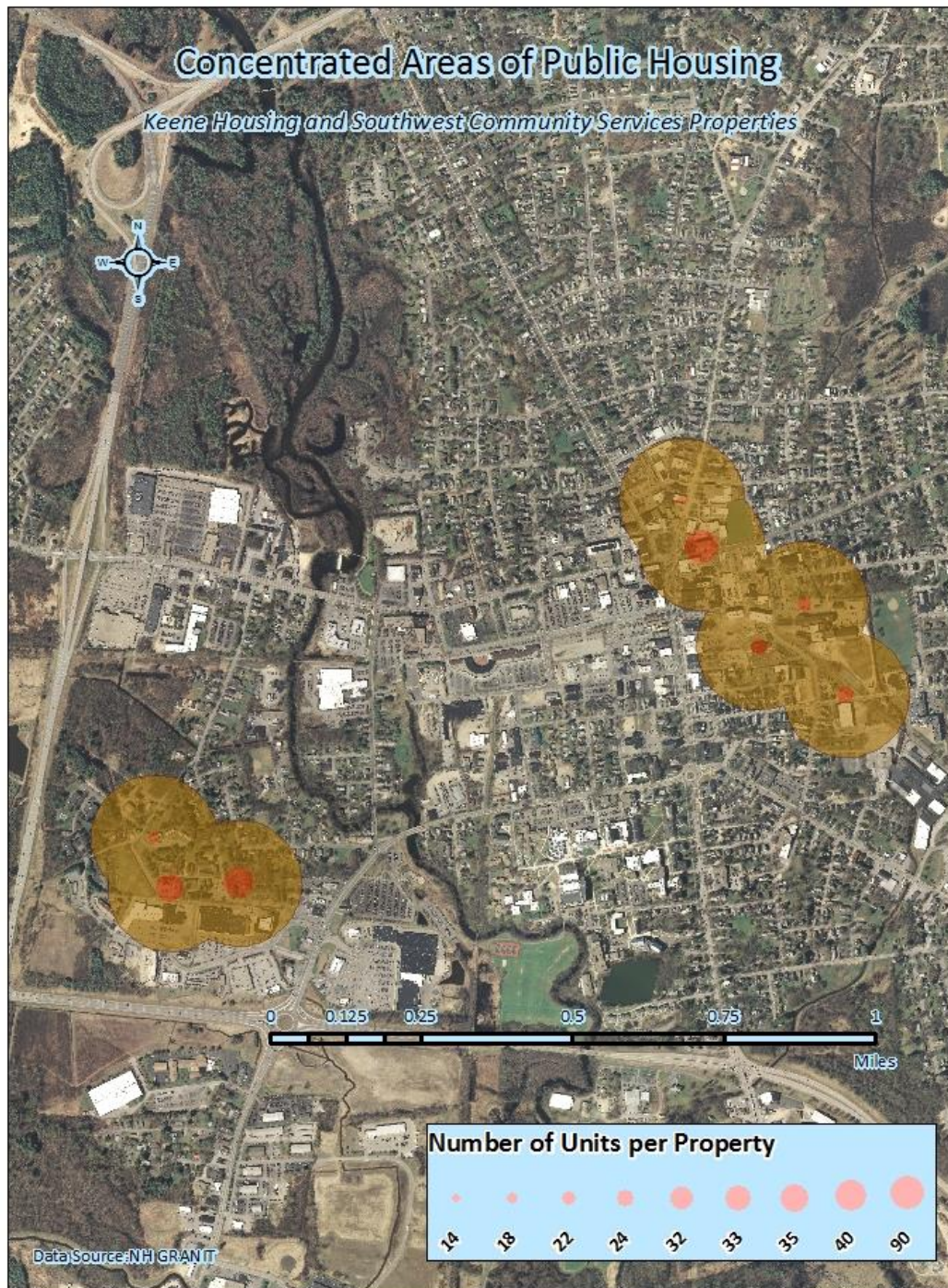
Close to significant

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	3.647 ^a	1	.056		
Continuity Correction ^b	2.952	1	.086		
Likelihood Ratio	3.686	1	.055		
Fisher's Exact Test				.084	.042
Linear-by-Linear Association	3.615	1	.057		
N of Valid Cases	114				

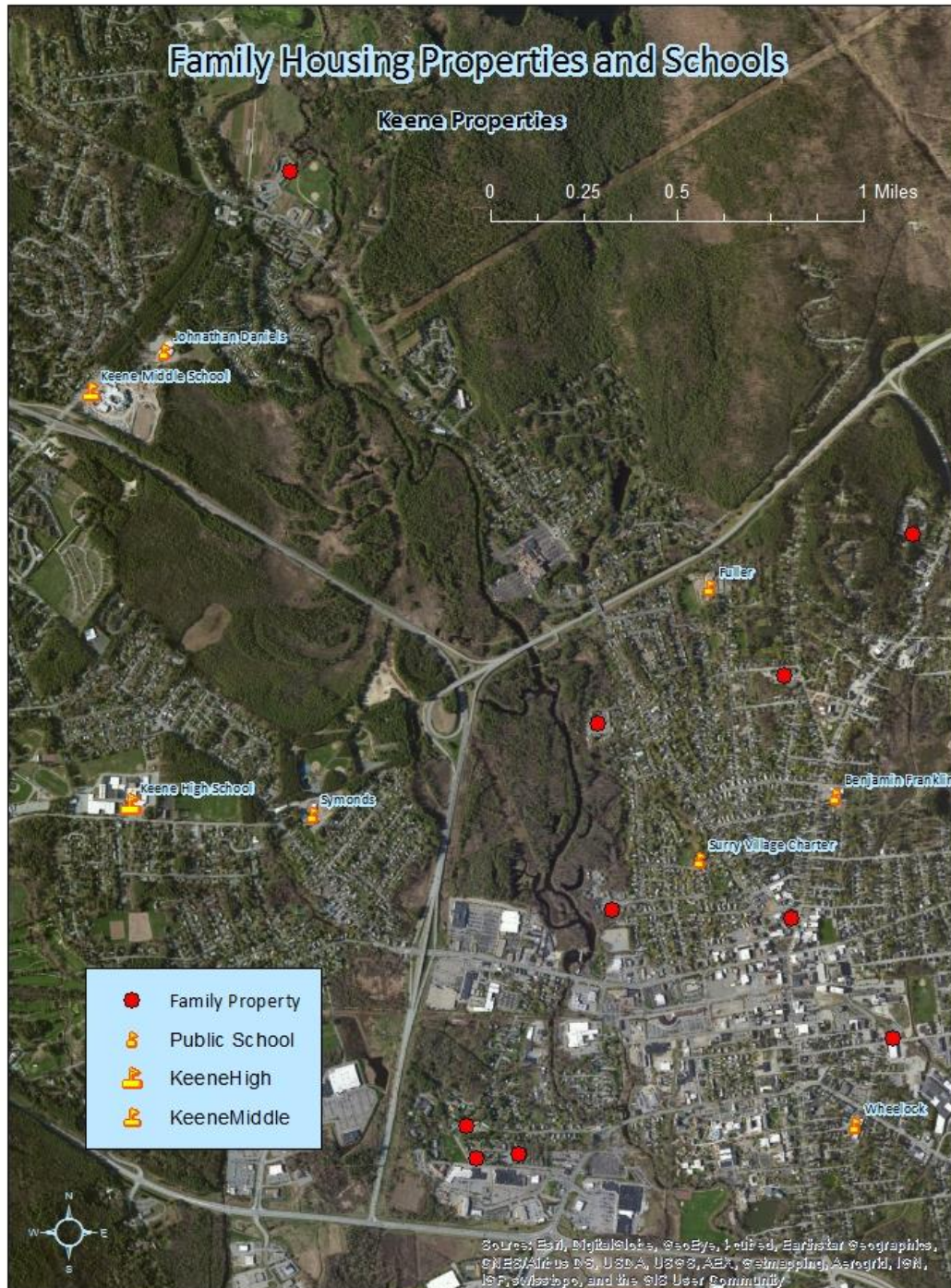
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 20.98.

b. Computed only for a 2x2 table

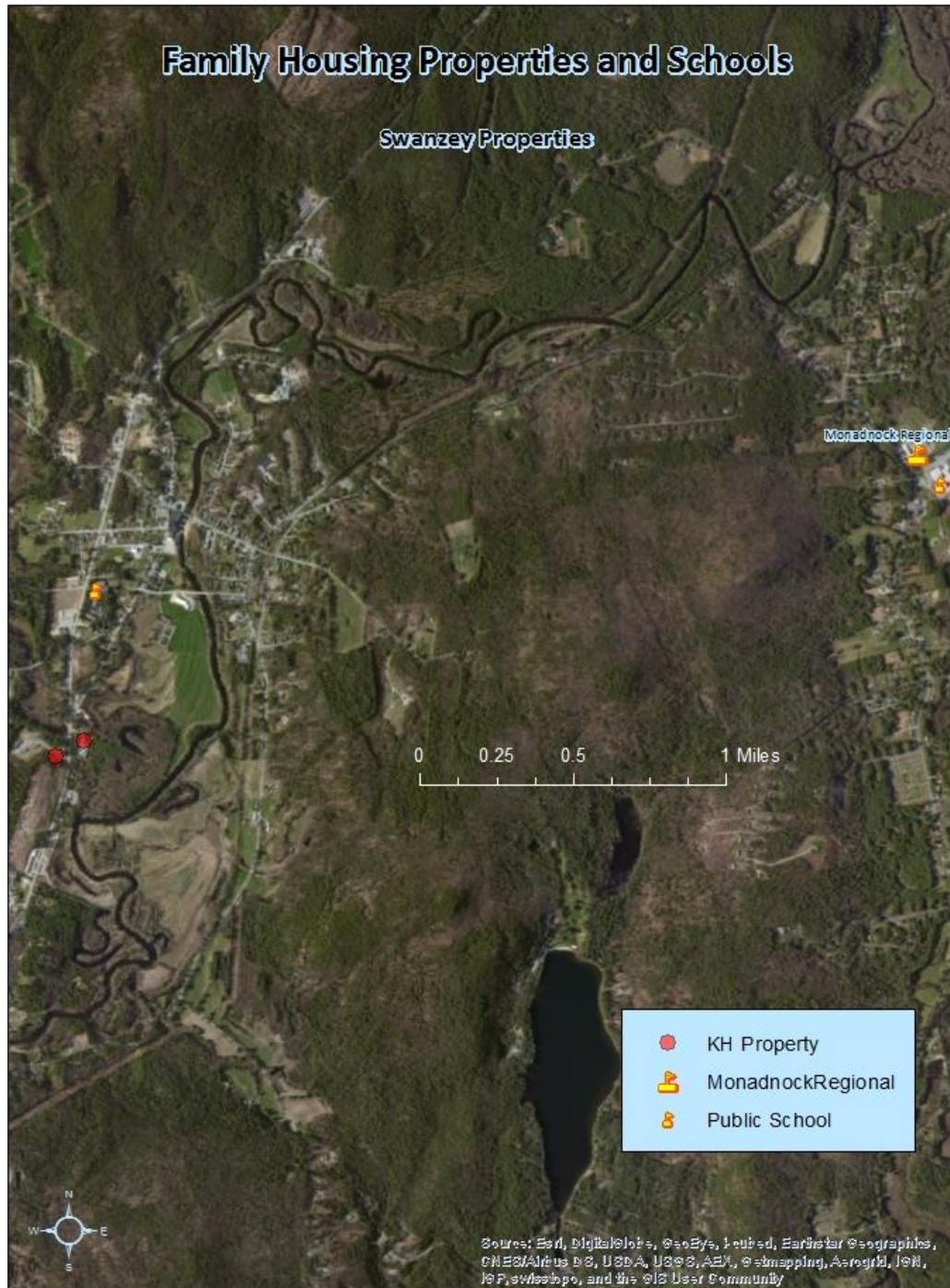
Appendix 3



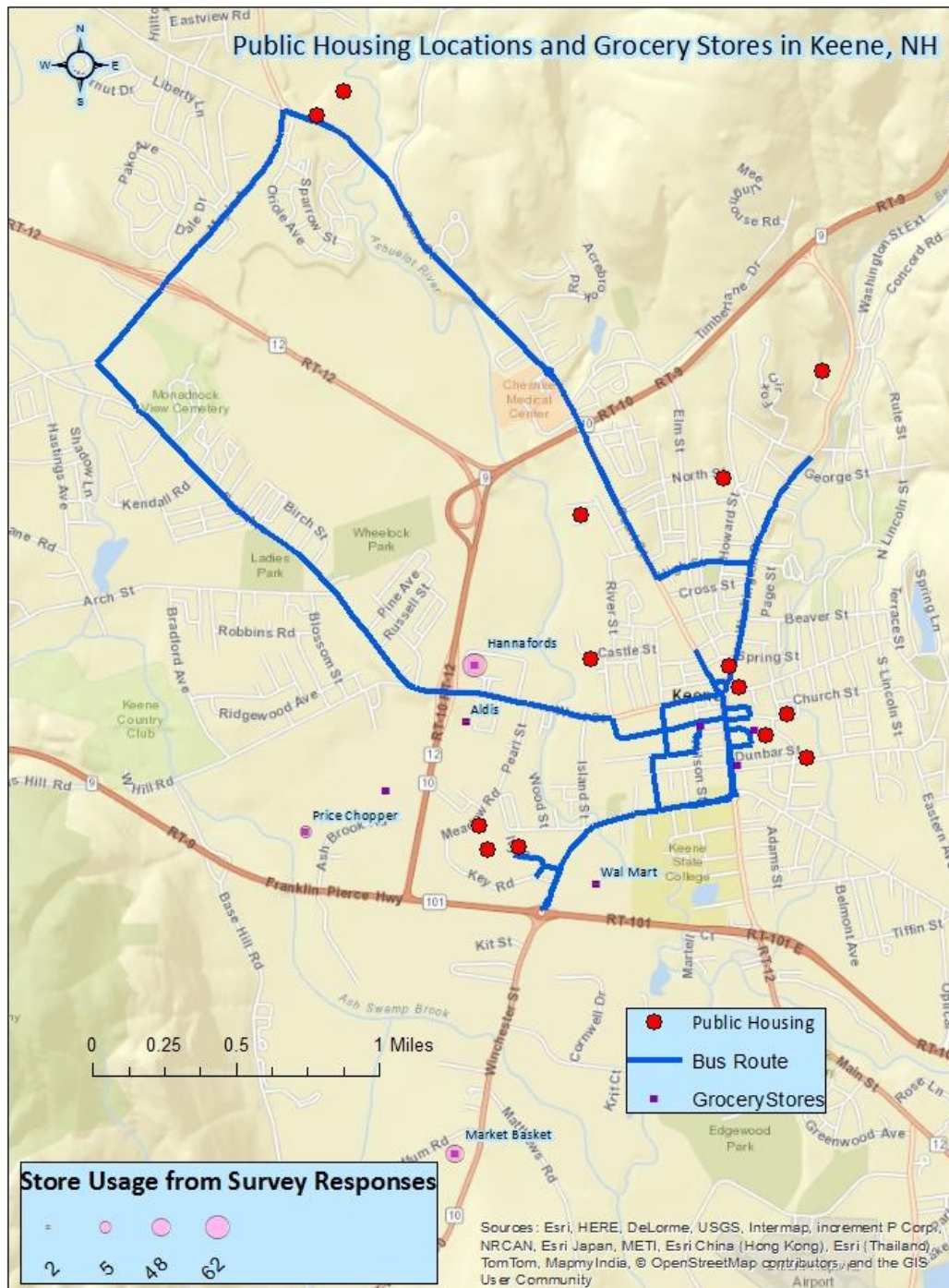
Appendix 4



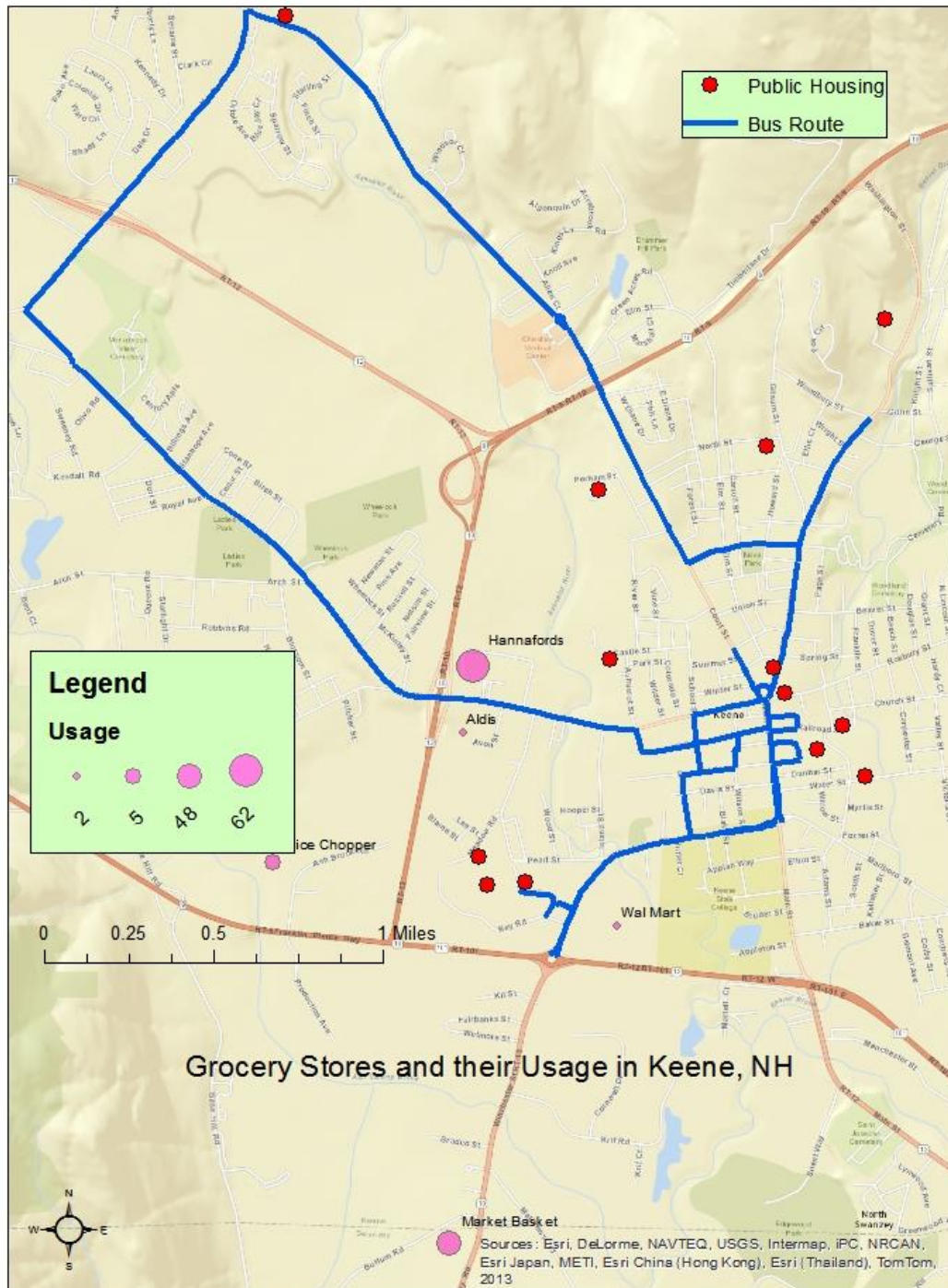
Appendix 5



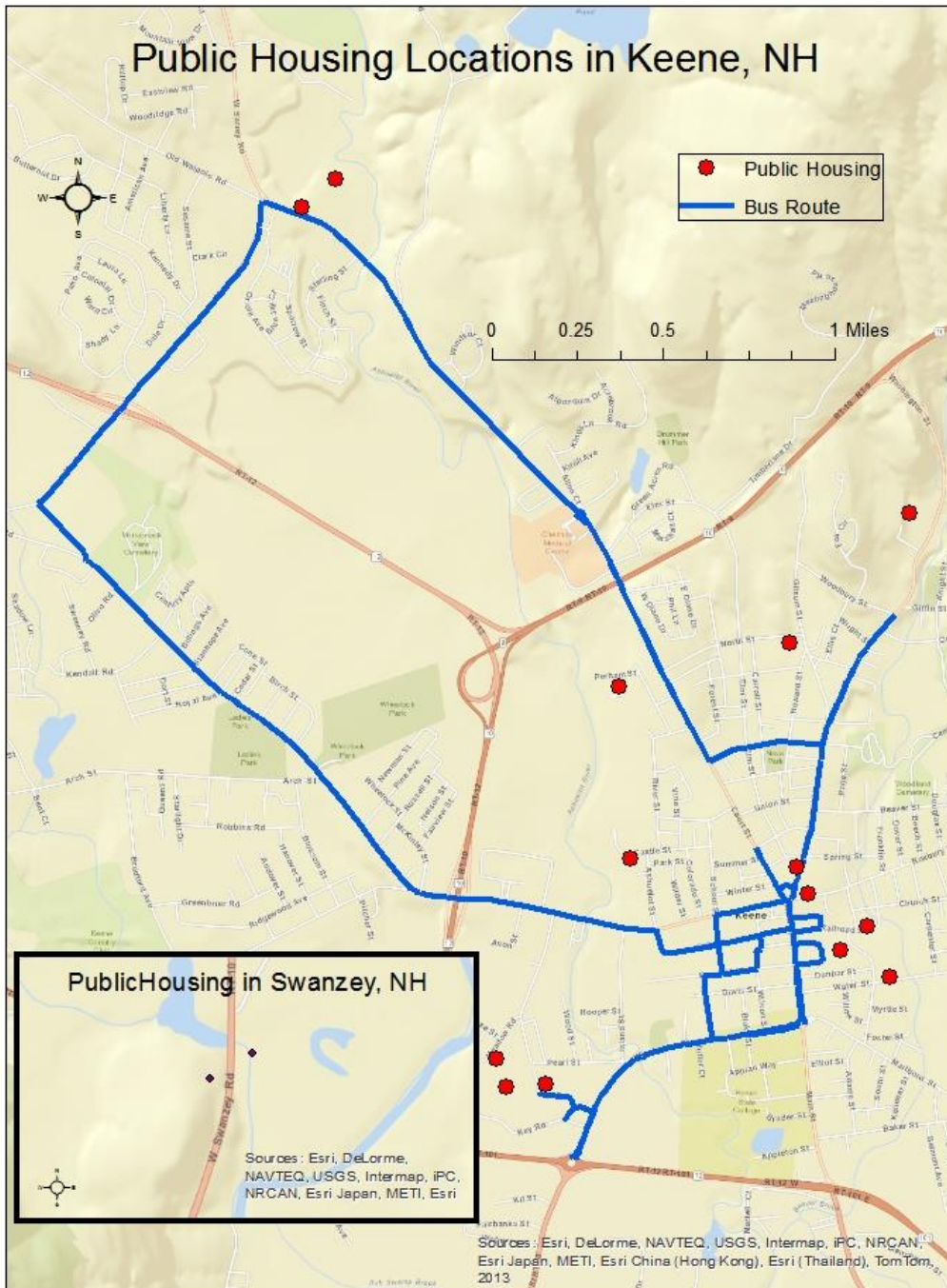
Appendix 6



Appendix 7



Appendix 8



Appendix 9

Semi-structured Interview Questions

- What organization do you work for?
- What role does your company fill in the affordable housing market in Keene?
- What is your position there?
- Do you feel that the affordable housing situation in Keene is working for those who need it?
- What do you consider the biggest challenge managing affordable housing projects in Keene?
- What are some local issues that are really driving this challenge?
- In your opinion, how does the affordable housing model in Keene compare to others in the region?
- How has this organization changed or developed since its inception?
- How are Keene State College students affecting the housing market in Keene?