CORNELL COOPERATIVE EXTENSION SULLIVAN COUNTY + ENGAGED CORNELL

SUPPORTING SULLIVAN SENIORS, YOUTH, AND CHILDREN

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UNDER THE SUPERVISION OF PROFESSOR MILDRED WARNER

7/1/2016

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INTRODUCTION

The Supporting Sullivan Seniors, Youth, and Children project is the product of the collaboration of Engaged Cornell and the Cornell Cooperative Extension (CCE) of Sullivan County, under the supervision of Professor Mildred Warner. The project will identify the current state of need of county residents, particularly children under 18, and seniors 65 and over. It is comprised of three components: a demographic analysis, a service assessment, and a physical design project, all of which will look at disparities in accessibility and quality of services, opportunities, and supports between different age cohorts. These components are informed by Professor Warner's conceptual model for Planning Across Generations.

Demographic trends are affirming the need for age-friendly communities more than ever before. In the next few decades, the US will experience unprecedented growth in the proportion of children and seniors. Furthermore, median income has remained generally unchanged, at $53,000 per family annually, while costs of living have risen. In 2009, of households with members age 65 and older that had a mortgage, almost half spent at least 30 percent of their income on housing—a proportion that classifies household housing cost as a significant financial burden. Renters in the same age group fared worse, with almost three-fifths of households considered housing cost burdened. Rural households are particularly stressed economically because of the disappearance of traditional industry from the American landscape. Due to these stressors, multigenerational households are becoming more common, and planning and designing for the wellbeing of all age groups is becoming urgent for many American communities.

Sullivan County is no exception to this national trend. Sitting within the Catskills Mountains and dotted with countless lakes, Sullivan County is a beautifully scenic area located 70 miles northwest out of New York City in the Upper Delaware River Basin. With its wealth of hiking trails and lakes and its rural nature, the County is in a unique position where the population triples during the summer due to a large influx of summer renters coming from New York City, including a significant Orthodox Jewish population. Though primarily home to an aging white population, there has been an increase in Latino families in recent years. Sullivan County has struggled with meeting the needs of these different demographics, particularly with providing services for their aging population due to the physical barriers presented by the geographical landscape.

This component of Supporting Sullivan Seniors, Youth, and Children will provide the theoretical framework, demographic data, and historical context required to conduct a thorough service analysis and complete a successful design intervention.

THEORETICAL FRAMEWORK

Breaking Down Age-Segregated Barriers

In a culture where age-segregation is the norm, age integration is an important step in the shift toward multigenerational communities. Most programs for the elderly, and many for young children, have been built on the idea of age-segregation, even though they may not even prefer it; retirement homes, for example, limit opportunities for socialization and community participation. Thus, services, transportation, and housing for the elderly stifle age integration as opposed to promoting it. However, both younger and older age groups can benefit from reciprocal socialization and learning. According to AARP's Checklist of Essential Features for Age-Friendly Cities, "older people [should be] specifically included in community activities for "families" [and] schools [should] provide opportunities to learn about ageing and older people, and involve older people in school activities" (AARP, 2015). Programs developed in this light have have demonstrated that breaking down age-segregated barriers encourages aging in place and creates new opportunities for coalition building.

Age-segregation impacts quality of life for elders and children alike. By perpetuating ageist stereotypes, it inhibits older people's freedom to contribute to society. By diminishing the role of children in communities, it affects their ability to participate in social connectivity, which drives well-being and active citizenship. But age-segregation also impacts the quality of service received by both demographics. In rural communities, where resources are limited as is, age-segregation significantly affects the efficiency of services. Thus, in these contexts, age integration can result in unprecedented improvements. In Chenango County, New York, funds and services for disabled and elderly paratransit, Medicaid transit, and Meals on Wheels programs were used to form the core of a broader public transit system for users of all ages (Greenhouse, Homsy & Warner, 2010). Similarly, in New York City, school buses are used to transport older residents from senior centers to supermarkets and other public places for free (ibid.). These initiatives put underutilized resources to work across generational lines, thereby increasing quality and productivity of services and livability.

Age integration is a cultural framework that can be used to promote multigenerational communities, even in a rural context where services are generally lacking. Consolidation is one way to improve the efficiency and distribution of these services. Another way is joint use, which increases access to services and opportunities where they wouldn't otherwise be found. Perhaps the most frequently cited example of joint use is the multigenerational schoolyard. Schools, particularly in rural areas, act as community centers and are the most prevalent public facility in the United States (North, 2013). In spite of their abundance, their use is, in many cases, limited to students—and only during designated hours. Joint use agreements are one way to open recreational facilities to the public without the prohibitive high costs of new parkland and recreational facility development (ibid).

Age-segregation is a deeply fundamental aspect of many cultures that is not productive in the creation of sustainable, multigenerational communities. Integration is an important step in the movement toward planning across generations, especially

when resources and services are scarce. By consolidating and coordinating these resources and services, communities can increase access, quality, and efficiency. By permitting public access to abundant recreational facilities such as schools, communities can strive to promote active citizenship, socialization, and health.

Civic Engagement

Entire communities can benefit from elderly and youth engagement. However, these two populations are often overlooked in decision-making processes or lack the resources needed to fully engage in their communities. Physical design, creative initiatives, and provision of services can encourage greater participation from these marginalized generations, which is likely to produce age-friendly communities.

In the U.S., the elderly population is growing fast: 25.6 percent of the country is 45 years and older, and that demographic is growing 18 times faster than any other group (Li & Long, 2013). The growth in the elderly population increases stress on the "sandwich" generation, the generation that is 'sandwiched' between the elderly generation and the children and youth generation (Li, 2013). This generation is crucial to the wellbeing of the generations it's located between because this generation carries the financial burden and responsibility for the polar generations. However, as the age of death is increasing with technological and medical advancements, the working generation must absorb increased stress and responsibility for the retired or limited elderlies. However, this stress can be alleviated to some degree by engaging seniors in decision making processes and other facets of community engagement. This can include mentoring school children, becoming foster grandparents and senior companions, participating in Neighborhood Watch, and others (Hodgson, 2011; Zaire, 2013). By volunteering, seniors provide a service to neighbors and families, while benefiting their own wellness. Studies show that elderly people that volunteer and engage in the community tend to live longer and happier lives because their service generates a sense of purpose and value (Post, 2005).

Like seniors, children face barriers to engagement in communities. They are dependent on parents or guardians to provide transportation, food, and shelter. The needs of children burden the sandwich generation, but this burden is necessary for communities (Li, 2013). Children will eventually replace the sandwich generation. Thus, investment in the wellbeing of children will have a significant impact on the health of future communities. These communities should be conducive to the participation and engagement of children in decision-making processes (Unicef, 2004). However, these processes are not designed to be inclusive of children. Thus, adults are responsible for representing the needs and interests of children. Programs that include child-participation can help produce a sense of belonging and responsibility to the community for children and their families (Hodgson, 2011). The Future Festivals workshop, demonstrated in Kaneohe, Hawaii, is one model of what childhood participation can look like (Greenhouse, Homsy & Warner, 2010). It engaged both children and seniors, facilitating their engagement through murals, models, photographs, and theatrical performances, aiming to relieve social tensions by get community members to work together. Programs like this can encourage child participation within communities, which, in turn, can enhance community wellbeing across the age spectrum.

Physical design has the ability to influence the quantity and quality of participation of both the elderly and youth populations, consequently reducing stress on the sandwich generation. Children and older generations are especially

sensitive to their environments, making designing for multiple generations ever more crucial to healthy communities (Long, 2013). The physical design of schools and community centers can act as a tool to encourage inclusion and social connectivity of both students and seniors.

Smart Growth and Universal Design

Planners and organizations have come together to set out guidelines for how to build a physical environment that supports and encourages participation by all, independent of age. Such intergenerational planning responds to demographic trends and can foster health, efficiency, and flexibility within communities. Not only is good design important for creating a sustainable future, but it is also important to the immediate health of community members, who benefit from the social and physical effects of accessibility, engagement, and participation.

Demographic shifts coincide with changes in the physical design needs of the population across generations (Hodgson, 2011). For the elderly, good design now focuses on figuring out how to best encourage aging in place. Although seniors comprise the majority of homeowners, many homes do not cater to their physical limitations. For children, families, and young adults, good design focuses on providing a variety of housing options, as well as accessibility to jobs and services. Universal design seeks to address these issues by identifying common needs between different age demographics. Common needs include safe, walkable neighborhoods, nearby access to a complete range of services, opportunities for civic engagement, affordable and mixed-use housing options, and adequate transportation options. Constructing a built environment that follows good design practices helps foster healthy communities that support multigenerational populations.

In addition to universal design, smart growth practices also apply to designing for a multigenerational community. Principles of smart growth encourage well-planned density, mixed-use development, pedestrian-oriented design, a variety of transportation options, and well-designed parks, public spaces, and recreational areas––all of which can be used across generations and encourage community engagement, health, and efficiency.

Schools are an example of a community resource that, if designed well, can positively impact the entire community. Because communities differ in terms of culture, history, and location, approaches to design require sensitivity to the community's unique needs and resources. Several movements have emerged out of the push to reconsider school design. The joint-use school approach encourages schoolyards to be used by the public, especially seniors, affirming the idea that schools are a community asset (North, 2013). Schools also offer sports facilities, autonomous libraries, and transportation that ought to be open to multigenerational public use. However, joint use does not imply that public spaces are designed for multigenerational use (Dunn, 2013). The Schoolyard Design movement utilizes intentional design to foster learning and healthy habits. These movements were founded on the reality that schools are the most prevalent public space in the United States, and should be a place for learning for everyone as well as a space for civic engagement. Good design increases neighborhood value, and can inspire community engagement and participation. While these initiatives were originally designed for a suburban or urban setting, the concepts they promote can be applied to a rural context as well. While students and adults may be unable to walk to school, facilities can still be designed to provide access and opportunities for people of all ages. Such design could provide locations of

recreational activity, not only for students, but for adults and elderly people as well, thus encouraging exercise and healthy habits. The school building can act as a place for community gathering and opportunities for participation for all ages, and school libraries can provide educational resources residents may not otherwise have. Even the smaller particulars of physical design ought to be catered to the users (e.g. designing bathrooms and door handles so that they can be easily used by children and elderly people). Additionally, school buses can act as a major resource that has previously been underutilized in many communities, rural and urban alike (Hodgson, 2011). When school buses are not being used for transporting children to and from school-related activities, these buses can be used for others. These school buses can be used to transport elderly people or people with disabilities from their homes to grocery stores. This sort of strategy is especially useful in the rural context in order to combat the challenges that spatial isolation has on individuals that are unable to drive. Creatively using resources that are already acquired and available within the public and community domain is important to sustaining rural communities that want to remain rural but at the same time allow elderly people to age in place, decrease dependence on the sandwich generation, and support the needs of youth and children.

Public spaces and streets are also important opportunities for good design practice. Complete Streets is a guideline for creating streetscapes for pedestrians that promote transportation alternatives (Hodgson, 2011). In doing so, streetscapes can create equitable communities, rather than favoring cars and endangering pedestrians. Although Complete Streets is mostly applicable to urban streetscapes, certain principles can be applied to a rural context. Seniors, for example, should have safe spaces to walk around their community for their health and wellbeing (AARP, 2015). Housing and zoning are equally important factors in community design. Cohousing and zoning to allow for accessory dwelling units (ADU) are proven examples of tools that promote affordability and social connectivity for the entire population (Madfis, 2013). Cohousing does this by mandating the participation of residents in the community decisionmaking process. Members of such communities have their own rooms, but share public spaces with their housemates. Each member is responsible for chores and some degree of engagement within the shared spaces. Changing zoning to permit Vs allows homeowners to have additional structures on their properties that can be rented out or used to provide housing for aging relatives—which can increase the level of care for seniors in multigenerational households while maintaining privacy and dignity. This is particularly relevant in rural areas where land parcels are large enough to easily build ADUs and homes are spread out. ADUs allow elderly relatives to be in close, accessible proximity to relatives or caretakers, decreasing the risks of living independently in what could be an isolated location. Sullivan County offers a prime example of how ADUs in rural context can be utilized. People from the Northeast travel to Sullivan County in order to escape the heat of summer and chaos of dense civilization. Zoning for ADUs allows residents of Sullivan County to build summer homes on their property which they can rent out to vacationers. This not only provides additional income to the family, but also promotes the County as a desirable destination, intriguing outsiders, supporting residents, and instilling a sense of pride in their county.

Contemporary trends are fleeting, but good design is a crucial element in the creation of sustainable multigenerational communities. Participation and engagement are essential tools in this process, especially for the younger and older ends of the age spectrum. In a world that continues to grow in population and consumption, establishing a built

environment centered around practices of smart growth and universal design is essential to the wellbeing of present and future generations.

Informal Networks

nformal networks refer to the connections between family, friends, and neighbors that provide services to individuals within the network. Informal networks are critical in satisfying community needs that cannot be met by formal networks provided by the gov-ernment or private corporations. They are a critical source of support particularly for people on the ends of the age spectrum, persons of lower socioeconomic classes, and immigrants. The formality of transactions between network users can range from car sharing amongst neighbors to paying a local youth to shovel a driveway during winter. Despite their importance and prevalence, informal networks are difficult to track and have largely been disregarded by planners.

These networks have supported multi-generational initiatives by strengthening community connections; creating care networks, thereby decreasing the burden placed on caregivers; and complementing the formal delivery system, which lessens the cost of care for children and the elderly. ITN America is the first national non-profit transportation network geared towards servicing the elderly. Drivers provide door pickups, take their passengers to their destination, and assist with any unloading that may be needed. The cost of running the service is funded by merchants, health care providers, and other community organizations. Furthermore, drivers are volunteer-based and the cars are acquired through donations, making the operation more affordable and more personal than taxis (Zaire & Rivin, 2013). Neighborhood child care and carpool systems are additional methods of distributing labor and maximizing the time of the often overextended sandwich generation, while also building stronger community.

Informal services are particularly critical in rural areas where access to services mandates individuals to own personal vehicles. The spread of housing throughout the area makes it impossible for public services to be distributed evenly and efficiently throughout a county. Challenges that are unique to rural areas consequently increase the value of care networks in allowing seniors to age in place and providing activities and transportation for youths. In smaller networks, services may be exchanged for no charge; for example, an individual picks up a neighbor who has been discharged from the hospital. In more formalized networks, members of the system utilize money or time as currency. For neighbor-to-neighbor carsharing, individuals rent out their cars at a self-determined rate. This not only increases transportation options for those who do not own cars, but also provides an additional source of income for car renters.

The very nature of informal networks makes them difficult to track, but they have been vital in communities by allowing seniors to age in place, lessening the burden on the sandwich generation by creating care and transportation networks for children, strengthening community ties, and fulfilling needs that cannot be met by formal networks. Small scale informal networks often naturally occur in communities when a need is identified, but planners can further encourage the formation and usage of such networks by legitimizing the role of neighborhood associations and encouraging civic engagement and collaboration. These networks will be particularly valuable in Sullivan County because services are not evenly distributed throughout the towns and public transportation cannot reach everyone given the rural nature of the county.

DEMOGRAPHIC ANALYSIS

Figure 1
TOTAL POPULATION BY RACE, 2000 + 2010

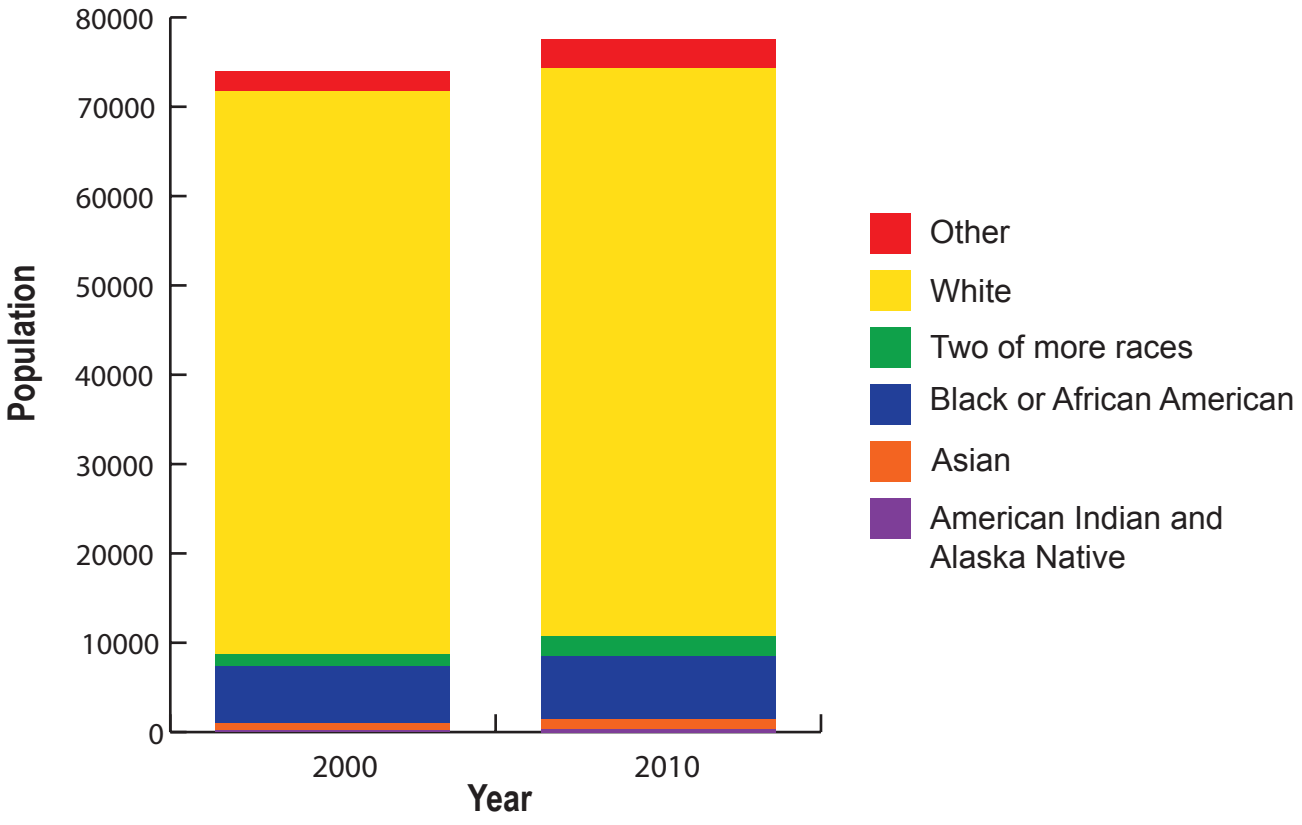


Figure 2
HISPANIC POPULATION OF ANY RACE, 2000 + 2010

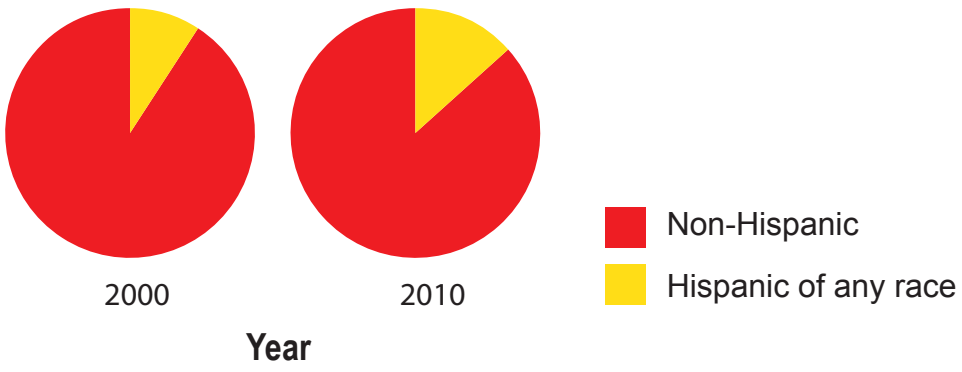


Figure 3

POPULATION DISTRIBUTION BY AGE, 2000 + 2010

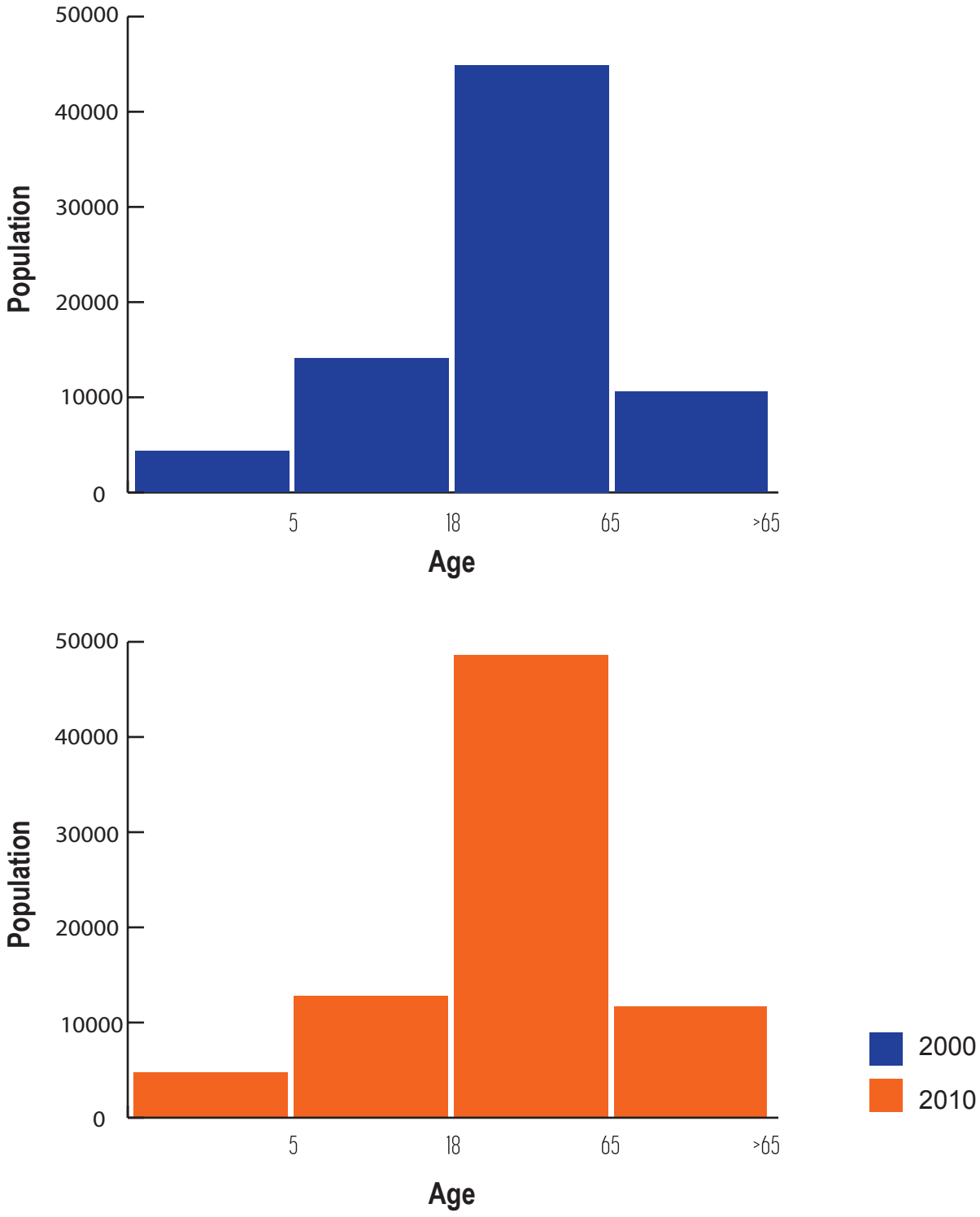


Figure 4
OCCUPATION BY INDUSTRY, 2010

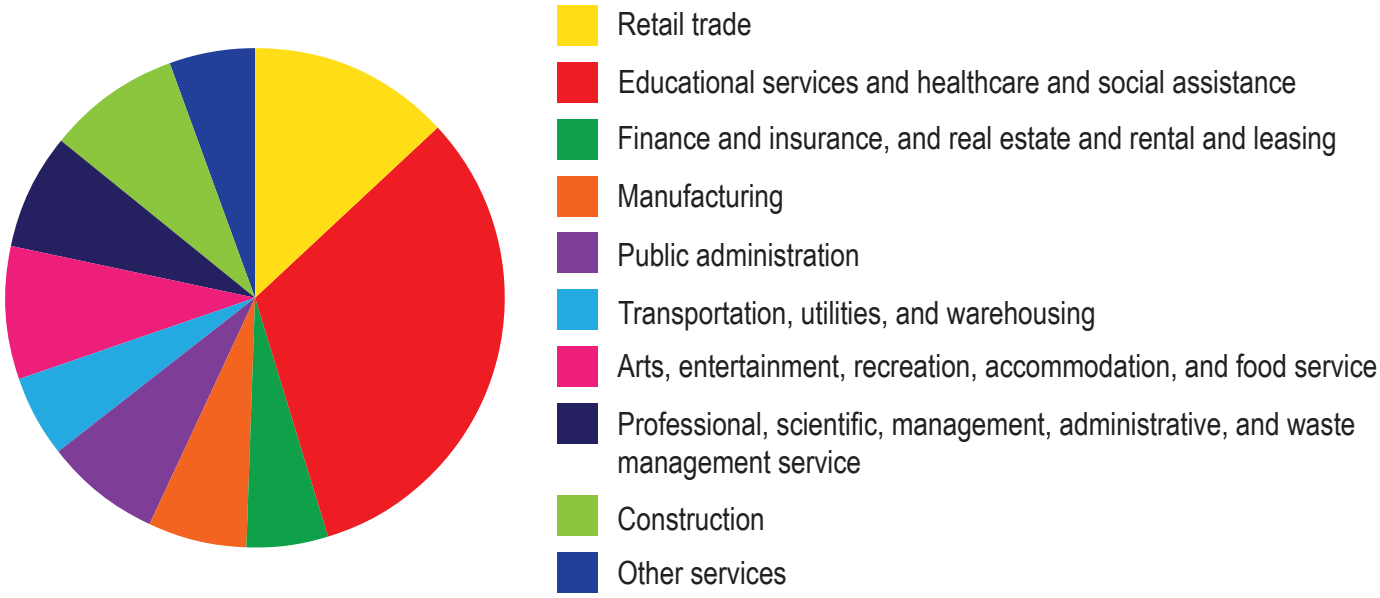


Figure 5
MEDIAN HOUSEHOLD INCOME, 2000 + 2014

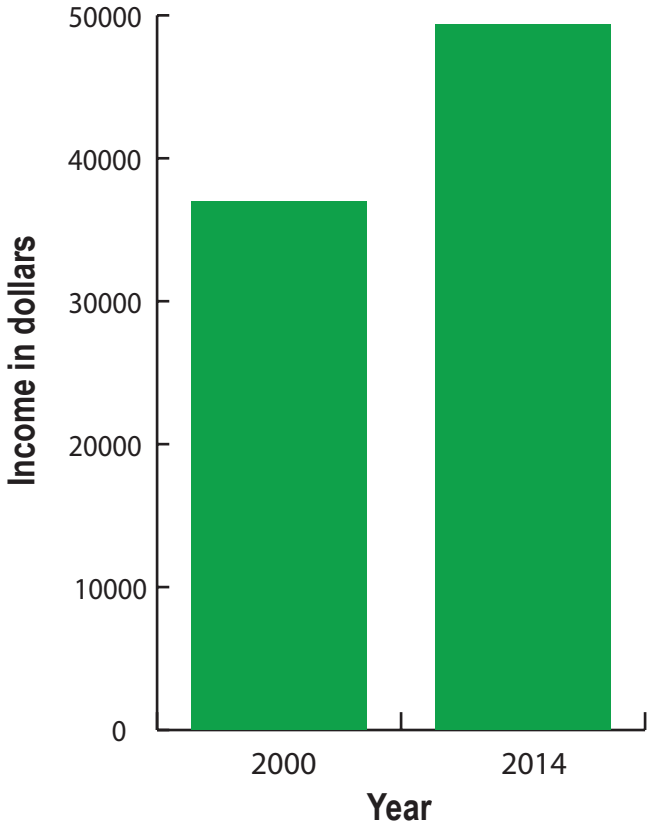


Figure 6
MEDIAN FAMILY INCOME, 2000 + 2014

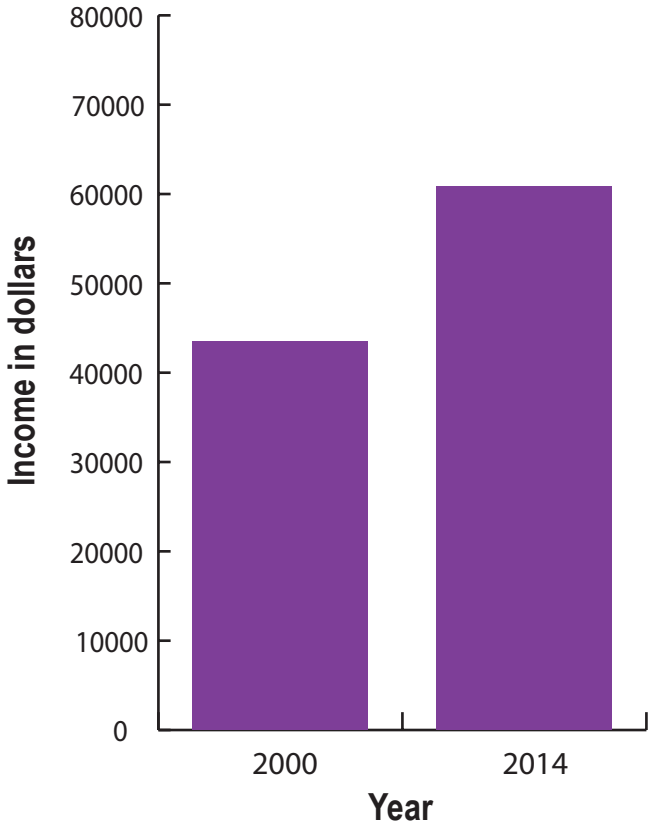
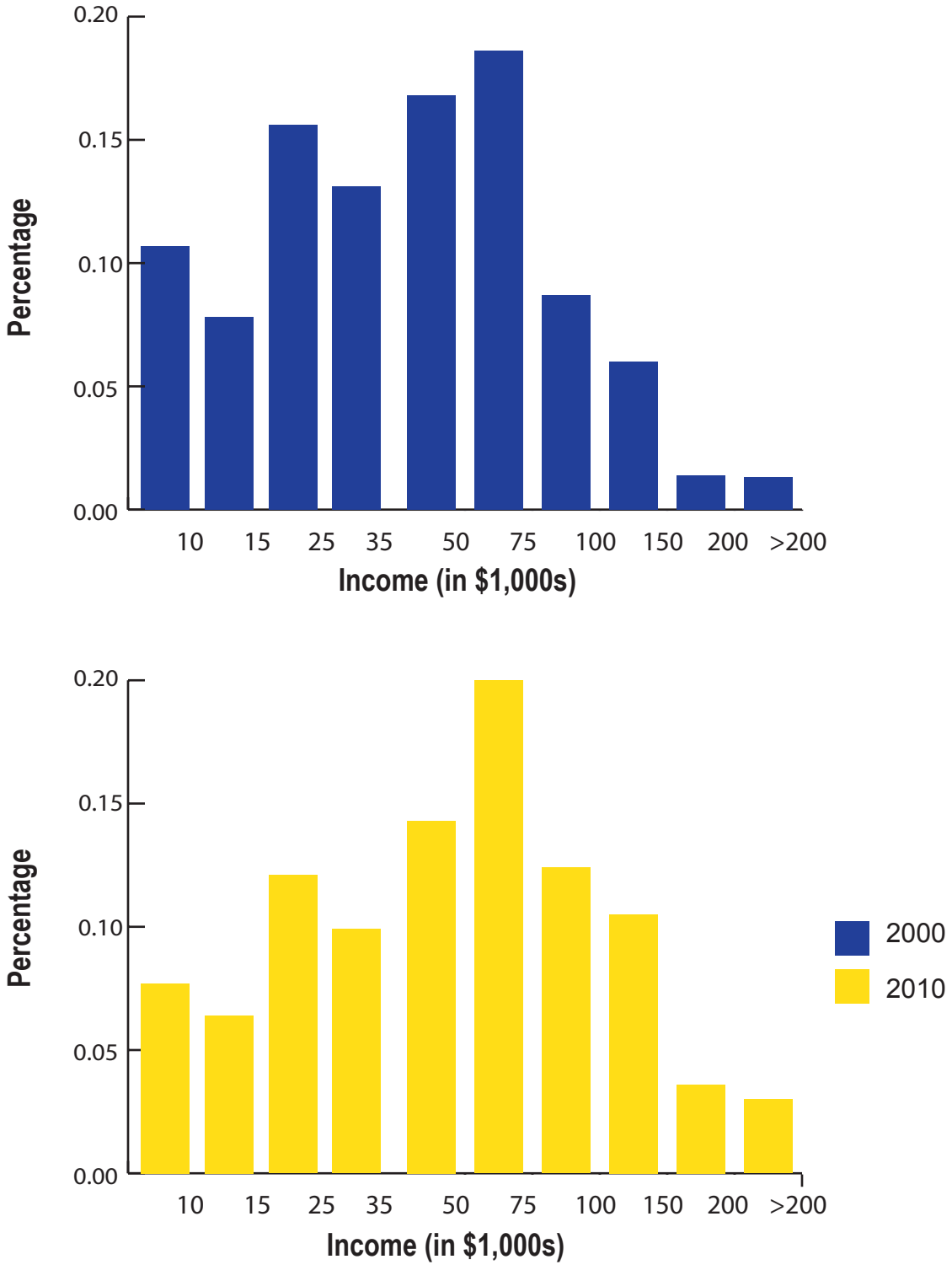


Figure 7

HOUSEHOLD INCOME DISTRIBUTION, 2000 + 2014



Population

This analysis references statistics from 2000, 2010, and 2014 data made available by the US Census Bureau, with emphasis on significant demographic shifts and information that pertains to multigenerational planning. In doing so, this analysis sets precedent for a comprehensive assessment of need and countywide services. In this light, the section is divided into four sections: population, economics, housing, and health.

In 2014, Sullivan County was home to 77,547 with a density of 79 people per square mile. The majority of the population has been and continues to be comprised of non-hispanic white people, as demonstrated in Figure 1. However the total population of white people has remained relatively stagnant in comparison to that of minorities. In ten years, the proportion of white people dropped by more than three percent (from 85.3 percent to 82 percent), while minority populations of almost all categories grew, at least to some degree.

The most significant demographic shift over the past decade within Sullivan County was the unprecedented growth of the hispanic population. Between 2000 and 2010, the proportion of hispanic people in the county grew by more than four percent, reaching 13.6% in 2010. The significance of this trend is immense. Over nine percent of the county's population speaks Spanish, thirty-seven percent of which cannot speak English well. The implications of this reality for the provision of services in Sullivan County are undeniable. Figure 2 shows the growth Hispanic population of any race as a proportion of total population.

The county experienced changes in age composition as well. Most notably, the proportion of 5-17 year olds dropped 2.35%, and that of 18-64 years grew close to two percent. Figure 3 demonstrates this shift toward an ageing population. The median age of a person in Sullivan County grew from 41.2 to 41.8 between 2000 and 2010, and the female population is ageing faster and more significantly than their male counterpart. Sullivan County's ageing population will put more pressure on its already lacking resources and services.

Economics

Since 2000, educational services, healthcare, and social assistance has been the largest source of employment, making up nearly one-third of the County's total industry. Retail trade is the second largest employer, occupying 12.2 percent of industry. The remaining occupations are nearly evenly distributed amongst the other eight industries: agriculture, forestry, fishing and hunting, and mining; construction; manufacturing; wholesale trade; transportation and warehousing; information; finance and insurance; professional, scientific, and management; arts, entertainment, and food services; public administration; and other services. The occupation distribution has remained fairly constant over the past 15 years, except for a four percent increase in educational services, healthcare, and social assistance and a two percent decrease in the arts and entertainment sector.

After adjusting for inflation, household incomes are on the rise. Between 2000 and 2014, the median household income increased from $36,998 to $49,388, while the mean household income increased from $48,359 to $63,971. Although the median and mean household incomes have been increasing at roughly the same rate, the wealth gap appears to be widening slightly with the mean income drawing farther

away from the median. The percentage of people within the income brackets above the median has increased by a total of 13.5 percent, while the percentage of households in income brackets below the median has decreased by 10.4 percent. Furthermore, unemployment rates have increased from 5.3 percent in 2000 to 7.6 percent in 2014.

Poverty trends amongst individuals and families have been increasing over the past four years. The percent of individuals living below the poverty line has increased from 16.3 percent in 2000 to 18 percent in 2014. Within this demographic, the percent of youths under 18 increased from 22.8 percent to 26 percent, but there has been minimal change in the percent of adults 65 and over living under the poverty line during the same time frame. Similarly, the total percent of families living below the poverty line increased from 11.6 percent in 2000 to 13 percent in 2014. Of those families, in 2000 and 2014 respectively, 18.6 percent and 20.4 percent had children under the age of 18.

With over 90 percent of households reporting that they own a car, it is unsurprising that 77.4 percent of workers drive to work. A little under 10 percent carpool, and less than two percent utilize public transportation. The public transportation system in Sullivan County is extremely limited and only has two routes that travel once a week. The lack of biking and pedestrian infrastructure in addition to the rural nature of the county has discouraged alternative methods of transportation and accounts for the low percentage of people who use these means of transit.

The average commute time to work is 28.7 minutes. Due to the rural nature of the county, driving is the primary means of transportation, with more than three-quarters of the county driving alone to work.

Housing

According to the 2010 U.S. Census, there were 30,139 households in Sullivan County, with an average household size of 2.45. In comparison to the national average, the County has a relatively older population with only 30.5 percent of the households that have individuals who are younger than 18, and 28.1 percent that have individuals over 65 living in them. 11.2 percent of households are headed by a single single male or female householder over the age of 65. Nearly two-thirds of those households are headed by elderly women. Over 60 percent of householders moved into their unit in the past 14 years; although only 12.8 percent of housing structures were built during the same time period, demonstrating that residents have been moving around within the county but very little new housing development has occurred.

As of 2010, there were 49,186 household units in the county. Of those, only 61.3 percent were occupied. This high vacancy rate is likely largely the result of a significant summer population. A large number of homeowners own property, but only occupy the units during the summer, and thus do not count towards the number of occupied housing units. Of the occupied units, two-thirds are owner-occupied while the remaining one-third are inhabited by renters. The median value for owner-occupied housing units grew at a 5.78 percent annual rate, increasing from $93,300 in 2000 to $168,800 in 2014. The median monthly gross rent also grew, but at a slower rate of 4.01 percent, increasing from $545 in 2000 to $851 in 2014.

HISTORY

Historically, all of the county's economic milestones have been the direct result of transportation breakthroughs, including the construction of canals, highways, and railroads. The county was geographically isolated from larger cities along the Eastern Seaboard, such as New York City and Philadelphia, but transportation systems have been critical to the integration of the county into the region's larger economic network. Economic development in the county throughout the 18th and 19th centuries has had both direct and indirect impacts on the built environment as well as the current demographics of the county. The following is a brief summary of historic and economic milestones and how advances in the county's history have continued to inform both the physical and social landscape of Sullivan County today.

1764- Timber Rafting

Dating back to the mid 18th century, water has been instrumental in building Sullivan County's economy. Taking advantage of the county's rich supply of pine and hemlock trees and the growing shipping industry in Pittsburgh, Pennsylvania, Daniel Skinner started a logging business in 1764, which led to the creation of a multi-million industry that lasted for 150 years until the 1920's. The journey from the Upper Delaware Valley to the shipping ports further downstream took multiple days, forcing rafters to seek refuge in eddies along the riverbank. Attracted by the new market demand, inns and small businesses began developing along the shore, providing a resting place, raft repairs, and supplies for travelers. While these businesses have largely disappeared, the Eddy Farm in Sparrowbush is still active. A raft repair business in the 1840s, the building has since been transformed into a tourist resort and now exists as a retreat and worship center (J. Conway, personal communication, June 15, 2016).

1809- Newburgh-Cochecton Turnpike

Completed in 1809, the Newburgh-Cochecton Turnpike linked New York City to the west. The turnpike mediated increased accessibility between the City and western New York State and allowed for the prosperity of tanneries. Its construction through Monticello resulted in the growth of commercial businesses, establishing the town as the most important community in the region. This later became a pivotal factor in the state's decision to place the county seat in Monticello. As a result of the increased connectivity, the population of Sullivan County doubled from 6,108 in 1810 to 12,364 in 1830. Parts of the turnpike still exist today, including Broadway in Monticello, Route 17B through White Lake, and County Road 114 from Fosterdale to Cochecton (J. Conway, personal communication, June 15, 2016).

1828- Delaware and Hudson Canal (D&H Canal)

The D&H Canal is a 108-mile long canal that connects the Delaware River to the Hudson River. Irish laborers were hired for the construction project and remained in the area even after the project's completion. Their presence is still significant today with a large percentage of residents citing Irish ancestry. The canal facilitated the importing and exporting of goods, increasing the perceived livability of the region, and by 1950,

there were over 25,000 people living in the county. The county's location along these major waterways were critical in the growth of the tanning industry and allowed the county to be a major leather supplier to the Union Army during the Civil War. The communities that grew around the D&H continue to exist today, including Barryville, Wurtsboro, and Summitville, while Swan Lake, Mongaup Valley, and Cochecton Center are all towns that have grown from early tannery settlements (J. Conway, personal communication, June 15, 2016).

1940's and 1950's- Tourism Industry

Though originally built to cater to the Jews who flooded into Upstate New York from New York City and Eastern Europe to escape religious persecution, the fame and success of Jewish-owned hotels, including the Grossinger's resort and the Concord, quickly expanded beyond their Jewish clientele. Existing hotels and boarding houses that were built during the Silver Age were unable to compete with these massive resorts and were eventually sold to Jewish families. Tourism quickly became the county's greatest industry and source of revenue with the population soaring up from the year round population of 50,000 to 250,000 during the summer months. 1955 was the peak of the tourism industry, but by 1958 the volume of vacationers coming into the county had begun to decrease (Early Sullivan County, 2016).

1960's- Decline of Tourism

The availability of inexpensive air conditioning units decreased the need for city dwellers to escape the oppressive heat during the summer. Air travel also became more affordable, and people chose to travel abroad or cross country rather than drive to the Catskills Mountains. Furthermore, the assimilation of Jews in New York City lessened the need for Jewish resorts that had previously served as a haven for the marginalized immigrants. These three attributes collectively decreased the number of people streaming into the Catskills Mountains during the summer. While most of the large resorts have since been burned down, abandoned, or converted to retreat centers, prisons, and condos, many of the bungalow colonies have been bought by the Hasidic Jew community and are inhabited by the community during the summer (Early Sullivan County, 2016).

Since the decline of the tourism industry, the county has yet to establish itself as a critical economic player in the region or embrace a new industry that will bring back the economic success it has experienced in the past. At any point in time, Sullivan County's economy has been dominated by a single industry, creating a boomtown phenomenon: the County experiences great wealth, but then experiences economic stagnation when the industry begins to decline and eventually disappears. While the County still reaps the benefits of a summer tourism, it is nowhere as significant as the tourism industry in the 1940's and 1950's. Construction of casinos and a massive wellness center in Monticello and organic farms have all been proposed as possible avenues of economic revitalization, but it is still not entirely clear how the county will proceed in the future.

PLANNING

Governance in Sullivan County occurs primarily at the town level, and consequently, planning at the county level has recently and historically played a lesser role than in more urbanized places. The County's most recent master plan, the 2020 Toolkit, reflects a general understanding of contemporary planning best practice, including—but not limited to—smart growth, open space and natural resource management, and information technology infrastructure. However, the plan was written before the 2008 economic recession and at a time when planners anticipated population growth in the county (Sullivan County Division of Planning & Community Development, 2005). Since then, planners have completed extensive reports on transportation and health, which respectively demonstrate the progress that has yet to be made on the goals laid out by the 2020 Toolkit. Many of these objectives are important steps in the shift toward multigenerational communities and livability in Sullivan county.

The 2020 Toolkit anticipated unparalleled growth in Sullivan County, and advised that towns take appropriate measures to accommodate changing demographics, including an aging population and an increase in immigrants and children (Sullivan County Division of Planning & Community Development, 2005). Most of these measures could be categorized under the gist of smart growth. Even in a place as rural as Sullivan County, planners understand the benefits and necessity of creating walkable communities, promoting alternative forms of transportation, and encouraging mixed-use development in hamlets and villages. But considering the scope of the county and the lack of development that has occurred, the feasibility of these practices is questionable.

Hurleyville is a small hamlet in the town of Fallsburg that is a paradigm for smart growth in a rural context, but its circumstances are unique. The Center for Discovery, which offers innovative adult and pediatric rehabilitation programs for disabled individuals, is attempting to remake the small hamlet as a model, walkable community to attract both its professional staff and the clients and families they serve (Hurst, 2015). But it's difficult to gauge the functionality of walkable communities in Sullivan County, where access to services like healthcare and education is difficult, if not impossible, without a car. Furthermore, it's difficult to assess whether or not Hurleyville can act as a model for other hamlets and villages that do not have access to the same level of private investment. However, other hamlets and villages throughout Sullivan County do share similar characteristics, and have the potential to become more age-friendly with time.

Information Technology Infrastructure

The prohibitive administrative and physical hurdles in Sullivan County are heightened by its lack of information technology infrastructure. Although county planners acknowledged the importance of internet access and cellular phone coverage in the 2020 Toolkit, access remains limited and unevenly distributed (Sullivan County Division of Planning & Community Development, 2005). A 2008 study discovered that less than 20 percent of second home owners in Sullivan County were satisfied with information technology infrastructure in the area (Sullivan County Department of Planning & Environmental Management, 2008). The proportion of year-round residents who are put

at a disadvantage by their access to broadband and cellular coverage is bound to be similar, if not greater. The Federal Communication Commission (FCC) affirmed that high-speed internet access can be defined as a utility and should be available to all Americans by June 2016 (Lohr & Ruiz, 2016). In a rural context, internet access can significantly impact an individual's access to services and informal networks, and thus, should be treated as such (Sullivan County Division of Planning & Community Development, 2005). Legislators believe that Sullivan County needs a dedicated telecommunications resource person who can tie all of the municipalities together, and that universal access is an essential step for the county moving forward (Mid-Hudson News Network, 2015).

Health

In the County's 2013 Health Assessment, Sullivan County was ranked 61 out of New York's 62 counties for health outcomes. 61.5 percent of adults were either overweight or obese. Child obesity, tooth decay, and well-child visits are common indicators of child health. Child obesity is at 22.2 percent, which is higher than New York State and is on the rise from 19.4 percent in 2008. 52.8 percent of surveyed third graders had untreated tooth decay, compared to New York State's 24 percent, and 65.1 percent of children in government sponsored insurance programs had the recommended number of well-child visits. 43.2 percent of surveyed persons responded that access to parks and recreation was one of the County's greatest strengths; however, respondents also demonstrated dissatisfaction with the lack of opportunities for exercise citing unaffordable gyms and limited access to parks and playgrounds (Sullivan County Public Health Services, 2013). This contradictory statement will be further elucidated in the service analysis. The County intends to focus efforts over the next five years on preventing chronic disease, promoting health women, infants, and children, and promoting mental health and preventing substance abuse.

Sullivan County has a wealth of public health services available to the community, including services specifically geared towards providing assistance to families and the elderly. Despite this, 30 percent of survey respondents reported that they traveled to other counties to seek better quality health services (Sullivan County Public Health Services, 2013). The greatest barriers to formal health care services are high costs of copayments and medication, lack of health insurance, lack of transportation, and lack of knowledge of operating hours and providers. Increasing the visibility of available health services and bolstering existing systems to transport homebound persons to health service providers will help create a healthier, more livable County.

Transportation

In 2015, Sullivan County hired consultants to conduct and assemble a thorough analysis of transportation in order to assess the needs of the County and plan for the future. The analysis emphasized one basic conclusion: the system in place cannot respond effectively or efficiently to the needs of the Sullivan County population due to the limited extent of service and the lack of collaboration between service providers. 35 entities across the County provide transportation services for limited groups of people, operating with separate vehicles for segregated purposes. Similar to the socially constructed barriers between generations encouraged by the built environment, transportation services are also geared towards certain predetermined groups of people. While such services sometimes make sense and are necessary for catering to the needs of certain individuals within society (e.g. providing transportation for people with physical or mental

disabilities, or providing transportation for students), collaboration between service providers offers the opportunity to increase efficiency and to service more people.

The physical nature of being a rural county in the 21st century assumes the use and reliance on personal vehicles for transportation. However, some members of the county cannot afford or do not have the ability to operate such a vehicle. Low density makes mass transit systems irrelevant within the country context, and county-wide public transit is limited to three full-time workers and nine part-time workers. All other transportation is contracted out to other organizations. To address the discordant transportation system, the plan suggests appointing a manager of transportation for the county who would organize transportation services across entities, working to establish more opportunities for public transit within a ten year period. While the majority of transportation services are currently focused around Monticello and Liberty, the plan hopes to provide transportation services across the county, providing access to medical care, education, employment, recreation, and shopping, thus increasing the quality of life for residents of Sullivan County.

SURVEY TOOL

Interviews with Service Providers

To begin the service analysis, interviews were conducted with service providers within Sullivan County in order to gauge service providers' perspective on quality of public services. Fifteen service providers were chosen from a variety of different service sectors including but not limited to senior services, child and infant care, health care, workforce development, and transportation. Service providers were asked to describe the services they offered, as well as to evaluate their strengths and weaknesses in terms of the quality of services offered, the scope of people reached, and the general accessibility of services.

Service Recipient Surveys

Information from these key informant interviews was then used to construct community surveys. Service recipients were asked to assess the accessibility, availability, quality, and cost of health, transportation, recreational, and age-specific services in the county. The paper version of the survey was in circulation at libraries, congregate meal sites, and government offices for two weeks in August 2016, while the electronic version did not close for another month. While we tried to cover all corners of the county, there was an inherent spatial bias towards village centers, particularly Liberty and Monticello, given that the majority of services and public buildings were located in these areas. 66 percent of responses were collected online, while the remaining 34 percent were collected from the paper version. Seniors were specifically targeted, as this demographic was identified to be a largely underserved population.

We had additionally hoped to include some of the growing ethnic minority groups in the county, including the Latino and Black population, as well as the year-round Hasidic Jew community; however, our limited time prevented us from conducting a thorough outreach to these populations. We reached out to religious leaders and representatives from organizations that catered to immigrant youths, but we experienced difficulty in establishing contacts and distributing surveys.

Data Analysis

Although over 300 responses were collected, only 254 were linked to zip codes, and thus were included in this data analysis. Zip codes were categorized into four categories based on population size as a means of creating a rural-urban indicator, and reported zip codes that fell outside the boundaries of Sullivan County were excluded. These cohorts were then cross tabulated with responses to health care, recreational, and youth services in order to determine possible relationships between access to services and presence of an urban center (see Age Friendly Sullivan: Perspectives from a Rural County for survey findings).

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