3. DEMOGRAPHICS

A. Introduction

According to the 2010 Census, Michigan's population declined by roughly 50,000 persons since 2000. This news was hardly a surprise to many, considering the amount of economic hardship that Michiganders have had to endure over the last five years. Concern about how these circumstances impact an important constituent of Michigan's population—senior citizens—were a large motivation in conducting this study. Real questions coming out of this situation are quite important for housing development in the state going forward.

The purpose of this profile is to provide some demographic and economic background to the primary data collected in other portions of the needs assessment. Census information, particularly results from the 2010 American Community Survey (ACS), is used to paint a rough picture of Michigan's senior population. Major trends in household types, housing conditions and income will be discussed in a national context, and differences between the national and Michigan situations will be highlighted.

LIMITATIONS OF DATA

Before the major themes are described, it is important to note issues surrounding the data and methods used in this profile. As noted, the primary source for the work is the 2010 ACS. This information was used in two forms—the standard extracts available from the American Factfinder website, and the Public Use Microsample (PUMS) data, also available from the US Census. The major reason for using the PUMS data is to create custom cross-tabulations of the data, to study relationships between variables in a more direct way.

While the PUMS data allows for more research versatility, there is a cost. Since it is a survey, it falls prey to a number of sources of error. It is important to keep in mind that the numbers presented below are estimates, with margins of error. In order to keep this to a minimum, analytical results are presented in a way that recognizes the somewhat imprecise nature of the data. This is vital, since the precision of estimates tends to degrade as sample size decreases—in areas with smaller populations, for example, or if a small sub-section of the population is studied.

Many aspects of the presentation were consciously designed with data precision issues in mind, including:

- Recoding data from the ACS so that the resulting number of categories would be small (between three
 and five in most cases).
- Using Decennial Census data if counts are needed, while saving ACS data for percentage or proportion information.
- Depicting trends and concepts graphically, rather than with tables. This puts less emphasis on exact numbers, and more on broader tendencies within the data.

DEFINITION OF "OLDER PERSONS"

Any analysis of an issue with this scope needs to define terms to use throughout its narrative. In the present case, this includes the basic unit of analysis for this project: what an "older" person is.

It is true that a widespread traditional (and sometimes even legislative or policy) definition of "older" includes persons aged at least 65 years. This understanding is not universal, however. For example, persons aged 55, 60, 62 or 65 can qualify for different "senior" benefits like occupancy in an age-restricted apartment complex, or obtaining other benefits.

Because of study goals and practical observations of MSHDA staff, this profile takes a more subtle view of this definitional problem by recognizing four age cohorts among the "senior" population. The first ("near seniors") is comprised of persons between the ages of 55 and 64. The "young senior" group includes persons aged between

65 and 74 years. Next, those persons aged between 75 and 84 years are placed in the "middle senior" category. Finally, persons over the age of 84 are included in the "oldest senior" group.

DEFINITION OF SETTLEMENT TYPES

A second group of definitions is needed to categorize settlement types around the state. These divisions aid in uncovering dimensions of the older population's experiences in terms of a rural/urban continuum. Rurality has proven to be an important aspect of difference in societies around the world, and Michigan's current social and economic milieu is no different.

In order to include this dimension into the present study, Census geographies called Public Use Microsample Areas (PUMAs) around the state were put into one of four categories, designed to reflect differences in both population density and the hierarchy of central places. This level of geography was used because it is the smallest for which PUMS data exists.

- Rural Areas are the State's less developed areas located away from major cities.
- Regional Centers includes PUMAs built around the state's smaller cities, such as Muskegon, Bay City, Port Huron, and others.
- Exurban or Suburban Areas includes regions that are just outside of the state's major urban areas.
- <u>Urban Centers</u> includes the built-up areas around Michigan's largest cities, like Detroit, Grand Rapids, Ann Arbor, Lansing and others.

Figure 1 on the next page shows the PUMAs and their group memberships.

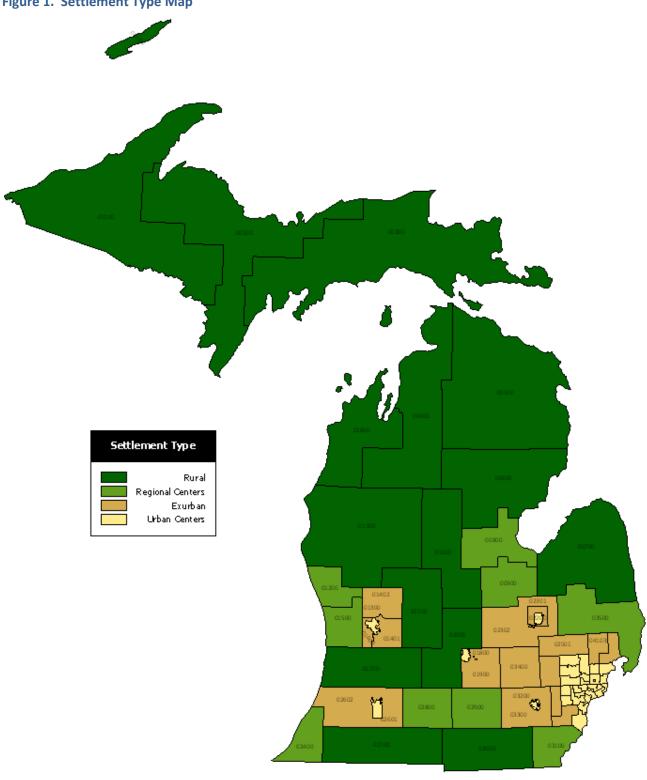


Figure 1. Settlement Type Map

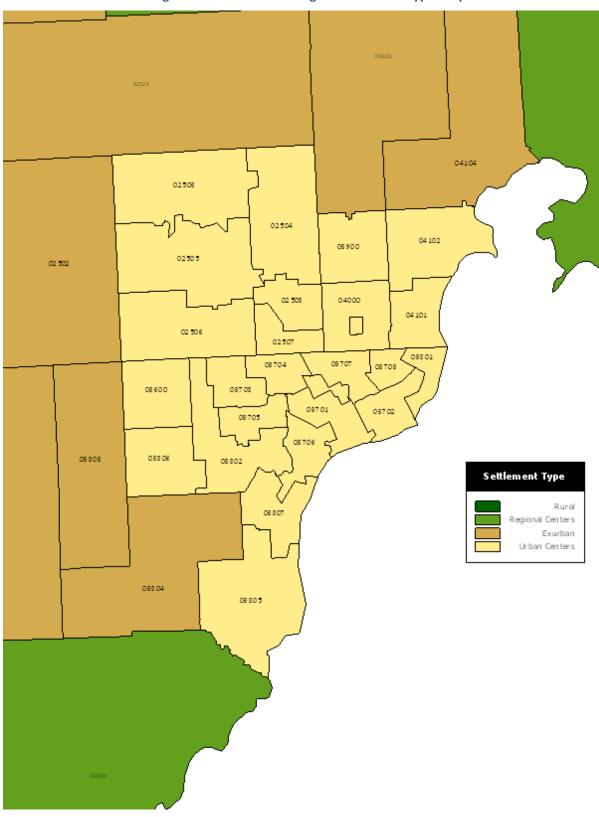


Figure 2. Southeast Michigan Settlement Type Map

B. Profile of Older Population

DEMOGRAPHICS

Population Totals

The 2010 Census put the number of persons in the United States over the age of 54 at just under 76.8 million, or nearly one-quarter of the total population of roughly 309 million. This number reflects the fact that, due to revolutionary changes in health technology and public welfare policies, life expectancies have increased at a dramatic pace.

The table below shows the distribution of the population into the five study groups:

Table 2: Older Population in the United States, 2010

Population Group	Number	% of Total
Non-Seniors	232 million	75.1%
Near Seniors (55-64)	36.5 million	11.8%
Young Seniors (65-74)	21.7 million	7.0%
Middle Seniors (75-84)	13.1 million	4.2%
Oldest Seniors (85 and Over)	5.5 million	1.8%

The numbers show that the Near Senior cohort is the largest among the senior adults in the country. Not unexpectedly, the sizes of the cohorts shrink as their age increases. Oldest Senior adults account for just less than 5.5 million persons, or about two percent of the nation's total population.

In Michigan, the older adult population stood at 2.6 million persons at the 2010 Census. This number is approximately 26% of the total population in the state, indicating that Michigan is slightly "older" in age distribution than the country as a whole.

A traditional method of analyzing populations by age is the population pyramid. The one below shows the 2010 Census results at both the state and national levels.

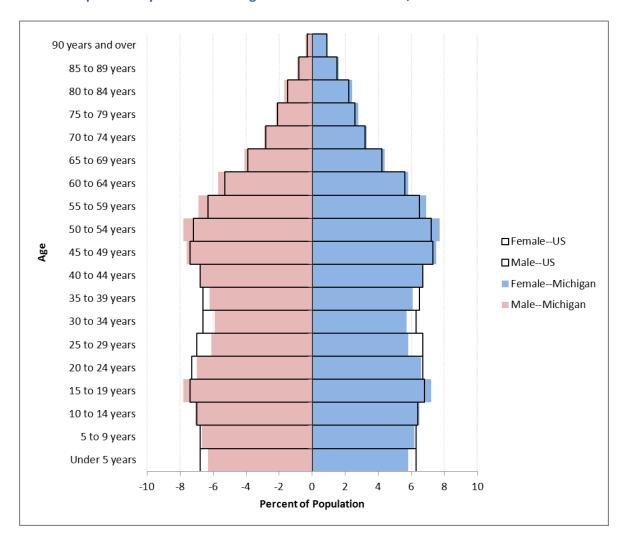


Chart 1: Population Pyramid for Michigan and the United States, 2010

The graph shows that the state has a surplus of persons above the age of 45 when compared to national percentages. Most of the younger cohorts (with the exception of persons aged between 15 and 19 years) show deficits. This could be a sign of the effects of prolonged economic difficulties in the state, in that younger adult cohorts may be more able to leave in search of better opportunities than older age groups. In this regard, the relatively large deficits in the 25 to 39 year old groups are especially telling.

The table below shows the breakdown of Michigan's population into the five study groups:

Table 3: Older Population in Michigan, 2010

Population Group	Number	% of Total
Non-Seniors	7.3 million	73.6%
Near Seniors	1.3 million	12.7%
Young Seniors	0.7 million	7.3%
Middle Seniors	0.4 million	4.5%
Oldest Seniors	0.2 million	1.9%

In percentage terms, the largest difference between national and state figures is among the younger senior cohort. Nationally, they comprise nearly 12 percent of the population, but in Michigan the proportion is about one percentage point larger. The other older cohorts in Michigan are also larger than in the country as a whole.

Geography of the Senior Population in Michigan

The map on the next page shows the concentration of the various age cohorts by Michigan counties. A number of interesting patterns are on the map, each implying important policy issues and objectives.

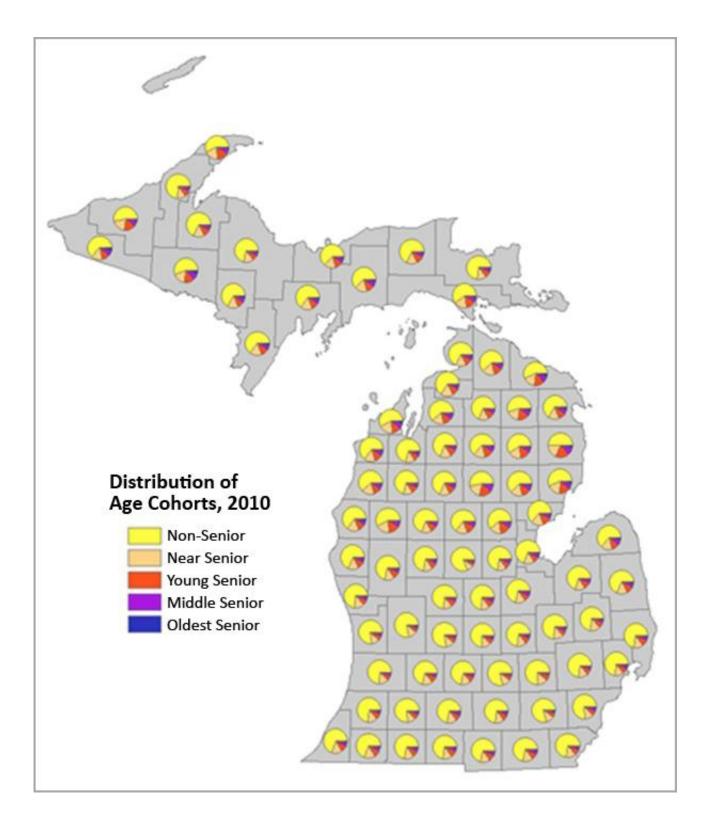
The first is the concentration of older adults in the northern, more rural part of the state. According to the state figures, non-seniors account for about three-quarters of Michigan residents (rounding up). Therefore, in order to conform to this, each county's pie chart should be roughly three-quarters yellow, and one-quarter other colors.

However, this is not the case in many counties, especially in the northeastern portion of the Lower Peninsula. Here, the older adult percentage of the population nears 50% in many places. Other relatively large percentages of older residents exist in the Thumb, northwestern Lower Michigan, and many counties in the Upper Peninsula.

The second is the prominence of the older (i.e., Young and Middle Senior cohorts) in those same counties. It seems to be variance in these segments that drive overall senior numbers; the younger senior cohorts do not seem to display the same amount of geographic variability.

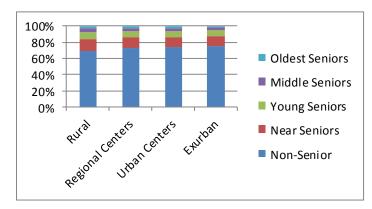
There are a number of explanations for these patterns. One is economic, and holds that younger people move out of rural, economically stressed areas in order to find employment opportunities. This has been the case for a number of decades in these areas. Another, operative in some of the more tourist-based counties, is a desire by households with means to relocate to areas offering a high degree of natural amenities and cultural activities. The northwestern section of the Lower Peninsula has benefitted from this over the last few decades, and the somewhat heightened share of Near Seniors in the area's population supports this contention.

One important ramification of this brief analysis is that there may be a spatial mismatch between the rural residences of a relatively large portion of older adults and the predominately urban locations of services that they might need as they age in place, like congregate care living facilities, sources of health care, or other forms of assistance.



The differences in a rural/urban context can be discerned by using the settlement types introduced in the Introduction to this study. The chart below breaks the state's population into those four categories. Each bar on the chart shows the age distribution for a particular settlement type.

Chart 2: Michigan's Population by Settlement Type, 2010



This chart corroborates what the map showed—rural populations tend to be older than others, especially exurban. These two types of places were the opposing poles in this regard, with the regional and urban centers in the middle.

Disability Status

To understand the housing needs of Michigan's older population, it is important to study the extent to which members of that cohort may need help in living independently. The prevalence of disabilities among older residents is a major determinant of demand for these services. Investigating national trends among persons with disabilities provides context for the state's statistics.

The primary way disability is measured in this profile is through responses to the 2010 American Community Survey. The Survey takes an approach to asking questions about disability that tries to describe deficits in three major domains of disability (communication, physical and mental), as well as Activities of Daily Living (ADLs—activities like dressing, personal hygiene and feeding oneself) and Instrumental Activities of Daily Living (IADLs—more complicated tasks than are covered by ADLs, like shopping, managing money and meal preparation, for example). The table below shows the types of disabilities that are covered by the ACS, and the types of questions that are involved in each.⁸

Table 4: Disability Concepts in the ACS

Concepts	Definition	Label in ACS	Question Asked
Communication Domain	Limitations involving a person's ability to communicate with others	Hearing Difficulty	Is this person deaf or does she/he have serious difficulty hearing?
		Vision Difficulty	Is this person blind or does she/he have serious difficulty seeing even when wearing glasses?
Mental Domain	Limitations involving a person's ability to reason or concentrate	Cognitive Difficulty	Because of a physical, mental or emotional condition, does this person have serious difficulty concentrating, remembering or making decisions?
Physical Domain	Limitations regarding movement, due to respiratory, metabolic or musculoskeletal body functions	Ambulatory Difficulty	Does this person have serious difficulty walking or climbing stairs?
ADLs	Limitations regarding basic activities around the home associated with caring for one's self	Self-Care Difficulty	Does this person have difficulty dressing or bathing?
IADLs	Limitations in one's ability to live independently in a community	Independent Living Difficulty	Because of a physical, mental or emotional condition, does this person have difficulty doing errands alone such as visiting a doctor's office or shopping?

Not surprisingly, the data from the ACS show that as people age their activities become more impaired by disability. The chart below shows the results of this analysis.

⁸ Information on how the ACS measures disability is taken from two sources. The first is a study written by Matthew Brault for the US Bureau of the Census, titled "Review of Changes to the Measurement of Disability in the 2008 American Community Survey", written in 2009. The second is the International Encyclopedia of Rehabilitation, accessed online at http://cirrie.buffalo.edu/encyclopedia/en/article/37/ on February 9, 2012.

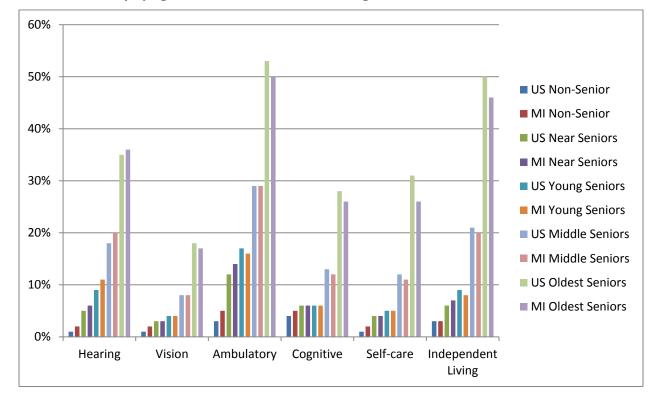


Chart 3: Disability by Age in the United States and Michigan, 2010

The incidence of disability of all types grows significantly as people pass through the life cycle. The Oldest Seniors cohort displays the most severe levels of disability, especially in two areas: ambulatory difficulties and independent living issues. At least half of persons in this age group are disabled in these ways. In addition, the percentages are high enough that one can assume that a person can be disabled with more than one difficulty. Again, the probability of this occurring increases with age.

The rates of disability seem to grow more rapidly as people age. For example, while younger and middle seniors have different rates of disability, the difference between them is not as large as the difference in rates between the Young and Middle senior cohorts, or the Middle and Oldest Senior groups. The disability with the fastest increase in prevalence is self-care; it moves from 12% in Middle Seniors to 31% in the Oldest Senior. Independent living issues, along with Ambulatory, Vision and Hearing difficulties, double in prevalence between Middle Seniors and the Oldest Senior.

The rapid increase in the incidence of disabilities of all types as cohorts age is the same. There is a small pattern of higher levels of disability among younger cohorts, and lower rates among both the Middle Senior and Oldest Senior groups. For instance, the level of self-care and independent living issues are about ten percent less common among the Oldest Senior in Michigan (26% and 46%, respectively) vs. the United States (31% and 50%).

Chart 4 consists of six separate charts that look at type of disability by settlement type in Michigan. The data shows the same broad pattern of increasing incidence of disability as age increases across all settlement types. However, some differences in the level of disability exist as well. For example, there is a 10 percentage point difference between the incidence of hearing difficulties among the Oldest Senior cohort when rural areas are compared with exurban ones. A similar gap exists between Rural areas and Regional Centers regarding vision problems among the Oldest Seniors.

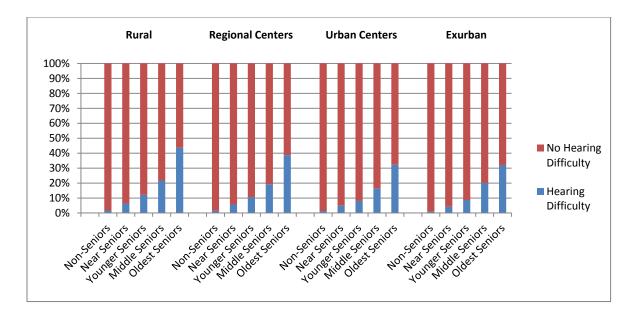
Also important is the assumed lack of services for aging in rural areas, compared with the relatively high rate of disability in those areas. One would assume that more prevalent service opportunities in more densely-settled areas would impact these numbers, but they do not. For example, the percentages of Oldest Seniors that report self-care difficulties is higher than in both Regional and Urban Centers, and about equal to that found in the Exurbs. This is also generally true for cognitive difficulties.

The pattern reverses for independent living disability, however. Regional and Urban Centers report a slightly higher incidence than Rural areas. But even there, the difference is slight.

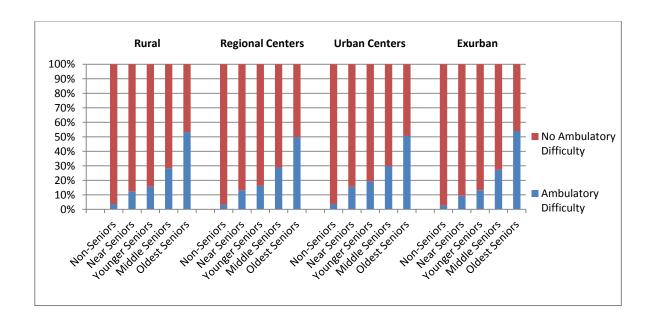
One implication of this pattern is that many elders with disabilities live in rural areas removed from opportunities for cost-effective service provision. This is an important issue to address; as more rural dwellers age in place, it is likely that this situation will worsen over the coming years.

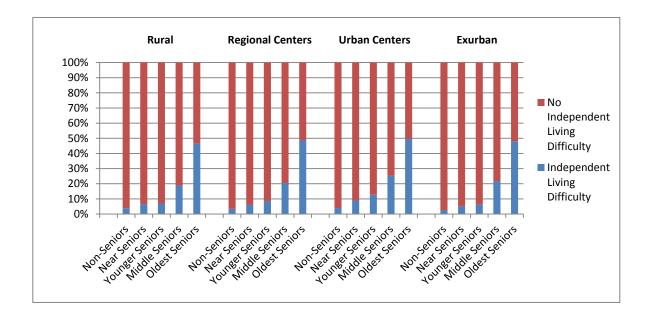
Another finding refers to the highly increased odds of having a disability as one ages. While this is expected as people age, these changes can manifest suddenly, making shorter-term crisis care services as important as long-term individual planning for health care and social service needs.

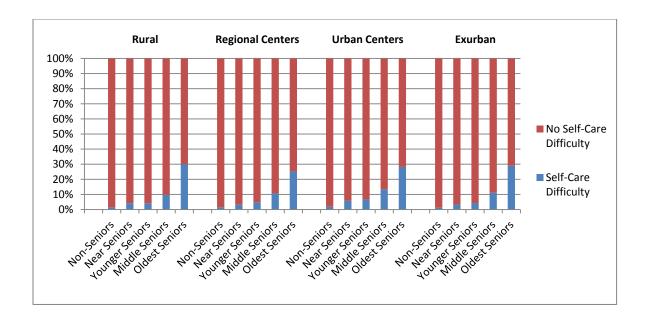


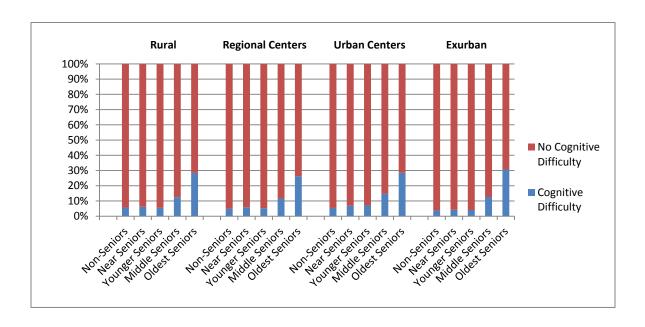












Marital Status, Household Size and Presence of Grandchildren

Like most other life cycle issues, marital status tends to change as one gets older. Marital status helps determine demand for unit sizes, and is an indicator of demand for services useful for single seniors. The chart below shows the situation in Michigan and the United States in 2010:

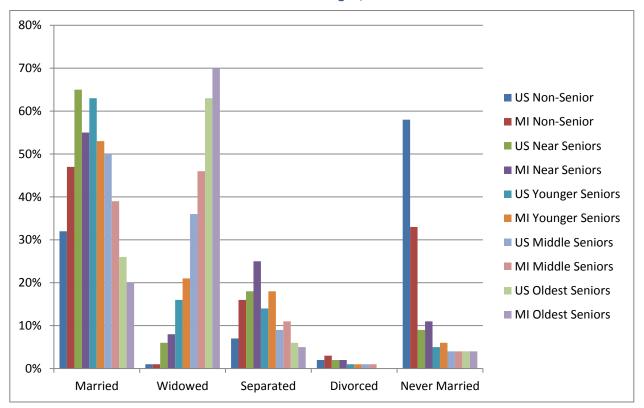


Chart 5: Marital Status in the United States and Michigan, 2010

Marriage rates hit their maximum prevalence among younger and middle seniors—approximately two thirds of these groups were married in 2010. The lowest rate does not belong to the non-senior population, but rather to the Oldest Seniors. While about 96% of this cohort had been married in the past, only about one-quarter are currently married--two thirds of the members of this age group are widowed.

Marital status in the state varies with age, as it does nationally. Generally, the percentage of persons who have never married decreases as age increases, so that about 96% of the Oldest Seniors were married at some time. Predictably, significant percentages of both Middle Seniors and Oldest Seniors are widowed. Divorce and separations tend to concentrate among the younger cohorts.

While the general pattern in Michigan is similar to that of the country as a whole, major differences do exist. For example, the percentage of older cohorts that are currently married is much lower among older seniors in the state than it is nationally. Much of that difference is due to an increase among widows in that age group. The Oldest Seniors also exhibit higher rates of widowhood than the national rate.

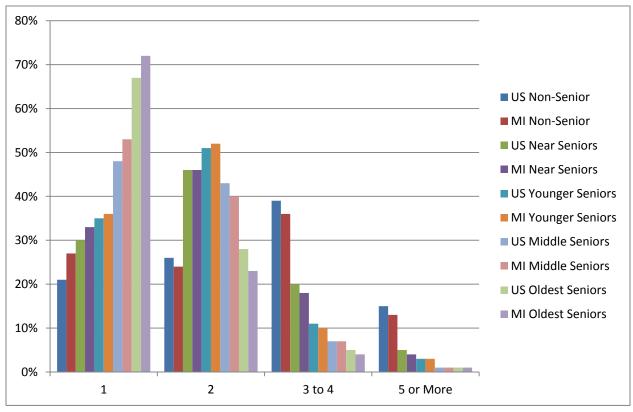
Another notable difference is the high percentage of non-seniors that is married in Michigan (47%) compared to the nation (32%). Separations are also higher among this group.

Given marriage data, we would assume that household size tends to decrease as a household ages. The data show that this assumption held true in 2010 nationally. Chart 6 shows the distribution of household size among the study cohorts.

In that year, about 94% of Oldest Seniors-headed households lived either alone or with just one other person. A similar percentage of older seniors lived in small households, but the distribution was more evenly split between one- and two-person households. In fact, the only cohorts that show a significant percentage of larger households (over three persons) are the two youngest—non-seniors and younger seniors.

There is a distinct trend in Michigan towards smaller households as age increases. For example, about 95% of households among the Oldest Seniors are small in size (one or two persons). The percentage among non-seniors is about half. The state's trend is roughly similar to that of the country as a whole.

Chart 6: Household Size in the United States and Michigan, 2010



An emerging issue in some areas is the incidence of grandparents caring for dependent grandchildren. Across the country, the ACS in 2010 found about 1.7 million households included in this group. Chart 7 summarizes this trend.

Nationally, grandparents with responsibility for grandchildren are more common as a living arrangement in non-senior and younger senior households. However, it is true that significant proportions of grandparents in older cohorts have responsibility as well. This can be problematic for affected households, in terms of housing choice and resources available to help grandparents with this task.

In Michigan, unlike the country as a whole, most grandparents do not have responsibility for their grandchildren. The likelihood of this circumstance decreases with age. Grandparents in the non-senior cohort are more likely than not to have responsibility for grandchildren. This proportion drops from over five in ten to one in ten among the Oldest Senior group. There is a major drop-off between the Middle Senior and Oldest Senior groups.

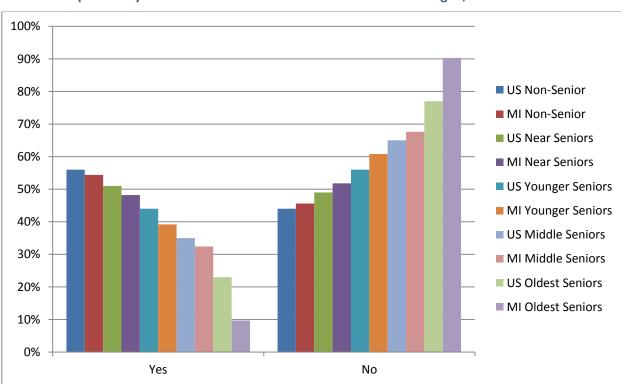


Chart 7: Responsibility for Grandchildren in the United States and Michigan, 2010

Income

Personal income is defined as the amount of income an individual receives regardless of source. The chart below compares the average personal incomes of the study groups nationally and in Michigan.

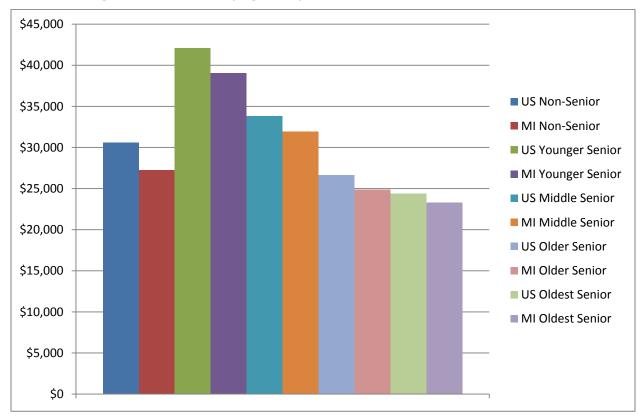


Chart 8: Average Personal Income by Age Group, 2010

The chart depicts a distribution of income that is shaped largely by life cycle issues. Average personal income tends to peak at about \$42,000 among younger seniors nationally, and at a lower level (about \$39,000) among that same age group in Michigan. Middle seniors also have a higher personal income, but not as high as the younger senior cohort. At the other end of the scale, the Oldest Seniors have the lowest incomes, followed closely by middle seniors. One important trend (and a reversal from previous decades) is that, in all age groups, the national average personal income is higher than Michigan's. The largest differences exist in the younger age cohorts, likely because of the sources of income most common among them.

The ACS collects data on eight major sources of income--interest, public assistance, retirement, self-employment, supplemental security income, social security and wages. Table 4 defines these terms:⁹

⁹ These definitions are copied from the 2010 ACS Subject Definitions document, at http://www.census.gov/acs/www/Downloads/data_documentation/SubjectDefinitions/2010_ACSSubjectDefinitions.pdf, accessed February 14, 2012.

Table 5. Definition of American Community Survey Sources of Income

Source	Definition
Wage income	Wage or salary income includes total money earnings received for work performed as an employee during the past 12 months. It includes wages, salary, Armed Forces pay, commissions, tips, piece-rate payments, and cash bonuses earned before deductions were made for taxes, bonds, pensions, union dues, etc.
Self-employment income	Includes both farm and non-farm income. Farm self-employment income includes net money income (gross receipts minus operating expenses) from the operation of a farm by a person on his or her own account, as an owner, renter, or sharecropper. Gross receipts include the value of all products sold, government farm programs, money received from the rental of farm equipment to others, and incidental receipts from the sale of wood, sand, gravel, etc. Operating expenses include cost of feed, fertilizer, seed, and other farming supplies, cash wages paid to farmhands, depreciation charges, rent, interest on farm mortgages, farm building repairs, farm taxes (not state and federal personal income taxes), etc. The value of fuel, food, or other farm products used for family living is not included as part of net income. Non-farm self-employment income includes net money income (gross receipts minus expenses) from one's own business, professional enterprise, or partnership. Gross receipts include the value of all goods sold and services rendered. Expenses include costs of goods purchased, rent, heat, light, power, depreciation charges, wages and salaries paid, business taxes (not personal income taxes), etc.
Interest income	Interest, dividends, or net rental income includes interest on savings or bonds, dividends from stockholdings or membership in associations, net income from rental of property to others and receipts from boarders or lodgers, net royalties, and periodic payments from an estate or trust fund.
Social Security income	Social Security income includes Social Security pensions and survivor benefits, permanent disability insurance payments made by the Social Security Administration prior to deductions for medical insurance, and railroad retirement insurance checks from the U.S. government. Medicare reimbursements are not included.
Supplemental Security income	Supplemental Security Income (SSI) is a nationwide U.S. assistance program administered by the Social Security Administration that guarantees a minimum level of income for needy aged, blind, or disabled individuals.
Public assistance income	Public assistance income includes general assistance and Temporary Assistance to Needy Families (TANF). Separate payments received for hospital or other medical care (vendor payments) are excluded. This does not include Supplemental Security Income (SSI) or noncash benefits such as Food Stamps.
Retirement income	Retirement income includes: (1) retirement pensions and survivor benefits from a former employer; labor union; or federal, state, or local government; and the U.S. military; (2) disability income from companies or unions; federal, state, or local government; and the U.S. military; (3) periodic receipts from annuities and insurance; and (4) regular income from IRA and Keogh plans. This does not include Social Security income.
Other income	All other income includes unemployment compensation, worker's compensation, Department of Veterans Affairs (VA) payments, alimony and child support, contributions received periodically from people not living in the household, military family allotments, and other kinds of periodic income other than earnings.

Chart 9 shows the percentage of each age group's average personal income that came from these sources.

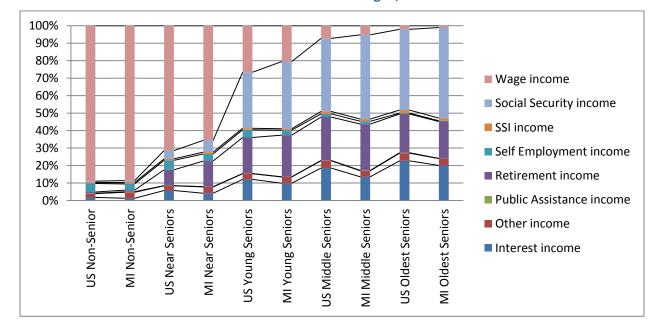


Chart 9: Sources of Income in the United States and Michigan, 2010

As persons age, personal income become less reliant on wages (the most lucrative of the eight sources on average), and more reliant on three other sources. The first to come into prevalence is retirement income. The second is Social Security income, which accounts for almost one-third of the average Middle Senior personal income. The last is interest income, which becomes a significant resource for the Middle Senior cohort as well. The Oldest Senior's income is mostly (91%) comprised of money from these three sources.

This is a radical change from the Non-Senior group, where 94% of income is generated by wages and self-employment. Young Seniors also derive a large majority of their incomes from wages and self-employment; together, about 80% of that group's income is due to these two sources.

The importance of social security income is evident. The oldest cohorts in the study rely on it for between 40% and 50% of income. Average income from this source is approximately \$11,000 in each of the three oldest cohorts.

Sources of income for the Middle Senior cohort are the most diverse, reflecting the fact that this group seems to be the first in which major lifestyle changes among its members are felt widely. In this group, income from employment (either wages or self-employment) is still relatively high, at about one third of the total. Social Security income also accounts for approximately one-third of the group's income. The other third is mostly involved with income from either retirement benefits or interest payments.

It is also interesting to note that, across the age spectrum, no cohort's average personal income includes more than three percent from direct transfer payments from the government to individuals (i.e., SSI or Public Assistance). This is true despite a very slow recovery from a long recession.

The impact of different income streams in part explains the differences in income level between Michigan and the United States as a whole. This is because, as people age, wage income decreases in amount and importance while other, less locally-variable sources (such as Social Security) increase.

Another important issue among senior's incomes are the fixed nature of the largest income sources among older cohorts. Although this tends to even out the incomes of older Michiganders, it also holds them more susceptible to "shocks" due to increased medical costs, higher utility costs, or other unforeseen events. In addition, lower incomes among these groups leads to more insecurity, since it doesn't take a major discontinuity to lead to dire outcomes.

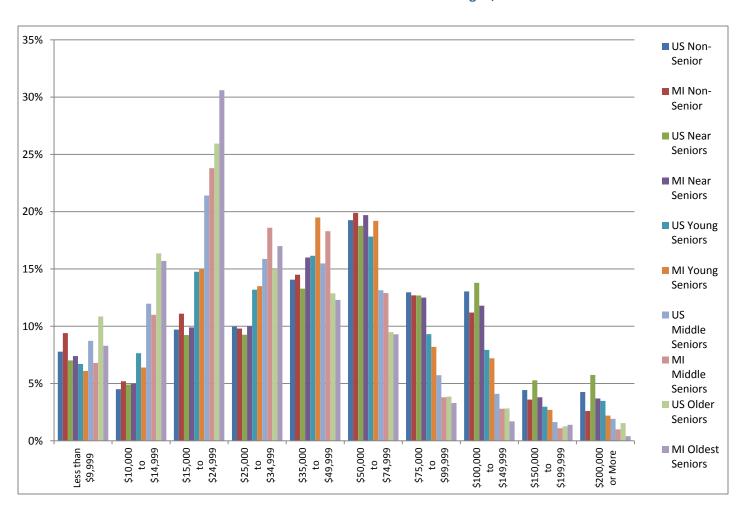
Household income is the sum of all the personal incomes of the household's members. The 2010 ACS showed stark differences in this variable, shown in Chart 10.

Incomes in the United States tend to peak among Young Seniors, and decrease rather precipitously afterwards. There are many reasons for this, but the major ones are likely changes in household size (moving from multiple earners to single earners as people age), and a lower prevalence of wages as a source of income in the higher age cohorts. This brings with it a growing reliance on lower-paying or fixed-income sources.

This trend is revealed in the data. For example, the modal income category (the largest in terms of members) among Non-Senior, Young Senior and Middle Senior households is between \$50,000 and \$74,999. The modal category among older senior households decreases to between \$25,000 to \$34,999, and moves to between \$15,000 and \$24,999 among the Oldest Seniors.

Another finding is that, as cohorts age, the variety of income levels tends to decrease. This occurs as the sources of income for households decrease, and reliance on fixed-income sources increases. For example, the modal category among Non-Seniors, Young Seniors and Middle Seniors is just below 20%. The Oldest Seniors modal category accounts for about 21% of the total, while the Oldest Senior figure is over 25%.

Chart 10: Household Income Distribution in the United States and Michigan, 2010



Studying income levels by type of place shows a strong relationship between affluence and exurban places. Chart 11 shows how income is distributed between the age groups in the four settlement types. Higher incomes predominate in all age groups in exurban places. However, even there, the Oldest Seniors have the lowest incomes. In addition, the difference in income between Older Seniors and the Oldest Seniors is more pronounced than in the other areas, which tend to have relatively parity in income between those two cohorts. Regional Centers are different from the other three groups, in that incomes for the Oldest Seniors seem to be slightly higher than Middle Seniors.

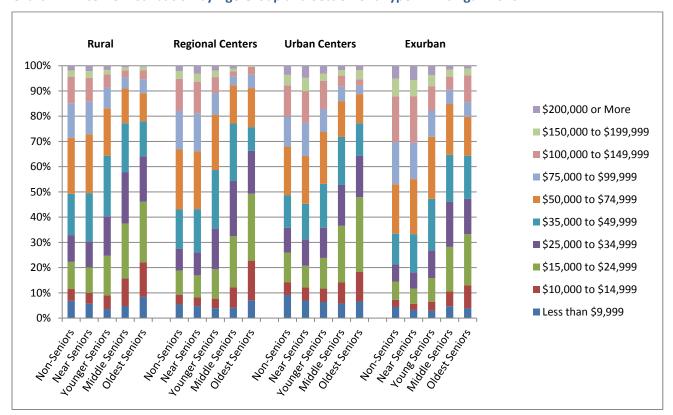


Chart 11: Income Distribution by Age Group and Settlement Type in Michigan 2010

HOUSING

The housing situations of the population also tend to vary with age. The next section of this report presents data on housing topics, using the same age groups as before.

Group Quarters

One of the major differences between groups is the nature of their living quarters: do persons live in actual housing units, or in group quarters due to illness, punishment, public service, or other reasons?

Chart 12 shows how living quarters are distributed among age cohorts. Three types of housing are covered. The first are housing units (apartments, single-family homes, etc.). The second are institutional group quarters, such as correctional facilities, nursing/skilled nursing facilities, hospitals or residential schools for people with disabilities. Noninstitutional group quarters include student housing, military quarters, homeless shelters, soup kitchens, and group homes.

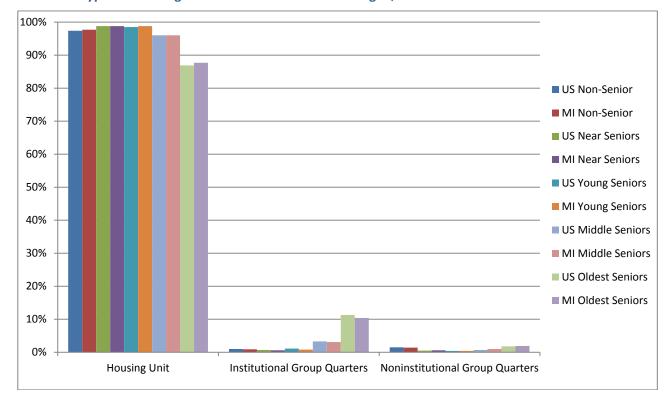


Chart 12: Type of Dwelling in the United States and Michigan, 2010

The incidence of institutional group home living increases as one ages; about 11% of the Oldest Seniors live in this type of setting. Conversely, about one percent of Non-Seniors do. This situation is not surprising given that many of the Oldest Seniors often need assistance with activities of daily life, and therefore opt for nursing homes.

A slight difference does exist between national and state figures among the Oldest Seniors regarding group quarters. Nationally, the percentage of this cohort that lives in institutional group quarters is marginally higher than in Michigan. The difference lies mostly in the fact that more of the Oldest Seniors live in housing units, rather than in non-institutionalized settings.

Outside of the Oldest Seniors, the overwhelming majority of people live in housing units of one type or another. This situation does not change much until one regards the Middle Senior cohort, but even then, the propensity to live in housing units rather than group quarters is still significantly above 90%.

Meals Included in Rent

While nursing homes tend to care for those who need a great deal of assistance with daily tasks, other solutions that offer a less-comprehensive suite of services can also fill a need in the community. One way to measure this is to determine the prevalence of housing units that offer meals, the price of which are included in rent. According to Census materials, ¹⁰ this question is included in the ACS to measure "congregate housing"—units that include meals and other services in the rent. While this definition is simplistic, it suffices for a thumbnail sketch of current conditions.

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¹⁰ This information is taken from the 2010 ACS Subject Definitions document detailed in the previous footnote.

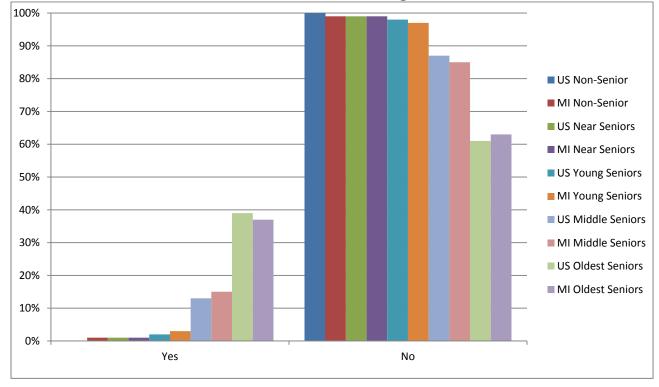


Chart 13: Meals Included in Rent in the United States and Michigan, 2010

Chart 13 shows the percentage of households in each age cohort that live in rental complexes that include meals in rent.

Occupancy in rental projects that include meals in rent increases with age, but the only age groups that have significant proportions are the Middle Seniors and Oldest Seniors. Utilization rates among the latter group approach 40% in both state and national figures, and between 10% and 20% among Middle Seniors.

However, the same tendency that appeared in the figures for group quarters living appears here as well, with Oldest Senior citizens of Michigan utilizing this type of rental unit less frequently than in the country as a whole. The difference is slight, but present nonetheless.

Tenure

Tenure describes the manner in which a house is held by its occupant. One can own their shelter, either by use of a financial instrument such as a mortgage, or without debt. Alternatively, one can pay the owner of the unit rent to stay there. Rarely, occupancy occurs without payment of rent. Each of these types of tenure has important ramifications for mobility, financial health, and care alternatives.

Chart 14 shows how tenure types are distributed throughout the study age cohorts. Three trends are important to notice. The first is that, after increasing through most of the cohorts, ownership (whether by use of a mortgage or owned free and clear) among the Oldest Seniors falls back to levels more associated with Non-Seniors. Conversely, renter propensity increases among the Oldest Seniors, second highest to the Non-Senior's renter percentage.

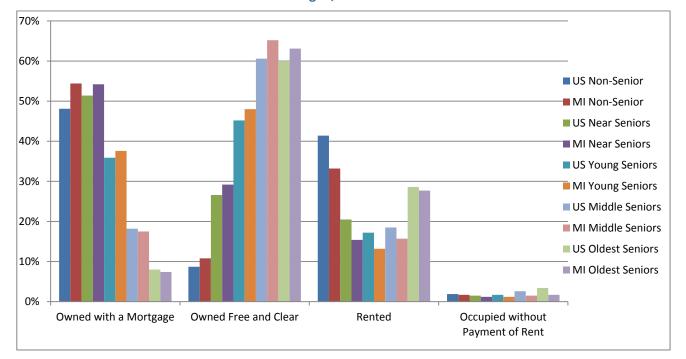


Chart 14: Tenure in the United States and Michigan, 2010

The reasons for this change probably have to do with one's ability to effectively care for a home as time passes. Maintenance of a home can be an arduous task and the data suggest that the incidence of disability increases with age. It seems that people cope with this by moving into rentership, where at least routine maintenance is taken care of by the owner.

The second trend is that the incidence of owning through a mortgage decreases with time, as they are paid off by owners. These percentages represent a financial resource among those cohorts that owners can potentially take advantage of, but over the last few years, dwindling real estate prices have shrunk both the size of the resource, as well as the for-sale market for housing that would help owners capitalize on it.

The final trend is that in most cohorts, Michigan households tend to own homes at a higher rate than do overall US households. The difference again is slight, but persistent across age groups. The only ones that do not follow this pattern are the Middle Seniors and Oldest Seniors, who have slightly lower percentages of homeownership with mortgages.

Chart 15 looks at tenure by age and settlement type in the state. Two trends are apparent. The first is that the march to owning a home free and clear as cohorts age is quite prevalent, and a feature of each settlement type's housing stock. However, that trend seems to be stronger among Rural and Regional Center residents than the other settlement types.

The second is that Rural areas tend to have the lowest rentership, especially among the older age cohorts. Exurban elders are also less likely to rent than their Regional and Urban Center counterparts.

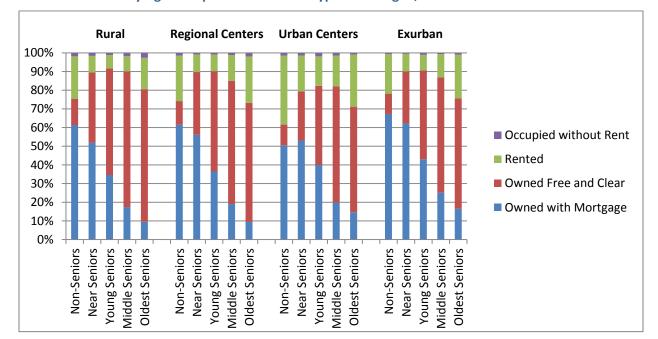


Chart 15: Tenure by Age Group and Settlement Type in Michigan, 2010

Housing Type

Housing units can be described in terms of the number of units in a structure. The typical housing unit is configured as a single-family unit detached physically from others—the quintessential "American Dream" home. Chart 16 shows how many households reside in that type of dwelling, among others.

The chart shows two important trends. The first is that, indeed, a majority of households regardless of age cohort live in single family detached dwellings. Michigan households do so at higher rates than does the nation as a whole, and the difference in this regard is between 5% and 10% in most cases.

The second trend is that a relatively high percentage of the Oldest Seniors live in large-scale multifamily structures with 50 or more units. This might be a function of how subsidized housing for seniors is configured—many of these projects are multistory elevatored structures.

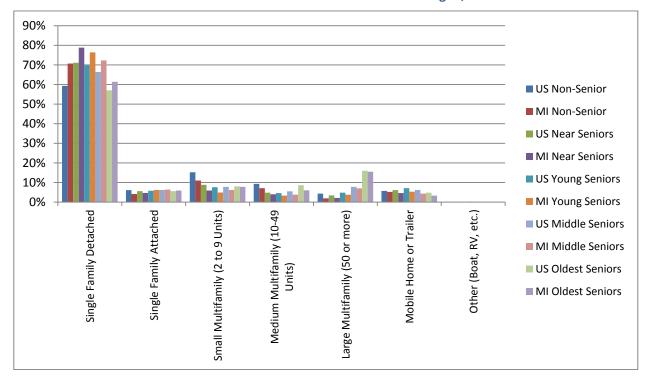


Chart 16: Number of Units in Structure in the United States and Michigan, 2010

Housing Quality—Age of Structure

An important indicator of potential housing quality is the age of a structure. Older homes, whether apartments or single-family dwellings, often need more upkeep to maintain them. In addition, older homes can tend to be smaller, with floor plans that might need updating to keep them attractive to buyers or to make aging in place easier to do (i.e., handicap access, universal design criteria, etc.). For these reasons, older homes tend to be less expensive than newer ones, but sometimes less-attractive alternatives to older households.

Chart 17 shows patterns in age of structure data by the age of householders living in them. Again, two major trends are evident.

First, the age of Michigan homes is higher than in the country as a whole. The differences are present in terms of housing built before 1950, as well as the relative lack of new housing (units built after 2004). Units built between 1980 and 1999 make up less of Michigan's stock than nationally.

The other pattern is the trend for older households to reside in older structures. This is shown in the pre-1950 stock—roughly 25% of households in this cohort reside in housing of this vintage.

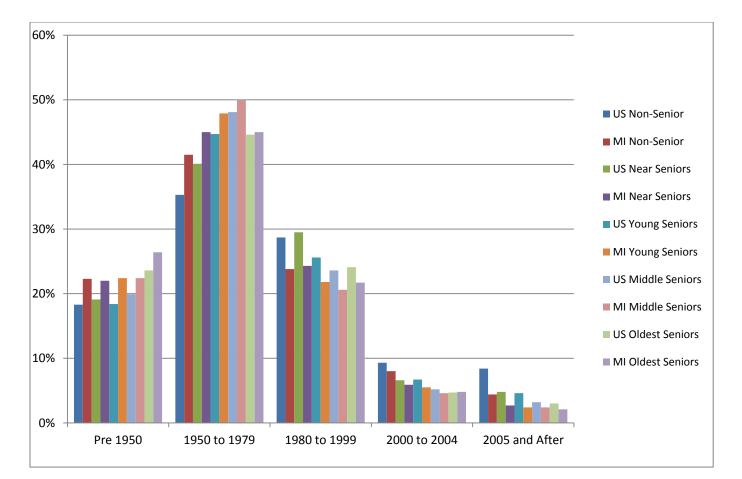


Chart 17: Age of Structure in the United States and Michigan, 2010

Cost of Housing - Value of Owner-Occupied Units

Understanding patterns in the value of owner-occupied housing is important. Since homeownership is seen as perhaps the most important investment a household makes, checking values is a way to roughly gauge the resources that may be available to households as they age (even though the potential to make these resources liquid has decreased over the last few years as a result of the crisis in the housing market).

Chart 18 shows differences in the distribution of housing value by age group. It details the fact that older age cohorts tend to live in less-expensive housing. This can be explained in part by the age of the structures that they occupy. Since they live in older-than-average housing, one would expect their homes to be less expensive than the newer units occupied by younger cohorts. More expensive housing is more common among Young Senior and Middle Senior groups than the older cohorts.

Another fact highlighted by the chart is the inexpensive nature of Michigan's housing stock relative to the rest of the country. Michigan has a larger concentration of housing in the first three value categories relative to the United States, and a significant underconcentration in the next four expensive groups. This difference is most apparent among housing valued between \$300,000 and \$999,999.

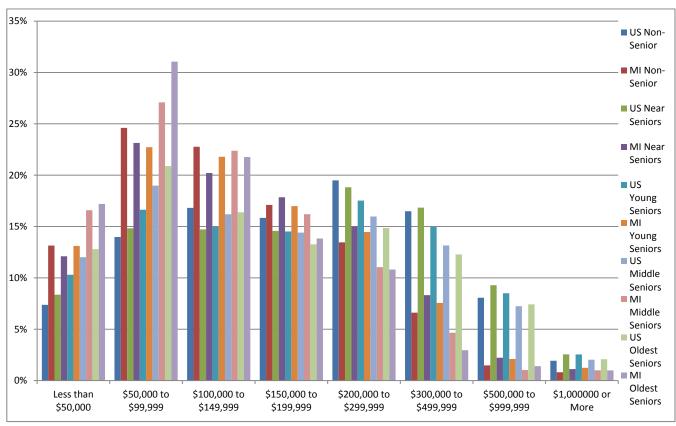


Chart 18: Housing Value by Age Group in the United States and Michigan, 2010

Chart 19 shows the distribution of housing values across settlement types. It shows that lower-priced stock is more common in both Rural and Urban Centers. Regional Centers also have a relatively high percentage. More expensive housing is common in the state's Exurban areas.

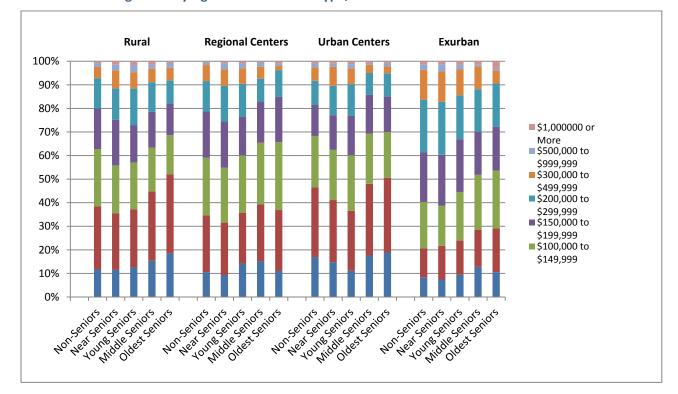


Chart 19: Housing Value by Age and Settlement Type, 2010

Cost of Housing - Gross Rent

Data on gross rents (contract rents plus utilities) shares some similarities with the value of owner-occupied housing, but is also different in its distribution of costs between age cohorts (see Chart 20).

Unlike the housing value data, where older cohorts tended to live in lower-value units, older senior renters have a different, generally higher rent profile. This is especially true among the Oldest Senior.

Across most age groups, the most common rent paid is between \$500 and \$749. This holds true for all groups except the Oldest Senior. Their modal rent category is over \$1,250, and in Michigan a higher percentage of the Oldest Seniors are paying this level of rent. This fact is likely related to the high incidence of the Oldest Seniors living in units with meals included in rent.

What is probably not linked to a great extent with meal provision is the fact that a smaller proportion of Middle Senior and Oldest Senior in Michigan live in units priced below \$300 per month.

These patterns are different from the national picture. Again, the affordable nature of Michigan's housing stock is on display, but with an important twist. Rather than Michigan having a higher percentage of the lowest priced units, the surplus comes in the middle category, with rents of between \$500 and \$749, and to a lesser extent the next highest category (between \$750 and \$999).

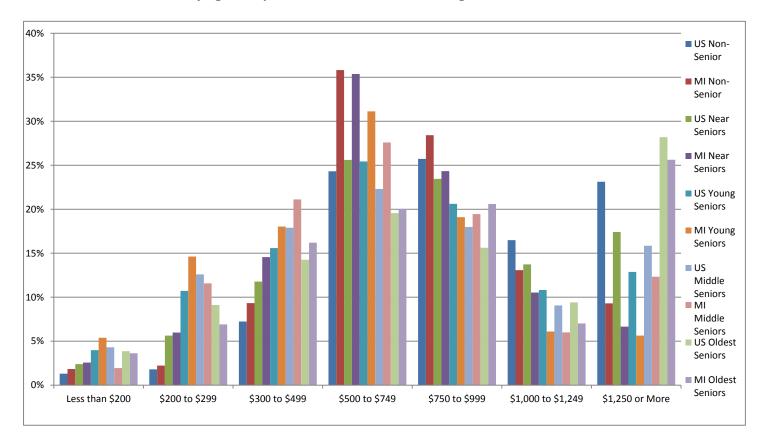


Chart 20: Gross Rent by Age Group in the United States and Michigan, 2010

Chart 20 shows the distribution of gross rents by settlement type and age of householder. The Oldest Seniors seem to be paying more in rent than any other age cohort on a percentage basis, across all settlement types. The situation is most visible in Exurbs and Urban Centers, and least prevalent in Rural areas. Secondly, and related to the first pattern, is the lower level of rural rents in general, especially for the Middle and Oldest Senior cohorts. Between 40% and 50% of those groups pay less than \$500 per month on rental shelter costs. This is considerably lower than in other settlement types. This could be related to the United States Department of Agriculture's activity in the housing sector through its Rural Housing Service.

Cost of Housing – Overburden

Increased housing costs among both renters and owners affect data on overburden. This concept assumes that a reasonable amount of household income to pay for shelter is about 30%. Households paying more than this are deemed to be overburdened—paying too much of their income for housing. A household with severe overburden pays at least 50% of their incomes on shelter, one of the indicators that HUD uses to define "worst case housing needs." An overburden of this level indicates an unstable housing situation, which in turn can lead to homelessness.

http://www.huduser.org/portal/publications/affhsg/wc_HsgNeeds09.html on February 16, 2012.

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¹¹ The latest HUD document that details worst case housing needs in the United States is *Worst Case Housing Needs 2009: A Report to Congress*, accessed at

Chart 21 shows the prevalence of rent overburden among the study cohorts. In 2010, all age groups displayed rent overburden to some extent. A higher proportion of households in the older age segments were overburdened, especially among the Middle Senior and Oldest Senior groups. Data on severe overburden followed this pattern even more closely; for example, a plurality of Oldest Senior households pays more than half of their income towards shelter costs. This is again likely due to the combination of low incomes and the need for congregate services that is common among the Oldest Seniors.

However, the relationship may not be as direct as it seems. The nature of the service costs, and how (or if) they are bundled with rent, needs to be taken into account. It is possible that some congregate care facilities charge higher rents because services might be bundled. To some seniors, that may be an attraction—even if they do not need services at move-in, they may be willing to pay extra if those services are available to them when they need them.

In any case, it is possible also that a 50% level of overburden may not be as harmful to the older and frail elderly, depending on their individual circumstances. If a household is living in congregate care, or a more allencompassing living arrangement that combines shelter with care, less money may be needed to provide for the other necessities of life (clothing, gifts, entertainment, etc.) because the basics are covered through rent or other charges. It is still an open question as to how high these costs can get and still be within the means of households that need these housing options, or exactly how much a senior's income is "fair" to assess for these purposes.

In Michigan, the data point to a slightly higher degree of overburden among the Middle and Oldest Senior groups, and a lower incidence of severe overburden among those same groups. The Oldest Seniors have a slightly lower proportion of both types of overburden than nationally.

 $^{^{12}}$ Overburden for renters is computed by using gross rent, which is the sum of contract rent paid for a unit plus utility costs borne by the tenant.

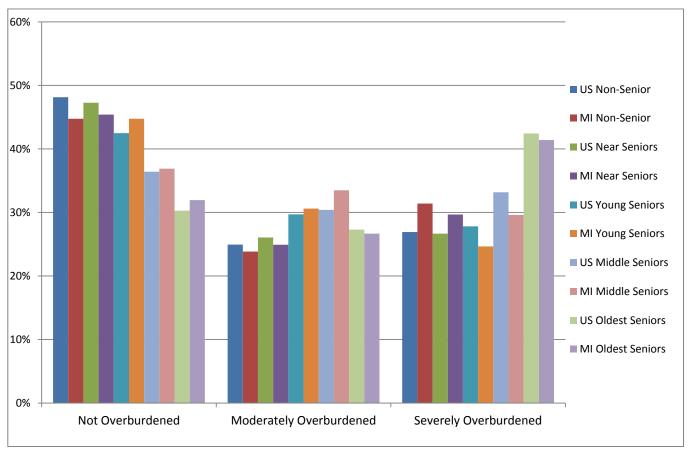


Chart 21: Renter Overburden in the United States and Michigan, 2010

Chart 22 shows the renter overburden situation in the settlement types. It shows that the issue of overburden is widely spread throughout the state. The situation is slightly different in Rural areas, where rents for many older residents have already been shown to be lower than in other types of places. However, it is still true that in most areas, the Middle Seniors and Oldest Seniors bear heavier renter shelter burdens than other age cohorts.

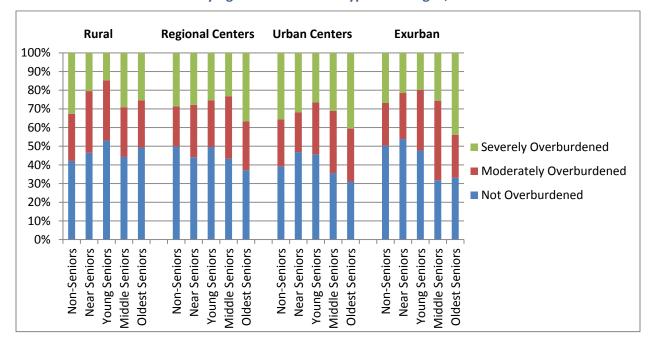


Chart 22: Renter Overburden by Age and Settlement Type in Michigan, 2010

The situation among owner occupiers is not as dire (see Chart 23)¹³. About two-thirds of most of the age cohorts' members are not overburdened. However, the pattern of which age groups display the most overburden is the same; both Non-Seniors and the Oldest Seniors have elevated rates, and severe overburden does occur more frequently among the Oldest Seniors than other age groups nationally. This is a startling finding, in that about 70% of the Oldest Seniors own their homes without a mortgage, and therefore do not have a monthly mortgage payment to make. The statistics below indicate that other homeowner costs are enough to overburden a significant percentage of older seniors. While the numbers among Michigan homeowners are slightly lower in terms of overburden, the difference is not large enough to be a cause for celebration.

http://www.census.gov/acs/www/Downloads/data_documentation/SubjectDefinitions/2010_ACSSubjectDefinitions.pdf, accessed February 16, 2012.

¹³ Owner costs included in this calculation are payments for mortgages, deeds of trust, contracts to purchase, or similar debts on the property (including payments for the first mortgage, second mortgages, home equity loans, and other junior mortgages); real estate taxes; fire, hazard, and flood insurance on the property; utilities (electricity, gas, and water and sewer); and fuels (oil, coal, kerosene, wood, etc.). It also includes, where appropriate, the monthly condominium fee for condominiums and mobile home costs. This definition is from the 2010 ACS Subject Definitions document, at

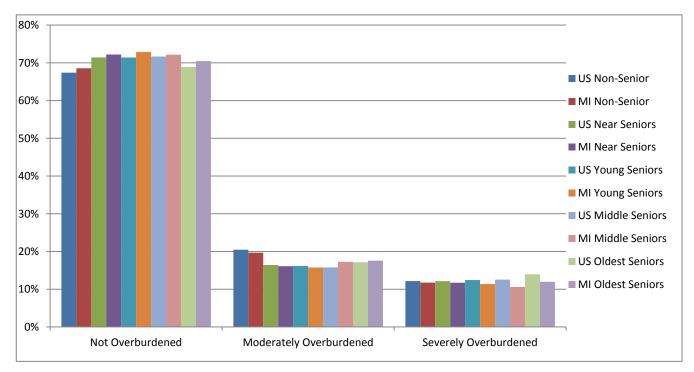


Chart 23: Owner Overburden in the United States and Michigan, 2010

Chart 24 shows depicts the level of overburden among owners in the study age cohorts by settlement type. According to this data, owner overburden is more common across age groups in Urban Centers than in other types of places.

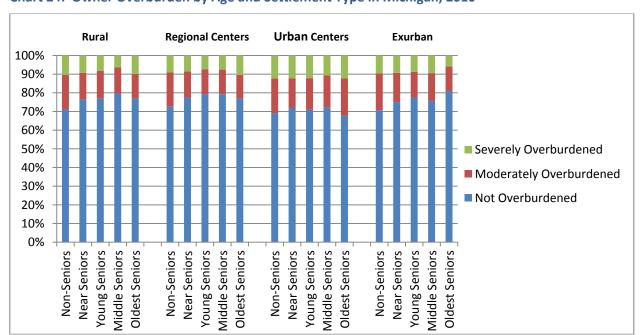


Chart 24: Owner Overburden by Age and Settlement Type in Michigan, 2010

Geographic Mobility

Migration among the age groups is also key to understanding housing needs. The table below looks at respondents to the 2010 ACS who moved during the previous 12 months.

Non-Seniors had the highest percentage of movers, at 19%. Movers become less numerous among older cohorts, but do see an uptick among the Oldest Seniors. About eight percent of that group moved in the previous year, but that percentage is still less than half of the non-senior's level.

Comparisons between the figures for the United States and Michigan show that they are broadly similar in rates of non-movers and movers. However, Michigan's population seems to have moved slightly less than the country's as a whole. The difference is not substantially significant, and otherwise patterns among the age groups are the same.

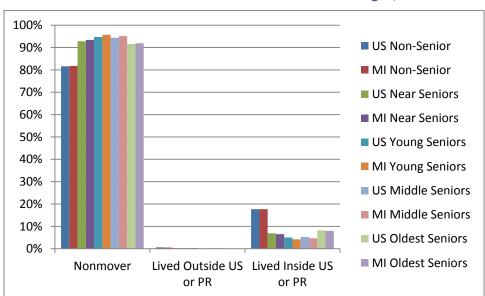


Chart 25: Moves within Last Year in United States and Michigan, 2010

Summary of Trends

Data on demographic and housing aspects of the senior population can be summarized as follows:

- The Young Senior cohort is the largest among the older adults in Michigan and the country. Not unexpectedly, the sizes of the cohorts shrink as their age increases. Oldest Senior adults account for about two percent of the population in both areas.
- The incidence of disability of all types grows significantly as people pass through the life cycle. The
 Oldest Senior cohort displays the most severe levels of disability, especially in two areas:
 ambulatory difficulties and independent living issues. Rates of disability grow more rapidly as
 persons age.
- Marriage rates are highest among Young and Middle Seniors. The lowest rate is associated with the Oldest Seniors, about two-thirds of whom are currently widowed.
- In 2010, most Oldest Senior-headed households lived either alone or with just one other person. A similar percentage of Middle Seniors lived in small households. The issue of grandparents caring for grandchildren is relegated mostly to Non-Senior and Young Senior households.
- Income data show that, as time goes on, personal income totals become less reliant on wages and
 more reliant on three other sources: retirement income, social security payments, and interest
 income. Among the Oldest Seniors, about 91% of income is derived from these three sources, and
 in Michigan, social security income makes up a larger percentage of elderly income than in the
 nation as a whole.
- Incomes tend to peak among Young Seniors, and decrease rather precipitously afterwards. In addition, variety in income levels decreases as cohorts age.
- The incidence of institutional group home living increases as one ages, but does not become
 universal—about 10% of the Oldest Seniors live in group homes, with the balance living in housing
 units.
- Occupancy in units that include meals with rent (a surrogate measure for congregate care settings) remains guite rare in renters under the age of 75.
- After increasing through most of the cohorts, ownership among the Oldest Seniors falls back to levels more associated with Non-Seniors. Also, the incidence of owning with a mortgage decreases with time, as they are paid off by owners. This process starts mainly among Young Seniors.
- Among all age groups, single-family detached housing is the most common, but the proportions of households living in them are lowest among Non-Seniors and the Oldest Seniors. Michigan's rate of single-family home occupation is significantly greater than the United States' figure.
- Homes occupied by older cohorts tend to be older as well. Nearly one-quarter of the Oldest Seniors live in housing units constructed before 1950.
- Older age cohorts tend to live in less-expensive housing, the value of which is likely influenced by its age.
- Data on gross rents show that instead of getting less expensive over time, the older cohorts' rents tend to increase. This is probably associated with the prevalence of congregate care and other service-rich living arrangements among some senior populations.
- Rent overburden is concentrated in older age segments, especially among the Middle Senior and Oldest Senior groups. This is especially the case with severe overburden.

- About two-thirds of most of the age cohorts' members are not overburdened by owner costs.
 However, despite the fact that about three in five senior households own their homes free and clear, about a third of them are still overburdened to some extent, likely due to utility and tax costs.
- Movers become less numerous among older cohorts, but do see an uptick among the Oldest Seniors.