

OLDER MAINERS, EMPTY PLATES:
RESEARCH ON SENIOR FOOD
INSECURITY IN MAINE

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Table of Contents

Executive Summary	2
Introduction	3
Methods	3
Defining Senior Hunger	4
Measuring Senior Hunger.....	4
Part I: Senior Hunger Data	5
National Trends	5
Part II: Seniors in Maine	7
A Growing Population.....	7
Demographic Indicators.....	9
Part III: Senior Food Insecurity in Maine	12
The Numbers	12
A Detailed Look	13
The Location	15
Part IV: Addressing the Issue	16
The Policy Response	16
Older Americans Act	18
Commodity Supplemental Food Program.....	20
Senior Farmer Market Nutrition Program.....	21
Supplemental Nutrition Assistance Program	22
Child and Adult Care Food Program	23
The Emergency Food Assistance Program	24
The Charitable Response.....	27
Conclusion	29
Appendices	31

EXECUTIVE SUMMARY

Older adults face many risks and hardships such as fixed incomes, limited mobility and health problems that often get worse as they age. For this vulnerable population, food security only exacerbates their situation. While food insecurity is a trying and volatile situation for anyone, seniors suffer particularly difficult consequences. Seniors facing food insecurity are twice as likely to have overall poor health conditions than food secure elderly. They also have an increased risk of chronic health issues such as heart attacks, congestive heart failure and depression. Seniors experiencing marginal food insecurity have the functional abilities of someone 14 years older. With fixed incomes and rising costs, older adults have a difficult time protecting themselves from food insecurity and hunger. In some cases, seniors that have enough money to buy food do not have the resources to access or prepare it due to functional limitations, transportation difficulties or health issues.

Over the past 10 years, the number of seniors facing marginal food insecurity in the United States has more than doubled. In the next 15 years, older adults will be about 20% of the population and by 2050, the number of seniors in the United States will almost double. With this increase in both numbers and proportions of seniors in America, the need and demand for services for older adults will only rise. Understanding and tackling food insecurity among seniors is therefore an urgent public health issue.

Maine has more food insecure seniors than the average state in the U.S. Roughly 45,600 seniors in Maine experience food insecurity—double the number in that situation in 2010—and an additional 56,000 face the threat of hunger. At almost 14%, Maine’s senior food insecurity rate is the 12th highest rate in the nation and the worst in Northern New England. In 2014, Maine entered the top 10 worst states for very low food security among seniors—the most severe category of hunger measured. The state’s historic increases in senior food insecurity are likely to get worse as the senior population grows. In the next 15 years, the proportion of elderly residents in Maine is projected to double. Every day, 50 Mainers turn age 65, making it the oldest state per capita. These numbers necessitate a response that can meet the current needs of the elderly and prevent future increases in senior food insecurity.

Maine seniors often suffer in silence and are forced to make compromising choices, especially when it comes to food. Therefore, initiatives serving seniors in any capacity should understand and address food insecurity. Throughout the state, dedicated federal and charitable programs are trying to meet the need and provide seniors with food assistance. However, these programs require more resources to sufficiently meet the need. Additional efforts to quell senior food insecurity should build upon existing senior service networks and focus on raising awareness about senior hunger, advocating for senior food programs and increasing food access through additional programs. Partnerships and integrated networks will help to reach seniors in need and ultimately make these efforts more successful.

INTRODUCTION

Food insecurity among seniors—adults age 60 and over—is a significant problem permeating the United States. As a group, older Americans are a vulnerable population. They often have fixed incomes, limited mobility, specific nutrition needs and chronic health issues such as diabetes and high blood pressure. Older adults have an increased risk of nutritional deficiencies and often have difficulty meeting the requirements of a healthy diet.¹

Food insecurity compounds the issues facing this already vulnerable population and has serious health and financial implications. Food insecurity is associated with the prevalence of mental illness, nutrient deficiencies and hospitalizations.² It also increases disability and decreases resistance to infection.³ Food insecure seniors are more than twice as likely to report fair or poor health status than seniors not facing food insecurity.⁴ In one study, food insecure seniors exhibited poorer health results than their food secure counterparts on every health indicator and in every subgroup examined.⁵ Even when controlling for other factors such as income, food insecure seniors face an increased risk of chronic health conditions such as depression, heart attack, asthma and congestive heart failure.⁶ For seniors, experiencing marginal food insecurity is roughly the same as being 14 years older.⁷ The poor and chronic health conditions associated with food insecurity also have financial implications. Treatment for older adults accounts for over half of the country's health care budget.⁸ Of these costs, 95% are for chronic diseases.⁹

By 2050, the number of seniors in the United States will almost double.¹⁰ As early as 2030, older adults will be about 20% of the population.¹¹ With this increase in both numbers and proportions, the need and demand for services for older Americans will rise. Understanding and tackling food insecurity among seniors is therefore an urgent public health issue.

Methods

This report presents an overview of food insecurity among the elderly in Maine. Part I provides background information on national data, including the trends, rates and determinants of senior food insecurity. Part II provides demographic information on seniors in Maine. Section III explores food insecurity among the elderly in Maine and summarizes qualitative and quantitative research on the topic. Part IV presents information on the current response to senior hunger, including federal policies and charitable programs. The report concludes with recommendations for tackling senior hunger in Maine.

The information presented in this paper is compiled from a broad literature review on senior hunger as well as research specific to Maine. The information was gathered from sources such as Feeding America, AARP and academic articles. Additional context was provided by community conversations and discussions with players tackling senior hunger in Maine.

Ultimately, the information in this report will be used by the author to inform recommendations to Good Shepherd Food Bank on potential programs and strategies the organization could adopt to help fight senior food insecurity in Maine

Defining Senior Hunger

Senior hunger is a complicated topic. The USDA defines food insecurity as a state of being without reliable access to a sufficient quantity of affordable, nutritious food. While this is true for seniors, this definition misses many of the complexities of food insecurity among the elderly. Seniors suffering any level of food insecurity experience physical, social and psychological symptoms. When asked by researchers, the elderly note several factors that contribute to their food insecure situation including: a lack of money for food, transportation limitations, health or mobility limitations, not having the right foods for their health needs, trade-offs, a lack of motivation to cook or eat, compromises on quality or quantity, worry and anxiety about their food situation.¹² Food insecurity among the elderly is also described as a continuum. The first stage involves making compromises on the quality of the food eaten. This progresses into feeling anxiety and uncertainty about the food situation, consuming socially unacceptable meals and ultimately using outside or emergency sources to get food.¹³

Because seniors suffer in a different way than younger adults, some people propose expanding and clarifying the definition of food insecurity for seniors. For example, researchers in the early 2000s stated that food insecurity among the elderly comprises not only limited food affordability, availability, and accessibility, but also includes the inability to obtain and use food in the household because of functional impairments, health problems or lack of social support.¹⁴

Additionally, though seniors are often categorized as one demographic group, different physical and financial conditions shape their food security experience. Feeding America calls this a ‘continuum of need’ based on seniors’ mobility and ability to prepare and purchase meals.

Measuring Senior Hunger

While the field has acknowledged a need for a different and specific food insecurity definition for seniors, the current method of measuring food insecurity is uniform across all age groups. Common assessment tools* produce estimates of food insecurity that result from limited financial resources.¹⁵ However, as outlined above, food insecurity among the elderly is often more than a financial problem. Some food insecure seniors have enough money to buy food but do not have the resources to access or prepare it.¹⁶ Additional barriers to food security for seniors include limited knowledge of existing programs and nutrition, transportation, stigma or pride, paperwork for support programs, specific dietary needs and social isolation.

Food insecurity assessments in the U.S. census do not account for these burdens and are therefore likely to underestimate the scope of the problem. However, due to a lack of other official estimates, the numbers reported in this paper are from studies that use census data. It is therefore important to note that although the calculations are sound, the percentages most likely underestimate the number of seniors that face precarious food situations.

The U.S. government measures four levels of food security, from high to very low. Food insecurity is defined as those who experience low and very low food security (See Appendix A for more information). The numbers in this report are consistent with the USDA’s definition of food insecurity and ‘seniors’ refers to people age 60 and above unless otherwise noted.

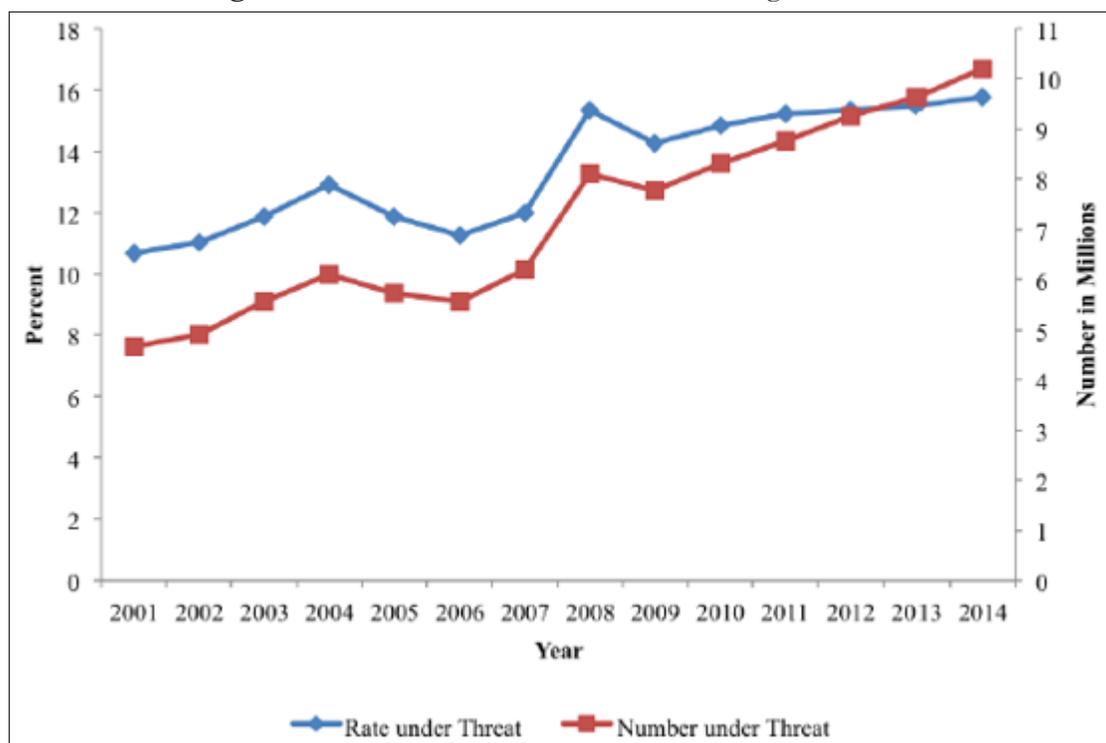
* The U.S. census conducts a Current Population Survey, part of which is the Core Food Security Module (CSFM) to assess food security.

SENIOR HUNGER DATA

National Trends

Researchers began examining food insecurity rates in the elderly in the early 1990s. Today, the topic is gaining attention for good reason. From 2001 to 2014, the number of seniors facing the threat of hunger* more than doubled.¹⁷ As Figure 1 shows, this corresponds to a 119% increase, meaning that in 2014, more than 10 million seniors faced the threat of hunger.

Figure 1: Trends in the Threat of Senior Hunger in the U.S.



Source: Ziliak and Gunderson, 2016.

By 2025, when the youngest of the Baby Boom Generation reaches age 60, the number of food insecure seniors is projected to increase by 50%.¹⁸ These increases have important moral and political implications and will stress the current support systems.

Who Suffers

Food insecurity can strike anyone at any time. As mentioned above, seniors are particularly vulnerable due to factors such as fixed incomes, limited mobility and poor health. While food insecurity is unpredictable and volatile, researchers have studied potential indicators of senior hunger. Seniors are more likely to be food insecure if they:¹⁹

- Are a younger senior (60-64)
- Have lower incomes

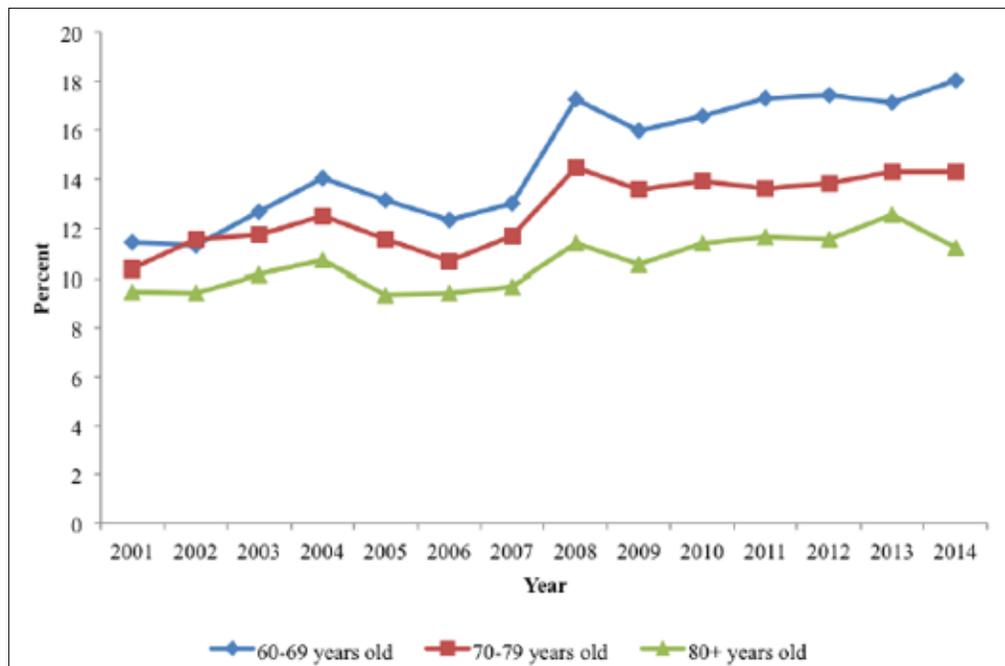
* Note: The 'threat of hunger' is the term the authors use to describe marginal food insecurity.

- Are African American or Hispanic
- Divorced/separated or never married
- Live with grandchildren
- Rent
- Never graduated high school

The same study showed that seniors without access to emotional and financial support are substantially more likely to suffer from hunger. Other reports found that social isolation, food assistance program participation and functional impairments were also significantly related with food insecurity among seniors.²⁰

Though currently accepted as a well-known trend, a discussion of senior hunger and age deserves more attention. Researchers have documented that as age increases, the threat of hunger decreases amongst seniors. The “young old” are thus the most vulnerable, as Figure 2 shows. Though no single cause can be attributed to this trend, some researchers believe that the rate decreases as people become eligible for services such as Social Security and Medicare.²¹

Figure 2: Trends in the Threat of Senior Hunger by Age



Source: Gunderson and Ziliak, 2016.

Additional reports include adults age 50-59 and cite that this age group experiences more severe food insecurity than older adults.^{22,23} Compared to seniors, adults age 40-59 actually face a higher risk of food insecurity, but they do not suffer as severe health effects.²⁴

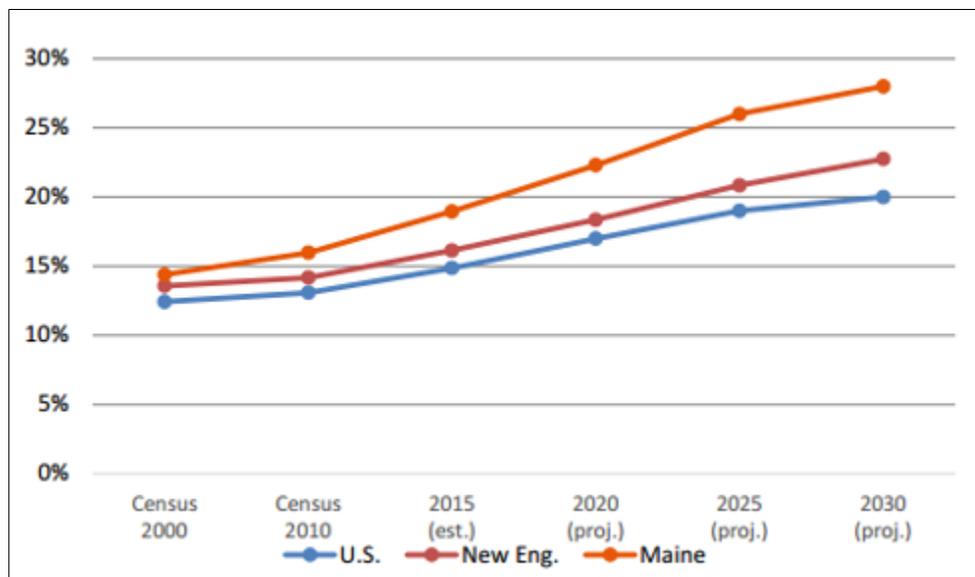
SENIORS IN MAINE

This section presents an overview of population trends in Maine followed by a snapshot of certain demographic characteristics for seniors in the state. As mentioned above, indicators of senior hunger include age, income, race, relationship status, the presence of grandchildren, education and home-ownership status.²⁵ Therefore, this section will look at these demographic characteristics for Maine as a potential indication of the state of senior hunger. It is important to note that while there is strong correlation between these characteristics and food insecurity, the problem is not restricted to those factors. For example, while younger seniors age 60-64 are more likely to be food insecure, seniors in every age group face the threat of hunger.

A Growing Population

According to the U.S. Census Bureau, Maine is the oldest state in the nation.* With 19% of its population over the age of 65,²⁶ Maine is second only to Florida in its proportion of elderly residents.²⁷ This number is growing faster than both the New England and national average. As Figure 3 shows, the proportion of elderly residents in Maine is projected to almost double by 2030.²⁸

Figure 3: Historical and Projected Trends in the Percentage of Populations 65 and Older
Maine, New England, and the United States
2000-2030



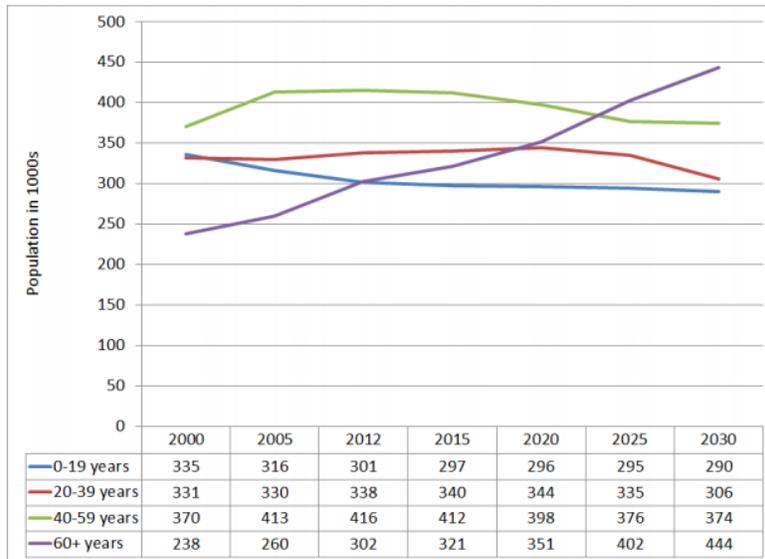
Source: University of Southern Maine Muskie School, 2016.

By 2025, people age 65 and older will make up over a quarter of Maine's population. This is in part due to the number of Baby Boomers in the state. According to AARP, Maine has the highest

* The median age in Maine in 2013 was 43.9.

percentage of Baby Boomers in the nation.²⁹ Every day, 50 Mainers turn 65.³⁰ Figure 4 illustrates Maine’s rapid growth of seniors in the state compared to other age groups.

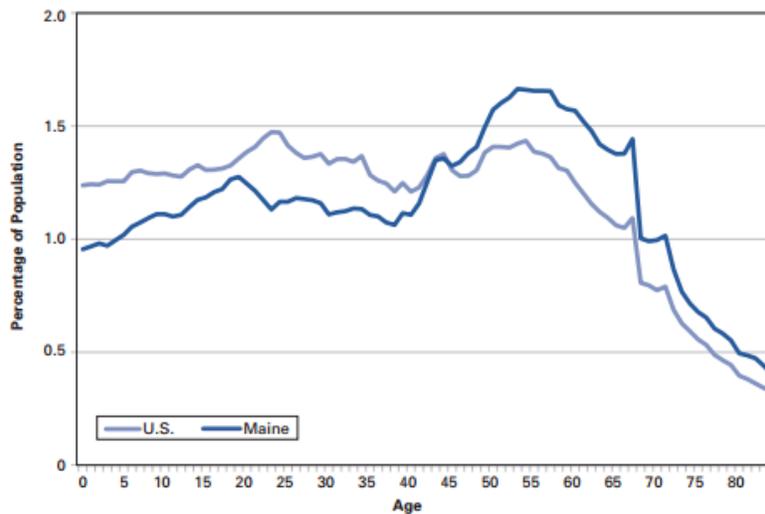
Figure 4: The Growing Number of Maine Seniors



Source: Maine Policy Academy State Profile, 2012³¹

Figure 5 shows that while Maine has a high proportion of older adults, it also has a lower proportion of young people than the U.S. as a whole. The state is experiencing a decline in birth rates that is much greater than the national average.³² Because the total population is projected to stay roughly the same, the ratio of seniors to younger people is going to grow.³³ With these projected increases, Maine faces an intensifying challenge to care for the elderly and address issues such as senior hunger.

Figure 5: Percent of Maine and U.S. Population by Age, 2014



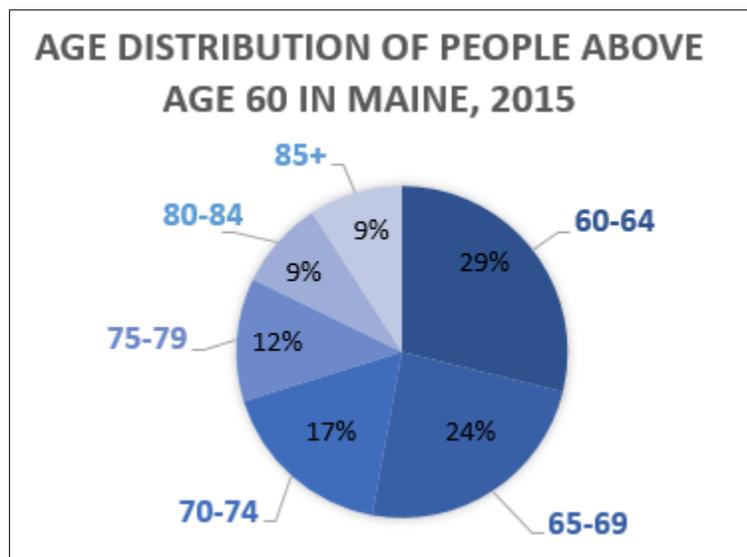
Source: Breece, et al, 2015.

Demographic Indicators of Senior Hunger

Age

As previously mentioned, younger seniors are more likely to be food insecure than their older counterparts.³⁴ In 2015, 331,119 seniors lived in Maine.³⁵ Of those people, over half are between the age of 60 and 69, as shown in Figure 6.

Figure 6



Data Source: American Community Survey, 2015

Income

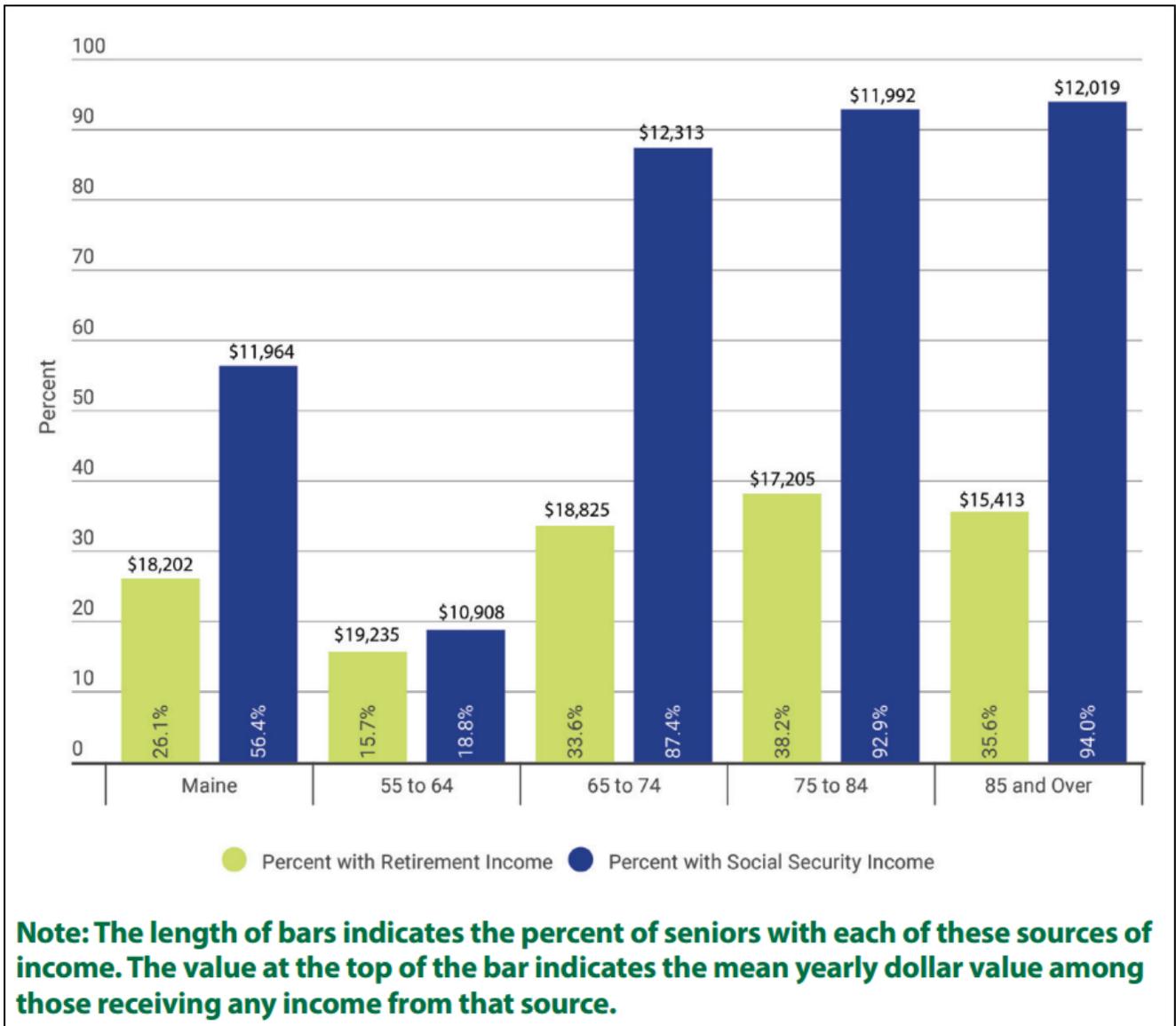
Seniors with lower incomes are substantially more likely to face food insecurity.³⁶ In 2014, almost half of all seniors in the U.S. living below the poverty line faced marginal food insecurity.³⁷ In Maine, 9% of seniors fall below 100% of the Federal Poverty Level, an income of about \$11,770 for one person.³⁸ Since 2012, the number of seniors living in poverty in Maine has increased proportionally to the general senior population increase in the state.³⁹

Low-income seniors, or those whose income is below 200% of the poverty line, are most at-risk of facing food insecurity.⁴⁰ 29% of older Mainers* are low-income.⁴¹ Additionally, in Maine, almost 57% of adults age 65 and above lack the financial resources required to cover their basic needs.⁴² Despite the fact that low-income seniors face a higher risk of food insecurity, all food insecure seniors face adverse health consequences, regardless of income.⁴³

Seniors often rely on a fixed income of social security and retirement funds. While some people have both sources, social security is the only source of income for 1 in 3 Mainers age 65 and above.⁴⁴ Figure 7 illustrates the breakdown of income for Maine seniors.

* Age 55 and above

Figure 7: Percent of Maine Seniors with Retirement or Social Security Income and Mean Annual Retirement and Social Security Income by Age Category



Source: Schafer and Mattingly, 2016

Race

Nationally, seniors that are African American or Hispanic are more likely to experience food insecurity. In Maine, the effect is small because of the small population of racial minorities.⁴⁵ .3% of Maine seniors are African American and .5% are Hispanic or Latino.⁴⁶

Relationship Status

Divorced or separated seniors face marginal food insecurity rates that are almost three times as high as married seniors.⁴⁷ In Maine, 15% of seniors are divorced or separated, 19% are widowed and 5% never married.⁴⁸

Family Household

Senior households with grandchildren are almost three times as likely to be food insecure than those without grandchildren present.⁴⁹ About 2% of Maine seniors live with their grandchildren, while almost 42% live alone.⁵⁰

Homeownership Status

Seniors that rent are more likely than seniors that own their home to experience food insecurity. In Maine, 20% of seniors rent⁵¹ and they are more likely to rent the older they get.⁵² According to the Maine Real Estate Managers Association, there are 9,890 senior households on the waitlist for subsidized apartments throughout the state.⁵³

Education

Seniors that never graduated high school are 20% more likely to face marginal food insecurity than high school graduates.⁵⁴ While 13% of seniors in Maine have less than a high school degree,⁵⁵ this is less than the national average of 16% for people over the age of 65.⁵⁶

SENIOR FOOD SECURITY IN MAINE

The state of hunger is increasing for seniors in Maine. Research shows that in 2014—the most recent year for which data is available—senior food insecurity in Maine was 13.8%, or an estimated 45,628 people.⁵⁷ This includes seniors suffering from low and very low food security, as defined by the USDA (see Figure 8). When expanding the lens to look at marginal food security, almost an additional 17% of seniors in Maine suffer, compared to the national average of 15.8%.⁵⁸ This means that an additional 56,000 seniors face the threat of hunger. When taken together, these figures mean that almost 1 in 3 Maine seniors has indicated anxiety over having enough food in the house. (For more information on the USDA categories and characteristics of food security, see Appendix A.)

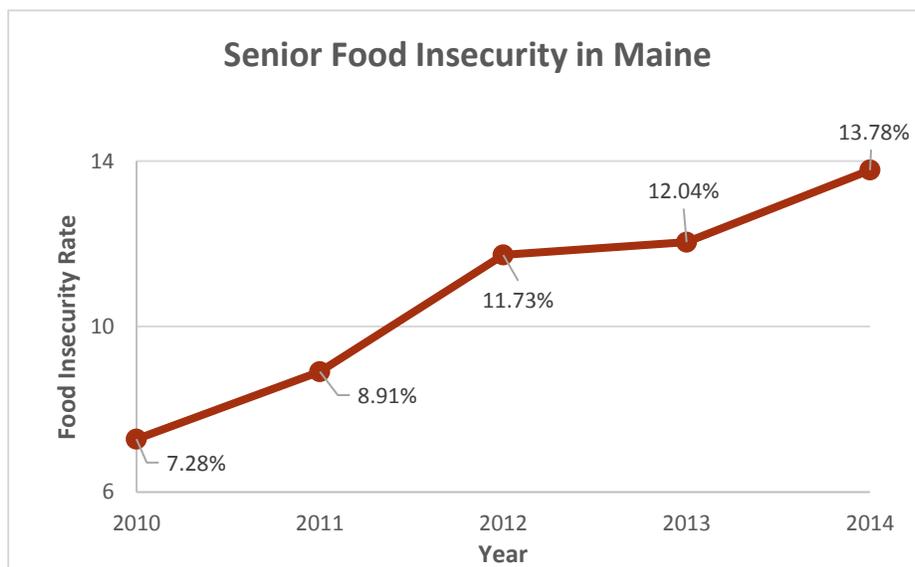
Figure 8: Senior Food Insecurity in Maine, 2014

		Food Insecurity
Marginal Food Security	16.96%	13.78%
Low Food Security	9.53%	
Very Low Food Security	4.25%	

Data Source: Ziliak and Gundersen, 2014 Supplement

The above figures are part of a trend that has been getting progressively worse, as shown in Figure 9. In 2010, Maine ranked 41st in the U.S. for senior food insecurity. By 2014, Maine had jumped to the 12th highest percent in the nation.⁵⁹ During this time, the number of food insecure seniors in the state more than doubled. The projected increases in the number and proportion of Maine seniors will only exacerbate the problem if the state continues on this trend.

Figure 9

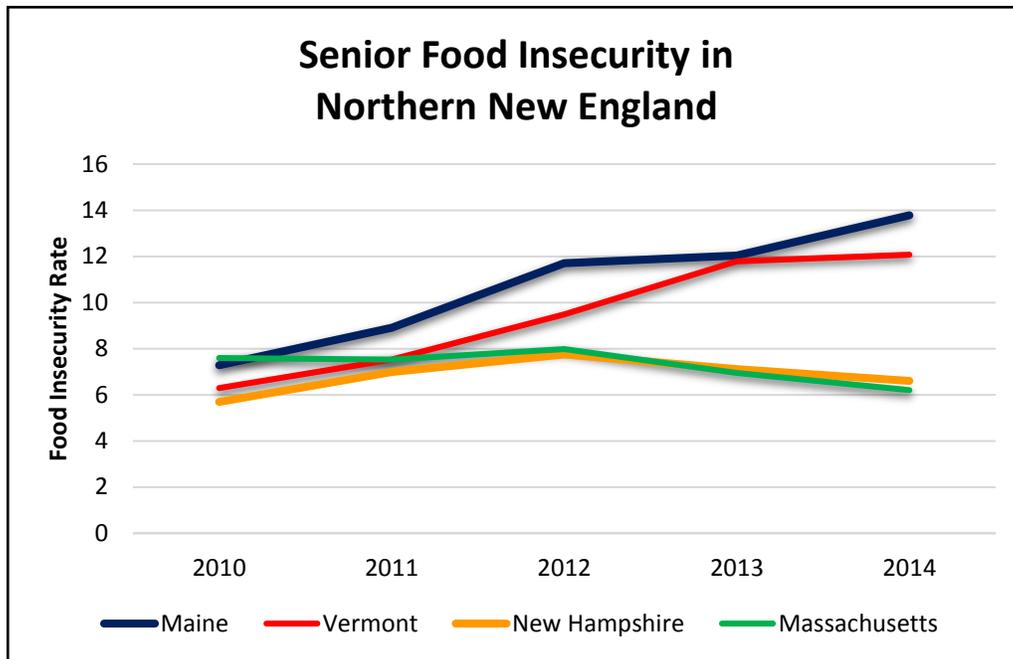


Data Sources: Ziliak and Gundersen, 2016, 2015, 2014, 2013, 2012 Supplements.

As Figure 10 shows, Maine has the highest rate of senior food insecurity in Northern New England. In 2014, Maine entered the top 10 worst states for very low food security among seniors—the most

severe category of hunger measured.⁶⁰ This means that Maine has some of the largest numbers of seniors in the nation that report having to reduce their food intake multiple times a year.⁶¹

Figure 10



Data Sources: Ziliak and Gundersen, 2016, 2015, 2014, 2013, 2012 Supplements.

A Detailed Look

Senior food insecurity in Maine is increasing and getting worse. Yet, the issue is sometimes referred to as a hidden crisis. Seniors, especially those from the Traditionalist or Silent generation,* are often private, patient, and resourceful, hard-workers. These traits, combined with elderly Mainer's reputation for stoicism, self-sufficiency and a hardy modesty further the hidden nature of senior food insecurity. A study looking at food insecurity among rural seniors noted that the elderly saw compromises in their food intake and cycles of deprivation as the norm.⁶² Additionally, seniors' values, their pride in 'making do' and traditions of growing and sharing their food affected their perception of food security. The study concluded that food security for these elders was more unstable than the numbers suggested and that they may be more food insecure than they realized. These findings could help to explain why, anecdotally, when offered food assistance, many seniors in Maine simply state that others need it more than they do.

Various surveys, assessments and focus groups throughout Maine have described the experiences of seniors and food security. According to a 2012 Elder Services Needs Assessment for Maine:⁶³

- Almost a quarter of interviewed Mainers over the age of 50 occasionally worry that their food budget will not meet their needs (19% reported worrying 'occasionally' while 4% reported 'constantly' worrying).

* People born between 1922 and 1946

- 11% of respondents reported skipping meals or cutting back on the amount and type of food they eat for financial reasons. Transportation was also cited as a reason.
- Younger respondents (age 50-64) and those with a lower annual income (under \$30,000) are more likely to say they have skipped or cut back on meals.

Most notably, over half of the respondents in this assessment did not know where they would go if they needed help getting food. A 2016 study had similar findings—that many seniors did not know about food assistance programs or how to access them if they were eligible.⁶⁴ Participants in this study felt that they would benefit from advocates that could help them understand available services and how to apply for them. This research suggests a strong need for better outreach and education for seniors.

According to a survey done by Preble Street and Good Shepherd Food Bank, 38% of food pantry users in Maine report a senior living in the household.⁶⁵ Of those seniors visiting a pantry, over half of them reported using the pantry more this year than last year and almost 90% said they visited the pantry once a month or more. Just under half of seniors interviewed reported not receiving SNAP benefits and the majority of those that did have SNAP said that they ran out within two weeks of receiving them. 20% said that they used all the benefits within the first day. Almost two out of three seniors reported having to choose between food and other essentials. The highest reported trade-off was health care costs, followed by home costs such as bills or repairs, and then transportation.

Managing Food Insecurity

As Figure 11 shows, seniors often employ coping strategies to manage their food supply and make trade-offs when managing their finances. Research shows that many seniors pay all their other bills first and then purchase food,⁶⁶ perhaps suggesting why over half of older adults surveyed by Feeding America used three or more different coping strategies to secure enough food. On fixed incomes, many seniors also have to make trade-offs and choose between buying food or spending money on housing, transportation, heat and electricity or medical care. Considering that more than half of Meals on Wheels participants take 6-23 medications daily,⁶⁷ these decisions often require drastic personal sacrifices.

Figure 11: Managing Senior Food Security

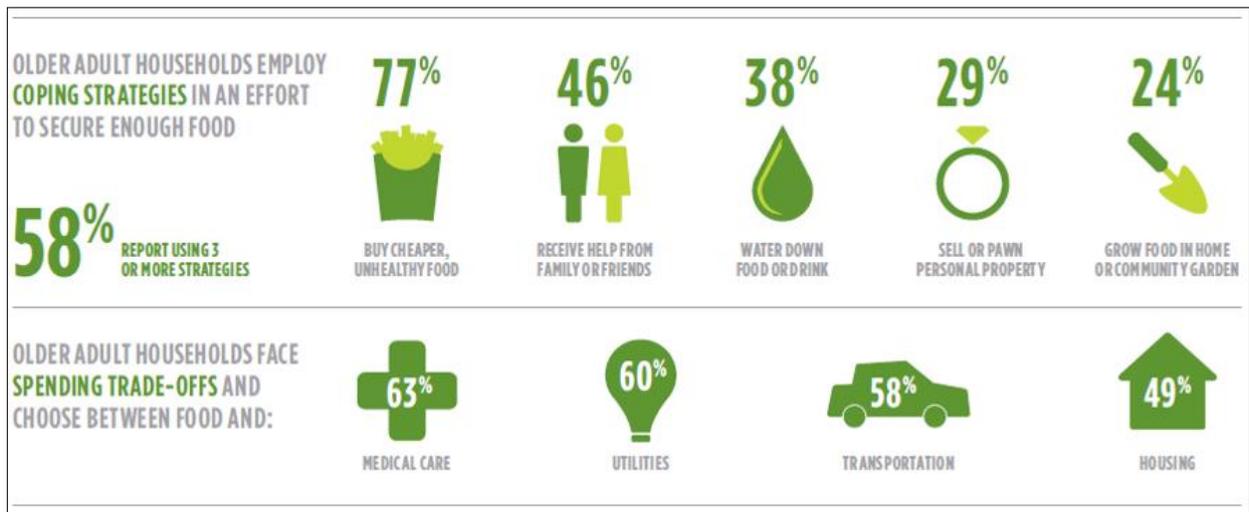


Image Source: Feeding America⁶⁸

A focus group conducted by the University of Maine revealed this struggle to make ends meet for elderly Mainers. The researcher states that “while participants did not speak about going hungry, they did describe many strategies to be sure that did not happen,” including juggling bills and buying cheaper, less nutritious food.⁶⁹ The group also spoke about “the difficulty of growing older, living on fixed incomes, having reduced options, and feeling afraid of how they would get by.”⁷⁰

The Location

Currently, researchers are unable to estimate senior food insecurity rates at a sub-state level due to methodology limitations and small samples sizes. This report therefore presents information on various characteristics of Maine seniors by county. The variables—median age, percent seniors, overall food security rate, SNAP participation, poverty and income—inform an understanding of each county and help to highlight potential areas with seniors in need of food assistance. Ultimately, the context and knowledge held by local agencies and organizations working with seniors will paint a more complete picture of senior food insecurity in each community. This section highlights the top counties of each variable—refer to Appendix B for maps with more information on each variable.

Lincoln and Piscataquis County are tied for the highest median age in the state and also have the highest percentage of seniors, respectively. While Washington and Aroostook County have the top two highest rates of overall food insecurity, Somerset and Aroostook have the highest percentages of seniors receiving SNAP.* Somerset and Washington County seniors have the lowest average incomes in the state. Aroostook has the highest percentage of seniors living below the poverty line, followed by Piscataquis and Washington at similar rates.

* Note: Data for SNAP participation among the 60 and over population is not available from the U.S. Census for Piscataquis County.

ADDRESSING THE ISSUE

Recently, Maine has acknowledged this often hidden issue and highlighted the importance of nutrition and food for seniors. Maine's 2016-2020 State Plan on Aging states that food insecurity is an increasingly concerning issue for Maine seniors and suggests addressing it as a way to achieve their objective of fostering independence and safety within a community.⁷¹ A primer for Maine policy makers in 2013 also highlighted food insecurity as one of five areas of concern for the aging population. A Statewide Assessment on Aging in 2012 identified Food and Nutrition as a top priority service needed by older adults in order to remain in their home, preceded only by transportation.⁷²

Throughout Maine and the nation, communities are striving to help their seniors age in place. The Maine State Plan on Aging's overall goal is 'to help aging and disabled adults to maintain their independence and live safely where they choose to.'⁷³ AARP Maine currently has a network of 24 Age-Friendly Communities in the state that have made a commitment to age-friendly planning and the Maine Health Access Foundation supports Thriving in Place programs that help people with chronic health conditions stay healthy and in their homes. These initiatives recognize that food security and nutrition are vital to maintaining the health and independence of seniors. This section of the report outlines additional policies and programs aimed at combatting elderly food insecurity.

The Policy Response

The United States has several federal policies that aim to reduce senior food insecurity. Some programs serve seniors exclusively while others serve at-risk populations of all ages. The chart from Feeding America and Meals on Wheels⁷⁴ on the following page summarizes the federal nutrition programs available to seniors at risk of food insecurity. This section expands upon these programs and provides information on their operation in Maine.

Figure 12: Federal Nutrition Programs for Seniors

THE FEDERAL NUTRITION PROGRAMS SERVING AT-RISK SENIORS

GROCERY				MEAL-BASED		
	SNAP	SENIOR FARMERS' MARKET NUTRITION PROGRAM	CSFP	TEFAP	CONGREGATE MEALS	HOME-DELIVERED MEALS
FEDERAL PROGRAMS	<p>Low-income seniors receive a supplemental grocery card to purchase food at qualified retailers.</p> <p><i>Some seniors are able to pay for meals at authorized restaurants or home-delivered meal programs.</i></p>	<p>Low-income seniors receive coupons for goods at farmers' markets, roadside stands, and community supported agriculture operations (CSAs), putting fresh produce into the hands of at-risk seniors.</p>	<p>Low-income seniors receive monthly food packages, distributed by food banks or agencies from USDA commodities. The packages are designed to meet seniors' unique nutritional needs.</p>	<p>Low-income Americans in need of emergency food assistance, including seniors, receive groceries or meals at no cost through food banks, pantries, soup kitchens or shelters.</p>	<p>Eligible seniors receive meals in a group setting (like a senior center, community building, or adult care home), often accompanied by nutrition education, exercise and other social activities.</p> <p><i>Some seniors access meals at adult care facilities through the Child and Adult Care Food Program, which is authorized through the Child Nutrition Bill.</i></p>	<p>Eligible seniors receive nutritious meals delivered to their home either by a Meals on Wheels volunteer or staff member, accompanied by a friendly visit and safety check.</p>
ELIGIBILITY REQUIREMENTS	<p>130% of the federal poverty line, or annual income of \$15,444 for a senior living alone.</p>	<p>185% of the federal poverty line, or an annual income of \$21,978 for a senior living alone.</p>	<p>130% of the federal poverty line, or an annual income of \$15,444 for a senior living alone.</p>	<p>185% of the federal poverty line, or an annual income of \$21,978 for a senior living alone.</p>	<p>Seniors 60+ in the greatest economic and social need, with particular attention to those who are low-income, belong to a minority group, have limited English proficiency, are at risk of institutionalization and live in rural areas. Home delivery is targeted to the least mobile.</p>	
AMERICANS 60+ SERVED	<p>4.25 MILLION SENIORS average benefit \$139/month or \$1.32/meal (2014)</p>	<p>817,751 SENIORS average benefit \$31/year (2015)</p>	<p>572,035 SENIORS (2015)</p>	<p>596,929,272 meals served by Feeding America</p> <p><i>*17% of clients are 60+ (2014)</i></p>	<p>1,566,935 SENIORS 80,282,410 meals (2014)</p>	<p>835,985 SENIORS 137,702,853 meals (2014)</p>
THE UNMET NEED	<p>Only 41% of eligible seniors are enrolled in SNAP and recipients on average access only \$129/mo, an insufficient benefit to support seniors' nutritional needs for the full month.</p>	<p>The program is funded at a set level annually and therefore cannot serve all eligible seniors and is unavailable in 7 states. Seniors on average only receive \$31/year in groceries.</p>	<p>The program is funded at a set level annually and therefore cannot serve all eligible seniors and is unavailable in AL, WV, and WY.</p>	<p>The program is funded at a set level annually and therefore feeds only as many people as the commodities can provide for.</p>	<p>The program is funded at a set level annually and therefore may only serve as many eligible participants as funding allows, which has never kept pace with demand or rising costs and results in waiting lists for meal services across all states.</p>	
JURISDICTION	<p>The Agricultural Act, also known as the Farm Bill, is reauthorized every five years. Funding is appropriated annually through the Agricultural Appropriations Act for SFMNP, CSFP, and TEFAP.</p> <p>Last Authorized February 2014, Expires 2018</p>				<p>The Older Americans Act is generally reauthorized every five years. Additional funding is provided through the Nutrition Services Incentive Program through cash or commodities. Funding is appropriated annually through the Labor-HHS-Education and Related Agencies Bill.</p> <p>Last Authorized 2016, Expires 2019</p>	

Image Source: Feeding America and Meals on Wheels

The Older Americans Act, Title III

The Older Americans Act (OAA) was enacted in 1965 and supports community-based services such as social and nutrition services to people over the age of 60 and their caregivers. Title III of the Act, Grants for State and Community Programs on Aging, has for different components, the largest of which is nutrition services with over 40% of the funding.

Nutrition Services

The goal of the nutrition services program is to reduce hunger and food insecurity and promote the health and socialization of older Americans while providing access to healthy meals, nutrition education and counseling. Nutrition Services has three programs:

1. Congregate Nutrition Services Program
 - Provides meals and nutrition services at sites such as senior centers, community centers, schools and adult day cares
2. Home-Delivered Nutrition Services Program
 - Provides meals and nutrition services to homebound seniors
3. Nutrition Services Incentive Program, NSIP
 - Provides money to purchase food or commodities for congregate and home-delivered nutrition programs (commodities are provided by the USDA)

Administration

The Administration on Aging (AoA), under the U.S. Department of Health and Human Services, administers the OAA. The AoA awards funds to the State Unit on Aging known as the Office of Elder Services in Maine. This office grants funds to the Area Agency on Aging (AAA). In Maine, there are five AAAs that each cover their own planning and service area.

Funding for congregate and home-delivered meals is based on each state's relative share of the total population age 60 and older. Each state must match 15% of the funds with non-federal money. NSIP funds are allotted based on a state's share of total meals served by the nutrition services program in the prior year. Federal funding has been flat for over 5 years.

Eligibility

To receive Title III services, participants must be 60 or older and homebound for Home-Delivered Nutrition Services such as Meals on Wheels. Disabled participants under the age of 60 are also eligible. The Act states that services should be targeted to people with the greatest social need, but means tests are not allowed. Participants are encouraged to contribute to the cost of the meals but cannot be denied services for a failure to contribute.

Of Note

Home-delivered meals such as Meals on Wheels provide a third of daily nutrition and energy requirements. Despite this, caseworkers often report incidences of clients stretching the meal to last all day.

The OAA Reauthorization Act of 2016 adds that the state “must encourage the use of locally grown foods in the program, and identify potential partnerships and contracts with local producers and providers of locally grown foods.”⁷⁵ Service providers are also encouraged to pursue opportunities for intergenerational meals or sites.⁷⁶

Nationally, approximately 1/3 of the cost of Meals on Wheels is provided by federal funding from the Older Americans Act.⁷⁷

The Numbers in Maine

Home-Delivered	Congregate
Seniors Served⁷⁸	
4,351	16,598 seniors at 75 sites
Waitlist	
Fluctuates	N/A
Meals Served⁷⁹	
535,303	303,741
Average Cost Per Meal⁸⁰	
\$7.25	\$8.55
Average Donation Requested*	
\$3.90	\$4.25

* Most agencies do not receive the full donation requested.

Commodity Supplemental Food Program (CSFP)

The Commodity Supplemental Food Program provides low-income seniors with a nutritionally appropriate 30-pound box of food each month. The program aims to improve the health of seniors by providing nutritious USDA commodities to supplement their diet.

Administration

CSFP is administered by the Food and Nutrition Service, an agency of the USDA. The Maine State administering agency is the Department of Agriculture, Conservation and Forestry. USDA purchases food and makes it available to the Department of Agriculture, which sends it to Good Shepherd Food Bank. GSFB packs the food into brown bags and sends it to distribution sites within the five Area Agencies on Aging.

CSFP funding is based on program performance and a formula from the USDA that involves the poverty rate and population in Maine. The USDA provides the commodities and funds to cover administrative costs for preparing and distributing the food. As a discretionary program, CSFP's reach is limited by funding.

Eligibility

Participants must be 60 or older and have an income that is at or below 130% of the Federal Poverty Line, or about \$15,400 for a household of one.

Of Note

The USDA will be conducting a comprehensive review of the CSFP food package in 2017. This review will evaluate the nutritional content of the package as well as its suitability for senior's needs and preferences.

The Numbers in Maine*

<u>Commodity Supplemental Food Program</u> (2016)	
Seniors Served	Capped at 3,229
Waitlist	1,500

* Note that in 2017, Maine's allotted CSFP shares increased to 9,000

Senior Farmers Market Nutrition Program

In Maine, the Senior Farmers Market Nutrition Program (SFMNP) operates as a Senior Farm Share Program. Through this program, eligible seniors receive fresh fruits and vegetables directly from Maine farmers. Participants receive \$50 worth of produce for 8 weeks during the growing season.

Administration

Federal funding for SFMNP comes from the USDA. In Maine, the Department of Agriculture, Forestry and Conservation oversees the program.

Seniors work directly with farmers to sign up for a farm share. Eligible farms are listed on the Get Real, Get Maine website and the shares often go quickly during the sign-up season, which begins in March or April.

Eligibility

Participants must be 60 or older and have an income that is at or below 185% of the Federal Poverty Line, which is about \$21,775 for one person.

Of Note

Farmers are not required to keep or report a waitlist for the program; however, the number of seniors that qualify for a Farm Share outnumbers the amount of shares available for distribution. Additionally, according to the Maine Department of Agriculture, the program has not had leftover shares since 2010. The Department also reports that many farmers provide more produce to seniors than what the program pays for. In 2015, 17,075 seniors received FarmShare benefits from 106 Maine farmers.⁸¹

The Numbers in Maine

<u>Senior Farm Share</u> (2016)	
Total Allotted Farm Shares	16,558
Number of Participating Farms	96

Supplemental Nutrition Assistance Program (SNAP)

SNAP is a nutrition assistance program that provides eligible low-income families and individuals with monthly benefits that are used to purchase food. Participants receive a benefits card, similar to a debit card that can be used at participating food retail outlets.

Administration

The Food and Nutrition Service of the USDA administers SNAP on the federal level. In Maine, the Department of Health and Human Services oversees the program. The federal government covers the cost of the benefits and splits administration costs with the state. SNAP is a federal entitlement program, meaning that all eligible people will receive benefits.

Eligibility

SNAP participants must have an income that is at or below 185% of the Federal Poverty Line. Eligibility is based on a person's income after deductions, assets and the number of people in the household. The State of Maine has an asset limit of \$5,000, though seniors are allowed to deduct medical costs that exceed \$35 per month.

Of Note

Maine currently has restrictive policies and procedures that have limited the number of people receiving benefits. Seniors have low participation rates nationwide, but Maine seniors participate at a rate above the national average—60% of eligible seniors in Maine are enrolled in SNAP.⁸² However, Maine is one of only five states that applies an asset test to seniors.⁸³

Barriers to enrollment include pride, stigma, difficult applications, low awareness, perceived small benefits, and a belief that receiving benefits will take away from others. In Maine, the minimum SNAP benefit for seniors is \$16. In 2007, 86% of elderly Maine participants qualified for more than the minimum benefit, one of the highest percentages in the country.⁸⁴

The Numbers in Maine

Supplemental Nutrition Assistance Program (SNAP) (2016)	
Number of Seniors Receiving SNAP⁸⁵	29,000
Average Benefit for Households with Seniors⁸⁶	\$120
Percent of Eligible Seniors Not Enrolled⁸⁷	40%

Child and Adult Care Food Program (CACFP)

CACFP in Maine aims to help participants improve and maintain good health while promoting the development of good lifelong eating habits.⁸⁸ CACFP provides reimbursements for meals and snacks served at certain child care centers, day care homes and adult day care centers.

Adult Day Care Centers

The adult day care component of CACFP aims to provide nutritional support that will help elderly and functionally impaired adults remain in the community and avoid premature institutionalization.⁸⁹

Administration

Federal funding is provided by USDA's Food and Nutrition Service. At the State level, the Maine Department of Health and Human Services' Office of Child and Family Services administers the program.

Eligibility

Licensed adult day care centers can get reimbursed for food provided to eligible participants—non-residential seniors age 60 and above or functionally impaired adults of any age. Adult day care centers cannot receive reimbursements for seniors not enrolled to receive care at their facility (i.e. drop-ins). Menus for snacks and meals must meet USDA guidelines to receive funding. Eligible providers are reimbursed at a federally set rate for the meals and snacks.

The Numbers in Maine

Child and Adult Care Food Program (CACFP) (2016)	
Number of Adult Day Care Centers⁹⁰	
	35
Number of Enrolled Adult Day Care Centers	
	unknown at this time*

* DHHS has not shared this information and had not responded to a Freedom of Information Act request at the time of this report.

The Emergency Food Assistance Program (TEFAP)

TEFAP provides temporary nutrition assistance in the form of USDA donated food to low-income people, including the elderly, through emergency food providers such as food banks or soup kitchens. These food providers distribute the commodities to people in need of short-term hunger relief.

Administration

At a federal level, the USDA's Food and Nutrition Service administers the program. Maine's Department of Agriculture manages the program at a state level.

Eligibility

TEFAP does not have age restrictions, but participants must meet income eligibility requirements. In Maine, households at or below 150% of the Federal Poverty Level are eligible to receive food—about \$17,655 for one person. However, the TEFAP income eligibility form contains a clause that allows people needing emergency food assistance, regardless of income, to receive food.

Of Note

The Department of Agriculture works with 256 organizations in Maine. They partner strictly with food pantries, kitchens and shelters.

The Numbers in Maine

The Emergency Food Assistance Program (TEFAP) (2016)	
Number of People Receiving	
	32,000 <i>people of all ages/month</i>
Total Number of People Eligible (not just seniors)	
	306,544

The following chart highlights information specific to the State of Maine on the federal policies that address senior food insecurity. The bottom row shows the gap in available services and seniors in need.*

As the chart shows, despite existing efforts, policies addressing senior hunger face a substantial unmet need. This data is consistent with national estimates, which showed that in 2008 only 11% of low-income, food insecure older adults in the U.S. received services such as home-delivered or congregate meals.⁹¹ Many of the federal support programs and policies outlined above are either underfunded or under-resourced. Thus, while it is important to continue to advocate for sustained or increased federal funding to address the current need, charitable programs are a significant part of addressing senior food insecurity

* According to the US Census, 331,119 seniors over the age of 60 live in Maine. The number of food insecure seniors is estimated to be 45,628 (13.78% of 331,119). The calculations in this chart show what percent of food insecure seniors are not receiving services.

**Policies Addressing Senior Food Insecurity:
A Snapshot for Maine 2016**

	Older Americans Act Title III, Home-delivery	OAA Title III Congregate Meals	CSFP	Senior FarmShare	CACFP	SNAP (Food Stamps)	TEFAP
Description	Provides eligible seniors with meals and a check-in from Meals on Wheels staff or volunteers	Provides eligible seniors with meals and nutrition services at sites such as senior centers, community centers, schools and adult day cares	Provides low-income seniors with a nutritionally appropriate 30 pound box of USDA food each month	Provides participants with \$50 worth of produce from a local farmer on a weekly basis for 8 weeks during the growing season	Provides Adult Day Care Centers with reimbursements for food provided to eligible seniors	Provides eligible people, including seniors, with a card with monthly benefits that are used to purchase food at authorized retailers	Provides low-income people, including seniors, with groceries or meals through food pantries, kitchens or shelters
State Administration	DHHS, Office of Elder Services	DHHS, Office of Elder Services	Department of Agriculture, Conservation and Forestry	Department of Agriculture, Conservation and Forestry	DHHS, Office of Child and Family Services	DHHS, Office of Family Independence	Department of Agriculture, Conservation and Forestry
Eligibility	60+ and Homebound	60+	60+ and an income that is 130% of the Federal Poverty Line (FPL)	60+ and 185% of FPL	Adult Day Care Centers serving non-residential seniors age 60+ or functionally impaired adults of any age	185% of FPL	150% of FPL
Funding	Discretionary Funding <i>Maine receives a set amount of money every year</i> State funding and private donations supplement federal funds	Discretionary Funding <i>Maine receives a set amount of money every year</i>	Discretionary Funding <i>Maine receives a set amount of money every year</i>	Discretionary Funding <i>Maine receives a set amount of money every year</i>	Mandatory/Entitlement Funding <i>Every person who meets eligibility requirements receives services</i>	Mandatory/Entitlement Funding <i>Every person who meets eligibility requirements receives services</i>	Discretionary Funding <i>Maine receives a set amount of money every year</i>
Seniors Served in Maine	4,351	16,598	3,229*	16,558	Information not available	29,000	Total Number of Recipients/Month: 32,000 # of seniors unknown
Waitlist	Varies by Area	N/A	1,500	Waitlist numbers are not reported, but demand historically outnumbers supply	Information not available	No	No
Unmet Need**	Over 90% of estimated food insecure seniors are not receiving services	64% of estimated food insecure seniors are not receiving services	Over 90% of estimated food insecure seniors are not receiving services	64% of estimated food insecure seniors are not receiving services	Information not available	40% of eligible seniors are not enrolled***	Almost 90% of all eligible people in Maine are not receiving services

*Note that in 2017, Maine's CSFP allocation increased to 9,000

** The number of food insecure seniors is about 45,600. The unmet need shows what percent of this population is not served by the program

***According to Feeding America

The Charitable Response

Given the limited funding for federal programs and certain eligibility requirements, federal policies are not able to serve all those in need of food assistance. Charitable programs—those not run by the government—aim to address this service gap. This section highlights various charitable efforts but is not meant to be an inclusive list.

Various food assistance programs throughout the state serve seniors. Good Shepherd Food Bank sources and distributes food to a network of hunger relief agencies throughout the state. As of 2016, almost 40% of Good Shepherd Food Bank’s clients had a senior living in the household.⁹² While hunger relief programs often serve people of all ages, some operate specific senior events or distributions. Agencies throughout the state operate food pantries, food mobiles, meal programs, cooking classes, farm shares and hunger boxes that all benefit seniors.

Many organizations providing general services to seniors also recognize the importance of food security and nutrition. These organizations play a vital role in tackling elderly hunger because they are often the primary source of services and information for seniors. Agencies such as adult day care centers, senior housing, local AARP offices, senior centers, home health programs, veteran affairs and Area Agencies on Aging are all trusted and frequented by seniors. For example, Maine has five Area Agencies on Aging.

Each agency offers nutrition services extending beyond the federally funded Meals on Wheels and Congregate Meals. They supplement these efforts with charitable donations and offer programs such as nutrition education, prepared meals for purchase, pet food, emergency food boxes and referrals to pantries.

Healthcare settings and organizations also play a role in nutrition and food security. In response to recent research showing that a two-question screening quickly identifies households at risk for food insecurity,⁹³ public health advocates are encouraging clinicians to discuss food and nutrition with their patients. While the two-question screening study focused on families with children, the Nutrition

Screening Initiative aims to identify and treat nutrition problems in older adults.⁹⁴ This initiative uses a 10-question checklist to determine nutritional risk for seniors.

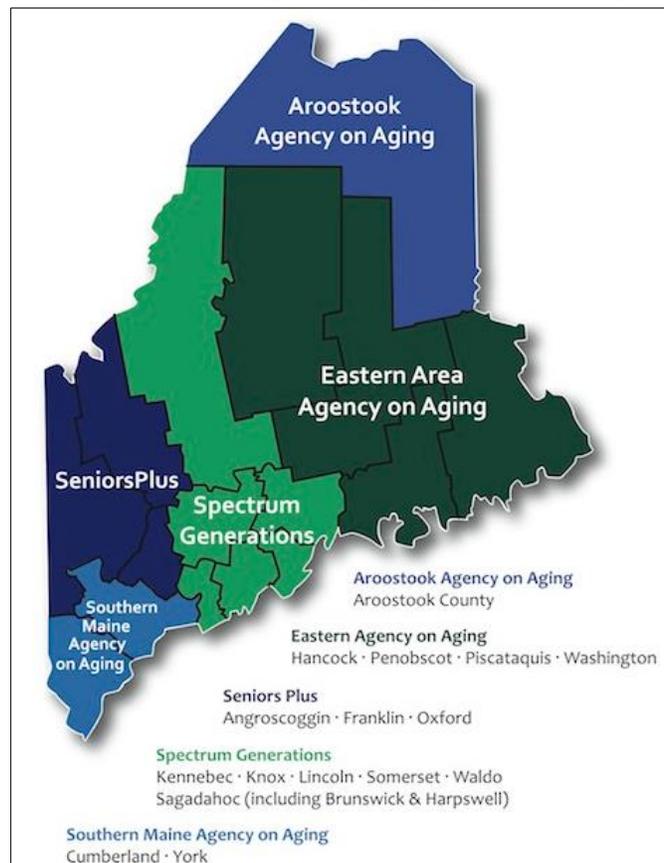


Image Source:
Maine Association of Area Agencies on Aging

Though assessment of the checklist suggests that it might be a better tool for awareness and education than screening,⁹⁵ given seniors' trust in physicians and prioritization of doctor appointments, working with healthcare practitioners to address senior food insecurity is a promising approach.

Research has also shown that for patients 65 and older who are at risk for malnutrition, nutrition interventions can reduce complication rates, length of hospital stay, readmission rates, cost of care and sometimes mortality.⁹⁶ The potential for nutrition interventions to reduce hospital readmission rates among the elderly has prompted several projects, including one in Northern Maine. This pilot project observed fewer readmission rates for patients receiving 14 meals and an in-home visit after being discharged from the hospital compared to those that did not.⁹⁷ Efforts in healthcare, food assistance and senior services are all important parts of tackling senior food insecurity.

CONCLUSION

Senior hunger in Maine has been on an upward trend for five years. During this time, Maine went from having one of the lowest rates of senior food insecurity in the nation to one of the highest, and the number of food insecure seniors more than doubled. Existing federal programs and charitable efforts are not able to meet the current need, and the need is only going to grow as the state ages and seniors become a larger proportion of the population. This population increase adds a layer of urgency to an already severe situation.

Seniors are a vulnerable population that face a spectrum of challenging issues that drain their resources. Ultimately, food security efforts fit within a larger collaboration of senior services including those that help with housing, transportation and medical needs. Supporting all of seniors' needs will reduce the number of financial trade-offs they are forced to consider and help to stretch their often limited resources. Organizations serving older adults in Maine should work together and recognize that hunger cannot be solved in isolation. Additionally, while acknowledging the larger context surrounding food insecurity, specific hunger alleviation programs are needed to meet the current nutrition needs of seniors.

Efforts to reduce senior hunger should focus on awareness, advocacy, and access while strengthening existing partnerships. Raising awareness about senior hunger in the state will mitigate its effects by leveraging support from the general public and funders. Increased awareness about the causes and effects of senior food insecurity will also help to de-stigmatize the experience and encourage supportive community action. Targeted outreach efforts that effectively reach seniors should be expanded upon so that seniors are aware of existing programs and where they can turn for help.

Advocacy is also vital for minimizing senior hunger. Federal programs that support food security for older Americans are a critical piece of the solution because they provide thousands of seniors in the state with food. Demand for federally funded programs such as CSFP, Meals on Wheels, and Senior Farm Shares continues to outnumber supply. Actively supporting these programs and advocating for increased funding will ensure continued access to food for seniors in need. In addition to supporting existing programs, outreach efforts to increase participation among programs that are not fully leveraged, such as SNAP and CACFP, will mitigate senior hunger. SNAP is available to all qualifying seniors but many in the state do not participate. Reducing the barriers to participation will enable more seniors to secure additional food.

While increasing awareness and advocating for federal programs that support senior food security are necessary, ultimately more resources are needed to tackle the issue. Programs that create and increase access to supplemental sources of nutrition are vital to decreasing the current rate of food insecurity in Maine. These programs should recognize and cater to the food insecurity experience for older adults. Senior food insecurity is not just a result of limited financial means but also of specific health and nutrition needs, mobility issues, pride, problems with transportation and isolation. Senior hunger programs should address all of these aspects to ensure that seniors can access and consume appropriate, nutritional food.

Additionally, because seniors are a difficult population to reach, successful hunger alleviation efforts will partner with existing programs, use trusted sources and support integrated networks. Partnerships will ultimately ground and strengthen senior food awareness, advocacy, and access efforts that will halt and reverse senior food insecurity trends in the state.

Appendix A

USDA's Information on Food Security¹

USDA's labels describe ranges of food security:

Food Security

- **High food security** (*old label=Food security*): no reported indications of food-access problems or limitations.
- **Marginal food security** (*old label=Food security*): one or two reported indications—typically of anxiety over food sufficiency or shortage of food in the house. Little or no indication of changes in diets or food intake.

Food Insecurity

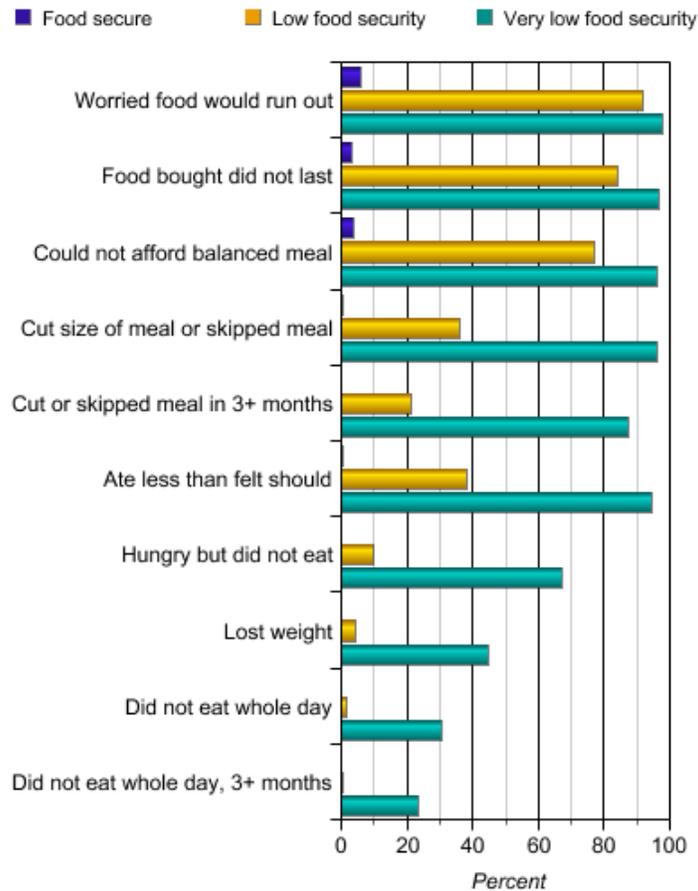
- **Low food security** (*old label=Food insecurity without hunger*): reports of reduced quality, variety, or desirability of diet. Little or no indication of reduced food intake.
- **Very low food security** (*old label=Food insecurity with hunger*): Reports of multiple indications of disrupted eating patterns and reduced food intake.

¹ <http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security.aspx>

Characteristics of Households With Very Low Food Security

Conditions reported by households with very low food security are compared with those reported by food-secure households and by households with low (but not very low) food security in the following chart:

Percentage of households reporting indicators of adult food insecurity, by food security status, 2015



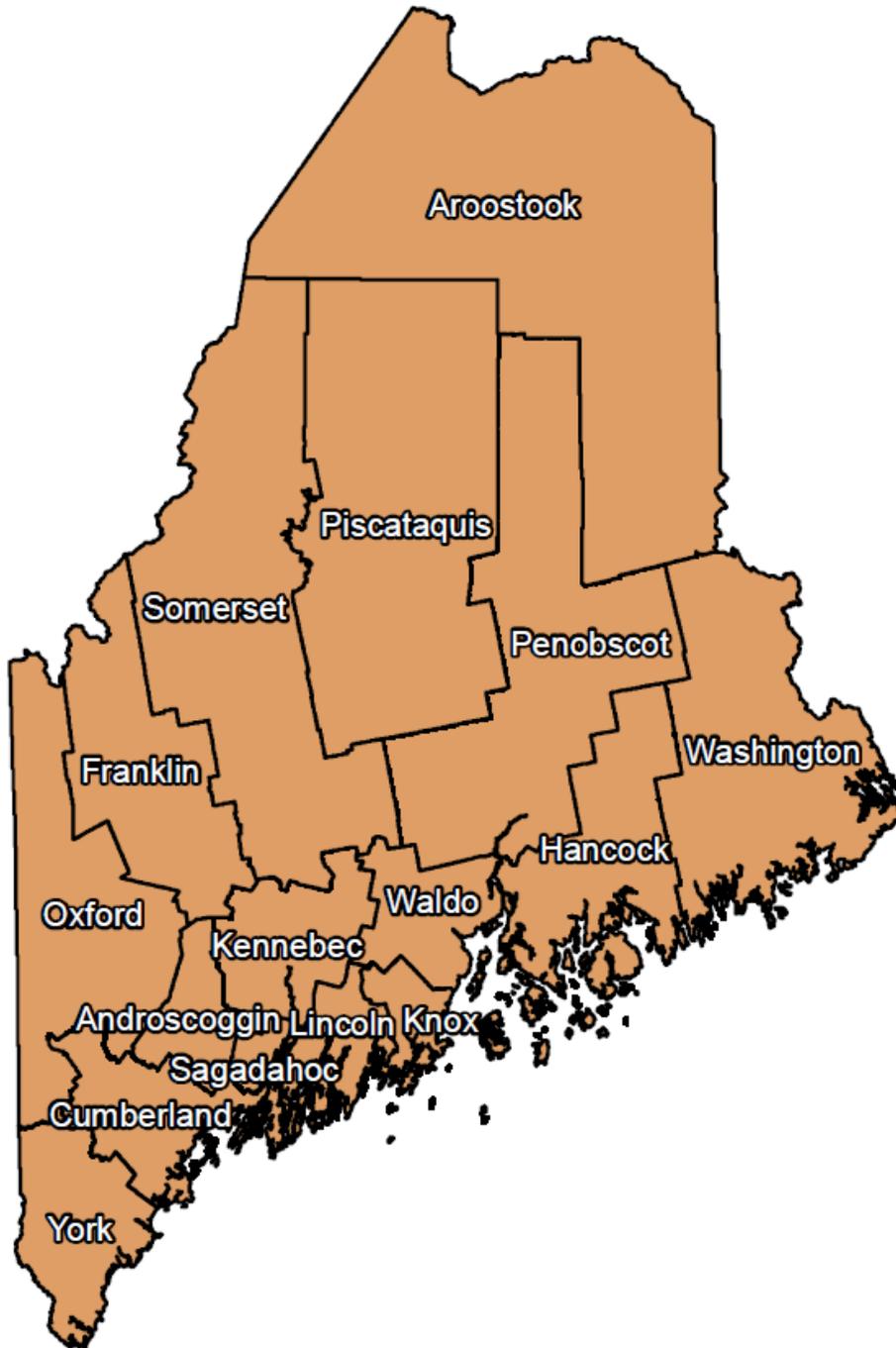
Source: Calculated by ERS, USDA, using data from the December 2015 Current Population Survey Food Security Supplement.

Appendix B

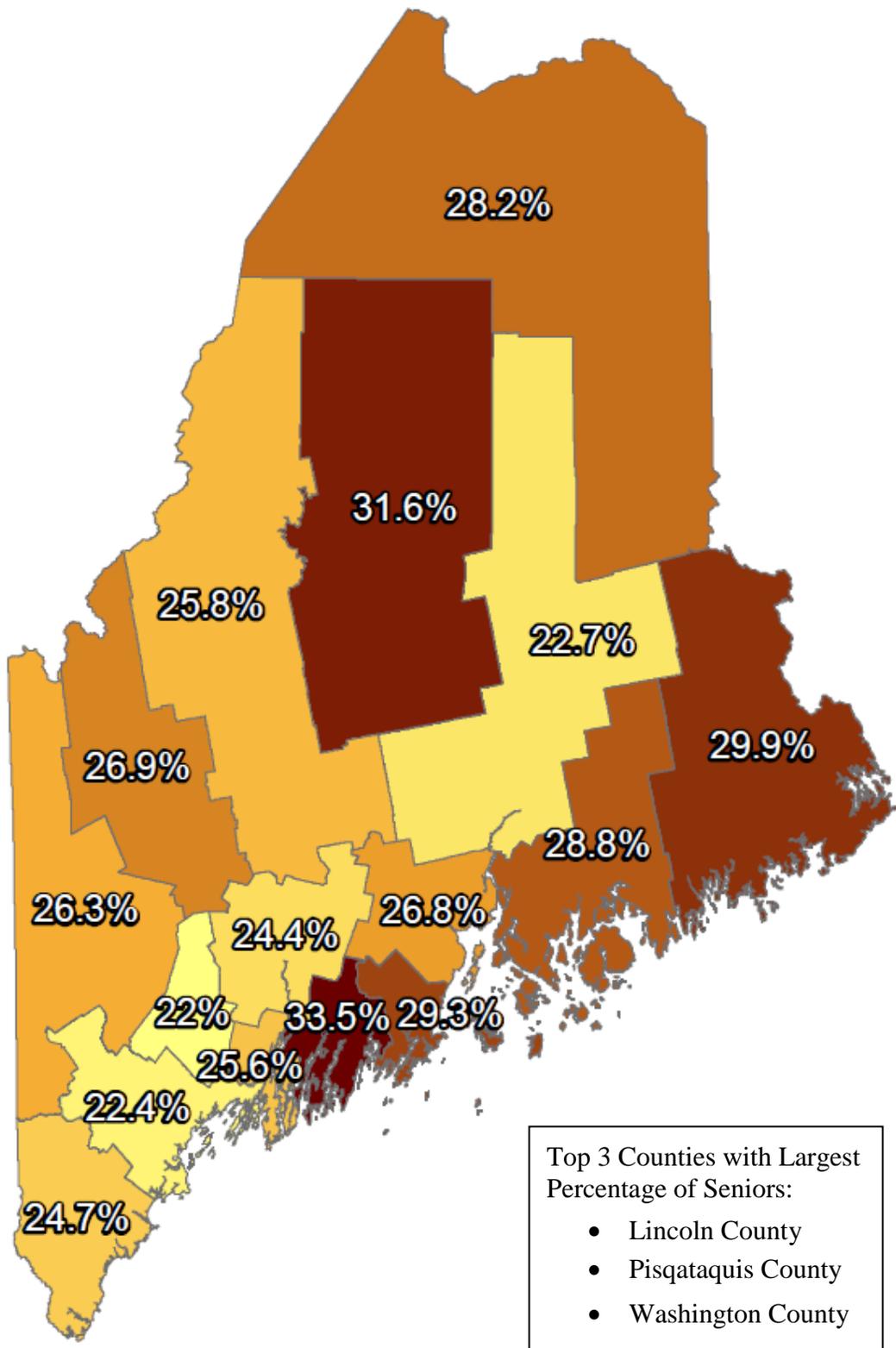
Maps of County Data

Data Source: American Community Survey 2015 5-Year Estimates

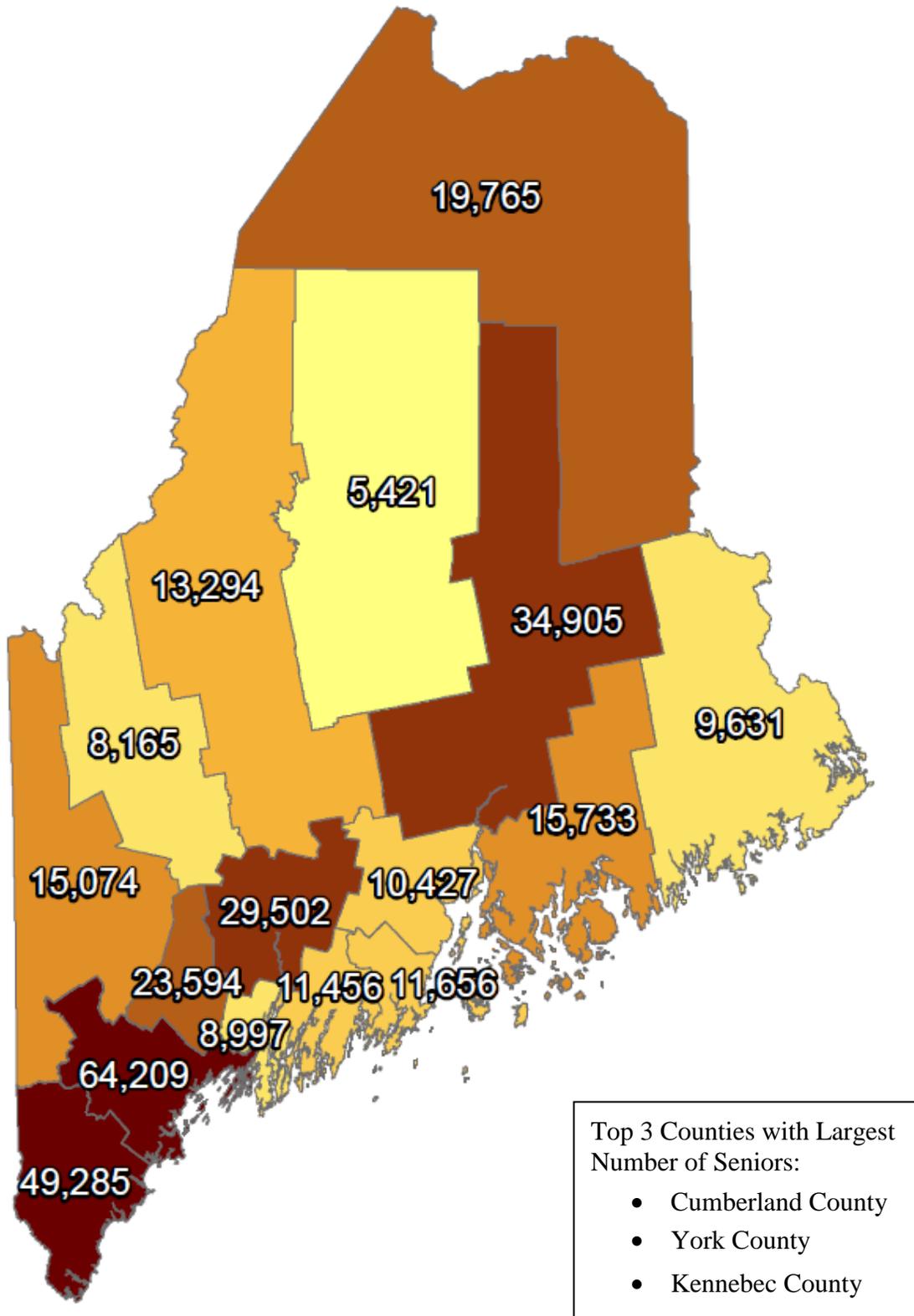
Counties in Maine



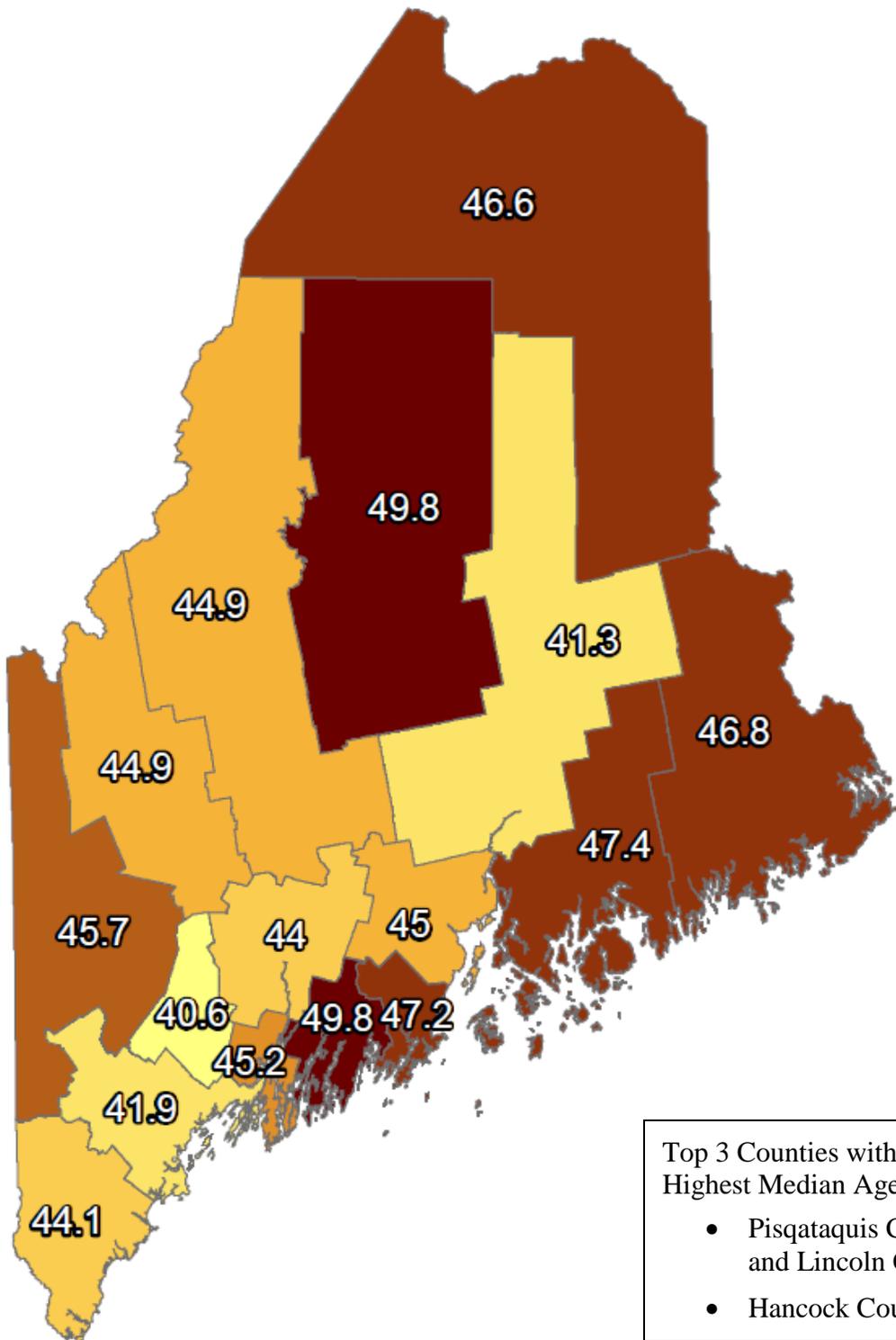
Percent of the Population Age 60 and Older



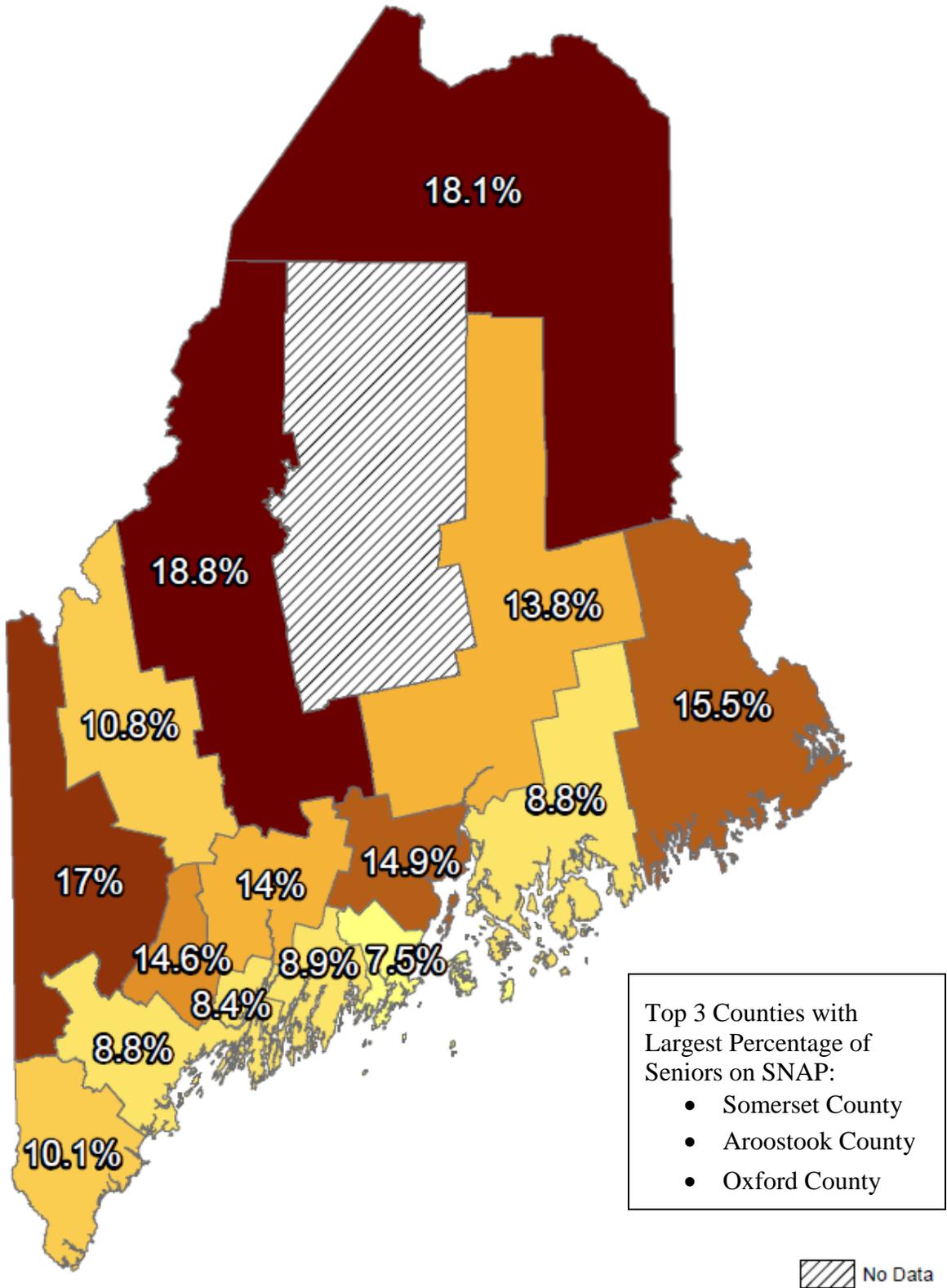
Number of People 60 and Older



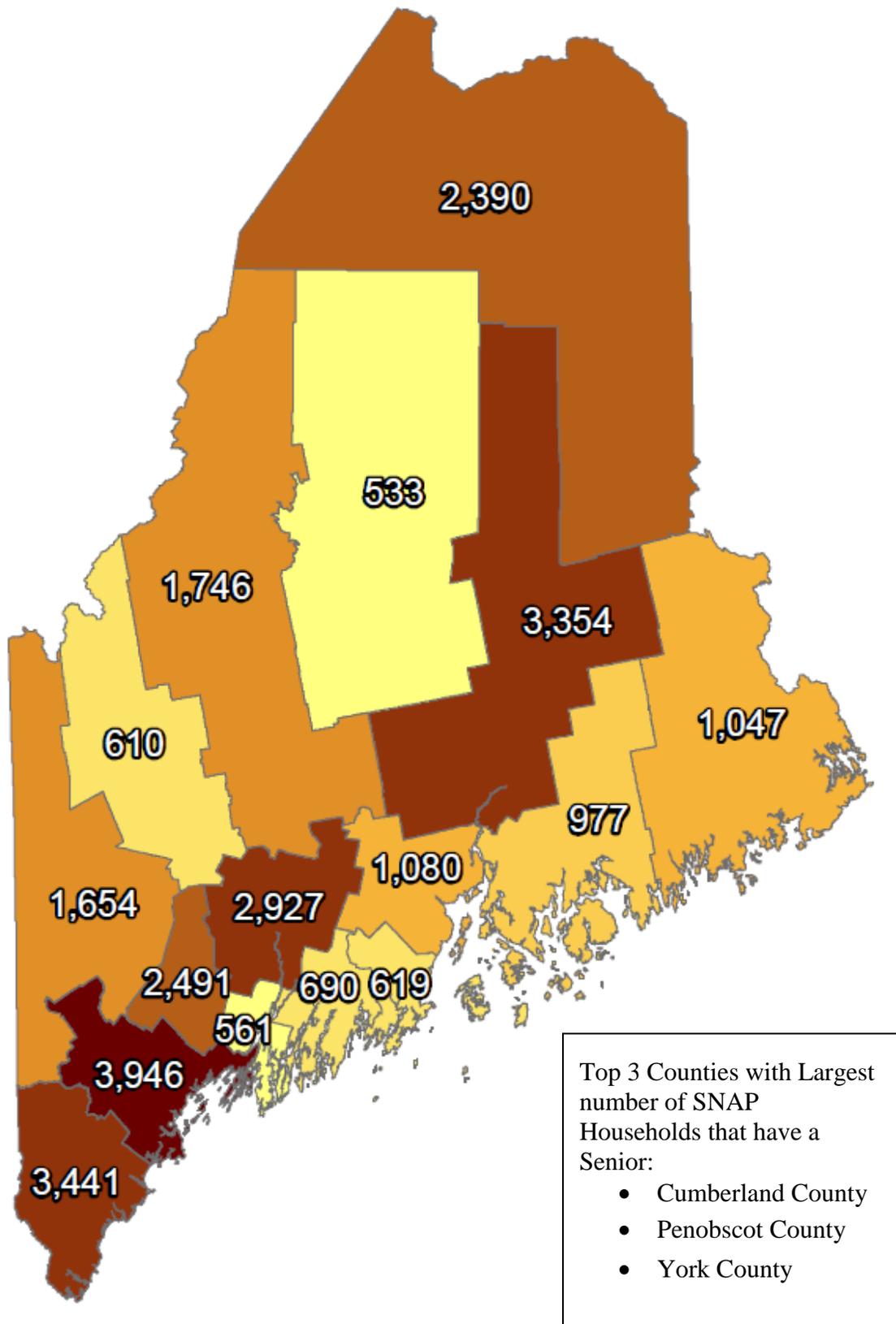
Median Age



Percent of Senior Households Receiving SNAP

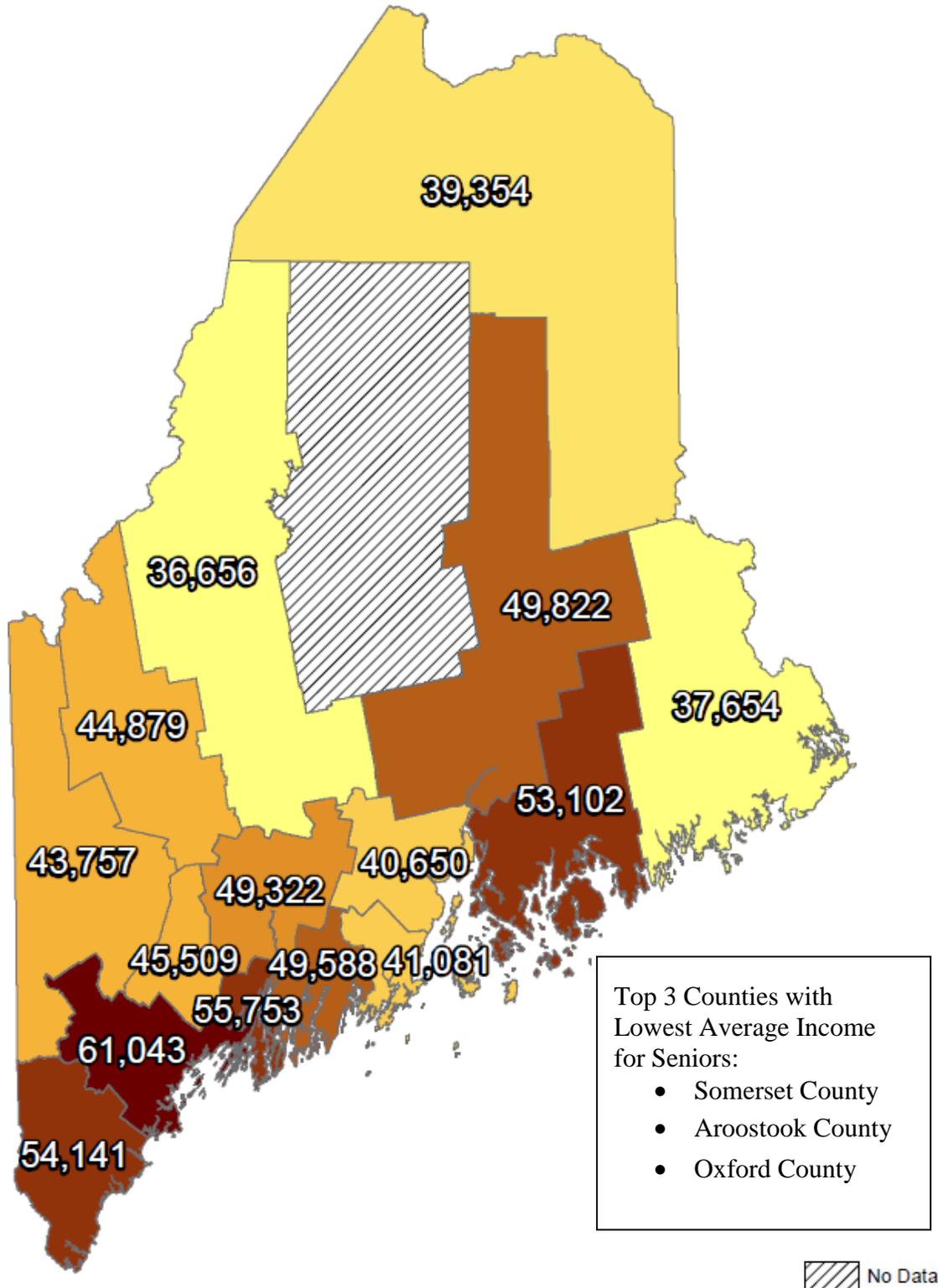


Number of SNAP Households with a Senior

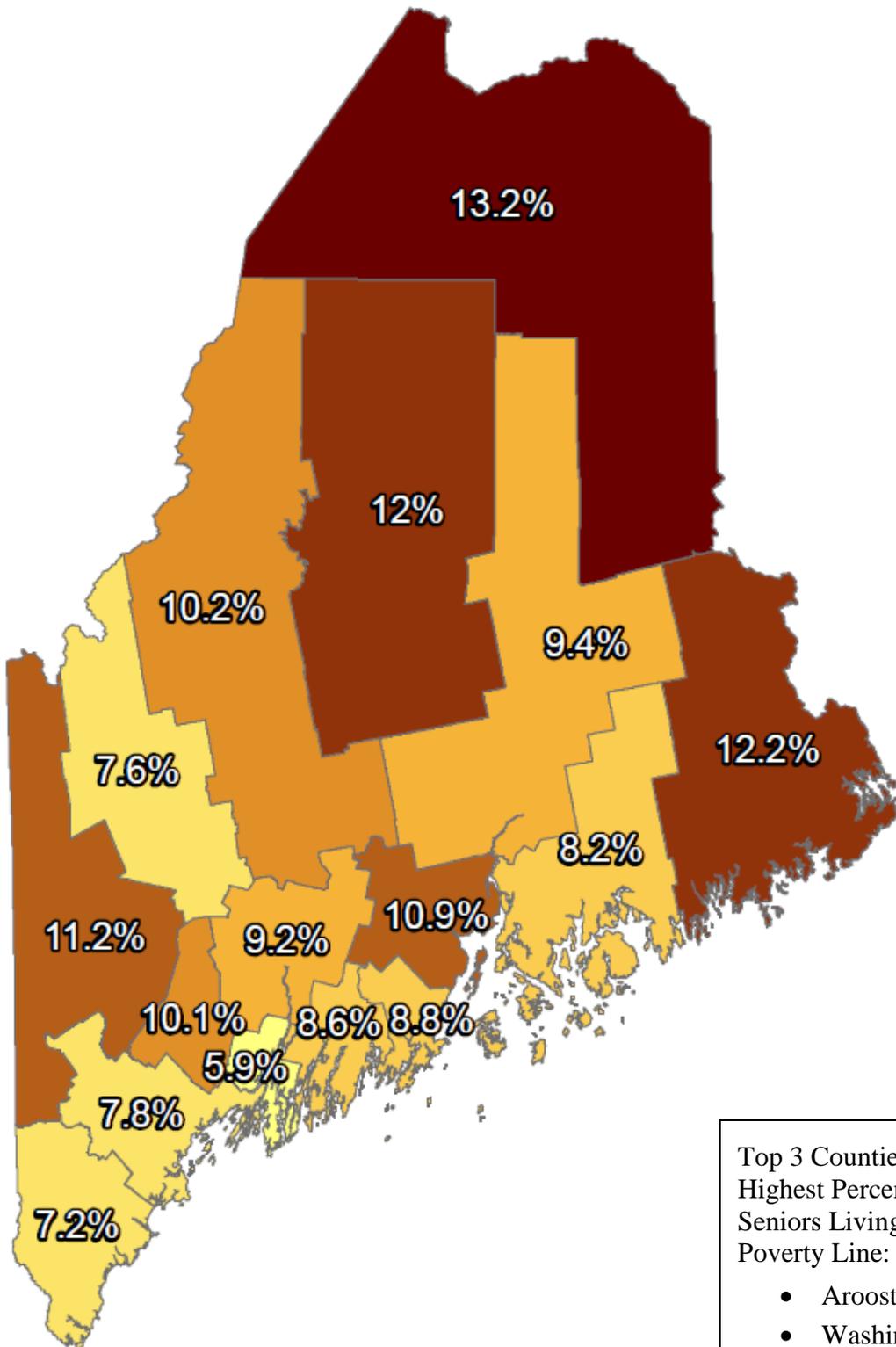


Average Income of Seniors

Figures in \$



Percent Seniors Living Below the Poverty Line



Top 3 Counties with Highest Percentage of Seniors Living Below the Poverty Line:

- Aroostook County
- Washington County
- Piscataquis County

References

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- ¹ Quandt, Sara. Arcury, Thomas. McDonal, Juliana. Bell, Ronny and Vitolins, Mara. *Meaning and Management of Food Security Among Rural Elders*. The Journal of Applied Gerontology. 20(3): 356-376. September, 2001.
- ² Shepard, Donald. Setren, Elizabeth and Cooper, Donna. *Hunger in America: Suffering We All Pay For*. Center for American Progress. October 2011. http://people.brandeis.edu/~shepard/hung_paper_posted-copy1.pdf. Accessed August 19, 2016.
- ³ Lee, Jung Sun and Frongillo, Edward. *Nutritional and Health Consequences are Associated with Food Insecurity among U.S. Elderly Persons*. Journal of Nutrition. 131: 1503-1509, 2001. As stated in <http://frac.org/aarp-foundation-and-frac-announce-new-tools-to-fight-hunger-among-seniors/>. Accessed August 18, 2016.
- ⁴ Ibid.
- ⁵ Strickhouser, Sara. Wright, James and Donley, Amy. University of Central Florida, Department of Sociology. *Food Insecurity Among Older Adults: A Report Submitted to the AARP Foundation*. Full Report. September, 2014.
- ⁶ Feeding America and National Foundation to End Senior Hunger (NFESH). *Spotlight on Senior Health Adverse Health Outcomes of Food Insecure Older Americans*. March, 2015. <http://www.feedingamerica.org/hunger-in-america/our-research/senior-hunger-research/or-spotlight-on-senior-health-executive-summary.pdf>. Accessed August 18, 2016.
- ⁷ Ziliak, James. Gundersen, Craig and Haist, Margaret. *The Causes, Consequences, and Future of Senior Hunger in America*. Report submitted to Meals on Wheels Association of America Foundation. 2008.
- ⁸ U.S. Department of Health and Human Services. *Multiple Chronic Conditions: A Strategic Framework— Optimum Health and Quality of Life for Individuals with Multiple Chronic Conditions*. Washington, DC: U.S. Department of Health and Human Services. 2010.
- ⁹ Centers for Disease Control and Prevention, U.S. Department of Health and Human Services. *The State of Aging and Health in America 2013*. Atlanta, GA. 2013.
- ¹⁰ As compared to the population in 2012. Ortman, Jennifer. Velkoff, Victoria and Hogan, Howard. *An Aging Nation: The Older Population in the United States, Population Estimates and Projections*. P25-1140. Issued May 2014.
- ¹¹ Centers for Disease Control and Prevention, U.S. Department of Health and Human Services. *The State of Aging and Health in America 2013*. Atlanta, GA. 2013.
- ¹² Wolfe, Wendy. Frongillo, Edward and Valois, Pascale. *Understanding the Experience of Food Insecurity by Elders Suggests Ways to Improve Its Measurement*. American Society for Nutritional Services 22-3166:03. June, 2003.
- ¹³ Wolfe, Wendy. Olson, Christine. Kendall, Anne and Frongillo, Edward. *Hunger and food insecurity in the elderly: Its nature and measurement*. Journal of Aging and Health, 10(3): 327-350. 1998.
- ¹⁴ Lee, Jung Sun and Frongillo, Edward. *Factors Associated with Food Insecurity Among US Elderly Persons: Importance of Functional Impairments*. Journal of Gerontology. 56(2):S94-S99. March, 2001.
- ¹⁵ Price, Cristofer. Hamilton, William and Cook, John. *Household Food Insecurity in the United States: Guide to Implementing the Core Food Security Module*. Prepared for the U.S. Department of Agriculture. September, 1997. <http://www.abtassociates.com/reports/D19971303.pdf> Accessed September 15, 2017.
- ¹⁶ Wolfe, Wendy. Frongillo, Edward and Valois, Pascale. *Understanding the Experience of Food Insecurity by Elders Suggests Ways to Improve Its Measurement*. American Society for Nutritional Services 22-3166:03. June, 2003.
- ¹⁷ Gundersen, Craig and Ziliak, James. *The State of Senior Hunger In America 2014: An Annual Report*. June 2016.
- ¹⁸ Ziliak, James and Gundersen, Craig. *Senior Hunger in the United States: Differences across states and rural and urban areas*. University of Kentucky Center for Poverty Research Special Reports. A report submitted to the Meals on Wheels Association of America. September, 2009.
- ¹⁹ Ziliak, James. Gundersen, Craig and Haist, Margaret. *The Causes, Consequences, and Future of Senior Hunger in America*. Report submitted to Meals on Wheels Association of America Foundation. 2008.
- ²⁰ Lee, Jung Sun and Frongillo, Edward. *Factors Associated with Food Insecurity Among US Elderly Persons: Importance of Functional Impairments*. Journal of Gerontology. 56(2):S94-S99. March, 2001.
- ²¹ AbuSabha, Rayane. Shackman, Gene, Bonk, Barbara and Samuels, Steven. *Food Security and Senior Participation in the Commodity Supplemental Food Program*. Journal of Hunger & Environmental Nutrition, 6(1):1–9. 2011.
- ²² AARP Foundation. *Securing the Essentials: Findings on Nutrition Knowledge and Food Insecurity among Older Adults*. AARP Foundation. 2015.
- ²³ Strickhouser, Sara. Wright, James and Donley, Amy. University of Central Florida, Department of Sociology. *Food Insecurity Among Older Adults: A Report Submitted to the AARP Foundation*. Full Report. September, 2014.

-
- ²⁴ Feeding America and National Foundation to End Senior Hunger (NFESH). *Spotlight on Senior Health Adverse Health Outcomes of Food Insecure Older Americans*. March, 2015. <http://www.feedingamerica.org/hunger-in-america/our-research/senior-hunger-research/or-spotlight-on-senior-health-executive-summary.pdf>. Accessed January 1, 2017.
- ²⁵ Ziliak, James. Gunderson, Craig and Haist, Margaret. *The Causes, Consequences, and Future of Senior Hunger in America*. Report submitted to Meals on Wheels Association of America Foundation. 2008.
- ²⁶ Aging and Disability Services, an office of the Department of Health and Human Services. April, 2016. *Maine's State Plan on Aging 2016-2020*. <http://www.maine.gov/dhhs/oads/trainings-resources/documents/STATEPLANONAGING2016-2020DRAFT.pdf>. Accessed September 6, 2016.
- ²⁷ States with the Largest Elderly Population. <http://www.worldatlas.com/articles/the-us-states-with-the-oldest-population.html>. Accessed September 10, 2016.
- ²⁸ University of Southern Maine-Muskie School of Public Service. Chartbook- *Adults Using Long Term Services and Supports: Population and Service Use Trends in Maine*. (2016). <http://muskie.usm.maine.edu/Publications/DA/Long-Term-Services-Supports-Use-Trends-Chartbook-SFY2014.pdf>. Accessed September 9, 2016.
- ²⁹ AARP. *The Boomer Nation: A State-By-State Snapshot*. <http://www.aarp.org/politics-society/history/info-2014/map-where-boomers-live.html#/ME>. Accessed September 10, 2016.
- ³⁰ AARP Maine. *Sharing the AARP Maine Survey Results*. July, 2014. <http://states.aarp.org/sharing-the-aarp-maine-survey-results/>. Accessed January 30, 2017.
- ³¹ U.S. Department of Health and Human Services, Administration for Community Living. http://www.aoa.gov/AoA_Programs/HPW/Behavioral/docs2/Maine%20Epi%20Profile%20Final.pdf. Accessed October 15, 2016.
- ³² Breece, James. Mills, Glenn and Gabe, Todd. *The Economic Implications of Maine's Changing Age Structure*. Maine Policy Review 24.2: 13 -22. 2015. <http://digitalcommons.library.umaine.edu/mpr/vol24/iss2/5>. Accessed September 12, 2016.
- ³³ Ibid.
- ³⁴ Ziliak, James. Gunderson, Craig and Haist, Margaret. *The Causes, Consequences, and Future of Senior Hunger in America*. Report submitted to Meals on Wheels Association of America Foundation. 2008.
- ³⁵ American Community Survey. 2015 5 year estimate, Table S0102
- ³⁶ Ziliak, James and Gunderson, Craig. *Supplement to The State of Senior Hunger In America 2014: An Annual Report*. Prepared for the National Foundation to End Senior Hunger. June, 2016.
- ³⁷ Ibid.
- ³⁸ American Community Survey. 2015 5 Year Estimates. Table S0102.
- ³⁹ Wislar, Daisy. *Graphs and Maps Visualizing Senior Hunger and Senior Poverty in Maine*. Community Matters in Maine Fellowship. Prepared for MCHPP. July, 2016.
- ⁴⁰ Feeding America and National Foundation to End Senior Hunger (NFESH). *Spotlight on Senior Health Adverse Health Outcomes of Food Insecure Older Americans*. March, 2015. <http://www.feedingamerica.org/hunger-in-america/our-research/senior-hunger-research/or-spotlight-on-senior-health-executive-summary.pdf>. Accessed January 1, 2017.
- ⁴¹ Schaefer, Andrew and Mattingly, Marybeth. *A Portrait of Wellbeing: The Status of Seniors in Maine*. John T. Gorman Foundation and University of New Hampshire Carsey School of Public Policy. 2016.
- ⁴² Mutchler, Jan. Li, Yang and Xu, Ping. *Living Below the Line: Economic Insecurity and Older Americans Insecurity in the States in 2016*. Center for Social and Demographic Research on Aging, Gerontology Institute, University of Massachusetts, Boston. September, 2016.
- ⁴³ Feeding America and National Foundation to End Senior Hunger (NFESH). *Spotlight on Senior Health Adverse Health Outcomes of Food Insecure Older Americans*. March, 2015. <http://www.feedingamerica.org/hunger-in-america/our-research/senior-hunger-research/or-spotlight-on-senior-health-executive-summary.pdf>. Accessed August 18, 2016.
- ⁴⁴ AARP. Social Security: 2014 Maine Quick Facts. http://www.aarp.org/content/dam/aarp/research/surveys_statistics/general/2014/ssqf/Social-Security-2014-Maine-Quick-Facts-AARP-res-gen.pdf. Accessed November 11, 2016.
- ⁴⁵ Ziliak, James and Gunderson, Craig. *Senior Hunger in the United States: Differences Across States and Rural and Urban Areas*. University of Kentucky Center for Poverty Research Special Reports. September, 2009.
- ⁴⁶ American Community Survey. 2015 5 Year Estimates. Table S0102.
- ⁴⁷ Ziliak, James and Gunderson, Craig. *Supplement to The State of Senior Hunger In America 2014: An Annual Report*. Prepared for the National Foundation to End Senior Hunger. June, 2016.
- ⁴⁸ American Community Survey. 2015 5 Year Estimates. Table S0102.

-
- ⁴⁹ Ziliak, James and Gundersen, Craig. *Supplement to The State of Senior Hunger In America 2014: An Annual Report*. Prepared for the National Foundation to End Senior Hunger. June, 2016.
- ⁵⁰ American Community Survey. 2015 5 Year Estimates. Table S0102.
- ⁵¹ Ibid.
- ⁵² Schaefer, Andrew and Mattingly, Marybeth. *A Portrait of Wellbeing: The Status of Seniors in Maine*. John T. Gorman Foundation and University of New Hampshire Carsey School of Public Policy. 2016.
- ⁵³ Maine Real Estate Management Association. *Press Release on Senior Housing Bond*. Posted October 17, 2016. <http://www.mrema.org/news/senior-housing-bond/#more-968>. Accessed February 16, 2017.
- ⁵⁴ Ziliak, James. Gundersen, Craig and Haist, Margaret. *The Causes, Consequences, and Future of Senior Hunger in America*. Report submitted to Meals on Wheels Association of America Foundation. 2008.
- ⁵⁵ American Community Survey. 2015 5 Year Estimates. Table S0102.
- ⁵⁶ Ryan, Camille and Bauman, Kurt. *Educational Attainment in the United States: 2015*. March, 2016. <http://www.census.gov/content/dam/Census/library/publications/2016/demo/p20-578.pdf>. Accessed November 12, 2016.
- ⁵⁷ Gundersen, Craig and Ziliak, James. *Supplement—The State of Senior Hunger In America 2014: An Annual Report*. June 2016. Note that Gundersen and Ziliak highlight marginal senior food security in their main report.
- ⁵⁸ Ibid.
- ⁵⁹ Calculations from:
Ziliak, James and Gundersen, Craig. *Supplement to The State of Senior Hunger In America 2014: An Annual Report*. Prepared for the National Foundation to End Senior Hunger. June, 2016.
Ziliak, James and Gundersen, Craig. *Supplement to The State of Senior Hunger In America 2013: An Annual Report*. April, 2015.
Ziliak, James and Gundersen, Craig. *Supplement to The State of Senior Hunger In America 2012: An Annual Report*. Prepared for the National Foundation to End Senior Hunger. May, 2014.
Ziliak, James and Gundersen, Craig. *Supplement to The State of Senior Hunger In America 2011: An Annual Report*. Prepared for the National Foundation to End Senior Hunger. August, 2013.
Ziliak, James and Gundersen, Craig. *Supplement to The State of Senior Hunger In America 2010: An Annual Report*. Prepared for the Meals on Wheels Foundation, Inc. May, 2012.
- ⁶⁰ Ziliak, James and Gundersen, Craig. *Supplement-The State of Senior Hunger In America 2014: An Annual Report*. Prepared for the National Foundation to End Senior Hunger. June, 2016.
- ⁶¹ Characteristics of very low food insecurity come from: USDA. *Definitions of Food Security*. <http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security/#ranges>. Accessed November 11, 2016.
- ⁶² Quandt, Sara et al. *Meaning and Management of Food Security Among Rural Elders*. The Journal of Applied Gerontology. 20(3): 356-376. September, 2001.
- ⁶³ Critical Insights. *Maine Elder Services Needs Assessment: Summary Report of Findings*. Prepared for Maine Association of Area Agencies on Aging. January, 2012.
- ⁶⁴ Butler, Sandra. *Conversations with Older Maine Adults about Food Insecurity and Food Assistance*. School of Social Work, University of Maine in collaboration with Maine Equal Justice Partners (MEJP), Legal Services for the Elderly, and Eastern Area Agency on Aging (EAAA). 2016.
- ⁶⁵ Good Shepherd Food Bank and Preble Street Research Report. *Hunger Pains: Widespread food insecurity threatens Maine's future*. February, 2017.
- ⁶⁶ Quandt, Sara, et al. *Meaning and Management of Food Security Among Rural Elders*. The Journal of Applied Gerontology. 20(3): 356-376. September, 2001.
- ⁶⁷ Feeding American and Meals on Wheels America. *Senior Hunger*. September, 2016. http://www.mealsonwheelsamerica.org/docs/default-source/advocacy/advocacy/fa_mowa_seniorhunger.pdf?sfvrsn=2. Accessed November 20, 2016.
- ⁶⁸ Feeding America. *Baby Boomers and Beyond: Facing Hunger after Fifty*. A Report on Older Adult Clients and Households of the Feeding America in 2013. <http://www.feedingamerica.org/hunger-in-america/our-research/senior-hunger-research/baby-boomers-executive-summary.pdf>. Accessed November 10, 2016.
- ⁶⁹ Butler, Sandra. *Conversations with Older Maine Adults about Food Insecurity and Food Assistance*. School of Social Work, University of Maine in collaboration with Maine Equal Justice Partners (MEJP), Legal Services for the Elderly, and Eastern Area Agency on Aging (EAAA). 2016.
- ⁷⁰ Ibid.

-
- ⁷¹ Maine's State Plan on Aging 2016-2020.
- ⁷² Gugliucci, Marilyn. *Maine Statewide Assessment on Aging: Survey and Focus Group Research*. Prepared for Maine Association of Area Agencies on Aging. March, 2012.
- ⁷³ Maine's State Plan on Aging, 2016-2020.
- ⁷⁴ Feeding American and Meals on Wheels America. *Senior Hunger*. September, 2016.
http://www.mealsonwheelsamerica.org/docs/default-source/advocacy/advocacy/fa_mowa_seniorhunger.pdf?sfvrsn=2. Accessed November 20, 2016.
- ⁷⁵ Older Americans Act Reauthorization Act of 2016 S. 192. Public Law No. 114-144. 4/19/2016. Sponsored by Senator Alexander, Lamar. Accessed October 10, 2016 from <https://www.congress.gov/bill/114th-congress/senate-bill/192>.
- ⁷⁶ Ibid.
- ⁷⁷ Meals on Wheels Frequently Asked Questions. <https://americaletsdolunch.org/faq/>. Accessed January 30, 2017.
- ⁷⁸ Meals on Wheels America: Maine 2016 Profile. <http://www.mealsonwheelsamerica.org/docs/default-source/factsheets/2012/mow-factsheet-maine2016.pdf?sfvrsn=2>. Accessed January 30, 2017.
- ⁷⁹ Ibid.
- ⁸⁰ Calculated from information in: The BDN Editorial Board. *DHHS should check the law, then rethink its plan to put Meals on Wheels out to bid*. Bangor Daily News. April 29, 2016.
<http://bangordailynews.com/2016/04/29/opinion/editorials/dhhs-should-check-the-law-then-rethink-its-plans-to-put-meals-on-wheels-out-to-bid/>. Accessed January 30, 2017.
- ⁸¹ E-mail correspondence with Senior FarmShare Program Manager. October, 2016.
- ⁸² Feeding America, Communication Resources, Senior SNAP Gap Network Take Action Guide, 2016.
- ⁸³ Good Shepherd Food Bank and Preble Street Research Report. *Hunger Pains: Widespread food insecurity threatens Maine's future*. February, 2017.
- ⁸⁴ Cunnyngham, Karen. *State Trends in Supplemental Nutrition Assistance Program Eligibility and Participation Among Elderly Individuals*. Final Report. Mathematica Reference Number: 06520. September 28, 2010.
- ⁸⁵ Farson Gray, Kelsey and Lauffer, Sarah. United States Department of Agriculture. *Characteristics of Supplemental Nutrition Assistance Program Households: Fiscal Year 2015*. Nutrition Assistance Program Report Series, Office of Policy Support. Report No. SNAP-16-CHAR. November, 2016
- ⁸⁶ Center on Budget and Policy Priorities. *Maine Food Supplement Program*. January 31, 2017.
http://www.cbpp.org/sites/default/files/atoms/files/snap_factsheet_maine.pdf. Accessed February 22, 2017.
- ⁸⁷ Estimate from Feeding America's HungerNet Map the Senior SNAP Gap.
- ⁸⁸ Maine Department of Health and Human Services. *Maine CACFP General Brochure*.
http://muskie.usm.maine.edu/maineroads/pdfs/CACFP/MECACFP_general_brochure.pdf. Accessed January 30, 2017.
- ⁸⁹ United States Department of Agriculture, Food and Nutrition Service. Memo Code: CACFP-20-2012. August 7, 2012. <http://www.fns.usda.gov/sites/default/files/CACFP20-2012.pdf>. Accessed January 30, 2017.
- ⁹⁰ Maine Senior Guide. http://www.seniorcare.com/directory/me/#acs_footnote Accessed January 30, 2017.
- ⁹¹ United States Government Accountability Office. *Older Americans Act: More Should be Done to Measure the Extent of Unmet Need for Services*. A Report to the Chairman, Special Committee on Aging, U.S. Senate. February, 2011.
- ⁹² Good Shepherd Food Bank and Preble Street Research Report. *Hunger Pains: Widespread food insecurity threatens Maine's future*. February, 2017.
- ⁹³ Hager, Erin et al. *Development and Validity of a 2-item Screen to Identify Families at Risk for Food Insecurity*. *Pediatrics*. 126 (1): e26-e32. 2010.
- ⁹⁴ Posner, Barbara et al. *Nutrition and Health Risks in the Elderly: The Nutrition Screening Initiative*. *American Journal of Public Health*. 83(7):972-978. 1993.
- ⁹⁵ Sahyoun, Nadine et al. *Nutrition Screening Initiative Checklist may be a Better Awareness/Educational Tool than a Screening One*. *Journal of the Academy of Nutrition and Dietetics*. 97(7):760-764. 1997.
- ⁹⁶ Tappenden, Kelly et al. *Critical Role of Nutrition in Improving Quality of Care: An Interdisciplinary Call to Action to Address Adult Hospital Malnutrition*. *Journal of the Academy of Nutrition and Dietetics*. 113(9):1219-1237. 2013.
- ⁹⁷ Leary, Maureen. *Addressing Medical and Social needs in a Rural Maine Community: Feasibility and Lessons Learned from a Pilot Post-hospital Discharge Meal Distribution Program*. A project by Healthcentric Advisory. June, 2016.