West Virginia Senior Services Needs Assessment and Funding Formula Design

Prepared for:

Metro Area Agency on Aging

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West Virginia Senior Services Needs Assessment and Funding Formula Design

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EXECUTIVE SUMMARY

The West Virginia Senior Services Needs Assessment and Funding Formula Design project was conducted by the Marshall University Center for Business & Economic Research (MU CBER) for the Metro Area Agency on Aging (Metro AAA). The project included a redesign of the funding formula that allocates appropriations to the four Area Agencies on Aging in the State.

This analysis was conducted using county-level Census data for 2019, survey input from employees of the senior centers around the State, a review of literature on senior health and wellness, and a review of funding formulas for senior services in other states. MU CBER executed the needs survey via online software and via telephone interviews in April, May, and June of 2021. A total of 291 individuals participated in the survey, producing 274 completed surveys.

Highlights of the survey reveal that transportation and in-home services are the largest areas of need, although respondents anticipate that demand for services of all types will increase over the next decade. The survey was conducted while the senior centers were temporarily closed due to Covid-19. Many respondents were anxious to reopen the centers and resume services and were observing the impact from the loss of those places as social gathering locales. There was consensus that more outreach is needed to locate seniors in need of services.

In design of the funding formula, specific attention was paid to the population of rural seniors, seniors living in poverty, and minority seniors due to high need in each of these demographics. More rural seniors are physically inactive, fewer report very good or excellent health, more report falling, and fewer receive health screenings and flu vaccines. Minority seniors have higher rates of economic insecurity than white adults. And even healthy low-income adults have poorer self-reported health and greater health risks compared to higher-income adults.

The new proposed funding formula is comprised of five factors.

1. **Population Aged 60 to 74:** This factor measures the number of individuals that are or are soon to be "young seniors" who are eligible for but do not use services as often as older seniors do. This group is also the "rising 75+" demographic for planning purposes.
2. **Population Aged 75+:** This factor addresses the age group most in need of services, including the "oldest old" aged 85+.
3. **Population 65+ in Poverty:** This factor focuses on individuals most in need of services due to lack of their own resources to pay for needs in retirement.
4. **Population of Minorities Age 65+:** This factor focuses on the seniors with the largest relative need due to higher shares in poverty and lower household incomes. Minorities also have less generational wealth to drawn on to pay for needs in retirement compared to their white counterparts.
5. **Relative Rurality:** This factor is an index that aggregates data on population, population density, remoteness, and built-up area for each county. It provides a scaled measure of county level access to services like healthcare and groceries relative to other counties.

This analysis compiled statistical data to support the five factors used in the proposed formula. This ensures that the resources allocated to each AAA match the most current demographic data.

Shares of Factor Data by Area Agency on Aging (AAA)

AAA	Pop 60 to 74	Pop 75+	Minority Pop 65+	Pop 65+ Poverty	Relative Rurality
Region 1/Northwestern	26.9%	27.7%	20.4%	24.0%	22.6%
Region 2/Metro	29.7%	30.4%	28.9%	32.2%	21.2%
Region 3/Potomac	22.4%	21.0%	23.1%	21.1%	27.2%
Region 4/Appalachian	21.0%	21.0%	27.5%	22.6%	29.0%
WV Total	100%	100%	100%	100%	100%

Each AAA share of each of the five factors, and the total portion of the funding formula, are calculated by multiplying the factor coefficients by the share of the factor for each county. The factors used and the coefficients on those factors are similar to those utilized by other regional states. Values for the AAAs are the sum of the counties within each of the four areas. Once implemented, this formula will triple the emphasis on seniors in poverty and reduce the emphasis on the base senior population by half, in addition to incorporating the rural factor.

Factor Coefficients for the Proposed Senior Services Funding Formula for 2022

Factor	Pop 60 to 74	Pop 75+	Minority Pop 65+	Pop in Poverty	Rurality
Coefficient	**0.1**	**0.3**	**0.1**	**0.3**	**0.2**

Proposed Formula Shares by AAA for 2022

AAA	Pop 60 to 74	Pop 75+	Minority Pop 65+	Pop 65+ Poverty	Relative Rurality	Total
Region 1/Northwestern	0.0269	0.0830	0.0204	0.0721	0.0452	0.2477
Region 2/Metro	0.0297	0.0911	0.0289	0.0967	0.0423	0.2888
Region 3/Potomac	0.0224	0.0630	0.0231	0.0634	0.0544	0.2264
Region 4/Appalachian	0.0210	0.0629	0.0275	0.0677	0.0581	0.2371
WV Total	**0.1**	**0.3**	**0.1**	**0.3**	**0.2**	**1.00**

Aside from the rurality factor, data used to construct the underlying factor data for counties is population data for 2019 as that was the most recent data year available. Incorporating the 2020 Census data is important for obtaining the most current population estimates, which per the U.S. Census will be released in March 2022.

West Virginia Senior Services Needs Assessment and Funding Formula Design

INTRODUCTION

The West Virginia Bureau of Senior Services (WVBOSS) is the lead provider of services to senior citizens in the State. WVBOSS operates under provisions of the Older Americans Act (OAA), an authorizing statue that enables federal grants that states use for social services in the field of aging. The OAA emphasis is on services that provide seniors "the opportunity to remain in their own homes and communities with a high quality of life for as long as possible (West Virginia Bureau of Senior Services, 2021)."

Major WVBOSS services are nutrition, both delivered and in congregate settings and transportation. Additional services include in-home services, caregiver support services, legal assistance, a long-term care ombudsman program, disease prevention and health promotion programs, and several others. WVBOSS manages these programs via Aging and Disability Networks under the purview of the United States Administration on Community Living (ACL), within the United States Department of Health and Human Services.

West Virginia's four Area Agencies on Aging (AAAs) are part of a nationwide network of organizations created by the Older Americans Act to coordinate access to services and programs. Each AAA is responsible for a planning and service area that includes multiple counties. The AAAs contract with senior centers for the provision of meals, transportation, and other services.

Overview of Services Provided

The West Virginia provider network consists of 55 county-based provider agencies, managed by the four AAAs, nine long-term care ombudsmen, a contract relationship with WV Legal Aid and one Senior Legal Aid services provider (West Virginia Bureau of Senior Services, 2021).

These services are funded by federal and State sources, including the West Virginia Lottery and casino license fees. Funds are allocated to the four AAAs based on demographic criteria.

Purpose of this Project

The Marshall University Center for Business & Economic Research (MU CBER) was contracted by the Metro AAA to conduct a needs assessment and redesign of the funding formula that allocates appropriations to the AAAs. MU CBER conducted this analysis using county-level Census data for 2019, input from employees of the senior centers around the State, a review of literature on senior health and wellness, and a review of funding formulas for senior services in other states.

DEMOGRAPHIC DATA

West Virginia's senior population has been growing. This growth is in contrast to static total population over the same time period.

The ratio of the population age 65+ to the population age 20 to 64 is called the **old age dependency ratio**. This is a measure of the retired population compared to the working population, and measures how many retired people are supported by each working person in a defined economy. This is not a perfect measure, as some individuals over age 65 continue to work, and not all individuals between 20 and 64 are working. But an increasing population of retirees combined with a shrinking population of prime age working adults is an indicator of potential reduced resources/tax revenue to fund senior programs in coming years.

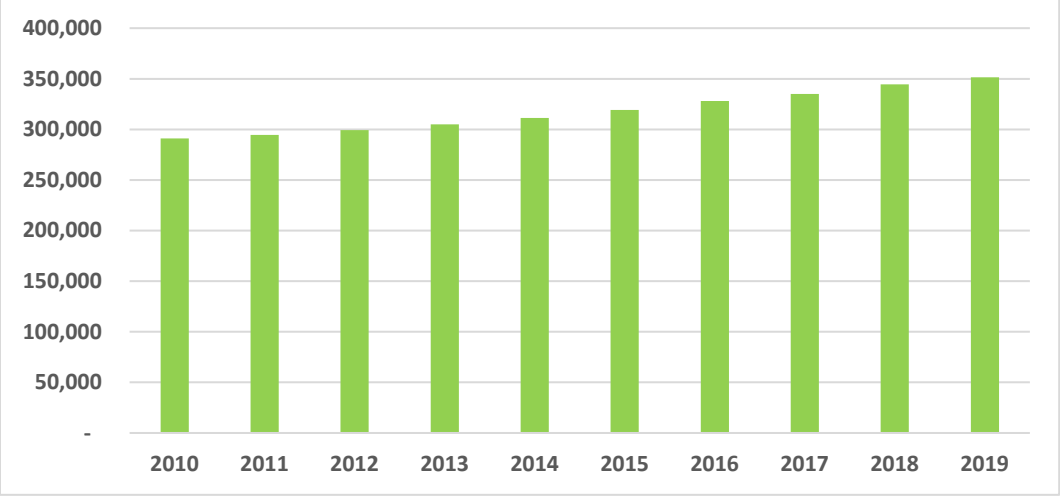
For the U.S. the old-age dependency ratio is expected to increase rapidly between 2010 and 2030, from 22 to 35, as all of the baby boomers move into the 65+ category (U.S. Census Bureau, 2010). West Virginia's old-age dependency ratio was already at 33 percent in 2019, having risen from about 25 percent in 2007.

Table 1 West Virginia Population by Age Group and Old-Age Dependency Ratios, 2007 to 2019

AGE GROUP	2007	2012	2017	2019
Age 0 to 19	436,444	438,718	422,007	414,434
Age 20 to 64	1,093,813	1,112,411	1,078,510	1,051,630
Age 55 to 64	227,880	263,313	268,042	262,267
Age 65+	278,530	299,352	336,326	351,196
Total Population	1,808,787	1,850,481	1,836,843	1,817,260
Old-Age Dependency Ratio	25%	27%	31%	33%

SOURCE: U.S. Census Bureau, ACS 5-Year Data (average of most recent 5 years).

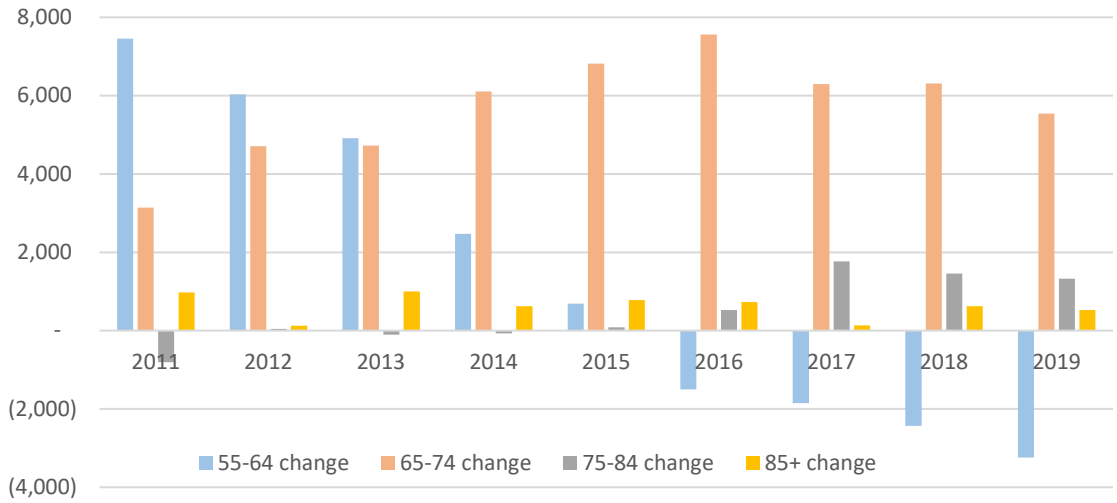
Table 2 West Virginia Population Age 65+, 2010 to 2019



SOURCE: U.S. Census Bureau, ACS 5-Year Data.

While the population of seniors has grown over the last decade, this trend is likely to slow and may eventually reverse due to recent declines in the population of emerging seniors aged 55 to 64. Census data for 2020, once available, will shed more light on recent trends.

Figure 1 Population Trends – Gains/Losses by Age Group: 2011 to 2019

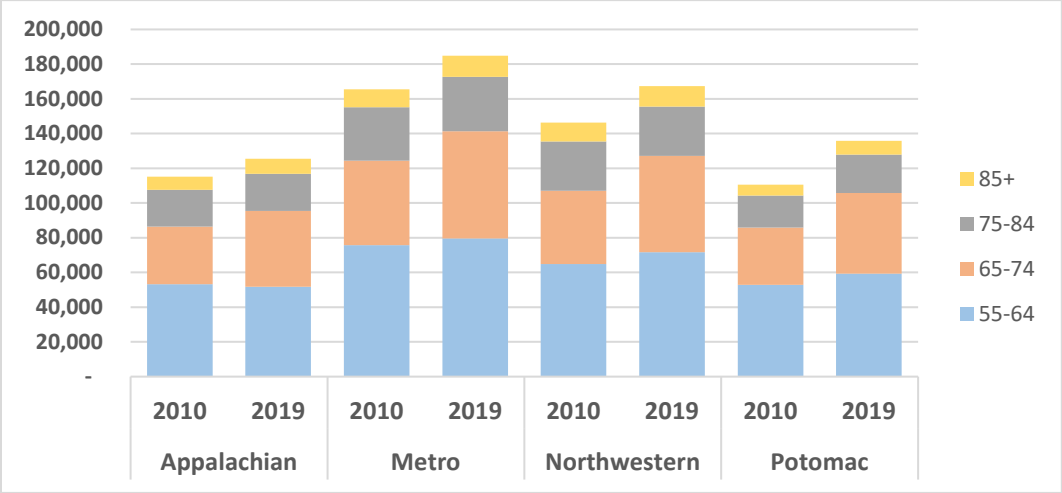


Population Trends by County and Area Agency on Aging (AAA)

From 2010 to 2019, every West Virginia county saw population growth in the 65+ demographic. However, some counties saw considerably larger growth, and some saw very slight growth. Trends vary across the four AAAs. The Potomac AAA saw the largest growth for the 65+ age group, at 32%. The other three AAAs all saw between 17 and 19 percent growth.

For the 55 to 64 age group, the Appalachian AAA was the only region to lose residents (-1,600) from 2010 to 2019. At the same time Potomac gained 6,500, Northwestern 6,800, and Metro 3,800 residents. However, from 2015 or 2016 to 2019 all four AAAs lost population in this group.

Figure 2 Population by Age Group, by Area Agency on Aging – 2010 and 2019



Minority Seniors

Specific attention is paid to minority seniors, Black and Latino or Hispanic adults in particular, because these demographics have higher rates of economic insecurity than white adults. Per Census Bureau data, 60% of Black and Latino or Hispanic women over age 65 had incomes below 200% of the poverty line in 2017. For white women, that number was 41.4% (Henry J Kaiser Family Foundation, 2018). In West Virginia, the median income for Black households is $33,000 while it is $47,000 for White households, a difference of $14,000. This varies by county, with differences as high as $26,000 to $30,000 in Cabell, Marion, Ohio, and Wood counties. This reflects all households, as income data for 65+ households is less reliable due to sample size.

The minority share of West Virginia's 65+ population is a little over four percent of the total senior population. This is a smaller share than for the broader total population, which is comprised of about eight percent minorities. The minority population includes all racial and ethnic groups except the non-Hispanic White alone population. These figures include estimates for the White Hispanic population, which is about 71% of the total Hispanic population in West Virginia per Census data.

Table 3 West Virginia's Population Estimates by Racial and Ethnic Group, 65+ and Total in 2019

Race/Ethnicity	Population 65+	% of 65+	Total Pop	% of Total Pop
African American/Black	8,673	2.5%	66,990	3.7%
American Indian/Alaska Native	575	0.2%	3,667	0.2%
Asian	1,635	0.5%	14,523	0.8%
Native Hawaiian/Pacific Islander	72	0.0%	410	0.0%
Some Other Race	314	0.1%	7,971	0.4%
Two or More Races	2,254	0.6%	32,135	1.8%
White Non-Hispanic	337,663	96.1%	1,691,895	93.1%
White Hispanic1	1,276	0.4%	20,054	1.1%
Total	351,186		1,817,5912	
Total Minority Population	14,799	4.2%	145,837	8.0%

SOURCE: U.S. Census Bureau, ACS 5-Year Data and MU CBER estimate.

Due to high margins of error (MOE) for minority population estimates, particularly for 75+ demographics, it is possible this data underestimates the population of minority seniors. Estimates for the African American population, West Virginia's largest minority group, illustrate this. Data for the largest two counties within each AAA reveals that this may be an issue even in the counties with relatively large Black populations.

1 Estimate based on Census data for Hispanic seniors and the white-Hispanic population.

2 Does not match other population totals due to use of different dataset.

The cause of these high errors is small sample sizes. This is particularly true for the 75 to 84 and 85+ demographics, where MOEs exceed the population estimate for five of the eight largest counties. MOEs are similar for other minority groups.

Table 4 Margins of Error for Population Estimates for African Americans by Age in 2019

County	AAA Region	55 to 64		65 to 74		75 to 84		85+	
		Est	MOE	Est	MOE	Est	MOE	Est	MOE
Berkeley	III	1,218	±70	670	±151	58	±69	43	±77
Cabell	II	517	±43	344	±101	106	±76	102	±98
Jefferson	III	563	±50	303	±86	140	±89	50	±58
Kanawha	II	1,802	±101	1,146	±56	393	±109	235	±110
Marion	I	146	±63	244	±66	55	±42	12	±40
Mercer	IV	504	±38	337	±65	165	±63	40	±54
Monongalia	I	284	±121	129	±122	93	±94	0	±56
Raleigh	IV	761	±46	521	±60	198	±102	101	±68

Seniors in Poverty

MOEs are also high for estimates of the number of minority seniors in poverty. For example, the point estimate for the number of African Americans age 75+ in poverty in Cabell County is zero (with an MOE of ±28). The estimates for the number of African Americans aged 65-74 in poverty in Logan County and in McDowell County, one of the poorest counties in West Virginia, are also zero. Due to these inaccuracies this analysis focuses on the total number of seniors in poverty.

Statewide, there are about 33,409 seniors aged 65+ living in poverty. This is about 10 percent of the total senior population. At the county level, the share of seniors age 65+ in poverty ranges from a low of five percent in Tucker County to a high of 19 percent in Webster County.

The **federal poverty threshold** is based on age and the size of a family unit. In 2020, for a single person aged 65 or older the threshold was $12,415 in annual income. For a two-person household with a householder aged 65 or older it was $15,644 (U.S. Census Bureau, 2021).

The number of older adults living in poverty increases when using the Census Bureau's Supplemental Poverty Measure, which includes factors such as financial resources and out-of-pocket spending. Retirement incomes, Social Security, and Medicare aren't always enough to cover the basic necessities. According to the National Council on Aging millions of seniors struggle to meet expenses even though they're not considered poor because they live above the poverty line (University of Southern California, 2020).

Rural Seniors

Rural seniors comprise a large portion of the clients served in West Virginia and every county has residents living in places considered rural. The majority of the State's counties are more than 50 percent rural, and 13 of 55 counties are 100 percent rural.

Rural communities provide fewer services than metropolitan communities e.g., healthcare, housing, transportation, opportunities for civic engagement, nutrition services, grocery stores, and social services. Even though older adults in rural areas report larger social networks than their urban counterparts, they have increased risks of social isolation and loneliness, which has been linked to poor health outcomes (Henning-Smith, Moscovice, & Kozhimannil, 2019).

MU CBER estimated of the number of rural seniors residing within each AAA using Census data for rural and urban designation. Census tract data was aggregated to create a county-level value for percent rural, which was then multiplied by the population aged 65+. However, because the reality of living in an area designated as rural differs from county to county, the simple count of individuals living in rural census blocks does not account for differences in terms of access to services and provisions. To rectify this, MU CBER identified a tool that accounts for aspects of ruralness other than population and scaled those results to create distinction between counties.

A tool developed by geography researchers at Purdue University creates an index of **relative rurality (IRR)** for every county in the U.S. that enables broad analysis of rurality. It includes four separate dimensions: population size, population density, remoteness, and built-up area (Waldorf & Kim, 2018). This index ranks the relative rurality of each West Virginia county.

As each AAA is comprised of varying numbers of counties, average county IRR was used to measure rurality for each AAA. The rurality values were scaled from 0 to 1 to accent differences between the 55 counties, creating a spectrum of rurality that heightens observation of variation between counties within a very rural State. These scaled values are shown in Appendix A.

The four AAAs vary by size with respect to each of the key factors important for quantifying senior needs. These data are the starting point for design of the new funding formula. Rural population estimates were not used and are only shown for comparison purposes.

Table 5 Key Demographic Data by AAA (2019)

Area	Pop 60 to 74	Pop 75+	Pop 65+ Poverty	Minority Pop 65+	Rural 65+ Pop Est	Rural Pop %	Relative Rurality
Northwestern	91,993	39,647	8,034	3,127	38,266	20.8%	22.6%
Metro	101,826	43,473	10,774	4,428	48,212	26.2%	21.2%
Potomac	76,876	30,067	7,066	3,541	50,179	27.3%	27.2%
Appalachian	71,788	30,047	7,535	4,208	47,322	25.7%	29.0%
WV Total	342,483	143,234	33,409	15,304	183,979	100%	100%

SOURCE: U.S. Census Bureau, ACS 2019 5-Year Data, Purdue University, and MU CBER.

The following maps illustrate the difference in rank for the rural population vs. the relative rurality rank for West Virginia's 55 counties. Berkeley County has the second largest rural population but is the least rural in terms of the IRR. The scaling method assigns a value of 0 to Berkeley County (Potomac AAA) to account for the relative lack of rurality, and a value of 1 to Pocahontas County (Appalachian AAA) to account for the most extreme rurality.

Figure 3 Map of County-Level Relative Rurality Rank

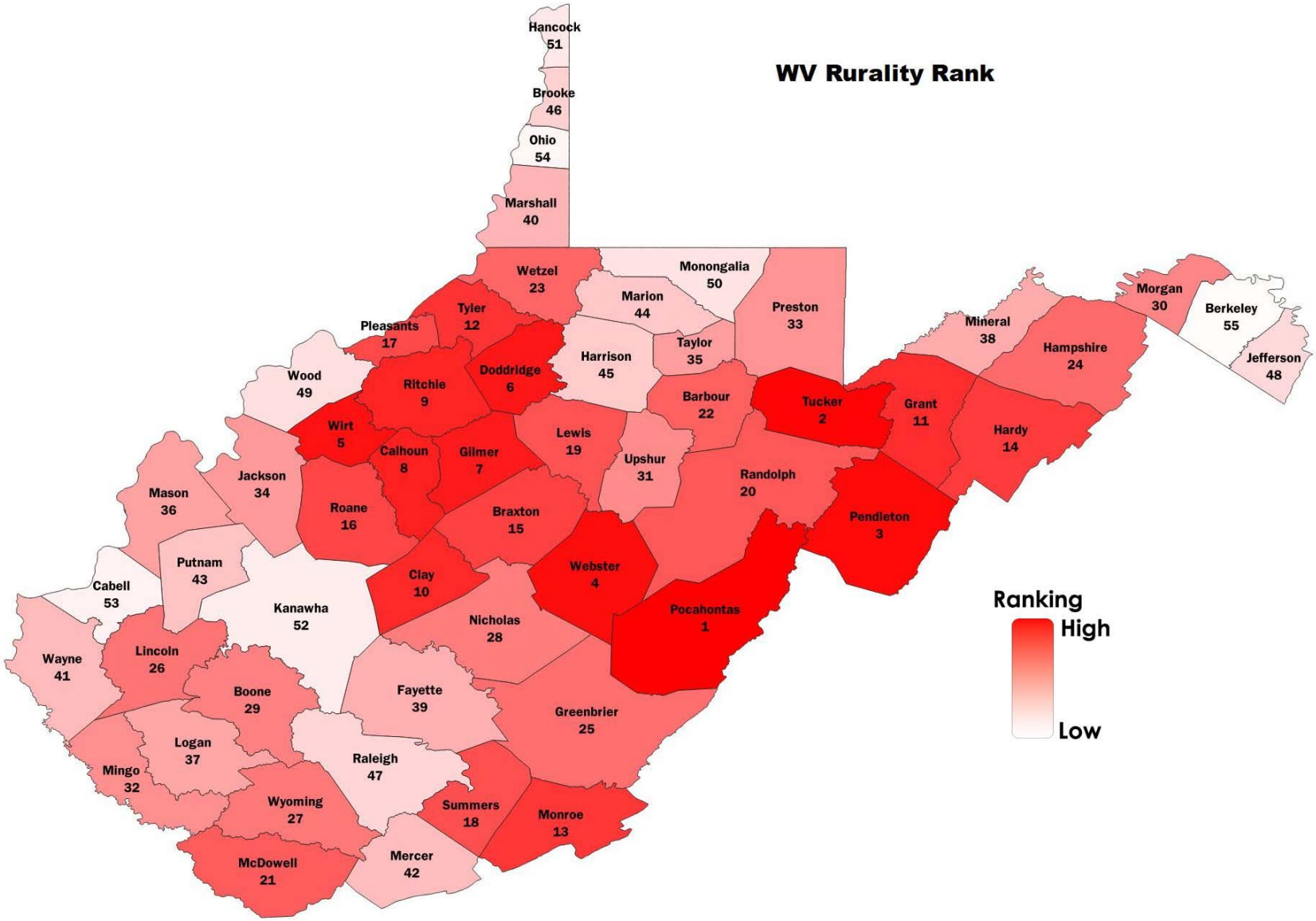
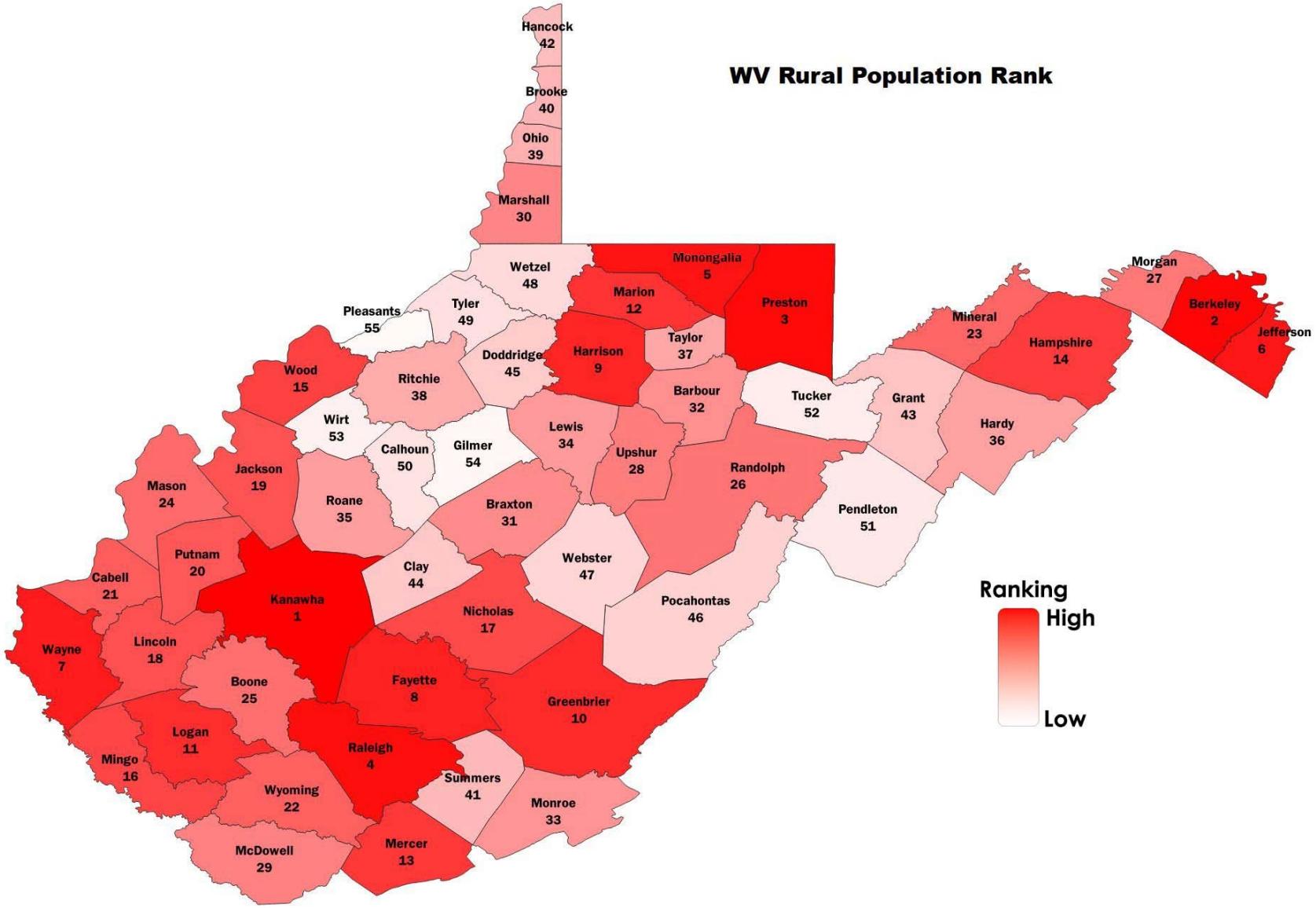


Figure 4 Map of County-Level Rural Population Rank



Scaled Average Rurality

MU CBER scaled the IRR values to provide distinction between the counties and accentuate differences in rurality. Because each of the four AAA regions contain counties with similar degrees of ruralness, the simple averages do not provide much distinction. Scaling provides more meaningful distinction.

Step 1: Average the county Index of Relative Rurality (IRR) values, calculated by Purdue University, for each AAA. The IRR is a county-level value based on 4 factors of ruralness:

- Size: logarithm of population size
- Density: logarithm of population density.
- Remoteness: network distance. The shortest route along the network of roads and highways, using a geospatial database of the U.S. Census Bureau and Federal Highway Administration.
- Built-up area: urban area (as defined by the US Census Bureau) as a percentage of total land area.

Step 2: Scale the average IRR values using Mix-Max Scaling to normalize/spread the 55 county values between 0 and 1.

The formula for each AAA is: (x – wvmin)/(wvmax-wvmin), where

- x = average IRR for each AAA
- wvmin = maximum county IRR for West Virginia (Pocahontas at 0.584)
- wvmax = minimum IRR for West Virginia (Berkeley at 0.393)

Example for Northwestern AAA: Scaled IRR = (0.4959 – 0.393)/(0.5840 – 0.393) = 0.5386

NOTE: This result is the same as if all 16 Northwestern counties had been scaled and averaged.

STEP 3: Sum the **scaled average rurality** for the four AAAs and divide each average by the sum to calculate each AAA's share. The Share of Rurality is the factor share for the funding formula.

Table 6 Scaled Average Rurality Formula

AAA	x (avg IRR)	wv min	wv max	Scaled Rurality	Share of Rurality
Northwestern	0.4959	0.393	0.584	0.5386	0.2261
Metro	0.4893	0.393	0.584	0.5040	0.2116
Potomac	0.5167	0.393	0.584	0.6478	0.2720
Appalachian	0.5251	0.393	0.584	0.6915	0.2903
Sum				2.3820	1.0000

County level scaled values are shown in Appendix A.

NEEDS ASSESSMENT

MU CBER undertook a three-pronged approach to assess the needs of West Virginia's seniors. This comprised a series of interviews with the Director of WVBOSS and each AAA Director, a literature review, and design and execution of a survey of providers of senior services.

Literature Review

The literature review focused on research and evidence about seniors in poverty, rural seniors and the design and results of other surveys focused on senior needs around the country. MU CBER also collected examples of other State funding formulas for senior services.

Key findings regard the health effects of lower incomes. Even healthy low-income adults have poorer self-reported health and greater health risks compared to higher-income adults and are much more likely to smoke and to be obese. Low-income adults are also more likely to have mental health problems, have more limited access to care, and are less likely to seek preventative healthcare (Cunningham, 2018).

Older adults experiencing poverty tend to live on fixed incomes, have limited transportation options, and have difficulty meeting their basic nutritional needs. This makes them especially vulnerable when an unexpected life event or financial expense occurs, because they typically do not have sufficient savings or the ability to work more to make up for losses (National Institute on Retirement Security, 2020).

One consequence of this is that many low-income seniors reported having difficulty following their doctor's dietary advice because they could not afford or obtain fresh produce and healthy proteins (Brookings Institution, 2020). Research indicates that food-insecure seniors have less nutritious diets, have worse health outcomes, and are at higher risk for depression than food-secure seniors. These impacts are compounded by the fact that compared to other adult age groups seniors are particularly vulnerable to the health consequences of food insecurity. Households with grandchildren are almost three times as likely to be food insecure (National Foundation to End Senior Hunger, 2014).

The 2019 "America's Health Rankings Senior Report" is a state-level assessment of the health of seniors. The report concludes that the health of young seniors, aged 65 to 74, is both better and worse in 2018 compared to 15 years ago. While early deaths and smoking rates have declined, excessive drinking, obesity, diabetes, and suicide have increased. West Virginia was ranked 46th in this assessment (United Health Foundation, 2019).

The 2018 version of this report focused on rural seniors and found that this demographic has several health challenges compared to suburban and urban seniors. More rural seniors are physically inactive, fewer report very good or excellent health, more report falling, and fewer receive health screenings and flu vaccines (United Health Foundation, 2018). West Virginia was ranked 45th overall for risk of social isolation, due largely to high rates of disability and high chance of being divorced, separated, or widowed.

West Virginia Senior Needs Survey

MU CBER conducted a statewide needs assessment survey to complement the literature review and to get firsthand information about what seniors need.

The survey was designed to assess the unmet and emerging needs of seniors from the perspective of service providers. MU CBER surveyed employees, rather than seniors themselves, because of the inability to interview seniors in person due to Covid-19. Also, as center employees interact extensively with seniors and many are seniors themselves, they have a broad experience and equally valuable input. A broad cross section of employees of service providers were surveyed, including directors, coordinators, in-home care providers, cooks, nutrition managers, nurses, and drivers.

MU CBER executed the survey via an online software and via telephone interviews. The survey was conducted in April, May, and June of 2021. Participants were first approached via email with the opportunity to take the survey online. Non-respondents were contacted via telephone and were given the opportunity to take the survey over the phone.

A total of 291 individuals participated in the survey, producing 274 completed surveys. Responses are provided in Appendix B. Open-ended responses are provided in a separate document.

This number of responses allows a confidence of 95%, with a level of precision of ±7%, that the quantifiable answers accurately reflect the views of the service providers when discussing the needs of West Virginia seniors (Israel, 1992).3 However, at the AAA level the results are less reliable due to smaller numbers of responses.

Table 7 Survey Responses by AAA

Appalachian	Metro	Northwestern	Potomac	Grand Total
49	68	79	78	274

Survey Questions

The survey was comprised of 46 questions in 10 sections. The 10 sections regarded:

1. Role and location of interviewee
2. Demographics of seniors served e.g., rural vs. non-rural
3. Transportation needs
4. The impact and presence of isolation
5. Nutrition needs

3 Based on an estimate that the total number of employees at all four AAAs is between 2,000 and 4,000.

6. Medical needs
7. Staffing
8. Housing
9. Access to information
10. Changing needs over the next 10 years

Survey Highlights

- 98% of respondents said that they serve rural seniors.
- Top needs identified for rural seniors were homemaker services, transportation, and assistance with activities of daily living.
- The top need identified for minority seniors is more transportation, followed by nutrition, and in-home services. Many stated that there is a need to conduct more outreach to minorities.
- Respondents frequently stated that they need more funds for transportation services.
- 54% responded that their seniors are highly impacted by isolation, with 92% stating that covid-19 has greatly increased this isolation. The required closing of the centers was a major issue.
- 81% stated that seniors in their area do not have adequate access to broadband.
- 37% said they knew at least 25 seniors who do not utilize the nutrition programs but need this service and 31% said they knew 10 to 25 seniors in this situation.
- 79% said they know seniors who have difficulty following their doctor's dietary advice because they cannot access or afford fresh produce and healthy proteins. Affordability is the main barrier.
- Dental health and preventative care were the most frequently cited unmet medical needs.
- 26% of respondents said they feel their center is severely understaffed and 30% feel they are moderately understaffed.
- Low pay was cited as the greatest barrier to hiring more workers, with 59% of respondents considering it a high barrier.
- The greatest staffing needs are for in-home healthcare and in-home services, with both of these considered to be of high need.
- 53% of respondents consider sub-standard housing to be a significant or moderate problem.
- 64% state that their seniors are only somewhat aware of the services available to them and 92% believe more outreach is needed.

These findings are supported by the results from other surveys. Also in 2021, WVBOSS distributed their own needs survey titled "A Needs Assessment and Public Input Survey" (West Virginia Bureau of Senior Services, 2021). The results of this survey match some of the findings from MU CBER's survey. Two examples stand out.

- Question: What do you believe are the most critical/difficult issues faced by West Virginia Seniors? Top 3 issues per the responses:
    - Contact with other people and socialization (76%)
    - Transportation (65%)
    - In-home care (67%)

- Question: What services and supports are most important to you as a West Virginia senior? Top 3 issues per the responses:
    - In-home care (Bathing, dressing, grooming, toileting, etc.) – 61%
    - Transportation – 56%
    - Meals on Wheels – 51%

Application to Funding Formula

These survey results corroborate the need to directly assess the unique needs of West Virginia's rural seniors, a factor that was not explicitly accounted for in previous funding formulas. The repeated feedback on the need for more transportation services in particular aligns this aspect of need with rural demographics.

Other formula factors, the base population of individuals considered to be seniors by age, minority seniors, and seniors living in poverty, were already explicitly accounted for. Survey feedback points to the needs of rural minority seniors being largely the same as for white seniors, with in-home care and services, and transportation comprising most unmet needs .

Survey respondents anticipate that demand for services of all types will increase over the next decade. The majority expect demand to increase by at least 50 percent for all services, provided that funding is in place. While the funding formula does not affect the amount of funds available, it serves to match funds to geographic areas based on need.

INTRASTATE FUNDING FORMULA

West Virginia's Intrastate Funding Formula must meet the requirements of Section 305(a)(2)(C) of the Older Americans Act (OAA) of 1965. This Act requires the State to:

> *"in consultation with area agencies, in accordance with guidelines issued by the Assistant Secretary, and using the best available data, develop and publish for review and comment a formula for distribution within the State of funds received under this subchapter that takes into account i) the geographical distribution of older individuals in the State; and ii) the distribution among planning and service areas of older individuals with greatest economic need and older individuals with greatest social need, with particular attention to low-income minority older individuals.*

The formula is used to determine each AAA's share of Title III funds for supportive services, congregate meals, home-delivered meals, preventative health, and caregiver services, as well as a portion of State-funded senior programs.

Formula Elements

The funding formula is comprised of five factors, as required by the OAA.

1. **Population Aged 60 to 74:** This factor the age group that are or are soon to be "young seniors" who are eligible for but do not use services as often as older seniors do. This group is also the "rising 75+" demographic for planning purposes. (10% weight)
2. **Population Aged 75+:** This factor addresses the age group most in need of services, including the "oldest old" aged 85+. (30% weight)
3. **Population 65+ in Poverty:** This factor focuses on individuals most in need of services due to lack of their own resources to pay for needs in retirement. (30% weight)
4. **Population of Minorities Age 65+:** This factor focuses on the seniors with the largest relative need due to higher shares in poverty and lower household incomes. Most minorities also have less generational wealth to drawn on to pay for needs in retirement compared to their white counterparts. (10% weight)
5. **Scaled Relative Rurality:** This factor is based on Purdue University's Index of Relative Rurality (IRR) which aggregates data on population, population density, remoteness, and built-up area by county using GIS analysis. It provides a measure of relative access to services like healthcare and groceries. Since all 55 counties contain rural areas, MU CBER scaled the indices to accent differences in rurality and assigned a value of zero to the least rural county (Berkeley) and a value of 1 to the most rural county (Pocahontas). (20% weight)

These factors are in keeping with OAA guidelines and were established to reflect changing demographics and to give preference to target populations. Prior to 2022 the formula was heavily focused on the size of the senior population, with lesser emphasis on the number of seniors living in poverty and minority seniors and contained no rurality metric.

Table 8 Factor Coefficients for the Proposed Senior Services Funding Formula for 2022

Factor	Pop 60 to 74	Pop 75+	Minority Pop 65+	Pop 65+ in Poverty	Rurality
Coefficient	**0.1**	**0.3**	**0.1**	**0.3**	**0.2**

Numerical Statement of the Funding Formula

Each of the four AAA's share of the formula is the sum of the county shares within its area. Each county share is calculated by multiplying the factor coefficients by the county's share of each of the four Census data-based factors for West Virginia. The Rurality factor is based on each AAA's scaled average relative rurality. For each AAA, the formula share is the sum of:

1. The share of individuals aged 60 to 74 residing in each county multiplied by 10%.
2. The share of individuals aged 75+ residing in each county multiplied by 30%.
3. The share of individuals aged 65+ in poverty residing in each county multiplied by 30%.
4. The share of minority individuals aged 65+ residing in each county multiplied by 10%.
5. The share of scaled average relative rurality for each AAA multiplied by 20%.

Numerically, an example of formula for AAA_1 (1 of 4) is:

AAA_1 Funding Share *= sum of AAA_1 county shares of Pop 60 to 74* **** 0.1*** *+ sum of AAA_1 county shares of Pop 75+* **** 0.3*** *+ sum of AAA_1 county shares of Minority Pop 65+* **** 0.1*** *+ sum of AAA_1 county shares of Pop 65+ In Poverty* **** 0.3*** *+ AAA_1 scaled average county Rurality* **** 0.2***

Table 9 Shares of Factor Data by AAA

Area	Pop 60 to 74	Pop 75+	Minority Pop 65+	Pop 65+ Poverty	Relative Rurality
Region 1/Northwestern	26.9%	27.7%	20.4%	24.0%	22.6%
Region 2/Metro	29.7%	30.4%	28.9%	32.2%	21.2%
Region 3/Potomac	22.4%	21.0%	23.1%	21.1%	27.2%
Region 4/Appalachian	21.0%	21.0%	27.5%	22.6%	29.0%
WV Total	100%	100%	100%	100%	100%

Table 10 Formula Shares by AAA for 2022

Area	Pop 60 to 74	Pop 75+	Minority Pop 65+	Pop 65+ Poverty	Relative Rurality	Total
Region 1/Northwestern	0.0269	0.0830	0.0204	0.0721	0.0452	0.2477
Region 2/Metro	0.0297	0.0911	0.0289	0.0967	0.0423	0.2888
Region 3/Potomac	0.0224	0.0630	0.0231	0.0634	0.0544	0.2264
Region 4/Appalachian	0.0210	0.0629	0.0275	0.0677	0.0581	0.2371
WV Total	**0.1**	**0.3**	**0.1**	**0.3**	**0.2**	**1.00**

Table 11 Key Demographic Data by AAA (2019)

Area	Pop 60 to 74	Pop 75+	Pop 65+ Poverty	Minority Pop 65+	Rural 65+ Pop Est	Rural Pop %	Relative Rurality
Northwestern	91,993	39,647	8,034	3,127	38,266	20.8%	22.6%
Metro	101,826	43,473	10,774	4,428	48,212	26.2%	21.2%
Potomac	76,876	30,067	7,066	3,541	50,179	27.3%	27.2%
Appalachian	71,788	30,047	7,535	4,208	47,322	25.7%	29.0%
WV Total	342,483	143,234	33,409	15,304	183,979	100%	100%

SOURCE: U.S. Census Bureau, ACS 2019 5-Year Data, Purdue University, and MU CBER.

Comparison with Other States

The factors within the formula and the coefficients on those factors are similar to those utilized by other regional states. Compared to previous versions for West Virginia, this formula triples the emphasis on seniors in poverty and reduces the emphasis on the base population by half.

Table 12 Regional States Senior Funding Formula Components

State	IN	NC	PA pre-2021	PA as of 2021	WV pre-2022	WV 2022
Pop 60+	0.3	0.5	0.1			
Pop 70+					0.8	
Pop 60 to 74				0.01		0.1
Pop 75+			0.2	0.04		0.3
In Poverty	0.45	0.3	0.25	0.6	0.1	0.3
Minority	0.05	0.1	0.2	0.15	0.1	0.1
Minority Poverty	0.05					
Rural	0.1	0.1	0.25	0.1		0.2
65+ Live Alone				0.1		
ADL Limits	0.05					

Sources: See References.

Allocation of Funds Demonstration

The following table provides AAA figures for the revised funding formula based on FY21 Title III allocations, and including administration expenses, an amount of $10.6 million.

Table 13 Demonstration of Allocation of Funds – FY 2021 Title III

AAA	Admin	IIIB	IIIC	IIID	IIIE	SP for ELD	Total
1	160,000	$536,699	$1,067,399	$39,004	$263,682	$579,584	$2,646,368
2	$160,000	$625,741	$1,244,487	$45,475	$307,429	$679,398	$3,062,530
3	$160,000	$490,620	$975,757	$35,655	$241,043	$514,186	$2,417,261
4	$160,000	$513,910	$1,022,077	$37,348	$252,486	$532,280	$2,518,102
Total	$640,000	$2,166,970	$4,309,719	$157,483	$1,064,640	$2,305,448	$10,644,260

2020 Census Data Updates

To ensure that the formula is current, the factor data used to construct the allocations will be updated every three years. It is recommended that the formula be updated with 2020 data once available and that updates occur every three years following that update.

In November 2021 the Census Bureau announced a delay in release of the 2016-2020 American Community Survey (ACS) 5-year data originally targeted for December 2021. The website states that "Additional time is needed to continue refining our methodology so that we can minimize the impact of nonresponse bias due to the COVID-19 pandemic." The current plan targets a March 2022 release date (U.S. Census Bureau, 2021).

Incorporating the 2020 Census data is important for obtaining the most current population estimates. It is also the source of updates for the ruralness of the population by county.

As of December 2021, only experimental estimates developed from 2020 ACS 1-year data, were available from the Census. These estimates do not include county-level data and are not available on the main Census website.

SUMMARY

This analysis has identified several of the existing and emerging needs of West Virginia seniors as observed by those in the best position to do so, the providers of those services. This analysis also compiled statistical data to inform the WVBOSS on how to reallocate financial resources to each region of the State in a way that matches current demographics.

Once implemented, this formula will triple the emphasis on seniors in poverty and reduce the emphasis on the base senior population by half compared to FY 2022. In addition, by incorporating a rurality metric this formula explicitly accounts for the challenges of delivering services in remote locations.

Conversations with healthcare professionals that work with seniors underscore that what is most important to seniors is quality of life, not being a burden to others, independence, functionality in daily living, mobility, economics, and pain (Walker, 2019). WVBOSS serves thousands of seniors across West Virginia, but some go unserved due to lack of resources or lack of information.

Highlights of findings from this assessment reveal that more outreach is needed to locate seniors in need of services. Transportation and in-home services are the largest areas of need. This assessment was conducted while the senior centers were temporarily closed due to Covid-19. Many respondents were anxious to reopen the centers and resume services and were observing the impact from the loss of those places as social gathering locales.

Demographic data show that the growth in West Virginia's senior population may not continue for much longer. This possibility is driven by recent contraction in the population of individuals aged 55 to 64, those of prime working-age, who may be leaving the State for better work prospects or for retirement. If this trend continues the demand for senior services may also begin to decline as this age cohort begins to need services. Looking forward these trends can be anticipated by regularly observing population data.

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APPENDIX A – FACTOR DATA BY COUNTY AND AAA (2019)

Table 14 County and AAA Data Used in the Funding Formula

County/AAA	Pop 60 to 74	Pop 75+	Minority Pop 65+	Pop 65+ In Poverty	Index of Relative Rurality (IRR)	Average IRR	Scaled Rurality
NORTHWESTERN AAA	**91,993**	**39,647**	**3,127**	**8,034**		**0.4958**	**0.2261**
Brooke	5,332	1,557	44	227	0.452		0.309
Calhoun	1,613	680	18	184	0.559		0.869
Doddridge	1,662	684	45	106	0.559		0.869
Gilmer	1,219	608	17	81	0.559		0.869
Hancock	6,099	2,911	310	736	0.422		0.152
Harrison	12,434	5,556	427	1,172	0.453		0.314
Marion	10,321	4,521	516	819	0.454		0.319
Marshall	6,670	2,673	104	463	0.486		0.487
Monongalia	13,220	4,989	694	718	0.426		0.173
Ohio	8,299	3,960	339	848	0.408		0.079
Pleasants	1,340	564	11	152	0.537		0.754
Ritchie	2,062	909	100	248	0.553		0.838
Tyler	1,808	804	4	127	0.550		0.822
Wetzel	2,905	1,583	70	422	0.528		0.707
Wirt	1,088	450	19	157	0.561		0.880
Wood	15,921	7,198	409	1,576	0.427		0.178
METRO AAA	**101,826**	**43,473**	**4,428**	**10,774**		**0.4892**	**0.2116**
Boone	4,695	1,567	89	406	0.519		0.660
Cabell	15,690	7,350	817	1,479	0.413		0.105
Jackson	5,383	2,604	106	599	0.509		0.607
Kanawha	35,438	15,343	2,393	3,551	0.417		0.126
Lincoln	3,974	1,553	-	393	0.522		0.675
Logan	6,573	2,418	211	932	0.502		0.571
Mason	5,142	2,321	159	481	0.507		0.597
Mingo	4,735	1,614	200	560	0.515		0.639
Putnam	9,991	4,064	348	851	0.455		0.325
Roane	2,784	1,209	56	322	0.539		0.764
Wayne	7,421	3,430	49	1,199	0.484		0.476
County/AAA	**Pop 60 to 74**	**Pop 75+**	**Minority Pop 65+**	**Pop 65+ In Poverty**	**Index of Relative Rurality (IRR)**	**Average IRR**	**Scaled Rurality**
POTOMAC AAA	**76,876**	**30,067**	**3,541**	**7,066**		**0.5167**	**0.2720**

Barbour	2,936	1,324	50	368	0.530		0.717
Berkeley	18,085	5,799	1,488	1,283	0.393		0.000
Hampshire	2,536	1,139	112	358	0.551		0.827
Grant	5,183	1,918	94	497	0.524		0.686
Hardy	2,924	1,241	231	245	0.547		0.806
Jefferson	9,477	3,220	791	659	0.441		0.251
Lewis	3,103	1,317	65	347	0.534		0.738
Mineral	5,152	2,353	235	630	0.502		0.571
Morgan	4,039	1,582	133	327	0.518		0.654
Pendleton	1,559	886	38	261	0.571		0.932
Preston	6,444	2,608	117	669	0.510		0.613
Randolph	5,856	2,545	38	598	0.533		0.733
Taylor	3,314	1,372	78	260	0.508		0.602
Tucker	1,626	742	1	95	0.574		0.948
Upshur	4,642	2,021	70	470	0.515		0.639
APPALACHIAN AAA	**71,788**	**30,047**	**4,208**	**7,535**		**0.5251**	**0.2903**
Braxton	3,016	1,319	120	338	0.546		0.801
Clay	1,723	724	15	239	0.552		0.832
Fayette	8,919	3,634	625	872	0.488		0.497
Greenbrier	7,407	3,366	357	898	0.522		0.675
McDowell	3,978	1,545	419	508	0.530		0.717
Mercer	12,124	5,346	777	1,111	0.461		0.356
Monroe	2,857	1,386	137	265	0.548		0.812
Nicholas	5,445	2,181	149	557	0.520		0.665
Pocahontas	1,924	876	55	115	0.584		1.000
Raleigh	14,970	6,005	1,236	1,508	0.450		0.298
Summers	2,832	1,310	107	430	0.536		0.749
Webster	1,843	743	-	353	0.568		0.916
Wyoming	4,750	1,612	211	341	0.521		0.670
WV TOTAL	**342,483**	**143,234**	**15,304**	**33,409**	**NA**	**0.5071**	**1.00**

SOURCE: U.S. Census Bureau, ACS 5-Year Data and Purdue University's Index of Relative Rurality (IRR) and CBER calculations.

APPENDIX B – COUNTY AND AAA FACTOR AND FUNDING FORMULA SHARES

Table 15 County and AAA Level Factor Shares and Contribution to New Funding Formula

	Share of Factor Data in 2019 (2010 for Rurality)					Contribution to New Funding Formula					
County/AAA	**Pop 60 to 74**	**Pop 75+**	**Min Pop 65+**	**Pop 65+ Poverty**	**Relative Rurality**	**Pop 60 to 74**	**Pop 75+**	**Min Pop 65+**	**Pop 65+ Poverty**	**Relative Rurality**	**Total**
NORTHWESTERN	**0.2686**	**0.2768**	**0.2043**	**0.2405**	**0.2261**	**0.0269**	**0.0830**	**0.0204**	**0.0721**	**0.0452**	**0.2477**
Brooke	0.0156	0.0109	0.0029	0.0068	0.0081	0.0016	0.0033	0.0003	0.0020	0.0016	0.0088
Calhoun	0.0047	0.0047	0.0012	0.0055	0.0228	0.0005	0.0014	0.0001	0.0016	0.0046	0.0082
Doddridge	0.0049	0.0048	0.0029	0.0032	0.0228	0.0005	0.0014	0.0003	0.0009	0.0046	0.0077
Gilmer	0.0036	0.0042	0.0011	0.0024	0.0228	0.0004	0.0013	0.0001	0.0007	0.0046	0.0070
Hancock	0.0178	0.0203	0.0203	0.0220	0.0040	0.0018	0.0061	0.0020	0.0066	0.0008	0.0173
Harrison	0.0363	0.0388	0.0279	0.0351	0.0082	0.0036	0.0116	0.0028	0.0105	0.0016	0.0302
Marion	0.0301	0.0316	0.0337	0.0245	0.0084	0.0030	0.0095	0.0034	0.0074	0.0017	0.0249
Marshall	0.0195	0.0187	0.0068	0.0139	0.0128	0.0019	0.0056	0.0007	0.0042	0.0026	0.0149
Monongalia	0.0386	0.0348	0.0453	0.0215	0.0045	0.0039	0.0104	0.0045	0.0065	0.0009	0.0262
Ohio	0.0242	0.0276	0.0222	0.0254	0.0021	0.0024	0.0083	0.0022	0.0076	0.0004	0.0210
Pleasants	0.0039	0.0039	0.0007	0.0045	0.0198	0.0004	0.0012	0.0001	0.0014	0.0040	0.0070
Ritchie	0.0060	0.0063	0.0065	0.0074	0.0220	0.0006	0.0019	0.0007	0.0022	0.0044	0.0098
Tyler	0.0053	0.0056	0.0003	0.0038	0.0216	0.0005	0.0017	0.0000	0.0011	0.0043	0.0077
Wetzel	0.0085	0.0111	0.0046	0.0126	0.0185	0.0008	0.0033	0.0005	0.0038	0.0037	0.0121
Wirt	0.0032	0.0031	0.0012	0.0047	0.0231	0.0003	0.0009	0.0001	0.0014	0.0046	0.0074
Wood	0.0465	0.0503	0.0267	0.0472	0.0047	0.0046	0.0151	0.0027	0.0142	0.0009	0.0375
METRO	**0.2973**	**0.3035**	**0.2893**	**0.3225**	**0.2116**	**0.0297**	**0.0911**	**0.0289**	**0.0967**	**0.0423**	**0.2888**
Boone	0.0137	0.0109	0.0058	0.0122	0.0252	0.0014	0.0033	0.0006	0.0036	0.0050	0.0139
Cabell	0.0458	0.0513	0.0534	0.0443	0.0040	0.0046	0.0154	0.0053	0.0133	0.0008	0.0394
Jackson	0.0157	0.0182	0.0069	0.0179	0.0232	0.0016	0.0055	0.0007	0.0054	0.0046	0.0177
Kanawha	0.1035	0.1071	0.1564	0.1063	0.0048	0.0103	0.0321	0.0156	0.0319	0.0010	0.0910
Lincoln	0.0116	0.0108	0.0000	0.0118	0.0258	0.0012	0.0033	0.0000	0.0035	0.0052	0.0131
Logan	0.0192	0.0169	0.0138	0.0279	0.0218	0.0019	0.0051	0.0014	0.0084	0.0044	0.0211
Mason	0.0150	0.0162	0.0104	0.0144	0.0228	0.0015	0.0049	0.0010	0.0043	0.0046	0.0163
Mingo	0.0138	0.0113	0.0131	0.0168	0.0244	0.0014	0.0034	0.0013	0.0050	0.0049	0.0160
Putnam	0.0292	0.0284	0.0227	0.0255	0.0124	0.0029	0.0085	0.0023	0.0076	0.0025	0.0238
Roane	0.0081	0.0084	0.0037	0.0096	0.0292	0.0008	0.0025	0.0004	0.0029	0.0058	0.0124
Wayne	0.0217	0.0239	0.0032	0.0359	0.0182	0.0022	0.0072	0.0003	0.0108	0.0036	0.0241

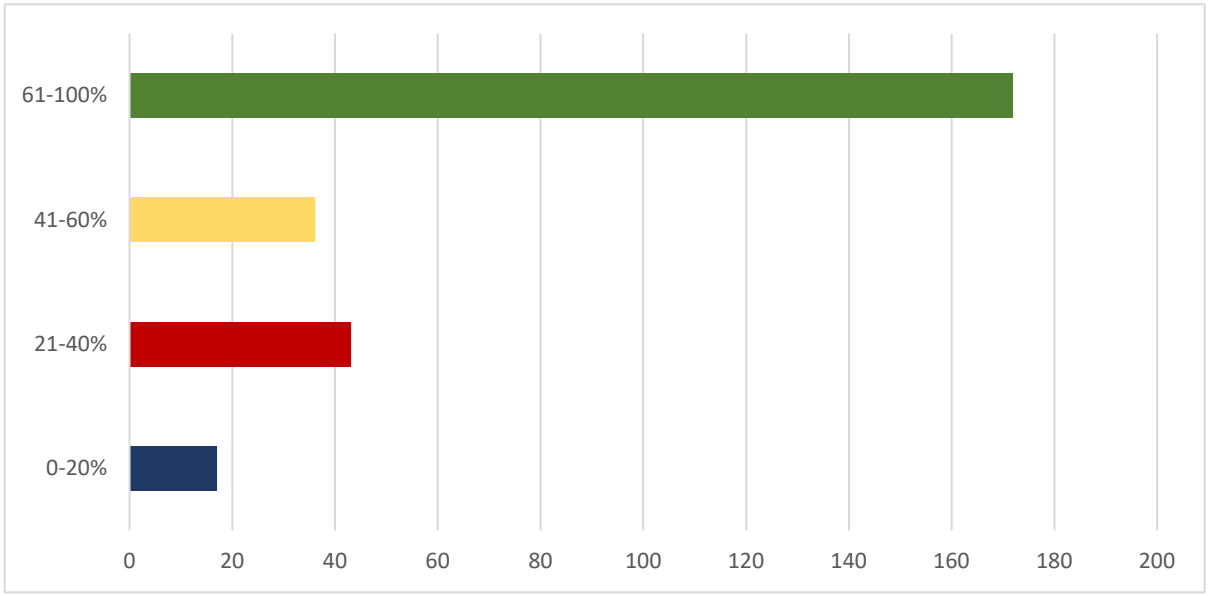
	Share of Factor Data in 2019 (2010 for Rurality)						Contribution to New Proposed Formula					
County/AAA	Pop 60 to 74	Pop 75+	Min Pop 65+	Pop 65+ Poverty	Relative Rurality		Pop 60 to 74	Pop 75+	Min Pop 65+	Pop 65+ Poverty	Relative Rurality	Total
POTOMAC	**0.2245**	**0.2099**	**0.2314**	**0.2115**	**0.2720**		**0.0224**	**0.0630**	**0.0231**	**0.0634**	**0.0544**	**0.2264**
Barbour	0.0086	0.0092	0.0033	0.0110	0.0201		0.0009	0.0028	0.0003	0.0033	0.0040	0.0113
Berkeley	0.0528	0.0405	0.0972	0.0384	0.0000		0.0053	0.0121	0.0097	0.0115	0.0000	0.0387
Hampshire	0.0151	0.0134	0.0061	0.0149	0.0232		0.0015	0.0040	0.0006	0.0045	0.0046	0.0117
Grant	0.0074	0.0080	0.0073	0.0107	0.0192		0.0007	0.0024	0.0007	0.0032	0.0038	0.0144
Hardy	0.0085	0.0087	0.0151	0.0073	0.0226		0.0009	0.0026	0.0015	0.0022	0.0045	0.0117
Jefferson	0.0277	0.0225	0.0517	0.0197	0.0070		0.0028	0.0067	0.0052	0.0059	0.0014	0.0220
Lewis	0.0091	0.0092	0.0042	0.0104	0.0207		0.0009	0.0028	0.0004	0.0031	0.0041	0.0113
Mineral	0.0150	0.0164	0.0154	0.0189	0.0160		0.0015	0.0049	0.0015	0.0057	0.0032	0.0168
Morgan	0.0118	0.0110	0.0087	0.0098	0.0183		0.0012	0.0033	0.0009	0.0029	0.0037	0.0120
Pendleton	0.0046	0.0062	0.0025	0.0078	0.0261		0.0005	0.0019	0.0002	0.0023	0.0052	0.0101
Preston	0.0188	0.0182	0.0076	0.0200	0.0171		0.0019	0.0055	0.0008	0.0060	0.0034	0.0175
Randolph	0.0171	0.0178	0.0025	0.0179	0.0205		0.0017	0.0053	0.0002	0.0054	0.0041	0.0168
Taylor	0.0097	0.0096	0.0051	0.0078	0.0169		0.0010	0.0029	0.0005	0.0023	0.0034	0.0101
Tucker	0.0047	0.0052	0.0001	0.0029	0.0265		0.0005	0.0016	0.0000	0.0009	0.0053	0.0082
Upshur	0.0136	0.0141	0.0046	0.0141	0.0179		0.0014	0.0042	0.0005	0.0042	0.0036	0.0138
APPALACHIAN	**0.2096**	**0.2098**	**0.2750**	**0.2256**	**0.2903**		**0.0210**	**0.0629**	**0.0275**	**0.0677**	**0.0581**	**0.2371**
Braxton	0.0088	0.0092	0.0078	0.0101	0.0259		0.0009	0.0028	0.0008	0.0030	0.0052	0.0126
Clay	0.0050	0.0051	0.0010	0.0072	0.0269		0.0005	0.0015	0.0001	0.0022	0.0054	0.0096
Fayette	0.0260	0.0254	0.0408	0.0261	0.0161		0.0026	0.0076	0.0041	0.0078	0.0032	0.0253
Greenbrier	0.0216	0.0235	0.0233	0.0269	0.0218		0.0022	0.0071	0.0023	0.0081	0.0044	0.0240
McDowell	0.0116	0.0108	0.0274	0.0152	0.0232		0.0012	0.0032	0.0027	0.0046	0.0046	0.0163
Mercer	0.0354	0.0373	0.0508	0.0333	0.0115		0.0035	0.0112	0.0051	0.0100	0.0023	0.0321
Monroe	0.0083	0.0097	0.0090	0.0079	0.0262		0.0008	0.0029	0.0009	0.0024	0.0052	0.0123
Nicholas	0.0159	0.0152	0.0097	0.0167	0.0215		0.0016	0.0046	0.0010	0.0050	0.0043	0.0164
Pocahontas	0.0056	0.0061	0.0036	0.0035	0.0323		0.0006	0.0018	0.0004	0.0010	0.0065	0.0103
Raleigh	0.0437	0.0419	0.0808	0.0451	0.0096		0.0044	0.0126	0.0081	0.0135	0.0019	0.0405
Summers	0.0083	0.0091	0.0070	0.0129	0.0242		0.0008	0.0027	0.0007	0.0039	0.0048	0.0130
Webster	0.0054	0.0052	0.0000	0.0106	0.0296		0.0005	0.0016	0.0000	0.0032	0.0059	0.0112
Wyoming	0.0139	0.0113	0.0138	0.0102	0.0216		0.0014	0.0034	0.0014	0.0031	0.0043	0.0135
TOTAL	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**		**0.10**	**0.30**	**0.10**	**0.30**	**0.20**	**1.00**

APPENDIX C – SURVEY RESULTS

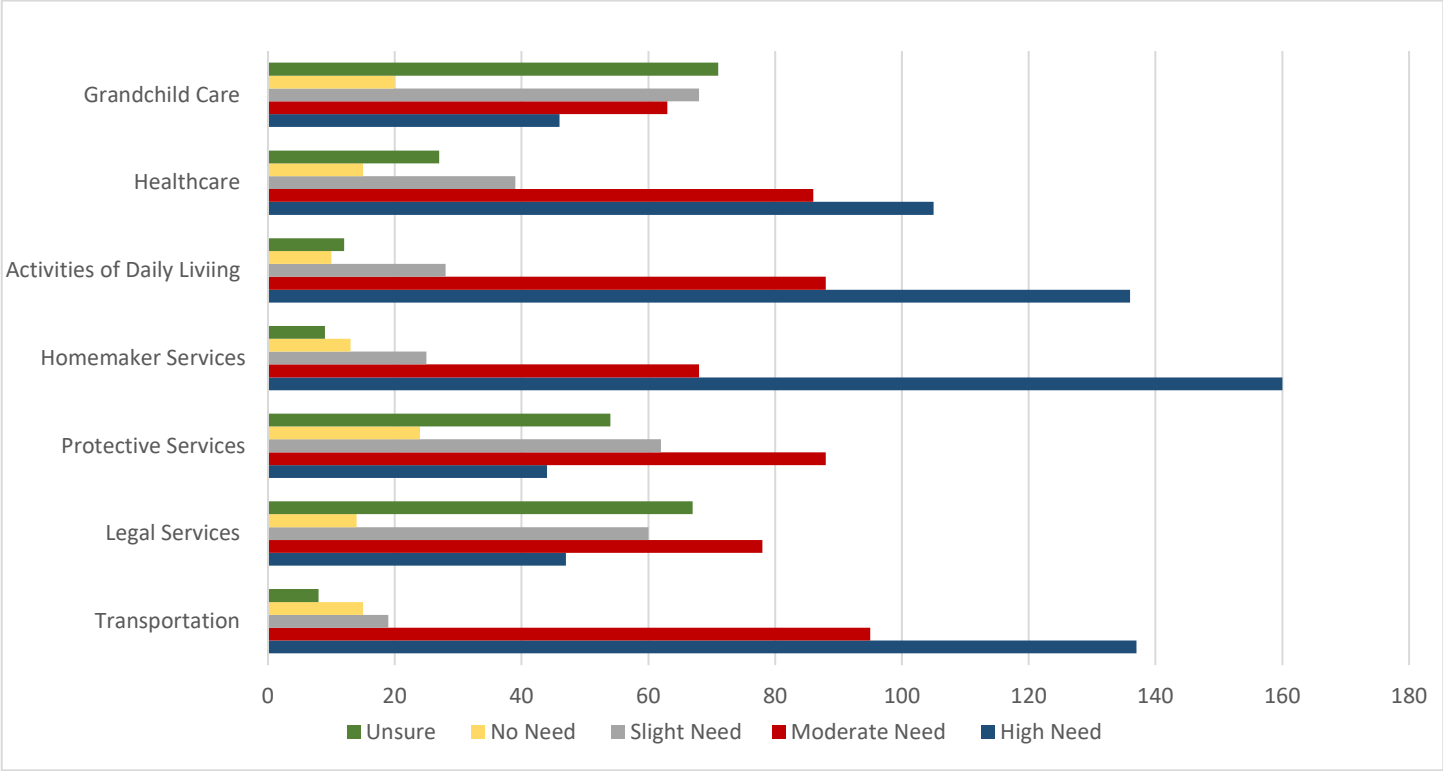
Q5 Does your center serve rural seniors?

ANSWER CHOICES	RESPONSES	# OF RESPONSES
Yes	98.91%	271
No	1.09%	3
TOTAL		274

Q6 If so, roughly what percentage of your clients are rural?



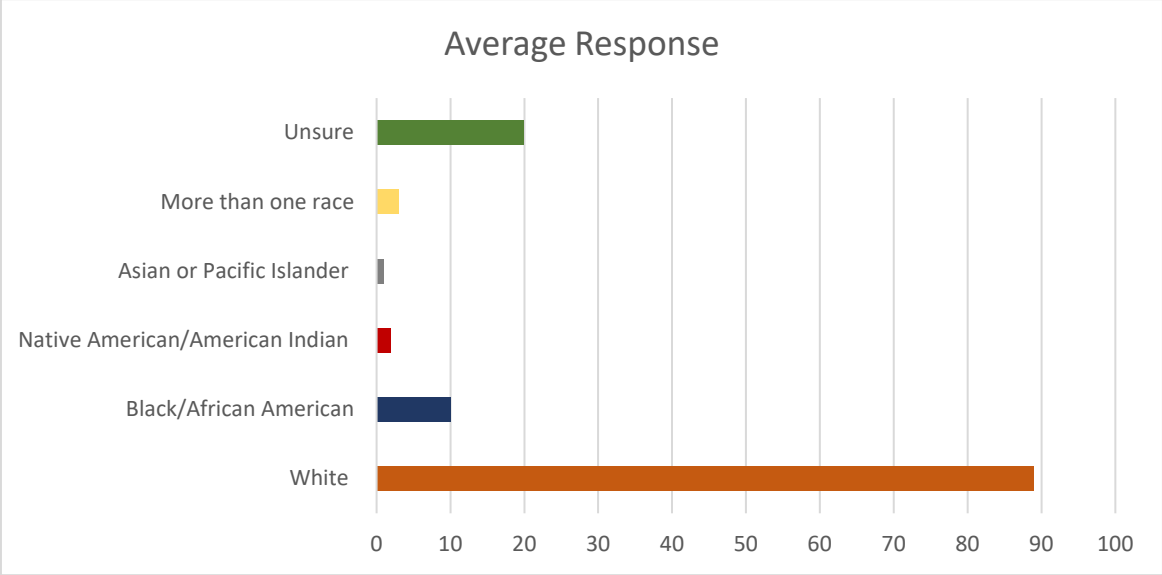
Q7 Do your rural seniors (rural seniors in your area) have unmet needs in any of the following areas?



	HIGH NEED	MODERATE NEED	SLIGHT NEED	NO NEED	UNSURE	TOTAL
Transportation	50.00%	34.67%	6.93%	5.47%	2.92%	
	137	95	19	15	8	274
Legal Services	17.67%	29.32%	22.56%	5.26%	25.19%	
	47	78	60	14	67	266
Protective Services	16.18%	32.35%	22.79%	8.82%	19.85%	
	44	88	62	24	54	272
Homemaker Services (cleaning, meals, shopping)	58.18%	24.73%	9.09%	4.73%	3.27%	
	160	68	25	13	9	275
Activities of Daily Living (bathing, dressing, etc.)	49.64%	32.12%	10.22%	3.65%	4.38%	
	136	88	28	10	12	274
Healthcare	38.60%	31.62%	14.34%	5.51%	9.93%	
	105	86	39	15	27	272

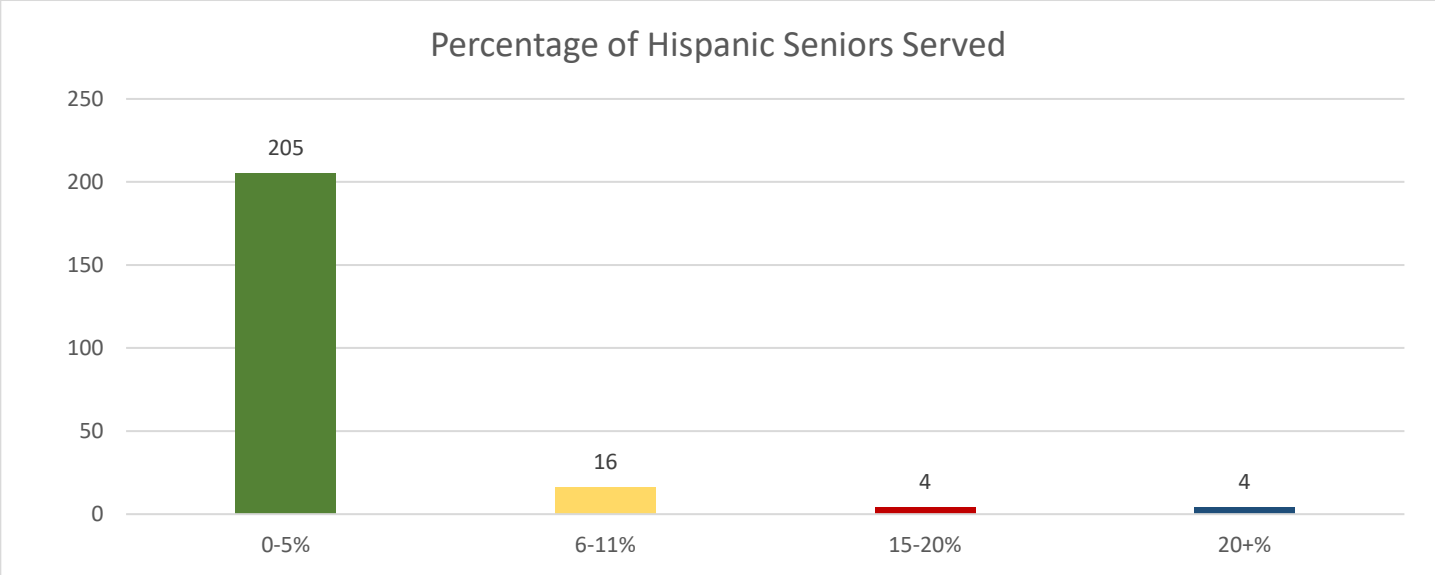
Grandchild Care	17.16%	23.51%	25.37%	7.46%	26.49%	
	46	63	68	20	71	268

Q8 Please estimate the percentage of seniors served for each race category:



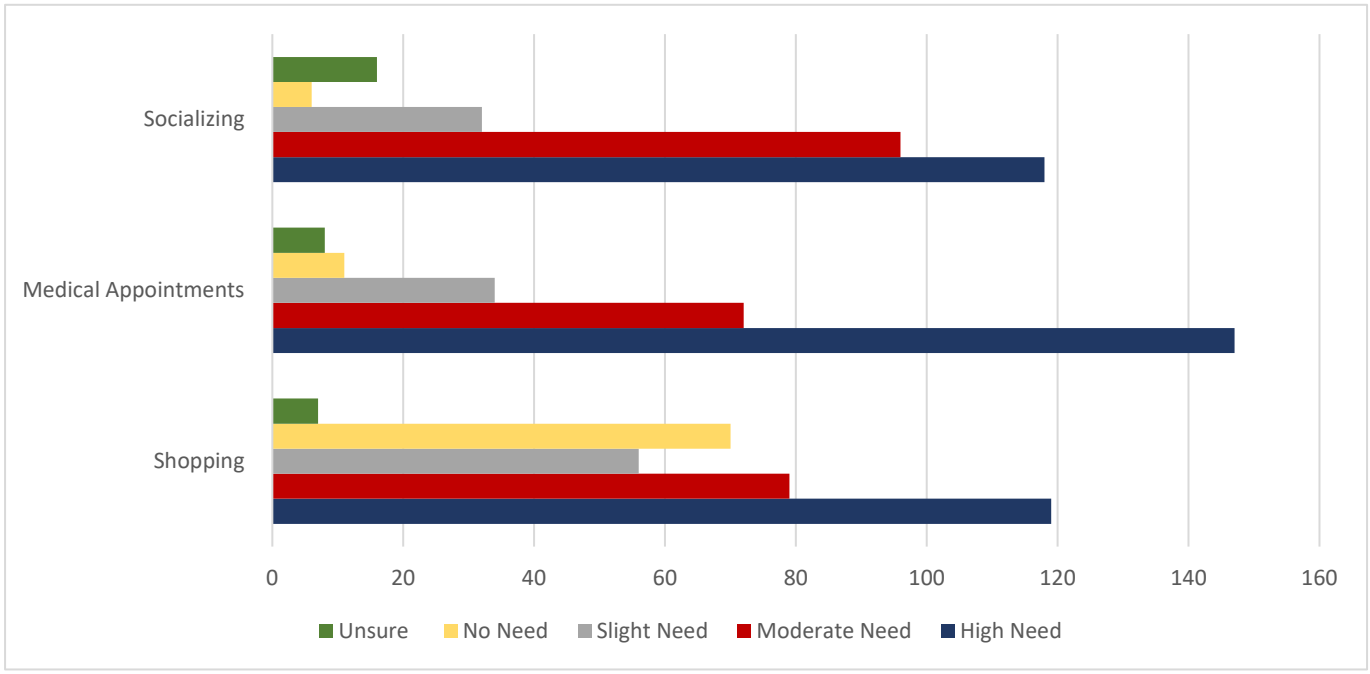
ANSWER CHOICES	AVERAGE RESPONSE
White	89%
Black/African American	10%
Native American/American Indian	2%
Asian or Pacific Islander	1%
More than one race	3%
Unsure	20%

Q9 Please estimate the percentage of Hispanic seniors served at your center. (Please use slider bar or enter a percentage in the box provided)



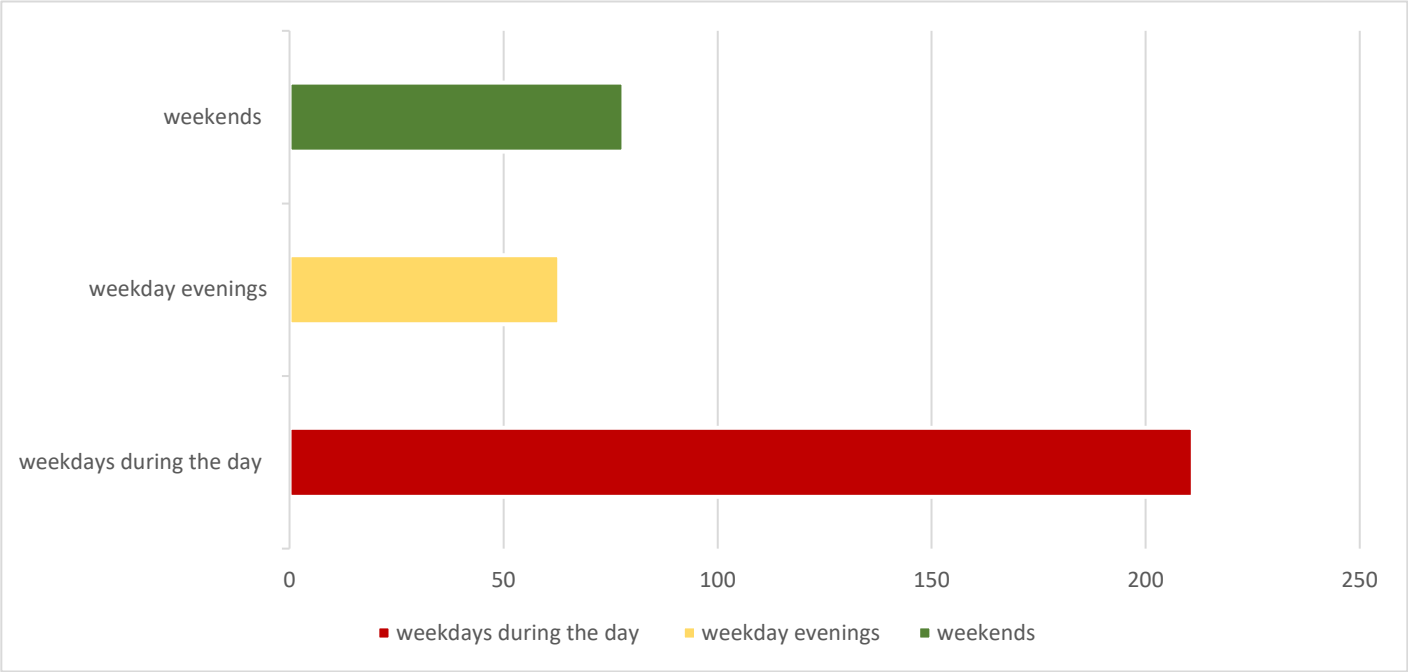
Q10 Thinking about the minority seniors in your area, both those served via your center and those that do not use your center, how could their needs be more fully met? (open-ended)

Q11 What are your seniors' most unmet transportation needs?



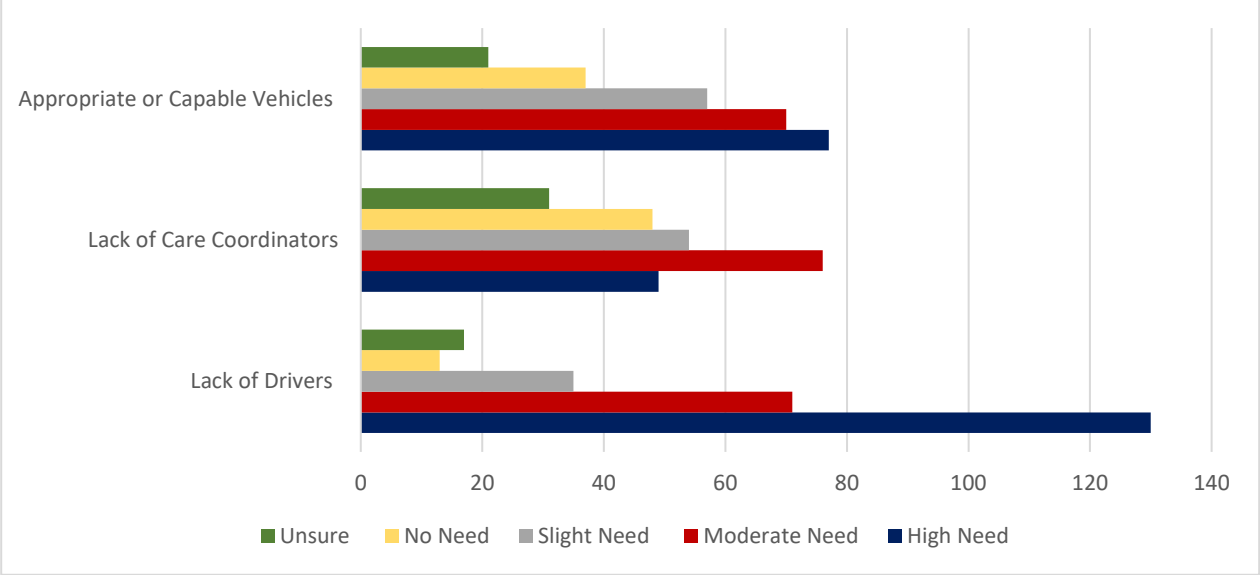
	HIGH NEED	MODERATE NEED	SLIGHT NEED	NO NEED	UNSURE	TOTAL
Shopping	43.91%	29.15%	20.66%	3.69%	2.58%	
	119	79	56	10	7	271
Medical appointments	54.04%	26.47%	12.50%	4.04%	2.94%	
	147	72	34	11	8	272
Socializing	44.03%	35.82%	11.94%	2.24%	5.97%	
	118	96	32	6	16	268

Q12 When is additional transportation most needed?



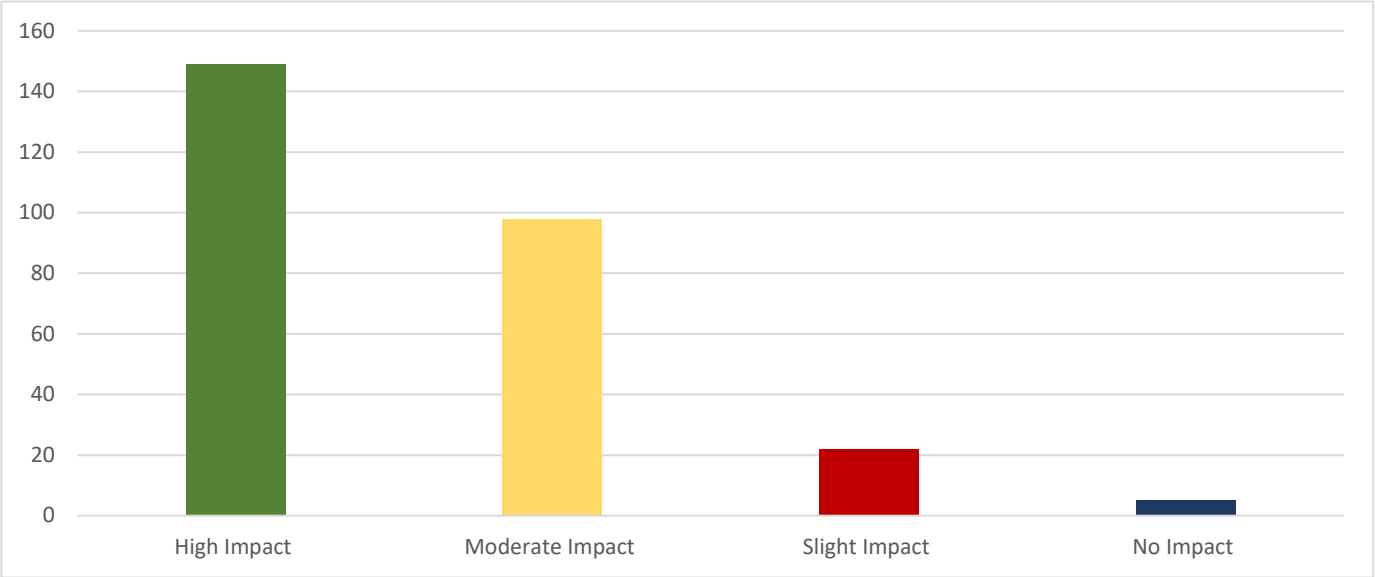
ANSWER CHOICES	RESPONSES	# OF RESPONSES
Weekdays during the day	77.01%	211
Weekday evenings	22.99%	63
Weekends	28.47%	78
Total Respondents: 274		

Q13 What are the biggest barriers to providing more transportation services to rural seniors?



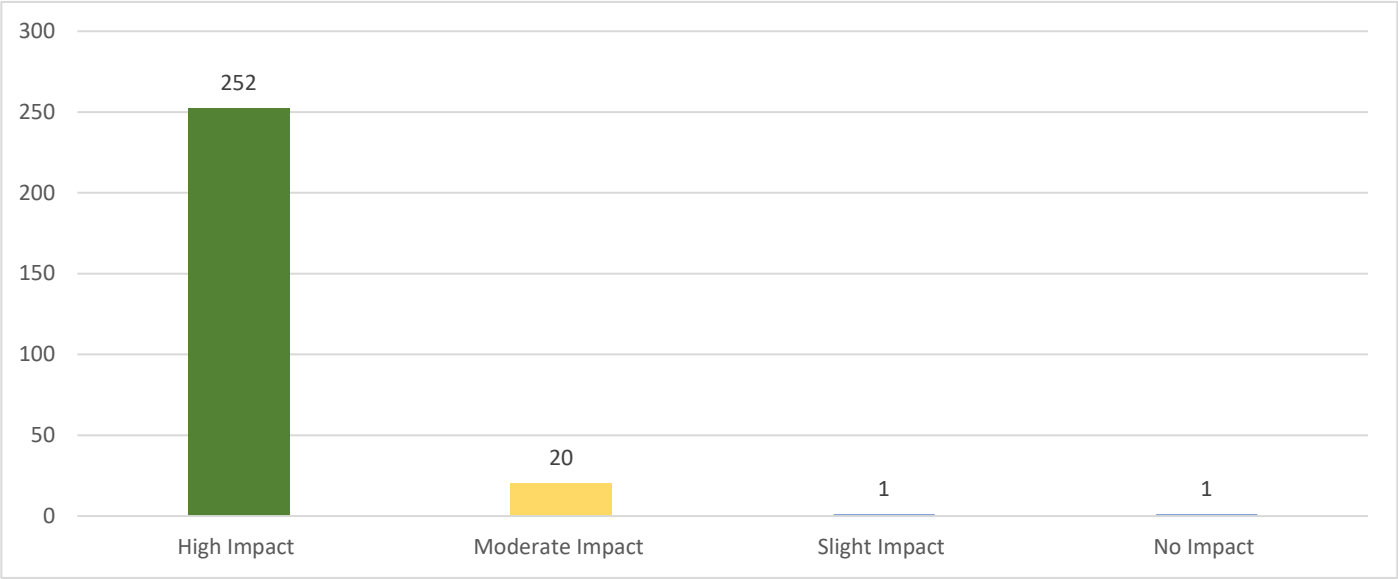
	HIGH NEED	MODERATE NEED	SLIGHT NEED	NO NEED	UNSURE	TOTAL
Lack of drivers	48.87%	26.69%	13.16%	4.89%	6.39%	
	130	71	35	13	17	266
Lack of care coordinators	18.99%	29.46%	20.93%	18.60%	12.02%	
	49	76	54	48	31	258
Appropriate or capable vehicles	29.39%	26.72%	21.76%	14.12%	8.02%	
	77	70	57	37	21	262

Q14 To what extent are your seniors negatively impacted by physical or social isolation?



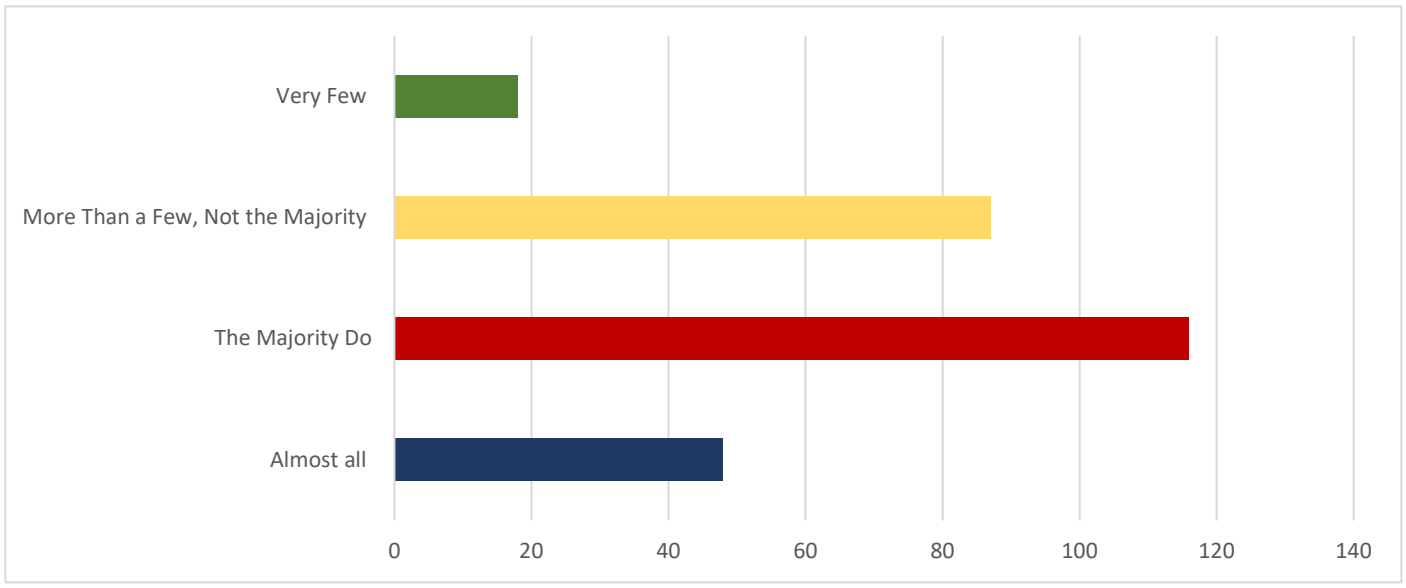
ANSWER CHOICES	RESPONSES	# OF RESPONSES
High Impact	54.38%	149
Moderate Impact	35.77%	98
Slight Impact	8.03%	22
No Impact	1.82%	5
TOTAL		274

Q15 How much has Covid-19 increased the isolation of your seniors?



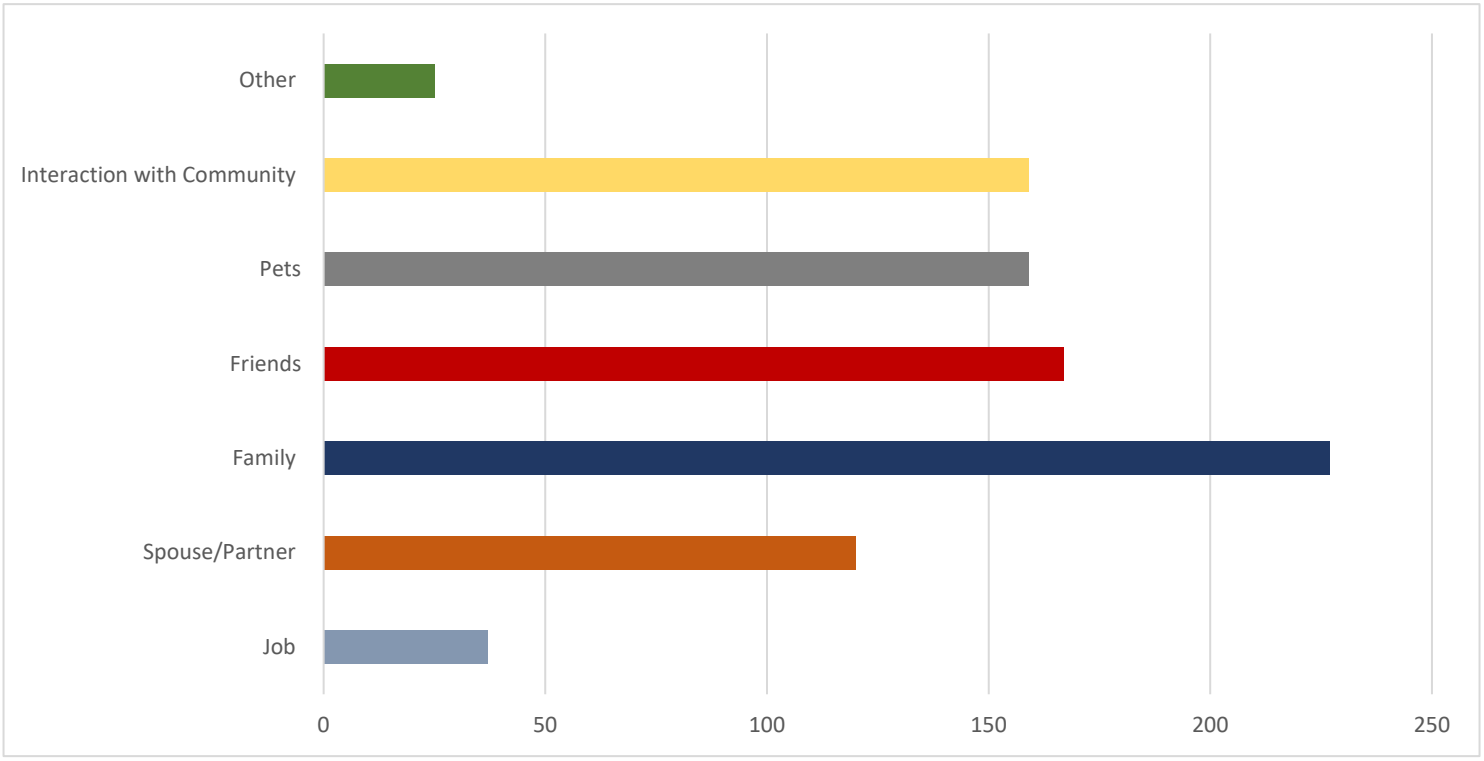
ANSWER CHOICES	RESPONSES	# OF RESPONSES
High Impact	91.97%	252
Moderate Impact	7.30%	20
Slight Impact	0.36%	1
No Impact	0.36%	1
TOTAL		274

Q16 Among the seniors with whom you interact, what portion have a sense of purpose in life?



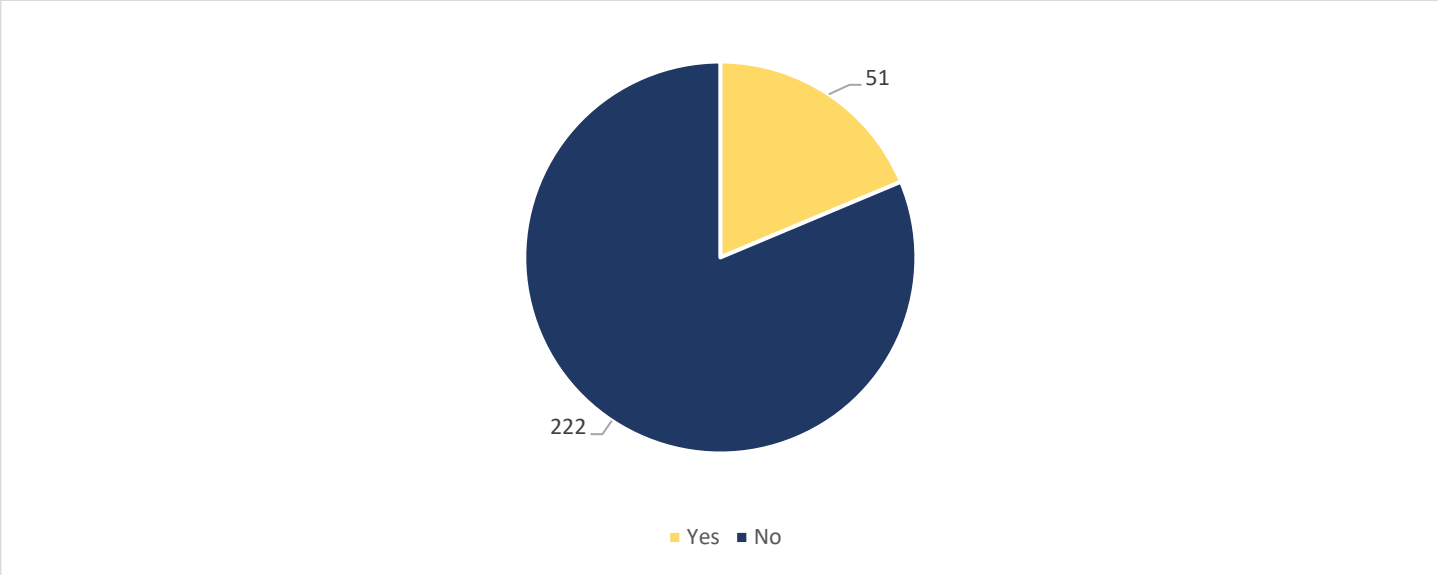
ANSWER CHOICES	RESPONSES	# OF RESPONSES
Almost all	17.84%	48
The majority do	43.12%	116
More than a few, but not the majority	32.34%	87
Very few	6.69%	18
TOTAL		269

Q17 For those with that sense of purpose, what provides it? (select all that apply)



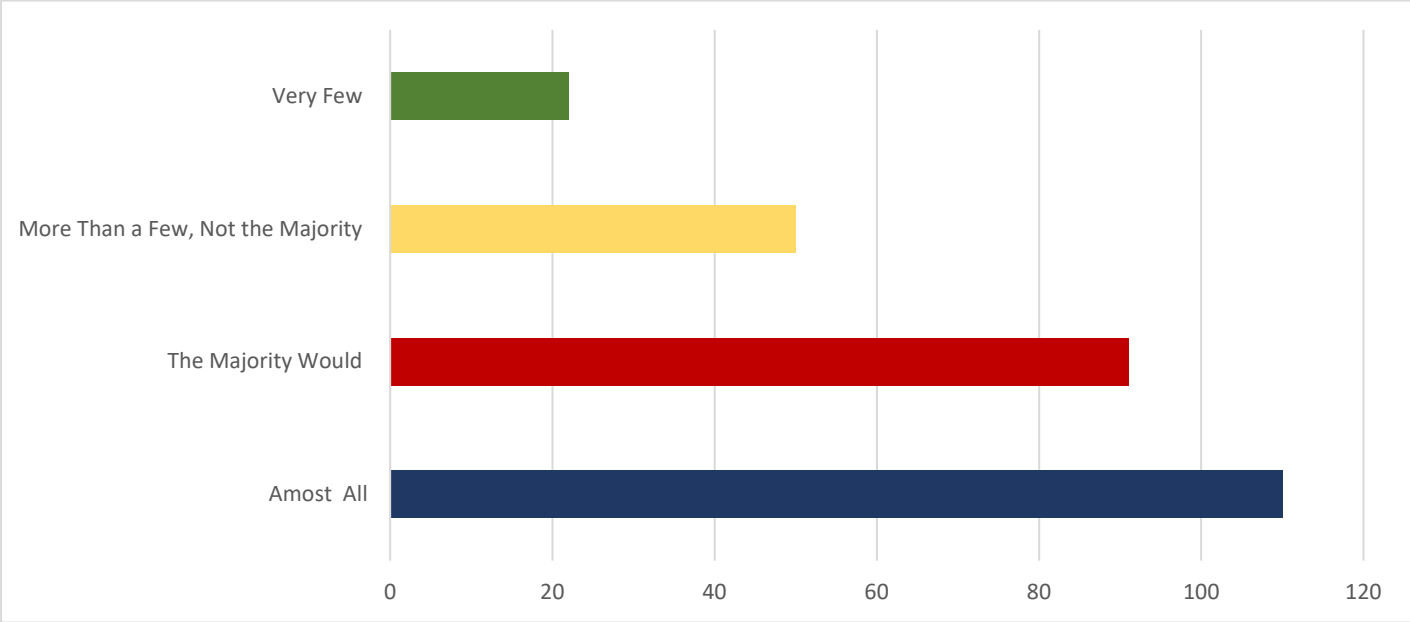
ANSWER CHOICES	# OF RESPONSES
Job	37
Spouse/Partner	120
Family	227
Friends	167
Pets	159
Interaction with their community	159
Other	25
Total Respondents: 267	

Q18 Do seniors in your area have adequate access to broadband, i.e., enough to allow video participation in remote medical care, guided physical activity, and connection with family?



ANSWER CHOICES	RESPONSES	# OF RESPONSES
Yes	18.68%	51
No	81.32%	222
TOTAL		273

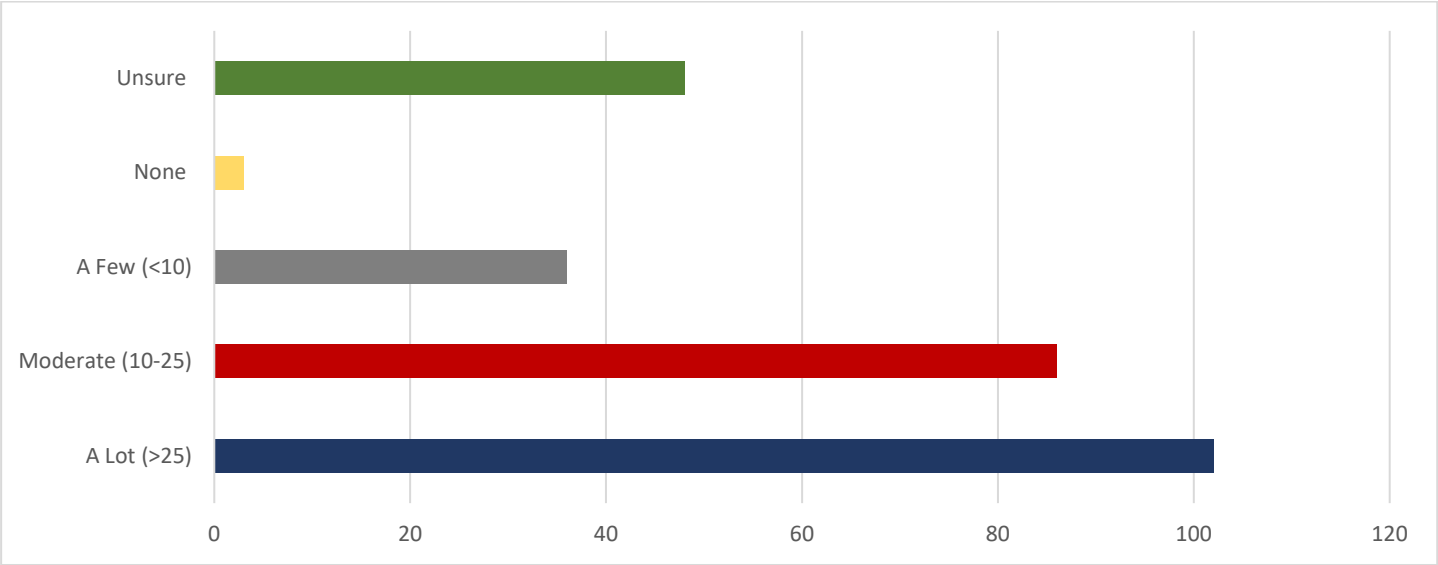
Q19 What portion of your seniors would benefit from better broadband internet access?



ANSWER CHOICES	RESPONSES	# OF RESPONSES
Almost all	40.29%	110
The majority would	33.33%	91
More than a few, but not the majority	18.32%	50
Very few	8.06%	22
TOTAL		273

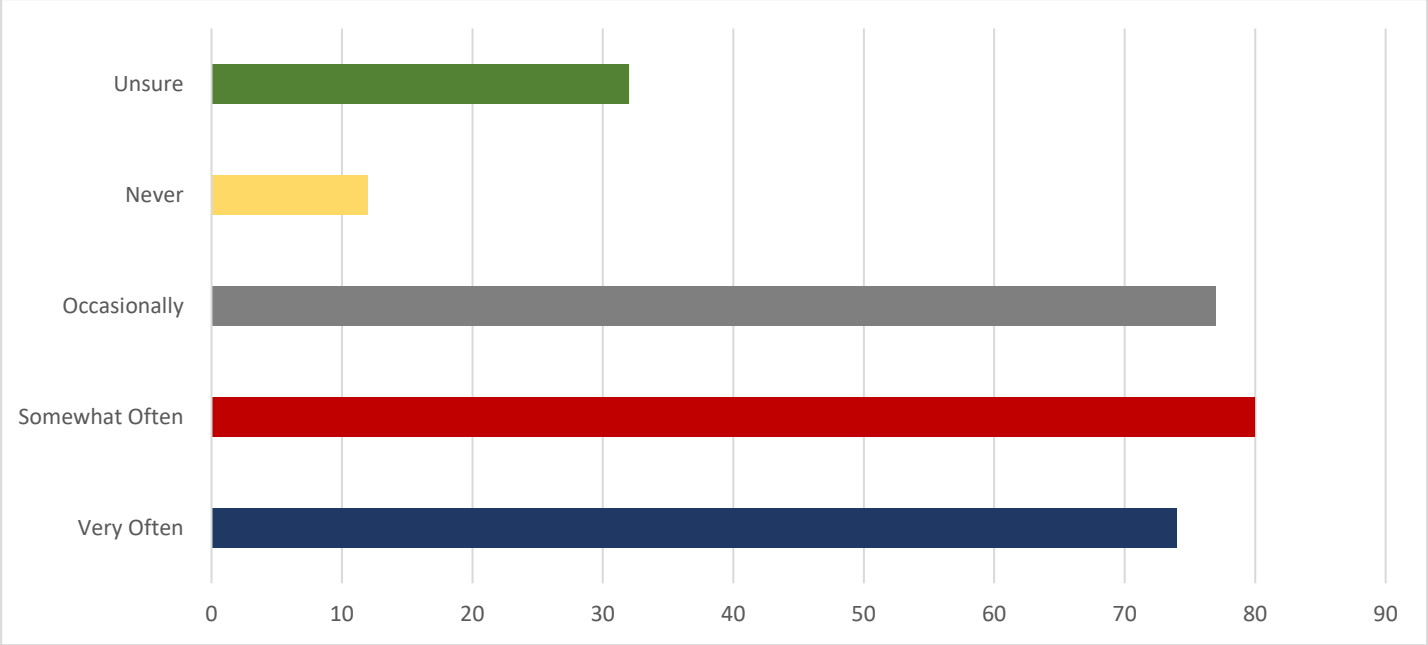
Q20 What other activities or factors would help reduce the impacts of isolation for seniors in your community? (open-ended)

Q21 Please help us quantify the approximate number of seniors in your service area who do not utilize the nutrition programs but need this service.



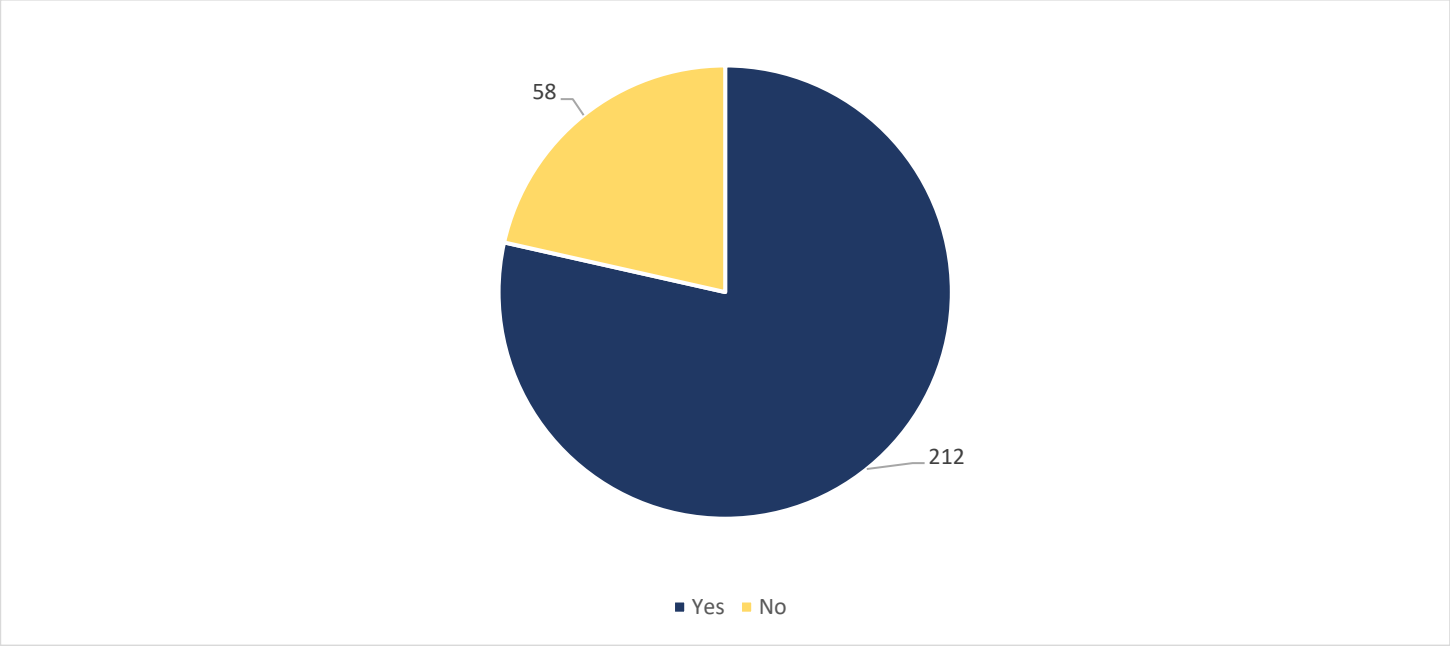
ANSWER CHOICES	RESPONSES	# OF RESPONSES
A lot (>25)	37.09%	102
Moderate (10-25)	31.27%	86
A few (<10)	13.09%	36
None	1.09%	3
Unsure	17.45%	48
TOTAL		275

Q22 How often do you get referrals from medical providers for your clients to receive home-delivered meals or other home-based services?



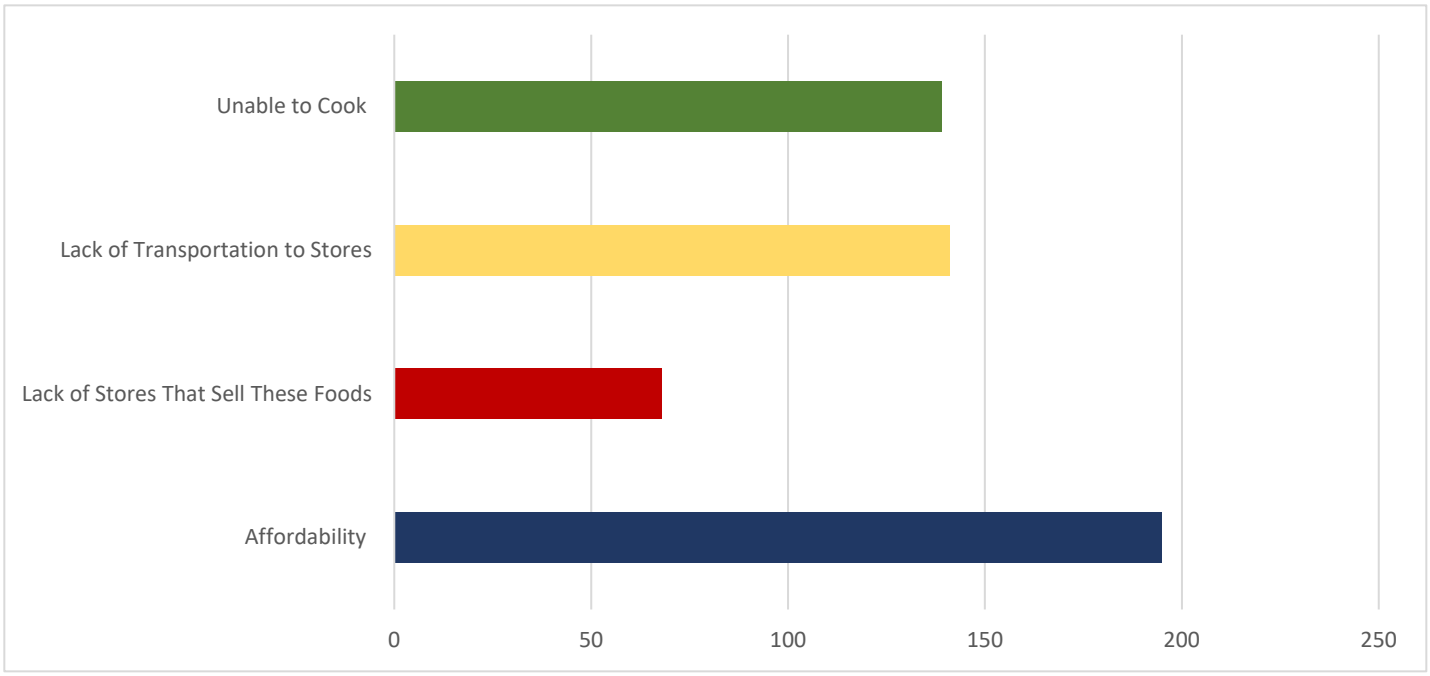
ANSWER CHOICES	RESPONSES	# OF RESPONSES
Very Often	26.91%	74
Somewhat Often	29.09%	80
Occasionally	28.00%	77
Never	4.36%	12
Unsure	11.64%	32
TOTAL		275

Q23 Do you know many seniors who have difficulty following their doctor's dietary advice because they cannot access or afford fresh produce and healthy proteins?



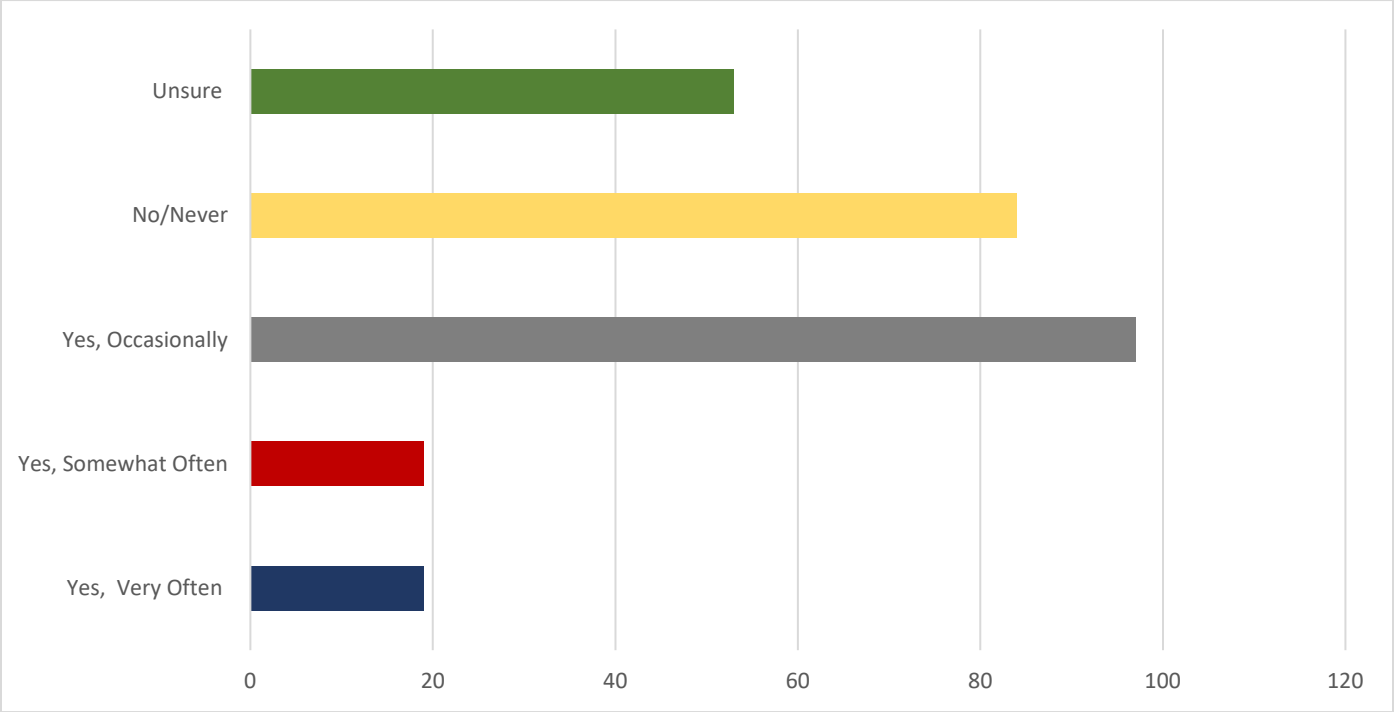
ANSWER CHOICES	RESPONSES	# OF RESPONSES
Yes	78.52%	212
No	21.48%	58
TOTAL		270

Q24 If yes, what are the main barriers? (Select all that apply)



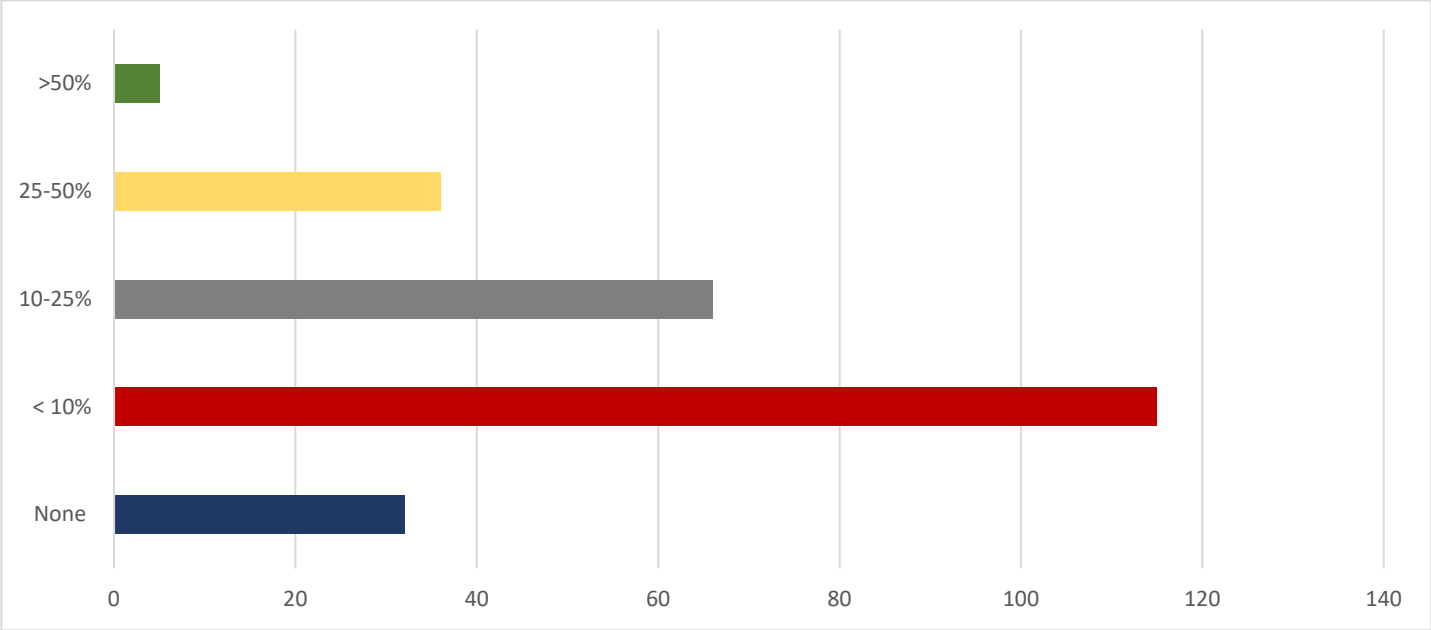
ANSWER CHOICES	RESPONSES	# OF RESPONSES
Affordability	90.70%	195
Lack of stores that sell these foods	31.63%	68
Lack of transportation to stores	65.58%	141
Unable to cook	64.65%	139
Total Respondents: 215		

Q25 Do your seniors ever request specific foods to better match their culture or lifestyle?



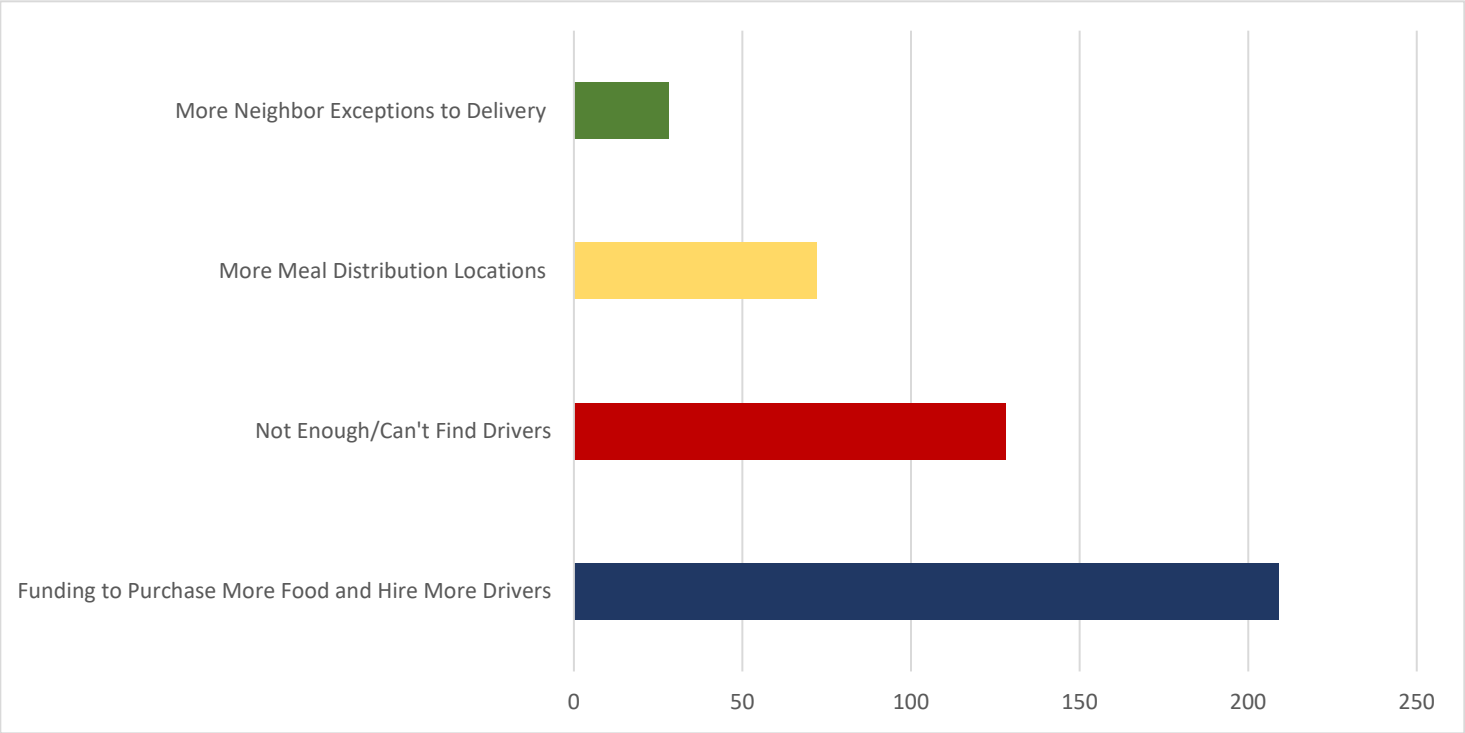
ANSWER CHOICES	RESPONSES	# OF RESPONSES
Yes, Very Often	6.99%	19
Yes, Somewhat Often	6.99%	19
Yes, Occasionally	35.66%	97
No/Never	30.88%	84
Unsure	19.49%	53
TOTAL		272

Q26 What portion of nutrition clients are grand families (seniors responsible for their grandchildren)?



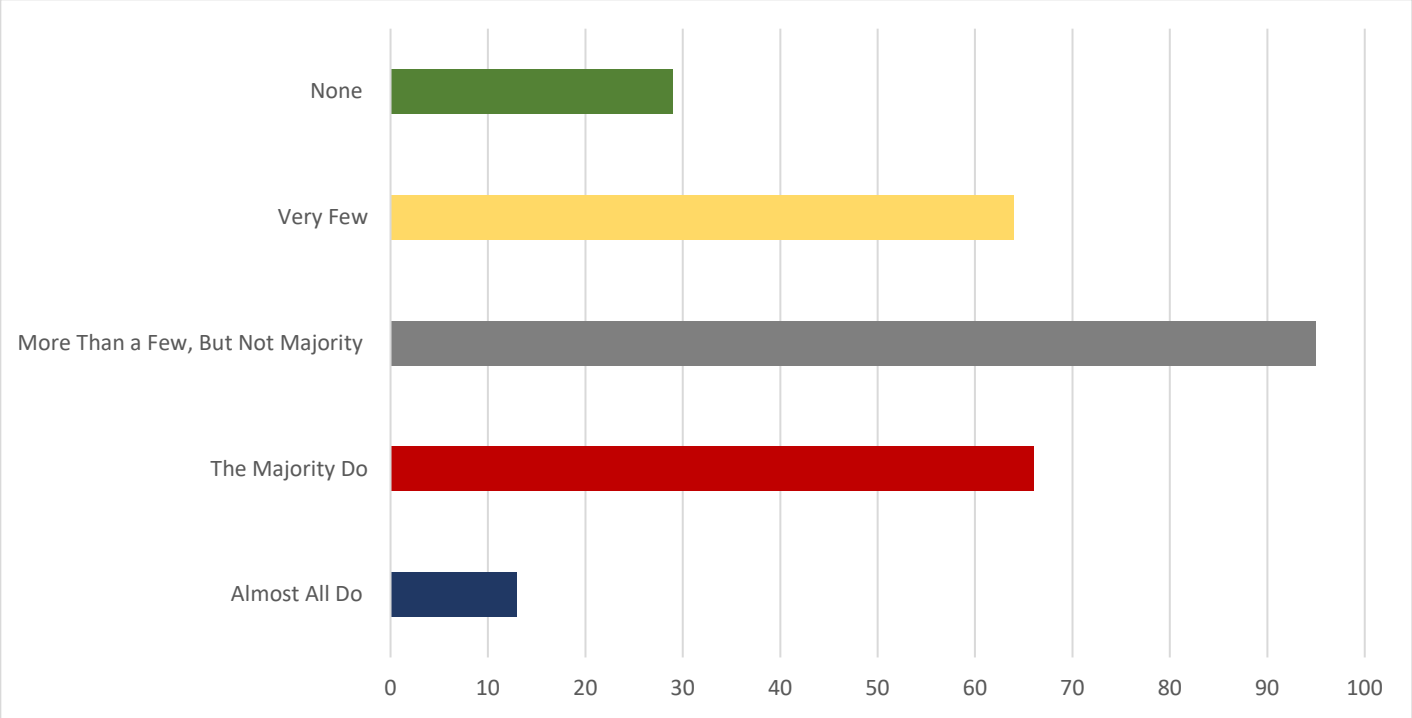
ANSWER CHOICES	RESPONSES	# OF RESPONSES
None	12.60%	32
< 10%	45.28%	115
10-25%	25.98%	66
25-50%	14.17%	36
> 50%	1.97%	5
TOTAL		254

Q27 What are the biggest barriers to delivering more food to seniors? (select all that apply)



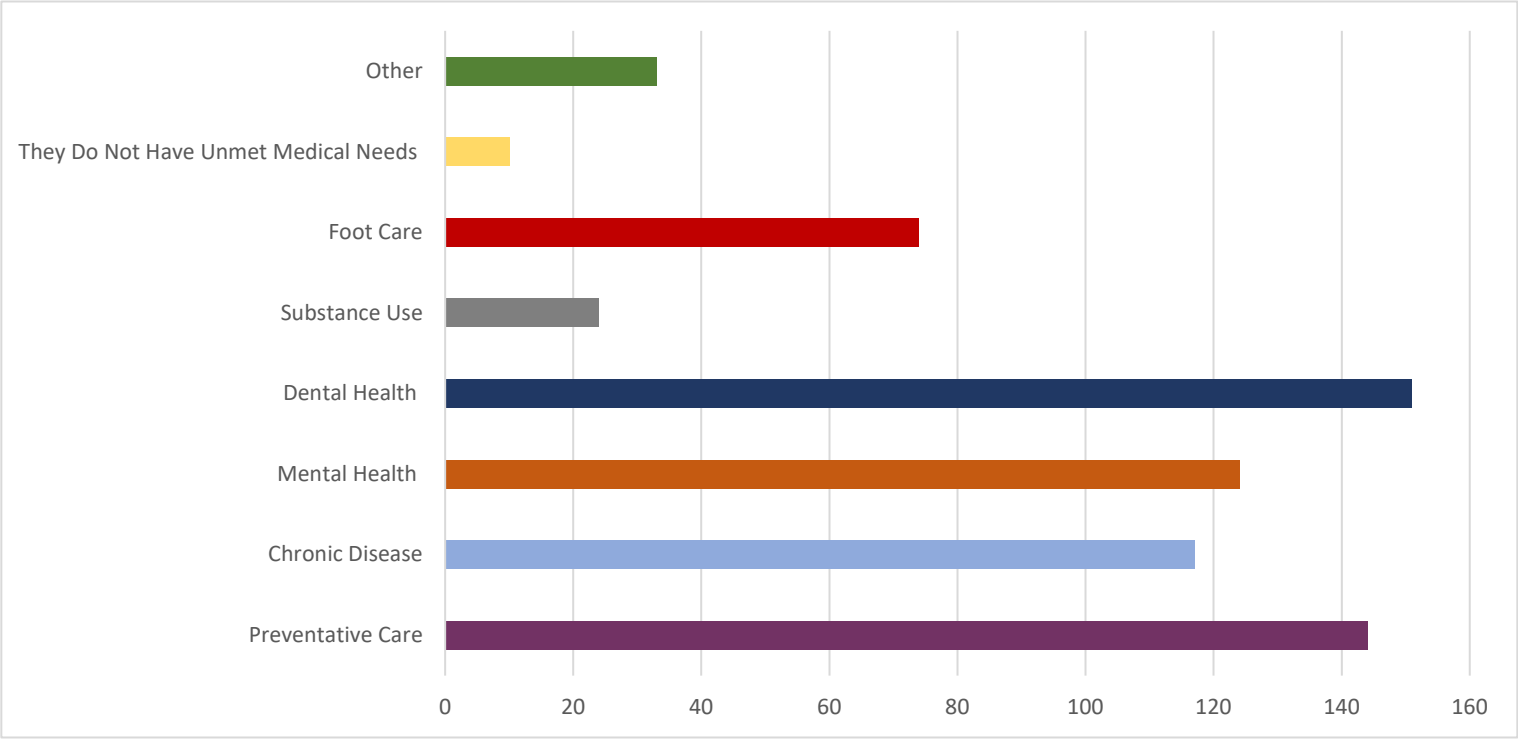
ANSWER CHOICES	RESPONSES	# OF RESPONSES
Funding to purchase more food and hire more drivers	85.31%	209
Not enough/can't find drivers	52.24%	128
More meal distribution locations	29.39%	72
More neighbor exceptions to delivery	11.43%	28
Total Respondents: 245		

Q28 Do the seniors you interact with have unmet medical needs?



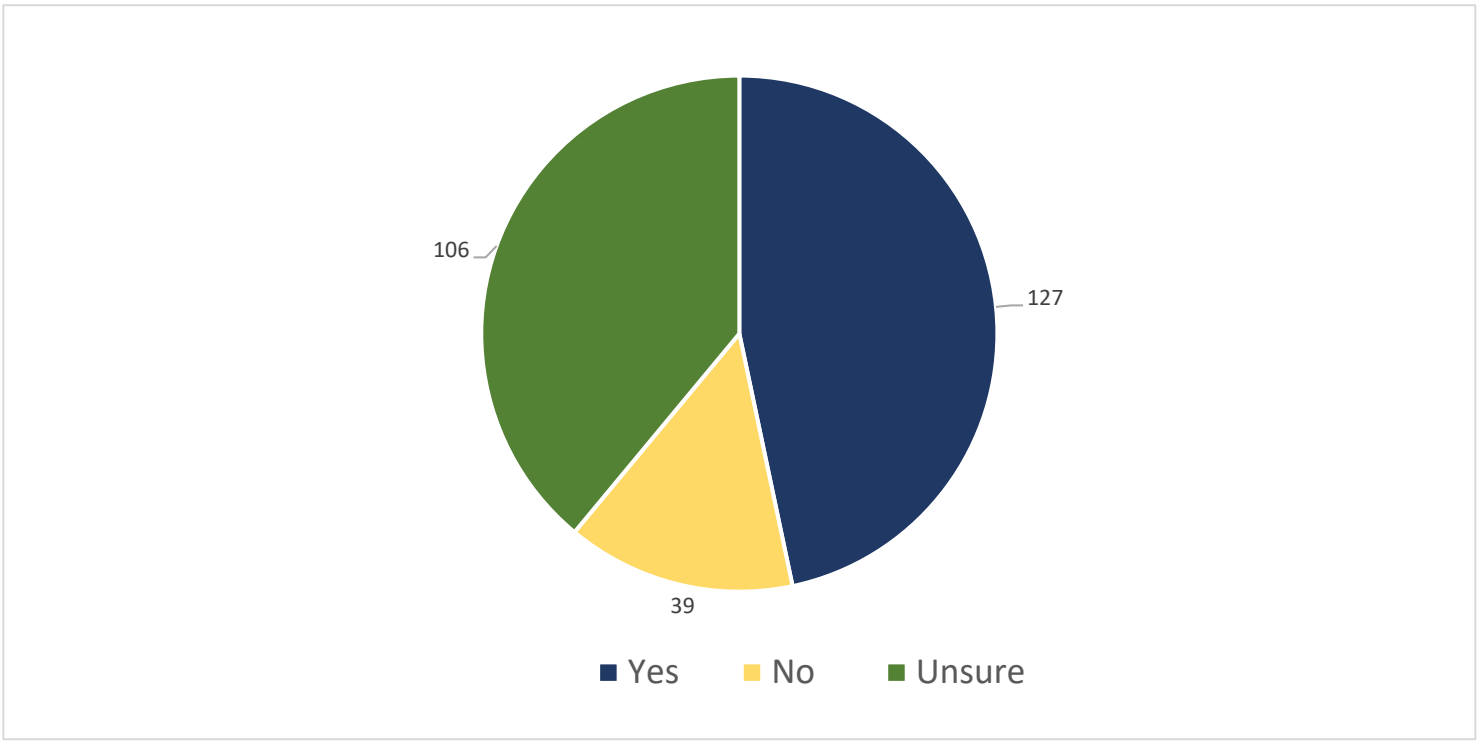
ANSWER CHOICES	RESPONSES	# OF RESPONSES
Almost All Do	4.87%	13
The Majority Do	24.72%	66
More Than a Few, But Not Majority	35.58%	95
Very Few	23.97%	64
None	10.86%	29
TOTAL		267

Q29 If yes, what areas? (select all that apply)



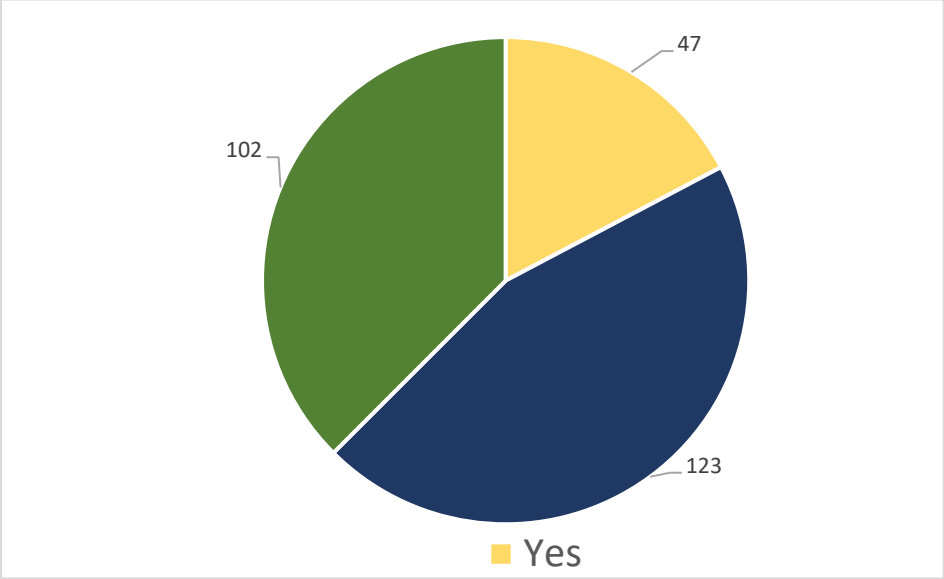
ANSWER CHOICES	RESPONSES	# OF RESPONSES
Preventative care	61.28%	144
Chronic disease	49.79%	117
Mental health	52.77%	124
Dental health	64.26%	151
Substance abuse	10.21%	24
Foot care	31.49%	74
They do not have unmet medical needs	4.26%	10
Other (please specify)	14.04%	33
Total Respondents: 235		

Q30 Could more care coordination help fill these unmet medical needs?



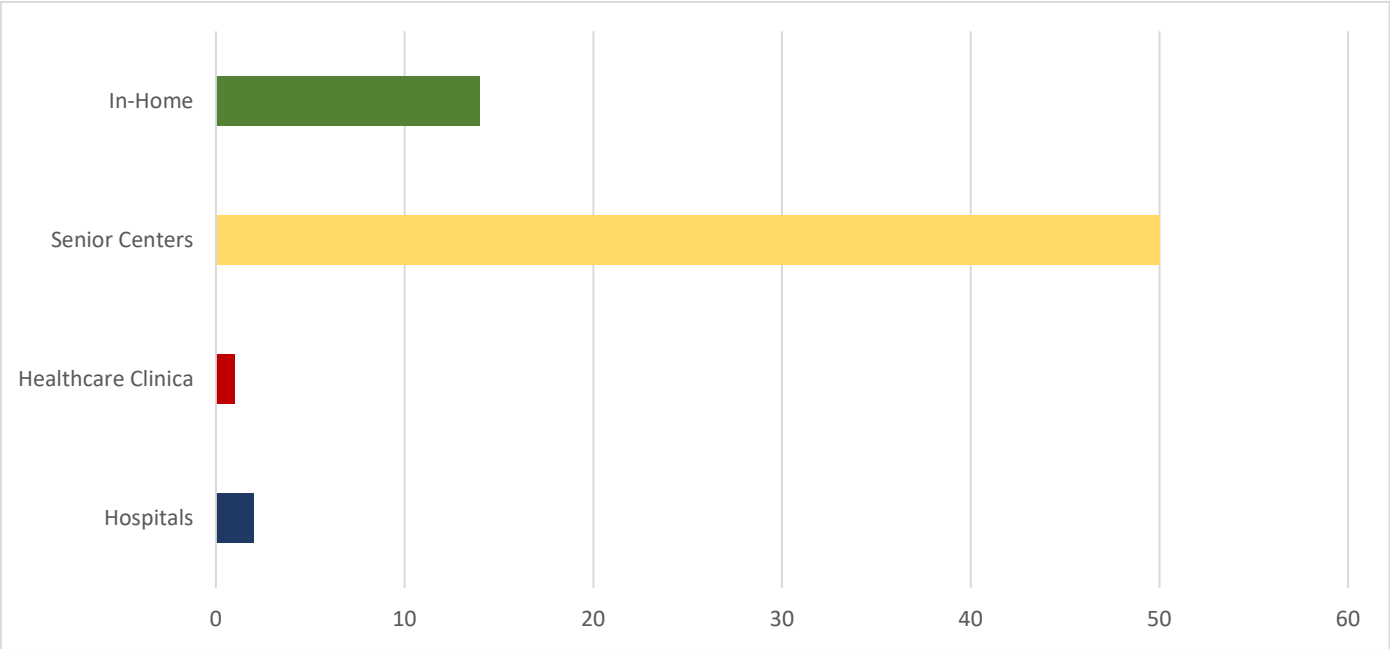
ANSWER CHOICES	RESPONSES	# OF RESPONSES
Yes	46.69%	127
No	14.34%	39
Unsure	38.97%	106
TOTAL		272

Q31 Do you have plans to develop exercise or other social services via a web-based service?



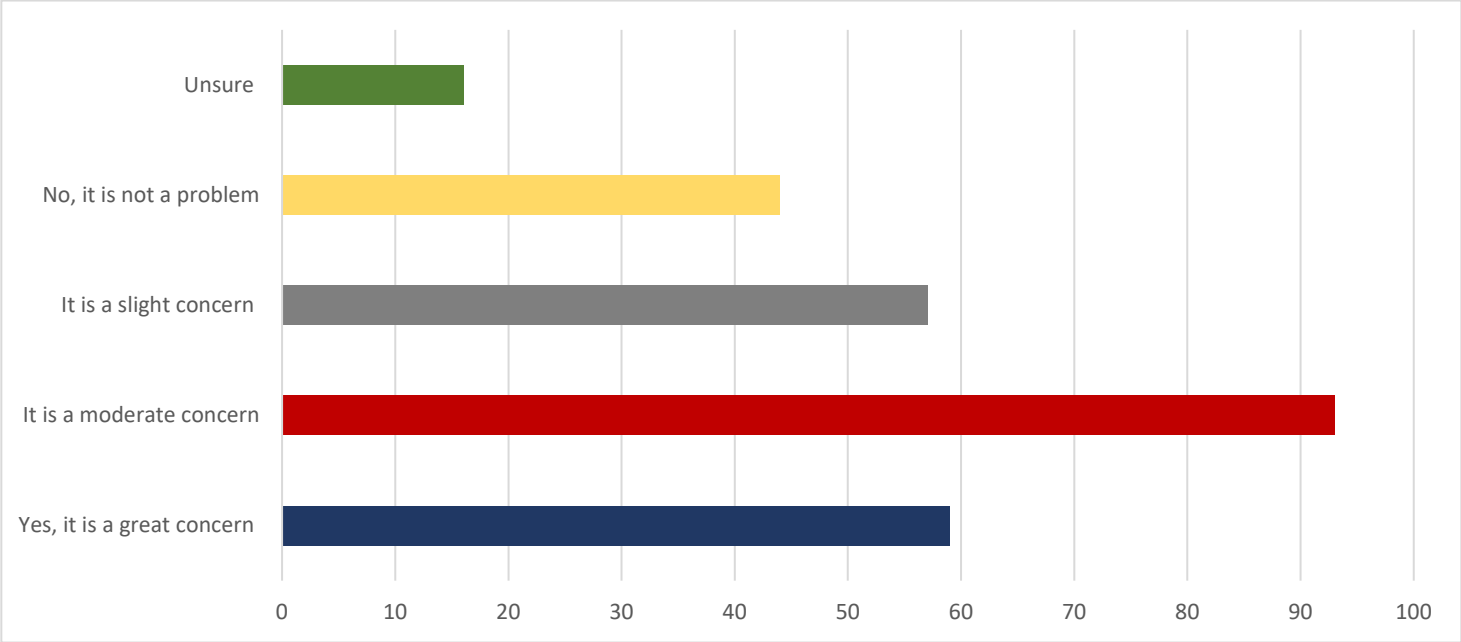
ANSWER CHOICES	RESPONSES	# OF RESPONSES
Yes	17.28%	47
No	45.22%	123
Unsure	37.50%	102
TOTAL		272

Q32 If yes, in what settings? (select all that apply)



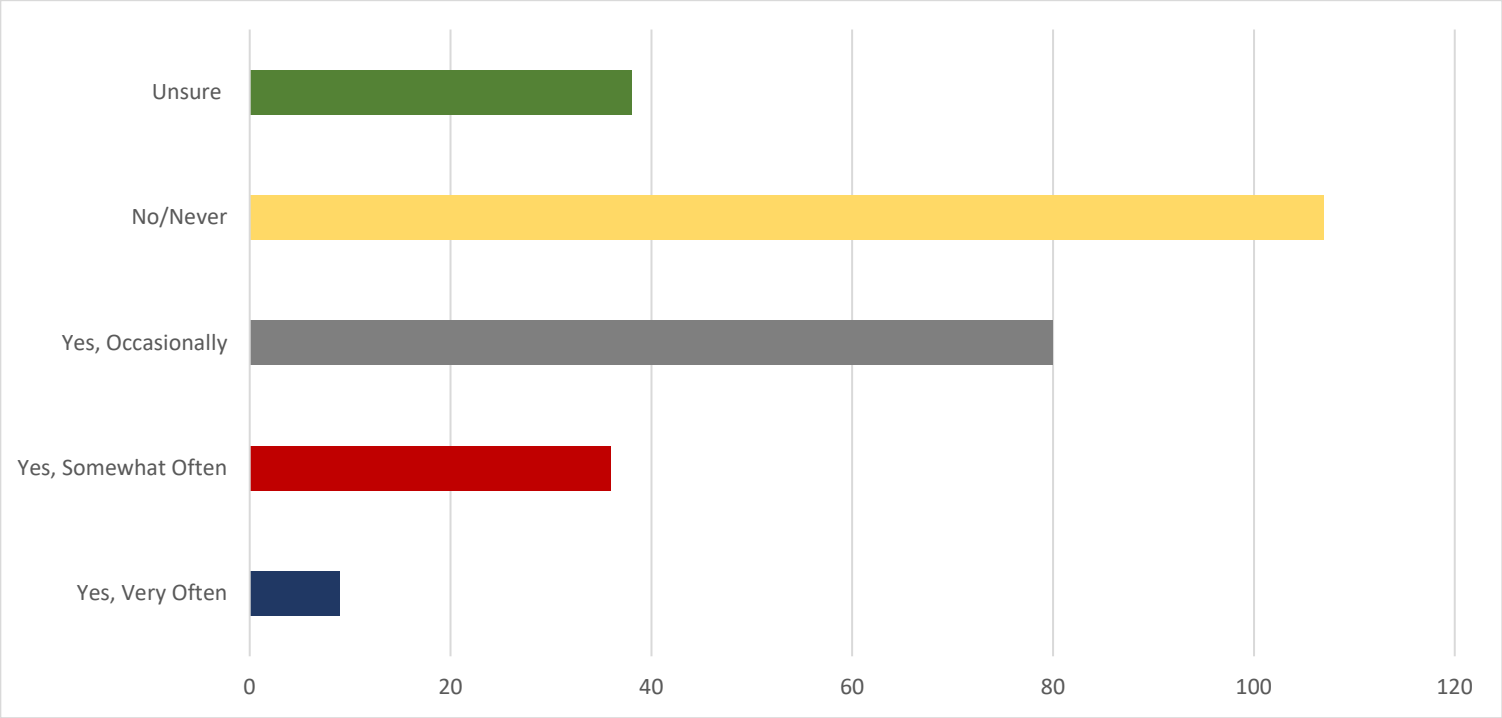
ANSWER CHOICES	RESPONSES	# OF RESPONSES
Hospitals	3.51%	2
Healthcare clinics	1.75%	1
Senior centers	87.72%	50
In-home, as part of visits by a community health worker	24.56%	14
Total Respondents: 57		

Q33 Is access to healthcare an issue for your seniors?



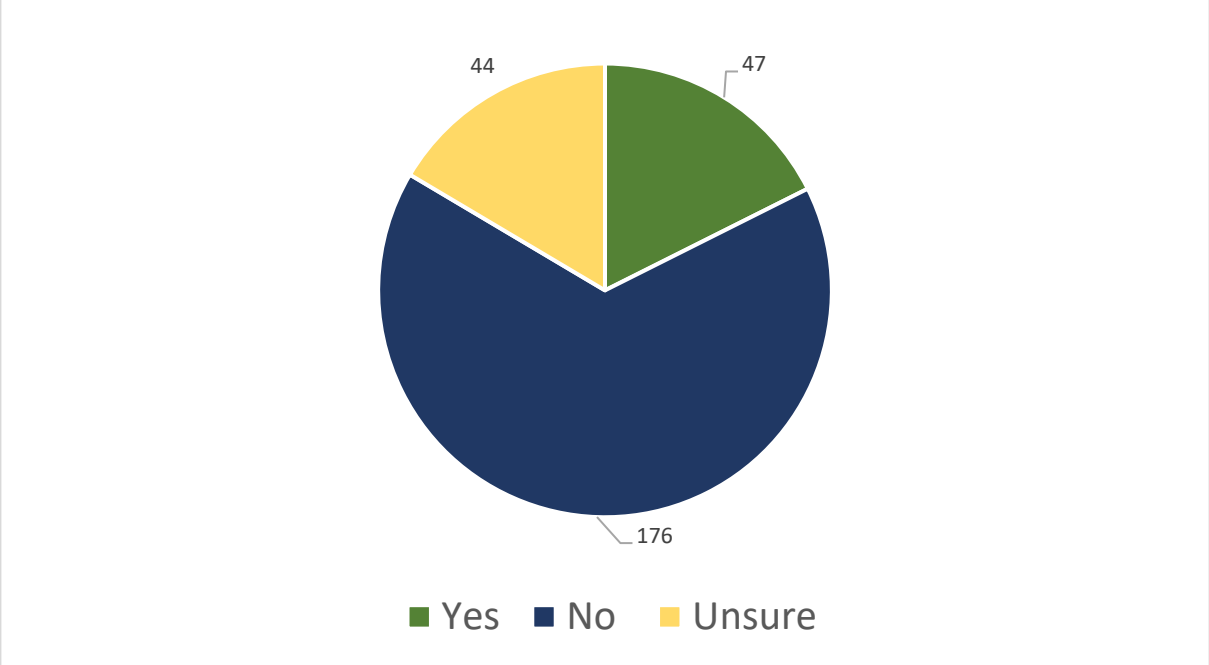
ANSWER CHOICES	RESPONSES	# OF RESPONSES
Yes, it is a great concern	21.93%	59
It is a moderate concern	34.57%	93
It is a slight concern	21.19%	57
No, it is not a problem	16.36%	44
Unsure	5.95%	16
TOTAL		269

Q34 Thinking about the growing use of internet for telehealth and other services, do you observe much interest/receive queries about this from your clients?



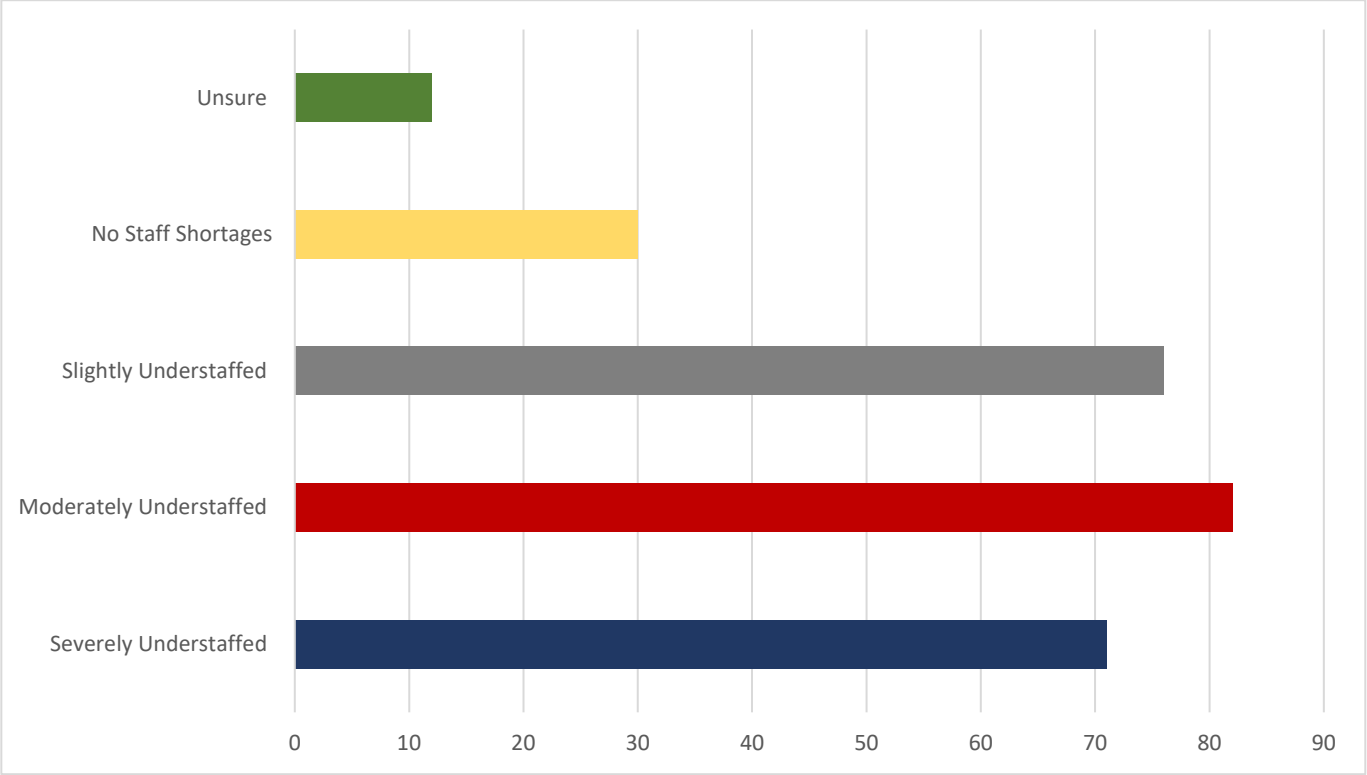
ANSWER CHOICES	RESPONSES	# OF RESPONSES
Yes, Very Often	3.33%	9
Yes, Somewhat often	13.33%	36
Yes, Occasionally	29.63%	80
No/Never	39.63%	107
Unsure	14.07%	38
TOTAL		270

Q35 Do you have a role in facilitating this so more seniors can participate in teleservices?



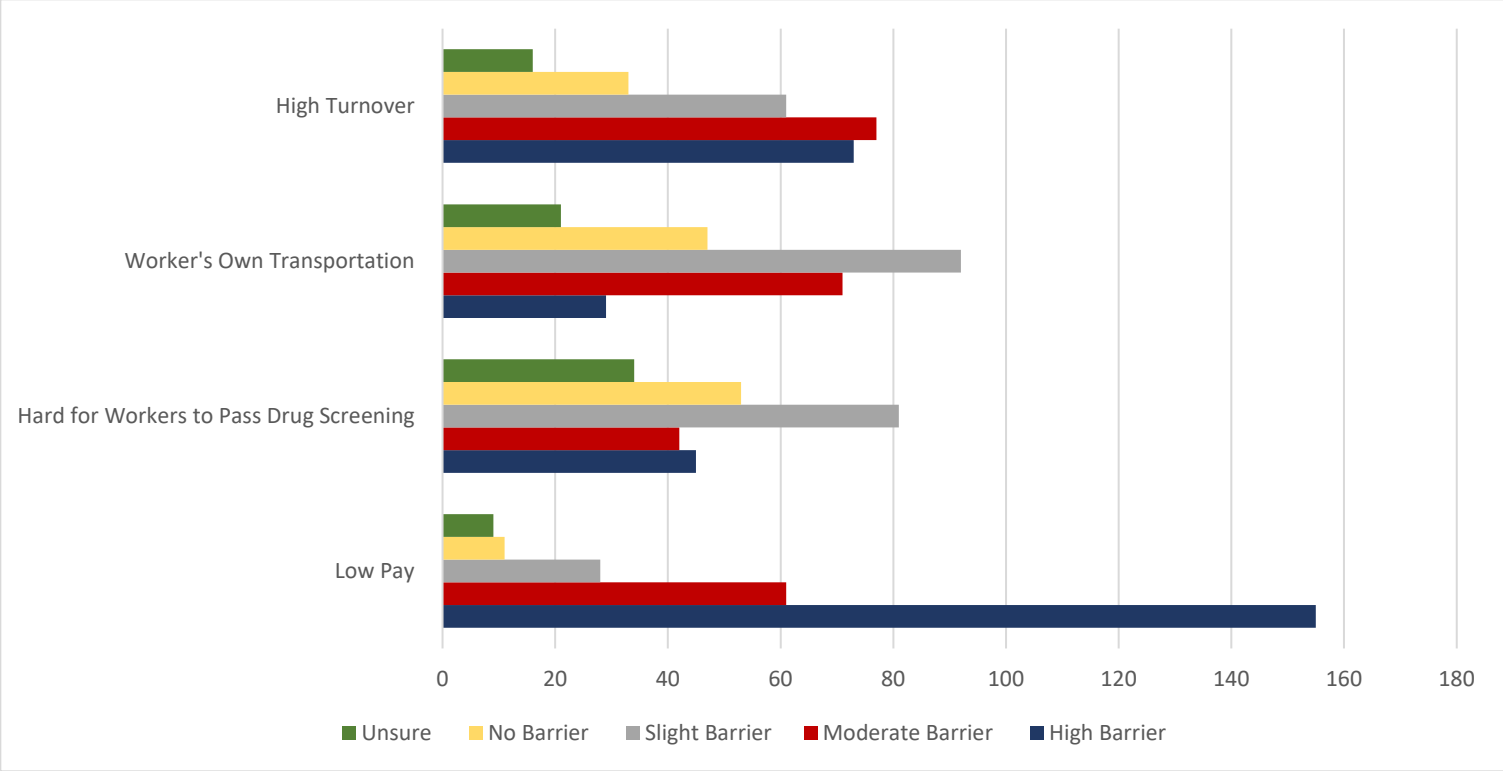
ANSWER CHOICES	RESPONSES	# OF RESPONSES
Yes	17.60%	47
No	65.92%	176
Unsure	16.48%	44
TOTAL		267

Q36 Thinking about the staffing situation for your center, how do you categorize the sufficiency of employees and/or applicants to fill openings?



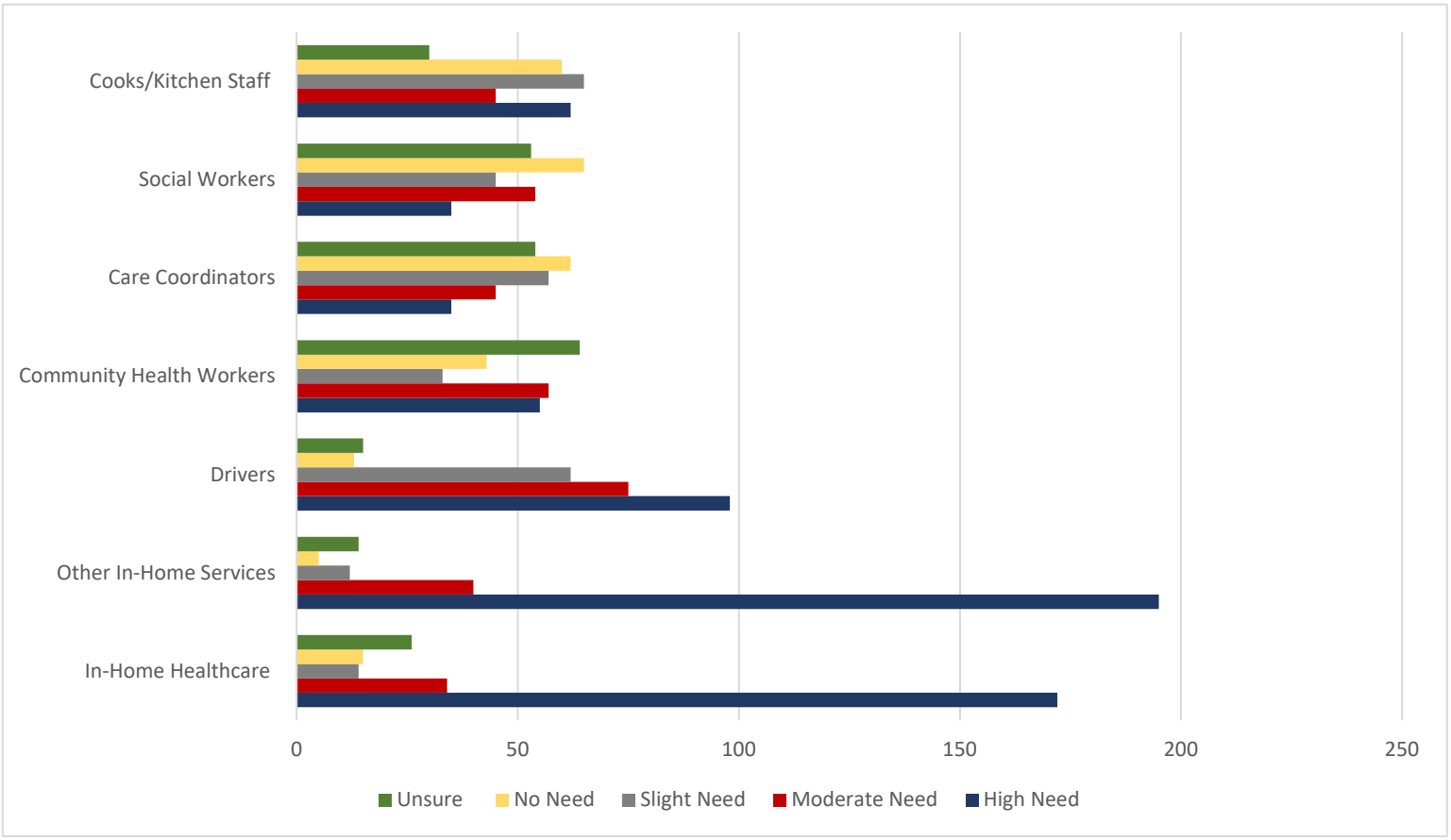
ANSWER CHOICES	RESPONSES	# OF RESPONSES
Severely Understaffed	26.20%	71
Moderately Understaffed	30.26%	82
Slightly Understaffed	28.04%	76
No staff shortages	11.07%	30
Unsure	4.43%	12
TOTAL		271

Q37 What are the biggest barriers to hiring new workers?



	HIGH BARRIER	MODERATE BARRIER	SLIGHT BARRIER	NO BARRIER	UNSURE	TOTAL
Low pay	58.71%	23.11%	10.61%	4.17%	3.41%	
	155	61	28	11	9	264
Hard for workers to pass drug screening	17.65%	16.47%	31.76%	20.78%	13.33%	
	45	42	81	53	34	255
Worker's own transportation	11.15%	27.31%	35.38%	18.08%	8.08%	
	29	71	92	47	21	260
High turnover	28.08%	29.62%	23.46%	12.69%	6.15%	
	73	77	61	33	16	260

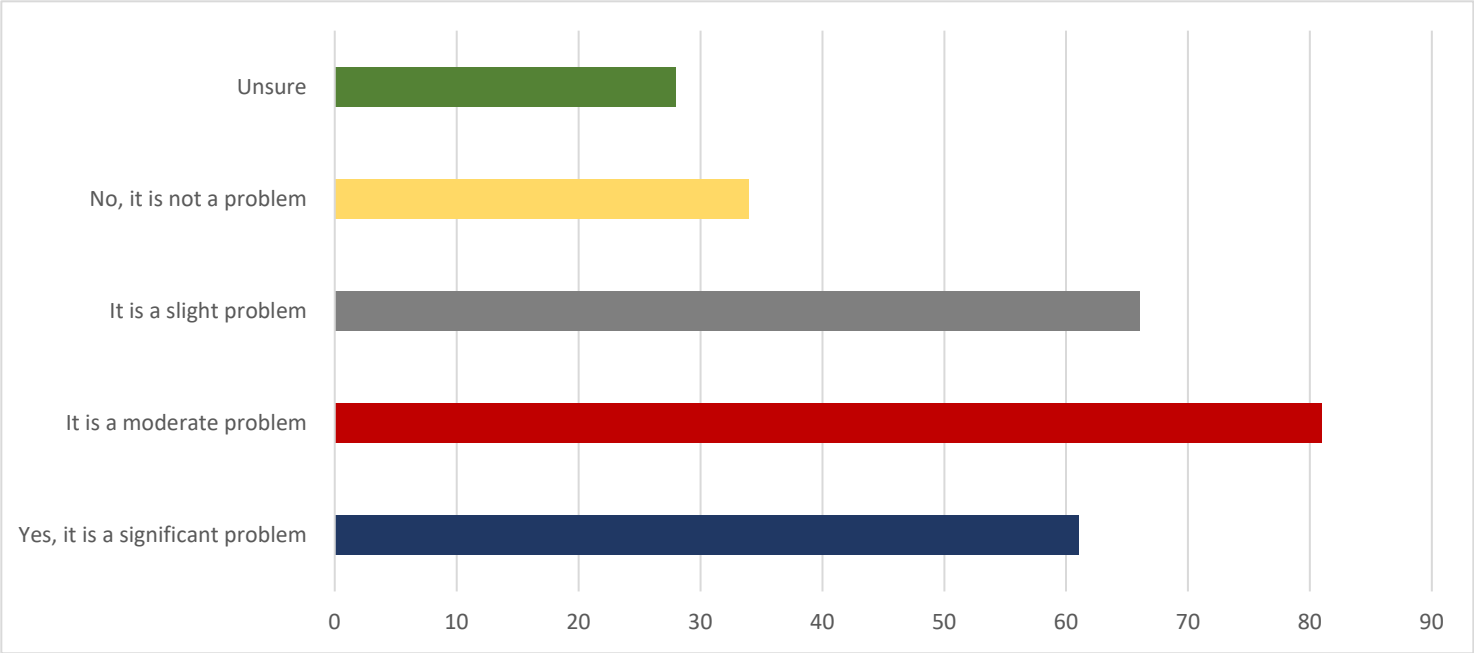
Q38 What are the biggest staffing areas of need?



	HIGH NEED	MODERATE NEED	SLIGHT NEED	NO NEED	UNSURE	TOTAL
In-home healthcare	65.90%	13.03%	5.36%	5.75%	9.96%	
	172	34	14	15	26	261
Other in-home services (homemaker, personal care)	73.31%	15.04%	4.51%	1.88%	5.26%	
	195	40	12	5	14	266
Drivers	37.26%	28.52%	23.57%	4.94%	5.70%	
	98	75	62	13	15	263
Community health workers	21.83%	22.62%	13.10%	17.06%	25.40%	
	55	57	33	43	64	252
Care coordinators	13.83%	17.79%	22.53%	24.51%	21.34%	
	35	45	57	62	54	253

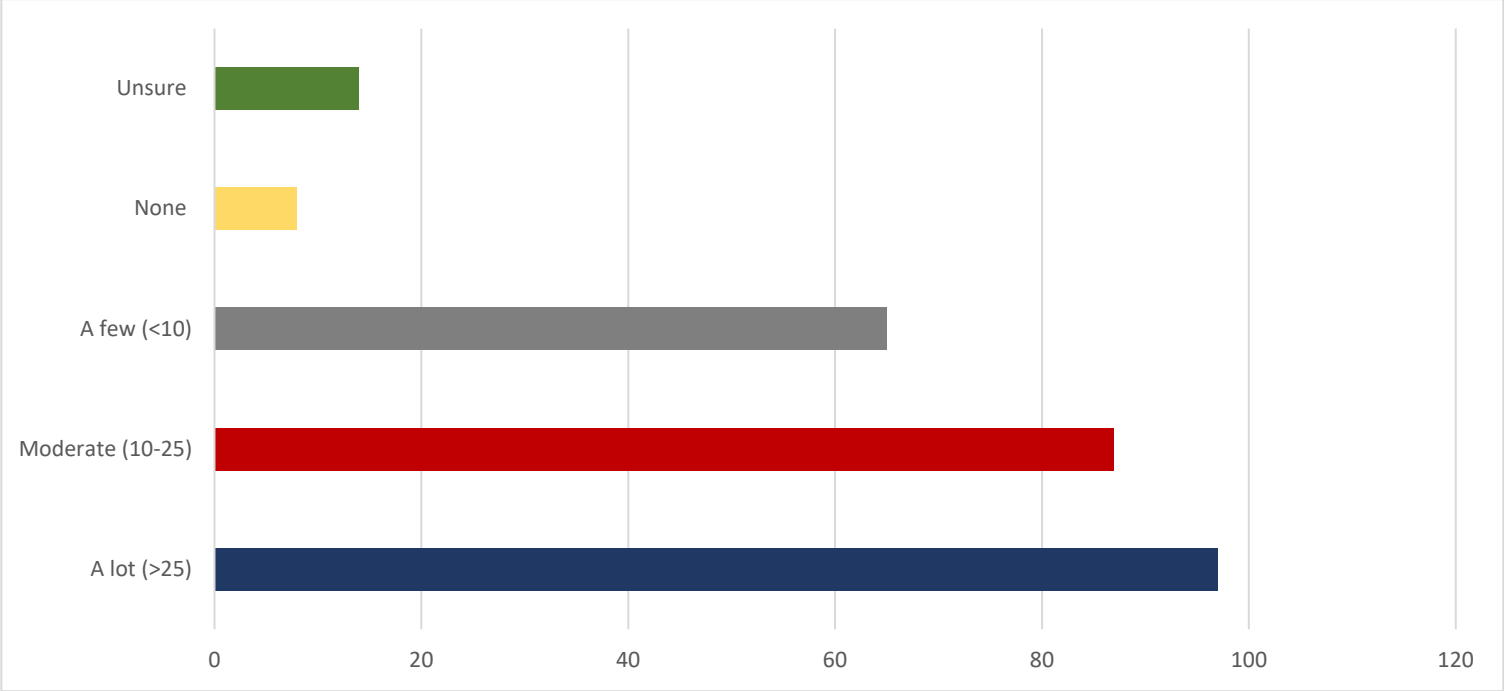
Social workers	13.89%	21.43%	17.86%	25.79%	21.03%	
	35	54	45	65	53	252
Cooks/ Kitchen staff	23.66%	17.18%	24.81%	22.90%	11.45%	
	62	45	65	60	30	262

Q39 Are sub-standard housing conditions a problem for your senior population?



ANSWER CHOICES	RESPONSES	# OF RESPONSES
Yes, it is a significant problem	22.59%	61
It is a moderate problem	30.00%	81
It is a slight problem	24.44%	66
No, it is not a problem	12.59%	34
Unsure	10.37%	28
TOTAL		270

Q40 Are many seniors with whom you interact in need of home modifications for mobility (ramps, interior remodeling, shower railings) but lack the resources to do so?

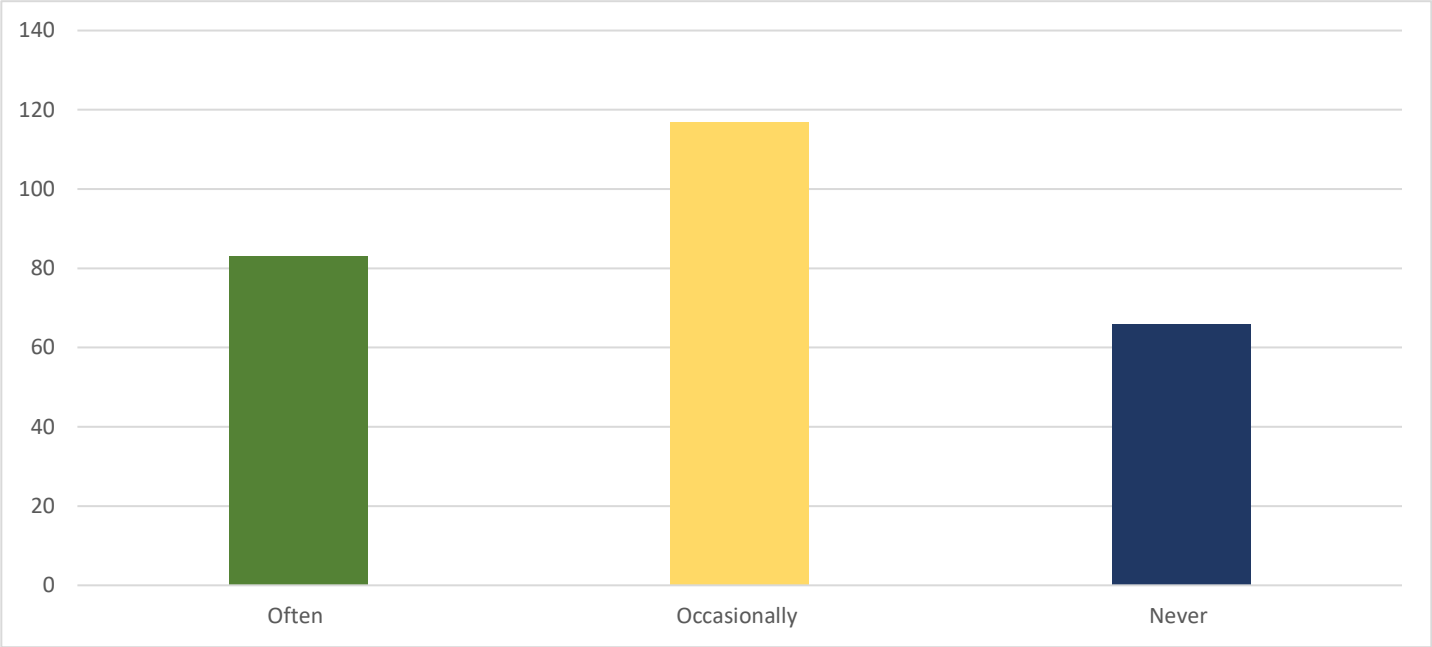


ANSWER CHOICES	RESPONSES	# OF RESPONSES
A lot (>25)	35.79%	97
Moderate (10-25)	32.10%	87
A Few (<10)	23.99%	65
None	2.95%	8
Unsure	5.17%	14
TOTAL		271

Q41 Is it difficult to find resources to help seniors maintain or repair their homes?

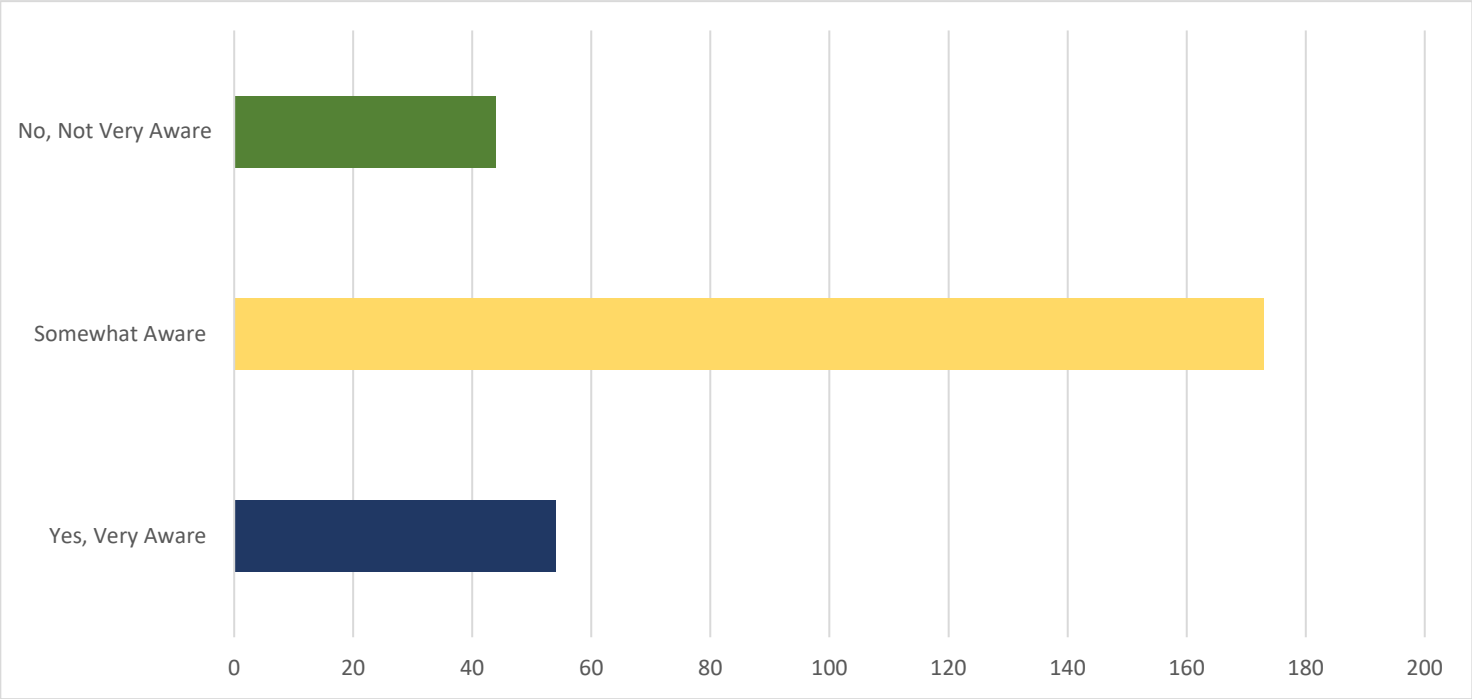
ANSWER CHOICES	RESPONSES	# OF RESPONSES
Yes	91.32%	242
No	8.68%	23
TOTAL		265

Q42 How often do you refer/help clients to the WV Weatherization Assistance Program or another home improvement assistance organization?



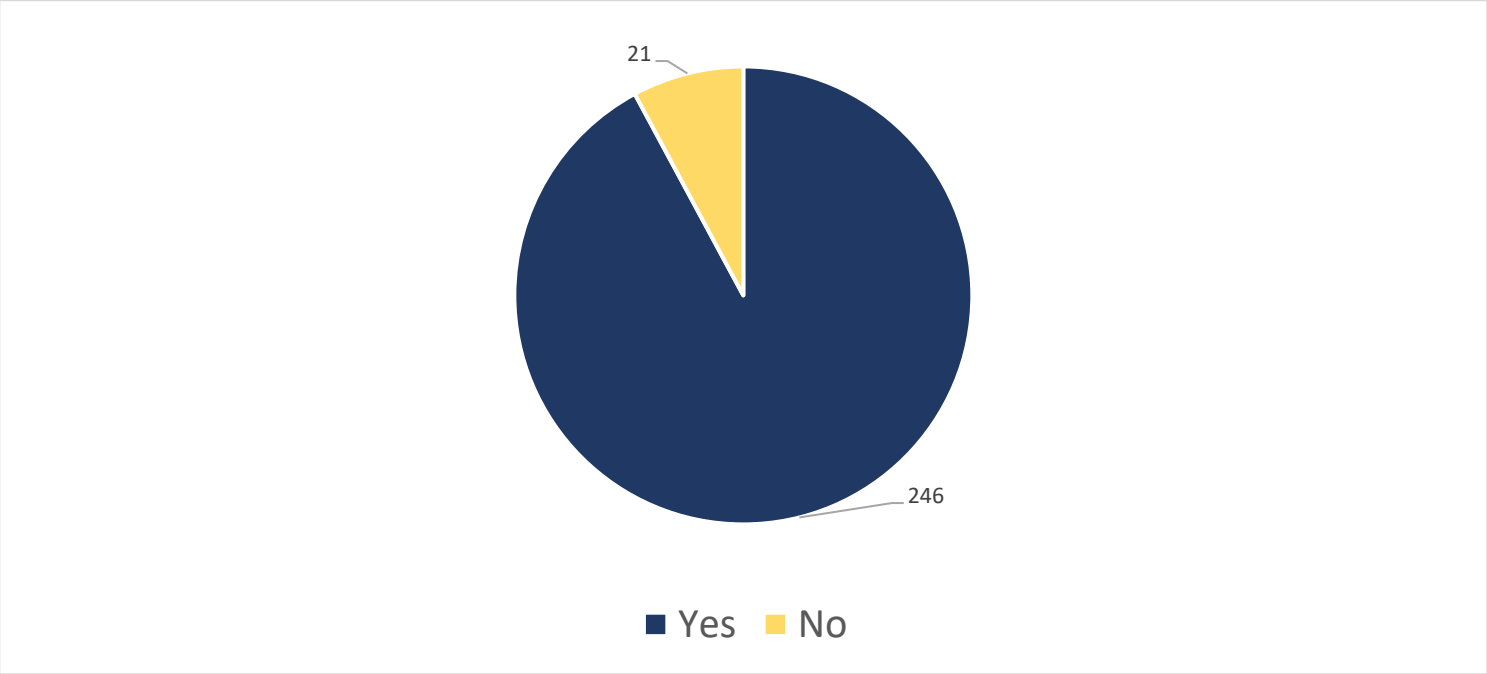
ANSWER CHOICES	RESPONSES	# OF RESPONSES
Often	31.20%	83
Occasionally	43.98%	117
Never	24.81%	66
TOTAL		266

Q43 Are seniors in your area aware of services available to them?



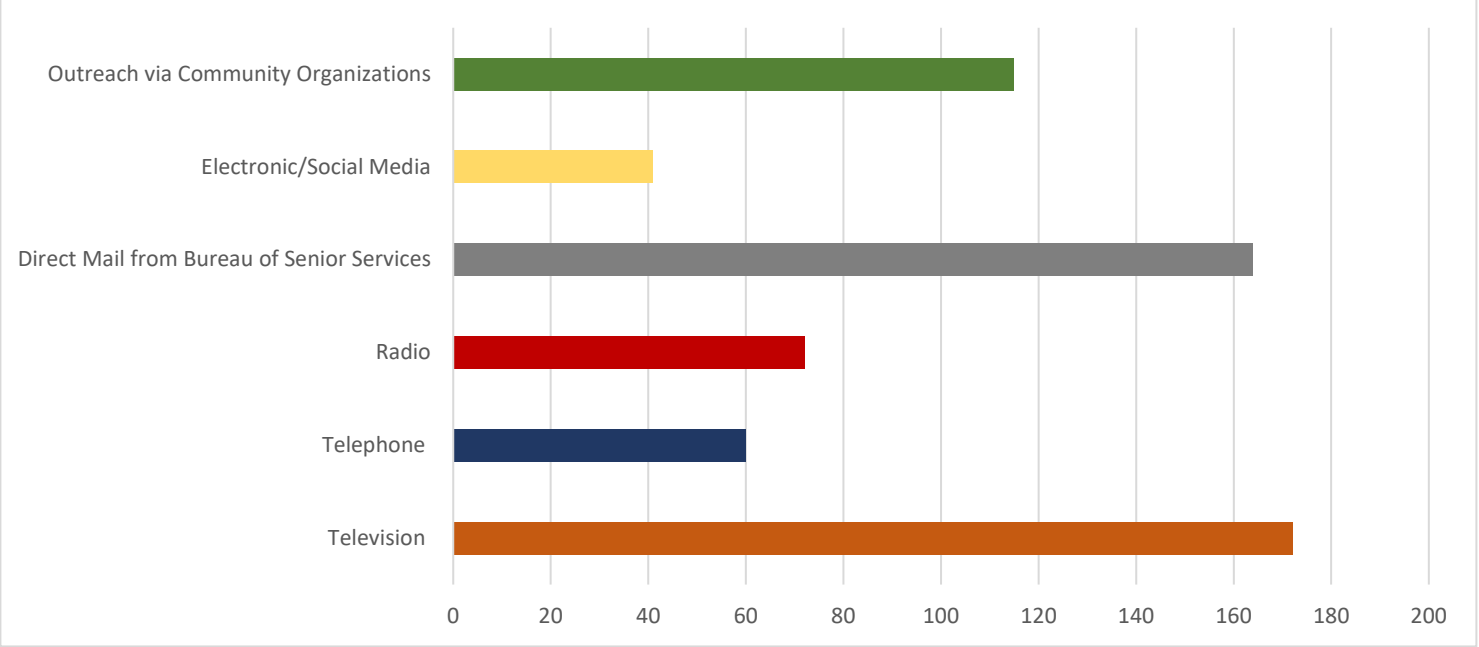
ANSWER CHOICES	RESPONSES	# OF RESPONSES
Yes, Very Aware	19.93%	54
Somewhat Aware	63.84%	173
No, Not Very Aware	16.24%	44
TOTAL		271

Q44 Is additional marketing and outreach needed to reach more seniors?



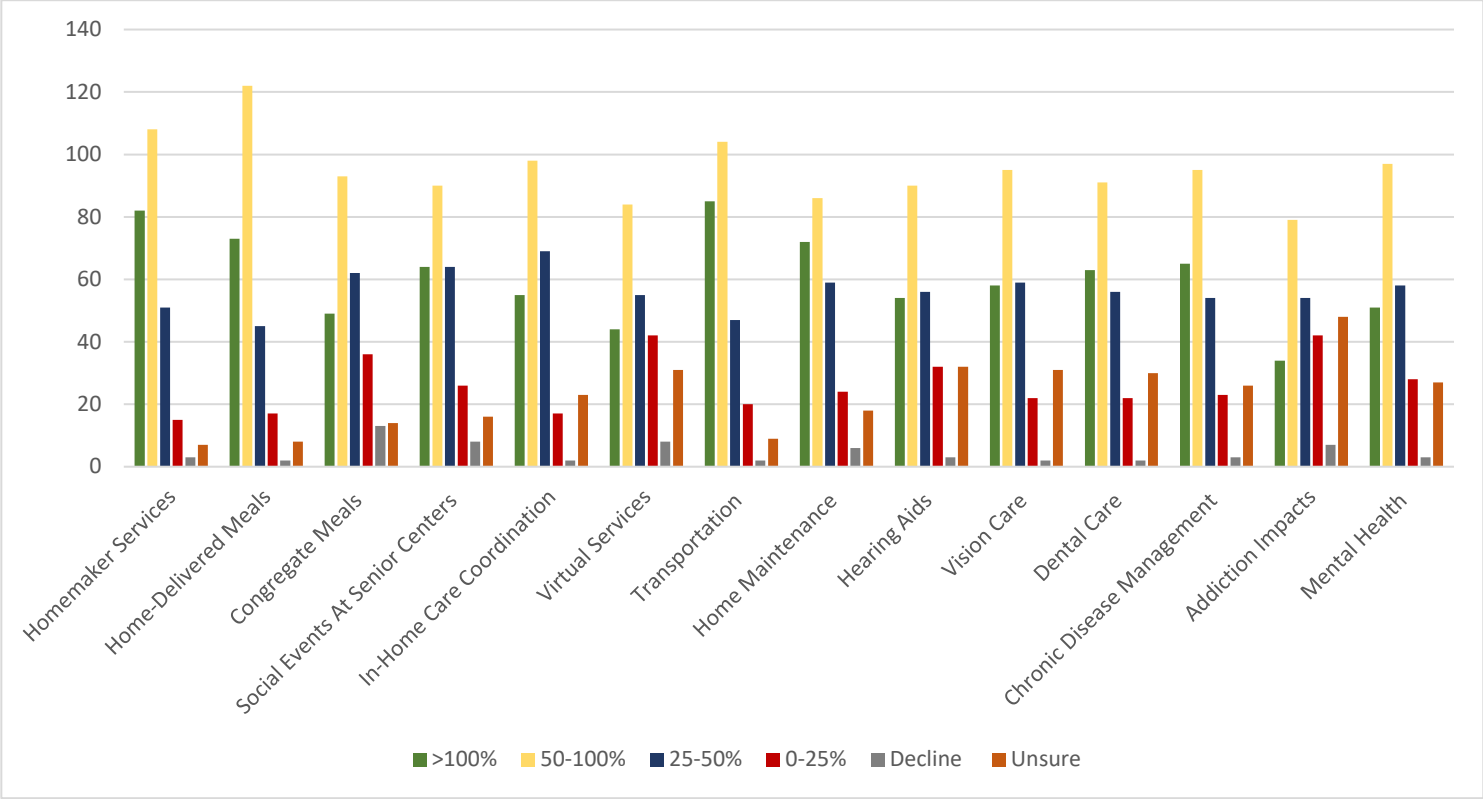
ANSWER CHOICES	RESPONSES	# OF RESPONSES
Yes	92.13%	246
No	7.87%	21
TOTAL		267

Q45 What outreach methods would be most effective? Please select no more than two.



ANSWER CHOICES	RESPONSES	# OF RESPONSES
Television	64.66%	172
Telephone	22.56%	60
Radio	27.07%	72
Direct mail from Bureau of Senior Services, etc.	61.65%	164
Electronic/ Social Media	15.41%	41
Outreach via community organizations	43.23%	115
Total Respondents: 266		

Q46 Thinking about expected growth in the senior population, and generational preferences among seniors, over the next 10 years, what level of change in demand do you expect for the following?



	+ > 100%	+ 50 TO 100%	+ 25 TO 50%	+ 0 TO 25%	DECLINE	UNSURE	TOTAL
Homemaker services	30.83%	40.60%	19.17%	5.64%	1.13%	2.63%	
	82	108	51	15	3	7	266
Home-delivered meals	27.34%	45.69%	16.85%	6.37%	0.75%	3.00%	
	73	122	45	17	2	8	267
Congregate meals	18.28%	34.70%	23.51%	13.43%	4.85%	5.22%	
	49	93	63	36	13	14	268
Social events at senior centers	23.88%	33.58%	23.88%	9.70%	2.99%	5.97%	
	64	90	64	26	8	16	268
In-home care coordination	20.83%	37.12%	26.14%	6.44%	0.76%	8.71%	
	55	98	69	17	2	23	264

Virtual services	16.67%	31.82%	20.83%	15.91%	3.03%	11.74%	
	44	84	55	42	8	31	264
Transportation	31.84%	38.95%	17.60%	7.49%	0.75%	3.37%	
	85	104	47	20	2	9	267
Home maintenance	27.17%	32.45%	22.26%	9.06%	2.26%	6.79%	
	72	86	59	24	6	18	265
Hearing aids	20.22%	33.71%	20.97%	11.99%	1.12%	11.99%	
	54	90	56	32	3	32	267
Vision care	21.72%	35.58%	22.10%	8.24%	0.75%	11.61%	
	58	95	59	22	2	31	267
Dental care	23.86%	34.47%	21.21%	8.33%	0.76%	11.36%	
	63	91	56	22	2	30	264
Chronic disease management	24.44%	35.71%	20.30%	8.65%	1.13%	9.77%	
	65	95	54	23	3	26	266
Addiction impacts	12.88%	29.92%	20.45%	15.91%	2.65%	18.18%	
	34	79	54	42	7	48	264
Mental health	19.32%	36.74%	21.97%	10.61%	1.14%	10.23%	
	51	97	58	28	3	27	264