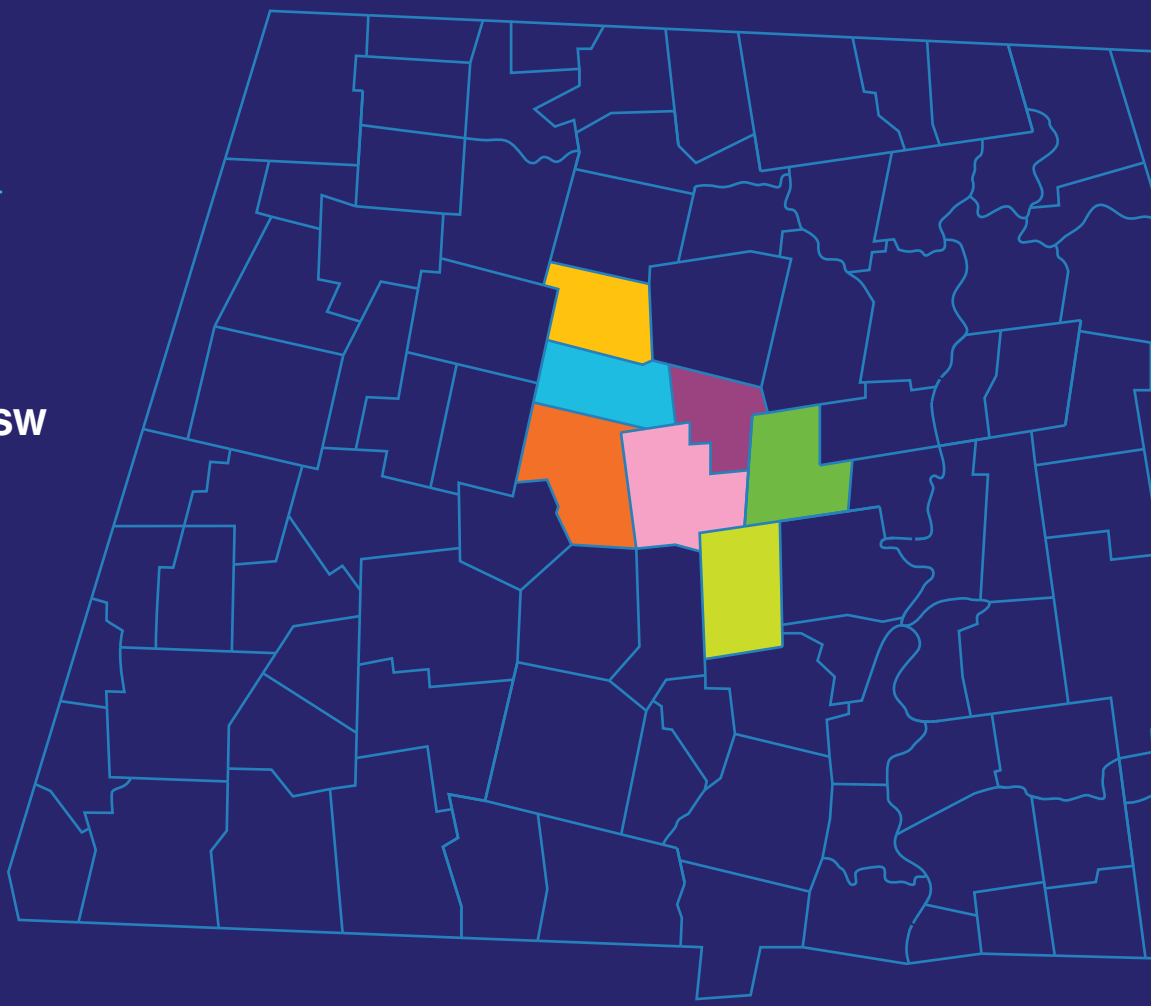
REPORT ON

Aging and Technology in Seven Rural Hilltowns

Northern Hilltowns Consortium of Councils on Aging

Peg Whalen, PhD MSW

Digital Development Coordinator



April 2024

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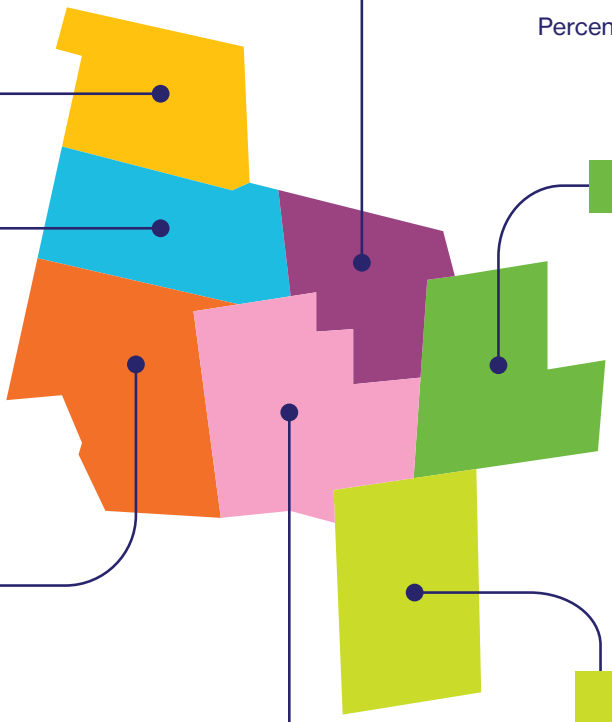
Seven Rural Hilltowns in Western Massachusetts



Plainfield

Population: **566**
Number Older Adults: **272**
Percent Older Adults: **48%**

Goshen

Population: **962**
Number Older Adults: **389**
Percent Older Adults: **43%**

Williamsburg

Population: **2,638**
Number Older Adults: **976**
Percent Older Adults: **37%**

Cummington

Population: **843**
Number Older Adults: **347**
Percent Older Adults: **36%**

Worthington

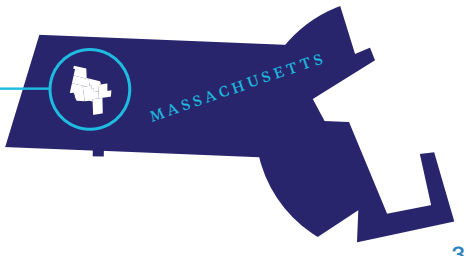
Population: **1,290**
Number Older Adults: **529**
Percent Older Adults: **41%**

Westhampton

Population: **1,611**
Number Older Adults: **596**
Percent Older Adults: **37%**

Chesterfield

Population: **1,234**
Number Older Adults: **455**
Percent Older Adults: **39%**



Acknowledgments

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Melissa Wilson, Williamsburg Senior Center director
Phyllis Dassatti, Worthington COA director

The Consortium sincerely thanks the older adults that graciously shared their time, opinions, and experiences by returning the questionnaire. We are grateful and pleased to share the voices of over 1,200 rural older adults, a rare opportunity for rural populations. With their participation, our needs assessment has created results that support both Consortium programming and inform many other rural communities about older adult needs and interests related to digital equity.

Special thanks are due to **Dr. Frank Robinson** of Baystate Health Digital Equity Initiative and **Damia Cavallari Stewart**, President, Transit Authority Figures. Frank provided funding for producing this report. Damia worked closely with us on shaping our work into an accessible, easy to read report. Their involvement improves this work and supports broader dissemination, hopefully to the benefit of other older adults and aging services providers.

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Digital copies of this report can be found on the Consortium website, **www.northernhilltownscoas.org**

1 Introduction

Introduction

Digital equity, as defined by The Alliance for Digital Equity in Western Massachusetts, is the ideal in which all people and communities have equal access to high-speed Internet, equipment and devices, and the knowledge and skills to fully engage with and participate in the digital world.

Digital equity aims to solve the disproportionate access to the digital world for groups of people that historically have been disadvantaged or denied access to privileges in a variety of ways, (i.e. economically, educationally, socio-culturally, geographically). In the digital world, the additional "disadvantage" of lacking access and opportunity to be part of virtual communities and information has resulted in a digital divide for many sub-groups of people.

Many older adults have less access to information and services because they are unable to use technology. Although many older adults do use technology, many others do not use or have access to computers, the Internet, training, and other technology. This reality has unique characteristics and causes which affect older adults—especially those living in rural communities.

"The digital divide is the disparity in access to digital technologies. The term "digital divide" refers to the gap between people who are able to benefit from digital technologies and those who cannot. The digital divide creates economic, educational, and social inequalities...[and] has impacts that cut across all aspects of life and our society."

The Alliance for Digital Equity, 2021, p. 7

"Digital equity is necessary for civic and cultural participation, employment, lifelong learning, and access to essential services."

The Alliance for Digital Equity, 2021, p. 8

BACKGROUND

The digital divide for older people in the seven rural northern hilltowns of northwest Hampshire County, Massachusetts was apparent even before the COVID pandemic. The Northern Hilltowns Consortium of Councils on Aging (Consortium) members had been aware of the limited use of technology by people 60 and older. This digital divide among older adults, or *Aging Digital Divide*, is a growing concern.

Until recently, the majority of the northern hilltowns had no access to broadband Internet services. Lack of high-speed access was a major barrier to effective access to Internet and motivation to acquire digital skills. Town specific surveys of potential broadband service users had been collected. However, little was known about technology interest, knowledge, use, and available technical support among people 60 and older.

The importance of addressing digital equity issues around the age-based digital divide became a focus for a group of seven rural hilltowns in Western Massachusetts.

The towns are Chesterfield, Cummington, Goshen, Plainfield, Westhampton, Worthington, and Williamsburg, Massachusetts.

ABOUT THIS REPORT

This report presents the results of the Aging and Technology survey, conducted in early 2023.

The report:

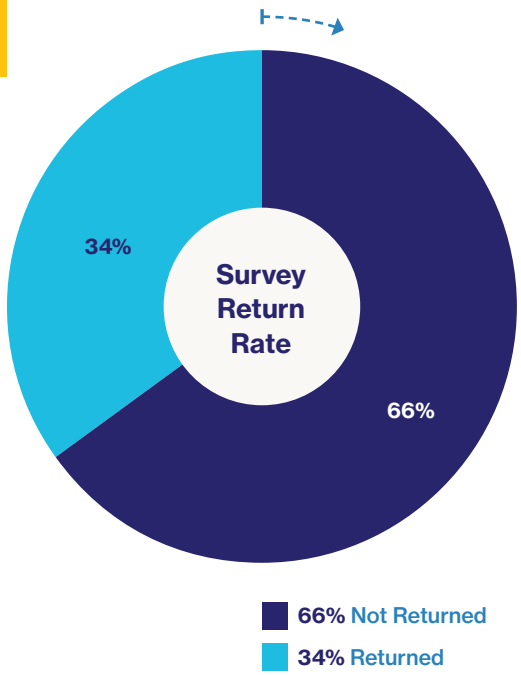
- Details **community and respondent demographics**, representativeness of the people returning questionnaires as compared with the hilltowns' older adult populations.
- Explores **existing Internet access, devices, and phone technology** among older adults.
- Reports **experiences using digital technology** including troubles encountered and Internet safety.
- Identifies **interest in learning more**, the nature of desired knowledge and skills, and desired ways of getting assistance.
- Focuses on **two subgroups** of older adults: (1) those that lack high speed/ broadband Internet access, and (2) self-rated beginner/novice users.
- Describes survey **methods**.
- Includes a copy of the **questionnaire**.

Finally, the report discusses lessons learned, limitations of the survey, and plans for the future.

For pie charts throughout this report, legends begin at the 12:00 position and flow in a clockwise direction.

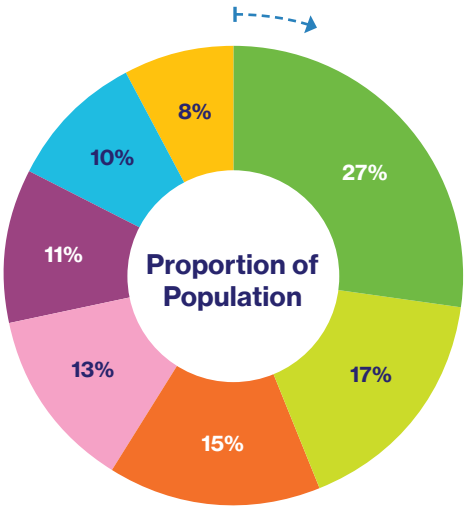
SURVEY METHODS

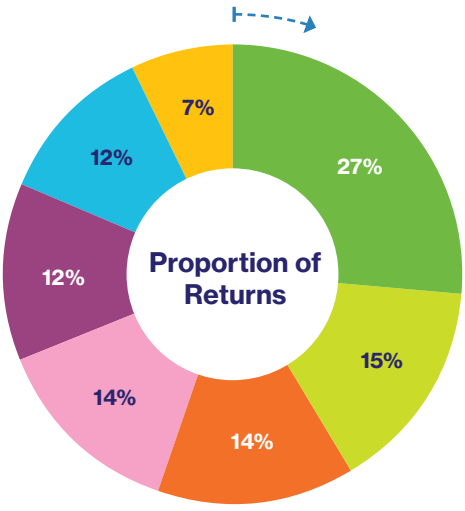
This needs assessment used a quantitative survey design to explore current technology use by older adults, their technology experiences, digital needs, and learning interests. Demographic data was also collected. A questionnaire was mailed to every older adult—residents age 60 and over—throughout the seven rural communities in Western Massachusetts. The mailing reached 3,517 people. This report is based on the 1,208 questionnaires returned in the first three months, representing 34% of the population.



REPRESENTATIVENESS OF SAMPLE

Returns are representative of the population distribution across the seven towns. Specifically, the received questionnaires came from towns in proportions that are very similar to the population of all older adults originally sent a questionnaire.

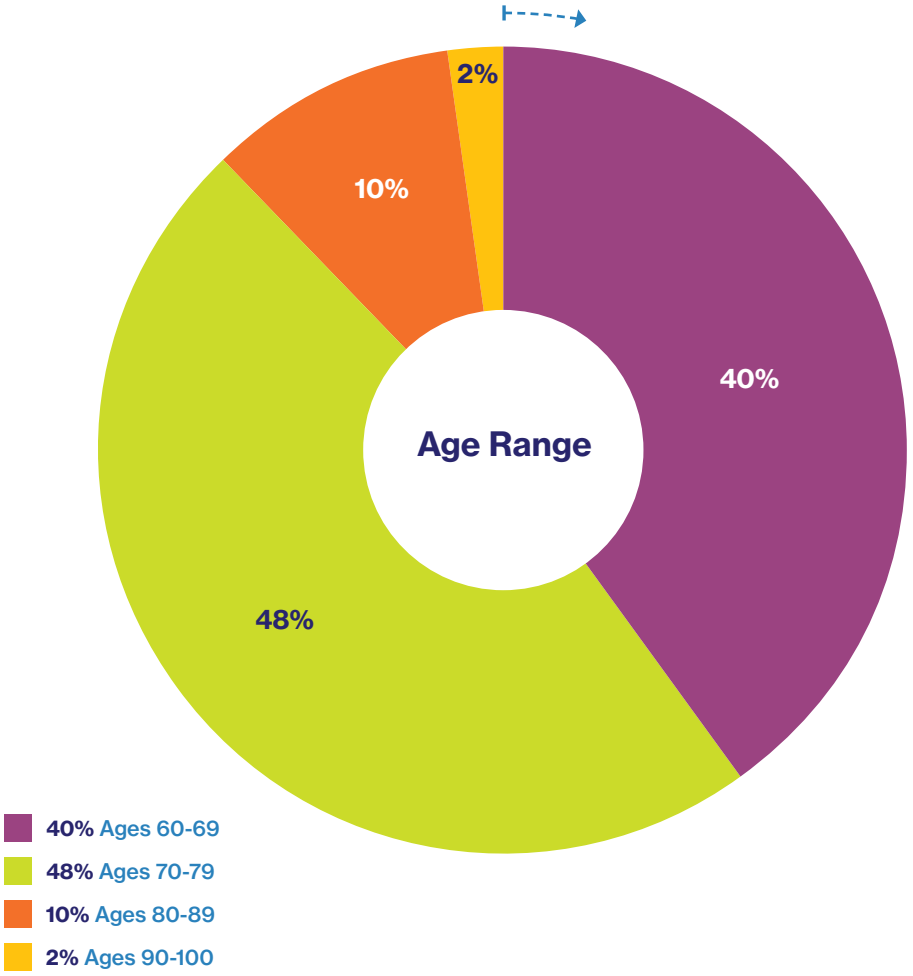




2 Demographics

Demographics

The questionnaire asked respondents to provide several different pieces of demographic information. Analysis was run to see if the demographics of the respondents were representative of the demographics of the local population. There are observed differences between the returns and the population for age, generation, and gender.

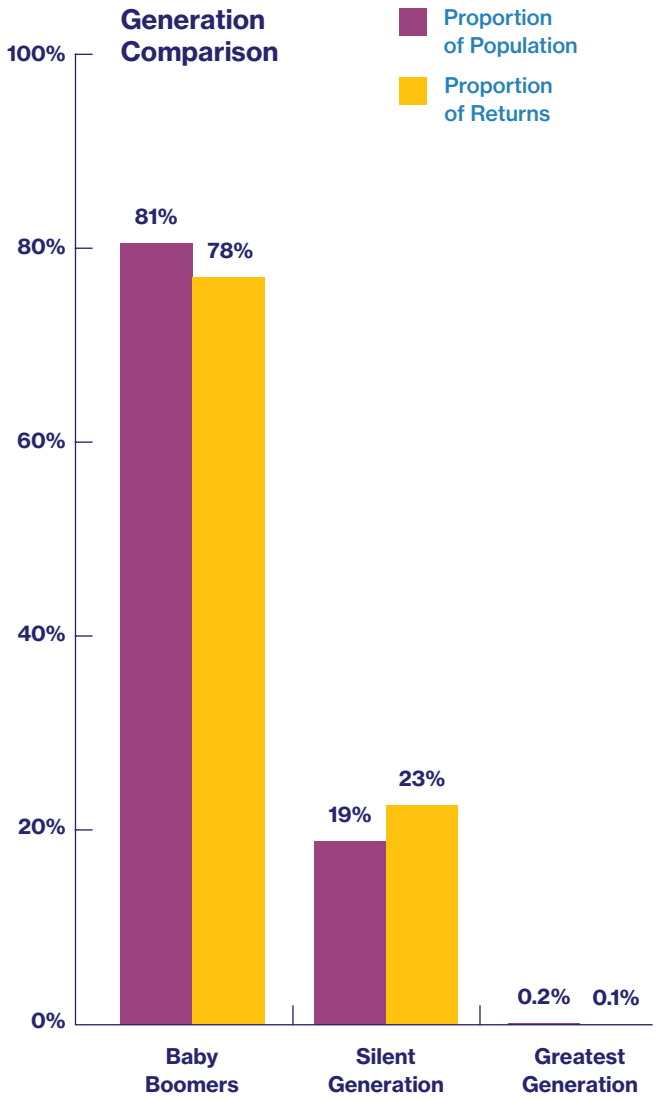


AGE

Ages ranged from 60 to 100 with an average age of 71.6 yrs. The highest percentage of responses was from people in their 70's (48%), followed by people in their 60's (40%). Returns from people in their 80's and 90's were at 10% and 2%, respectively.

GENERATION

Looking at generations, **Baby Boomers** those between 60 and 76 (based on birth years ranging from 1947 to 1963), were less likely to return the questionnaire. Baby Boomers make up about 81% of the hilltown population, yet questionnaires returned by them made up 77% of responses. **The Greatest Generation (World War II Generation) and Silent Generations make up 19%** of the hilltown older adults, and 23% of questionnaires were received from this group. The difference in returns suggests two realities. First, WWII and Silent Generations are using technology and are interested in sharing their experiences with it. Second, because Baby Boomers include a subset of people who are still employed, this group may have less time or inclination to complete questionnaires. Understandably those who are retired may have more time to participate. Because of space limitations, participants were not asked about employment status. This omission means this possible explanation cannot be explored.

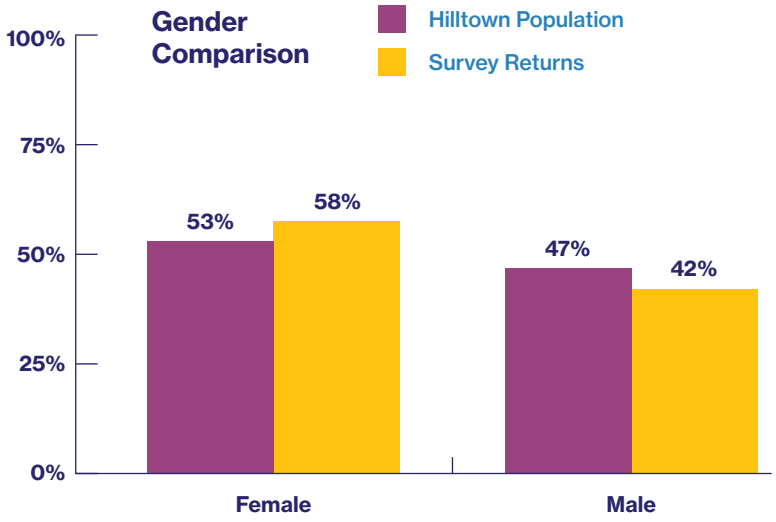


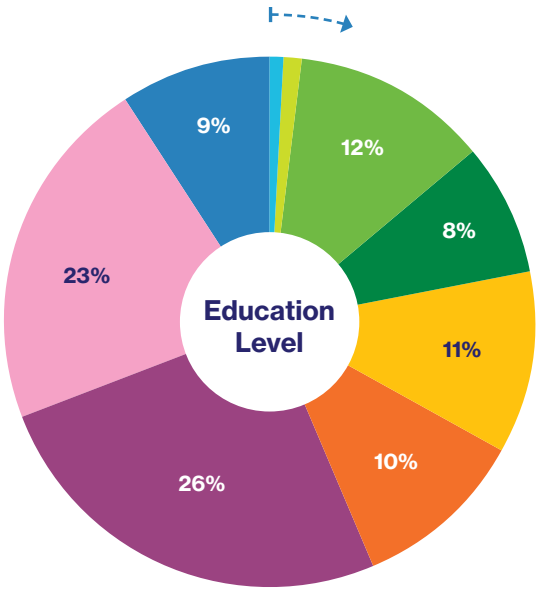
NUMBER OF OLDER ADULTS IN HOUSEHOLD

Respondents indicated how many older adults reside in their homes. Nearly one-third of participants (32%) live in households where they are the only older adult, although they may reside with multi-generational household members. The largest proportion of responses came from people in households with two older adults (67%), and the remaining 2% live in households with three or more older adults. Results do not indicate whether there are additional multi-generational household members in the home.

GENDER

In the population of hilltown older adults, 53% are female, and 47% are male. Returned questionnaires came from a higher proportion of women (58%) than from men, (42%). Non-binary respondents account for 0.1% of participants. These data reveal disproportionately higher participation in the survey by women than men.





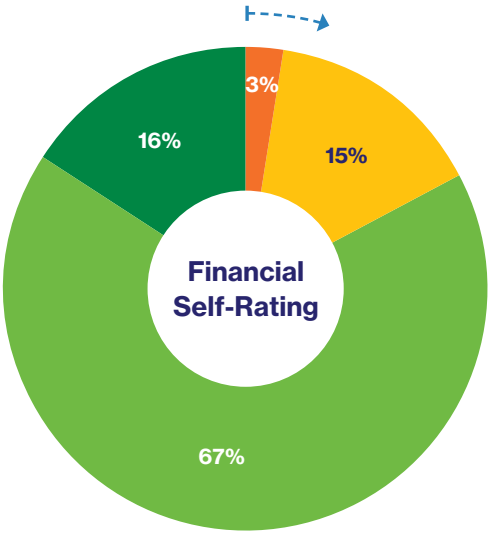
- **0.3%** 6th to 8th Grade
- **0.6%** 9th to 11th Grade
- **12%** High School Diploma / GED
- **8%** Trades / Professional / Training
- **11%** Some College
- **10%** Associate Degree
- **26%** Bachelor's Degree
- **23%** Master's Degree
- **9%** Doctoral Degree

EDUCATION

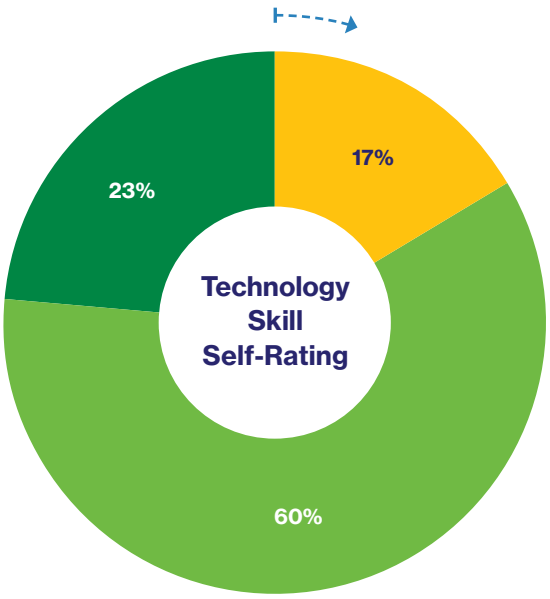
Education ranged from people with 6th grade educations through those with doctoral degrees. Questionnaires were returned most frequently by people with bachelor's degrees, 26%. Those with Master's degrees account for 23%, and doctoral degree holders are 9%. All but one respondent with trade or professional training also reported some college attendance, leading us to combine these forms of education with 19% of people having some college/trade/professional training. Over 1 in 10 participants have a high school diploma or GED (12%). Slightly less than one percent had less than a full high school education (0.9%). The data indicate survey respondents have disproportionately higher levels of education compared to national averages. For example, nationally 2% of people have doctoral degrees, while the percentage of people with doctoral degrees in our sample was 9%.

FINANCES

Participants were asked to self-rate the adequacy of their incomes. Although these ratings are personal and subjective, they still provide a rough way to determine the representativeness of the sample of responses. Two-thirds of participants (67%) indicate they have *enough*. An additional 16% describe having *more than enough*. A similar percentage (15%), indicate they have *barely enough*. A small percentage (3%) described their financial situation as *not enough*.



3% Not Enough
15% Barely Enough
67% Enough
16% More Than Enough



17% Novices / Beginners
60% Intermediate
23% Advanced/Expert

SELF-RATING AS TECHNOLOGY USERS

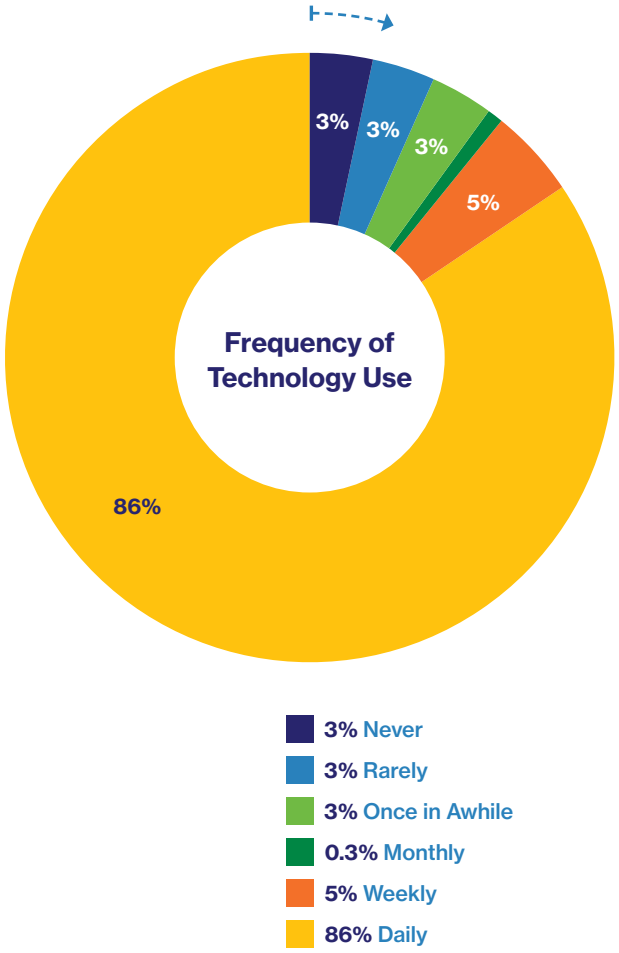
In order to assess skill levels, participants were asked to rate themselves with regard to technology use. Five skill levels were offered: interested non-user, beginner, intermediate, advanced, and expert. Interested non-users (novices) are a small group (4%). Beginners also are a small proportion of participants (13%). About 6 in 10 indicate they are intermediate (60%). Advanced users account for 1 in 5 (20%). And there is a small percentage of experts (3%).

Several respondents commented they are an intermediate level user "for my age," distinguishing skill with respect to age. These observations suggest older adults are aware of their peers' technology use, while also understanding that in comparison to younger generations their skill may be considered lower. A number of individuals describing themselves as experts commented that their employment is or had been in technology fields.

FREQUENCY OF TECHNOLOGY USE

People completed the sentence, "I use technology..." by choosing from six answers: *never, rarely, once in a while, monthly, weekly, daily.* Responses show that over 8 in 10 older adults who participated (86%) use technology daily. Almost 5% of respondents use technology weekly, while very few (0.3%) use it monthly. A little over 3% each reported using technology *once in a while, rarely,* and *never.*

Based on survey responses, a large majority of older adults (9 out of 10) are using technology on a regular basis. Given this finding, the northern hilltowns would appear to not have a substantial digital divide; however, the Councils on Aging in the seven hilltowns know the divide exists to a larger extent than the data show. These results suggest low rates of engagement of non-users and/or low frequency users in completing the questionnaire.



3

Internet, Devices, Phones & Library Internet Use

Internet, Devices, Phones & Library Internet Use

Access to different types of technology, including high-speed Internet and digital devices, is a hallmark of digital equity. Older adults were asked to describe the types and sources of high-speed Internet they have.

INTERNET ACCESS

Among those describing their type of Internet access, **80% report having some form of Internet service, either fiber, cable, and/or DSL.** Twenty percent of respondents did not choose a type of Internet service, yet a small percentage of those people report having access to the Internet. They may get Internet access through cellular service using a mobile device. Or they may lack the digital literacy to understand the nature of their Internet access, only that they have it.

After combining those with reported high-speed, DSL, and unidentified sources of Internet access, 92% of participants have some form of access to the Internet, high-speed or otherwise. Based on this data, we see that at least 73% have high-speed Internet service. This finding further reflects a likely over-representation of hilltown older adults with access to the digital world. The rationale for over-representation is from existing data in four towns that have fiber broadband. **The subscription rates show that between 20% and 30% of households are without service,** with a likely majority of these being the homes of older adults.

Close to half of participants (45%) reported having a Smart TV. Anecdotally, a number of older adults have said they have one but do not know how to use it. **These remarks suggest a distinction exists between having technology and fully using it.**

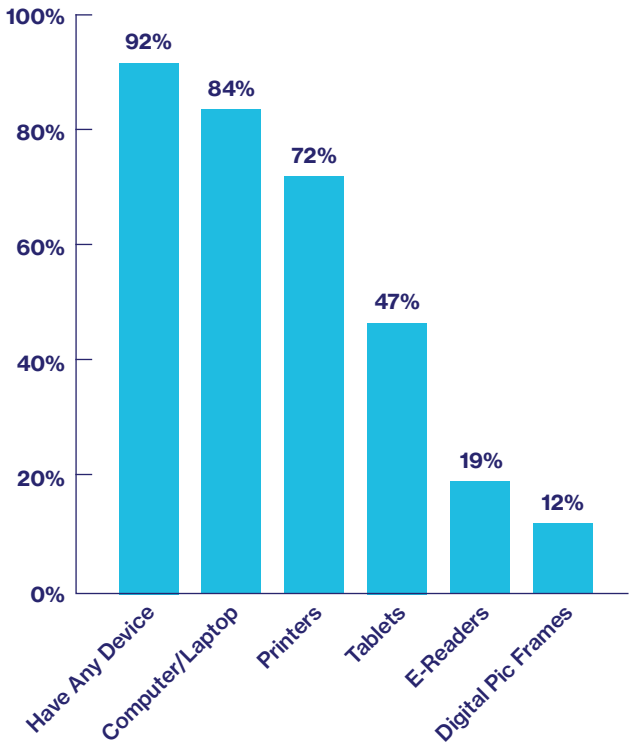
TECHNOLOGY DEVICES

Questions explored the types of equipment people have. Devices were presented in two groups—devices and phones. Six devices were listed:

1. Desktop Computer
2. Laptop
3. Tablet / iPad
4. Printer
5. Kindle / Nook
6. Digital Picture Frame

Over 9 out of 10 people (92%) have one or more of the devices listed. The most frequently owned device is a computer, either desktop, laptop, or both (84%). The next most common devices are printers (72%), followed by tablets (47%). E-Readers were much less common (19%), and digital picture frames lower still (12%).

Devices Reported



All of these devices are important technologies for accessing and interacting with the digital world. Having technology can facilitate social life, and devices potentially provide a digital solution to social isolation. For example, digital picture frames make it possible for people isolated at home to receive regular contact from family and friends.

Printers are important because much of the paperwork for healthcare, banking, retirement funds, legal, and other systems affecting older adult lives require the ability to print and return forms. Increasingly, though, systems are digitizing so people can "sign, scan, and email" forms as the new way to return documents.

CELLULAR PHONES

Phones are among the original forms of what has become digital technology. The northern hilltown area has gone from hard-wired phones to wireless handsets to having cellular service available almost everywhere. Newer devices can increase personal safety and give older adults visual contact with people they previously could only hear and speak with unseen. Understanding the types of phone service and devices people are using is informative for policy and programming.

Over half of respondents (59%) report having a landline. Land lines often maintain service when electric power is out, a regular occurrence in many rural areas, especially in fall and winter months. Landline capability is important to people experiencing health issues and having concerns about safety. This capacity is appealing to older adults, particularly those with health and mobility

issues who want to know they will have the ability to reach emergency services, neighbors, and family if they experience a problem.

Voice Over Internet (VOIP) phone services, like Skype, or broadband phone service (such as Ooma), was reported by 18%. Some participants indicated they have a landline but also marked Ooma service. This observation suggests a digital literacy issue, such that some people with VOIP do not understand they lack a landline. These individuals may have a false sense of security about their ability to reach emergency services. This finding suggests a need to better inform VOIP adopters about its limitations.

A little over 1 in 10 older adults have no cellular phone (11%). **The majority of respondents (89%) have cellular phones.** Of these people, 11% have only a non-smartphone/flip-phone, and 89% have smartphones. Distinguishing types of smartphones is relevant for training and technical support programming. The proportion of smartphone owners is around two-thirds having iPhones (68%) and one-third Androids (33%), with a few having both.

COMPUTER USE THROUGH LIBRARIES

Nationally, libraries were among the first community sites to provide residents with access to the Internet and WIFI. The survey looked at the percentage of people that reported going to the library to use the Internet. A small number of participants, 28, said they use the library to access the Internet; however, 244 older adults (20%) report they go to use library computers for other purposes. Several of the northern hilltown libraries also offer the opportunity to print documents, take a computer class, and other digital services. Libraries serve important social and educational needs in rural communities. Many do this with very limited resources because of small community sizes and constrained rural town budgets (Gustina, Guinnee, Decker & Bonney, 2020). Collaboration with libraries will be important to determine their roles in their communities with respect to digital equity and to support expanding what they already do for older adults and other residents.

"I want to learn more but not now, once retired. I may want to keep current with changes to Internet and devices."

4 Technology Use

Technology Use

The knowledge and skills needed to access and fully use the Internet, called "digital literacy," can make enormous differences in the lives of older adults and can change the experience of aging. Understanding current access, equipment, knowledge, interests, and skills clarifies older adult technology needs.

The questionnaire begins by asking participants to complete the sentence, *I use technology …* followed by seven choices: *never, rarely, once in a while, monthly, weekly, daily.* **A large majority (85%) of older adults report Daily use.** This group increases to 90% when including weekly users (5%) and monthly users (0.3%). The remaining low frequency users/ non-users account for 10%. Non-users and low frequency users are likely underrepresented among our respondents.

Among non-users (3%), a few respondents added comments stating proudly or emphatically that they are committed non-users and will NEVER use technology. The other two categories of low frequency users are those using technology rarely (3%) or once in a while (3%).

Reasons for low Internet use were given by 13% of survey participants. Specific reasons fall into four categories: learning related difficulties, safety concerns, lack of interest, and inability to afford.

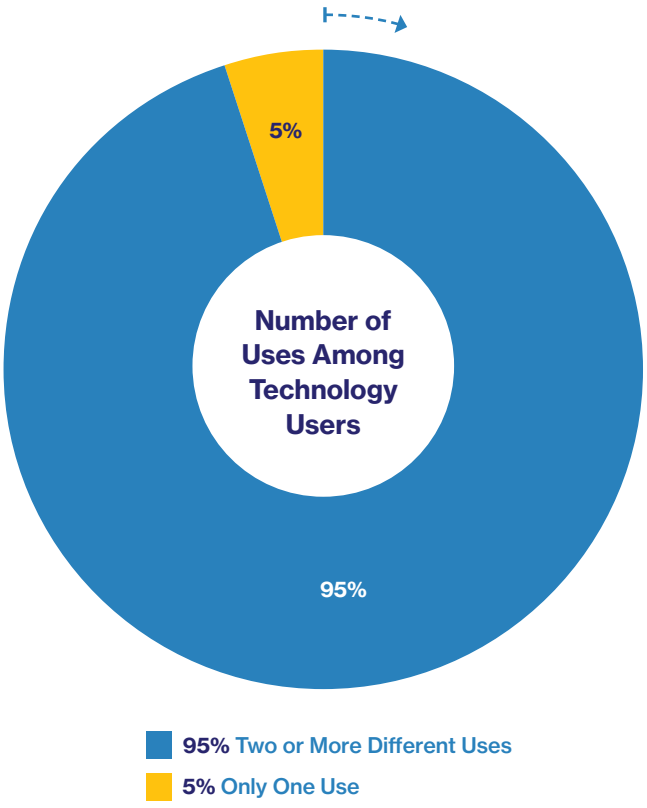
Six of 10 low frequency users identify issues with learning how to use technology. They either tried and could not, don't know how to learn, or believe they will be unable to understand and learn.

Online safety and crime concerns are identified by over half (58%). Over one-third (35%) say they have no interest in using or learning about technology. Less than one-quarter (23%) indicated they could not afford equipment and Internet—or believed mistakes might be too costly to fix. More than half of those reporting reasons (59%) fall into more than one category.

CURRENT USES

A list of 24 technology uses was presented, and the following question was asked, *In which ways do you currently use technology?* The uses listed appeared alphabetically. To simplify reporting, the items are grouped into five categories: *medical, money, entertainment, interactions,* and *information*.

Among the group of technology users, nearly all respondents (95%) report using technology for two or more activities. The number of uses ranges from 1 to all 24 specific uses. The few individuals reporting only one current use are not homogeneous and indicated one of six different uses.



Medical

Many older adults use the Internet for healthcare with 68% using it to access a medical portal, 38% using it to have telehealth appointments, and 28% using it to order prescriptions. While most respondents have medical portals, about 1% report not using them. More than a third (34%) of respondents also have a Medicare account.

Money

Respondents reported finance-related uses, including accessing accounts and other online financial activities loosely concerning income and expenses.

The most common income-related item is using online banking and/or mobile deposits, reported by 59% of respondents. Forty-seven percent (47%) indicated having an online social security account. And a little over one-third (35%) report having an online retirement or pension account.

Expenses handled online include:

- **Shopping Online 71%**
- **Paying Bills 56%**
- **Filing Taxes 26%**
- **Ordering Groceries 12%**
- **Fuel Assistance 2%**
- **SNAP/Food Assistance 2%**

The highest frequency use for expenditures is shopping online (71%). Over half indicate paying bills online (56%). A little more than one-quarter file taxes online (26%). Over 1 in 10 report ordering groceries online (12%). A few people have accounts for SNAP (2%) and/or fuel assistance (2%). Use of the online application processes for SNAP and Fuel Assistance appear to be disproportionately low.

This finding is interesting because these programs have shifted exclusively to online applications.

Older adults may suffer as need-based programs transition to the digital world more rapidly than their target populations develop the means to participate. Special attention by such programs to issues of digital equity is necessary if they hope to benefit from their programmatic cost-saving application processes. Attention to the issues of digital access and low digital literacy should be stimulated by those working for digital equity.

Entertainment

Entertainment keeps people engaged with the world and can increase quality of life. Digital entertainment can reduce boredom and may lower feelings of isolation for some people. Online activities increasingly offer entertainment through new ways to access TV and movies, get news, read or listen to books, and watch YouTube. These are common and important forms of digital activity for leisure pursuits.

Entertainment related use of technology is reported most frequently for having a smart TV (68%), followed by watching news/TV/movies (59%). YouTube is reported by 59%. Using technology for reading e-books or listening to audiobooks was identified least often (28%).

Social Connection

Interaction is especially crucial for older adult well-being because it is the best antidote to isolation. Many aspects of the digital world relate to interacting with others through email, social media, text messaging, photos, making and sharing video, Zoom, and video calling.

Nearly all respondents (93%) report using email. Three-quarters (75%) send/receive text messages. Slightly more than two-thirds (68%) make/receive video calls. Six in 10 use technology for photos or videos (60%). Zoom is used by 55%, and 54% use social media, (Instagram, Twitter, and Facebook). It is important to note that more than a few people went out of their way to write in comments, stating they will "never use Facebook." This finding is relevant to the ways digital literacy programming reaches communities online. Many groups and councils on aging use Facebook without realizing that there is a small-but-emphatic sub-group that will not be reached.

Information

Using the web to search for information on the Internet, go to specific websites, attend online meetings, keep records, and attend classes or workshops all relate to information. The highest informational use is online searches or "Googling" (85%). Similarly, 79% are able to get to specific websites. Almost half attend meetings online (49%). Over one-third use technology for record-keeping (38%). And over one-quarter (27%) indicate they take online classes or attend online workshops.

Other Uses

People say they use technology for paid employment, selling things they make online, maintaining their own website, gaming, and writing. Several more respondents marked *other,* but did not specify the way they use technology.

Online Accounts

The following question was also asked: "For which of the following have you or someone else created login account(s) so you/they can get to the following online information for you?" This question helps determine if online accounts exist for an individual even though they may not use the accounts themselves. Among the people answering the question, results show a small number have but do not use Facebook or other social media accounts, email, and medical portals.

Across the full sample, 2% have email they don't use, 3% have social media accounts they do not use, and 9% have a medical portal they do not use. Among non-users for each of these tasks, 28% subsequently reported they have an email account they do not use. For social media, 7% report having but not using a social media/ Facebook account. For medical portals, 27% have, but are not using, their accounts. While the discrepancies are small, they suggest a marginal, indirect involvement with the digital world, perhaps due to family or friends creating accounts in the hope the older adult in their life will use them or, for medical portals, as a way to help an older adult with accessing their online health/medical information.

"I want/need to stay relatively up to date. I would like to learn more about your offerings, but do not need basic classes."

5

Technology Troubles

Technology Troubles

The use of technology also includes times when it just will not work. These experiences include times when devices stop working or appear to act differently than they have up to now. People discover new tasks and/or programs to learn, or need reminders or assistance on how to accomplish tasks successfully. These instances are when technology causes trouble, and people need help or information.

HELP NEEDED

To explore these experiences and the ways people currently are getting assistance, a question asked, "When having problems with devices or questions about using technology, how do you get help?"

The majority of people (59%) get help from family members. In addition to family, the next most frequent source of help is friends (24%), or adult neighbors (4%). Community volunteers are also sources of assistance (2%). A small proportion of participants indicated they have no one to turn to for help (7%).

A few (2%) reported that Town Councils on Aging are sources of help. With respect to paid help, commercial assistance was found most often by calling the company from which a device or software was purchased (18.5%), paying someone (10%), and/or paying a store (7%). It is important to note that, because of the rural setting, the actual options for purchasing assistance and repair are quite limited.

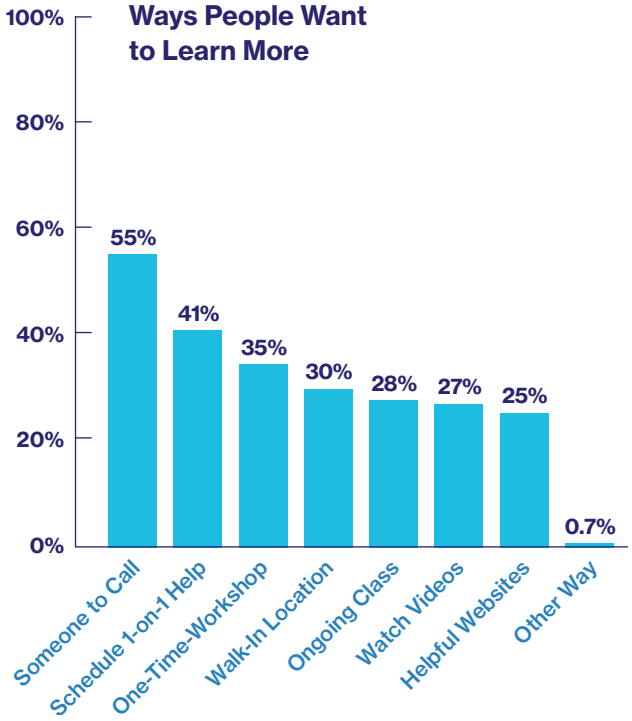
Anecdotally, despite the largest source of help being family, it is known to be an underused resource. Older adults getting assistance through the COAs often say they could call a family member but do not want to "bother them"—or they fear they are "asking too much" or too often. Others report that while they can ask family, getting assistance by phone or email is not helpful or not clear enough for them to learn or fix a problem themselves. A 95-year-old resident said "*I don't want to call my son because he is so very busy.*"

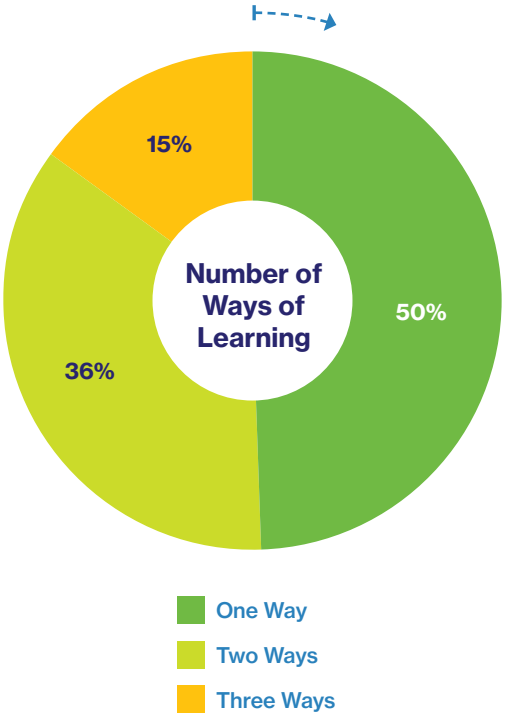
HELP WANTED

Among those interested in getting help, participants indicated one or more of the following: *scheduling one-on-one help, going to a walk-in location when needing help, and having someone to call when I have problems/ questions*. **The most frequently desired method is to have someone to call (28%).** Next most chosen way is to schedule one-on-one help (21%), followed by going to a walk-in location (15%). "Other" methods were less than one percent and fit within already listed choices or showed no consistency.

No one way of getting technology assistance predominated. About 50% of those indicating their preferred ways of getting help are interested in one particular method. The other half selected two ways (36%) or all three ways (15%).

This finding suggests a need for offering multiple help sources and methods to fully cover community needs. These responses can shape program development and target limited resources for offering technical support to older adults.





INTERNET SAFETY

In the seven northern hilltowns, monthly COA newsletters routinely include an article about online safety and scams of many types. Several questions prompted respondents to share their concerns about these issues.

The proportion of participants infrequently using technology (14%) gave reasons for their infrequent or non-use. Several of these reasons concerned fears about Internet safety. About one-quarter are concerned about their identity being stolen (23%). The next most common reason is simply believing technology is unsafe (14%). A small percentage were concerned their home could be broken into (6%), or the device could be stolen (6%).

Scams

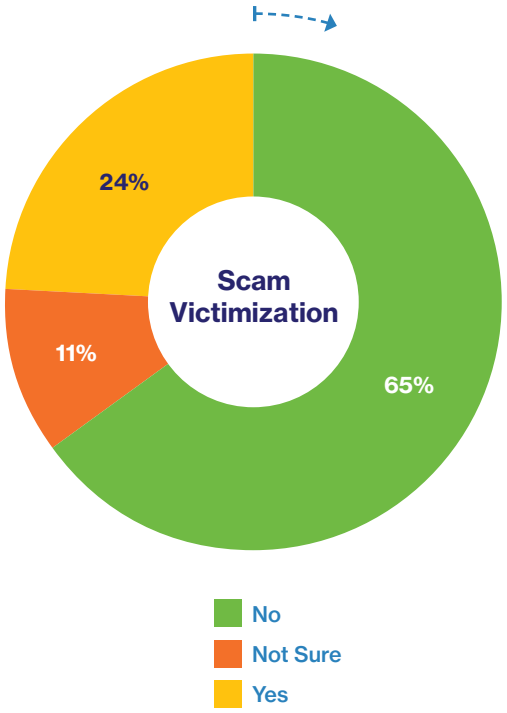
In the questionnaire section on experiences with technology, older adults were asked about scams.

Results showed over one-third (35%) had been or were unsure about whether they had experienced a technology scam. Respondents were asked about the results of the scams including losing money, losing information, sustaining damage to device(s), and/or having device(s) infected with a virus. Sometimes scam victims reported getting a virus, yet did not identify as a victim of a scam. In these cases, their answer to the question was changed to *yes*.

The most commonly reported scam experience was getting a device virus (33%). Almost 2 in 10 lost money (19%), representing 71 older adults. This percentage may under-represent the actual rate of financial Internet scam experiences because of shame about being tricked and/or losing money.

Costs can go beyond financial loss.

One story is from an older adult computer user who was tricked into paying over $500 to get "help" with a suddenly non-working device. This individual reported feeling humiliated after realizing what they had "fallen for." And, the effects were not limited to the lost money. For this individual it caused marital strife. Even several years after the loss, their spouse would not agree to the older adult getting other forms of technology. In addition, there were implications for their continued technology use. The scammed individual entirely gave up using a computer and email. To this day they maintain they have no interest in "starting all that again." They have recently agreed to adult children's wishes that they begin using a smartphone. With reluctance they have agreed but maintain they are doing so only for safety reasons and so they can text and video chat with family.



The questionnaire asks victims about reporting scams, yet only about half of scam victims answered this question. Of these a solid **majority (74%) did not report it** anywhere. Within the other 26% who did report it, 18% reported to the police, 11% reported to the state or federal government, and 4% reported to the Northwest District Attorney's Office. A handful specified reporting losses to AARP, credit card companies, and/or banks.

These results suggest a need for more community efforts to

- **increase older adult willingness to self-identify as scam victims,**
- **share the nature of scams experienced, and**
- **report scams.**

This survey reflects the challenges for older adults posed by Internet scams, viruses, devices issues, technology questions, and technical support needs. Older adults in our communities have patched together ways to get assistance; have preferred ways of getting technical support when offered support options; and are willing to identify when they have been the victim of a scam and, in some instances, are willing to report the scam to authorities or other resources.

"As I get older and increasingly challenged by skills needed to use technology it becomes more pervasive and complex."

6 Technology Interests

Technology Interests

TECHNOLOGY KNOWLEDGE & LEARNING

The second questionnaire section on "Your Technology Knowledge & Learning" includes questions about older adult interest in learning, devices people want to learn to use or use better, how they want to learn, and specific skills or knowledge they want to acquire to enhance their understanding. Questions included preferred times for scheduled training and getting technical assistance.

LEARNING INTERESTS

Participants responded to the question, "Are you interested in learning more about technology?"

Slightly over half the respondents (48%) say they already know what they want to know or they choose not to use technology (5%). For this report they are combined and described as disinterested in learning. The other group of respondents includes those that are unsure and reluctant (5%), new to learning technology (3%), and current users wanting to know more (37%). Those providing other responses were easily coded into one of the existing answer choices, leaving 3% with unique, sometimes unrelated, remarks. For example, "*I don't want to have to learn this but I guess I do.*"

Respondents are divided into two groups: 1) those lacking interest in learning more with no subsequent indication of wanting to learn (49%) and 2) those interested—or potentially interested—in learning specific devices, increasing their technology knowledge and skills, or expressing wanting to learn or get assistance in a particular way (51%).

What Older Adults Want To Learn

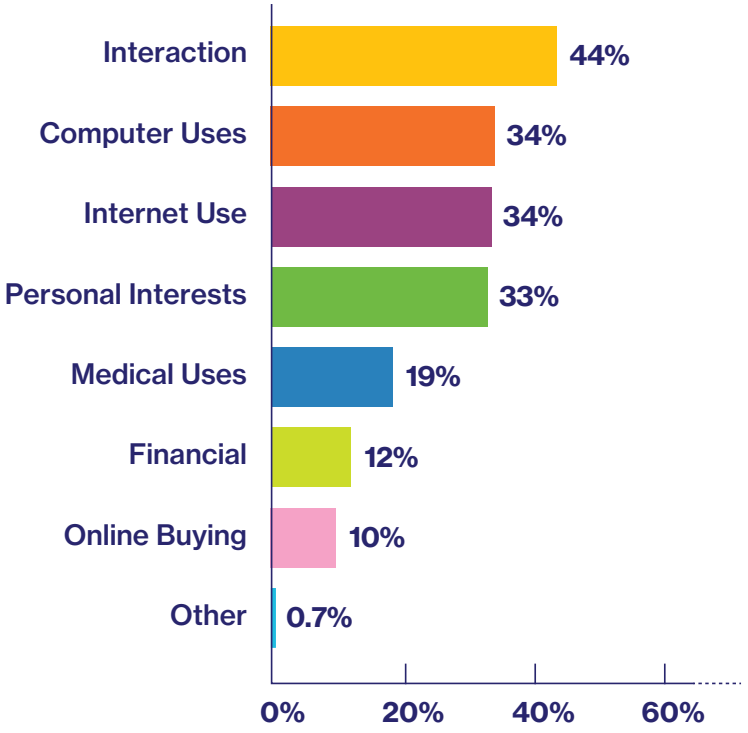
Questions explored specific interests by inquiring about types of equipment, various technology tasks or uses, ways of learning, and good times to learn. The percentages in the following section are based on the group of older adults interested in learning more. This group of 582 older adults want to learn about particular devices, specific uses (or both) and selected ways of learning topics of interest to them.

Devices

The device type of greatest interest is computer desktop/laptop/Chromebook (54%). The next most frequently identified device is a smartphone (47%). A little more than one-quarter want to learn about smart TVs (26%). Slightly less than one-quarter are interested in learning about iPads or other tablets (24%). About 10% want to learn about cell/flip phones. A small proportion are interested in digital picture frames (6%) and e-Readers like Kindle and Nook (5%). Finally, a few people (1%) express more advanced interests in less common devices: routers, mesh networks, newer technologies, printer repairs, home security networks, device maintenance, and Roku.

Want To Learn How To Use...

Among those with a learning interest, 72% want to learn one or more uses of technology for specific purposes or to accomplish particular tasks.



Thirty specific technology uses or tasks were grouped into 8 categories:

1. Interaction

Photos
Email
Zoom
Video Calling
Texting
Social Media

2. Computer Uses

Scan
Attach Docs
Print
Write / Journal

3. Internet Use

Streaming
Find Website
YouTube
Get on Internet
Join Chat
eBooks

4. Personal Interests

Info about Interests
Podcasts
Online Courses
Read Library / eBooks

5. Medical Uses

Medical Portal
Telehealth
Order RX's

6. Financial

Online Banking
File Taxes
Bill Pay

7. Online Buying

Shop Online
Buy Tech
Order Groceries

8. Other

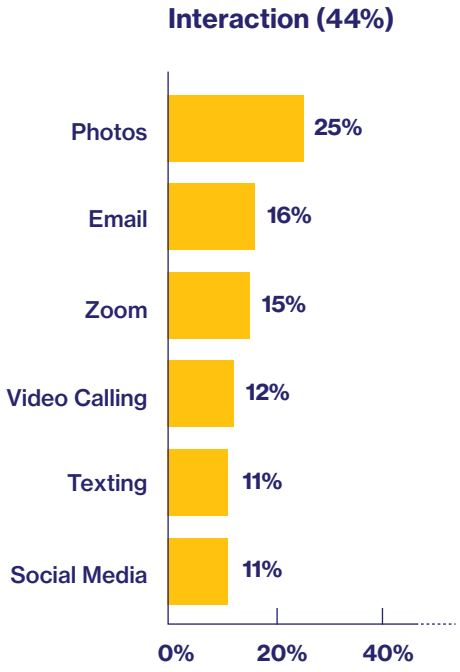
Varies

1. Interaction

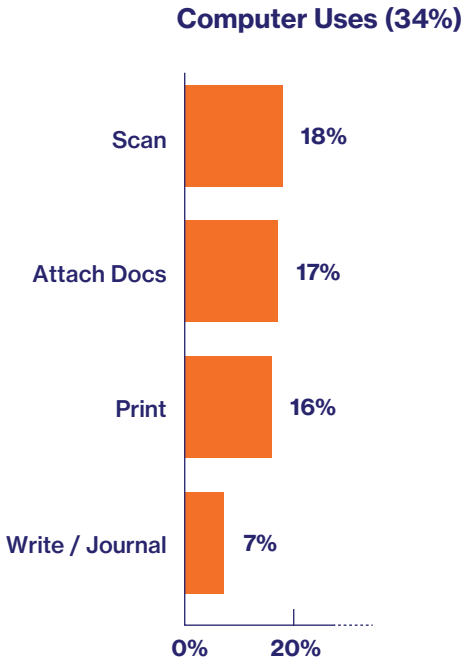
As more older adults age in their own homes, issues of helplessness, loneliness, social isolation, and boredom are invading daily life.

> Social isolation (the objective state of having few social relationships or infrequent social contact with others) and loneliness (a subjective feeling of being isolated) are serious yet underappreciated public health risks that affect a significant proportion of the older adult population. Approximately one-quarter (24 percent) of community-dwelling Americans aged 65 and older are considered to be socially isolated, and a significant proportion of adults in the United States report feeling lonely (35 percent of adults aged 45 and older and 43 percent of adults aged 60 and older). (National Library of Medicine)

Technology can go a long way in relieving these challenges in older adults' lives. Technology uses related to interaction with others include emailing, taking and organizing photos, and using Zoom. Each of these tasks brings people in contact with others in a technology-facilitated way. Learning interactive tasks was most frequently requested (44%). Within this category the specific uses of interest appear in the chart at right.



2. Computer Uses



Several uses relate to technology tasks older adults need to use in the course of daily life. Older adults regularly are asked to download, print, sign, scan, and attach forms to emails. Doctors' offices, Medicare plans, financial investment companies, and lawyers have transitioned their records and documents to digitized formats and digital processing. Official forms often can be emailed and returned on the same day, instead of relying on postal mail. Rural mail service is notoriously slow and can be inconsistent. **Learning to exist in the digital professional world is a pressing digital literacy issue for older adults.**

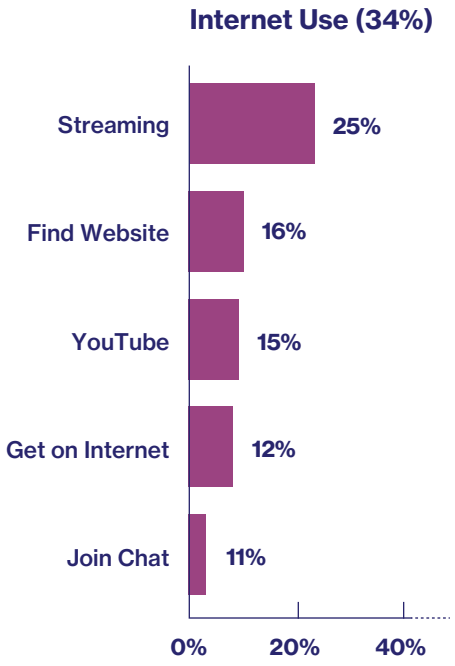
The other productivity item, journaling or writing, possibly relates to generativity activities in older adult years. Some older people reflect on life and may want to record their experiences and thoughts to share with family, friends, and community. Computer-facilitated writing, or voice to text features, may have growing appeal due to changes in eyesight and as handwriting becomes challenging because of arthritis and other chronic conditions that affect hand use.

Anecdotally, one persom over 85 has had the wherewithal to write and self-publish a book, a long-held dream of theirs. Another person sought technical support to move their poetry to a new device. And yet another person wanted to learn to use word processing software to write for their grandchildren, so they could leave a legacy for current and future generations.

3. Internet Use

The Internet has become an additional environment that older adults inhabit. Older adults' living environments are no longer limited to the physical world, geographic areas, and communities. These environments have expanded to include a digital world many people want or may need to enter. **Living in a digital world and having technological skills requires use of the Internet.** Many older adults seek the skills to access the Internet, move around in it, search for information effectively, and interact with others virtually.

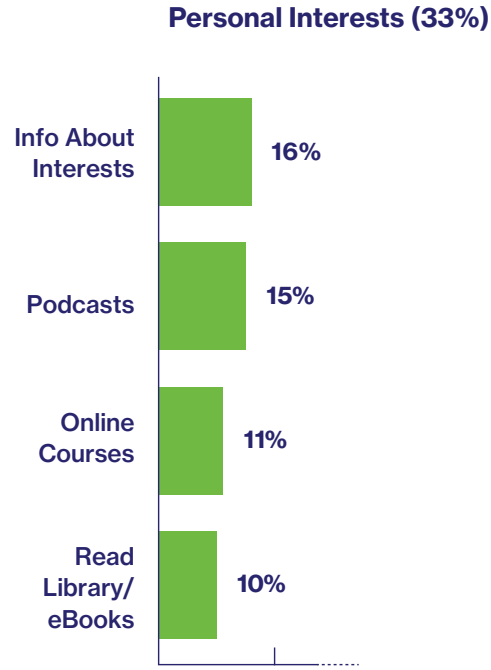
The Internet can make virtual travel possible, provide inexpensive or free access to music people love, and offer less costly ways of watching TV. People can see movies without leaving home or driving at night to cinemas. And the Internet makes getting local, national, and international news much faster than in the past. Older adults can participate in online chats with others across town and around the world. The Internet can change the experience of older adults being "shut-in" or isolated, as happened to many people of all ages during the COVID pandemic. Being confined to a physical environment can now be enriched with the ability to "visit" with others face-to-face. Traditional phone calls can be replaced with real-time video interactions with family members, friends, neighbors. Even as some older adults lose the ability to travel for visits or lack the finances to do so, **technology can keep people connected in meaningful, comforting ways.**

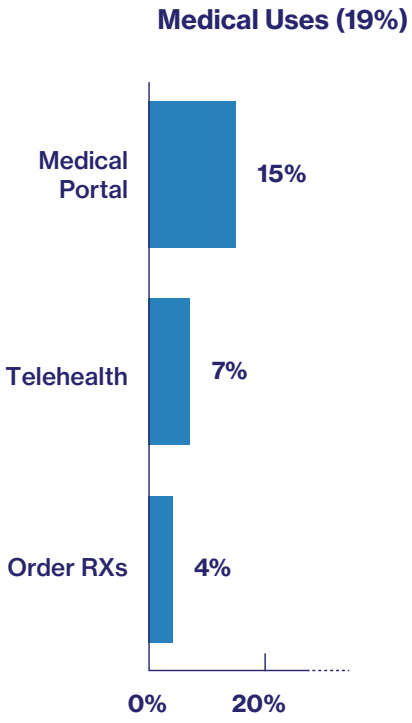


Satisfying these desires requires skills to access information online. Older adults grew up in times when physical books and teachers were the main sources of knowledge. The task back then was finding information to learn. In a digital world the task is different. Simply knowing how to access the Internet is insufficient. **In a digital world the task has become learning to wade through the vast amount of information—of varying quality and value—to find what one is looking for and can trust.** Knowing how to sift through overwhelming quantities of information requires entirely different skills.

4. Personal Interests

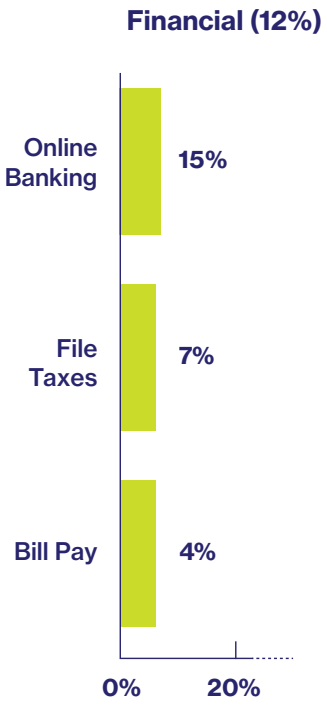
For many older adults, retirement can be a time of leisure. Retirees can develop new interests, spend more time on hobbies, explore ideas, acquire new knowledge, and enjoy more time for reading. **People want particular types of information in specific formats.** The findings reflect older adults' interests in acquiring the knowledge and skills to satisfy individual interests. Interest in accessing the library digitally and reading eBooks suggests the importance of libraries as partners in any digital literacy programming. Libraries certainly provide support beyond lending reading materials, considering libraries are one of the places people have turned for help with technology questions.





5. Medical Uses

Health care providers, insurance companies, pharmacies, and Medicare are urging, and sometimes requiring, older adults to access information and treatment using technology. Medical portal access requires Internet access; telehealth appointments require video and audio enabled equipment; and ordering prescriptions means navigating either pharmacy or insurance websites to locate where to place an order. These tasks require specific skills and sometimes new knowledge. Medical portals can be useful but also can be overwhelming. We now have the ability to see our medical test results—while being challenged to interpret them. Benefitting from the opportunity to "chat" with doctors and nurses, creates a need to know how to do so. And health care bill paying can be daunting when we have been accustomed to simply writing checks and mailing them. **Understanding why and how to use technology for medical purposes is now a fundamental part of older adult life.**

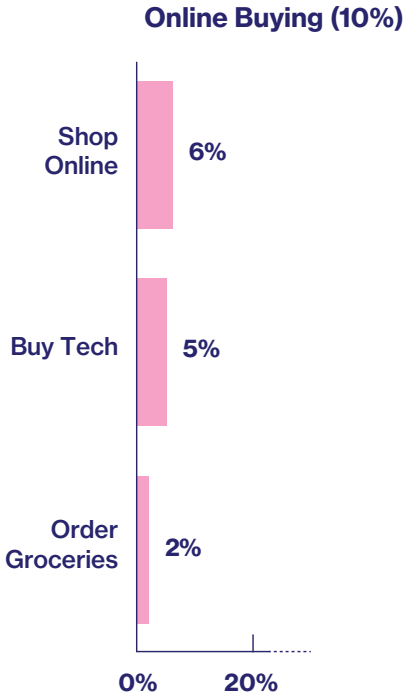


6. Financial

Knowing how to accomplish online financial tasks safely while avoiding Internet scams is an essential aspect of digital literacy. The financial world has changed dramatically. Now, in addition to cash, there are debit cards, credit cards, and payment using online services like PayPal, Venmo, and Zelle. Many older adults are suspicious of online financial activity. But banking online and mobile deposits can spare people time and energy they can use differently or use to avoid needing a ride when someone no longer drives. Filing taxes and getting much needed tax refunds faster make using online tax filing attractive. And online bill pay increasingly is becoming a requirement—with fees added if someone wants a paper bill mailed to their house, sometimes with a surcharge for paying by check.

7. Online Buying

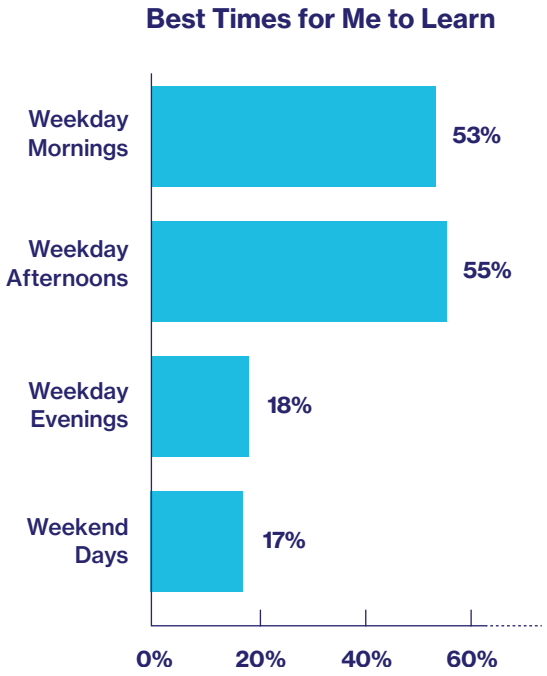
During the COVID pandemic, making purchases online and having items delivered to home or car became common. The ability to shop for groceries and non-food items requires a level of digital literacy. Often, accomplishing an online shopping task requires some coaching—as does knowing how to purchase the right technology, without buying more than needed or wanted. Learning how and where to buy technology devices and services is important knowledge for older adults. Interest in learning how to use technology to accomplish these parts of daily life requires learning specific skills.



Always More to Learn

Older adults of all levels of technology knowledge and experience have learning interests. Often these interests concern newer technologies and specialized applications, such as:

- Adobe Acrobat Pro
- Coding
- Computer Updating
- Excel
- Photography Software
- Roku
- Router Security
- Selling on Etsy
- Smart Boards
- Website Design & Maintenance
- Word



A Time to Learn

Scheduling is an important part of program and resource planning. Individual availability varies among the people programs are designed to reach. Scheduling training and technical support often involves guessing what day is best; what time of day will draw people; what time of day and day of week will allow training and support to reach the most people; and who needs specific days/times. Many older adults work. Growing numbers of people age 60 and over are not yet retired, and many retirees also work. Nationally, older adult employment is robust with 19% of people 65 and older now employed either full or part time (Pew Research Center, 2023). Many older adults also volunteer their time. One study reported that for people 60 and older in 2018, 33% were volunteering (Grinshteyn & Sugar, 2022).

To assess the scheduling needs of older adults in our communities, participants were asked to identify the best times for them to learn and get assistance and could choose more than one option. Over half (53%) indicate the best time for them is weekday mornings, and 55% say weekday afternoons. Fewer indicated evenings during the week are best (18%) and/or weekend daytimes (17%). These schedule choices also may be related to employment. Evening and weekend times are necessary options to serve older adults who are still working full-time.

Although the percentages for evenings and weekends are smaller, they still reflect substantial numbers of older adults. (Note: these numbers are only for the 35% of all hilltown older adults. If we extrapolate the percentages to the seven hilltowns population, these numbers would double or triple.)

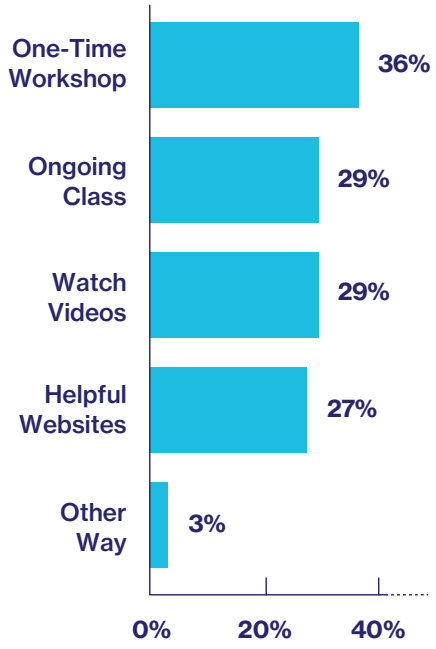
Learning to Learn

After looking at *what* older adults want to learn, and *when* they prefer to learn, the last concern is *how* people want to learn. Survey participants expressing a desire to learn were asked to indicate the ways in which they want to gain more knowledge or acquire skills. Participants selected from four ways of learning to complete the statement, "The ways I would like to learn more about using the Internet and technology are..." Existing learning methods offered include *ongoing classes*, *one-time workshops*, being told about *helpful websites*, and watching *online videos*. These choices were based on current programs and additional options that could be added with little expense.

Over one-third of older adult learners (36%) wanted to go to one-time workshops. For 29% of learners, the preferred way of learning is attending an ongoing class. Over a quarter (29%) want to watch videos, and 27% want to be told helpful websites they can visit to learn more. One participant explained, *"I need to practice the solution before trying to learn another one."* Their observation suggested to us another way to offer learning. Offering "practice" suggestions or giving instructions people can follow, may support them acquiring a new skill.

There are many ways to teach technology. By analogy, increasing reading literacy and comprehension gives students the ability to learn in many ways. Enhancing digital literacy, likewise can happen in an increasing variety of ways as an individual's skills increase. When people learn to turn on and log into a device, they are able to complete tutorials. After learning how to access the Internet and find websites, they have the ability to complete online and other skill-building classes. Once they learn how to navigate the Internet, they can learn how to filter out irrelevant information. Gradually, acquiring these skills gives older adults the ability to learn on their own, find answers to questions, and problem-solve their own technology issues and questions.

Ways People Want to Learn More



Across the seven rural communities, older adults have strongly embraced technology, including digital devices, cellular technologies like mobile phones, Internet, and other equipment. Older adults want to learn particular digital devices and specific ways of using technology. Information and skills are needed for purchasing technology, repairs, problem-solving, and accessing help. Digital Literacy encompasses a vast amount of knowledge and number of skills. Many technology users want to keep building their skills and expanding their use, and many know how they want to learn.

7

Needs, Takeaways & Next Steps

Needs, Takeaways & Next Steps

An enduring reason for needing aging services for technology is the issue of digital equity, specifically relating to physical ability, age, income, race, and comfort with English as a language. These groups are routinely denied access to societal resources, including digital resources and access to the digital world. These inequities will take longer to remedy. Meanwhile, the interests of older adults, and their increased time for learning, will require ongoing technology services, training, and support.

ASSESSED NEEDS

The needs assessment was successful and provided useful information. The Northern Hilltowns Consortium of Councils on Aging better understands the digital divide among older adult residents in their respective towns. The Consortium also has a direction for targeting limited resources to best meet the digital literacy interests of various subgroups, in ways and at times most desired by people.

Survey results helped Consortium members identify the current state of digital access, technology use, and learning interests across the seven rural communities it serves. Data reveal a need for:

- **increasing existing skill levels,**
- **assisting with technical difficulties encountered with devices and use,**
- **addressing specific learning interests,**
- **using preferred technical support methods,**
- **increasing broadband Internet service,**
- **providing devices to access the Internet.**

In particular, learning interests are highest for learning to use technology for interaction, using the Internet, completing computer tasks, and getting online information about personal interests. Devices older adults most want to learn to use include computers/ laptops/Chromebooks, smartphones, smart TVs, and tablets.

Desired ways of getting technical support include having someone to call, scheduling one-on-one appointments, and going to a walk-in location as needed. Most desired ways of learning are one-time workshops, ongoing classes, watching videos, and being told helpful websites to visit.

Desired times to attend scheduled activities were equal for weekday mornings and afternoons, but interest is also found for weekday evenings and weekend days.

TAKEAWAYS

Rural older adults are using a range of technologies for many purposes. Digital literacy is high among some subgroups and entirely absent for others. These groups delineate the Digital Divide for older adults.

The survey results are encouraging for several reasons.

1. Findings provide an evidence base for program development. Services can be designed to meet identified needs. Needed technology resources can be projected.

2. Targeting specific subsets of older adults is possible—those not using technology, for example—by addressing that group's concerns.

3. The numbers of potential volunteers with higher-level skills can be estimated, and those who spontaneously offered to help others through their questionnaire comments can be recruited.

4. Prioritizing topics and learning formats or methods helps support desired skill development, making approaches more likely to be effective.

5. The information gathered about the seven rural communities can be beneficial to groups serving these communities and can perhaps benefit other rural communities interested in the results, both within and beyond Massachusetts.

Several findings are surprising. Older adults are more than willing, even eager, to talk about their use of technology. The high return rate we ultimately received (35%) and anecdotal comments thanking the Consortium for conducting the survey illustrate this observation.

The survey has been successful in eliciting financial situation information. Income specific questions, even those providing wide ranges, often result in high rates of non-response. The question format brought out a high response rate. While not numerical, the answer choices allowed for examining the implications of financial means and economic well-being for Internet access, technology use, and digital learning interests. Self-rated skill levels clarify the perception of individual skills and support tailored outreach and appropriate learning opportunities for people.

The survey also reveals reasons low-frequency and non-users do not use technology more. Some older adults believe they cannot learn or have tried and failed. For others low/non-use reflects the extent to which fears of crime and feelings of danger are a factor. Knowing this information provides a starting point for approaching this group of older adults.

Several respondents were willing to share their experiences with scams, including those that reported losing money. Their responses show a willingness among some people to self-report, if only anonymously. Very low rates are found for reporting scams that caused loss of money, equipment, or information. Despite local, state, and national efforts to engage older adults in reporting, these efforts have not been effective in our area. This finding indicates a need to change how to engage older adult scam victims in reporting.

Also noteworthy is the proportion of answers that reflect self-reliance in resolving problems. The results revealed a solid number of older adults that make use of Internet information and forums to problem-solve the issues they encounter. Teaching Internet-facilitated problem-solving may be useful to offer.

With regard to current usage, the relatively low level of medical uses of technology for ordering prescriptions, having telehealth appointments, and accessing medical portals is a concern. Rates of having online Medicare accounts are low, and even fewer older adults have social security accounts. The reported use of other online services, such as SNAP and Fuel Assistance accounts, is also exceedingly low. These findings suggest that people needing these supports were not sufficiently engaged in completing questionnaires.

Nearly half of participants indicated they already know what they want to know. This group of participants warrants more investigation. Outreach to those who currently are not interested in learning more may require different approaches.

Older adults have broad interests in ways of using technology. Prior to the survey, the training opportunities offered focused on specific device use (i.e. iPhones, Android smartphones, PC computers/laptops and iPads). The responses reveal an additional need to teach specific tasks/uses of technology. For example, there is interest in learning to scan and attach documents. This learning interest information can be used to guide training offerings.

Given the issues of digital equity for older adults, it may be time for the field of aging to identify Digital Activities of Daily Living (DADLs). "Activities of daily living (ADLs) are essential and routine tasks that most young, healthy individuals can perform without assistance. The inability to accomplish essential activities of daily living may lead to unsafe conditions and poor quality of life." (Edemekong, Bomgaars, Sukumaran, & Schoo, (2023). Having basic DADLs can guide assessments of digital literacy and prioritize learning goals. And, having an idea about basic DADLs can give digital service providers starting points for approaching and assisting older adults not yet engaged in the digital world. The task of defining DADLs needs to be undertaken by those professionals working on issues of Digital Equity in conjunction with older adult technology users themselves.

Limitations

This survey project had several limitations. Efforts to engage older adults who are not using technology at all (or only occasionally) likely were not effective. Existing COAs' knowledge of the older adults in each of the communities makes clear our sample is not representative of technology non-use. For example, in the communities that currently have fiber broadband, up to 30% of homes have not been wired with broadband (based on MLP subscription rates for broadband service installation). Given the large proportion of town populations that are older adults, the likelihood is that a majority of homes without broadband are owned by older adults. This external source of information suggests the proportion of low frequency and non-users in our sample is about half the actual number.

The questionnaire had some content limitations. Employment status is a missing part of the context in which older adults are exposed to or required to use technology. Participants were not asked if they are retired and not working, working part-time, working full-time, or volunteering. Participants were not asked if they are veterans. Self-report of health was omitted. The survey did not ask about household size and the presence of younger adults, children, and youth. Household composition also is an important context for understanding older adult technology use and skill levels. Participants were not asked if they would be willing to help other older adults with technology questions, problems, or learning interests. These omissions became lost opportunities to understand aspects of daily older adult lives that relate to the digital divide. The lost information makes it more challenging to target sub-groups of residents to narrow the divide.

Another limitation is beyond the control of the project. Over 200 individuals shared their contact information (a phone number or email address) if they wanted to be contacted. Yet they are not picking up the calls made to respond to their requests. Anecdotal reports blame the amount of Robo calls that occur, leading people to decide to not answer the phone if they do not recognize a number—increasingly, even local numbers. Robo-calling is disrupting communication in rural areas.

Robo calls and caller ID "spoofing" are forms of technological harassment that affect rural towns. Rural towns generally are friendly communities, which previously were places where, just a few years ago, reaching out to residents by phone was easy. Unwanted digital communications — including email and text message spam, Robo calls,

and junk email—are making it extremely difficult to follow-up with those requesting additional contact. Spam and junk emails have impeded efforts to collect older adult email addresses; they simply won't share their contact email. This reality of digital daily life is frustrating and has hindered outreach efforts.

It is interesting to note that, although the survey is about technology, postal mail had to be used to distribute and collect the questionnaires. A large gap remains between paper and digital methods of information sharing and collecting. Rural councils on aging are experiencing premature external pushes to go online only with the information they share with older adults. Many rural residents still desire printed-and- mailed newsletters, brochures, directories, and flyers posted around town. Digital communication is being imposed on some older adults and communities before they fully are able access the digital world. The older adults that may most need paper versions of information (because they do not have the means to participate in the digital world) may be the very people who most need the services and information being forced online. Moving resource access to a digital format before the audience can make use of it is unwise, uninformed, and ill advised.

"Don't need help, but appreciate that you are reaching out to everyone about this, and how many will be grateful."

"Thank you for taking this up - I suspect it will be helpful to many."

"Very glad you are doing this!"

Next Steps

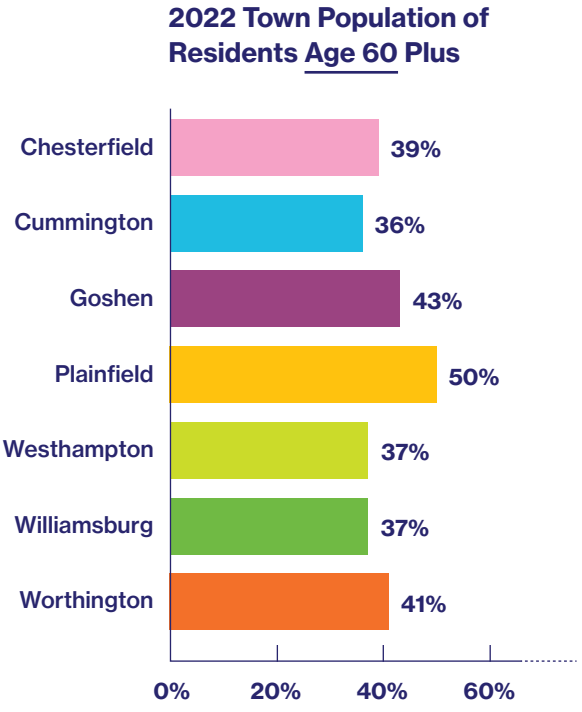
Recent USDA data (Davis, Rupasingha, Cromartie, and Sanders, 2023) indicates over 20% of rural residents in the U.S. are age 65 and older (as of 2021). The aging digital divide is also a geographic divide. Rural and remote communities across the country have been among the last geographic areas to get high-speed broadband Internet access. Adding rurality to the community portrait of aging towns adds complexity to this challenge.

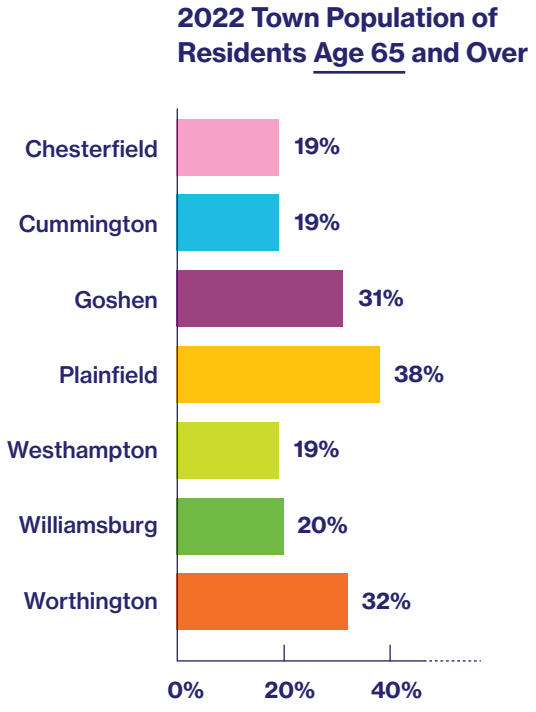
The seven rural communities in this study are disproportionately populated with older adults. Towns range from 36% to 50% of residents being 60 and over.

In comparison to the USDA rural America 20% figure, the northern hilltown percentage was calculated. The average percentage of residents 65 and older for the seven towns is 23%. Town proportions range from 19% to 38%.

This demographic landscape challenges our communities to increase digital literacy for a large population, many of whom only recently were given access to high-speed broadband Internet. The survey provides a clear picture of who needs what and how they would like to receive the resources and support they need for the technology they wish to use.

In late 2023, the Consortium used its collaborative strength to secure funding from regional and state sources. It continues partnering with other community, regional, and statewide groups and organizations. These partnerships support ways of making our communities more livable and age friendly for residents as they age.





Evidence-based information, such as that provided by this questionnaire, gives a compelling foundation for grant-seeking. These results already helped the Northern Hilltowns Consortium of Councils on Aging secure substantial funding for a digital literacy project. The five dimensions of the project include providing:

1. High-speed broadband Internet access for those without it;
2. Laptops, tablets, and hot spots for those lacking a way to access the Internet;
3. Training for skill-building through classes, workshops, videos, and website recommendations;
4. Technical support, both phone-based and one-on-one assistance;
5. Collaboration with libraries to support information needs, outreach, engagement, access to digital technologies, opportunities to try a variety of devices before purchasing, and technology-facilitated learning and leisure.

The Northern Hilltowns Consortium of Councils on Aging has started delivering services. A drop-in center is offered where older adults can stop-by to get individual assistance with questions and problems. A technical support help email account has been created, accepting requests for assistance and fielding questions that may be handled easily by email. The project also has a local technical support help phone number. People can call and leave voice or text messages about technology-related questions or make requests for specific assistance or information.

As aging services continue, Councils on Aging across Massachusetts are incorporating digital approaches to achieving their long-held goals of supporting and increasing the well-being, safety, and health of older adult citizens. For older adults that already are part of the digital world, the Consortium is committed to enhancing their digital lives. For rural older adults not yet able to access it, the Consortium is eager to welcome them into the digital world.

Appendices

References

Methodology

Questionnaire

Profile Of Seven Towns

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Methodology

DESIGN

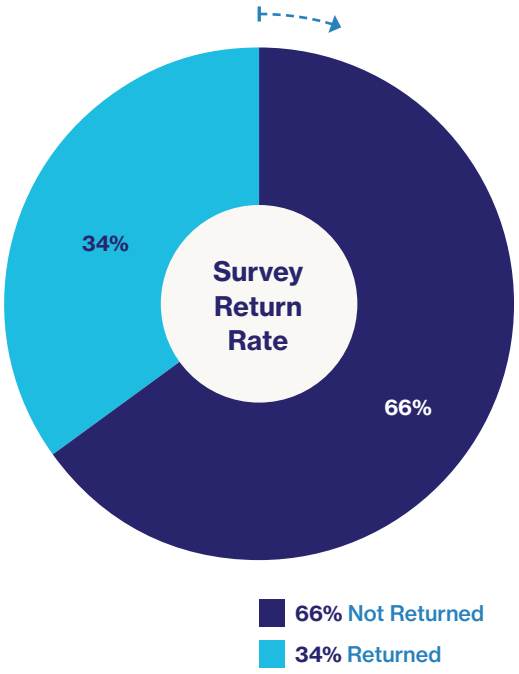
The Consortium's Council on Aging members designated a subcommittee of COA directors to assess the digital divide across our seven hilltowns. They created a questionnaire to achieve this goal. The resulting digital needs assessment used a quantitative survey methodology to understand current technology use by older adults, their technology experiences, digital needs and interests, and demographic profiles.

PROCEDURE

In early January 2023, a mailed-questionnaire was sent to every older adult, residents age 60 and over, throughout seven rural communities in Western Massachusetts. Municipal town clerks provided resident lists containing first and last names, residential and mailing addresses, date of birth, and gender. These lists were combined to generate the mailing, determine age and gender distribution of the population, and provide data needed to assess representativeness of the sample.

Three thousand five hundred and sixty-four (N=3,564) questionnaires were mailed to 2,550 households. Envelopes included enough copies for each older adult resident at the address as well as a stamped, pre-addressed return envelope. After undeliverable mail was removed, the mailing ultimately reached 3,517 people.

Over a three-month period, we received 1,239 questionnaires, largely by return mail. (At the writing of this report, over six months later, we continued receiving completed questionnaires). Returns were robust, ultimately yielding a response rate of 35%. This report is based on 1,208 of returned questionnaires, a return rate of 34%.



QUESTIONNAIRE

The paper questionnaire is titled Aging and Technology. The front page of the form serves as a "cover letter" to briefly describe what recipients are asked to do. It explains the aging digital divide and purpose of the survey, states how we would and would not use their responses, and emphasizes the importance of their participation. The introductory information urges both users and non-users of technology to return the questionnaire.
[Appendix p. 52]

Three pages presented twenty-three (23) questions in three sections:

1. Your experiences with technology and Internet
2. Your technology knowledge and learning
3. About you

The Experiences with Technology and Internet section assessed respondent:

- frequency of technology use
- reasons for low use
- digital devices, phones, type(s) of Internet access
- current uses of technology
- sources of help with technology problems and questions
- library technology use
- types of scams they experienced
- use of age-related online sites and services

The Technology Knowledge and Learning section determined:

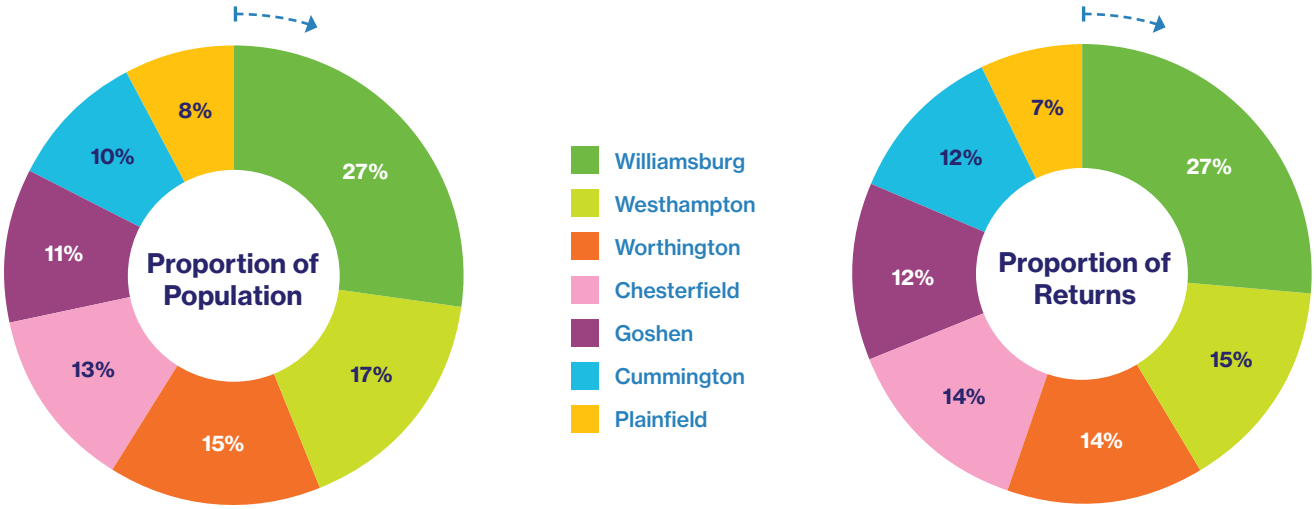
- interest in learning more
- devices people wanted to learn to use or use better
- technology uses for which they wanted to get or increase skills
- ways they wanted to learn and get technical assistance when needed

The About You section gathered demographics including:

- age
- number of older adults in the home
- gender
- town of residence
- self-rated financial well-being
- self-rated technology skill level
- education
- requests for being contacted

SAMPLE

Town populations - Results were analyzed to examine whether the returned questionnaires represented the proportion of older adults across towns. Chi-square test of proportions revealed returns from towns is proportionate to that of the population across the seven towns. (chi-sq = 12.32, df 6, p > .05)

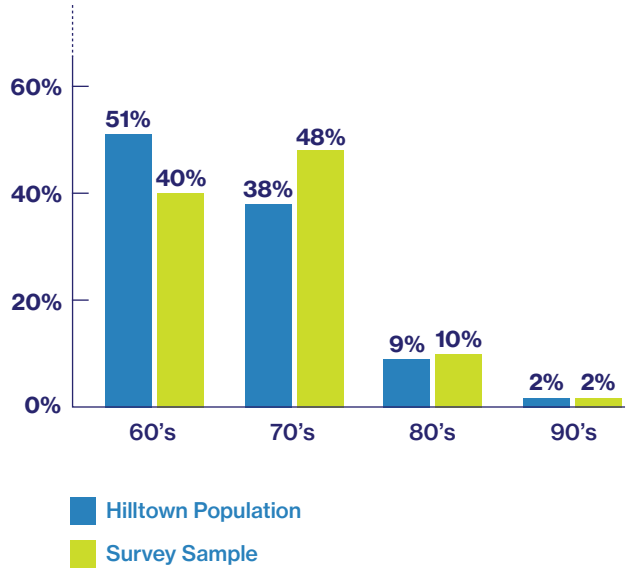


Demographics representativeness of sample

Age - The sample disproportionately represents people in their 70's than 60's, with similar proportions of people in their 80's and 90+. A higher proportion of older adults in their 70's (48%) returned questionnaires than exist in the population (38%). For those in their 60's the proportion difference is a lower percentage in the sample (40%) than in the population (50%). For 80's and 90+ the sample proportions (10% / 2%) vary little from the population (9% / 2%). (chi-sq = 92.5, df 3, p < .01)

Gender – The sample is disproportionally female. A higher proportion of women (58%) returned questionnaires than women in the population (53%) The percentage of men (42%) that returned questionnaires is lower than men in the sample (47%). (chi-sq = 9.27, df 1, p < .01)

Age Group Comparison,
Hilltown Population vs Survey Population



ANALYSIS

Survey data were analyzed using a spreadsheet imported into the Free/Libre Open Source Software application GNU PSPP version 1.6.2 (*GNU Project, 2015*). Statistical comparisons were made using chi-square tests of differences in proportions, non-parametric tests (Kramer's V) for self-rating of technology use level and financial situation rating. T-tests were used for age analyses and counts of various answers, such as number of help sources.

Questionnaire

Page 1

Aging and Technology Survey

for the Northern Hilltowns Consortium of COAs

This project is funded with a grant from the State of Massachusetts Executive Office of Elder Affairs

What are we asking you to do?

- Please tell us about your current access to and use or non-use of technology, such as computers/ laptops/ tablets, cell and smart phones, internet, smart TVs, printers, and other technology.
- The questionnaire should take you 10 to 15 minutes to fill out.
- Choose all that apply
- Share only as much information as you care to tell us.
- Please add a page if you want to comment on anything we did or did not ask.
- Please return your questionnaire **as soon as possible** or no later than February 15th.
- Questions also can be completed online by going to https://forms.gle/2nrehKjxW2QY5uJe7
- Mail your completed form(s) using the enclosed stamped envelope or give the sealed envelope to your COA.

You and the Aging Digital Divide

- Limited use of technology is affecting people 60 and older. Many older adults have less access to information and services because they make little or no use of technology.
- Although many older adults do use technology, many people, for various reasons, do not use or have access to computers, the internet, and other technology.
- This issue is called the *Aging Digital Divide* and is a growing concern.
- In the northern hilltowns very little is known about technology interest, knowledge, use and available technical support among people 60 and better.
- Current funding allows us to offer support to people to lessen the digital divide.

How will your answers be used?

- Your questionnaire is anonymous. We will not know if you return it unless you tell us.
- We will NEVER reveal potentially identifying information or details about you.
- The collected questionnaires will be combined in a report available later this spring.
- The results will be used to offer you more ways to get help, how to begin using and ways to learn more to meet your needs and interests.

YOUR FEEDBACK IS CRITICAL, THANK YOU FOR PARTICIPATING

Page 2

YOUR EXPERIENCES WITH TECHNOLOGY AND INTERNET

I use technology… ❒ Never ❒ Rarely ❒ Once in a while ❒ Monthly ❒ Weekly ❒ Daily

Above, if you marked never, rarely, or once in a while, why aren't you using technology more?

❒	I have no interest in it	❒	I don't know how I would get help
❒	I know nothing or very little	❒	If I make a mistake, it will be too expensive
❒	I don't know who could teach me	❒	I believe it is unsafe
❒	Don't think I could learn it	❒	My identity could be stolen
❒	I tried to learn it and couldn't	❒	My home could be broken into, stolen
❒	I can't afford the equipment	❒	The device could be stolen
❒	I can't afford internet service	❒	Other reasons:

Which of the following types of technology do you have?

	Devices/Equipment		Phone		Internet
❒	Desktop computer	❒	Landline home phone	❒	Broadband internet service
❒	Laptop	❒	Ooma /Skype /VOI phone	❒	Cable / Satellite internet
❒	Tablet / iPad	❒	Regular cell/flip phone	❒	Verizon DSL internet
❒	Printer	❒	Android smartphone	❒	Have internet access
❒	Kindle / Nook	❒	iPhone	❒	WIFI
❒	Digital picture frame	❒	Other phone	❒	Smart TV

In which ways do you currently use technology?

❒	Attend online meetings/events	❒	Make /get video calls	❒	Take classes /workshops
❒	Bank online / mobile deposits	❒	Order groceries	❒	Telehealth appointments
❒	Email	❒	Order prescriptions	❒	Text messaging
❒	Facebook/ other social media	❒	Pay bills online	❒	Use medical portal
❒	File taxes	❒	Photos /videos	❒	Use YouTube
❒	Get to specific websites	❒	Read eBooks / audiobooks	❒	Watch news/ TV/ movies
❒	Google/Internet searches	❒	Shop online	❒	Zoom
❒	Keep records	❒	Smart TV	❒	Other:

When having problems with devices or questions about using technology, how do you get help?

❒	I have no one to help	❒	Child/teen neighbor	❒	Library
❒	Friend	❒	Local volunteer	❒	My town COA
❒	Adult family member	❒	I pay someone local	❒	Another town's COA
❒	Child/teen family member	❒	I pay a store for help	❒	Other help: describe
❒	Adult neighbor	❒	Call the company	❒	

I go to the library so that I can: ❒ Non-internet computer use ❒ Use the internet

Have you ever been a victim of an internet or computer scam? ❒ No ❒ Not sure ❒ Yes

Did you lose money, information and/or was your equipment damaged?

❒ I lost money	❒ I lost information	❒ My device was damaged	❒ I got a virus

Did you report the loss to anyone?

❒ No	❒ Yes, to police	❒ Yes, to DA's office	❒ Yes, to state/federal gov

For which of the following have you or someone else created login account(s) so you /they can get to the following online information for you?

❒ Social Security	❒ Email
❒ Medicare	❒ Facebook or other social media
❒ Health Care Portal(s)	❒ SNAP / Food Assistance
❒ Fuel Assistance	❒ Pension / Retirement accounts

YOUR TECHNOLOGY KNOWLEDGE & LEARNING

Are you interested in learning more about technology? (Please check)

❒ No, already know what I want to know	❒ Yes, I want to start using it
❒ No, I choose not to use technology	❒ Yes, I want to learn more
❒ I don't know, I am reluctant to use it	❒ Other:

The technology devices I want to learn how to use or use better are:

❒ Smartphone	❒ Laptop / Notebook / Chromebook
❒ Regular cellphone / Flip phone	❒ Desktop computer
❒ iPad	❒ Digital Picture Frame
❒ Other tablet	❒ Smart TV
❒ Kindle / Nook / Other eReader	❒ Other:

The ways I would like to learn more about using internet and technology are:

❒ Going to an ongoing class	❒ Scheduling one-on-one help
❒ Going to a one-time workshop	❒ Going to walk-in location when I need help
❒ Being told about helpful websites	❒ Have someone to call when I have problem/question
❒ Watching online videos	❒ Other: (describe)

Page 4

I want to learn how to use technology for:

❒ Access medical portal	❒ Join a chat room	❒ Read library / ebooks
❒ Attach documents	❒ Keep a journal / write	❒ Scan documents
❒ Bank online	❒ Listen to podcasts	❒ Shop online
❒ Buy technology	❒ Make video calls	❒ Stream to Smart TV
❒ Do Email	❒ Online bill payment	❒ Telehealth
❒ Facebook & social media	❒ Online courses / workshop	❒ Text messaging
❒ File taxes	❒ Order groceries	❒ Use email
❒ Get info about my interests	❒ Order prescriptions	❒ Use YouTube
❒ Get on the internet	❒ Photo taking/ saving	❒ Zoom / Video calls
❒ Go to specific websites	❒ Print files/ documents	❒ Other:

The best times for me to learn more or get assistance are:

❒ Weekday Mornings ❒ Weekday Afternoons ❒ Weekday Evenings ❒ Weekend Days

ABOUT YOU

What town do you live in? _____

How many older adults are in your household? _____ (If more than one return more surveys)

How old are (each of) you? [list yourself first] _____

What is your gender? ❒ Female ❒ Male ❒ Other

Please rate your current financial situation?

❒ More than enough ❒ Enough ❒ Barely Enough ❒ Not Enough

How would you describe yourself as a technology user?

❒ Interested non-user ❒ Beginner ❒ Intermediate ❒ Advanced ❒ Expert

What level of education do you have?

❒ 6th to 8th grade	❒ Trades / Professional training	❒ Bachelor's Degree
❒ 9th to 11th	❒ Some college	❒ Master's Degree
❒ HS Diploma / GED	❒ Associate's Degree	❒ Doctoral Degree

I would like to be contacted

Name: _____ **phone:** _____

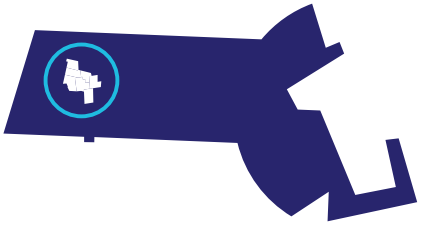
email: _____

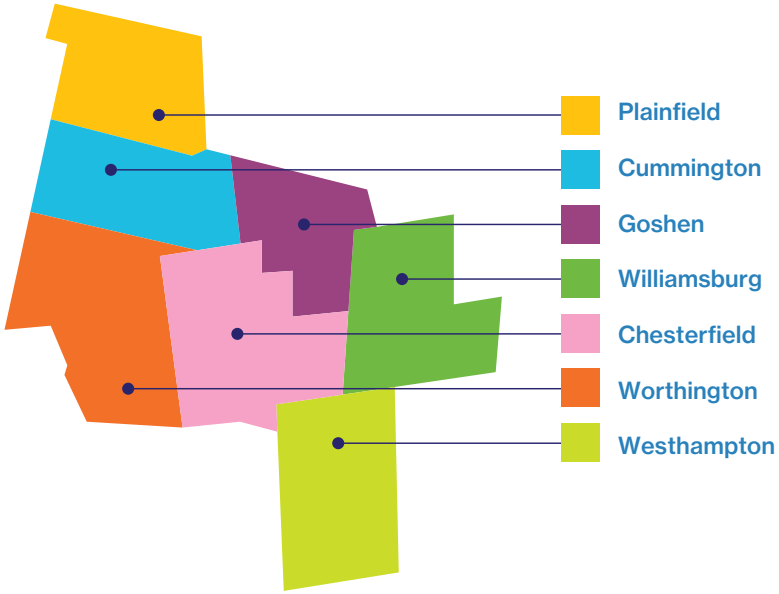
Seven Town Profiles 2022

	Chesterfield	Cummington	Goshen	Plainfield	Westhampton	Willamsburg	Worthington
Population	1,234	843	962	566	1,611	2,638	1,290
Percent Older Adults (60+)	39%	36%	43%	48%	37%	37%	41%
Number Older Adults (60+)	455	347	389	272	596	976	529
Older Adult Households (60+)	300	266	265	197	415	709	398
Square Miles	31.2	23.1	17.7	21.3	27.3	25.7	32.1
MA Rural Classification*	2	2	2	1	2	2	2
Broadband Source	Fiber Broadband	Fiber Broadband	Fiber Broadband	Fiber Broadband	Comcast	Comcast	Comcast
65+ Median Income**	$53,370	$83,033	$46,390	$59,113	$76,745	$82,600	$96,382

** Neilsberg.com Median household income by age 2021, adjusted for 2022 inflation

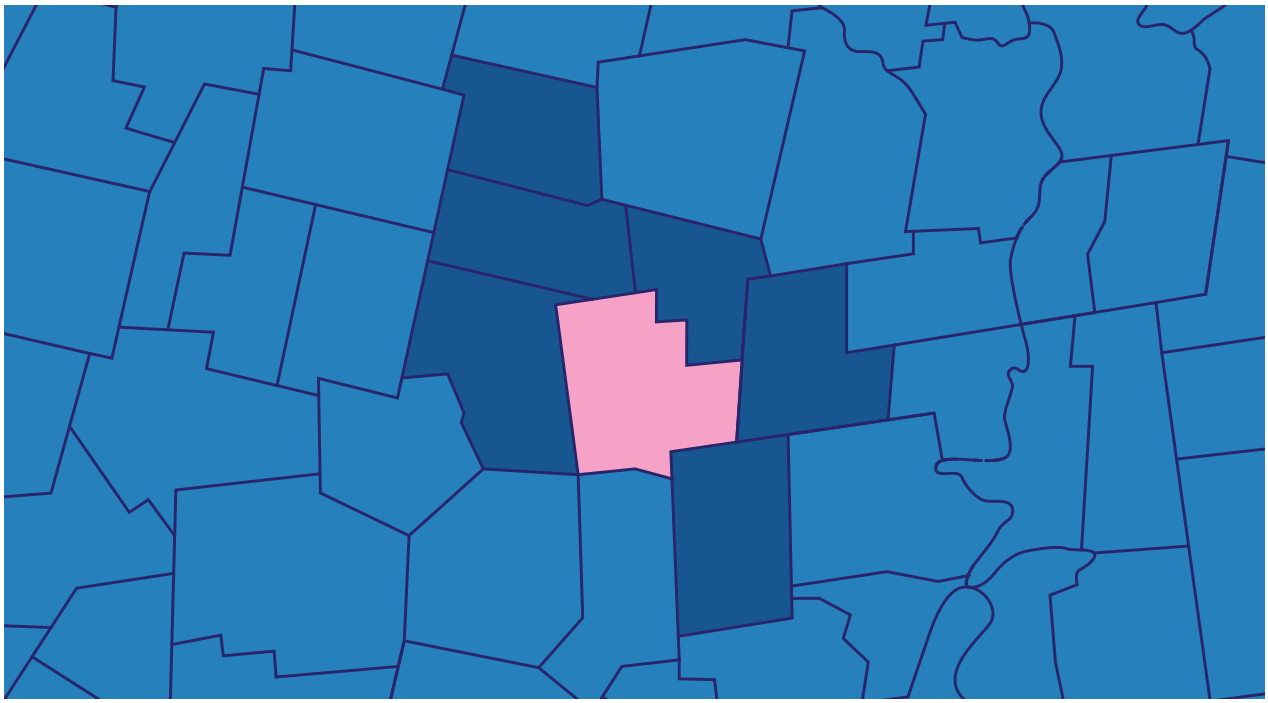
* as defined by State of Massachusetts Office of Rural Health (2023a & 2023b)





Chesterfield

HAMPSHIRE COUNTY, MASSACHUSETTS



Population

1,234

Square Miles

31.2

Percent Older Adults (60+)

39%

MA Rural Classification*

2

* as defined by State of Massachusetts Office of Rural Health (2023a & 2023b)

Number Older Adults (60+)

455

Broadband Source

Fiber Broadband

Older Adult Households (60+)

300

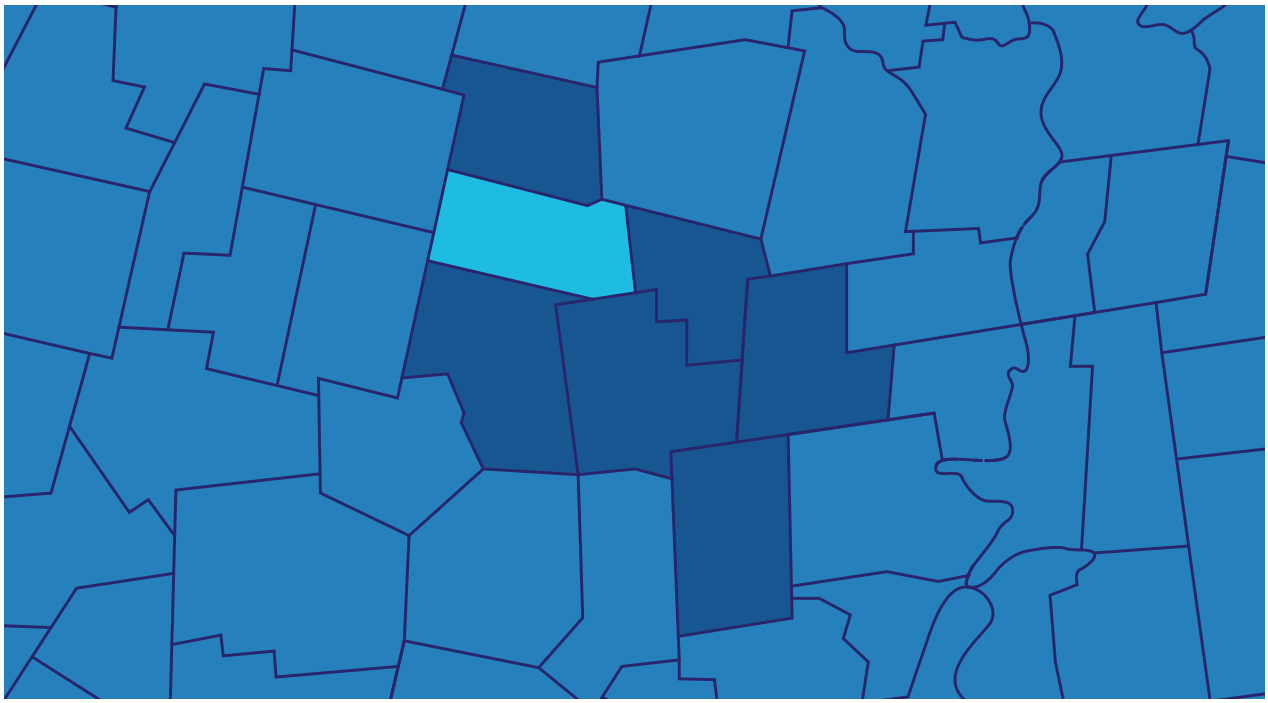
65+ Median Income**

$53,370

** Neilsberg.com Median household income by age 2021, adjusted for 2022 inflation

Cummington

HAMPSHIRE COUNTY, MASSACHUSETTS



Population

843

Square Miles

23.1

Percent Older Adults (60+)

36%

MA Rural Classification*

2

* as defined by State of Massachusetts Office of Rural Health (2023a & 2023b)

Number Older Adults (60+)

347

Broadband Source

Fiber Broadband

Older Adult Households (60+)

266

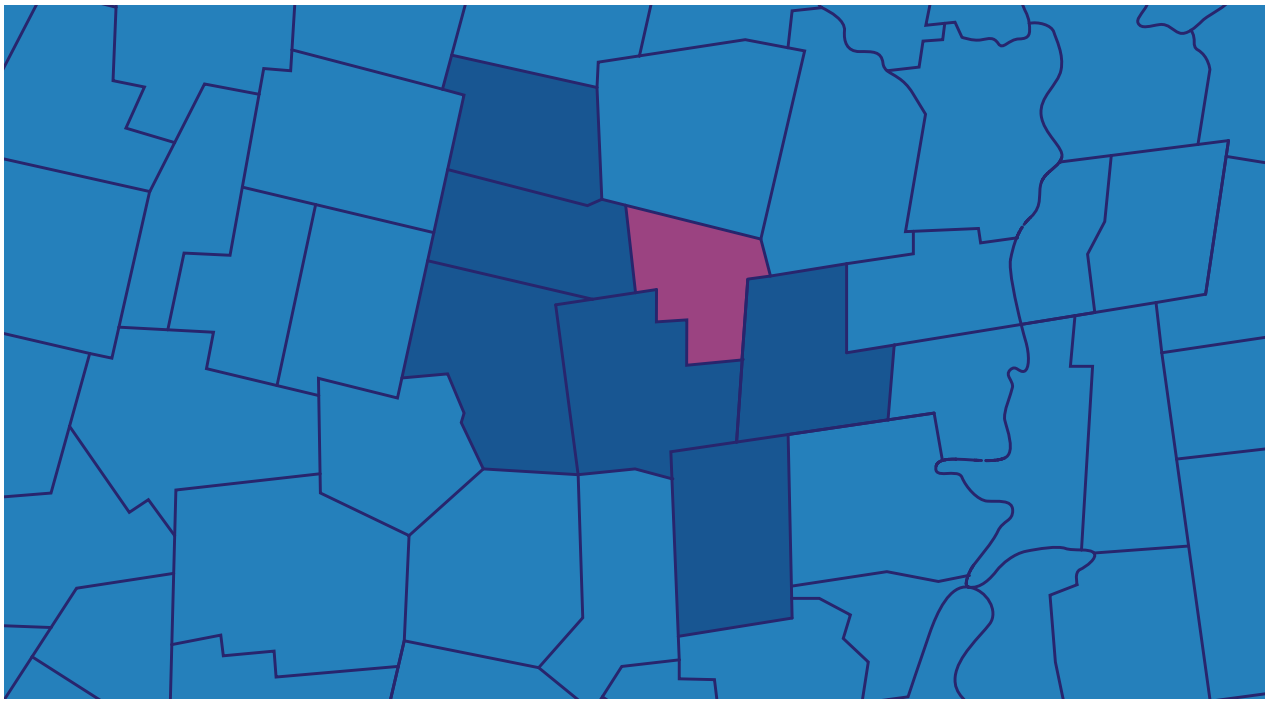
65+ Median Income**

$83,033

** Neilsberg.com Median household income by age 2021, adjusted for 2022 inflation

Goshen

HAMPSHIRE COUNTY, MASSACHUSETTS



Population

962

Square Miles

17.7

Percent Older Adults (60+)

43%

MA Rural Classification*

2

* as defined by State of Massachusetts Office of Rural Health (2023a & 2023b)

Number Older Adults (60+)

389

Broadband Source

Fiber Broadband

Older Adult Households (60+)

265

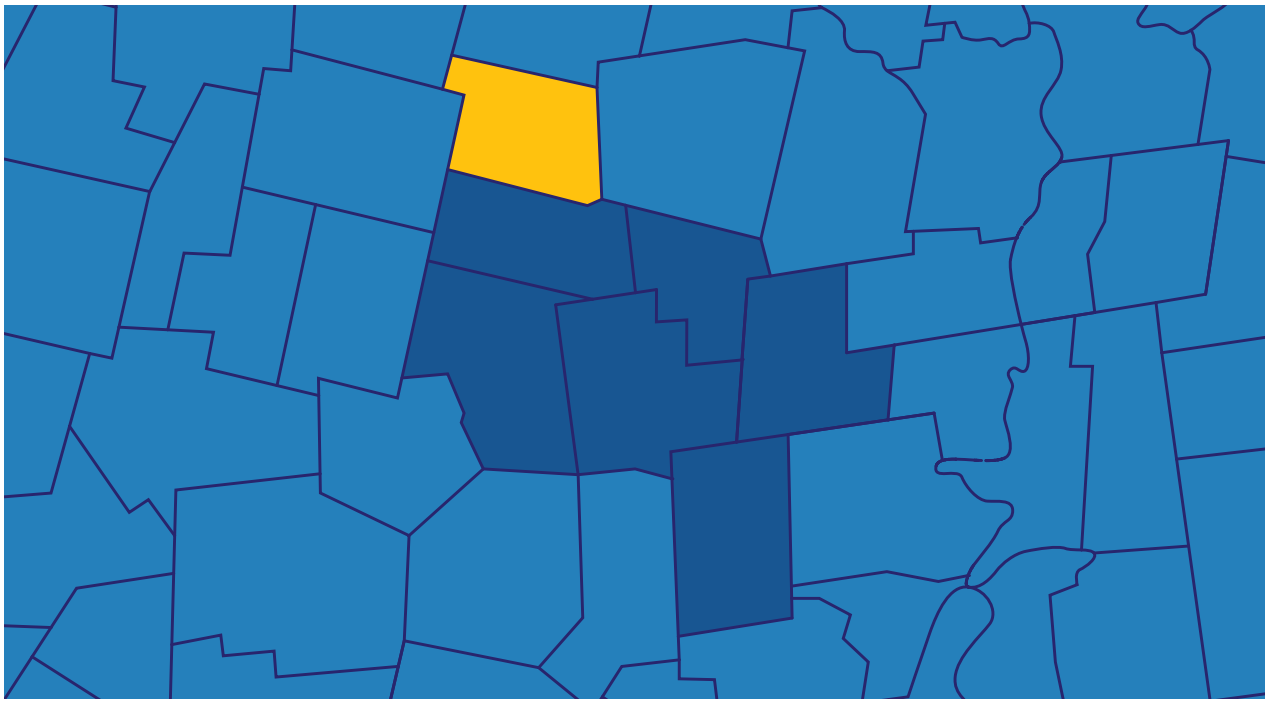
65+ Median Income**

$46,390

** Neilsberg.com Median household income by age 2021, adjusted for 2022 inflation

Plainfield

HAMPSHIRE COUNTY, MASSACHUSETTS



Population

566

Square Miles

21.3

Percent Older Adults (60+)

48%

MA Rural Classification*

1

* as defined by State of Massachusetts Office of Rural Health (2023a & 2023b)

Number Older Adults (60+)

272

Broadband Source

Fiber Broadband

Older Adult Households (60+)

197

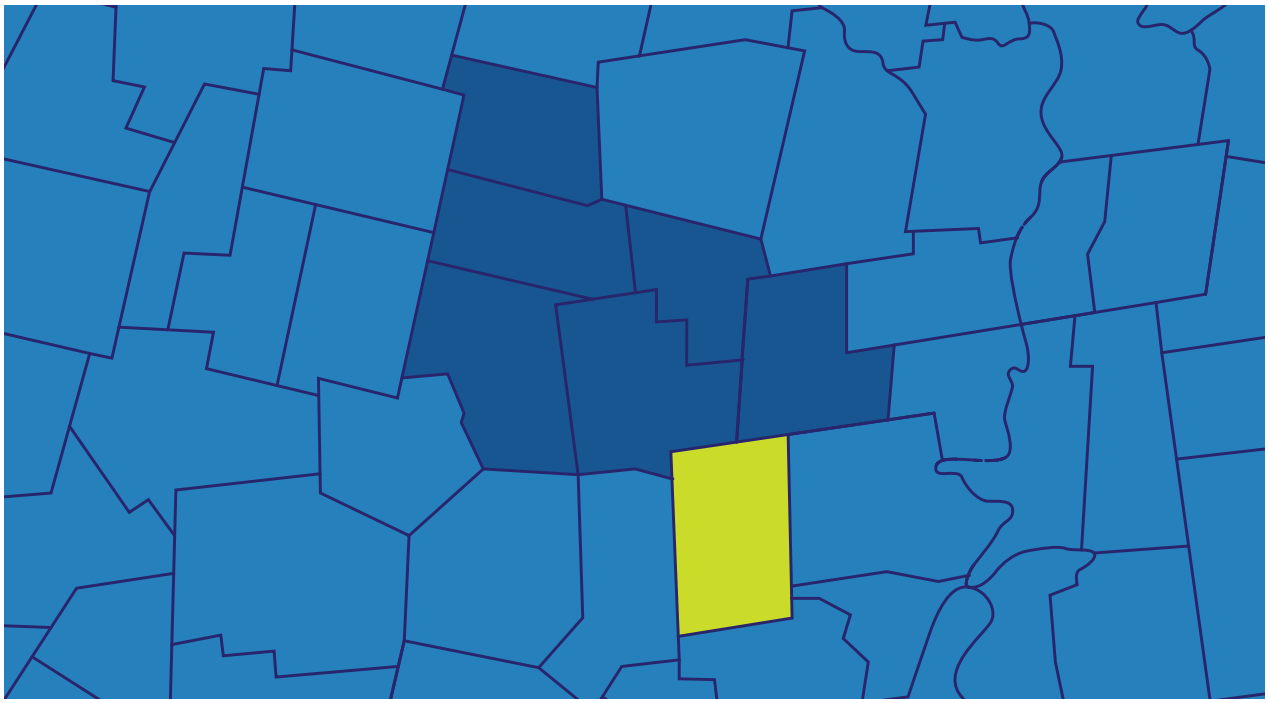
65+ Median Income**

$59,113

** Neilsberg.com Median household income by age 2021, adjusted for 2022 inflation

Westhampton

HAMPSHIRE COUNTY, MASSACHUSETTS



Population

1,611

Square Miles

27.3

Percent Older Adults (60+)

37%

MA Rural Classification*

2

* as defined by State of Massachusetts Office of Rural Health (2023a & 2023b)

Number Older Adults (60+)

596

Broadband Source

Comcast

Older Adult Households (60+)

415

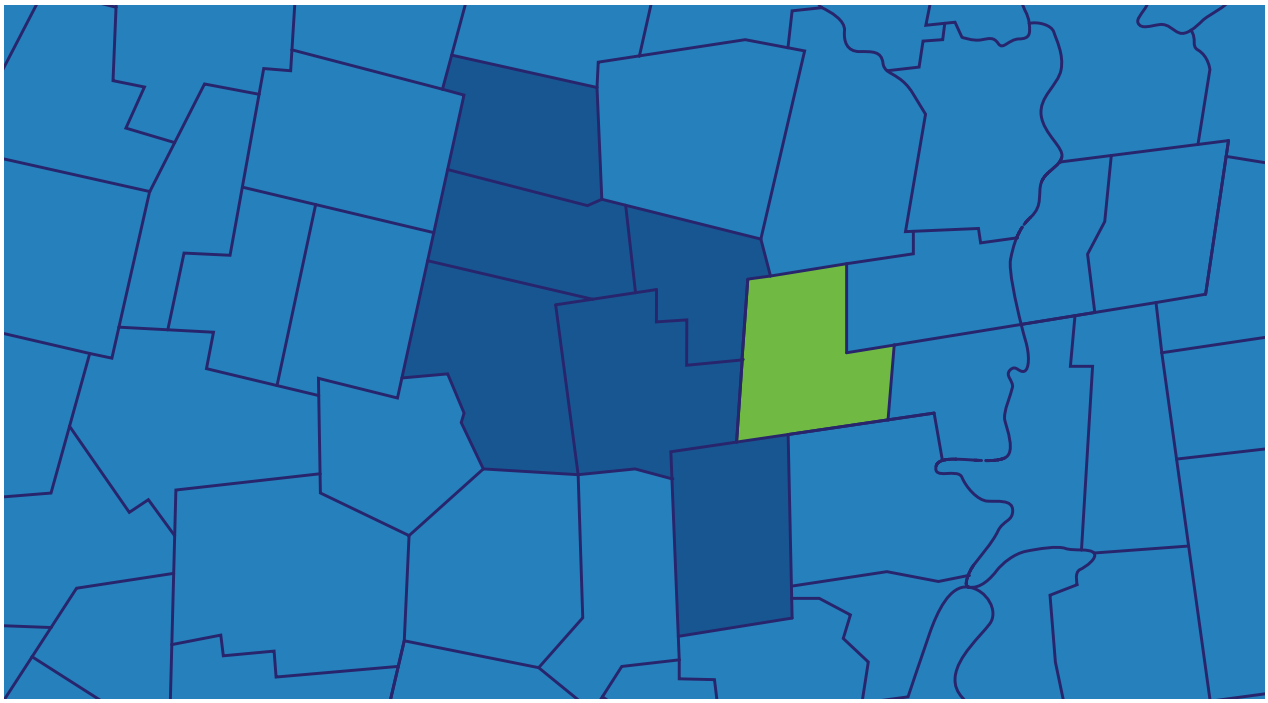
65+ Median Income**

$76,745

** Neilsberg.com Median household income by age 2021, adjusted for 2022 inflation

Williamsburg

HAMPSHIRE COUNTY, MASSACHUSETTS



Population

2,638

Square Miles

25.7

Percent Older Adults (60+)

37%

MA Rural Classification*

2

* as defined by State of Massachusetts Office of Rural Health (2023a & 2023b)

Number Older Adults (60+)

976

Broadband Source

Comcast

Older Adult Households (60+)

709

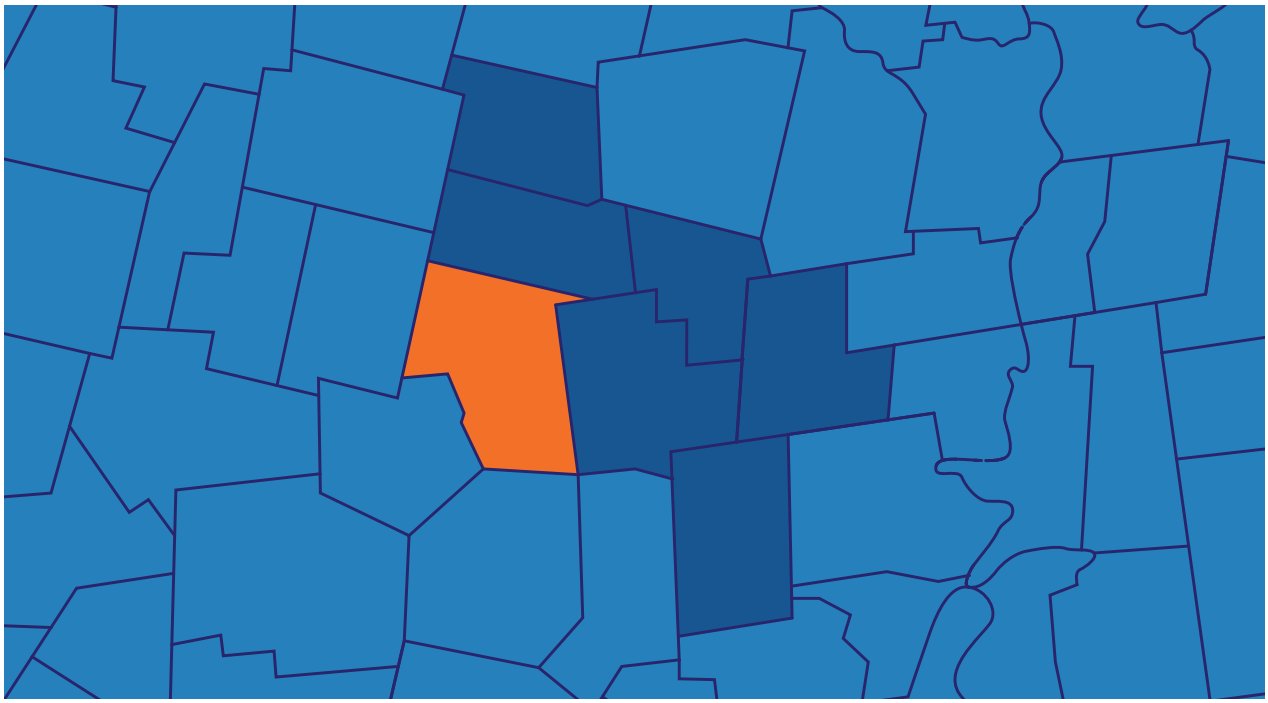
65+ Median Income**

$82,600

** Neilsberg.com Median household income by age 2021, adjusted for 2022 inflation

Worthington

HAMPSHIRE COUNTY, MASSACHUSETTS



Population

1,290

Square Miles

32.1

Percent Older Adults (60+)

41%

MA Rural Classification*

2

* as defined by State of Massachusetts Office of Rural Health (2023a & 2023b)

Number Older Adults (60+)

529

Broadband Source

Comcast

Older Adult Households (60+)

398

65+ Median Income**

$96,382

** Neilsberg.com Median household income by age 2021, adjusted for 2022 inflation