

## State/Regional AgrAbility Project Client Demographic Summary April 1, 2020 – March 31, 2021

*Prepared by:  
The National AgrAbility Project  
Purdue University  
West Lafayette, IN*

### Abstract

Using a standard reporting form developed by the National AgrAbility Project<sup>1</sup> (NAP) Evaluation Committee, a total of 20 USDA/NIFA-funded State/Regional AgrAbility Projects (SRAPs) provided demographic data for clients served during the period April 1, 2020, through March 31, 2021. All 20 states<sup>2</sup> were funded during the entire reporting period.

“Clients” were defined as farmers, ranchers, other agricultural workers, or members of farm families who have received at least one onsite technical assistance visit by an AgrAbility staff member at some time during their involvement with AgrAbility. To be included as a client for the current reporting period, clients had to receive at least some service from AgrAbility during the reporting period, though their site visit(s) may have occurred prior to the current reporting period. A total of 1,361 clients were served during the aforementioned reporting period. The following bulleted list contains highlights of gathered demographic data; percentages are based on the number of clients answering each question.

- The clients served were typically male (79.3%) with an average age of 56.1 years, which is relatively consistent but slightly lower than the average age for all farmers/ranchers as reported by USDA
- The three most common types of primary agricultural enterprises reported were livestock (primarily beef), dairy, and field/grain operations
- Owner/operators composed 73.0% of the clients served
- 64.7% reported that they worked full-time on their farm or ranch
- Of the 1,361 total clients, 22.4% claimed veteran status, 65.5% were non-veterans, and 12.1% did not respond concerning their veteran status
- 47.6% reported a high school education with an additional 43.8% reporting some college or technical school education and an additional 19.1% having graduated from college or higher. Therefore, 91.4% had at least a high school education.
- In regard to the cause of the client’s primary disability, the most frequently reported reasons were “Chronic or non-incident-related” (30.5%), “Non-agriculture-related incident” (24%), and “Agriculture-related incident” (18.2%).
- The three leading primary disability types were arthritis/rheumatic diseases, back injury, and joint injury

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<sup>1</sup> National AgrAbility Project activities during the referenced reporting period were supported by USDA/NIFA Special Project 2016-41590-225880. Development of this report was supported by USDA/NIFA Special Project 2021-41590-34813.

<sup>2</sup> States funded during entire period: AK, CA, CO, GA, KS, ME, MI, MO, NC, NE, NM, OH, PA, SD, TN, TX, UT, VA, WA, WI

- Of those reporting their income, 79.3% made less than \$60,000 in annual household income
- Only 38.3% of total clients reported whether or not they had past or current involvement in FFA or 4-H programs. Of those reporting, 41.7% indicated involvement.
- The three leading ways that clients heard about AgrAbility services were from an existing client, a public event (such as an agricultural fair or expo), and from media
- Clients served were from no fewer than 543 unique U.S. counties

## **Limitations of the Report**

Even though the same information was requested from each of the clients, participation was completely voluntary. No client was denied services for not providing demographic information. Therefore, in some cases, the data are incomplete, thus causing totals in some categories to be inconsistent. It should also be noted that the total percentages reported in tables may vary and not equal 100 percent due to rounding.

## **Findings**

SRAP staff reported serving a total of 1,361 farmer/rancher clients<sup>3</sup> with disabilities during the current reporting period (RP) of April 1, 2020, through March 31, 2021. This represents a 3.0 percent decrease in the number of total clients reported from the 2019-2020 RP as shown in Figure 1.

Part of the reason for the decrease in clients may relate to the loss of two long-standing SRAPs (Indiana and Illinois) in 2019, both of which had large, established client bases. Replacing these SRAPs were Washington State, a totally new SRAP with no existing clients, and Virginia, which had been funded in past grant cycles but which began the 2019-2020 reporting period with an almost entirely new staff.

Another contributing factor was the COVID-19 pandemic that hindered all SRAPs from making personal on-site visits to potential new clients, thereby significantly diminishing the number of new clients that could otherwise have been reported.

It may also be that AgrAbility has reached a level of stability for the funding available. When the total amount of USDA funding is divided by the number of clients reported, the result is \$3,570 per client. It should be noted that each of the SRAPs provide additional services, in addition to direct client services, that indirectly benefit farmers and ranchers in their respective states. These include public awareness activities designed to enhance accessibility in rural communities, training of rehabilitation professionals who serve rural clientele, and responding to potential clients by phone and email.

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<sup>3</sup> Clients were defined as farmers, ranchers, other agricultural workers, or members of their farm families who have received at least one onsite technical assistance visit by an AgrAbility staff member at some time during their involvement with AgrAbility. To be included as a client for the current reporting period, clients had to receive at least some service from AgrAbility during the reporting period, though their site visit(s) may have occurred during previous reporting periods.

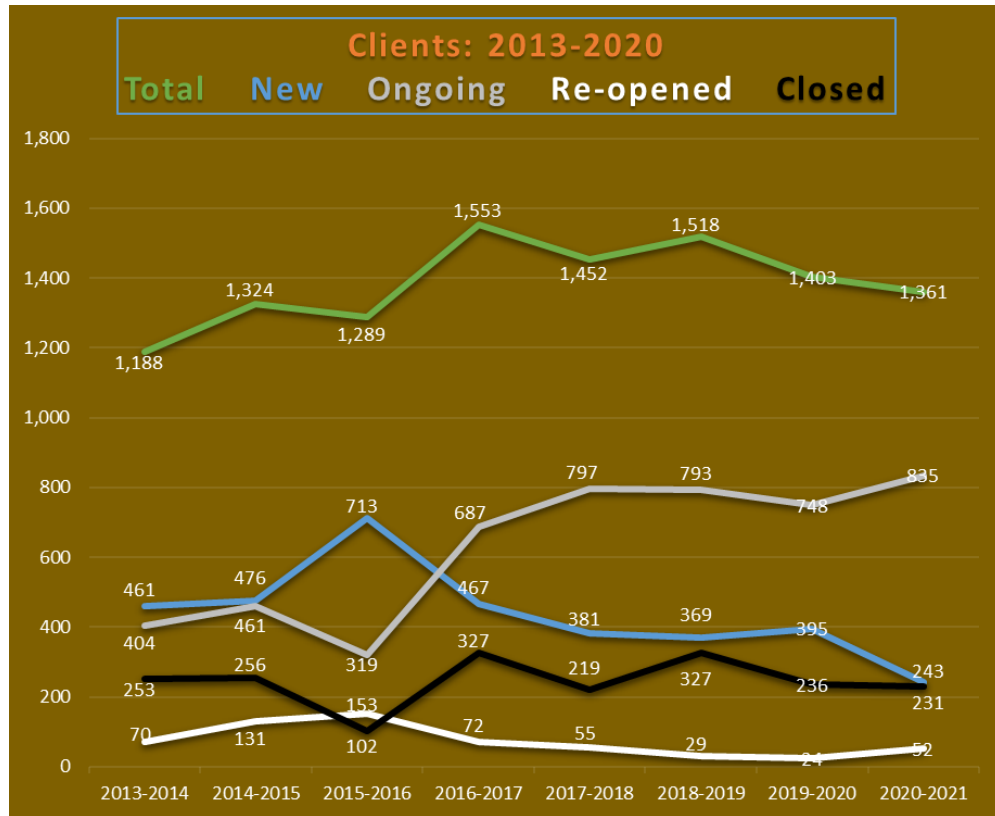


Figure 1. Total, New, Ongoing, Re-opened, and Closed Clients 2013-2014 through 2020-2021

The three most common types of primary agricultural operations, in descending order, were livestock (primarily beef), dairy, and field/grain operations. The leading primary disabilities were arthritis, back injuries, followed by joint injuries, “Other” (including celiac disease, carpal tunnel, spina bifida, peripheral neuropathy, dyslexia, migraines, and many others), and spinal cord injuries (paraplegia).

The mean age of the 1,327 clients who reported age information was 56.1 years (up from 55.6 in 2018-2019 but down from 56.4 in 2019-2020). The average age of AgrAbility clients is slightly lower than the average age of farmer owner/operators based on 2017 U.S. Census of Agriculture data that show an age of 57.5<sup>4</sup> for all farmers. This is likely because AgrAbility clients can be children and youth whereas the Census of Agriculture considers only adult farm producers. The age of AgrAbility clients ranged from 7 years to 102 years of age. For the 1,361 clients where sex was reported, 79.3% were male and 20.7% were female.

<sup>4</sup> USDA NASS, Table 52. Selected Producer Characteristics: 2017 and 2012 URL: [https://www.nass.usda.gov/Publications/AgCensus/2017/Full\\_Report/Volume\\_1,\\_Chapter\\_1\\_US/st99\\_1\\_0052\\_0052.pdf](https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_1_US/st99_1_0052_0052.pdf)

## Client Status

As shown in Figure 2, 61.4% of clients were ongoing AgrAbility clients from the previous year, while 17.9% were new clients.



Figure 2. 2020-2021 Client Status

## Client's relationship to the farm/ranch operation

As noted in Table 1, the overwhelming majority of clients (73.0% percent) were owner/operators of their farm or ranch. Only 6.3% of clients were farm employees (including migrant and seasonal workers), which suggests that this category may be underserved, especially in regions with large numbers of migrant/seasonal workers.

Table 1. Client's Relationship to the Farm/Ranch Operation (N=1,361), Percent

Owner/operator	73.0%
Spouse/partner	7.7%
Employee	5.2%
Planning a new agricultural career	5.1%
Child (<less than 18)	2.0%
Never farmed/ranched	1.8%
No longer actively farming/ranching	1.7%
Dependent adult	1.3%
Other family member	1.0%
Seasonal worker	0.7%
Migrant worker	0.4%

The percentage of clients planning a new agricultural career is more than double the numbers reported during 2013-14.

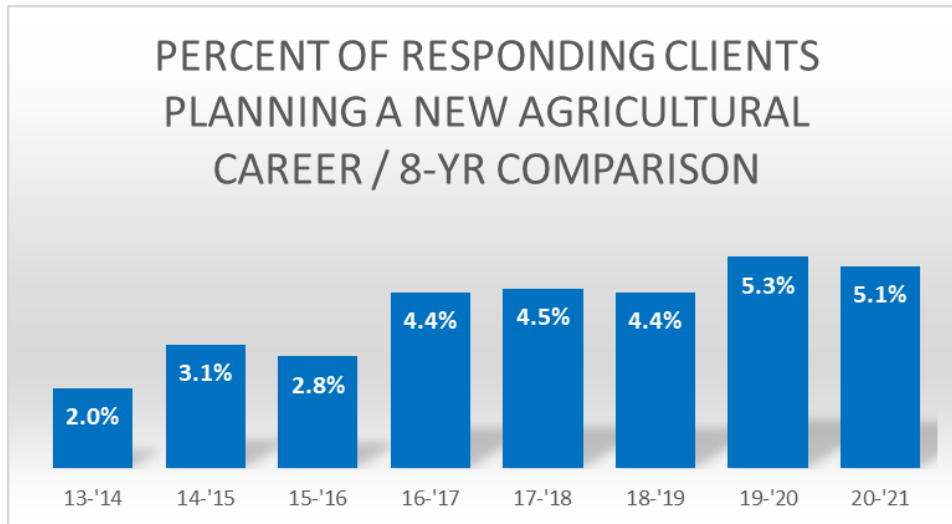


Figure 3. Percent of Responding Clients Planning a New Agricultural Career / 8-Year Comparison

### Client Work Status

Even considering the severity of many of the disability types reported, 64.7% of the clients considered themselves as fully employed (working 30-52 weeks) during the RP. This proportion is substantially higher than the 19.1%<sup>5</sup> of the general population of persons with disabilities who are employed, as reported by the US Department of Labor in 2021. Only 8.2% of AgrAbility clients reported themselves as not working during the RP. It should be noted, however, that the Department of Labor has a more restrictive standard for classifying a worker as disabled. For example, a farmer with severe arthritis that inhibits his ability to farm may not be classified as disabled under the Department of Labor standards but could still be an AgrAbility client.

<sup>5</sup> US Department of Labor, Bureau of Labor Statistics report: "PERSONS WITH A DISABILITY: LABOR FORCE CHARACTERISTICS – 2021" reported on <https://www.bls.gov/news.release/disabl.nr0.htm>

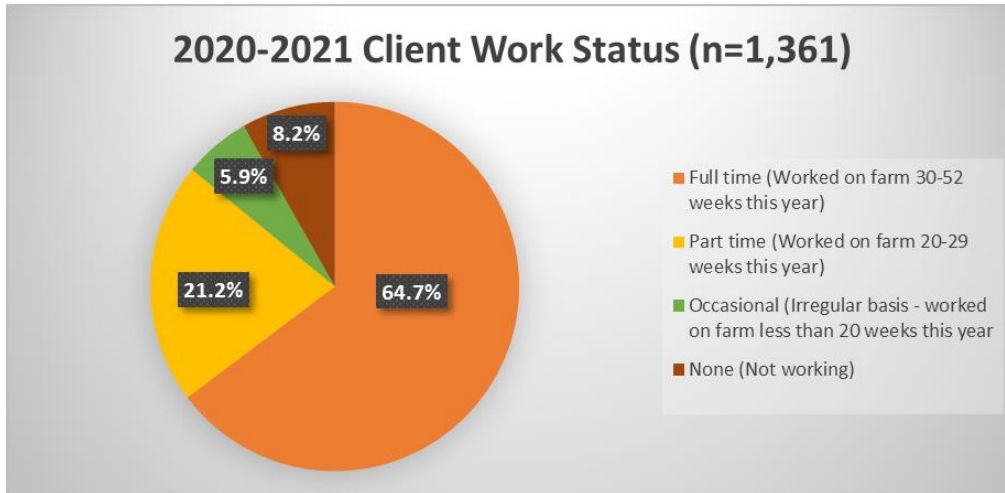


Figure 4. 2020-2021 Client Work Status

### Reported farm/ranch enterprises

As indicated in Census of Agriculture data, many farms/ranches comprise more than one agricultural enterprise, such as both crops and livestock. Therefore, clients were asked to identify up to three enterprises if they had more than one. The top three “primary enterprises” for the 1,361 clients reporting were livestock (29.9 percent), dairy (19.4 percent), and field/grain crops (15.6 percent). The most prevalent second and third enterprises were field/grain crops, hay, and livestock, although fewer clients reported having secondary and tertiary enterprises (n = 717 and n =193 respectively).

Table 2. Primary, Secondary, and Tertiary Farm/Ranch Enterprises

Enterprise	Primary (n=1361) %	Secondary (n=717) %	Tertiary (n=193) %
Livestock	29.9%	16.3%	13.5%
Dairy	19.4%	0.8%	1.0%
Field/grain crops	15.6%	30.4%	8.8%
Vegetable crops	9.7%	6.8%	7.3%
Agri-business	4.3%	2.2%	4.1%
Hay crops	4.0%	18.4%	18.1%
Other animal	3.3%	2.4%	4.7%
Specialized crops	2.9%	1.8%	4.7%
Poultry	2.9%	6.6%	9.8%
Fruit crops	2.5%	2.6%	4.7%
Other	1.9%	2.8%	1.6%
Orchard crops	1.5%	2.2%	2.6%
Swine/Hogs	0.7%	2.1%	3.6%
None	0.7%	3.3%	15.5%
Nursery crops	0.7%	1.1%	0.0%

More than 56% of the clients reported working with animals as their primary enterprise, which is noteworthy considering the extensive physical demands of typical animal-related activities.

### Cause of Disability

In Table 3, the causes of disability were divided into five categories: agriculture-related incidents (injuries), non-agriculture-related incidents (injuries), chronic conditions, conditions occurring during military service, and from birth. With 1,356 clients reporting cause of disability, the most common cause, 30.5%, was “Chronic or not incident-related.” This included arthritis, back problems, respiratory disease, heart disease, and other chronic conditions. Note that 42.2% percent of all causes of disability were due to some type of incident or injury; this is only the second time since the 2005-06 RP that more disabilities were attributed to incident/injuries than to chronic illness/non-incident related causes. As has been the case in the past, non-agriculture-related disabling injuries are significantly more prevalent than agriculture-related disabling injuries. The leading type of agriculture-related incidents was related to tractor/farm machinery at 5.0%. Military-related disabilities comprised 13.2% of all reported.

Table 3. Cause of Disability (n=1,356)

<b>Agriculture-related incident</b>	<b>Percent</b>	<b># Clients</b>
Tractor/Farm machinery	5.0%	68
Other	4.5%	61
Livestock/animals	3.5%	47
Falls	2.9%	40
Vehicle incident	2.0%	27
Chemicals/pesticides	0.3%	4
Total agriculture	18.2%	247
<b>Non-Agriculture-related incident</b>	<b>Percent</b>	<b># Clients</b>
Vehicular incident	9.7%	132
Other non-agricultural incident	9.4%	127
Falls	2.7%	37
Recreational	2.1%	29
Total non-agriculture	24.0%	325
<b>Chronic or not incident-related</b>	30.5%	414
<b>Occurred during military service</b>	13.2%	179
<b>From birth</b>	14.1%	191

### Disabilities: primary, secondary, and tertiary

There were fifty-five different types of disabilities from which staff/clients could select. SRAP staff were able to identify up to three disability types (primary, secondary, and tertiary). For the clients who reported primary disabilities, as shown in Table 4, arthritis/rheumatic diseases (14.6%) was the most common, followed by back injury (11.8%). Other leading disabilities

were joint injuries (9.9%), spinal paraplegia (6.0%), and traumatic brain injury (4.5%). Those listing secondary (n=591) and tertiary (n=252) causes of disability were fewer, but in both cases, joint injury, arthritis, and back injury were the most common. Furthermore, other conditions often related to aging populations, such as diabetes, visual impairments, hearing impairments, and heart disease were reported as secondary and tertiary disabilities.

Table 4. Disabilities: Primary, Secondary, and Tertiary

<b>Injury/Disease</b>	<b>Primary (n=1361)</b>	<b>Secondary (n=591)</b>	<b>Tertiary (n=252)</b>
Arthritis/Rheumatic diseases	14.6%	13.5%	10.3%
Back injury	11.8%	11.2%	6.3%
Joint injury	9.9%	16.8%	15.1%
Other <sup>6</sup>	7.8%	4.1%	4.4%
Spinal cord injury (paraplegia)	6.0%	0.5%	0.0%
Traumatic brain injury	4.5%	3.0%	2.4%
Orthopedic injury (other)	4.0%	7.4%	4.4%
Post-Traumatic Stress Disorder	3.8%	8.0%	12.3%
Cardiovascular disease	3.0%	4.1%	5.2%
Cancer	2.6%	1.5%	2.0%
Cerebral vascular accident (stroke)	2.6%	2.5%	0.4%
Visual Impairment	2.3%	3.6%	6.3%
Multiple sclerosis	2.2%	0.2%	0.0%
Amputation: Leg-above knee	2.1%	0.2%	0.4%
Spinal cord injury (quadriplegia)	1.9%	0.0%	0.0%
Other (neurological condition)	1.8%	1.4%	0.4%
Amputation: Leg-below knee	1.7%	0.8%	0.0%
Other (disease)	1.7%	2.2%	4.0%
Hearing impairment	1.7%	2.5%	4.4%
Diabetes/metabolic disorder	1.3%	4.1%	7.9%
Cerebral palsy	1.1%	0.0%	0.0%
Other (neuromuscular disease)	1.0%	0.3%	0.8%
Other (injury)	1.0%	1.5%	0.4%
Parkinson's disease	1.0%	0.3%	0.0%
COPD (Respiratory impairment)	1.0%	1.7%	0.8%
Muscular dystrophy	0.9%	0.2%	0.0%

<sup>6</sup> "Other" comprises any disability not otherwise listed.



Mental illness	0.9%	2.5%	3.2%
Amputation: Arm-above elbow	0.7%	0.0%	0.0%
Amputation: Arm-below elbow	0.6%	0.0%	0.0%
Peripheral neuropathies	0.6%	0.7%	2.8%
Amputation: Finger	0.5%	0.7%	0.4%
Other (amputation)	0.4%	0.0%	0.4%
Poliomyelitis	0.3%	0.0%	0.0%
Intellectual Disability	0.3%	0.0%	0.0%
ALS	0.2%	0.0%	0.0%
Guillain-Barre syndrome	0.2%	0.2%	0.0%
Fibromyalgia	0.2%	0.7%	0.4%
Kidney disease	0.2%	0.7%	0.8%
Amputation: Hand	0.1%	0.3%	0.0%
Amputation: Thumb	0.1%	0.2%	0.0%
Amputation: Foot	0.1%	0.2%	0.0%
Friedreich's ataxia	0.1%	0.0%	0.0%
Spinocerebellar degeneration	0.1%	0.0%	0.0%
Epilepsy	0.1%	0.8%	0.8%
Other (sensory impairment)	0.1%	0.5%	1.6%
Amputation: Toe	0.1%	0.0%	0.0%
Amputation: Replant	0.1%	0.0%	0.4%
Myasthenia gravis	0.1%	0.0%	0.0%
Hemophilia, sickle cell anemia, leukemia	0.1%	0.0%	0.0%
Chronic fatigue syndrome	0.1%	0.3%	0.0%
Deafblind	0.1%	0.0%	0.0%
Chemical sensitivity	0.1%	0.0%	0.0%
Huntington's disease	0.0%	0.0%	0.0%
Spinal muscular atrophy	0.0%	0.2%	0.8%
Chemical dependency	0.0%	0.5%	0.4%

## Level of Completed Education

Clients were asked to provide information on their highest level of education, and 1,164 responded. Of those responding, as shown in Figure 5, 47.6% had completed a high school education and 43.8% had completed some level of post-secondary education.

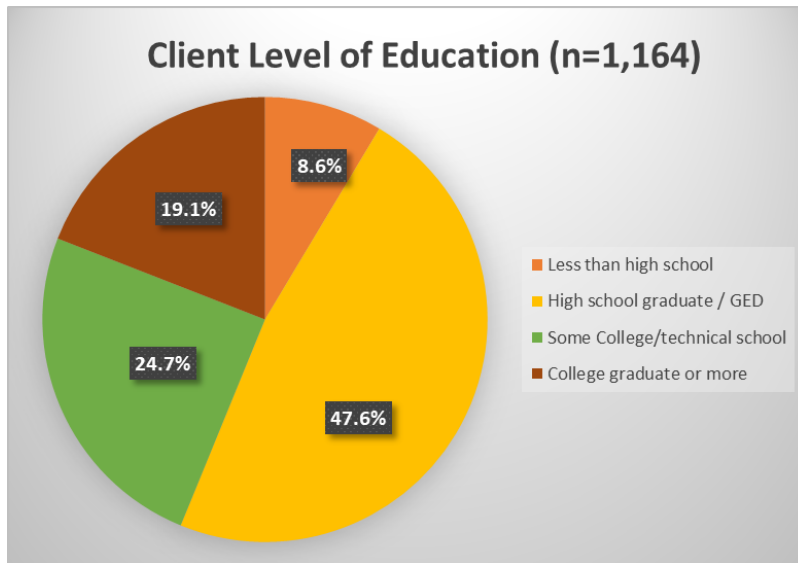


Figure 5. Client Level of Education

## Ethnicity

The overwhelming majority of clients served were white. This finding reflects the general makeup of current producers on U.S. farms and ranches which is approximately 95.4% white.<sup>7</sup> Table 5 suggests that AgrAbility could potentially expand its outreach to ethnically underserved audiences.

Table 5. Client Ethnicity (n=1,329), percent

Client Ethnicity	Percent	# Clients
White	89.0%	1183
Hispanic or Latino	4.7%	63
Black	4.1%	54
American Indian or Alaska Native	1.7%	22
Asian	0.5%	6
Other - (Asian/White - 1)	0.1%	1
Native Hawaiian/Pacific Islander	0.0%	0

<sup>7</sup> USDA NASS, Table 52. Selected Producer Characteristics: 2017 and 2012 URL: [https://www.nass.usda.gov/Publications/AgCensus/2017/Full\\_Report/Volume\\_1,\\_Chapter\\_1\\_US/st99\\_1\\_0052\\_0052.pdf](https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_1_US/st99_1_0052_0052.pdf)

## Total household income

About 44.1% of the clients provided information on household income as reported in Table 6 and 55.9% did not respond or did not wish to disclose their income. It should be noted that some income may be non-farm/ranch related, i.e., derived from non-farm/ranch-related activities. Information regarding “only” farm/ranch income was not asked. Because the majority of responses in previous reporting periods fell in the “Under \$60,000” category of income, the category was expanded in the 2018-19 reporting period to include lower divisions for more accuracy, and that is continued in this 2020-2021 report.

Table 6. Total household income of those who provided information (n=600), percent

Under \$20,000	11.0%
Under \$40,000	18.0%
Under \$60,000	50.3%
Under \$120,000	15.3%
Under \$180,000	4.0%
Under \$240,000	0.7%
Above \$240,000	0.7%
Wish not to disclose	55.9%

## Days worked off farm/ranch

As reported in Figure 6, the majority of reporting clients spent the bulk of their working time on their farm, ranch, or other agricultural enterprise. Only 10.6% spent more than 100 days working off-site.

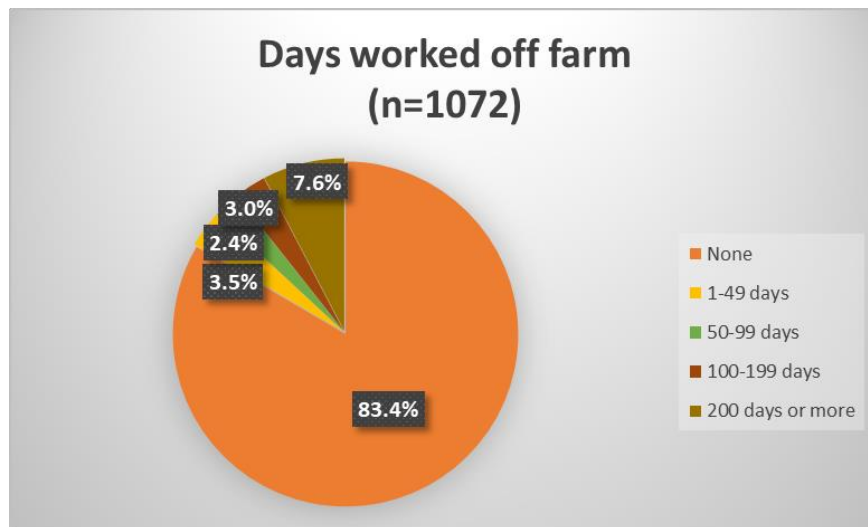


Figure 6. Days Worked Off Farm

## Percentage of clients who are veterans

Table 7 provides a distribution of clients by veteran status.

Table 7. Percentage of Clients Who Are Veterans (N=1,361), Percent

Veteran	22.4%
Non-veteran	65.5%
Unknown	12.1%

It was interesting to note in Figure 7 that, during the last five years, the percentage of veteran clients has increased significantly from 10.5% in 2015-2016 (135 veterans) to 17.4% in 2016-2017 (270) to 18.7% in 2017-2018 (271) to 18.9% in 2018-2019 (287) to 21.8% in 2019-2020 (306) and to 22.4% in 2020-2021 (305). Based upon the source of disability reported, 58.7% of those identifying themselves as veterans were disabled during military service.

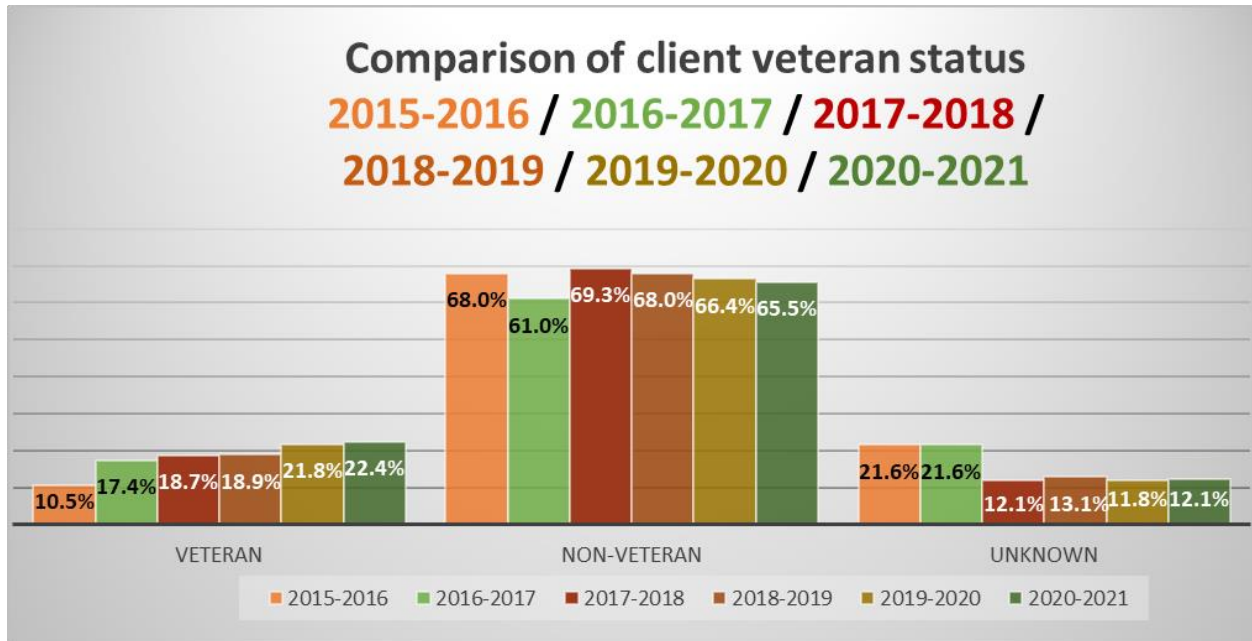


Figure 7. Comparison of Client Veteran Status 2015-2016 through 2020-2021

## How clients heard about AgrAbility

The importance of clients sharing, public awareness events, media, and word of mouth to identify potential AgrAbility clients is reflected in Figure 8, which indicates how clients first learned about the program. The data also show the importance of a diverse marketing strategy.

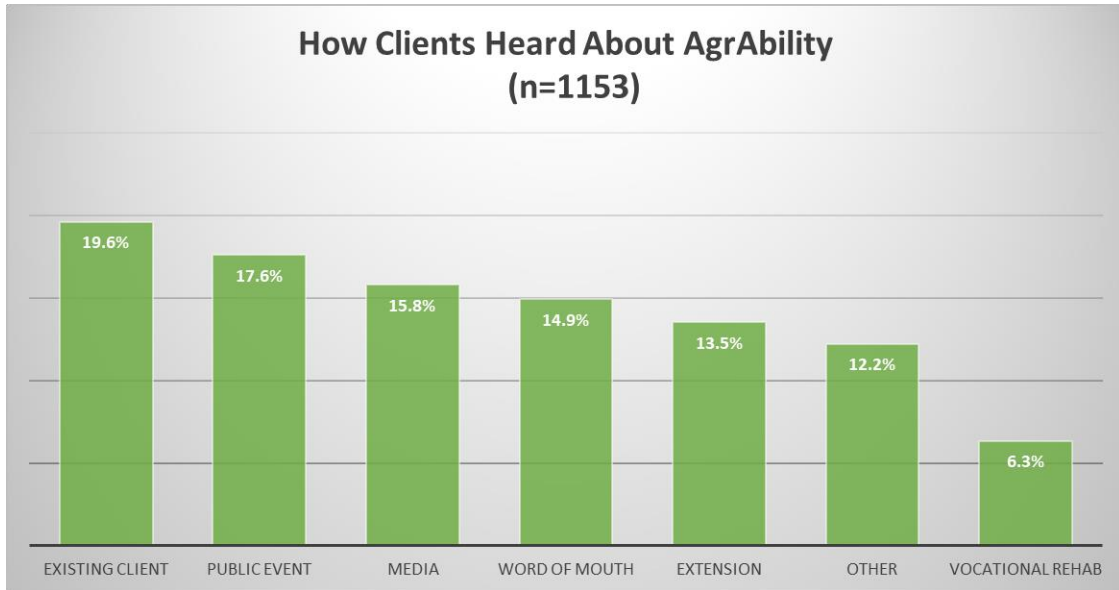


Figure 8. How Clients Heard About AgrAbility

**Clients who are/have been FFA or 4-H members**

Only 38.2% of total clients, as shown in Figure 9, reported whether or not they had past or current involvement in FFA or 4-H programs. Of the 521 clients who responded, 41.7% indicated involvement.

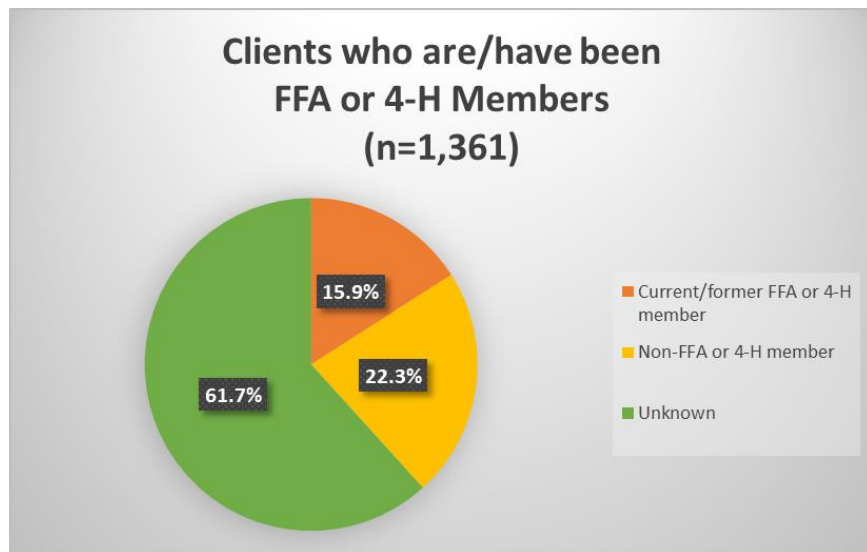


Figure 9. Clients Who Are/Have Been FFA or 4-H Members

## Client County Residence Data

At the request of USDA-NIFA, a question was added to the reporting form in 2016 to gather data on the county of residence of each AgrAbility client. Table 8 reports the data collected along with the total number of counties within the SRAP states.

Table 8. Client County Data

Clients reporting county	1,361
Clients not reporting county	0
Unique client counties	543
Total counties in SRAP states	1869

The distribution of AgrAbility clients by county of residence, shown in Figure 10, provides a visual aid to show areas served by the funded SRAPs during the RP. It also shows that most of the U.S. land mass and the majority of states are currently unserved, except for very limited onsite services conducted by the NAP in non-SRAP states. Figure 10 is not intended to provide comparison between SRAPs due to the varying nature of services provided by each project.

It is also important to consider when looking at the map of AgrAbility client counties that a single client in a large county of a state such as Utah, which only has 29 counties, will fill up a much larger portion of the map with color/shading than would perhaps many clients from multiple counties in states like Michigan, Tennessee, and Wisconsin, which have relatively small counties but many more of them.

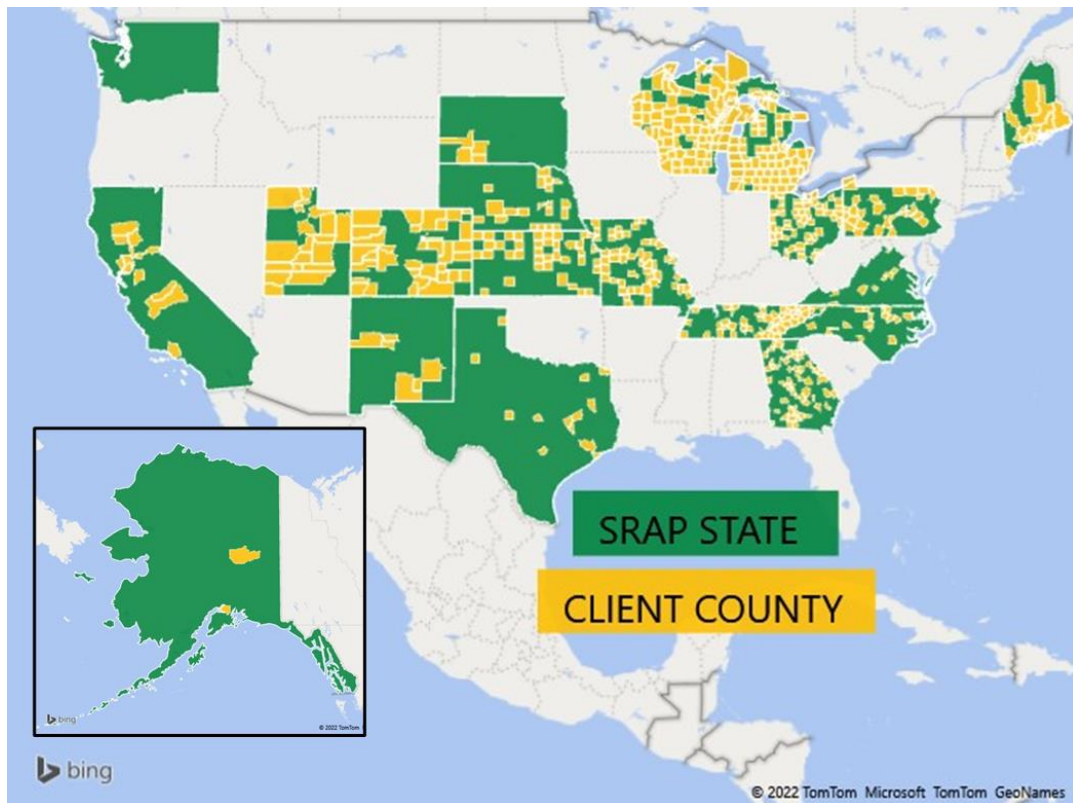


Figure 10

## Summary

The AgrAbility Program was established in the 1990 Farm Bill and is currently in its 30<sup>th</sup> year of serving farm and ranch families. Collecting client data and measuring the impact of the services have been significant parts of the annual plan of work from the very beginning. It is firmly believed that every publicly funded initiative should be able to demonstrate that the investment of public funds is justified and generating a meaningful return.

This summary provides a big picture view of the demographics of 1,361 clients who were served during one reporting period. It provides a means for better understanding the clients' characteristics so that SRAP services can be improved.

In addition to the demographic data, the NAP subcontractor at Colorado State University and the NAP Evaluation Committee continue to collect and analyze data and report on the impacts that AgrAbility services in 14 participating SRAPs are having on clients' quality of life and capacity for independent living. These findings have been very encouraging, showing statistically significant increases in both areas. Articles include the following:

- Fetsch, R. J., & Turk, P. (2018). A quantitative assessment of the effectiveness of USDA's AgrAbility project. *Disability and Health Journal*, 11(2), 249-255. doi: <https://doi.org/10.1016/j.dhjo.2017.10.004>
- Fetsch, R. J., & Collins, C. L. (2018). The effects of AgrAbility on the mental/behavioral health of farmers and ranchers with functional limitations: A comparison study. *Medical Research Archives*, 6(2). <http://www.journals.ke-i.org/index.php/mra/article/view/1691/1762>
- Fetsch, R. J., Jackman, D. M., & Collins, C. L. (2018). Assessing changes in quality of life and independent living and working levels among AgrAbility farmers and ranchers with disabilities. *Disability and Health Journal*. *Journal*, 11(2), 230-236. doi: <https://doi.org/10.1016/j.dhjo.2017.08.001>
- Fetsch, R. J., Leathers, C. L., & Morgan, G. A. (2020, February). Why do some farmers and ranchers overcome limitations from accidents and illnesses and others do not? AgrAbility works for most. *Medical Research Archives*, 8(2). Available at: <<https://journals.ke-i.org/mra/article/view/2047> (<https://journals.ke-i.org/mra/article/view/2047>)>. doi: <https://doi.org/10.18103/mra.v8i2.2047> (<https://doi.org/10.18103/mra.v8i2.2047>).
- Fetsch, R. J., Petrea, R. E., Jones, P. J., Field, W. E., & Aherin, R. A. (2020). A 25-year overview of AgrAbility demographics. *Journal of Agromedicine*, doi: 10.1080/1059924X.2020.1837318.
- Jackman, D. M., Fetsch, R. J., & Collins, C. L. (2016). Quality of life and independent living and working levels of farmers and ranchers with disabilities. *Disability and Health Journal*, 9, 226-233. doi: <http://dx.doi.org/10.1016/j.dhjo.2015.09.002>

It should be noted that, while the NAP Client Demographic Data Summary is based on the work of SRAPs funded by USDA/NIFA during the stated reporting period, there are formerly funded states that lost their government funding but that continue to work with AgrAbility clients as funding and staff permit. During the 2020-2021 reporting period, there were nine of these "affiliate" projects whose ongoing work effectively increases the outreach and visibility of AgrAbility across the country. For instance, one of those affiliate projects sent the NAP a report indicating that during this reporting period they continued to work with 29 ongoing clients while garnering seven new clients and one re-opened client.

In addition, as part of its plan of work, the NAP has been conducting onsite visits to farmers/ranchers who have expressed a need but are not served by a SRAP. During this reporting period, NAP staff conducted no less than eight such onsite visits.

In addition to the intensive, on-site services being provided to clients of AgrAbility, tens of thousands of other individuals from across the U.S. and even in numerous other countries are benefitting from AgrAbility resources and educational opportunities, such as those available through the AgrAbility website ([www.agrability.org](http://www.agrability.org)), toll-free help-line (800-825-4264), and events such as the annual National Training Workshop and regional training events.