

## State/Regional AgrAbility Project Client Demographic Summary April 1, 2016 – March 31, 2017

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### Abstract

Using a standard reporting form developed by the National AgrAbility Project<sup>1</sup> Evaluation Committee, each of the 20 USDA/NIFA-funded State/Regional AgrAbility Projects (SRAPs)<sup>2</sup> provided demographic data for clients served during the period April 1, 2016 through March 31, 2017. Clients were identified 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 1,553 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 (79.1%) with an average age of 54.4 years, which is relatively consistent with 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 73.1% of the clients served
- 64.2% reported that they worked full time on their farm or ranch
- Veterans composed 22.2% of clients reporting veteran status
- 39.2% had only a high school education with 55.8% reporting at least some college or technical school education. Therefore 94.9% had at least a high school education.
- The most common cause of reported primary disability was chronic illness (48.4%), while 48.0% of primary disabilities were the result of an injury of which 32.1% were non-agriculture-related and 15.9% agriculture-related
- The three leading primary disability types were back injury, joint injury, and arthritis/rheumatic diseases
- Of those reporting their income, 60.4% made less than \$60,000 in annual household income
- Only 20% of total clients reported whether or not they had past or current involvement in FFA or 4-H programs. Of those reporting, 43.7% indicated involvement.
- Public events (such as agricultural expos), media, and word of mouth were identified as the three leading ways that clients heard about AgrAbility services
- Clients served were from no fewer than 618 unique U.S. counties

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<sup>1</sup> The National AgrAbility Project is supported by USDA/NIFA Special Project 2016-41590-225880.

<sup>2</sup> Funded states were: CA, CO, GA, IL, IN, KS, KY, ME, MI, MO, NE, NC, OH, PA, TN, TX, UT, VA, WV, WI

## Introduction

When Purdue University received the National AgrAbility Project (NAP) grant for 2016-2020, it was decided that the process for collecting and analyzing client demographic data would be re-evaluated and modified as needed. Following discussions between the NAP and State and Regional AgrAbility Project (SRAPs) leaders, several data collection questions that had been causing confusion were clarified, and the collection tool was made more user-friendly. This task was undertaken by a sub-committee of the NAP Evaluation Committee, composed of Anne Brown-Reither (UT), Karen Funkenbusch (MO), Paige Tidwell (GA), and Chuck Baldwin (IN), along with NAP staff Paul Jones, Dr. Shawn Ehlers, and Richard Fox. This report is the first annual summary of client services based on the modified collection tool.

Notable among the data collection tool updates/clarifications are the following:

- In response to requests from the SRAPs, the NAP Demographics Collection Tool (Collection Tool) was made available as a standardized Excel file and as a matching online interactive web interface.
- A new question requesting the client's county of residence was added by request of USDA/NIFA.
- A new question asking how the client heard about AgrAbility was added.
- Pop-up definitions and clarifications were added wherever SRAPs had indicated confusion on how to report a given client demographic data point. For instance, when a client's status (new, ongoing, re-entered, closed case) is chosen, a definition of the chosen "status" appears to the right of the response, assuring consistency in responses.
- A new question requesting the client's entry and exit dates was added.
- Whereas previously SRAP personnel had to choose the client's primary, secondary, and tertiary disabilities from a long list of more than 50 injuries and diseases, the new Collection Tool simplifies the process using headings and sub-headings with drop-down lists that are much shorter.
- Pop-up definitions and clarifications were also added to several categories of injury and disease so that all SRAPs would be reporting in a consistent manner. This helped to avoid confusion between such categories as "back injury," "joint injury," and "orthopedic injury."

These changes required the SRAPs to update or modify their demographic collection methods and databases, which was greatly appreciated by the NAP.

The result is a much more uniform strategy for collecting, reporting, and summarizing demographic data for AgrAbility clients nationwide. The enhanced quality of the client data should provide a more reliable means of justifying program funding by USDA/NIFA and other sponsors. This is in keeping with the current NAP's program evaluation efforts and their emphasis on the importance of statistical justification of the AgrAbility Project as an impactful component in U.S. agriculture today.

## 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 information on the client demographic form. Therefore, in some cases, the data are incomplete 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 1,553 farmer/rancher clients<sup>3</sup> with disabilities during the period April 1, 2016 through March 31, 2017 for all projects. The 1,553 clients in the current reporting period (RP) represent a 20.5 percent increase in the number of clients reported from the 2015-2016 RP as shown in Figure 1. For cases where the client's county was reported, the clients resided in 618 different counties out of the total 1,901 counties in the 20 SRAP states.



Figure 1. Total Clients 2013-2017

Most of the clients served were employed full time as the owner/operator of a farm or ranch and were male. The three most common types of primary agricultural operations, in descending order, were livestock (primarily beef), dairy, and field/grain operations, (unchanged from 2015-2016). The leading primary disabilities were back injuries, followed by joint injuries, arthritis, and spinal cord injuries (paraplegia), (also unchanged from 2015-2016).

The mean age of the 1513 clients with reported age information was 54.4 years (down from 55.0 years in 2015-2016). It is of interest to note that the average age of AgrAbility clients is slightly lower than the average age of farmer owner/operators based on 2012 U.S. Census of Agriculture data that show an age of 58.3<sup>4</sup> for all farmers. The age of AgrAbility clients ranged from 2 years to 94 years of age. For the 1546 clients where sex was reported, 79.1 percent were male and 20.9 were female.

<sup>3</sup> Clients were identified 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.

<sup>4</sup> USDA NASS, 2012 Census of Agriculture / Highlights / Average Age Rising. URL: [https://www.nass.usda.gov/Publications/Highlights/2014/Farm\\_Demographics/index.php#average\\_age](https://www.nass.usda.gov/Publications/Highlights/2014/Farm_Demographics/index.php#average_age)

## Client Status

As shown in Figure 2, 44.2% of clients were ongoing AgrAbility clients from the previous year, while nearly a third were new clients.

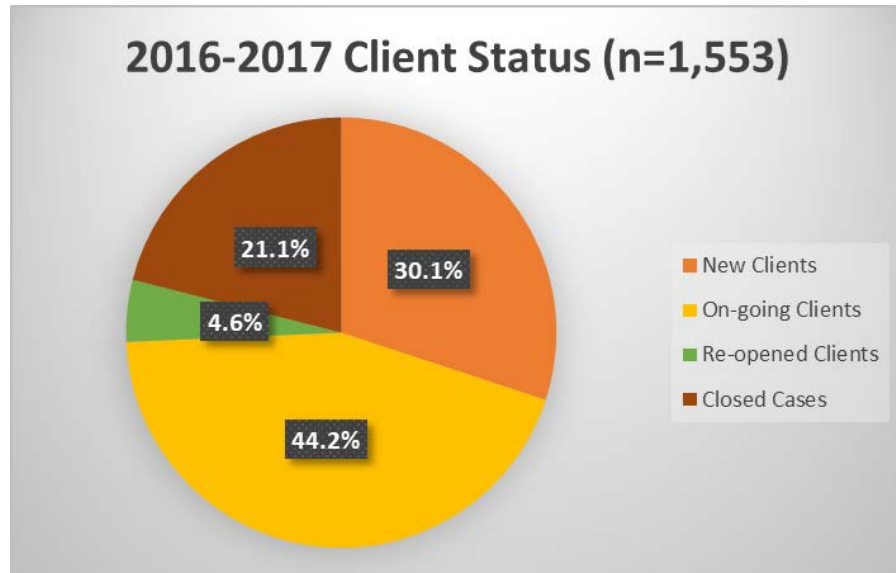


Figure 2. 2016-2017 Client Status

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

As noted in Table 1, the overwhelming majority of clients (73.1 percent) were owner/operators of their farm or ranch, and if the spouse/partner was included, the proportion is over 82.4%. Only 5.1% of clients were farm employees, 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=1539), Percent

Owner/operator	73.1
Spouse/partner	9.3
Planning a new agricultural career	4.4
Employee	4.1
Child (<less than 18)	2.5
No longer actively farming/ranching	2.1
Dependent adult	1.7
Never farmed/ranched	1.2
Seasonal worker	0.7
Other family member	0.6
Migrant worker	0.3

In regard to the aforementioned employment relationships to the farm/ranch operation, one noteworthy trend over the past four years was the increasing number of clients planning a new agricultural career (as shown in Figure 3). This trend may reflect current USDA investments in promoting new and beginning farmer efforts nationwide. In other words, persons with disabilities may be considering new opportunities in agriculture that were not previously seen as viable due to lack of supportive services.

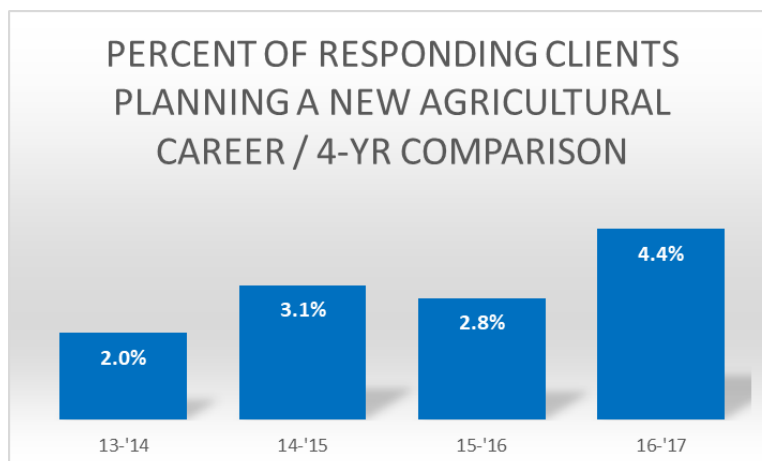


Figure 3. Percent of Responding Clients Planning a New Agricultural Career/4-Year Comparison

## Client Work Status

Even considering the severity of many of the disability types reported, 64.2% of the clients considered themselves as fully employed (working 30-52 weeks) during the RP. This proportion is substantially higher than the 12.7%<sup>5</sup> of the general population of persons with disabilities reported by the US Department of Labor in 2017. Only 8.4% of AgrAbility clients reported themselves as not working during the RP.

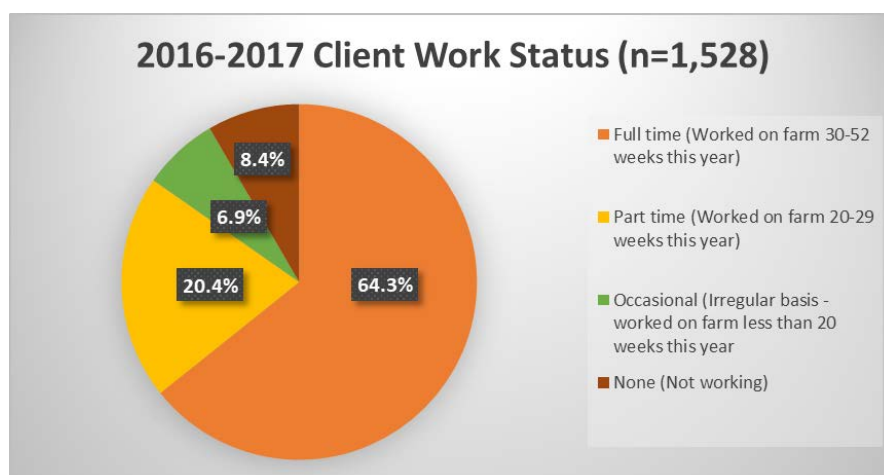


Figure 4. 2016-2017 Client Work Status

<sup>5</sup> US Department of Labor, Bureau of Labor Statistics report: “PERSONS WITH A DISABILITY: LABOR FORCE CHARACTERISTICS – 2017” reported on <https://www.bls.gov/news.release/disabl.nr0.htm>

## 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 more than one existed. The top three “primary enterprises” were livestock (27.4 percent), dairy (20.1 percent), and field/grain crops (17.0 percent) for the 1533 clients reporting. The most prevalent second and third enterprises were field/grain crops, hay, and livestock, although fewer clients were reported as having secondary and tertiary enterprises (n = 879 and n = 235 respectively).

Table 2. First, Second, and Third Farm/Ranch Enterprises

Enterprise	First (n=1533) %	Second (n=879) %	Third (n=235) %
Livestock	27.4	15.6	9.4
Dairy	20.1	1.0	1.3
Field/grain crops	17.0	32.4	6.4
Vegetable	8.5	5.6	4.7
Hay	5.4	19.1	20.0
Agribusiness	4.2	2.7	1.7
Poultry	3.5	6.1	3.8
Other animal	3.5	2.8	5.1
Fruit	2.6	3.1	3.0
Specialized Crops	2.6	1.3	5.5
Other	1.8	2.2	4.3
Swine/Hogs	1.4	1.7	2.6
Orchard	0.9	1.6	1.3
Nursery	0.8	0.2	1.7
None	0.3	4.6	29.4

More than 55% of the clients reported working with animals as their primary enterprise, which is noteworthy considering the extensive physical demands of animal-related activities.

## Cause of Disability

In Table 3, the causes of the disability were divided into five categories: agriculture-related incidents (injuries), non-agriculture-related incidents (injuries), chronic conditions, military-related incidents, and “from birth.” With 1,520 clients reporting cause of disability, the most common cause, 48.4 percent, was chronic illness or “non-incident-related.” Of the rest, 15.9 percent were agriculture-related incidents, and 24.7 percent were non-agriculture-related incidents. (Note that 48.0 percent of all causes of disability were due to some type of incident or injury.) The leading type of an agriculture-related incident was related to tractor/farm machinery, 4.7 percent. More than 7 percent of the disabilities reported were military-related.

Table 3. Cause of Disability (n=1,520)

Agriculture-related incident	Percent	# Clients
Tractor/Farm machinery	4.9	74
Falls	2.9	44
Livestock/animals	2.7	41

Vehicle incident	1.7	26
Chemicals/pesticides	0.0	0
Other	3.8	57
<b>Total agriculture</b>	<b>15.9</b>	<b>242</b>
<b>Non-Agriculture-related incident</b>		
Vehicular incident	9.1	139
Falls	2.8	43
Recreational	1.4	21
Other non-agricultural incident	11.4	173
<b>Total non-agriculture</b>	<b>24.7</b>	<b>376</b>
<b>Chronic or non-incident-related</b>	<b>48.4</b>	<b>736</b>
<b>Military-related incident</b>	<b>7.4</b>	<b>112</b>
<b>From birth</b>	<b>3.6</b>	<b>54</b>

### Disabilities: primary, secondary, and tertiary

There were fifty-five different categories of disabilities from which clients could select. SRAP staff were able to identify up to three disability types (primary, secondary, and tertiary) that impede the farmer/rancher's work. For the 1,553 clients who reported primary disabilities, as shown in Table 4, back injury was the most common (14.8 percent). Other leading disabilities were joint injuries (12.4 percent), arthritis/rheumatic diseases (10.0 percent), spinal paraplegia (5.5 percent), and orthopedic –injury – other (5.2 percent). Those listing secondary (n=1037) and tertiary (n=802) causes of disability were fewer, but in both cases, arthritis, joint injury, back injury, and orthopedic injury were very common. Furthermore, other conditions often related to aging populations, such as diabetes, visual impairments, hearing impairment, and heart disease were reported as secondary and tertiary disabilities.

Table 4. Disabilities: Primary, Secondary, and Tertiary

<b>Injury/Disease</b>	<b>Primary (n=1,553) %</b>	<b>Secondary (n=1037) %</b>	<b>Tertiary (n=802) %</b>
Back Injury	14.8%	7.0%	2.7%
Joint Injury	12.4%	9.3%	4.1%
Arthritis/Rheumatic diseases	10.0%	10.3%	5.0%
Spinal Paraplegia	5.5%	0.4%	0.0%
Orthopedic Injury (other)	5.2%	4.7%	2.1%
Other, Other	4.2%	3.8%	2.6%
Visual Impairment	3.2%	2.7%	1.2%
Cardio Vascular Disease	3.0%	1.7%	2.1%
Traumatic Brain Injury	2.8%	2.3%	0.6%
Post-Traumatic Stress Disorder	2.7%	2.3%	1.9%
Disease (other)	2.4%	2.0%	1.2%
Cerebral vascular accident (stroke)	2.1%	0.3%	0.0%
Multiple Sclerosis	2.0%	0.0%	0.0%
Hearing Impairment	1.9%	2.3%	2.4%
Amputation – leg above knee	1.9%	0.1%	0.0%
Neurological (other)	1.9%	1.0%	0.0%
Cancer	1.6%	1.7%	0.5%

Diabetes / Metabolic Disorder	1.7%	2.5%	1.7%
Amputation – leg below knee	1.4%	0.5%	0.0%
Spinal Quadriplegia	1.3%	0.1%	0.0%
Cerebral Palsy	1.3%	0.2%	0.0%
Mental Illness	1.3%	1.7%	1.0%
Injury, Other	1.2%	0.9%	0.9%
Neuromuscular disease (other)	1.1%	0.4%	0.4%
COPD (Respiratory Impairment)	1.2%	1.0%	0.6%
Parkinson's disease	0.8%	0.2%	0.0%
Peripheral neuropathies	0.8%	1.2%	0.4%
Intellectual Disability	0.8%	0.1%	0.1%
Amputation – arm below elbow	0.8%	0.0%	0.0%
Amputation – finger	0.7%	0.4%	0.0%
Fibromyalgia	0.7%	1.5%	0.1%
Amputation – arm above elbow	0.6%	0.0%	0.0%
Muscular dystrophy	0.6%	0.2%	0.0%
Poliomyelitis	0.5%	0.0%	0.0%
Amputation – foot	0.3%	0.3%	0.1%
Sensory Impairment (other)	0.3%	1.2%	0.0%
Amputation – hand	0.2%	0.2%	0.0%
Guillain-Barre syndrome	0.2%	0.0%	0.0%
Kidney disease	0.2%	0.4%	0.4%
Deafblind	0.2%	0.1%	0.0%
Amputation – thumb	0.1%	0.1%	0.1%
Amputation – replant	0.1%	0.0%	0.1%
Amputation (other)	0.1%	0.0%	0.0%
ALS	0.1%	0.0%	0.0%
Friedreich's ataxia	0.1%	0.0%	0.0%
Huntington's disease	0.1%	0.0%	0.0%
Myasthenia gravis	0.1%	0.0%	0.0%
Spinal muscular atrophy	0.1%	0.1%	0.1%
Spinocerebellar degeneration	0.1%	0.2%	0.1%
Epilepsy	0.1%	0.8%	0.2%
Hemophilia, sickle cell anemia, leukemia	0.2%	0.1%	0.0%
Chronic fatigue syndrome	0.1%	0.3%	0.0%
Amputation – toe	0.0%	0.0%	0.1%
Chemical dependency	0.0%	0.1%	0.0%
Chemical sensitivity	0.0%	0.1%	0.0%



## Level of Completed Education

Clients were asked to provide information on their highest level of education, and 712 responded. Of those responding, as shown in Figure 5, 39.2% had only a high school education and over half had completed some level of post-secondary education.

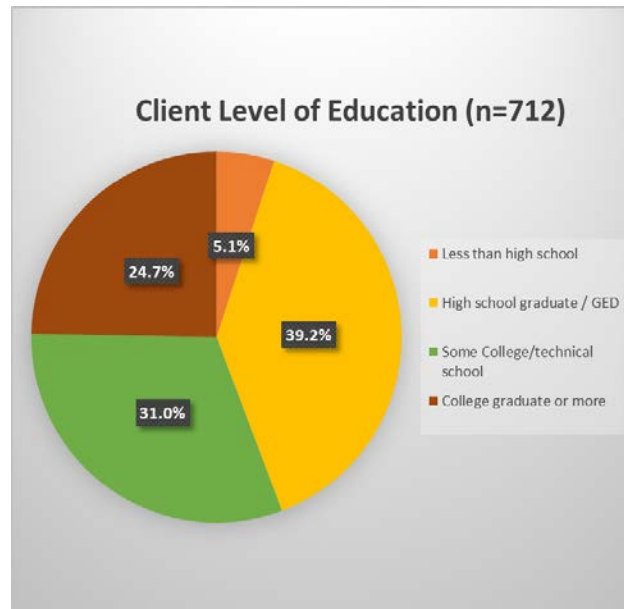


Figure 5. Client Level of Education

## Ethnicity

The overwhelming majority of clients served were white. This finding reflects the general makeup of current owner/operators of U.S. farms and ranches. Table 5 suggests that AgrAbility may not be as effective at reaching some employees of farms and ranches who could benefit from AgrAbility services.

Table 5. Client Ethnicity (n=1,423), percent

Client Ethnicity	Percent	# Clients
White	93.4	1329
Hispanic or Latino	2.8	40
Black	2.3	33
American Indian or Alaska Native	0.4	6
Asian	0.1	2
Native Hawaiian or Other Pacific Islander	0.1	1
Other (1 Ukrainian, 3 Mexican (not "Hispanic"), 1 Native American+Mexican, 1 Asian-Alaskan, 1 Puerto Rican, 1 Alaskan, 1 Haitian, 1 Armenian, 1 Scandinavian-Native American, 1 Greek-Mongolian, 1 White-American Indian, 1 Iranian, 1 Portuguese)	0.8	12
Missing from total number of 1553 clients	8.4	130

## Total household income

Only about half of the clients provided information on household income, which is reported in Table 6. It should be noted that some income may be non-farm/ranch related – derived from non-farm/ranch-related activities. Information regarding “only” farm/ranch income was not asked. Because the majority of responses fell in the lower category of income, the category was expanded to include lower divisions for future years.

Table 6. Total household income (n=829), percent

\$60,000 or less	60.4
\$60,001-\$120,000	17.7
\$120,001-\$180,000	1.1
\$180,001-\$240,000	0.2
Above \$240,000	0.7
Wish not to disclose	19.8
Missing from total number of 1553 clients	46.6

## 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 agricultural enterprise.

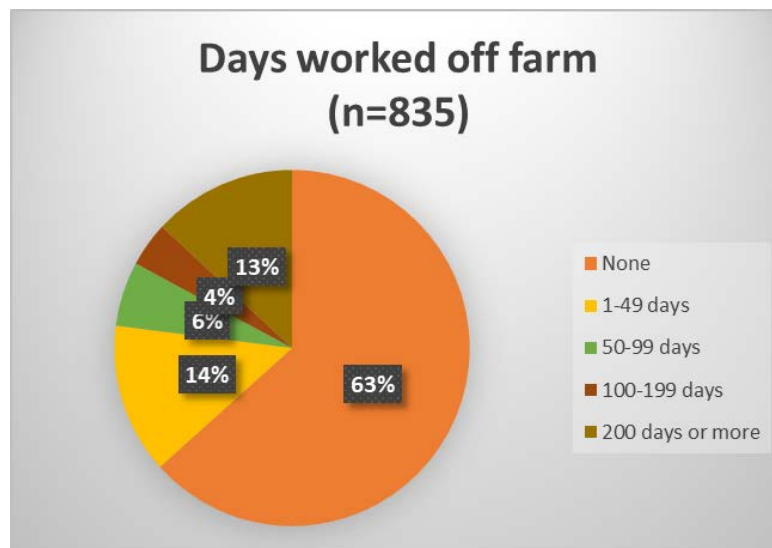


Figure 6. Days Worked Off Farm

## 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=1,553), Percent

Veteran	17.4
Non-veteran	61.0
Unknown	21.6

It was interesting to note in Figure 7 that, during the last two years, both the number and the percentage of veteran clients have increased significantly from 135 in 2015-2016 (10.5%) to 270 in 2016-2017 (17.4%). Based upon the source of disability reported, approximately half of those identifying themselves as veterans were disabled as the result of military activity.

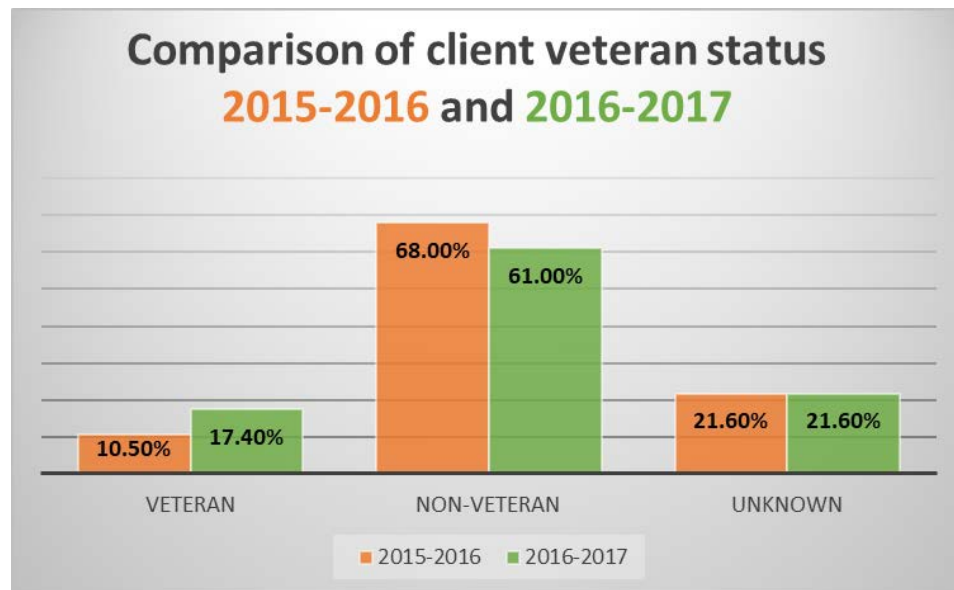


Figure 7. Comparison of Client Veteran Status 2015-2016 and 2016-2017

### How clients heard about AgrAbility

The importance of public awareness events 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.

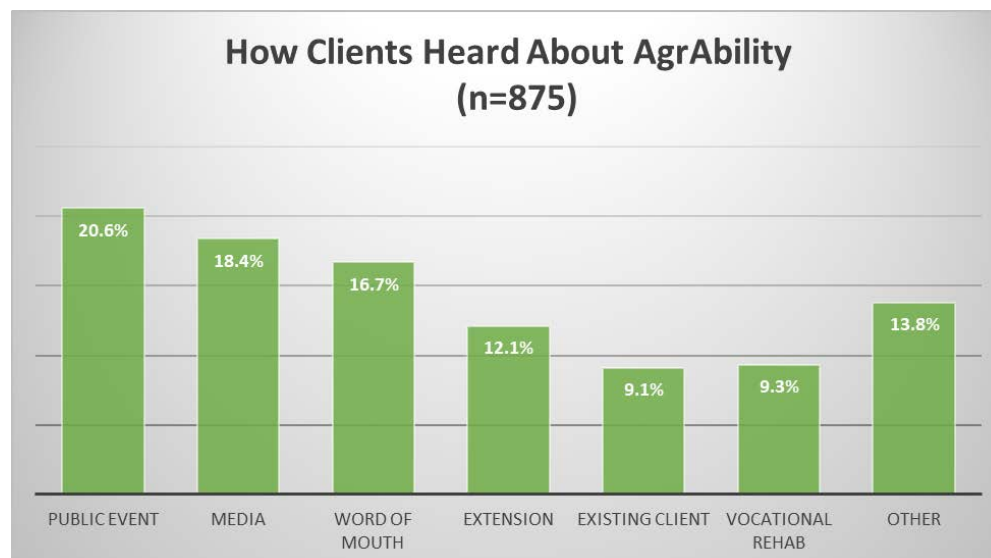


Figure 8. How Clients Heard About AgrAbility

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

Only 20.0% 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 311 clients who responded, 43.7% indicated involvement.

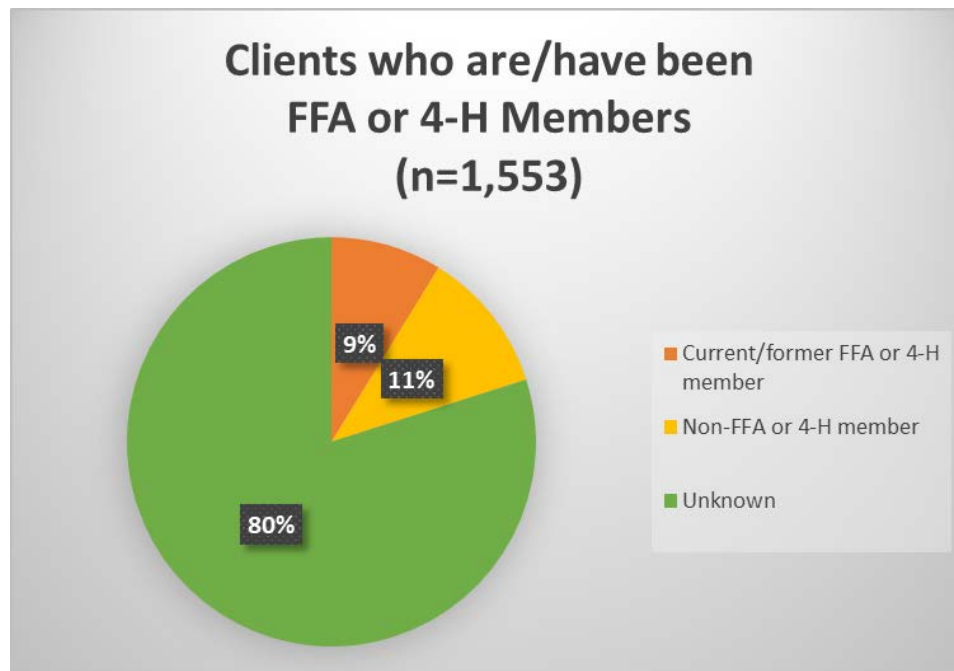


Figure 9. Clients Who Are/Have Been FFA or 4-H Members

## Client County Residence Data

At the request of USDA-NIFA, a question was added to the updated reporting form 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	1510
Clients not reporting county	43
Unique client counties	618
Total counties in SRAP states	1901

The distribution of AgrAbility clients by county of residence, shown in Figure 10, provides a visual aid to show areas served by the currently funded SRAPs. 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 (Figure 10) that one 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, Kentucky, and Tennessee, which have relatively small counties but many more of them.

## Summary

The AgrAbility Program was established in the 1990 Farm Bill and is currently in its 27<sup>th</sup> year of serving farm and ranch families. Collection of client data and measuring the impact of the services has been a significant part of the annual plan of work from the very beginning. It is firmly believed that every publically funded initiative should be able to demonstrate that the investment of public funds is justified and generate a meaningful return.

This summary provides a big picture view of the demographics of 1,553 clients who were served during one reporting period. It provides a means for better understanding the clients' characteristics so that the services being made available through the SRAPs can be improved.

In addition to the demographic data, the NAP subcontractor at Colorado State University is continuing to collect data on the impact that AgrAbility services are having on clients' quality of life and capacity for independent living. These findings have been very encouraging, showing statistically significant increase in both areas.

It should be noted that 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 by AgrAbility resources and educational opportunities, such as those available through the AgrAbility website ([www.agrability.org](http://www.agrability.org)), 800 toll-free phone (1-800-825-4264), and events such as the annual National Training Workshop and regional training events.

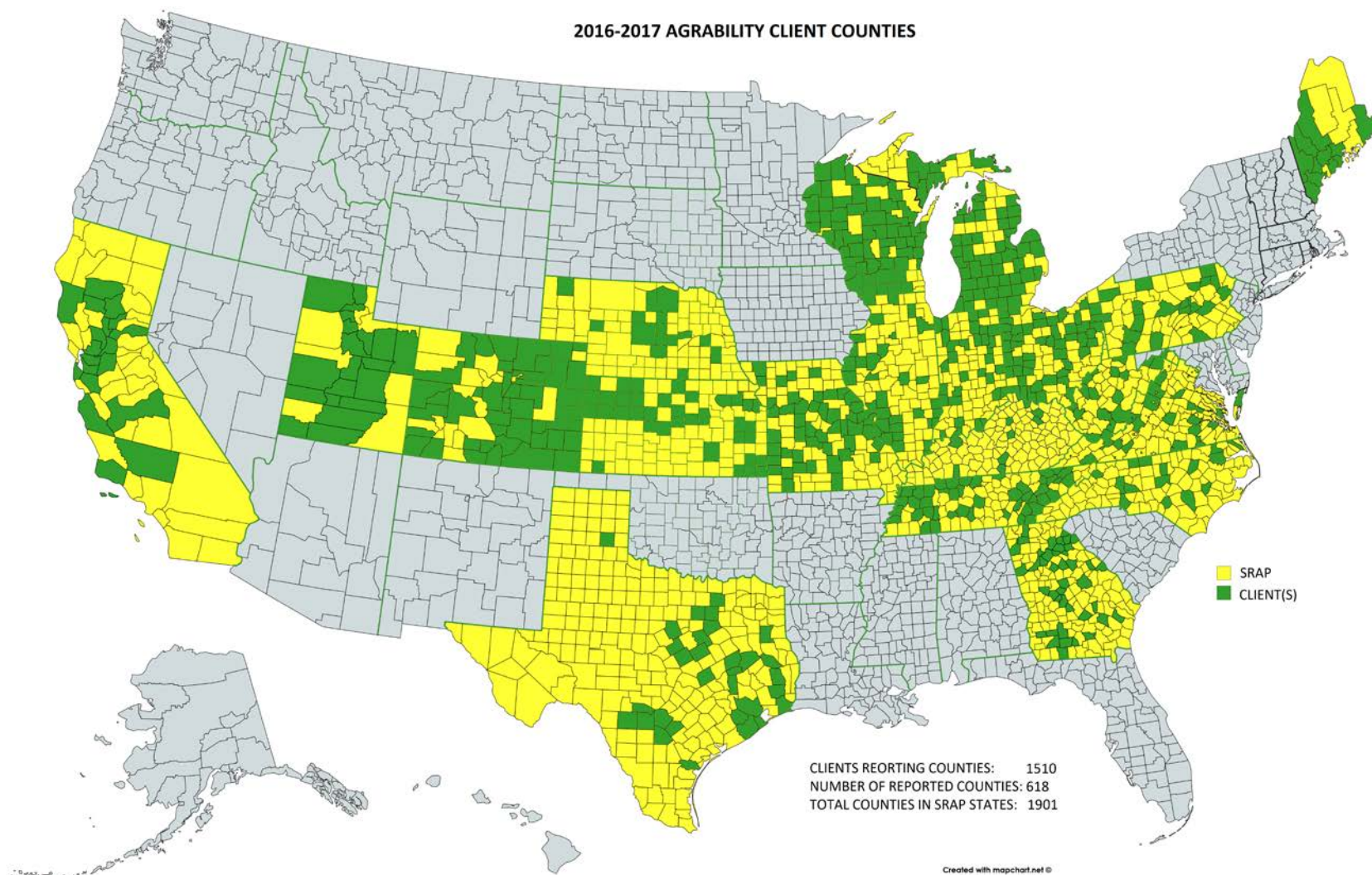


Figure 10.