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# AVERAGE MN FARMER IS 55 YEARS OLD

FARMING REFLECTS AGING TRENDS, SEES SMALL GROWTH IN OPERATIONS  
 LED BY WOMEN AND DIVERSE POPULATIONS

*By Michael Peterson*

Farmers have been a key part of Minnesota's history since its founding — and even before, among indigenous peoples. Yet agriculture has changed dramatically in recent decades, making an up-to-date profile of Minnesota's farmers essential. This Population Note examines the characteristics of the nearly 110,000 Minnesotans who operate farms — their age, gender, racial and ethnic background, length of time farming, and distribution across the state. It also explores some differences between Minnesota's farmers and others in the Midwest and nationally.

## WHO IS A FARMER? AND HOW MANY FARMERS ARE THERE IN MINNESOTA?

Every five years, the United States Department of Agriculture (USDA) conducts a nationwide Census of Agriculture, most recently in 2012. The resulting data gives us the most complete portrait of Minnesota's farmers and their operations. During the 1980s and 1990s, Minnesota saw a rather steady decline in principal farm operators, and thus total number of farms, from about 103,000 in 1978 to about 73,000 in 1997. However, in the three Agricultural Censuses since then (2002, 2007, and 2012) principal operators in Minnesota have been fairly steady in number, tallying between about 75,000 and 80,000 total farmers in each census (see Figure 1). In 2012, there were a total of 109,349 farm operators, or "farmers" for purposes of this brief, in Minnesota. This group consists of 74,542 "principal"<sup>1</sup> operators, and 34,807 "supporting"<sup>2</sup> operators. The number of principal operators (74,542) is equivalent to the number of farms in Minnesota in 2012.

Of note, these data employ a broad definition of "farm" — any place from which \$1,000 or more of agricultural products

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<sup>1</sup> The "principal operator" is defined as the person primarily responsible for the on-site, day-to-day operation of the farm or ranch business. The principal operator may be an owner or a hired manager.

<sup>2</sup> "Second or third operators" or "supporting operators" are defined as those who support the principal operator. Only more recent iterations of the Census of Agriculture (since 2002) have asked respondents to list second and third operators. Hired laborers are not counted as farm operators.

were produced and sold (or normally would have been sold) during the year.<sup>3</sup> As a result, the data include information on farms of all different sizes, including hobby farms and other small or part-time farming operations that some individuals may not commonly consider a farm. Collectively, Minnesota farms produce a wide array of livestock, poultry, and crops.

## AGING AMONG MINNESOTA'S FARMERS

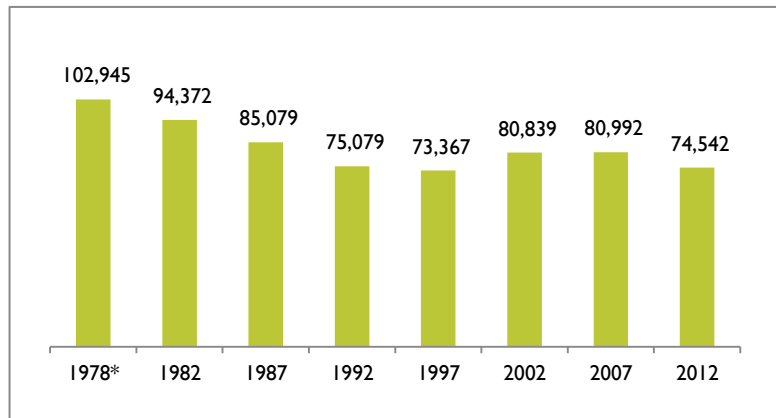
As workers age into retirement, it is crucial that younger cohorts of workers have the skills and education to replace them in the labor force.

This is of particular importance today, as the

unusually large portion of the workforce comprising the Baby Boomer generation continues its movement into retirement over the next two decades. This aging trend will affect all industries, including agriculture.

The shift to older farmers is especially evident when comparing Minnesota's operators in 1954 versus 2012. Principal operators over age 65 represented 12% of principal operators in 1954, but more than doubled to 27% in 2012 (see Figure 2). Many of these farmers were born even before the large "Baby Boom" generation.<sup>4</sup> More than 8,880 principal farm operators in Minnesota in 2012 were age 75 or older.

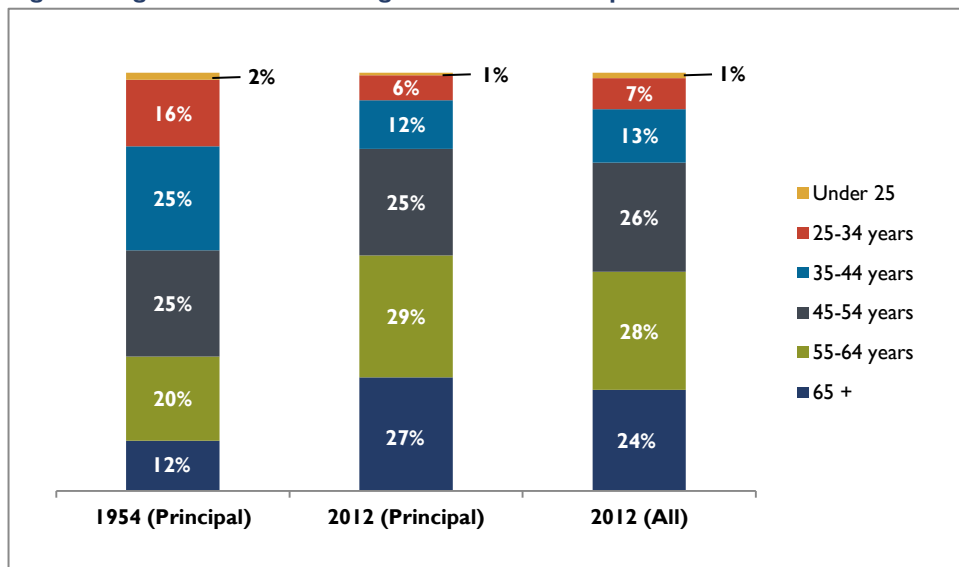
**Figure 1: Principal Farm Operators (Total Number of Farms), Minnesota, 1978-2012**



Source: Census of Agriculture, U.S. Department of Agriculture.

Note: \* There is only a 4-year interval between 1978 and 1982. Thereafter, the Census of Agriculture was conducted at 5-year intervals.

**Figure 2: Age Distribution Among Minnesota Farm Operators in 1954 and 2012**



Source: Census of Agriculture, U.S. Department of Agriculture.

In 2012, the average age of Minnesota's principal operators was 56.6, somewhat younger than the U.S. average of 58.3 years. Minnesota's principal farm operators rank in the middle of 10 Midwestern states<sup>5</sup> on this measure, but the age distribution of farmers is very similar across the Midwest. None of the Midwestern states has an average age below 54 years among its principal operators. Furthermore, in all of the Midwest states including Minnesota, less than a quarter of farmers are under age 45.

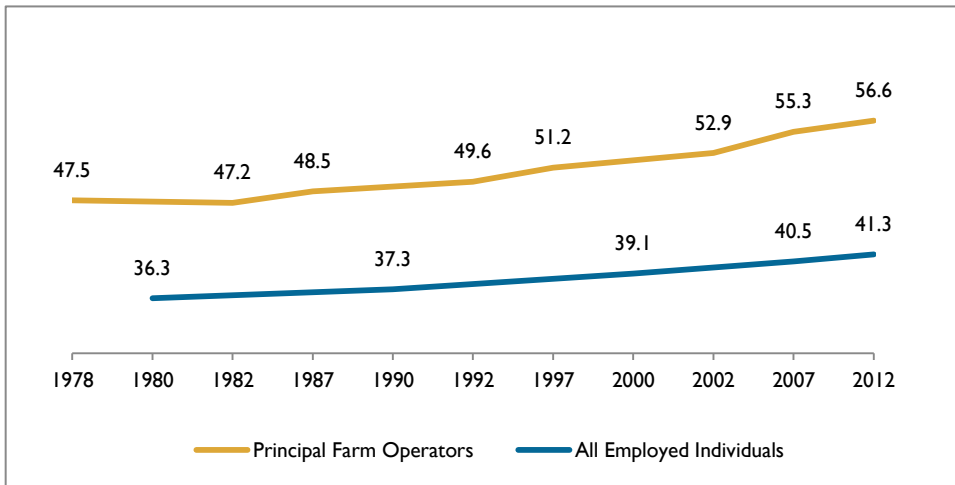
<sup>3</sup> United States Department of Agriculture. May 2, 2014. "Appendix A. Census of Agriculture Methodology." 2012 Census of Agriculture.

<sup>4</sup> The Baby Boom generation is defined as those with birth years of 1946 to 1964, or those age 48 to 66 in 2012.

<sup>5</sup> Ohio, Illinois, Iowa, Kansas, Michigan, Minnesota, Nebraska, North Dakota, South Dakota, Wisconsin

At 56.6 years, the average age of Minnesota’s principal operators has increased by 7.5 years between 1982 and 2012. Aging has been more pronounced among principal farm operators than among all employed Minnesotans. While the average age in both groups has increased over the last several decades, this trend has occurred at a greater pace for principal farm operators (see Figure 3). Farmers also tend to be older on average than other business owners. Around one-third of U.S. business owners were over 55 in 2007<sup>6</sup>, compared with nearly half of principal farm operators in Minnesota. However, *principal* farm operators tend to be older on average than second farm operators (average age of 53) and third farm operators (average age of 46). Considering the entire universe of Minnesota farmers (principal and supporting operators)

**Figure 3: Average Age, Principal Farm Operators and All Employed Individuals, Minnesota, 1978-2012**



Source: Census of Agriculture, U.S. Department of Agriculture for farm operators and IPUMS version of the U.S. Census Bureau decennial census and American Community Survey for all employed individuals.

lowers the average age of Minnesota’s farmers slightly—to age 55 overall.

The growth in farmers over age 65 began before the Baby Boomers started to make their mark, perhaps because changes in agricultural practices or advancements in farm technology have led to farmers working longer into old age. Considering that the current wave of Baby Boomer farm operators totals nearly 60,000, Minnesota can expect the current aging trend to continue.

## WOMEN OPERATING MINNESOTA FARMS

The role of women in agriculture has been underrepresented in historical data on farm operators. The Census of Agriculture first collected data on sex in 1978, yet it only asked about principal operators. This practice failed to capture the numerous women who worked alongside their husbands on U.S. farms, for whom farming was a shared family enterprise. When data on all operators was first collected in 2002, it revealed that women account for a significant percentage of all Minnesota farmers – just under a quarter. Their share has increased slightly in the two subsequent censuses.

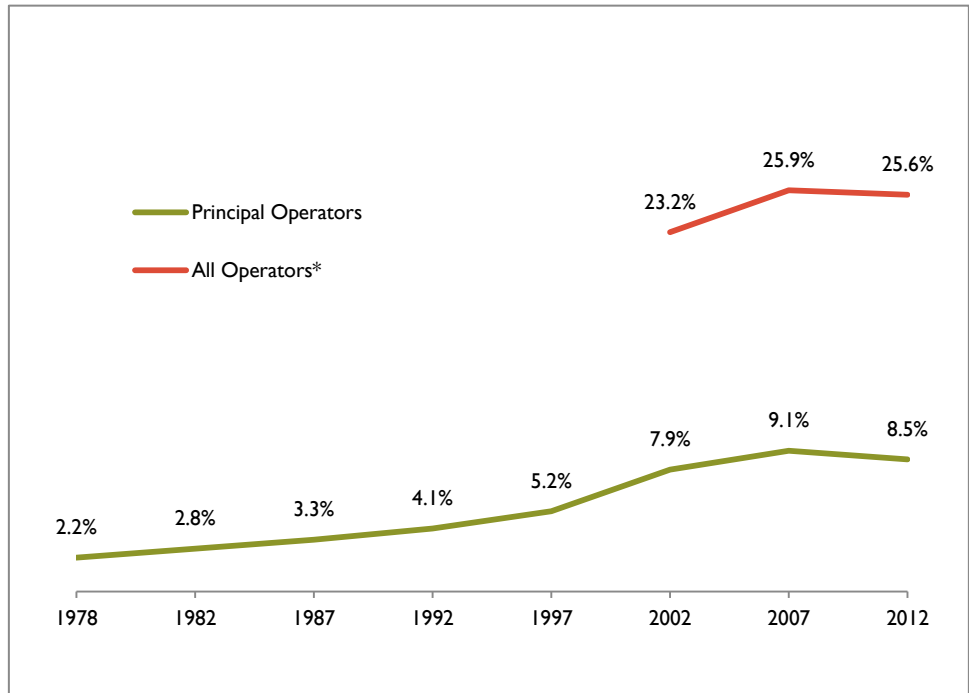
Additionally, many women who are listed in the data as second and third operators are spouses of male “principal” operators. Notably, the data does not permit “joint operations,” which may continue to understate their contributions. Women account for 66% of all second operators, 92% of which are spouses of male principal operators, and they account for 33% of third operators, 37% of which are spouses of male principal operators.

<sup>6</sup> U.S. Census Bureau, 2007 Survey of Business Owners. State-level age data is not available in the Survey of Business Owners.

Examining principal operators only, women's presence has also been growing. Their share as principals has increased nearly four-fold since 1978. In 2012, women principally operated 6,370 farms, or 9% of all of Minnesota's farms.

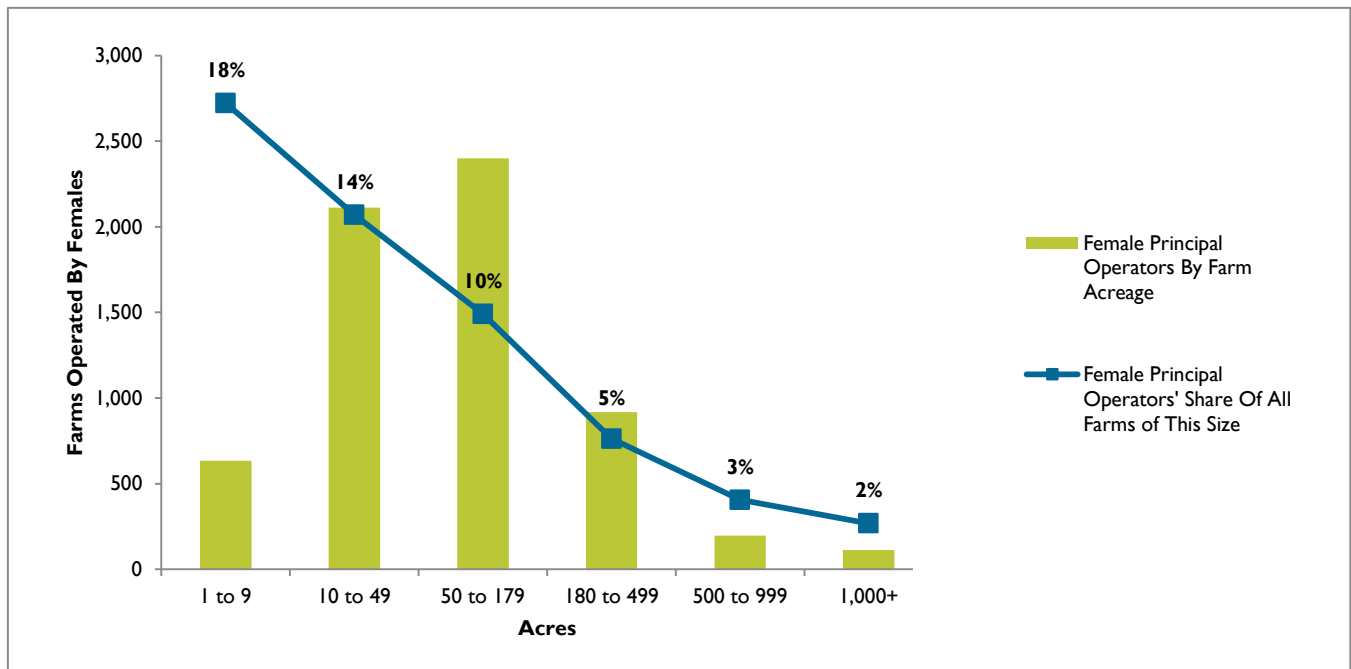
However, women-operated farms in Minnesota differ considerably in acreage. The smaller the farm, the more likely it is to be principally operated by a woman (see Figure 5). Among 2012 principal operators, women operated 18% of all farms smaller than 10 acres, while operating just 2% of Minnesota's largest farms (1,000 or more acres). Women are most likely to operate farms between 50 and 179 acres. Among all operators (male and female), the statewide average farm size was 349 acres.

**Figure 4: Women As A Share Of Farm Operators, Minnesota, 1978-2012**



Source: Census of Agriculture, U.S. Department of Agriculture.  
 \*The 2002 Census of Agriculture was revised to collect data on second and third operators, in addition to principal operators.

**Figure 5: Female Principal Operators And Their Share Of All Farms, By Farm Acreage, Minnesota, 2012**



Source: Census of Agriculture, U.S. Department of Agriculture.

## RACIAL & ETHNIC COMPOSITION OF MINNESOTA FARMERS

The racial and ethnic composition of Minnesota's overall population is becoming increasingly diverse. Between 2000 and 2010, 85 of Minnesota's 87 counties saw increases in their populations of Color,<sup>7</sup> while the White population decreased in 50 counties. Echoing this trend, the number of White principal farm operators decreased between 2007 and 2012, from 80,460 to 73,984 farmers. The data do not allow us to know what portion of this loss of nearly 6,500 principal farm operators who are White represented a change of ownership to a person of a different race and what portion

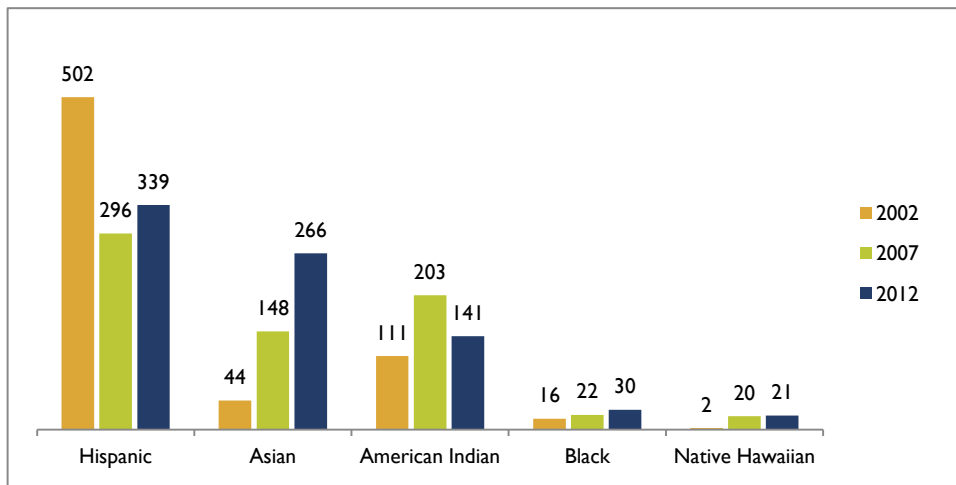
resulted from closed or consolidated farms run by White farmers. However, the gains in principal farm operators of Color from 2007 to 2012 were far more modest than the losses for White principal operators.

Despite the trend toward growing diversity statewide, farming in Minnesota remains a mostly White enterprise. This may reflect that farming operations are often passed down among families, and the high barriers to entry to farming, among

other reasons. In 2012, 99.5% of all principal operators in Minnesota were White, and 99.3% of all farm acreage in the state was operated by White farmers. White farmers tend to principally operate larger and more profitable farms, with more than 4 in 10 White farmers overseeing farms greater than 180 acres.

Farmers from other racial and ethnic groups are beginning to make small inroads to the occupation. Among Minnesota's principal farm operators, those identifying as a race(s) other than White grew from 244 to 558 in the past decade for which we have data. However, Hispanic farmers (who may be of any race) were fewer in number in 2012 than 2002. Indeed,

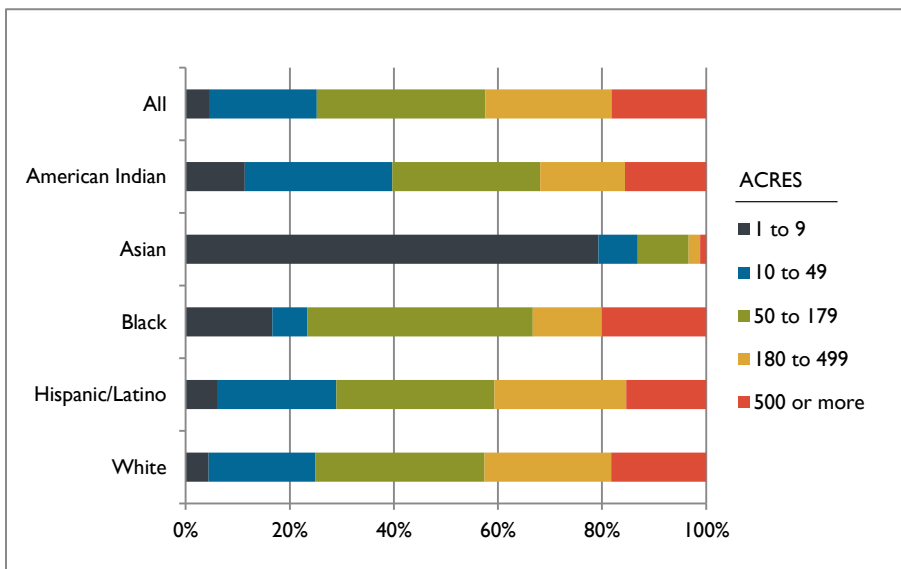
**Figure 6: Principal Farm Operators By Selected Racial And Ethnic Groups, Minnesota, 2002, 2007 and 2012**



Source: Census of Agriculture, U.S. Department of Agriculture.

Note: Because "Hispanic" is considered an ethnicity in the Census of Agriculture, individuals selecting Hispanic origin may also be represented in another race group.

**Figure 7: Distribution of Farms By Acreage And Race/Ethnicity of Principal Operators, Minnesota, 2012**



Source: Census of Agriculture, U.S. Department of Agriculture.

Note: Native Hawaiian farmers have been removed from this graph due their very small number of principal operators.

<sup>7</sup> Refers to those who self-identified as any race other than White alone, and/or those who indicated they were Hispanic/Latino.

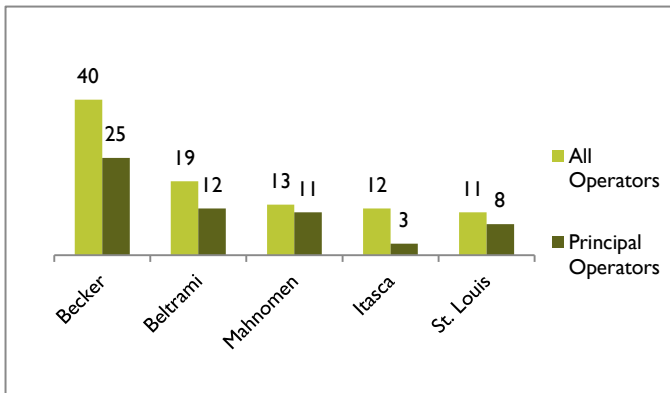
gains have been small or uneven for most Minnesota farmers of Color (see Figure 6).

More than 200 principal farm operators indicated they were American Indian in 2007, almost double the figure in 2002, but that figure fell to 141 farmers by 2012. While there were just over 500 Hispanic/Latino principal operators in 2002, that figure fell by more than 200 in the five years that followed, only to rebound by 43 farmers through 2012. Asian principal operators, however, have grown more than six-fold in the past decade—from just 44 farmers in 2002, to 266 in 2012. However, unlike other groups, Asian farmers are unique in that nearly 80% of them operate very small farms (from 1 to 9 acres), with significant focus on vegetable crops.

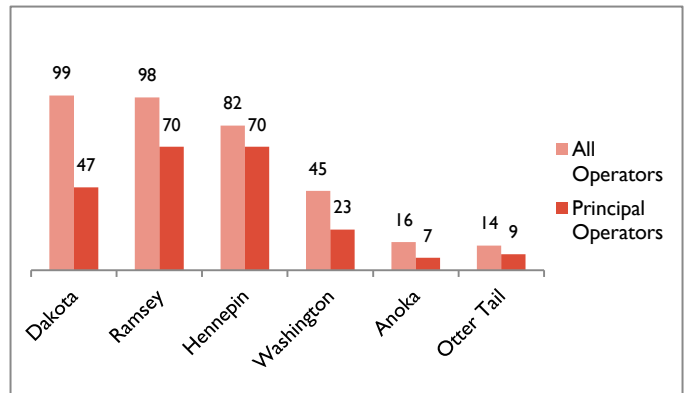
While farmers of Color represent a very small share of farmers statewide, some groups are more prominent in certain parts of Minnesota. Asian principal farmers operate overwhelmingly in the Twin Cities metro—especially in Dakota, Ramsey, Hennepin, and Washington counties. American Indian operators are clustered in counties containing reservation land. Becker and Mahnomen counties contain part of the White Earth Indian Reservation, and the Leech Lake and Red Lake reservations cover portions of Beltrami County. American Indians are most likely to principally operate relatively small-sized farms – a quarter work on 10-49 acres, while another quarter maintain farms in the 50-179 acre range.

Hispanic/Latino farm operators are concentrated in West Central Minnesota counties, and are most likely to work on farms between 50 and 179 acres. Together, Black and Native Hawaiian/Pacific Islanders totaled just 51 of Minnesota’s principal operators in 2012, and can be found farming in small numbers within the Twin Cities metro area, exurban counties, and in Greater Minnesota.

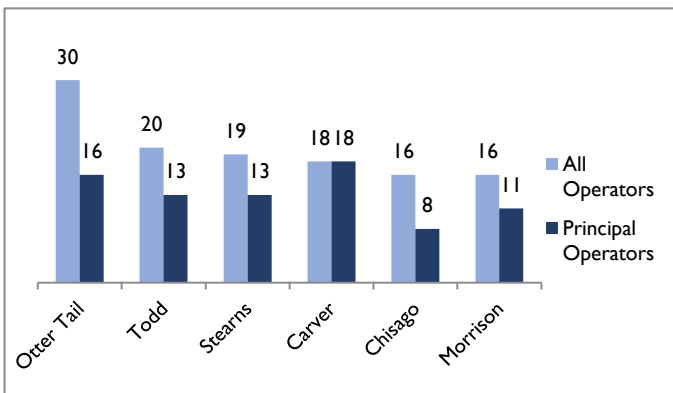
**Figure 8: American Indian Farm Operators, By Minnesota Counties of Greatest Representation, 2012**



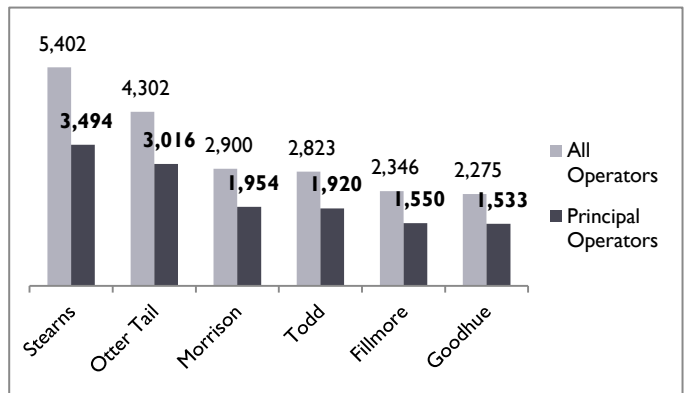
**Figure 9: Asian Farm Operators, By Minnesota Counties of Greatest Representation, 2012**



**Figure 10: Hispanic/Latino Farm Operators, By Minnesota Counties of Greatest Representation, 2012**



**Figure 11: White Farm Operators, By Minnesota Counties of Greatest Representation, 2012**



Source for all above figures: Census of Agriculture, U.S. Department of Agriculture.


To see interactive maps showing farmers by each demographic group in each county of the state, see: <http://mn.gov/admin/demography/map-viz-gallery/viz-farmers-by-county-and-demographics-2012.jsp>

## WHO WILL BECOME TOMORROW'S FARMERS?

Given that Minnesota's farmers who are principal operators are markedly older on balance, it is worth considering who will become the next generation of farmers. Second and third operators likely include younger farmers and family members who may one day take the reins as principal operators. The data bears this out, in part.

Relative to principal operators in Minnesota, second operators – 66% of which are women – averaged about 3.5 years younger. This small age difference may be due in part to the large number of women working as secondary operators to their spouses. However, third operators were on average about 10 years younger than principal operators. Despite being relatively younger than principal operators, second and third operators aren't necessarily new to farming. Just one-fifth of second operators are beginning farmers, and while third operators are more likely than principal operators to be beginning farmers, only one-third have been farming for less than ten years.

Regardless of operator type, many farmers rely on non-farm income as their primary income source. For 47% of principal operators, 58% of second operators, and 51% of third operators, something other than farming serves as their primary occupation. This may indicate less long-term commitment to farming, if economic or other conditions should prove challenging.

The Census of Agriculture defines a "beginning farmer" as an operator that has operated a farm (or consecutive farms) for less than ten years, regardless of age.<sup>8</sup> In 2012, there were 17,908 beginning farmers in Minnesota, accounting for 16% of all farmers. Not all beginning farmers are young, as about 35% of Minnesota's beginning farmers are Baby Boomers or older. Still, the majority of beginning farmers are under age 45. Women are somewhat more likely to be beginning farmers, as 21% of women have been farming for fewer than 10 years, compared to 14% of all principal operators. These beginning farmers and others who may follow them hold promise for Minnesota's farming future. 

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## ADDITIONAL RESOURCES FROM THE 2012 AGRICULTURAL CENSUS

Minnesota Statewide Summary:

[http://www.agcensus.usda.gov/Publications/2012/Online\\_Resources/County\\_Profiles/Minnesota/cp99027.pdf](http://www.agcensus.usda.gov/Publications/2012/Online_Resources/County_Profiles/Minnesota/cp99027.pdf)

Minnesota State and County Profiles:

[http://www.agcensus.usda.gov/Publications/2012/Online\\_Resources/County\\_Profiles/Minnesota/](http://www.agcensus.usda.gov/Publications/2012/Online_Resources/County_Profiles/Minnesota/)

Minnesota Race, Ethnicity and Gender Profiles, including detailed figures on crops and livestock:

[http://www.agcensus.usda.gov/Publications/2012/Online\\_Resources/Race\\_Ethnicity\\_and\\_Gender\\_Profiles/Minnesota/](http://www.agcensus.usda.gov/Publications/2012/Online_Resources/Race_Ethnicity_and_Gender_Profiles/Minnesota/)

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<sup>8</sup> United States Department of Agriculture, 2012 Census of Agriculture – Minnesota Highlights. Other definitions of beginning farmer exist. For example, Minnesota's Beginning Farmer Loan Program essentially defines a beginning farmer by net worth, rather than the length of their farming experience (Minn. Stat. § 41B.03, subd. 3).