



# PROFILE OF SMALL FARMS IN WASHINGTON STATE

2015 Update

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## Summary

This summary of trends in Washington State agriculture is designed to assist agricultural researchers, educators, policymakers, planners, service providers, and agricultural businesses in better understanding and meeting the needs of Washington State's small farms. Based on the 2012 Census of Agriculture by the US Department of Agriculture (USDA), there are 37,249 farms in Washington State. Of these farms, 89% or 33,228 have sales less than \$250,000 per year, meeting the 2012 USDA Definition of a Small Farm (1998). Over 45% or 16,900 farms in Washington reported annual sales below \$2,500 and can be classified as "non-commercial" operations. If these "non-commercial" farms are removed from the total, 80% of the remaining 20,349 farms have annual farm sales under \$250,000. Overall, the number of farms in Washington State decreased 5% from 39,284 to 37,249 between the 2007 and 2012 agricultural census. This loss of farm numbers was most pronounced in farms with under \$500,000 in sales. With the exception of farms with under \$2,500 in sales, there has been a continuous loss of small and mid-sized farms since 1997. Two areas of continued growth in Washington State agriculture include the number of Latino-operated farms and the number of farms selling directly to consumers.

## Introduction

Small farms comprise 88% of all farms in the US and account for just under half (49%) of its farmland (USDA 2012a). A global assessment on the future of agriculture by an intergovernmental panel known as the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) found that intensifying productive capacity and resource conservation among diversified small farmers offers a unique opportunity to strengthen rural livelihoods, increase food security, enhance social equity, and improve the environment (McIntyre et al. 2009).

While smallholder agriculture represents the dominant form of production in the world, modern agricultural knowledge and technology development models have often failed to improve small farm productivity, enhance resource conservation, reduce rural poverty, or improve regional food security (McIntyre et al. 2009). The Food and Agriculture Organization of the United Nations (FAO) has made "sustainable intensification of smallholder crop production" one of its key strategic objectives over the next 15 years (FAO 2011). In the US, as in other countries, making gains in small farm capacity and viability while conserving and enhancing the natural

resource base may require rethinking standard approaches to agricultural research and extension.

## Defining a Small Farm

In the seminal report "A Time to Act," the USDA National Commission on Small Farms defined small farms as "farms with less than \$250,000 gross receipts annually on which day-to-day labor and management are provided by the farmer and/or the farm family that owns the production or owns, or leases, the productive assets" (USDA 1998). A new farm typology developed by the USDA Economic Research Service classifies "small family farms" based on Gross Cash Farm Income of less than \$350,000 instead of Gross Farm Sales under \$250,000 (Hoppe and MacDonald 2013). Under the revised typology, 88% of Washington's farms would be classified as "small family farms" (USDA 2015). However, since the Gross Cash Farm Income measure was not used for data collection in the 2012 Census of Agriculture and could not be compared with prior census data, we chose to use the original typology for this publication.

While farms vary tremendously by region and by crop, as well as by the amount of income actually netted from gross sales, this guideline can be helpful in categorizing and comparing farms. Classifying farms by acreage can be misleading in a state like Washington, where productivity per acre can differ vastly depending on water availability, type of crop, and the farming strategies employed.

## Washington State Small Farm Trends

From the 2012 Census of Agriculture, 89% or 33,228 of the 37,249 farms counted in Washington State can be classified as "small farms," meaning they reported annual sales of less than \$250,000. This number decreased by 5.8% from the 35,269 farms with under \$250,000 in sales counted in 2007. Over 45% or 16,900 of farms in Washington reported annual sales below \$2,500 (Figure 1). If for purposes of analysis, farms with sales below \$2,500 are excluded as "non-commercial," 20,349 farms remain of which 16,328 have annual farm sales under \$250,000. By measure of acreage, 81% of all Washington farms were smaller than 180 acres in size (Figure 2). Washington State's small farms produce an array of products from fresh fruits, vegetables, and flowers to meats, dairy, grains, and seed crops, with total sales valuing \$609,461,000 (USDA 2014a).

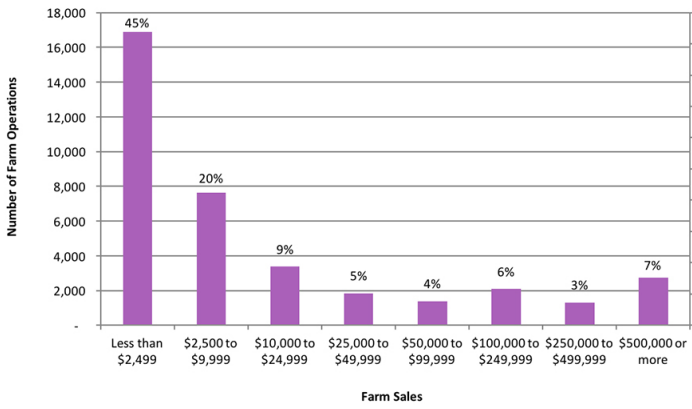


Figure 1. Number of farms in Washington State by farm sales in 2012.

Figure 3 shows the distribution of small farms with sales between \$2,500 and \$250,000 within Washington counties. Yakima County has the greatest total number (1,610) of these small farms (Table 1), while Chelan County has the highest percentage (62%) of farms in this size range (Figure 3). After removing farms with sales below \$2,500, the top 10 counties with small farms, both by total numbers and as a percentage of farms in that county, are located in both eastern and western Washington (Table 1). In terms of the total number of small farms in the state with sales between \$2,500 and \$250,000 in 2012, 41% are located in eastern Washington and 59% are in western Washington.

Including all farms, the most recent data from the 2012 Census of Agriculture shows a 7.1% overall decrease in farm numbers in the 15-year period since 1997, with an 8.3% decrease in the number of small farms (USDA 2014a). Between 1997 and 2012, the number of farms in every single sales category declined with the exception of the very smallest “non-commercial” farms, with sales under \$2,500, and the very largest farms with sales of \$500,000 or more (Figure 4).

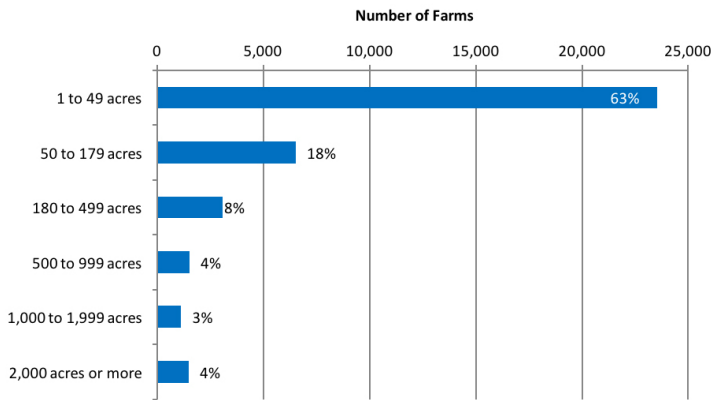


Figure 2. Number of Washington farms by acres operated.

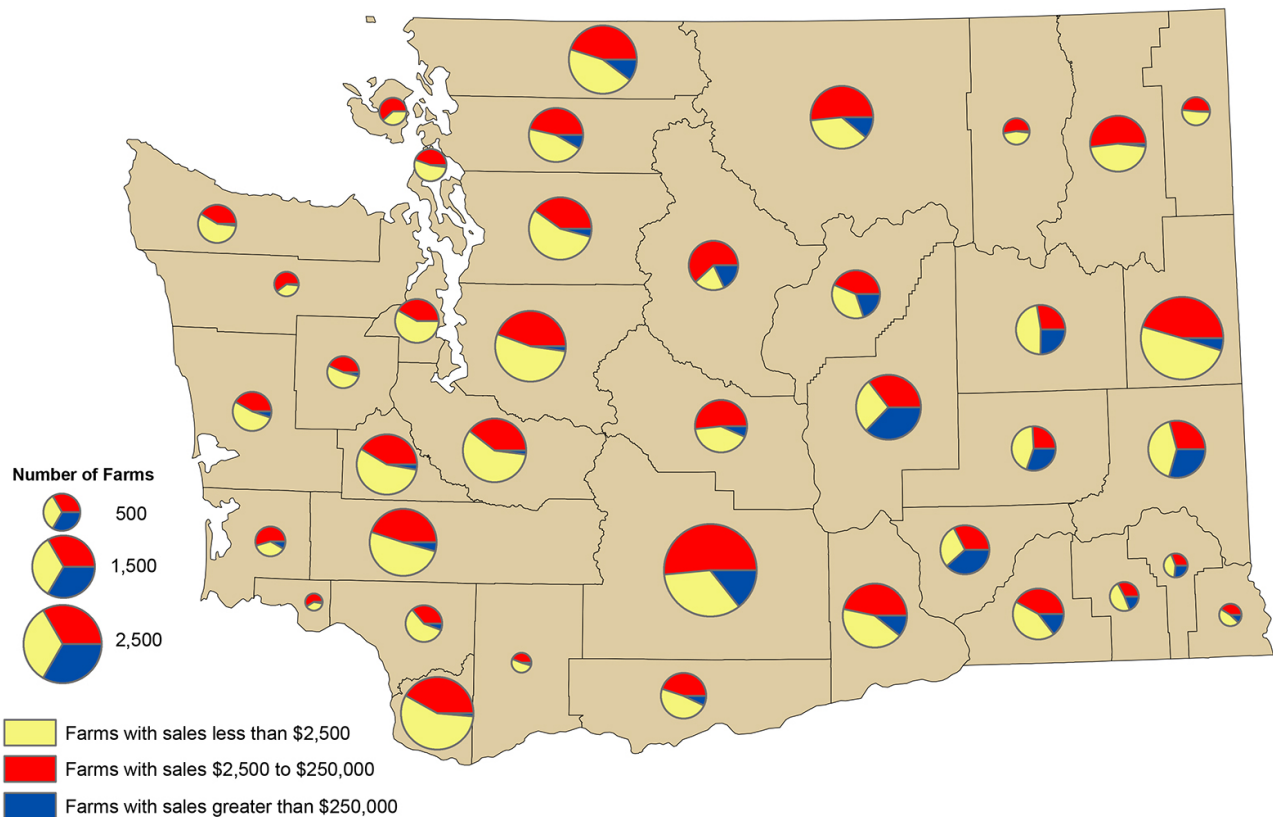


Figure 3. Percentage of farms in each county with Gross Farm Sales under \$2,500; between \$2,500 and \$250,000; and over \$250,000. (Source: USDA 2014a)

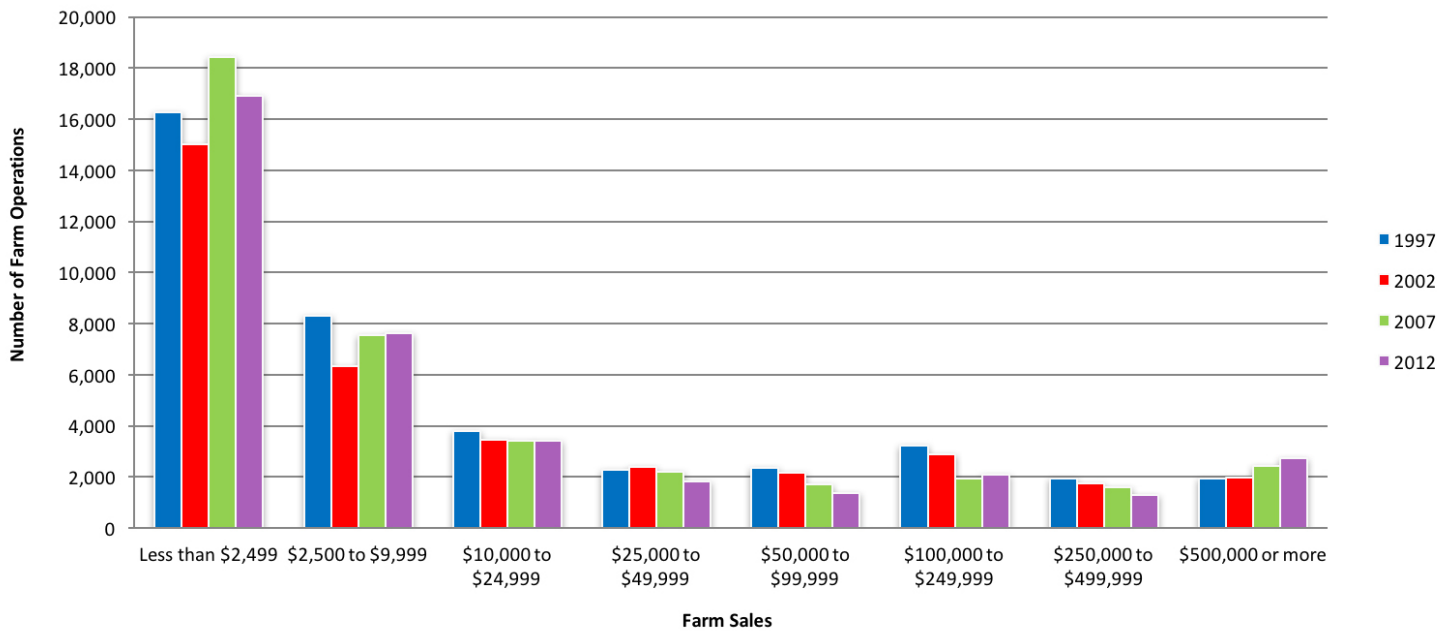


Figure 4. Washington State farm operations by sales in 1997, 2002, 2007, and 2012.

Table 1. Top 10 Counties with Small Farms in Washington State, 2012.

County	Number of Small Farms*	County	% of Farms in County that are Small Farms*
YAKIMA	1618	CHELAN	62%
SPOKANE	1138	SAN JUAN	61%
KING	817	JEFFERSON	60%
CLARK	810	WAHKIAKUM	59%
WHATCOM	768	PACIFIC	55%
OKANOGAN	747	FERRY	53%
LEWIS	741	STEVENS	52%
BENTON	705	KITTITAS	52%
STEVENS	596	OKANOGAN	52%
PIERCE	583	YAKIMA	51%

\*A small farm is defined as having under \$250,000 in sales. All numbers and percentages exclude farms with sales under \$2,500.

The greatest loss of farms was among those with sales from \$50,000 to \$99,999 (963 farms) and those with sales from \$100,000 to \$250,000 (1,129 farms). Among farms with sales from \$250,000 to \$499,999, there was a decline of 649 farms. During this same period, the number of farms with total sales over \$500,000 increased by 41%, while the number with sales under \$2,500 increased by 3.7% (Figure 4).

In the last five years, between the 2007 and 2012 Census of Agriculture, the overall number of farms continued to decrease by 5.2% or 2,035 farms. The number of small farms (with sales under \$250,000) also decreased by 5.8% or 2,041 farms during this period. One difference with past trends is that

instead of increasing, the number of farms with sales under \$2,500 also decreased by 8.4%. The greatest increase (299 farms or 12.3%) continued to be among farms with sales over \$500,000. And, in this period, there were also increases in the number of farms with sales between \$100,000 and \$249,999 (131 farms or 6.7%) and farms with sales between \$2,500 and \$4,999 (267 farms or 7%) (Figure 4).

The overall trend in Washington has been a steady loss of farmland, accompanied by an increase in average farm size as measured by acreage. Farmland acreage in the state declined by 1.5% to 14,748,107 between 2007 and 2012 (Table 2). At the same time, the average size of a farm increased from 381 acres in 2007 to 396 acres in 2012 (USDA 2012b). In Washington, small farms account for 42% of farmland or 6,136,939 acres, down from 45% or 6,712,261 acres in 2007 (Table 2). However, among farms with sales less than \$2,500, the combined number of acres operated increased by 20%, despite a loss of over 1,540 farms in this same period (Table 2). Interestingly, while these farms do not generate significant farm sales, they are clearly significant in terms of the overall stewardship of agricultural lands in Washington State. For small farms with sales between \$2,500 and \$250,000, the number of acres managed fell by 1,000,000 acres (22%) between 2007 and 2012 (Table 2). A similar decrease of 1,061,579 acres occurred among farms with sales between \$250,000 and \$499,999 (Table 2). However, the number of acres operated by farms with sales of over \$500,000 increased by 25%, or 1,412,219 acres despite an increase of just under 300 farms (Table 2).

Table 2. Change in Acres by Farm Sales Category, 2007 and 2012.

Farm Sales	2007		2012		Change 2007 to 2012	
	Acres	Percentage	Acres	Percent	Acres	Percentage
Less than \$2,499	2,119,335	14%	2,545,697	17%	426,362	20%
\$2,500 to \$9,999	470,766	3%	351,767	2%	-118,999	-25%
\$10,000 to \$24,999	438,953	3%	362,598	2%	-76,355	-17%
\$25,000 to \$49,999	498,259	3%	405,984	3%	-92,275	-19%
\$50,000 to \$99,999	1,413,337	9%	504,217	3%	-909,120	-64%
\$100,000 to \$249,999	1,771,611	12%	1,966,676	13%	195,065	11%
\$250,000 to \$499,999	2,675,602	18%	1,614,023	11%	-1,061,579	-40%
\$500,000 or more	5,584,926	37%	6,997,145	47%	1,412,219	25%
<b>Total</b>	<b>14,972,789</b>	<b>100%</b>	<b>14,748,107</b>	<b>100%</b>	<b>-224,682</b>	<b>-2%</b>

Sources: USDA 2009; 2014a.

## The Changing Face of Washington State Agriculture

In addition to the changes occurring in farm numbers and farm size, new trends have emerged in the characteristics of farm operators in Washington State over the past several census periods.

### Changing numbers of women farmers

Across the country, a growing number of farm operators and farm owners are women. From 1997 to 2012, the proportion of farms with women listed as the principal farm operator in the US grew from 9.5% to 13.7% (USDA 2004a; 2014a). The proportion of women-operated farms in Washington State has been higher than in the country as a whole, increasing from 5,379 (13% of all farms) in 1997 to 7,519 (20% of all farms) in 2012 (USDA 2014a). Despite the longer term upward trend in Washington, in the period between 2007 and 2012, the number of women listed as principal operators fell by 7% and the number of acres they managed decreased to 776,047 acres. During this same period, however, the total farm sales from farms with women as principal operators increased 33% to \$244,433,000 and their average farm sales increased 43% to 32,509 (USDA 2014a). Cattle and calves continue to be the most commonly produced commodity on women-operated farms, followed closely by poultry and eggs (USDA 2014b). As in the 2007 Census of Agriculture, the commodities with the highest sales value for women-operated farms are fruit, nuts, and berries, with combined annual sales of \$85,356,000 in 2012 (USDA 2014b).

The average age of female principal operators was 57.9, slightly younger than the average Washington State farmers' age of 58.8 (USDA 2014a). As illustrated in Figures 5 and 6, most women-operated farms (76%) had 50 acres or less, and 98% had sales under \$250,000. The agricultural census counts

only one member of a household as the “principal operator.” If joint women operators are included, the number jumps to 22,376 women operators, or 37% of all operators in Washington State (USDA 2014a). In 2012, 12,672 women operators were listed as the spouse of a primary operator, whereas only 2,938 male operators were counted as the spouse of a primary operator (USDA 2014a).

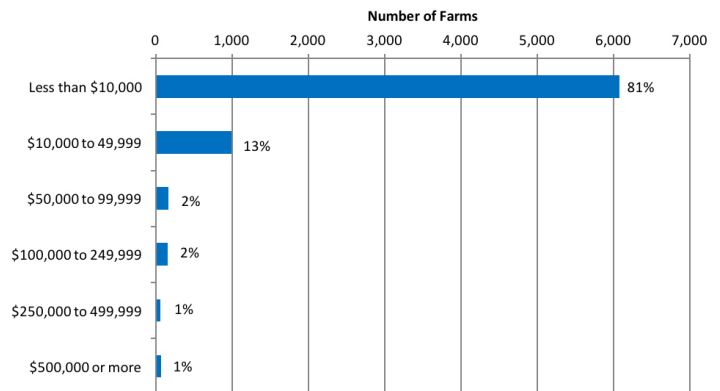


Figure 5. Washington State farms with women principal operators by farm sales in 2012.

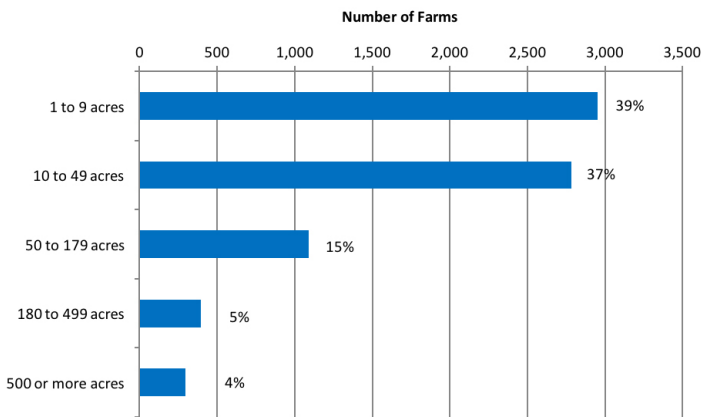


Figure 6. Washington State farms with women principal operators by acreage in 2012.

## A growing number of immigrant farmers

Between 1997 and 2012, the proportion of Washington State farms reporting “Spanish, Hispanic or Latino” principal operators grew from 2.4% to 5% (USDA 2004a: 42; USDA 2014b: 49). The 2012 agricultural census reported that 1,874 principal operators were of Spanish, Hispanic, or Latino origin and had a combined \$367,155,000 in farm sales (USDA 2014a: 49). This represents an increase of 68% since 2007 and constitutes 4% of the total sales for the state in 2012. Average sales for these Latino farms were \$195,920 in 2012, or 20% less than the overall average of \$244,859 (USDA 2014a: 49). Crops, grains, vegetables, fruit, and nursery accounted for the majority (75%) of farm sales for Spanish, Hispanic, and Latino principal operators, while 25% of sales were from animal production, ranching, dairy, hogs, sheep, aquaculture, and poultry (USDA 2014a: 49).

The average age for all Latino operators was 51.4, well below the state average age of 58.8 (USDA 2014a: 50). Most Latino-operated farms (80%) had 50 acres or less, and 91% had sales under \$250,000 (Figures 7 and Figure 8). Despite increased enumeration outreach efforts by the National Agricultural Statistics Service (NASS), the number of Latino farmers is most certainly under-counted on the census due to lack of English language skills, low literacy rates, mistrust of government, and low representation on farm lists maintained by agricultural agencies (Garcia and Marinez 2005).

Washington State also has a significant number of Hmong farmers. Although they are not a separate category in the census, the WSU Small Farms Program has identified over 100 Hmong-operated farms, mostly located in King, Snohomish, and Pierce Counties. Washington State is also home to refugees and immigrants from East Africa and Eastern Europe who aspire to start farms.

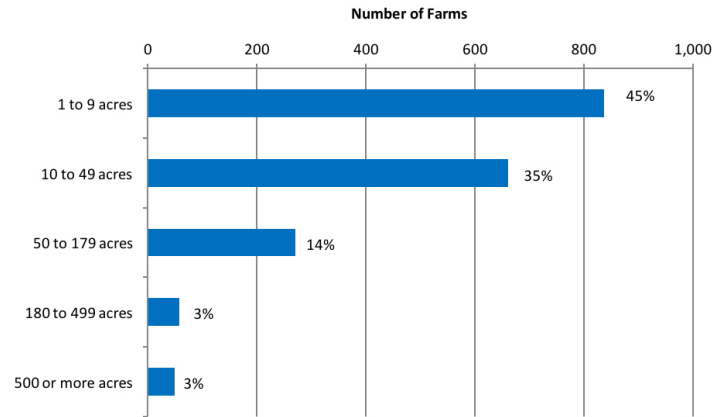


Figure 8. Washington State farms with Latino principal operators by acreage in 2012.

## Washington State’s Beginning Farmers

The average age of Washington State farmers in the 2012 Census of Agriculture was 58.8 years old, up from 57.0 in 2007. The aging farming population has contributed to an increased interest in programs designed to encourage “beginning farmers.” The USDA defines a beginning farmer as anyone who has operated a farm for “not more than ten consecutive years” (NRCS 2010). In Washington State in 2012, 22% of principal operators had farmed for less than ten years (USDA 2014a). This makes Washington tied with Vermont for the sixth highest state in terms of percentage of beginning farmers.

Of Washington State’s 8,335 beginning farms, over two-thirds had been farming 5 to 9 years in 2012. Only 13% had been farming for two years or less. In terms of gender, 25% of Washington’s beginning farmers had women principal operators and 75% had male principal operators. When comparing female to male operators, 27% of female principal operators were beginning farmers and 73% had 10 or more years of experience. In contrast, among male principal operators, 21% were beginning farmers and 79% had 10 or more years of experience. When analyzed by race, non-white operator categories had a higher proportion of beginning farmers than white operators. For example, 34% of Latino farmers were beginning farmers in comparison with 22% of white farmers (USDA 2014a).

Farms operated by beginning farmers tend to be small in terms of acreage and sales. Over three-quarters of beginning farmers operated less than 50 acres. Of these, most (52%) operated farms with less than 10 acres (Figure 9). Over three-quarters (77%) of beginning farms had sales less than \$10,000 (Figure 10). In contrast, 63% of farms in operation for 10 or more years had sales less than \$10,000 (USDA 2014a).

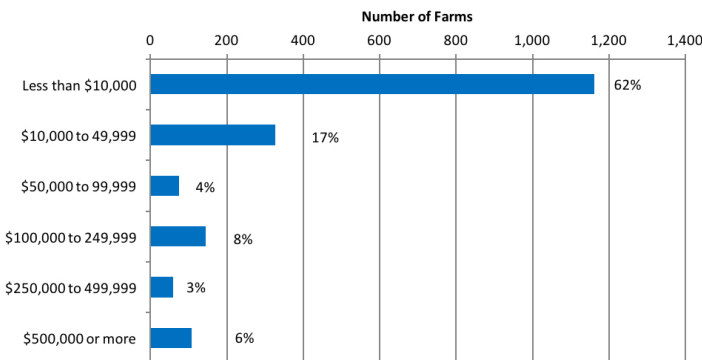


Figure 7. Washington State farms with Latino principal operators by farm sales in 2012.

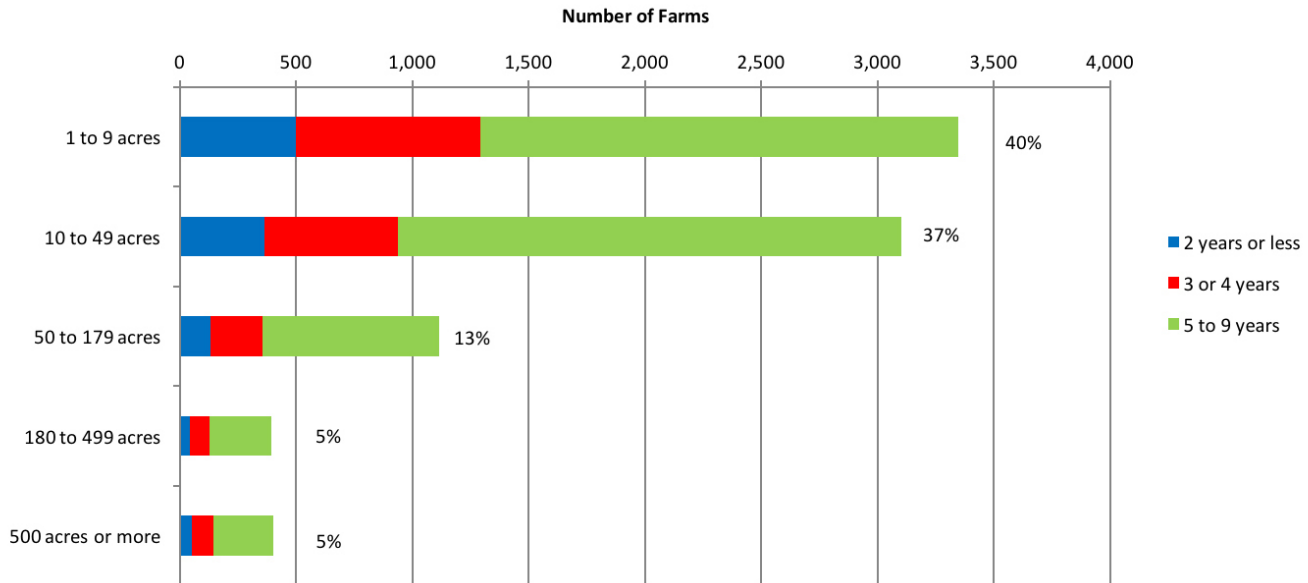


Figure 9. Washington State beginning farms by acreage in 2012.

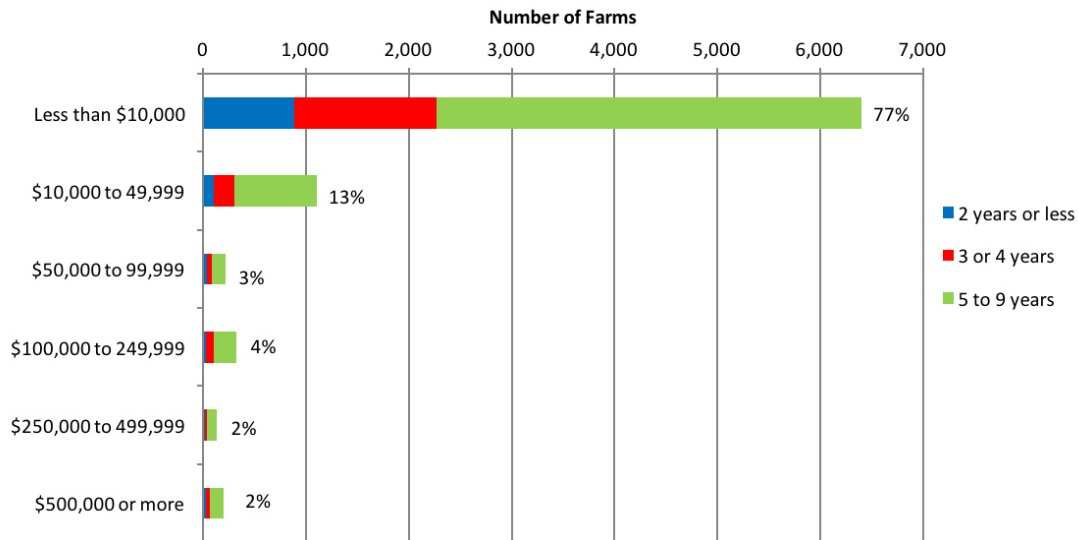


Figure 10. Washington State beginning farms by sales in 2012.

## The Value of Farming Income to Small Farms

Looking across all Washington farms, the 2012 Census of Agriculture found that less than one-fourth obtained 25% or more of their household income from farming. Only 18% of Washington farms obtained half or more of their income from farming and only 5% obtained 100% of their income from farming. Looking again at the subset of small farms with sales between \$2,500 and \$250,000, income from farming represented under 25% of household income for most (74%) of these farms; at least 25% of household income for 26% of these farms; 50% or more of the household income for 18% of these farms; and 100% of household income for 5%. Figure 11 shows that, as would be expected, the percentage of household income obtained from farming increases as farm sales volumes increase. However, in nearly every farm size category, some

portion of farms report obtaining at least half of their household income from farming (Figure 11). For example, of farms with at least \$100,000 in sales, more than half report that at least 50% of their household income comes from farming. Interestingly, even among farms with \$500,000 or more annual sales, only 30% report obtaining 100% of their household income from farming (USDA 2014a).

## The Increasing Importance of Direct Marketing

The number of Washington State farms reporting direct sales to consumers has increased steadily from the 1997 to the 2012 Census of Agriculture, from 4,428 to 5,640 farms, a 27% increase (USDA 2004a; 2014a). The volume of direct to consumer sales reported also increased, from \$16.5 million in 1997 to over \$45 million in 2012, an increase of 173%

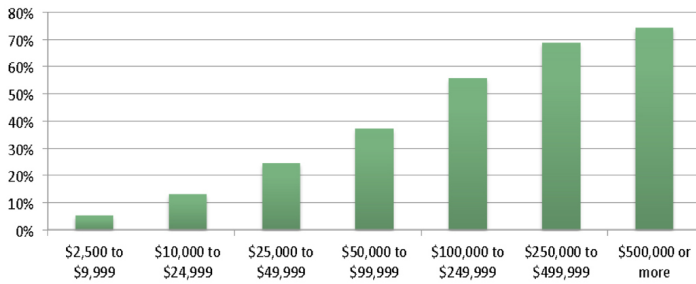


Figure 11. Washington farms earning at least 50% of household income from farming.

(USDA 2004a; 2014a). Overall, 15% of all farms reported direct to consumer sales in 2012, compared with 11% in 1997. Of the farms reporting direct to consumer sales in 2012, 89% were farms with sales of under \$250,000 and most of these farms (74%) had sales under \$10,000 (USDA 2014a). Statewide farmer surveys (Ostrom and Jussaume 2007) and farmers market sales data collected in Washington, along with recent national analyses (Hunt 2012; Low et al. 2015), suggest that current data collection methods used by the US Census of Agriculture are likely to be underestimating the full extent of direct market activity in Washington.

Research by Washington State University shows that farmers markets have clearly become a major sales outlet for small-scale producers in Washington State (Ostrom et al. 2012). Nationally, the total number of farmers markets has increased dramatically since the USDA first began collecting data in 1994. There are now over 8,268 farmers markets in the US, growing 371% between 1994 and 2014 (USDA 2014c). In 2010, researchers identified 160 markets in Washington State, operating in all but three counties (Ostrom et al. 2012). In 2013, one of the strongest markets in the state reported average daily sales of over \$1,200 per vendor and total market sales of \$3.7 million annually. In 2013, 106 Washington State Farmers Market Association member markets, representing only 66% of farmers markets in the state, reported annual sales of \$41.9 million (WSFMA 2013). In a survey of 503 Washington farmer vendors, 49% said that farmers market sales accounted for over half of their farm income and 56% of these farms said that farm income accounted for over 25% of their household income (Ostrom et al. 2012). Farmers markets offer a regular and flexible outlet for vendors to sell a wide range of produce, meat, eggs, plants, and value-added farm products in a short period of time. Farmers markets also offer an important opportunity for product testing, farm visibility, and overall business incubation and development.

Community-supported agriculture (CSA) is also an important marketing strategy for smaller operations in Washington, especially for vegetable growers (Ostrom and Jussaume 2007). On the 2012 Census of Agriculture, 388 farms reported sales using this method. Likewise, the popularity of agritourism is

increasing. In 2012, a reported 545 farms had \$15.3 million in sales from agritourism and recreational services, increases of 71% and 36%, respectively, since 2007 (USDA 2014a). While difficult to track, farm stands as well as sales to restaurants, food cooperatives, grocery retailers, food hubs, and institutions like schools and hospitals can be important sources of revenue for small farms (Low et al. 2015; Ostrom and Jussaume 2007). In 2012, the Census of Agriculture asked producers about sales to restaurants, grocery stores, schools, and other intermediated market channels for the first time. In Washington State, 1,654 farms reported marketing products directly to these retailers (USDA 2012b).

## Informational Needs of Small Farmers

The 1998 report by the USDA National Commission on Small Farms called attention to the need to focus more resources on the research and informational needs of small farm operators, noting that these farmers typically received a disproportionately small share of public agricultural assistance dollars (USDA 1998). Meeting the needs of highly diverse small, beginning, and limited resource producers will be challenging. At a time of declining public investment in agricultural research and extension, creative new approaches will be required to support incoming and existing small farm operators, many of whom will constitute the next generation of Washington State agricultural producers.

When past participants in Washington State University's Small Farming Education Program were surveyed about their informational needs, 80% listed soil fertility management and 64% ranked marketing assistance as top interests (SESRC 2012). Electronic forms of communication appear to be increasingly worthwhile. The 2012 agricultural census found that among small farm operators in Washington State, 79% had high-speed Internet access, up from only 41% in 2007 (USDA 2014a).

## Conclusion

Small farms are important to Washington State, with significant numbers of them found in every county. Like other small businesses, small farms can be valuable community assets, generating income and employment opportunities. Beyond their economic contributions, these farms serve critical land stewardship functions, managing 42% of Washington farmland or 6,136,939 acres. A diverse array of productive, independently owned farms operating throughout the state can ensure a dependable and accessible local food supply and the conservation of natural resources for the future. Yet, if current trends hold, Washington will see continued erosion of

commercially viable small- and mid-sized farms and their associated farmland. At present, the only growth in overall farm numbers is occurring among very large farms. The numbers of farms operated by Latino farmers in the state are increasing as are direct market farms. These types of farms tend to be small. Beginning farmers also constitute an increasingly significant segment of small farms. Targeted research and outreach approaches that account for the unique needs of a wide range of Washington's small farmers will be necessary to improve overall farm viability and slow rates of farm and farmland loss.

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