

Office of Farmland Preservation 2019 WASHINGTON STATE FARMLAND PRESERVATION INDICATORS REPORT

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INTRODUCTION

In 2009, the Farmland Preservation Task Force adopted a series of indicators to track progress and provide information to stakeholders on key areas as they related to issues around farmland preservation. The indicators help identify trends, conditions, and opportunities over time.

The farmland indicators provide an overall perspective of the current state of various elements impacting farmland preservation. They help us answer the question, "Are activities helping to improve the condition and availability of farmland in Washington?" They target specific concerns that affect the viability and future of agriculture in Washington.

The data used for these indicators come from a wide variety of sources. The primary sources of data are derived from the USDA Census of Agriculture, U.S. Census Bureau, Washington State Employment Security Department, Washington State Department of Revenue, Washington State Department of Agriculture, 2019 Public Lands Inventory, the Natural Resource Inventory, Bureau of Economic Analysis, and more. For Census of Agriculture terms, see the Census glossary.

This report is categorized into five areas consistent with the WSDA Future of Farming Report. The five categories are Making Agriculture a Priority, Regulatory Barriers, Resource Availability and Access, Strengthen Competitiveness, and Emerging Opportunities.

Making Agriculture a Priority – The act of growing food needs farmland and farmers. These indicators track areas that reflect land availability and the farmers that utilize the land. These two reflect the necessity to make agriculture a priority proportionate to its importance in the state economy.

Regulatory Barriers – In some cases regulations can impact the viability of certain agricultural business by increasing operational costs. The aggregate of the regulatory environment can be an incentive to sell the farm.

Resource Availability and Access – Similar to Making Agriculture a Priority, availability and access to land is important to farmland preservation efforts. These indicators track state–level tax incentive programs that work to preserve farms, actual acreage in production, and public ownership of land. The Task Force heard from all across the state the tension between purchasing land for habitat purposes while limiting or restricting agricultural uses.

Strengthen Competitiveness – While many variables exist, an overall sense of costs versus returns can be an indicator of whether farming is strong, thus leading to farmers continuing to farm or new farmers coming on with a chance to be profitable.

Emerging Opportunities – The prosperity of farming will in part depend on a trained workforce and access to land. These indicators track protected landscapes through working land easements, primary schools that have agricultural curriculums and secondary degrees in agriculture. Farms by organization track family farms and non-family farms and can be an indicator of the next generation of farmer and types of farm operations.







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Indicator: Competition of Land Use and Conversion

Measure: The number of building permits and the acreage of developed land in Washington.

Background: Competition of land refers to the danger of farmland loss due to changes in surrounding land uses. Historic and modern improvements continue to change the dynamics and profitability of agriculture. Advances in technology have allowed fewer farmers to manage a larger amount of land, resulting in fewer farms.

The Building Permits Survey is conducted by the U.S. Census Bureau and provides national, state, and local statistics on new privately-owned residential construction.

The National Resources Inventory (NRI) is a statistical survey of natural resource conditions and trends on non-Federal land in the United States. The NRI provides nationally consistent statistical data on the development of non-Federal rural lands for the period 1982-2015. Development of agricultural land represents essentially permanent loss of land from the production of food, feed, and fiber.

Trends & Findings:

- Between 1997 and 2015, developed land in Washington increased 15 percent
- Between 2012 and 2017, the number of farms in Washington dropped 1,456.
 During the same period, the numbers of acres declined 68,250.
- Since 2010, the average price of Washington farm real estate is up 53.6 percent.
- Since 2010, the average price of U.S. farm real estate is up 46 percent.
- In 2017, there were 45,794 residential building permits issued, up 35 percent since 2014.
- Nationally, the Census showed a 3.1 percent decrease in farms and a decrease of 1.5% in total land in farms.
- The market value of Washington agricultural products sold grew 5.6 percent from 2012 to \$9,634,461.

Sources:

USDA 2017 Census of Agriculture: Released April 2019, by the United States Department of Agriculture: https://www.nass.usda.gov/Publications/AgCensus/2017/index.php

2015 Natural Resource Inventory

https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/technical/nra/nri/results/

United States Census - Building Permits Survey:

https://www.census.gov/construction/bps/stateannual.html

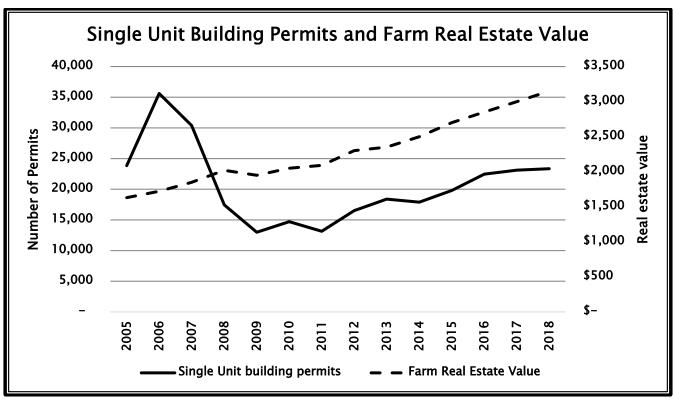


FIGURE 1 - U.S. CENSUS BUILDING PERMITS SURVEY & USDA CENSUS OF AGRICULTURE

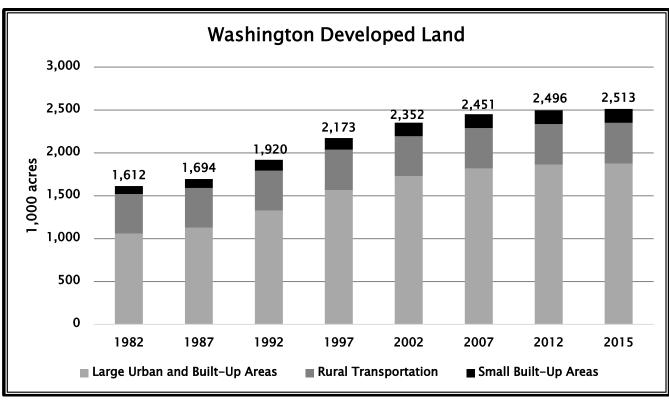


FIGURE 2 - 2015 NATURAL RESOURCE INVENTORY

Indicator: Characteristics of Principal Farm Owners

Measure: Average age, principal occupation.

Background: Significant amounts of land will be changing hands in the next 20 years in Washington as the average age of the principal operator has been steadily increasing. These farmers will be looking at options as they transition out of farming. This trend continues to illustrate the importance for transitional training for professionals on farm transfers and transition education and outreach to new and beginning farmers.

Many issues will influence the transition, including but not limited to land prices, a generation to take over management and ownership, environmental and regulatory pressures, and profitability. If a current farm is a second job, this may indicate the farm is not producing a living wage income.

Trends & Findings:

- The 2017 Census reported 17,513 New and Beginning principal producers in WA.
- For WA in 2017, there were 2,323 young principal producers (under age 35), up 616 since 2012. These young producers operate 702 thousand acres.
- 1,143 young principal producers report farming as their primary occupation.
 1,747 report "other" as primary occupation.
- Between 2012 and 2017, the percent of female producers increased 17 percent to 37 percent of all producers.
- In 2017, the tax status of family or individual farms comprised 80.6 percent of all farms. Relatively unchanged since 2012.
- In 2017, 59.5 percent of producers list "other" as primary occupation. In 2012, it was 56.4 percent.

Sources:

USDA 2017 Census of Agriculture: Released April 2019, by the United States Department of Agriculture: https://www.nass.usda.gov/Publications/AgCensus/2017/index.php

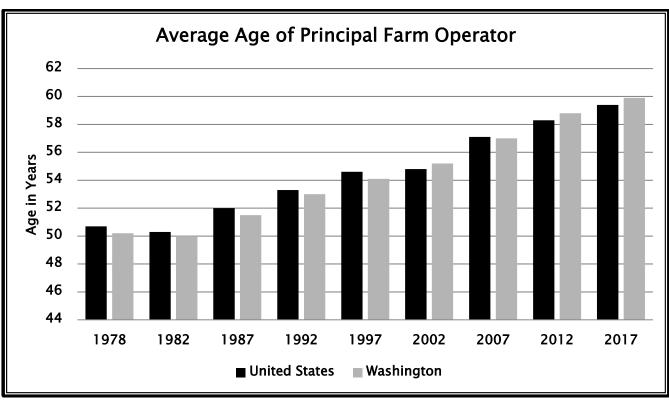


FIGURE 3 - USDA CENSUS OF AGRICULTURE

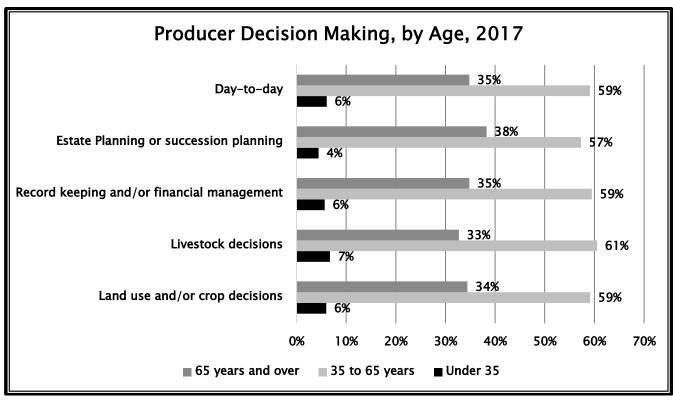


FIGURE 4 - USDA CENSUS OF AGRICULTURE

Indicator: Number of Food Manufacturers

Measure: Number of food manufactures as tabulated by Workforce Explorer with the WA State Employment Security Division (NAICS Code 311).

Background: The more access a farmer has to food manufacturers, the lower the transportation costs and increased potential for viability. The Census Bureau defines food manufacturing establishments (NAICS Code 311) as industries in the food manufacturing subsector that transform livestock and agricultural products into products for intermediate or final consumption.

A healthy food manufacturer sector contributes to the ongoing viability of our agricultural products by adding value to the product, which increases income.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers. Establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Trends & Findings:

- Since 2015, the number of food manufacturing establishments in Washington decreased 52 to 925. In 2018, the total economic impact of this sector was \$18 billion up \$3.3 billion.
- In 2018, there were 38,674 employed in the industry, up 14 percent from 2007.
- In 2018, the average wage paid to food manufacturing employees in Washington was \$49,368 - up 25 percent from 2007.
- In 2018, animal processing facilities was 79, down 15 from the 10-year high of 94 in 2014.

Sources:

Washington State Employment Security - Workforce Explorer https://fortress.wa.gov/esd/employmentdata/

United States Census Bureau: County Business Patterns: https://www.census.gov/programs-surveys/cbp.html



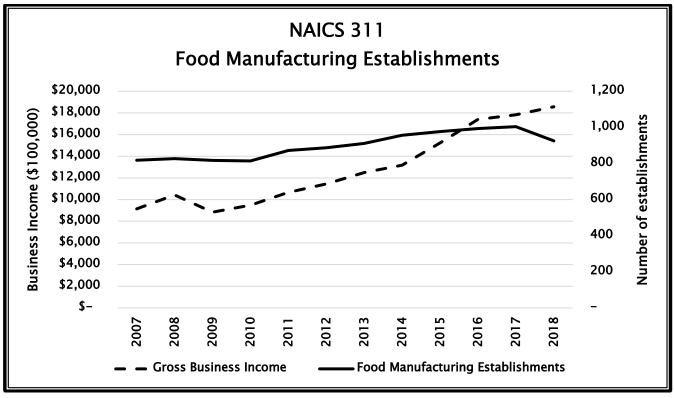


FIGURE 5 - WA EMPLOYMENT SECURITY DEPARTMENT

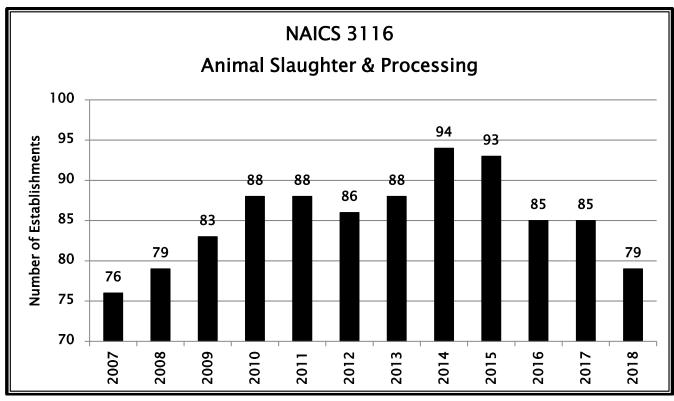


FIGURE 6 - U.S. CENSUS BUREAU (CENSTATS DATABASE)

Indicator: FARM AND FARM-RELATED EMPLOYMENT

Measure: Employment numbers in farm and farm-related industries from 2001-present

Background: The number of workers engaged in farm-related industries may indicate the general health of the industry. Farm employment is the number of workers engaged in the direct production of agricultural commodities, either livestock or crops; whether as a sole proprietor, partner, or hired laborer as defined by the Bureau of Economic Analysis.

Farm employment is affected by a variety of economic factors including technological change, industry structure, and international trade. Nationwide, farm employment has experienced a long-term decline with overall increases in pay.

The state's agricultural activity, employment and productivity contribute more to Washington's economy than the nation's agricultural industry share. Agricultural activities generally play a more significant role in Washington.

Trends & Findings:

- Hired farm labor expenses have increased 29 percent from 2010 to \$1.7 billion in 2018.
- In 2018, hired farm labor expenses accounted for 21 percent of farm production expenses.
- Total farm production expenses have increased 22 percent since 2010.

Sources:

Workforce Explorer – 2016 Agricultural Workforce Report: Published September 2018 https://esd.wa.gov/labormarketinfo/ag-employment-and-wages

USDA 2017 Census of Agriculture: Released April 2019, by the United States Department of Agriculture: https://www.nass.usda.gov/Publications/AgCensus/2017/index.php



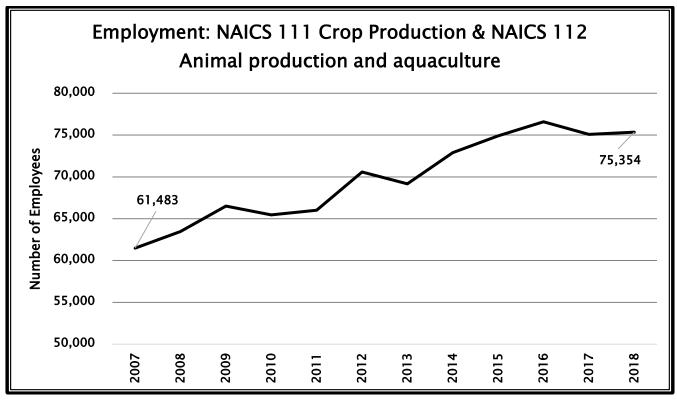


FIGURE 7 - BUREAU OF LABOR STATISTICS DATABASE

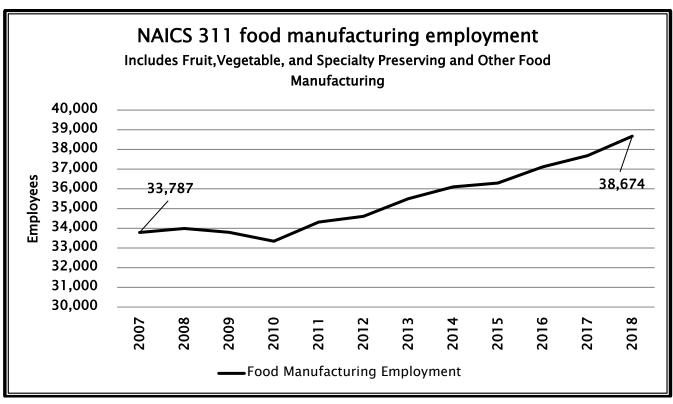


FIGURE 8 - BUREAU OF LABOR STATISTICS DATABASE

Indicator: WATER USE

Measure: Water use by use category and source.

Background: Measure includes estimated withdrawals from groundwater and surface sources for a variety of uses, including irrigation, public supply, and industry. Since 1950, the U.S. Geological Survey (USGS) has, at 5-year intervals, compiled data on the amount of water used in homes, businesses, industries, and on farms throughout the State.

Water use in the United States in 2015 was estimated to be about 322 billion gallons per day (Bgal/d), which was 9 percent less than in 2010. Nationally, the 2015 estimates put total withdrawals at the lowest level since before 1970, following the same overall trend of decreasing total withdrawals observed from 2005 to 2010.

Trends & Findings:

- 2015 surface-water withdrawals were 17 percent less than in 2010.
- 2015 groundwater withdrawals were down 4 percent from 2010.
- 2015 irrigation withdrawals were 20 percent less from 2010.
- 2015 surface-water withdrawals for irrigation accounted for 71 percent of the total irrigation withdrawals, In 2010, it was 74 percent.
- 2015 groundwater irrigation withdrawals decreased 9.7 percent from 2010.
- 2015 livestock water use increased 6.8 percent from 2010.

Sources:

USGS Estimated Domestic, Irrigation, and Industrial Water Use in Washington, 1985, 1990, 1995, 2000, 2005, 2010, 2015: https://pubs.er.usgs.gov/publication/cir1441

USDA 2017 Census of Agriculture: Released April 2019, by the United States Department of Agriculture: https://www.nass.usda.gov/Publications/AgCensus/2017/index.php



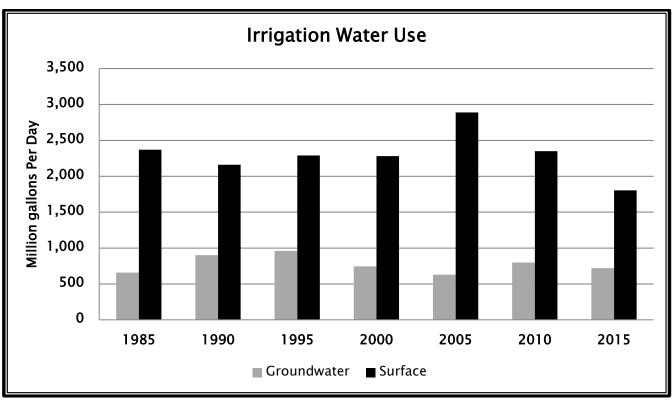


FIGURE 9 - USGS ESTIMATED USE OF WATER IN THE UNITED STATES

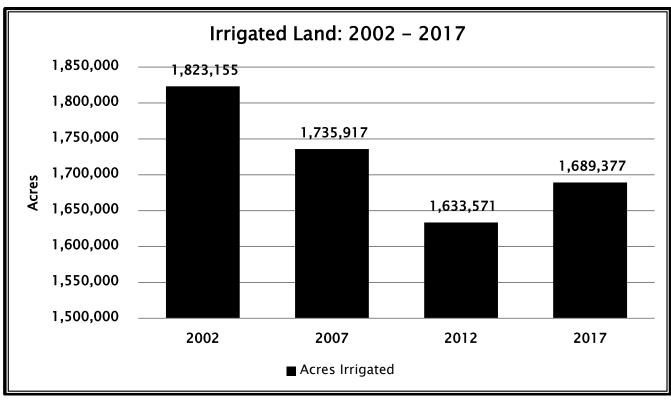


FIGURE 10 - USDA CENSUS OF AGRICULTURE

Indicator: OPEN SPACE ENROLLMENT

Measure: Acres enrolled in open space agriculture.

Background: Enrolling farmlands as "open space agriculture" reduces the property tax impact on farmland. It is one tool for making farmland more affordable, thus keeping it out of development.

Current use classification lowers the taxable value of farm and agricultural lands and other resource lands relative to other land uses. Land that would be assessed at \$10,000 an acre for its "highest and best use" might be valued at perhaps \$3,000 an acre as farmland. The effect of this lower valuation is to lower the tax assessed on lands classified as "current use," thereby making the land more affordable to keep in farm production.

Trends & Findings:

- In 2017, there were 9.1 million acres were enrolled in Open Space Farm and Agriculture, a decline of 11 percent from 2016. This could be in part due to Lincoln County not reporting. In 2016, they reported 1,234,071 acres. In addition, Walla Walla shows a decline of 99 percent of acres. In 2016, 687 thousand acres were enrolled. In 2017, they reported 4,226.
- In 2017, the percent value reduction of highest and best use value and current use value was 66 percent. The 20 year average is 70 percent.

Sources:

WA Department of Revenue Property Tax Statistics:

http://dor.wa.gov/content/aboutus/statisticsandreports/stats_proptaxstats_report.aspx



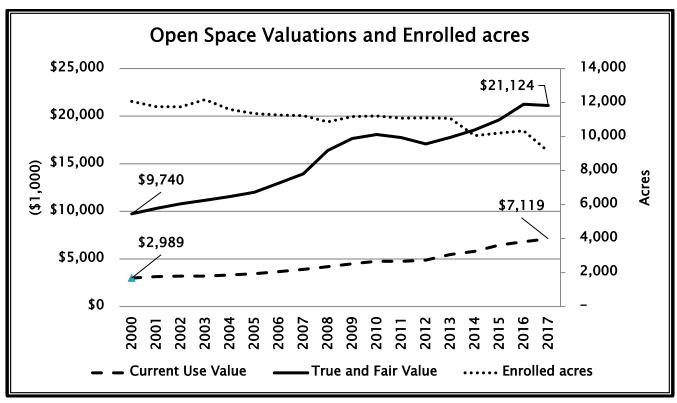


FIGURE 11 - WASHINGTON STATE DEPARTMENT OF REVENUE PROPERTY TAX DIVISION

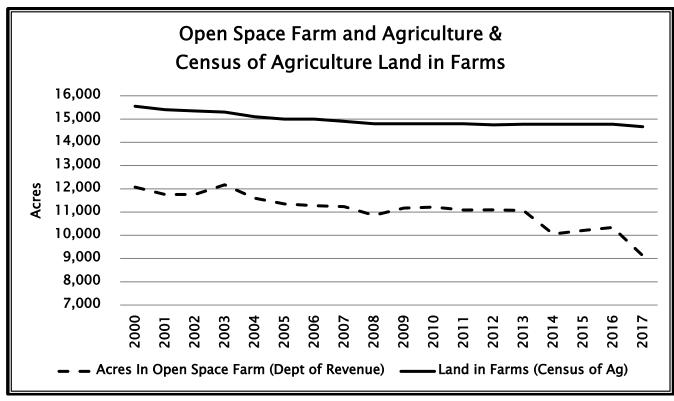


FIGURE 12 - DOR PROPERTY TAX STATISTICS & USDA CENSUS OF AGRICULTURE

Indicator: FARM SIZE DIVERSITY

Measure: Size diversity indicator is based on the number of farms in the different ranges/categories.

Background: Diversity in farm size indicates a flexibility and resiliency of agriculture. Flexibility can meet different kinds of demand; resiliency can survive different types of hardships.

USDA Census of Agriculture uses five broad scales (1-99 acres, 100-499, 500-999, 1000-1999, and 2000+ Acres) to measure farm size. The degree of disbursement (variation) of farms over all five categories provides a measurement of size diversity.

Trends & Findings:

- In 2017, farms less than 100 acres accounted for just over 10 percent of production value, unchanged from 2012.
- In 2017, 35% of farms reported less than \$1,000 in sales. Operating acreage was
 2.1m acres.
- The 2017 median farm size in Washington is 20 acres, down 33 percent from 2007.
- Farms reporting sales of over \$1m were 6% all farms reporting over \$1,000 in sales making up 81% of the states total market value.
- The average size of farms in 2017 is 410 acres. Up 7 percent since 2007.

Sources:

USDA 2017 Census of Agriculture: Released April 2019, by the United States Department of Agriculture: https://www.nass.usda.gov/Publications/AgCensus/2017/index.php



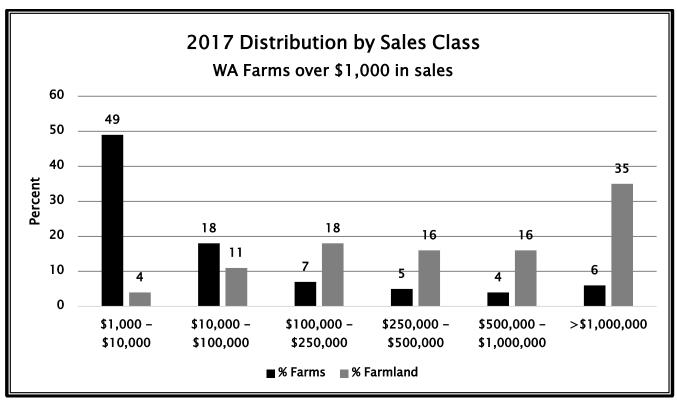


FIGURE 13 - USDA CENSUS OF AGRICULTURE

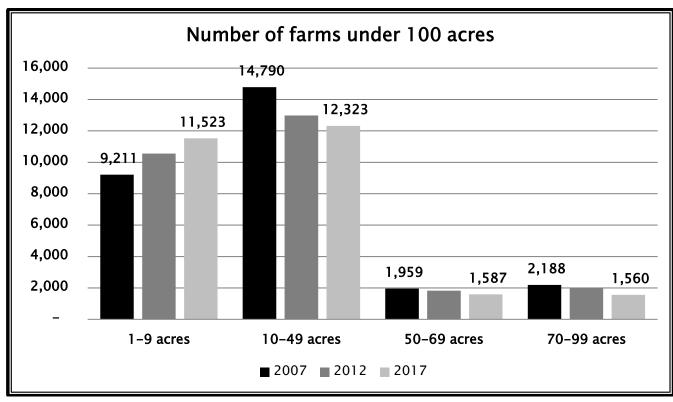


FIGURE 14 - USDA CENSUS OF AGRICULTURE

Indicator: Acreage in Production

Measure: Acreage in production using WSDA Cropland Data and USDA Land in Farms.

Background: Two sources of data have been used to compile this measure: Washington State Department of Agriculture (WSDA) and United States Department of Agriculture (USDA).

WSDA crop data includes cropland data calculated from the WSDA's crop geodatabase classified by several categories: 1) general crop group (berry, cereal grain, orchard, vegetable, etc.); 2) crop types (blueberry, wheat, apple, potato, etc.), and 3) irrigation method (center pivot, drip, rill, none, etc.). It does not include pastures (grazing land) or shellfish beds. WSDA re-maps the entire state every two to four years at a finer resolution than the NASS data. Given this, WSDA will be better able to illustrate changes in cropland.

USDA National Agricultural Statistics Service (NASS) data includes all land in farms in Washington including pasture, rangeland, scabland, and open agricultural land. The annual USDA NASS Land in Farms data includes any acreage that has \$1,000 farm income in a given year.

Trends & Findings:

- 2018 WSDA data shows an increase of 86 thousand acres of cropland from 2013.
- The 2017 Census shows WA farms and ranches produced crops and livestock valued at \$9.63 billion, a 5 percent increase from 2012.
- In 2017, cattle and calves were valued at \$1.06 billion, an increase of 7 percent from 2012 Census.
- 2017 acres of harvested cropland increased 3 percent from 2012 Census to 4.4 million acres.

Sources:

WSDA Cropland Geodatabase:

http://agr.wa.gov/PestFert/natresources/AgLandUse.aspx

USDA 2017 Census of Agriculture: Released April 2019, by the United States Department of Agriculture: https://www.nass.usda.gov/Publications/AgCensus/2017/index.php

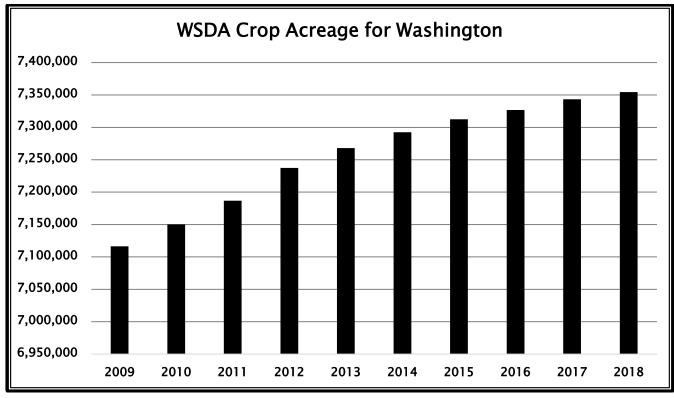


FIGURE 15 - WASHINGTON STATE DEPARTMENT OF AGRICULTURE

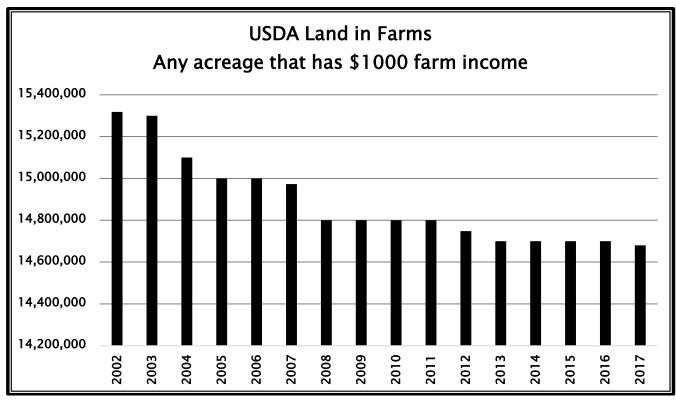


FIGURE 16 - USDA CENSUS OF AGRICULTURE

Indicator: Public Ownership of Land

Measure: Number of acres of land in state, local, and federal ownership.

Background: The Public Lands Inventory focuses on natural resource and recreation lands and shows ownership (federal, by agency; state, by agency; local government, by county or city), ownership type (fee simple or assumed fee simple; aquatic, upland, or assumed upland), location, acreage, principal use (developed recreation, habitat and passive recreation, revenue generation, conservation, assumed habitat and passive recreation, other, or unknown), and the date and cost of recent acquisitions (within the past ten years).

Value changes between reporting periods are based on best available data sources.

Trends & Findings (2019 reporting data is based on available data sources):

- Federal reporting differed in 2019 shows a decrease of 655,335 acres
- City and County showed a decrease of 365,679 acres
- State owned lands increased showed a net increase of 19,748 acres
- DNR uplands decreased 43,188 acres

Sources:

WA Public Lands Inventory: http://publiclandsinventory.wa.gov/



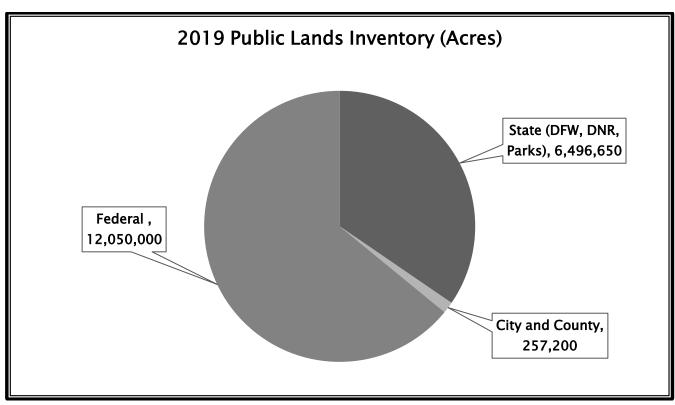


FIGURE 17 - 2019 PUBLIC LANDS INVENTORY

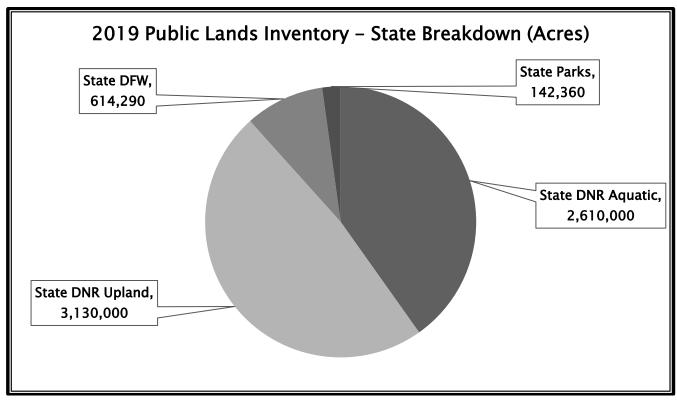


FIGURE 18 - 2019 PUBLIC LANDS INVENTORY

Indicator: Direct Marketing to Consumers

Measure: Number of farms selling directly to consumers and total value

Background: Direct marketing refers to selling that is based on a personal, one-to-one relationship that ties farmers and consumers together. Many times this relationship is face-to-face, such as at farmers markets. Other times, the consumer and farmer may not actually meet, for example, on Internet sales.

Direct marketing is one of many ways to improve a farm's financial success. It allows a farm to diversify by having more than one outlet for sales and assists in managing overall market risk.

Typical direct marketing strategies include selling directly from the farm, farm stand, U-pick, Internet/mail-order sales, or through a farmers market, Community Supported Agriculture (CSA), and even selling directly to restaurants, hospitals, grocery stores and schools.

Trends & Findings:

- Between 2012 and 2017, farms reporting sales directly to consumers decreased
 20 percent to 4,503 farms.
- Since the 2012 Census, the value of sales sold directly to consumers has increased 51 percent to \$68 million.
- In 2017, 220 farms reported over \$50,000 in sales direct to consumers representing 71 percent of direct to consumer sales.
- The top county reporting direct to consumer sales by value in 2017 was Skagit County with \$7 million, a 174 percent increase from 2012. Walla Walla County was second in the state with \$5.2 million.

Sources:

USDA 2017 Census of Agriculture: Released April 2019, by the United States Department of Agriculture: https://www.nass.usda.gov/Publications/AgCensus/2017/index.php



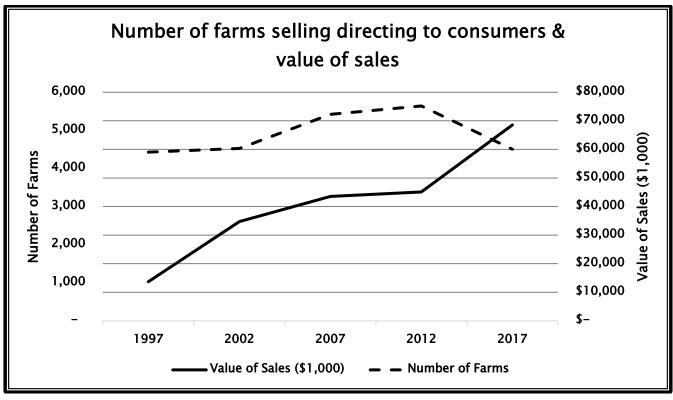


FIGURE 19 - USDA CENSUS OF AGRICULTURE

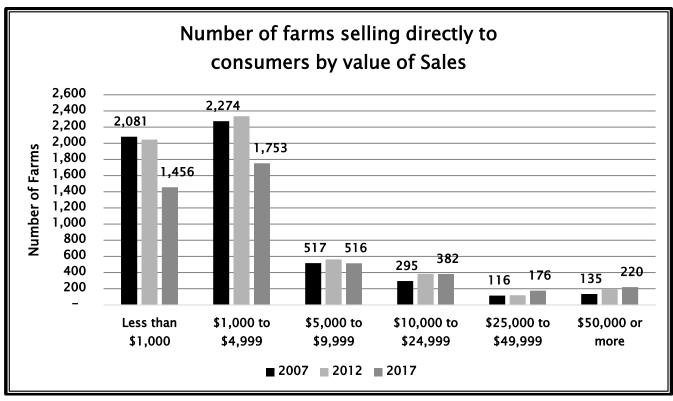


FIGURE 20 - USDA CENSUS OF AGRICULTURE

Indicator: Number of Food Distributors

Measure: Number of establishments in food wholesaling, warehousing, and storage in Washington State.

Background: Storage facilities and wholesalers provide a vital link between farms, food processors, and consumers. The graphs show data from bolded sectors:

- Grocery and Related Products Merchant Wholesalers (NAICS 4244) include wholesalers of general line groceries, packaged frozen foods, dairy products, poultry products, confectionery products, fish and seafood, meat products, fruit and vegetables, and other grocery products.
- Farm Supplies Merchant Wholesalers (424910) This industry comprises establishments primarily engaged in the merchant wholesale distribution of farm supplies, such as animal feeds, fertilizers, agricultural chemicals, pesticides, plant seeds, and plant bulbs.
- Farm Product and Raw Material Wholesalers (4245) wholesalers of grain and field beans, livestock, and other farm product raw materials.
- <u>Refrigerated Warehousing and Storage Industry</u> (49312) establishments primarily engaged in operating refrigerated warehousing and storage facilities.
- <u>Farm Product Warehousing and Storage (493130)</u> includes establishments primarily engaged in operating bulk farm product warehousing and storage facilities (except refrigerated).

Trends & Findings:

- In 2018 grocery (4244) and farm product (4245) wholesalers employed over 22,584 employees, up 12 percent from 2007. Annual payroll for these two sectors is up 47 percent during the same period to \$1.3 billion annually.
- In 2018, employment for refrigerated warehousing and farm product storage sectors declined 8 percent from 2011 to 2,426 employees. During the same period, annual payroll for these two sectors increased 24 percent to \$130 million annually.

Sources:

Bureau of Labor Statistics: https://data.bls.gov/PDQWeb/en

NACIS Codes - https://www.census.gov/cgi-bin/sssd/naics/naicsrch?chart=2017

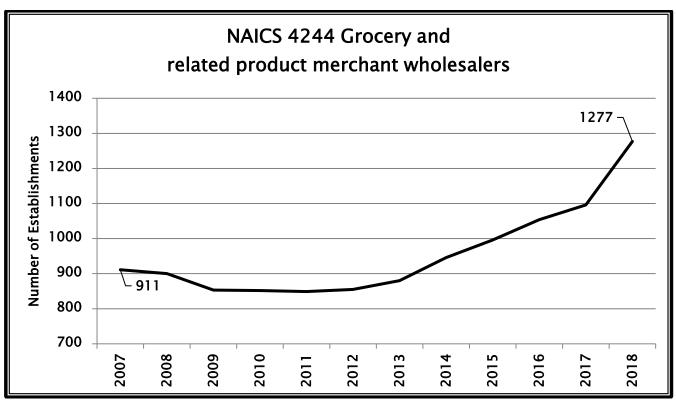


FIGURE 21 - BUREAU OF LABOR STATISTICS DATABASE

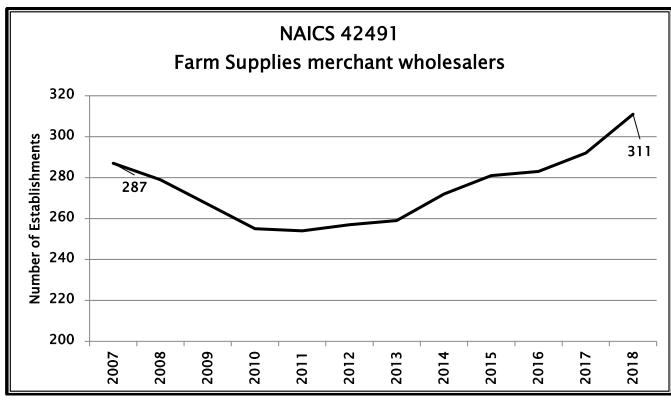


FIGURE 22 - BUREAU OF LABOR STATISTICS DATABASE

Indicator: PRIME AGRICULTURAL SOILS

Measure: Prime farmland, by land cover/use from the National Resources Inventory (NRI). The most current NRI data is for 2015.

Background: The Natural Resources Conservation Service (NRCS) defines prime farmland as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is also available for these uses.

NRI reports prime farmland by cropland, pastureland, conservation reserve program, rangeland, forestland, and other rural.

Without these prime soils, agricultural production cannot occur. Loss of prime soils indicates we may be losing agricultural production opportunities today and into the future.

Trends & Findings:

- Between 1982 and 2015, prime farmland soils used for cropland and pastureland have declined 13 percent to 1.37 million acres.
- Overall, prime farmlands have decreased 9 percent since the 1982.
- NRI reports a 1 percent increase of prime cropland.

Sources:

2015 USDA NRCS National Resources Inventory

 $\underline{https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/technical/nra/nri/}$



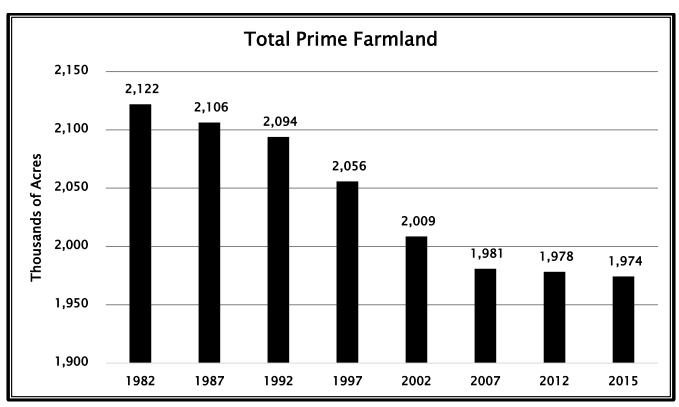


FIGURE 23 - NATURAL RESOURCE INVENTORY

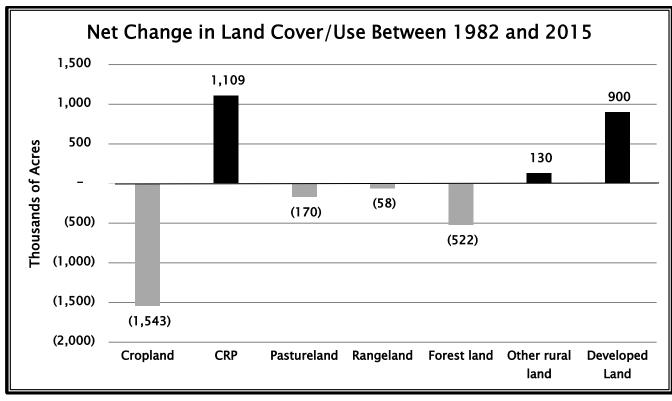


FIGURE 24 -NATURAL RESOURCE INVENTORY

Indicator: Washington Farm Expenses

Measure: Farm expenses for farms in Washington

Background: The value of crop and livestock production in Washington has risen steadily upward. Several factors are contributing to this trend, including increased demand for high value crops, increased production capacity, and water availability. But, while values may increase, costs may rise as well.

An insufficient return on investment can produce a wide range of negative effects that carry significant costs. In extreme cases, when farmers cannot make ends meet, agricultural land may be sold and converted to other uses, resulting in the loss of a valuable natural capital asset and a decline in food security for future generations.

The Economic Research Service (ERS) develops these numbers based on National Agricultural Statistical Services (NASS) estimates. ERS makes adjustments to the NASS estimates. Included in the calculation of costs are things such as operator dwellings, seed purchases, pesticide expenditures, fuel, and machinery.

Trends & Findings:

- Between 2007 and 2018, production expenses have increase 28 percent.
- The value of agricultural production has increased 41 percent over the same period.
- Since 2007, hired farm labor expenses have increased 46 percent.
- Since 2007, the cost of feed purchased for livestock more than doubled.

Sources:

USDA 2017 Census of Agriculture: Released April 2019, by the United States Department of Agriculture: https://www.nass.usda.gov/Publications/AgCensus/2017/index.php

USDA Economic Research Service - Farm Income and Wealth Statistics
https://www.ers.usda.gov/data-products/farm-income-and-wealth-statistics/



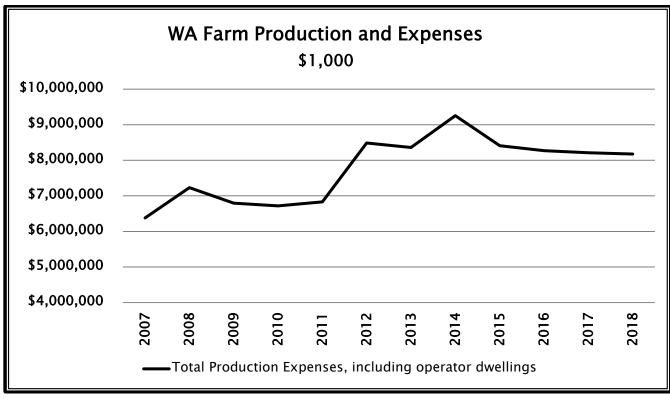


FIGURE 25 - USDA ECONOMIC RESEARCH SERVICE

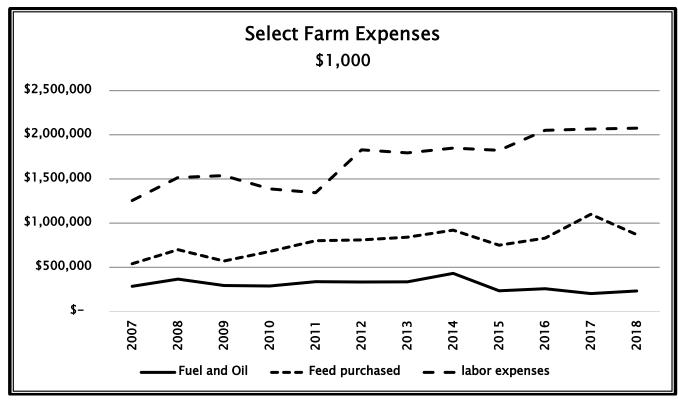


FIGURE 26 - USDA ECONOMIC RESEARCH SERVICE

Indicator: Washington Farm Income

Measure: Net Cash Farm Income and Net Farm Income as defined by USDA Economic Research Service (ERS).

Background: *Net value added* is the increase in the value of agricultural production due to the application of the agricultural producer's resource inputs, such as the producer's labor time spent in management and direct agricultural production, the producer's capital and land, and the labor that the producer hires.

Net farm income (NFI) — a broad measure of profits, reflects income from production in the current year—is calculated by subtracting farm expenses from gross farm income. NFI considers both cash and noncash income and expenses.

Gross farm income reflects the total value of agricultural output plus Government farm program payments.

Net cash farm income encompasses cash receipts from farming as well as farm-related income, including government payments, minus cash expenses.

Trends & Findings:

- Statewide, net farm income in 2018 was \$2.2 billion.
- Farms reporting net losses rose 3.4 percent to 65.9 percent of all farms.
- Nationally, net farm income is forecast to increase \$6.3 billion (10 percent) from
 2018 to \$69.4 billion in 2019, after decreasing \$12.0 billion (16 percent) in 2018.

Sources:

USDA ERS Farm Income Data:

http://www.ers.usda.gov/data-products/farm-income-and-wealth-statistics.aspx



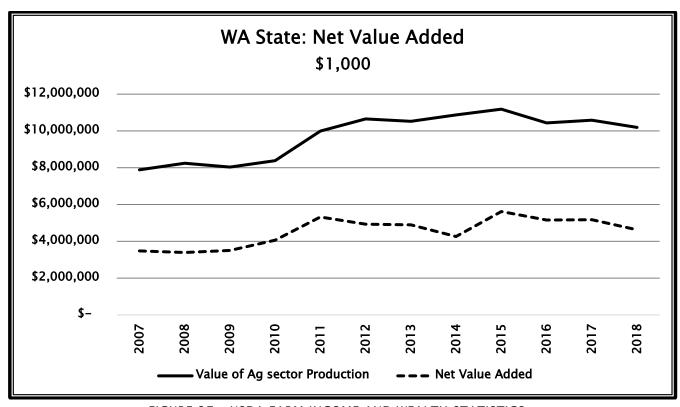


FIGURE 27 - USDA FARM INCOME AND WEALTH STATISTICS

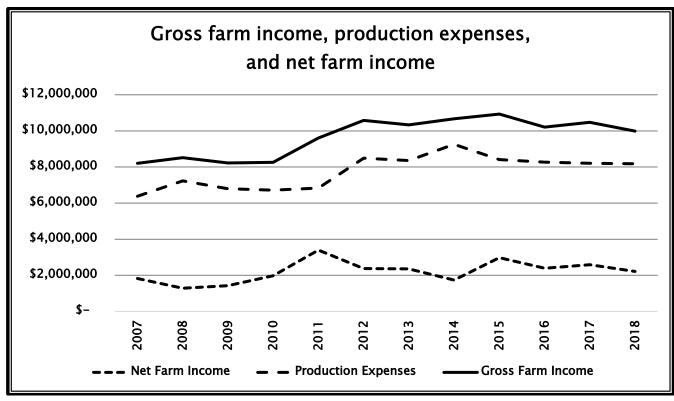


FIGURE 28 - USDA FARM INCOME AND WEALTH STATISTICS

Indicator: Number of Farmers Markets

Measure: Number of new farmers markets entering and leaving the market as reported by the WA State Farmers Market Association (WSFMA) and the WSDA.

Background: The greater the market potential, the better for a farmer to market fresh produce, lower transportation costs, and enable better access to customers, all of which can increase profitability. Farmers markets are critical to the survival of many small family farms and the preservation of farmland around the country. Selling directly to consumers allows farmers to become more profitable by obtaining retail rather than wholesale prices and developing a loyal customer base.

During the last ten years, USDA estimates the number of farmers markets nationwide has doubled. Money spent in farmers markets goes directly to farmers and can be recirculated to support other local jobs and businesses.

Access to healthy, fresh foods is a critical issue. Until recently, people enrolled in government food assistance programs could not use food stamps at farmers markets. As these programs have shifted to electronic transfers, more farmers markets have developed the capacity to process these payments. Increasing purchase at farmers markets through the food assistance programs ensures the users are getting fresh food and expands the market access for farmers selling in these venues.

Trends & Findings:

- In 2017, farmers markets reported \$51 million sales, up 21 percent from 2013.
- According to the WA State Farmers Market Association, farmers markets are located in 28 counties and 80 cities or towns.
- Nationally, in 2019, there were 8,767 farmers markets listed in USDA's National
 Farmers Market Directory, a 7 percent increase from 2013.

Sources:

Washington State Farmers Market Association www.wafarmersmarkets.com

USDA Agricultural Marketing Service: National Farmers Market Directory https://www.ams.usda.gov/local-food-directories/farmersmarkets

Washington State Department of Health – Famers Market Nutrition Program https://www.doh.wa.gov/YouandYourFamily/WIC/FarmersMarket



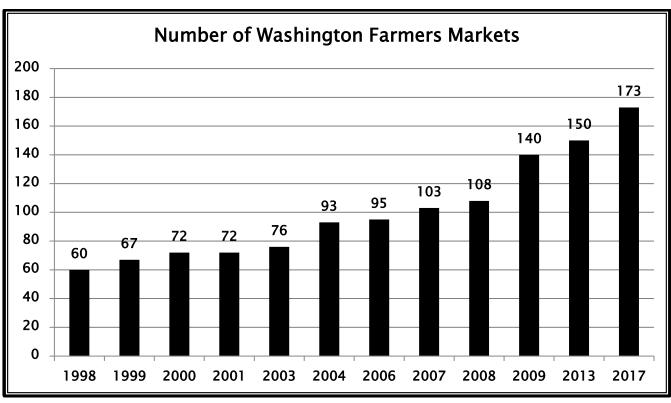


FIGURE 29 - WA STATE FARMERS MARKET ASSOCIATION & WSDA

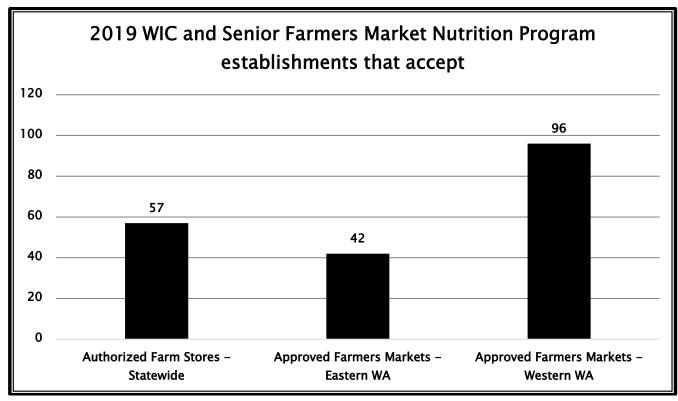


FIGURE 30 - WASHINGTON STATE DEPARTMENT OF HEALTH

Indicator: ENERGY USE ON FARMS

Measure: Value of petroleum products and electricity purchased by farms.

Background: Agriculture is one of the most energy-intensive industries, consuming about 2 percent of total energy consumed in the U.S. Energy makes up a significant part of operating expenditures for most crops, especially when considering indirect energy expenditures on fertilizer, because the production of fertilizer is extremely energy-intensive, requiring large amounts of natural gas.

Some farms are using renewable resources to produce energy. Wind turbines, methane digesters, and photovoltaics are the most common on-farm renewables. Renewable energy can help to offset the need for purchased energy. In some cases, the renewable energy produced on farms is sold to electric power suppliers, providing additional income for farmers.

Trends & Findings:

- Between 2010 and 2018, manufactured inputs increased 1 percent.
- Electricity expenditures decreased 21 percent between 2010 and 2018.
- According to the USDA 2017 Ag Census, farm production expenses increased 57 percent for Washington farmers between 2007 and 2017.
- Pesticide expenses increased 33 percent between 2010 and 2018.
- Between 2007 and 2017, the number of farms producing energy or electricity on-farm with solar panels, geothermal exchange, wind turbines, small hydro, or methane digesters increased from 1.3 to 6.2 percent.

Sources:

USDA ERS Farm Income Data: https://www.ers.usda.gov/data-products/farm-income-and-wealth-statistics/

USDA 2017 Census of Agriculture: https://www.nass.usda.gov/AgCensus/



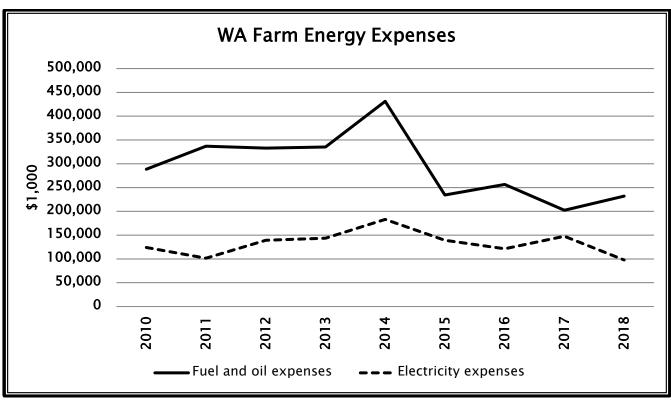


FIGURE 31 - USDA ECONOMIC RESEARCH SERVICE

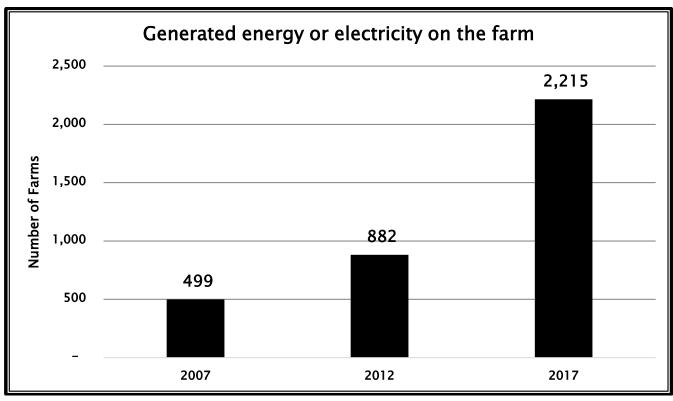


FIGURE 32 - USDA CENSUS OF AGRICULTURE

Indicator: Consumer Price Index for Food

Measure: Consumer Price Index for Food

Background:

The Bureau of Labor Statistics publishes the Consumer Price Index (CPI) on a monthly basis. The CPI measures the average change over time in the prices paid by urban consumers for a representative market basket of consumer goods and services. While the all-items CPI measures the price changes for all consumer goods and services, including food, the CPI for food measures the changes in the retail prices of food items only.

For the monthly cost of food graphic, the "Thrifty plan" is the least costly of the four, and is the basis for the Supplemental Nutrition Assistance Program (SNAP). The "Low" and "Moderate" programs provide appropriate diets for most people. The "Liberal plan" permits a greater variety — more meat and a different mix of fruits and vegetables — than the other plans.

Trends & Findings:

- In 2017, food expenditures were the third largest consumer spending category at 12.9 percent (transportation 15.9 percent, housing 33.1 percent).
- The Consumer Price Index for Food at Home is forecast to increase between .5 percent and 1.5 percent in 2020.
- Fruits and vegetables are forecast to increase up to 1 percent in 2020 with fresh fruits showing the biggest increases at 1–2 percent.
- The Consumer Price Index for the Seattle/Bremerton area has increased 19 percent from 2010.

Sources:

USDA-ERS Food Price Outlook:

https://www.ers.usda.gov/data-products/food-price-outlook.aspx

Bureau of Labor Statistics: Consumer Price Index:

https://www.bls.gov/cpi/

USDA Food Plans: Cost of Food Reports:

https://www.fns.usda.gov/cnpp/usda-food-plans-cost-food-reports

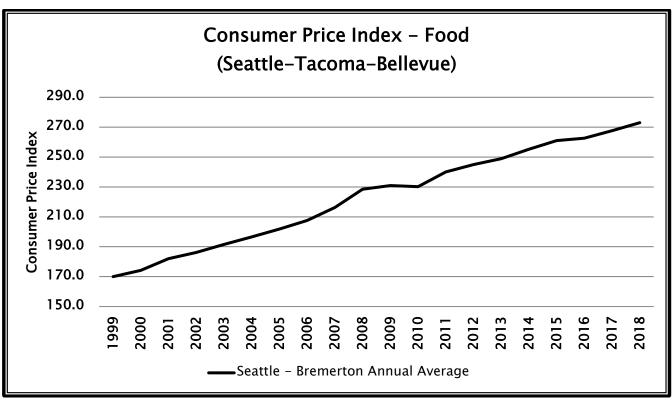


FIGURE 33 - BUREAU OF LABOR STATISTICS

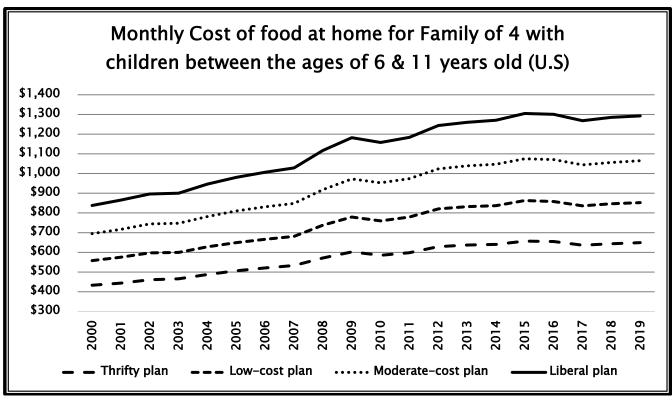


FIGURE 34 - USDA CENTER FOR NUTRITION POLICY AND PROMOTION

Indicator: Working Lands with Easements

Measure: Aggregate of working lands under a form of working land easement.

Background: Working land easements are an estate planning tool where farmers and ranchers can preserve the family farm for future generations. Land owners who place an easement on a parcel can still sell it, will it to children or grandchildren, change the type of farming, and encumber it as collateral. They just cannot convert it to a non–agricultural use. Working land easements are somewhat similar to conservation easements, which are created to protect wildlife habitat or open space. With working land easements the focus is on keeping the land in production. The farm or ranch continues to be managed as before the easement was placed on it.

In Washington, these types of easements have been implemented in many areas across the state, primarily in the western part of Washington. Many counties and land trusts have successfully negotiated working land easements with landowners, assuring the land remains in a working condition, while allowing the farm and family to remain connected.

Trends & Findings:

- Since the last survey, many of the land trusts that are active in working land easements have increased their acreage and easements.
- The 2019 survey did not capture fully all who are engaged, if your land trust totals are not represented in our survey, please contact ofp@scc.wa.gov
- Strong interest and support continues for working land easements.

Sources:

State Conservation Commission - Office of Farmland Preservation conducted survey, July 2019



<u>Entity</u>	2015	<u># of</u>	<u>2019</u>	<u># of</u>
	<u>Acres</u>	<u>Easements</u>	<u>Acres</u>	<u>Easements</u>
Blue Mountain Land Trust	457.44	7	NA	NA
Capitol Land Trust	NA	NA	1,732	13
Chelan-Douglas Land Trust	600	2	NA	NA
Columbia Land Trust	390	4	483	5
Community Farmland Trust	NA	NA	37	1
Forterra	976	6	1,591	13
Great Peninsula Conservancy	NA	NA	250	2
Jefferson Land Trust	800	13	14	1,062.7
King County Farmland Program	14,013	207	15,405	310
Methow Conservancy	NA	NA	1,695	49
North Olympic Land Trust	430	32	520	19
NW Rangeland Trust	142	1	NA	NA
Okanogan Land Trust	5,723	19	NA	NA
Palouse Land Trust	NA	NA	NA	NA
PCC Farmland Trust	1,287	13	1,472	16
San Juan County Land Bank	350	15	1,000	20
Skagit County Farmland Preservation	7,000	115	NA	NA
Skagit Land Trust	NA	NA	NA	NA
Whatcom County	826	16	NA	NA
Whatcom Land Trust	NA	NA	1,266	23
Whidbey Camano Land Trust	735	20	NA	NA

FIGURE 35 - JULY 2019 OFFICE OF FARMLAND PRESERVATION SURVEY

Indicator: Agriculture-Related Degrees

Measure: Calculate the number of agriculture-related degrees over time.

Background: A college trained workforce may indicate the interest and potential for new farmers. An important indicator is the number of degrees Washington students earn each year. An increase in the number of degrees indicates a desire to learn more about farming, begin their own farm, or take a larger share of the management on the family farm.

At the K-12 level, there are 52 agriculture education courses school districts may chose from when offering an Agriculture Education program. Finding certified educators to teach is a part of what holds back increased participation.

Trends & Findings:

- Since the last indicator report, higher education agriculture related degrees have not been updated (2016–17).
- Agriculture related two-year associate degrees have remained fairly steady.
- Agricultural related two-year certificate degrees have steadily declined from a high of nearly 500 in the 2015-16 school year.
- In 2019, of all the public school districts in Washington, 183 offered some sort of agricultural education. This is down 15 percent since 2009. However, since 2014 offerings have increased 9 percent.

Sources:

Washington State Board for Community and Technical Colleges

https://www.sbctc.edu/colleges-staff/research/data-public/credentials-awarded-dashboard.aspx

Office of Superintendent of Public Instruction

 $\frac{https://www.k12.wa.us/student-success/career-technical-education/career-technical-education-pathways/agriculture-food-and-natural-resources$

Education Research & Data Center - Undergraduate and Graduate Higher Ed Updated periodically

 $\underline{https://erdc.wa.gov/data-dashboards/public-four-year-dashboard\#annual-enrollment}$

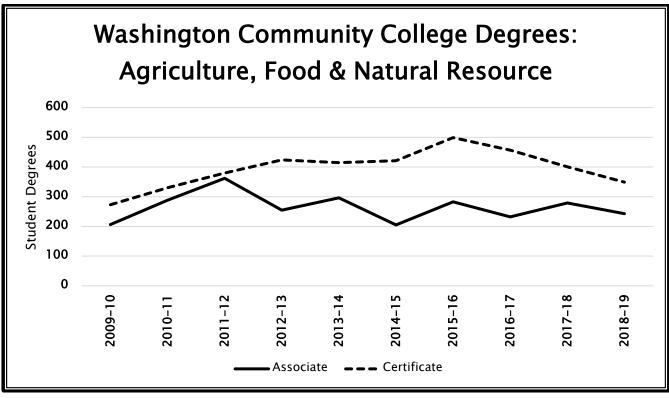


FIGURE 36 - WASHINGTON STATE BOARD FOR COMMUNITY & TECHNICAL COLLEGES

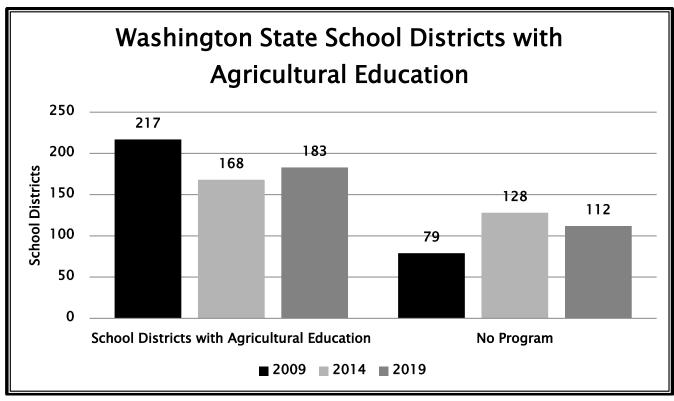


FIGURE 37 - OFFICE OF SUPERINTENDENT OF PUBLIC INSTRUCTION

Indicator: FARMS BY ORGANIZATION

Measure: Farms by type of organization.

Background: Washington farms are diverse, ranging from very small retirement and residential farms to enterprises with annual sales in the millions of dollars. Farms are operated by individuals on a full– and part–time basis, by multiple generations of a family, by multiple families, and by managers of non–family corporations. Some specialize in a single product, while others produce a wide variety of products. Some have full control over their farming processes, while others produce commodities under contract to strict specifications. Despite their diversity, most Washington farms are family farms.

Measures are divided into two broad categories: Family and non-family entities. The graph breaks them down into: non-family corporations and partnerships; or family-held corporations, individuals/family, and sole proprietorships.

Figure 39 is based on farm typology:

Residence Farms: Farms with less than \$350,000 in gross cash farm income and the principal operator is either retired or has a primary occupation other than farming

Intermediate Farms: Farms with less than \$350,000 in gross cash farm income and a principal operator whose primary occupation is farming

Commercial Farms: Farms with \$350,000 or more gross cash farm income as well as nonfamily farms

Trends & Findings:

- In 2017, 10 percent of all farms were commercial accounting for 83 percent of net farm income.
- In 2017, farms owned by individuals/family, or sole proprietorship accounted for 81 percent of all farms operating on 31 percent of all farmland.
- Since 2012, family held corporations farm acreage increased 3 percent to 4 million acres

Sources:

USDA Census of Agriculture: http://www.agcensus.usda.gov/

USDA National Agricultural Statistics Service: 2018 Washington Annual Statistical Bulletin
https://www.nass.usda.gov/Statistics_by_State/Washington/Publications/Annual_Statistical_Bulletin/index.p
https://www.nass.usda.gov/Statistics_by_State/Washington/Publications/Annual_Statistical_Bulletin/index.p

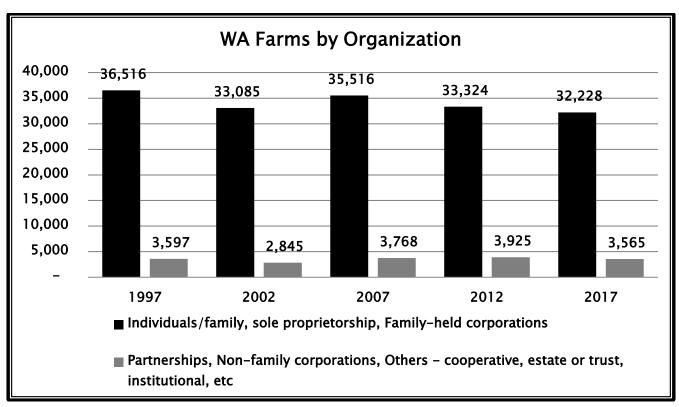


FIGURE 38 - USDA CENSUS OF AGRICULTURE

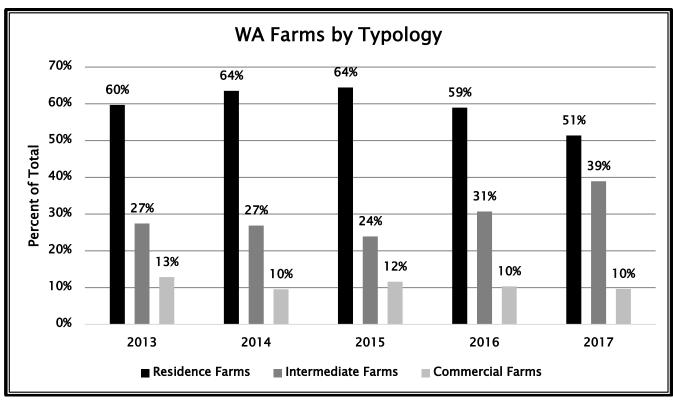


FIGURE 39 - USDA NATIONAL AGRICULTURAL STATISTICS SERVICE