



Washington State Farmland Preservation Indicators

Measuring Progress – March 2015

**Washington State Conservation Commission
Office of Farmland Preservation**

OFFICE OF FARMLAND PRESERVATION
2015 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, 2014 Public Land Inventory, the Natural Resource Inventory, Bureau of Economic Analysis, and more.

This report is categorized into five areas consistent with the 2008 WSDA Future of Farming Report available at <http://agr.wa.gov/fof/>. The five categories are Making Agriculture a Priority, Regulatory Barriers, Resource Availability and Access, Strengthen Competiveness, 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 Competiveness – 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.



**Washington State
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Linking you to conservation and preservation of local agricultural lands
www.scc.wa.gov

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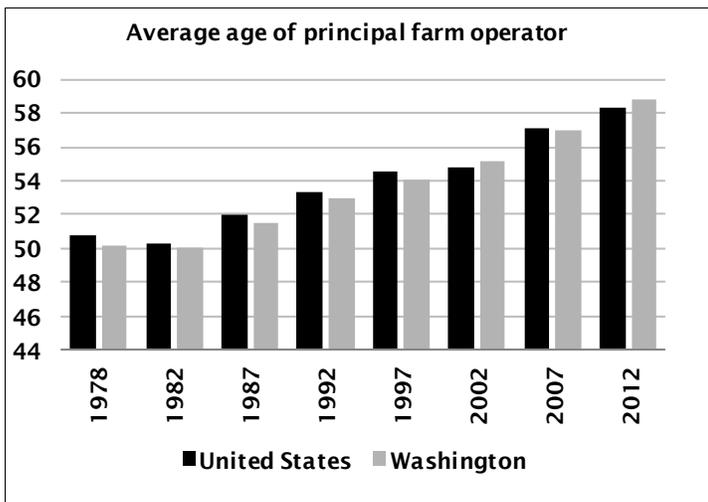
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INDICATOR GROUP: MAKING AGRICULTURE A PRIORITY

The act of growing food needs farmland and farmers. Metrics under "making agriculture a priority" track issues relating to land cost, land availability, and the farmers that use the land. Current trends reflect a need to help farmers plan to pass their operation to the next generation of farmers and to increase support programs for new and beginning farmers.

Who farms the land?

The average age of Washington farmers climbed to 58.8, mirroring what is occurring nationally. In terms of demographics, minority farmers increased over 3 percent, and Latino principal farmers continued to be the strongest growth demographic, increasing 14 percent since 2007.



More Information:

The full Washington State Farmland Preservation Indicators report is available at: ofp.scc.wa.gov

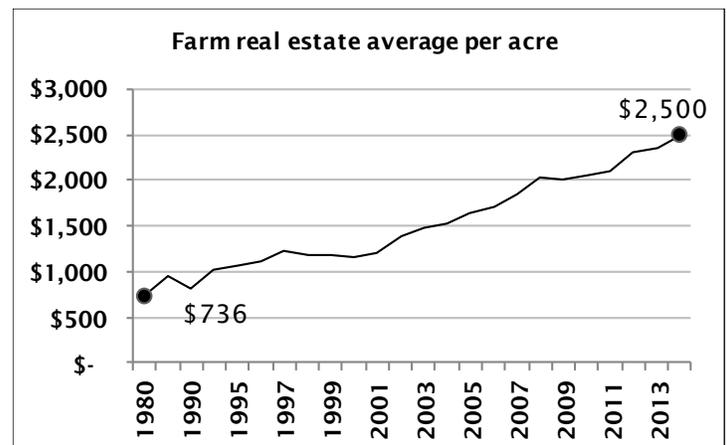
Contact:

Office of Farmland Preservation – ofp@scc.wa.gov

Principal farmers reporting other occupations			
1997	2002	2007	2012
13,546	14,926	21,263	19,569

Price of land

New farmers face challenges with access to affordable land. Farm real estate values (land and buildings) have increased consistently, and in recent years have exhibited above-average growth. Since 2000, the average price per acre of farm real estate has more than doubled. Access to capital for new and beginning farmers will continue to be a challenge.



Opportunity Outlook

Two key opportunity areas for continued focus include, 1) estate planning education and outreach, and 2) support programs for new and beginning farmers, with an emphasis on access to capital for land. Estate planning helps families plan for the future of their farm, including keeping it available for agricultural production. Continued support and improvement for land access programs will work to bring in the next generation of Washington farmers.



2015 Washington State

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INDICATOR GROUP: REGULATORY BARRIERS

In some cases, regulations can impact the viability of certain agricultural businesses by increasing operational costs and labor to comply. The aggregate of the regulatory environment can be an incentive to sell the farm or move processing out of state.

The business of farming and food manufacturing

The regulatory environment can be a factor for the continued success of farms and manufacturing. The cost of coming into compliance and remaining in compliance with regulations can impact whether farmers and manufacturers are able to stay in business and grow their operations.

An example of farm compliance costs comes from the Food and Drug Administration (FDA) as it relates compliance costs from a rule proposed in 2013. According to FDA analysis, the costs of compliance with the Produce Safety Rule would be high for farmers.

The average cost burden of implementing the regulations would be:

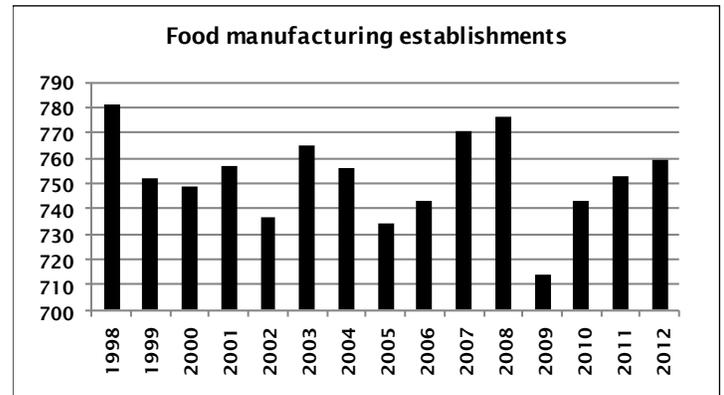
- For a "very small farm" (\$25,000–\$250,000 in annual sales): \$4,477 per year.
- For a "small farm" (\$250,001–\$500,000 in annual sales): \$12,384 per year.
- For a "large farm" (over \$500,000 in annual sales): \$29,545 per year.

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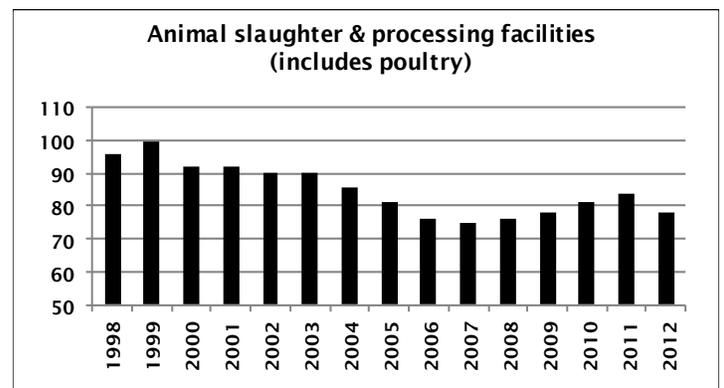
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Food Manufacturing and animal processing

Focusing on food system infrastructure, maintaining a healthy, robust food processing and manufacturing sector is important for farmers. When infrastructure leaves an area, if nothing fills the void, it becomes one less market available for Washington growers. While issues beyond regulations can factor in here, exploring goals from the regulatory and farm community will work to keep our agricultural economy healthy and growing.



Opportunity Outlook

- Identify key areas and policy where the regulatory environment may be impacting farmland and food system infrastructure in Washington.
- Ensure the health of agriculture is reflected in regulatory rule-making.



2015 Washington State

Farmland Preservation Indicators

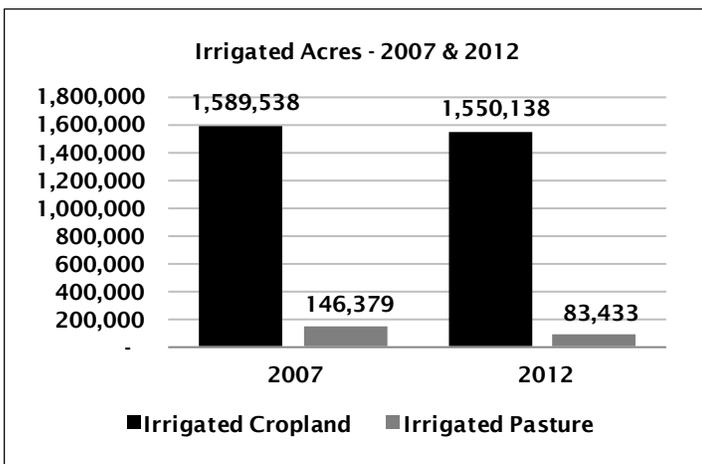
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INDICATOR GROUP: RESOURCE AVAILABILITY AND ACCESS

Availability and access to land with related natural resources is important to farmland preservation efforts. This grouping of indicators track water use, state-level tax incentive programs that work to preserve farms, actual acreage in production, and public ownership of land.

Water Availability

Many farms and farmers in Washington depend on access to a suitable and adequate supply of water. In many parts of Washington, land without water can limit or eliminate agricultural production. Improving water conveyance efficiencies and having water available for irrigation can lead to improved viability of land and contribute to land remaining available for continued agricultural production.



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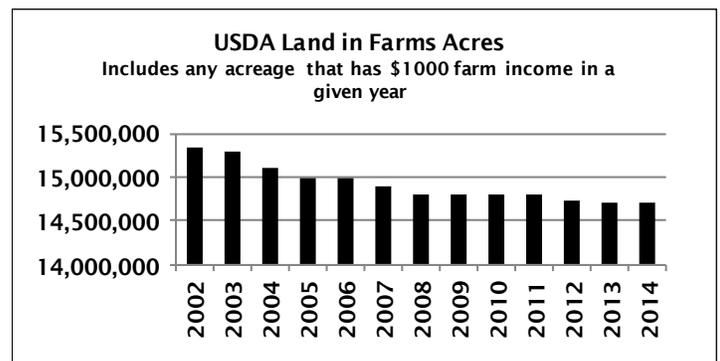
Agency	Acres - June 2003	Acres - June 2013
State Parks	133,697	137,160
DNR	116,572	151,107
WDFW	861,007	943,478
Grand Total	1,111,276	1,231,745

Public Ownership of Land

Since 2003, state ownership of land has increased by 120,470 acres (2014 Public Lands Inventory). This inventory traced agency acquisitions from State Parks, Dept. of Natural Resources (DNR), and Dept. of Fish and Wildlife (WDFW). Public acquisition of land at times can conflict with existing or potential agricultural activity with impacts on water resources and grazing land agreements.

Land in Farms

While overall land in farms as reported by the National Agricultural Statistics Service (NASS) continues to decline, land in crops as measured by Washington Department of Agriculture (WSDA) is increasing. WSDA re-maps the entire state every 2–4 years at a finer resolution than the NASS, allowing them to better-illustrate changes in cropland.



Opportunity Outlook

Efforts should continue to focus on policies and protocols that improve agricultural resources while recognizing and valuing habitat and species needs.



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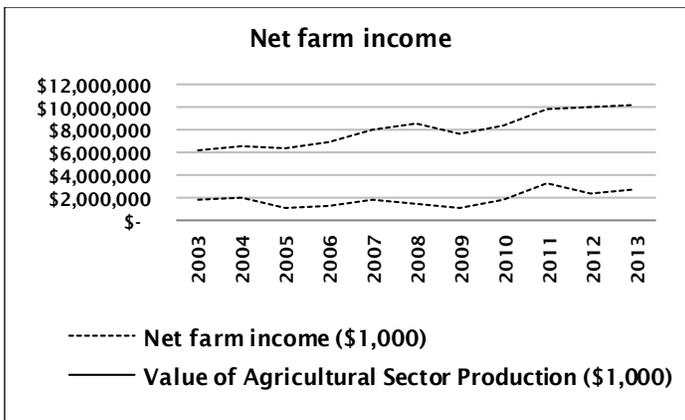
INDICATOR GROUP:

STRENGTHEN COMPETITIVENESS

While many variables impact the economic health of agriculture in Washington, an overall sense of costs and returns can indicate whether farming is strong, leading to farmers continuing to farm or new farmers coming on with a chance to be profitable. A diversified state agricultural economy improves opportunities for all farmers, regardless of size or scope. Local markets such as farmers markets, direct sales, and wholesale establishments all increase value and viability for Washington farmers.

Farm Income and Net Value

Insufficient return on investment can produce a 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.

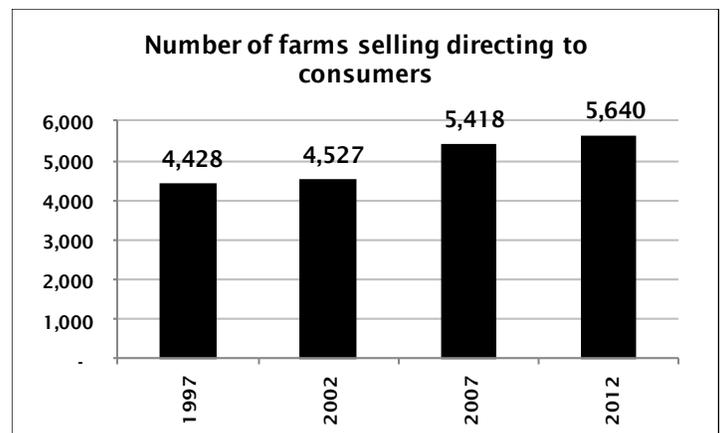


	Number of Farmers Markets
2003	76
2004	93
2006	95
2007	103
2008	108
2009	140
2013	150

Farmers Markets and Direct Marketing

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 re-circulated to support other local jobs and businesses.

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 direct from the farm, farm stand, U-pick, Internet/mail-order, farmers market, Community Supported Agriculture, direct to restaurants, hospitals, grocery stores, and schools.



More Information:

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Opportunity Outlook

For farmers interested in direct marketing, provide outreach and support to help them get their product to a localized marketplace.



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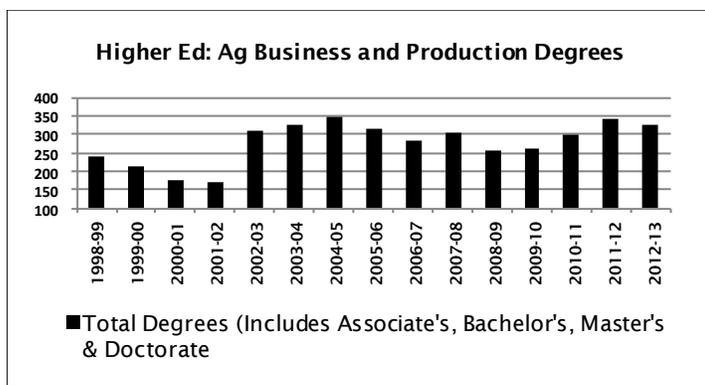
INDICATOR GROUP:

EMERGING OPPORTUNITIES

The prosperity of farming depends in part 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.

Agriculture Training

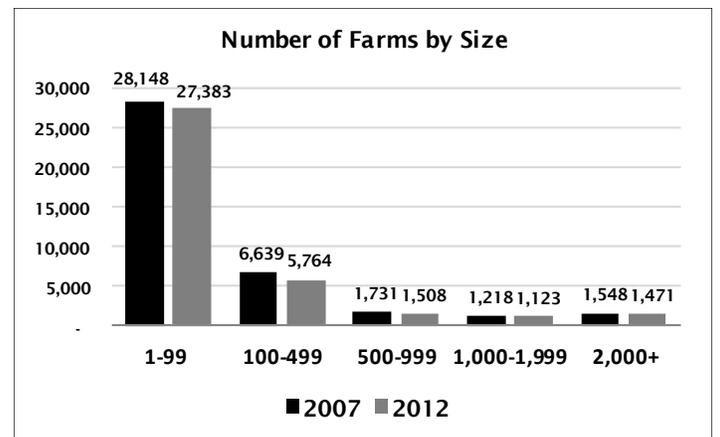
A college-trained workforce may indicate the interest and potential for new farmers. An important indicator is the number of degrees Washington students earn each year. An increase in the number of degrees indicates a desire to learn more about farming and begin their own farm or take a larger share of the management on the family farm. In addition, farm internship programs are gaining popularity as Washington initiates a pilot program to provide labor certainty for interns and farmers.



	1997	2002	2007	2012
Individuals/family, sole proprietorship, Family-held corporations	36,516	33,085	35,516	33,324
Partnerships, Non-family corporations, Others - cooperative, estate or trust, institutional, etc	3,597	2,845	3,768	3,925

Washington Farms

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. Farms owned by individuals or families accounted for 89.5 percent of total farms in Washington in 2012 – a half percent decrease from 2007. Farms owned by individuals or families accounted for 34 percent of total farm acreage, a 7 percent decrease from 2007. The majority of farms are under 100 acres. This may indicate farms facing pressure to convert as a trend to increase size and consolidate.



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Opportunity Outlook

Efforts should focus on continued education for new and beginning farmers and improve preservation of farmland through land use protections tools.

Washington State Farmland Preservation

Indicator: Competition of Land Use and Conversion

Measure: The number of farms and the acreage of land in farms for Washington from 1950 – through present.

Background: Competition of land refers to the danger of farmland loss due to changes in surrounding land uses. Historical 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.

Nationally, the 2012 Census of Agriculture showed a decrease in the number of farms, and reversed the upward trend that was shown in the annual estimates of farm numbers since the 2007 Census of Agriculture. Washington reflected this trend.

While overall farm and land in farms numbers are down, the market value of Washington agricultural products sold grew 34% from 2007 to \$9,120,749.

Trends & Findings:

- Between 2000 and 2014, the numbers of farms in Washington has declined 0.8%.
- During the same period, the numbers of acres has dropped 5.4%
- Since 2000, the average price per acre of farm real estate has more than doubled.

Sources:

USDA 2012 Census of Agriculture: Released May 2014, by the United States Department of Agriculture.

http://www.agcensus.usda.gov/Publications/2012/Full_Report/Census_by_State/Washington/

2013 Washington Annual Agricultural Bulletin: Released February 2014 by the USDA National Agricultural Statistics Service

http://www.nass.usda.gov/Statistics_by_State/Washington/Publications/Annual_Statistical_Bulletin/

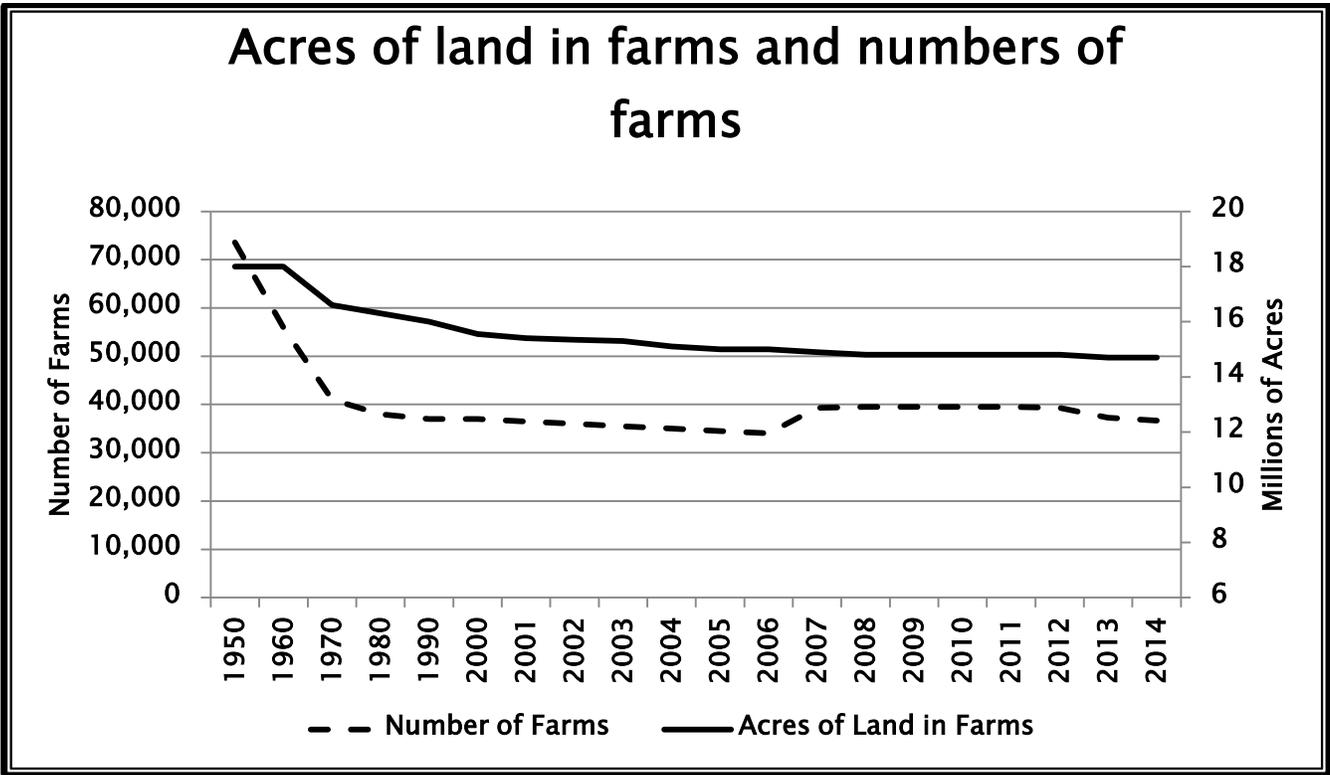


FIGURE 1 - USDA CENSUS OF AGRICULTURE

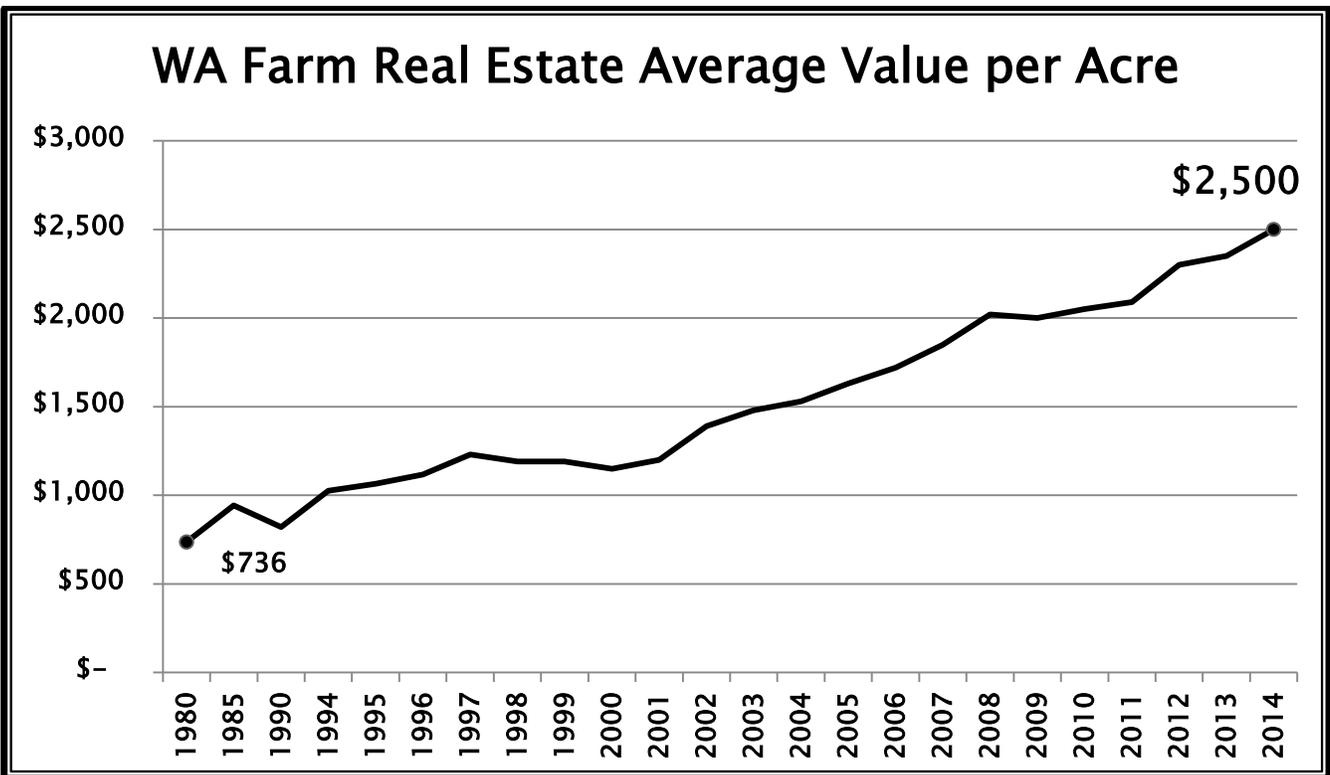


FIGURE 2 - WASHINGTON ANNUAL AGRICULTURAL BULLETIN

Washington State Farmland Preservation

Indicator: CHARACTERISTICS OF PRINCIPAL FARM OWNERS

Measure: Average age, principal occupation, minority.

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:

- Minority farmers continued to see positive growth having increased over 3%.
- Latino principal farmers has continued to be the strongest growth demographic having increased 14% since 2007 to 1,874 farmers.
- The average age of Washington farmers climbed to 58.8, mirroring what is occurring nationally. The national age average is 58.3
- The number of farmers under the age of 35 grew from 727 in 2007 to 852 in 2012.
- The number of full owner farmers on the farm for 10 years or less declined 30% to 6,911. For all farmers on the farm under 10 years, the number declined 16%.

Sources:

USDA 2012 Census of Agriculture: Released May 2014, by the United States Department of Agriculture.

http://www.agcensus.usda.gov/Publications/2012/Full_Report/Census_by_State/Washington/

USDA 2007 Census of Agriculture: Released February 2009, by the United States Department of Agriculture.

http://www.agcensus.usda.gov/Publications/2007/Full_Report/Volume_1,_Chapter_1_State_Level/Washington/

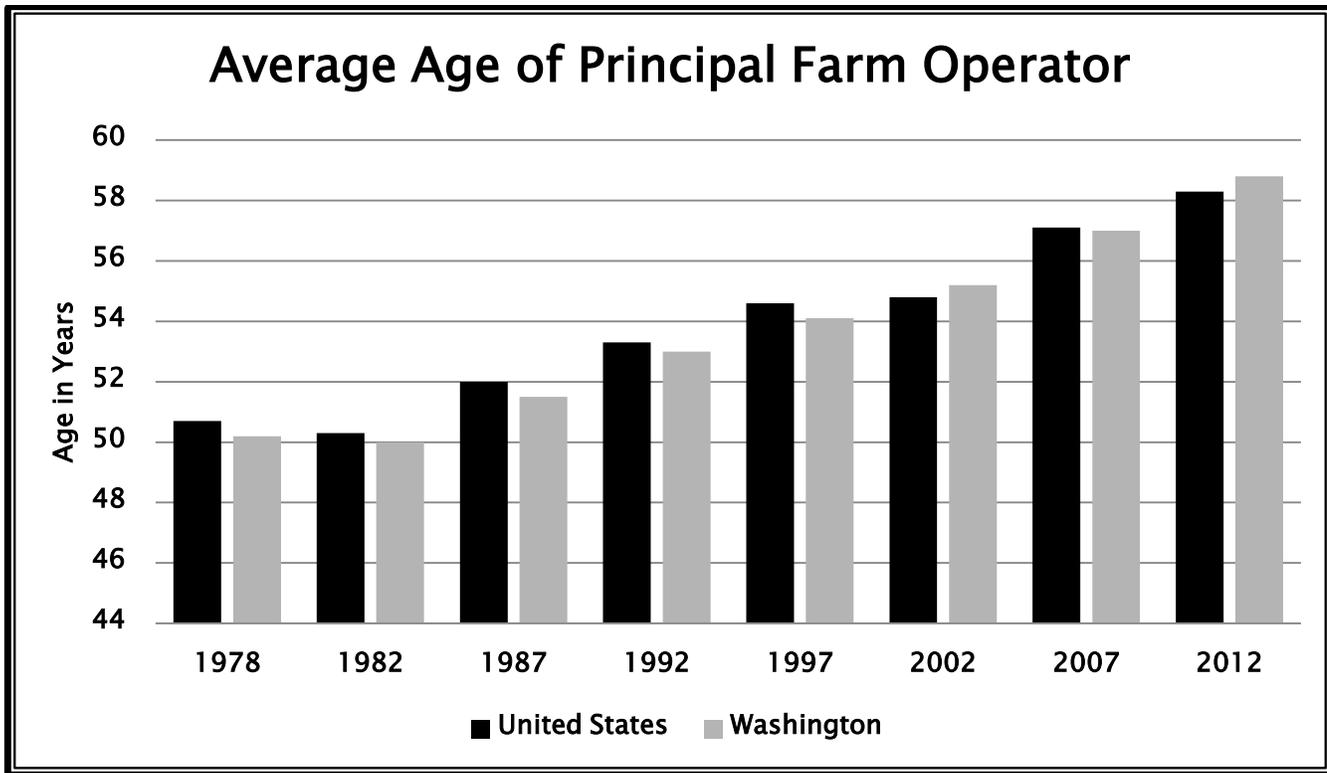


FIGURE 3 - USDA CENSUS OF AGRICULTURE

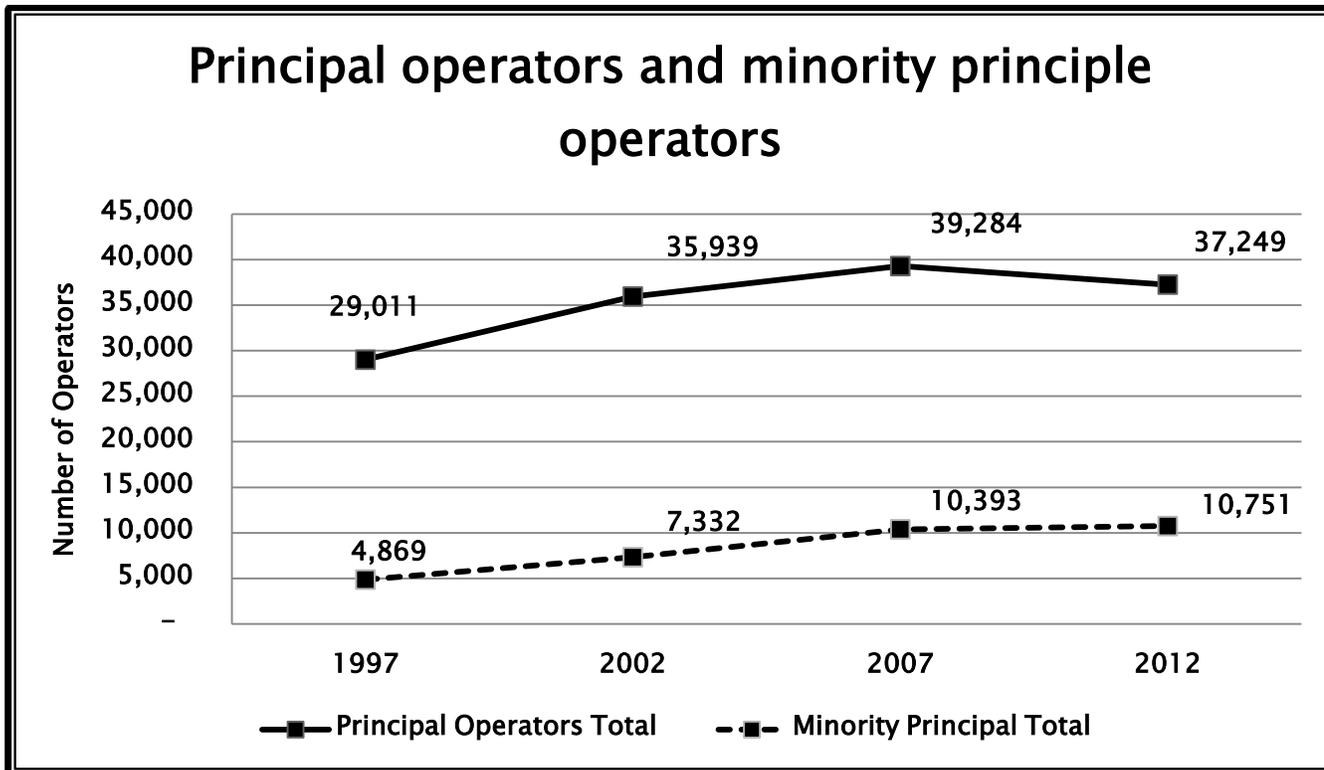


FIGURE 4 - USDA CENSUS OF AGRICULTURE

Washington State Farmland Preservation

Indicator: NUMBER OF FOOD PROCESSORS

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 processors, the lower the transportation costs and increased potential for viability. The Census Bureau defines food manufacturing establishments 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, increasing 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:

- The number of food manufacturing plants in Washington has declined from 771 in 2007 to 759 in 2012.
- Food processing and manufacturing industries (excluding seafood) produce output valued at \$9 billion and contribute \$1.5 billion in value added
- The total economic impact of this sector is \$17 billion annually.
- In 2012, there were 32,671 employed in the industry, up 3% from 2011.
- In 2012, the average wage paid to food manufacturing employees in Washington was \$41,450 – up 1% from 2011.
- Animal processing facilities declined 7% from 2011 to 78 facilities.

Sources:

United States Census Bureau: County Business Patterns

<http://www.census.gov/econ/cbp/index.html>

WSU Agriculture's Contribution to Washington's Economy

www.impact.wsu.edu/report/WashingtonAgEconomicImpact.pdf

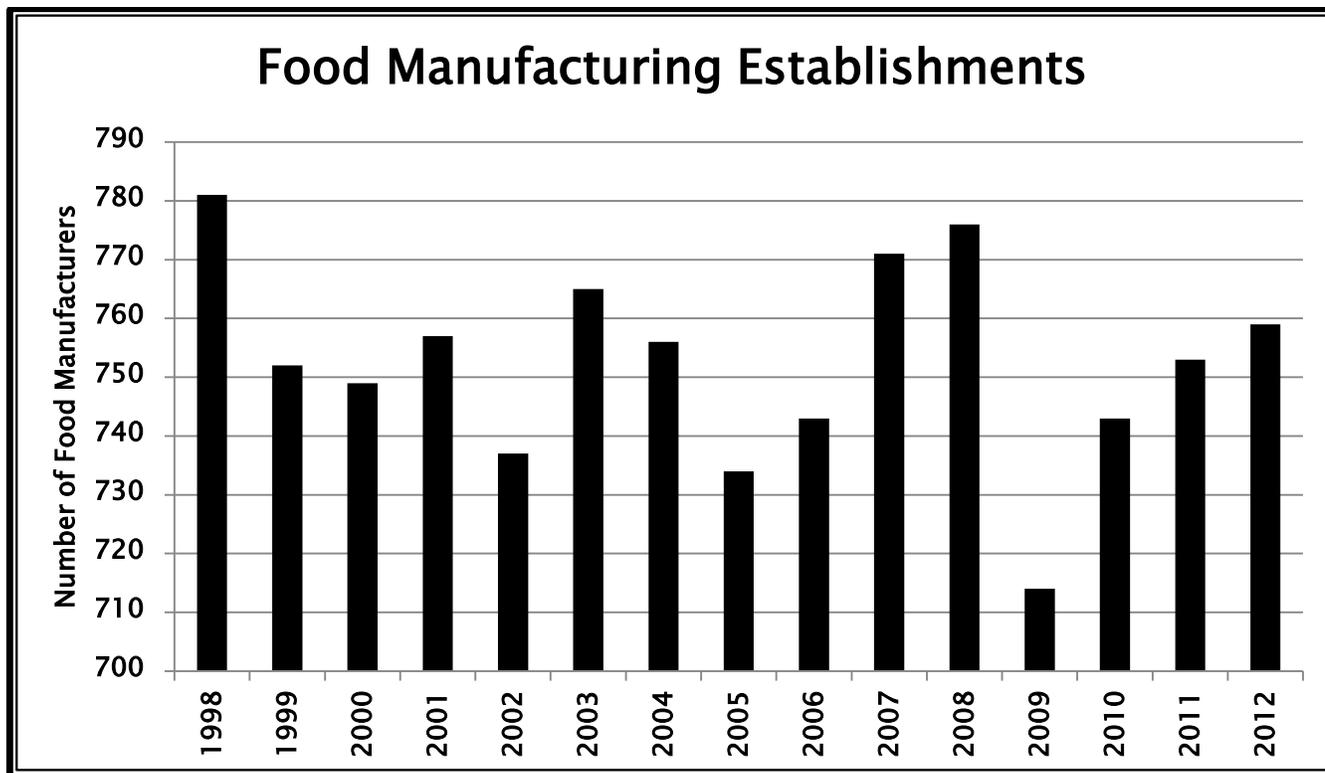


FIGURE 5 - U.S. CENSUS BUREAU (CENSTATS DATABASE)

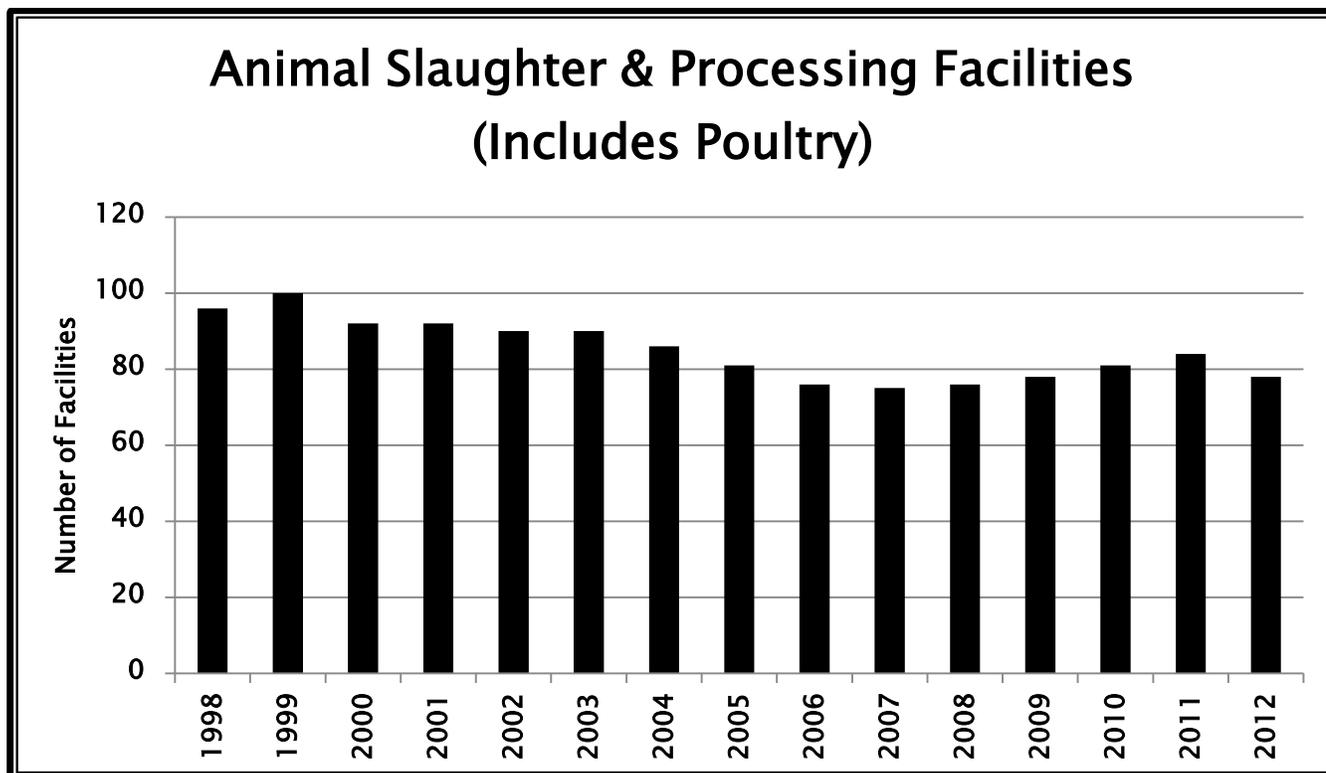


FIGURE 6 - U.S. CENSUS BUREAU (CENSTATS DATABASE)

Washington State Farmland Preservation

Indicator: FARM AND FARM RELATED EMPLOYMENT

Measure: Employment numbers in farm and farm-related industries from 2002–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.

Agriculture produced an annual average of more than 88,000 jobs in 2012, almost half of which were seasonal. Farmworkers in Washington earned \$2.1 billion in 2012 and almost 40,000 agriculture-related manufacturing workers earned an additional \$1.7 billion.

Trends & Findings:

- Hired farm labor expenses have grown 73% from 2002 (\$987 million) to \$1.7 billion in 2012.
- Hired farm labor expenses account for 21% of farm production expenses
- Total farm production expenses have increased 76% since 2002.

Sources:

Workforce Explorer – 2013 WA Employment Security Department: Annual Labor Market and Economic Report <https://fortress.wa.gov/esd/employmentdata/reports-publications/economic-reports/annual-labor-market-and-economic-report>

USDA 2012 Census of Agriculture: Released May 2014, by the United States Department of Agriculture.

http://www.agcensus.usda.gov/Publications/2012/Full_Report/Census_by_State/Washington/

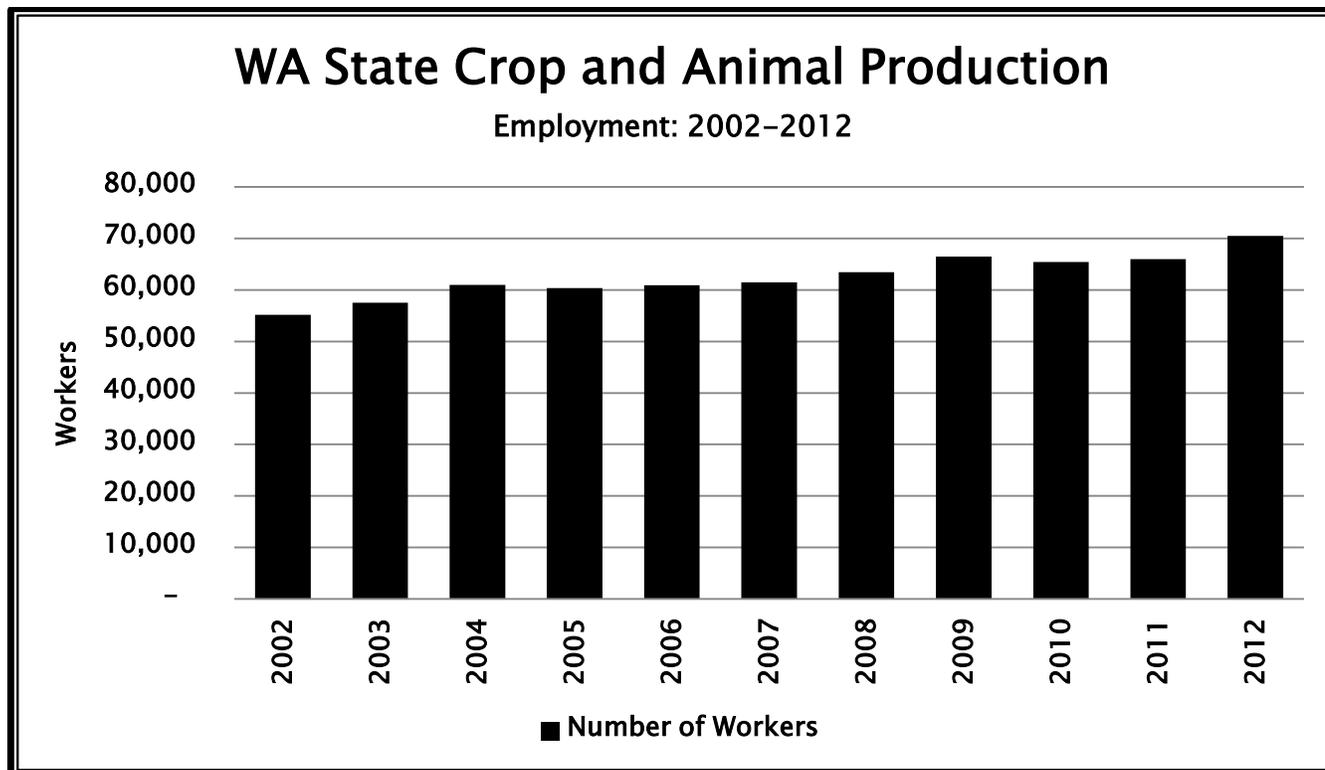


FIGURE 7 - WA WORKFORCE EXPLORER QCEW ANNUAL DATA



FIGURE 8 - EMPLOYMENT SECURITY DEPARTMENT - LABOR MARKET REPORT

Washington State Farmland Preservation

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.

Nationally, water use in the United States in 2010 was estimated to be about 355 billion gallons per day (Bgal/d), which was 13 percent less than in 2005. Nationally, the 2010 estimates put total withdrawals at the lowest level since before 1970.

Trends & Findings:

- Surface-water withdrawals (3.3 Mgal/d) were 22 percent less than in 2005.
- Groundwater withdrawals (1.6 Mgal/d) were about 7 percent more than in 2005.
- Irrigation withdrawals were 3.1 Mgal/d in 2010, a 10 percent decline from 2005.
- Surface-water withdrawals for irrigation accounted for 74 percent of the total irrigation withdrawals, 8 percent less than in 2005.
- Groundwater irrigation withdrawals increased 26 percent from 2005.
- Livestock water use declined 9 percent from 2005.
- Public supply water use declined from 9% to 910 (Mgal/d) in 2010.
- Self-supplied domestic water increased 31% to 113 (Mgal/d) in 2010.
- The population served by self-supplied water increased 11% to 1 million.

Sources:

USGS Estimated Domestic, Irrigation, and Industrial Water Use in Washington, 1985, 1990, 1995, 2000, 2005, 2010 <http://pubs.usgs.gov/circ/1405/>

USDA 2012 Census of Agriculture: Released May 2014, by the United States Department of Agriculture.

http://www.agcensus.usda.gov/Publications/2012/Full_Report/Census_by_State/Washington/



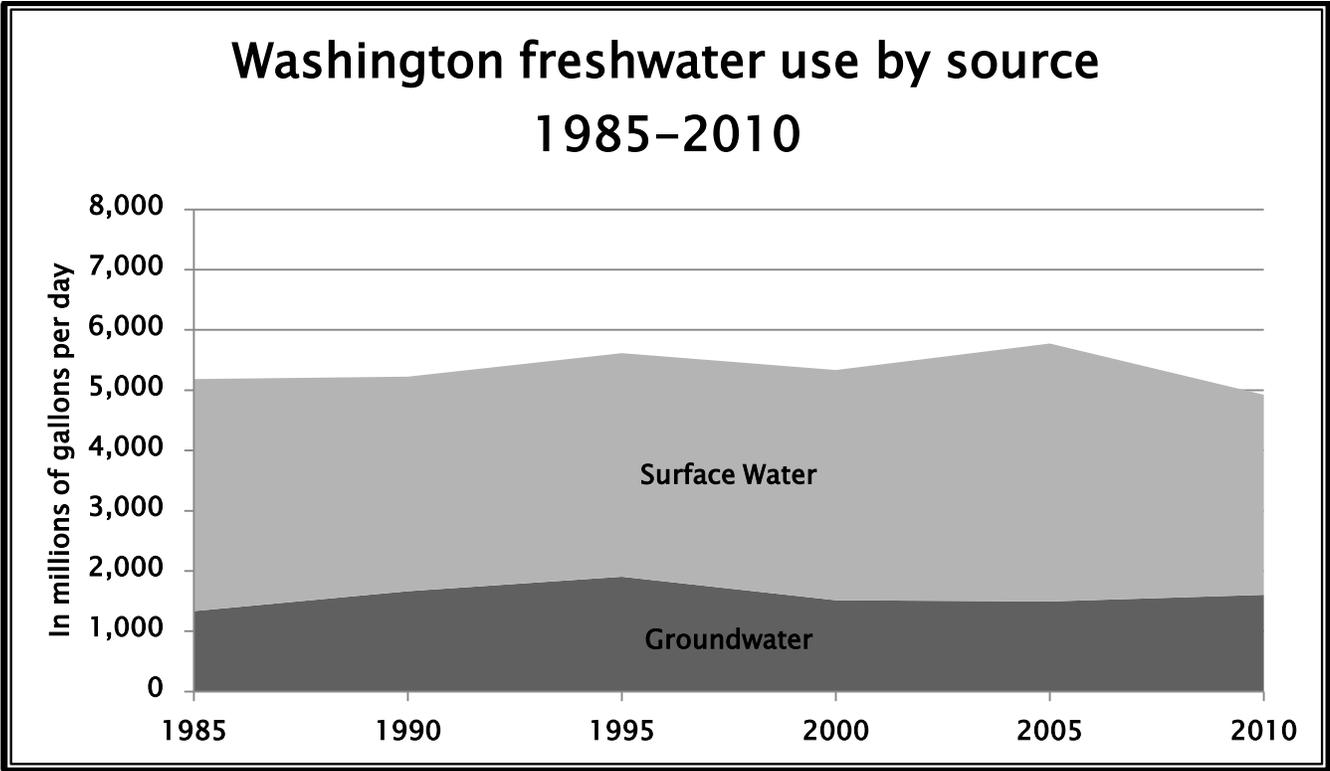


Figure 9 - USGS Estimated Use of Water in the United States

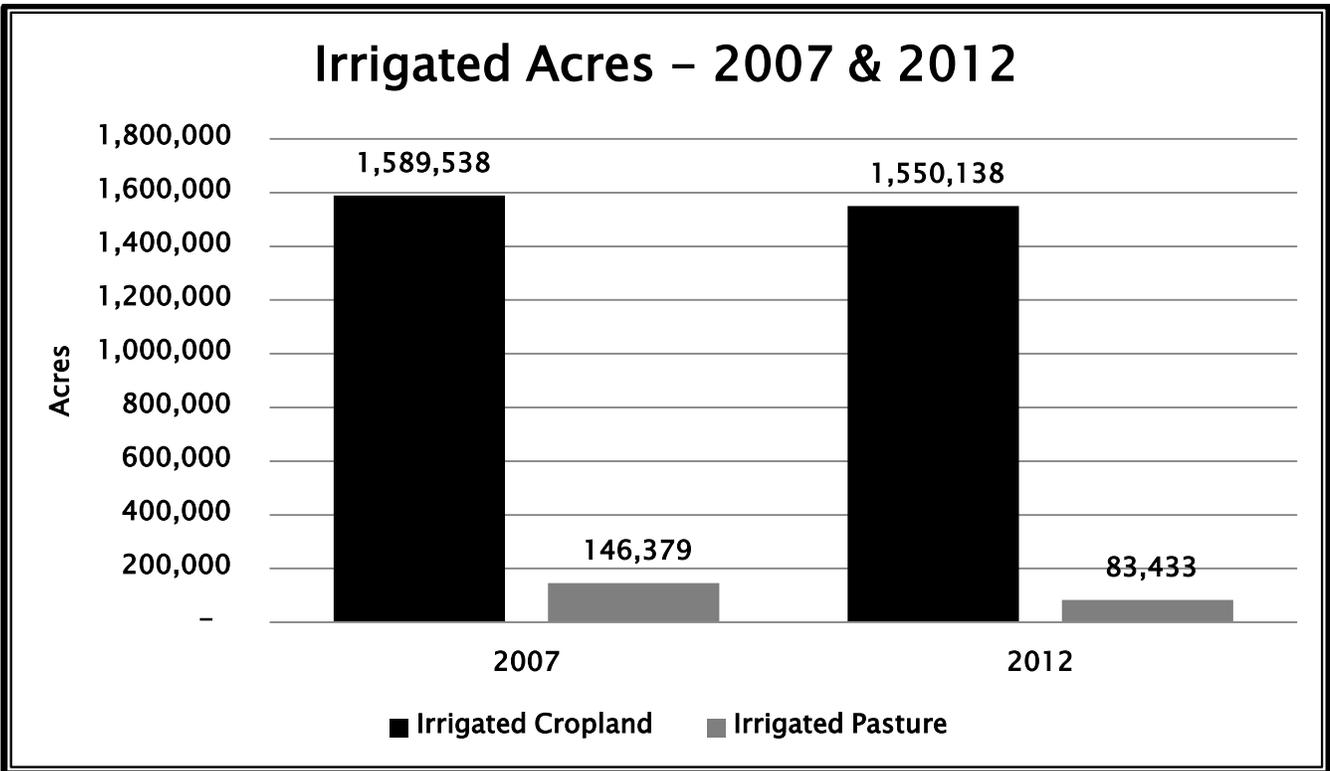


FIGURE 10 - USDA CENSUS OF AGRICULTURE

Washington State Farmland Preservation

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 2013, 11,069,996 acres were enrolled in Open Space Farm and Agriculture.
- The lowest enrollment since 2005 is 10,862,144 acres in 2008.
- Counties seeing the biggest % increase in enrollment from 2011 are:
 - Wahkiakum (17% or 4,055 acres), Stevens (3% or 2,019 acres), and Whitman (1.5% or 19,214 acres).
- Counties with the biggest % declines in enrollment from 2011 are:
 - King (-6.7% or 3,095 acres), Kitsap (-5.6% or 397 acres) and Grays Harbor (-3.9% or 1,027 acres).
- In 2013, the percent value reduction was 70% – overall, the 20 year average is 69%.

Sources:

WA Department of Revenue Property Tax Statistics.

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

X



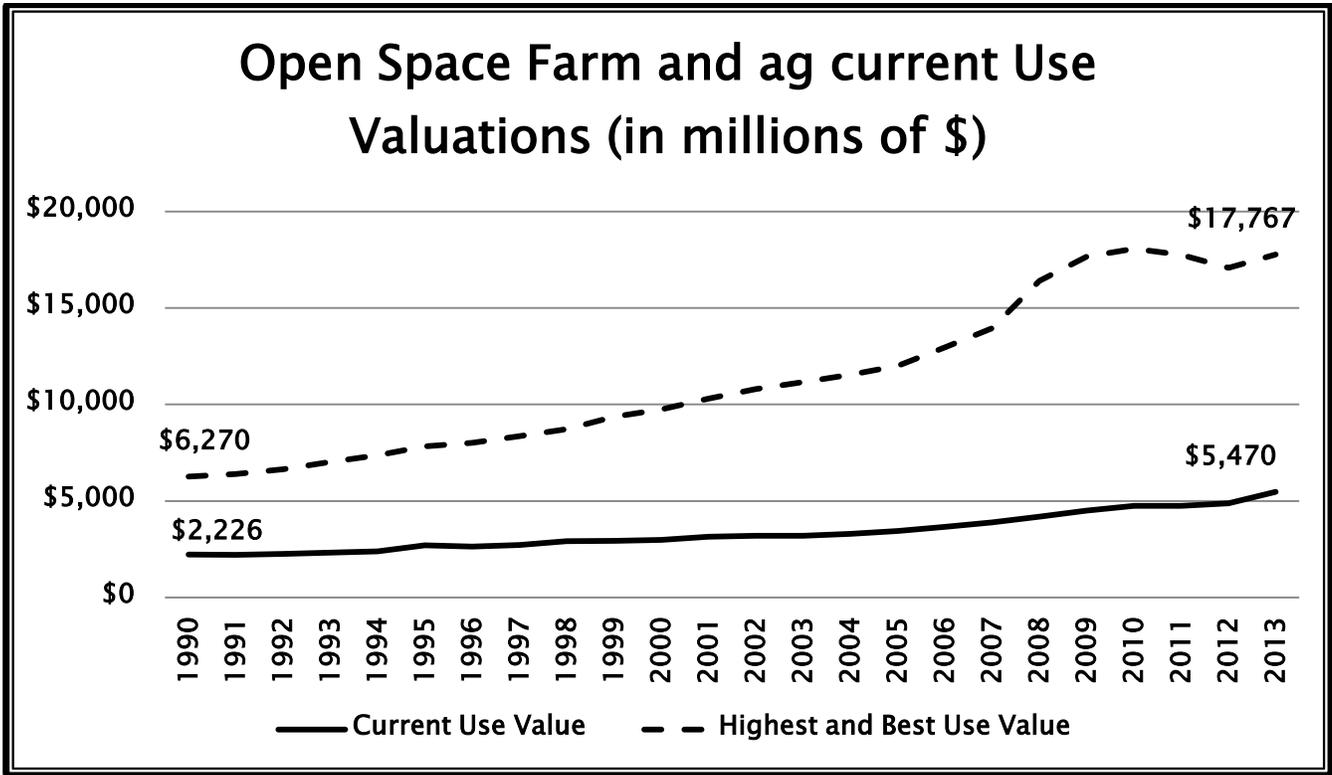


FIGURE 11 - WASHINGTON STATE DEPARTMENT OF REVENUE PROPERTY TAX DIVISION

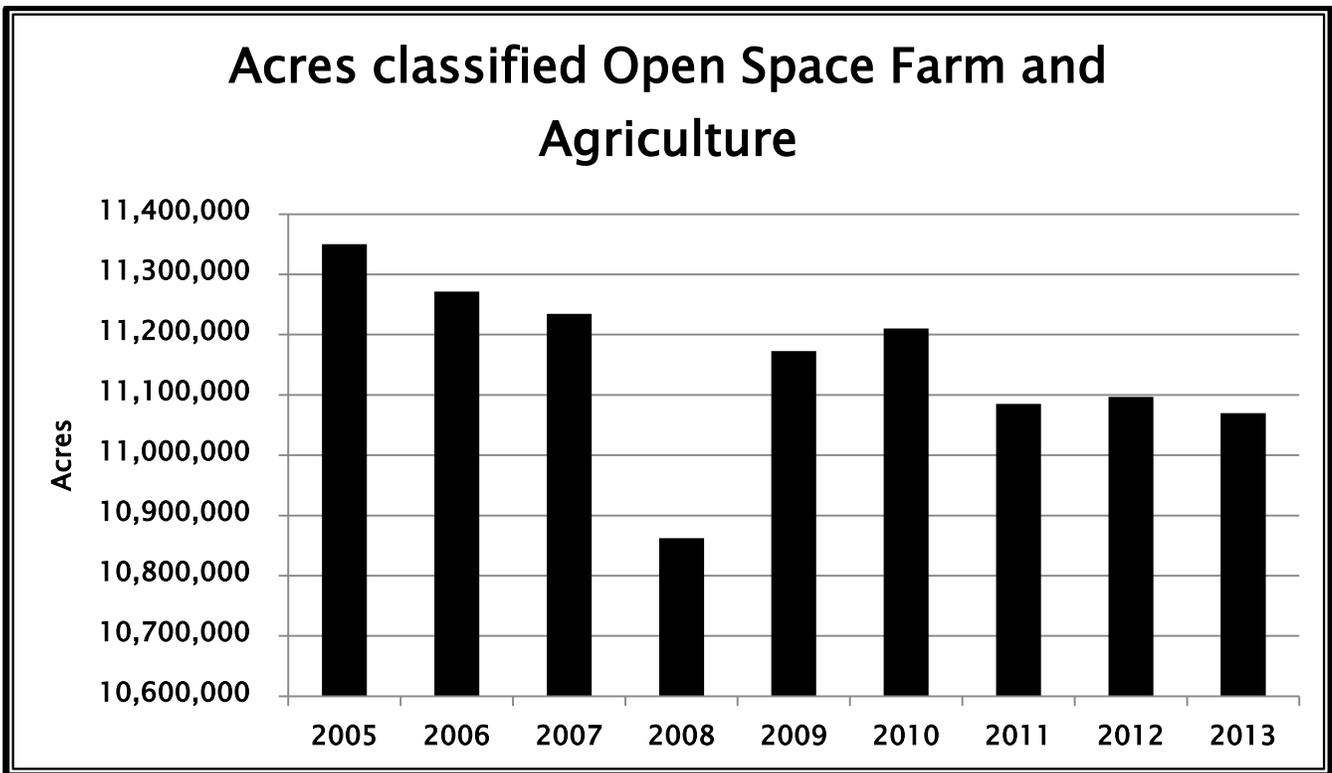


FIGURE 12 - WASHINGTON STATE DEPARTMENT OF REVENUE PROPERTY TAX DIVISION

Washington State Farmland Preservation

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 5 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 2012, farms less than 100 acres accounted for just over 10% of production value.
- Farms 500 acres and over accounted for 68% of production value.
- Farms under 10 acres increased nearly 22% from 2007 to 7,969 in 2012.
- The median size of farm in Washington declined by 6 acres from 2007 to 24 acres.
- Farms 1,000 acres or more declined 6.2% to 2,594 farms. This farm size accounts for nearly 7% of Washington farms
- Farms under 50 acres account for 63.2% of all farms in Washington.
- The average size of farm grew 15 acres in 2012 to 396 acres, up 4% from 2007.

Sources:

USDA 2012 Census of Agriculture: Released May 2014, by the United States Department of Agriculture.

http://www.agcensus.usda.gov/Publications/2012/Full_Report/Census_by_State/Washington/



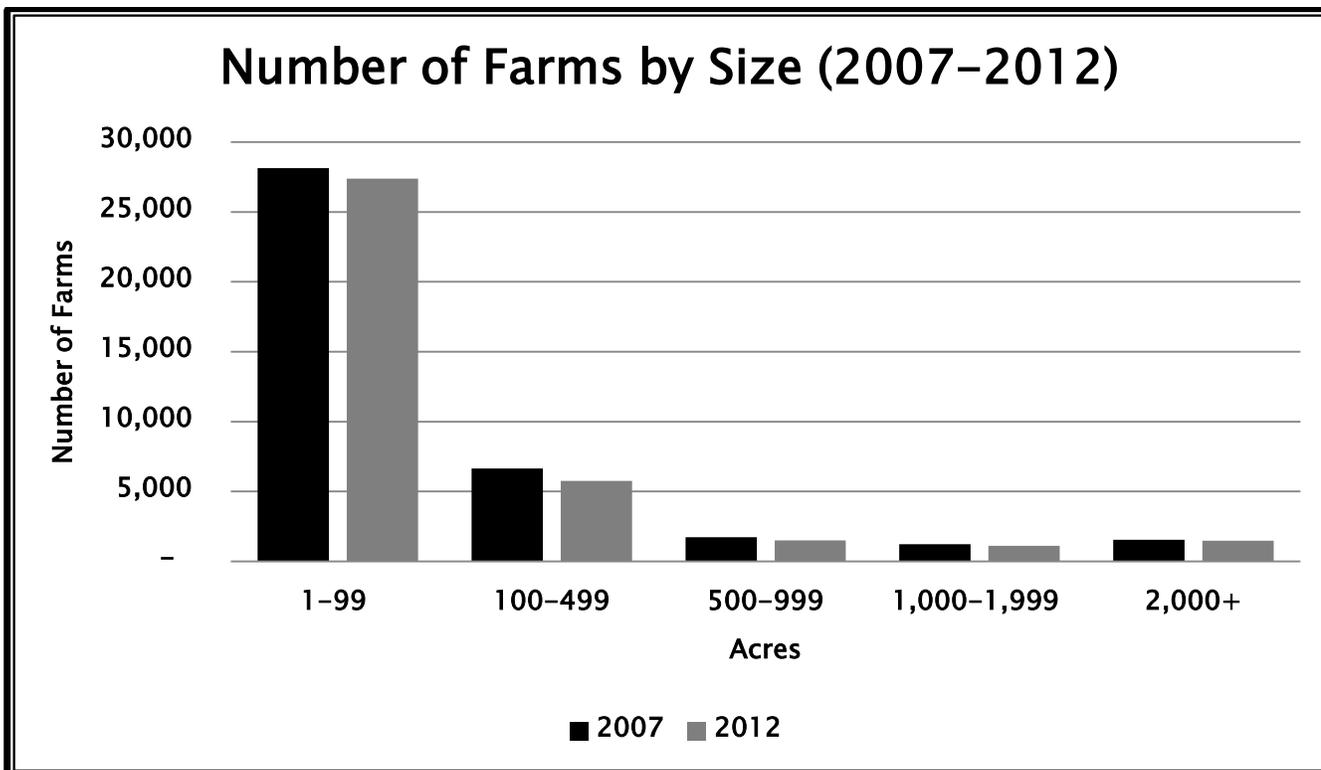


FIGURE 13 - USDA CENSUS OF AGRICULTURE

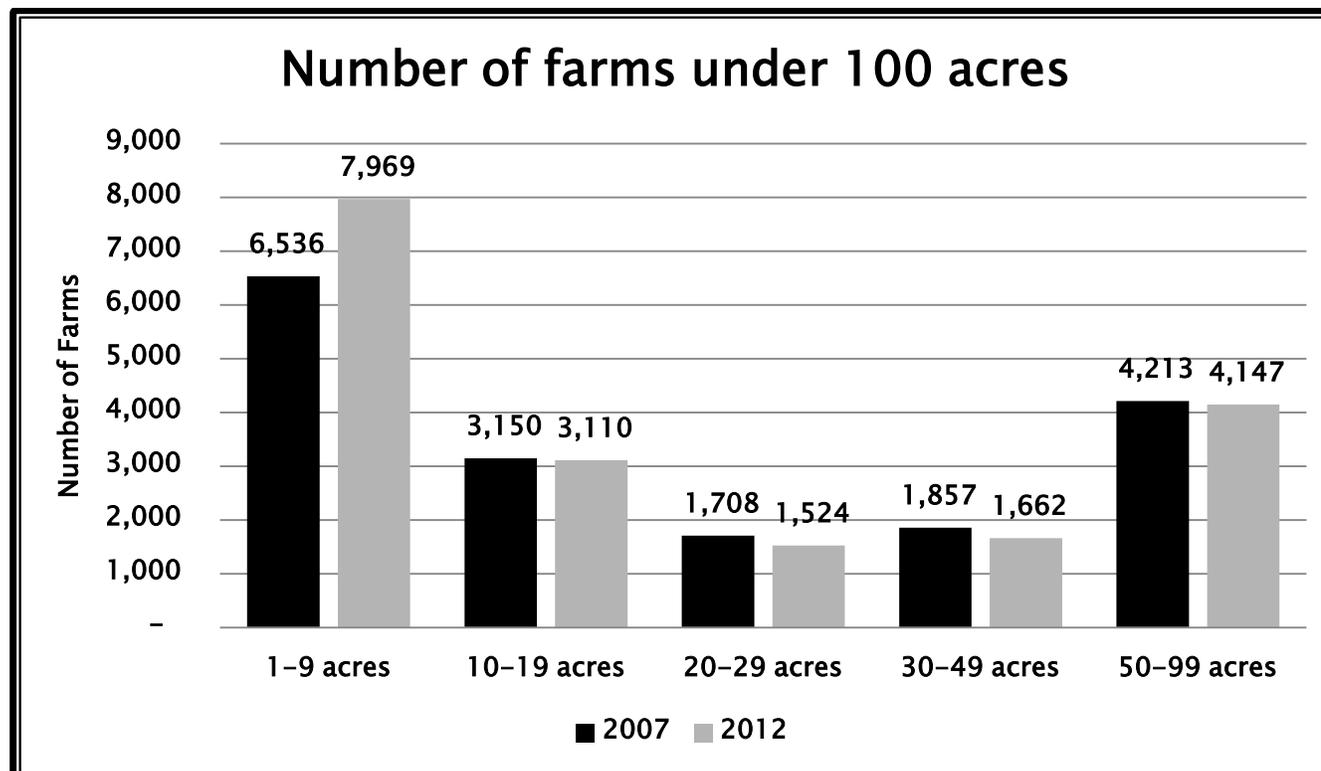


FIGURE 14 - USDA CENSUS OF AGRICULTURE

Washington State Farmland Preservation

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.

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 and is rounded to the nearest 100,000 acres. 2012 NASS Census data indicates a gradual decline from 2007–2012.

Recent NASS data shows a slight change in land in farms from the 2007 Census. However, this NASS Land in Farms acreage number doesn't mean high value cropland is declining (see definition above for land considered a farm). 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.

Trends & Findings:

- WSDA data shows an increase of around 200,000 acres from 2008–2013.
- In 2013, WA farms and ranches produced crops and livestock valued at \$10.02 billion, a 2 percent increase from 2012.
- Cattle and calves, valued at \$706 million, increased 7 percent from the previous year.

Sources:

WSDA Cropland Geodatabase:

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

USDA NASS Land in Farms Report:

http://www.nass.usda.gov/Statistics_by_State/Washington/Historic_Data/economics/landinfrm.pdf

USDA 2012 Census of Agriculture: Released May 2014, by the United States Department of Agriculture:

http://www.agcensus.usda.gov/Publications/2012/Full_Report/Census_by_State/Washington/



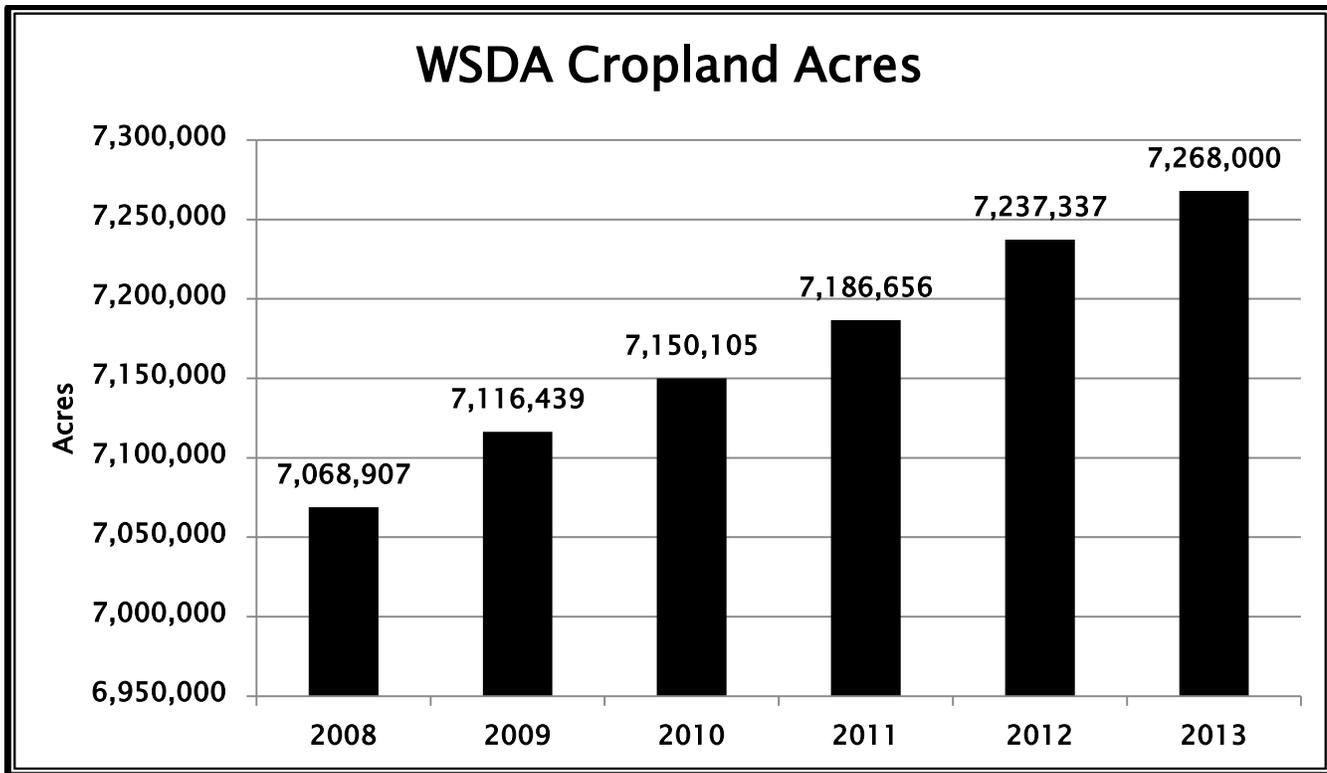


FIGURE 15 - WASHINGTON DEPARTMENT OF AGRICULTURE

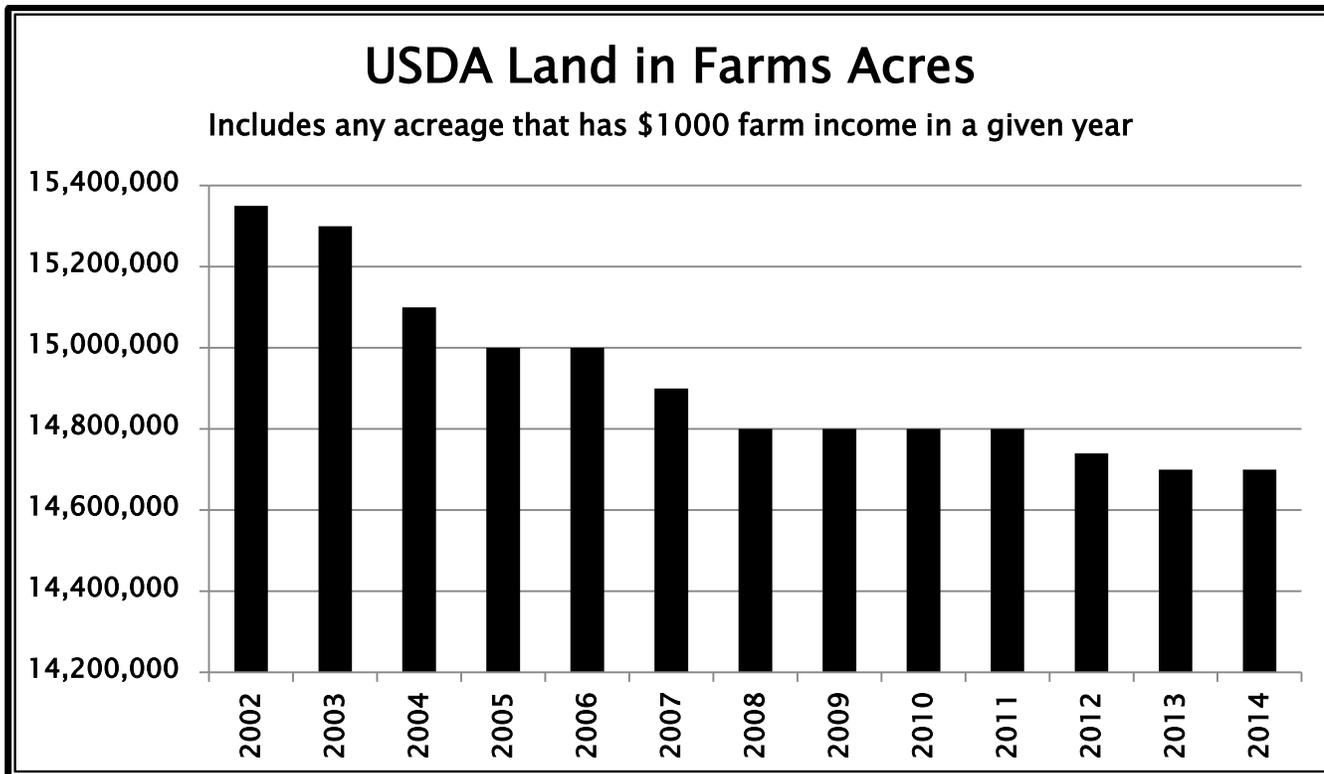


FIGURE 16 - USDA CENSUS OF AGRICULTURE

Washington State Farmland Preservation

Indicator: PUBLIC OWNERSHIP OF LAND

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

Background: The 2014 Public Lands Inventory is focused on publicly-owned natural resource and recreation lands. It integrates data from the 2012 Washington State Parcel Database, which is managed by the University of Washington's School of Environmental and Forest Sciences, with updated information from state agency partners – the Department of Natural Resources (DNR), Department of Fish and Wildlife (WDFW), and the State Parks and Recreation Commission (State Parks).

As this inventory is managed and maintained into the future, change analysis will be attainable. For the 2014 inventory, the numbers represent a baseline for future reporting.

In addition to the Inventory, WDFW released an inventory on agricultural land holdings. This data is reflected in the trends and findings below.

Trends & Findings:

- In 2012, WDFW had 69 crop leases involving 13,499 acres, a decline of 1,000 acres since 2008.
- WDFW currently has 41 grazing permits on 55,019 acres a decline of 24,837 acres from 2008.
- In 2012, WDFW reported water rights on 3,057.81 of DFW owned land.
- The amount of these water rights totals 9,814.69 acre/ft a year.
- DNR leases and permits about 1.1 million trust acres for agriculture and grazing.

Sources:

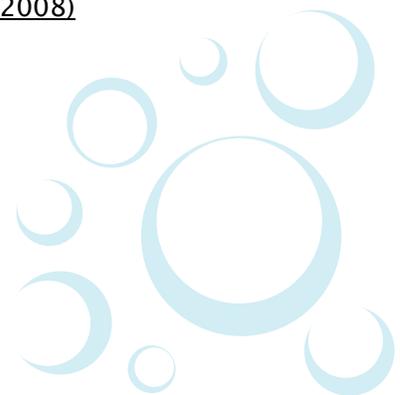
WA Public Lands Inventory: <http://publiclands.smartmine.com/>

WA Department of Natural Resources Agricultural Program:

http://www.dnr.wa.gov/BusinessPermits/Topics/LandLeasing/Pages/psl_leasing_agriculture_land_s.aspx

WDFW: [Report on the Inventory of Department Purchased or Leased Lands \(2008\)](#)

WDFW: [2013 Report on Inventory of Agricultural Land Holdings](#)



2014 Public Lands Inventory (acres)

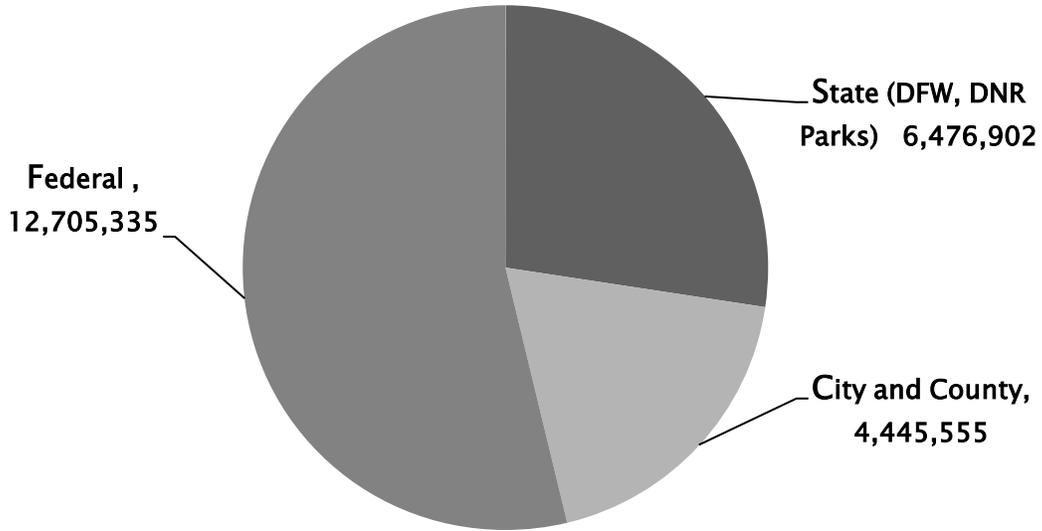


FIGURE 17 - 2014 PUBLIC LANDS INVENTORY

2014 Public Lands Inventory State Breakdown (acres)

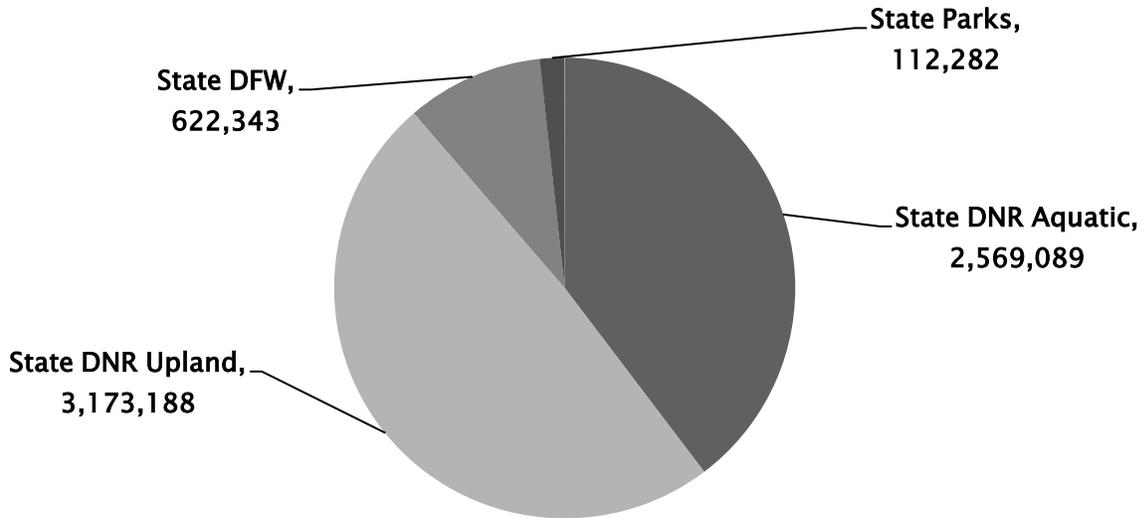


FIGURE 18 - 2014 PUBLIC LANDS INVENTORY

Washington State Farmland Preservation

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, like 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 farms 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 1997 and 2012, farms reporting sales directly to consumers increased 27%.
- Since the 2007 Census, the value of sales has increased 3.5%.
- In 2012, 192 farms reported over \$50,000 in sales representing \$25 million in sales.
- Farms reporting sales over \$50,000 increased 42% from the 2007 Census
- The top county reporting direct to consumer sales by value in 2012 was Yakima County with \$4.1 million, a 38% increase from 2007. Thurston County was second in the state with \$3.4 million - a 113% increase from 2007.

Sources:

USDA Census of Agriculture: United States Department of Agriculture.

http://www.agcensus.usda.gov/Publications/2012/Full_Report/Census_by_State/Washington/



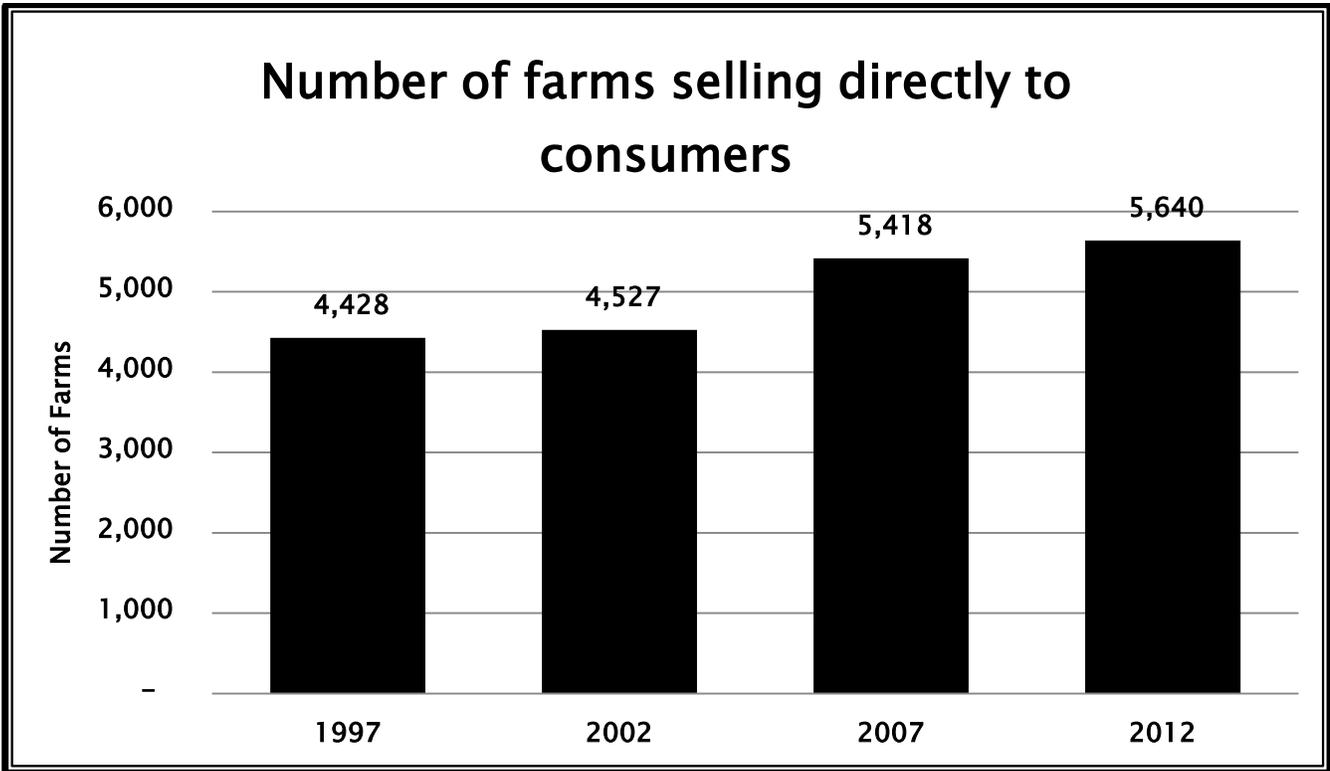


FIGURE 19 - USDA CENSUS OF AGRICULTURE

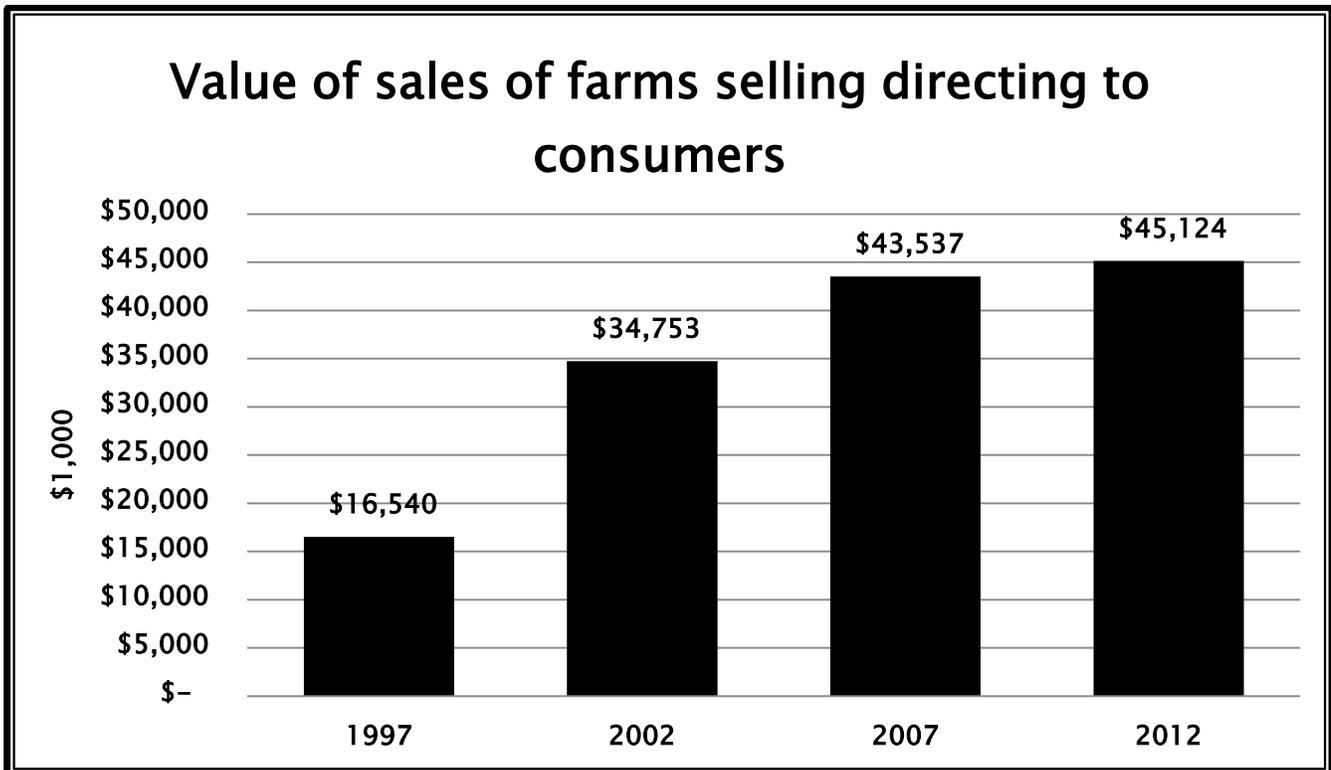


FIGURE 20 - USDA CENSUS OF AGRICULTURE

Washington State Farmland Preservation

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 use data from the following sources:

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 Product and Raw Material Wholesalers (NAICS 4245) include wholesalers of grain and field beans, livestock, and other farm product raw materials.

Refrigerated Warehousing and Storage industry (NAICS 49312) comprises establishments primarily engaged in operating refrigerated warehousing and storage facilities. The services provided by these establishments include blast freezing, tempering, and modified atmosphere storage services.

Farm Product Warehousing and Storage (NAICS 493130) includes establishments primarily engaged in operating bulk farm product warehousing and storage facilities (except refrigerated). Grain elevators primarily engaged in storage are included in this industry. An establishment is defined as an individual location. A single company may own and operate many establishments.

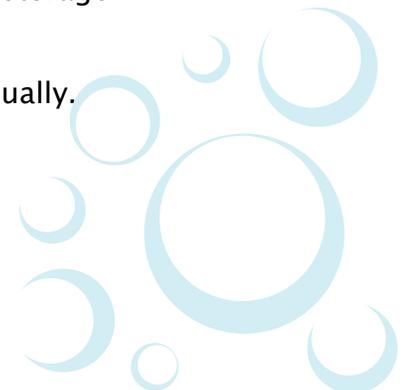
Trends & Findings:

- In 2012 grocery and farm product wholesalers employed over 24,000 employees, up three percent from 2011.
- Annual payroll for these two sectors declined half a percent from 2011 to \$1.18 billion annually.
- In 2012, employment for refrigerated warehousing and farm product storage sectors declined 12% from 2011 to 1,960 employees.
- Annual payroll for these two sectors declined 9.8% to \$82 million annually.

Sources:

United States Census Bureau: County Business Patterns

<http://www.census.gov/econ/cbp/index.html>



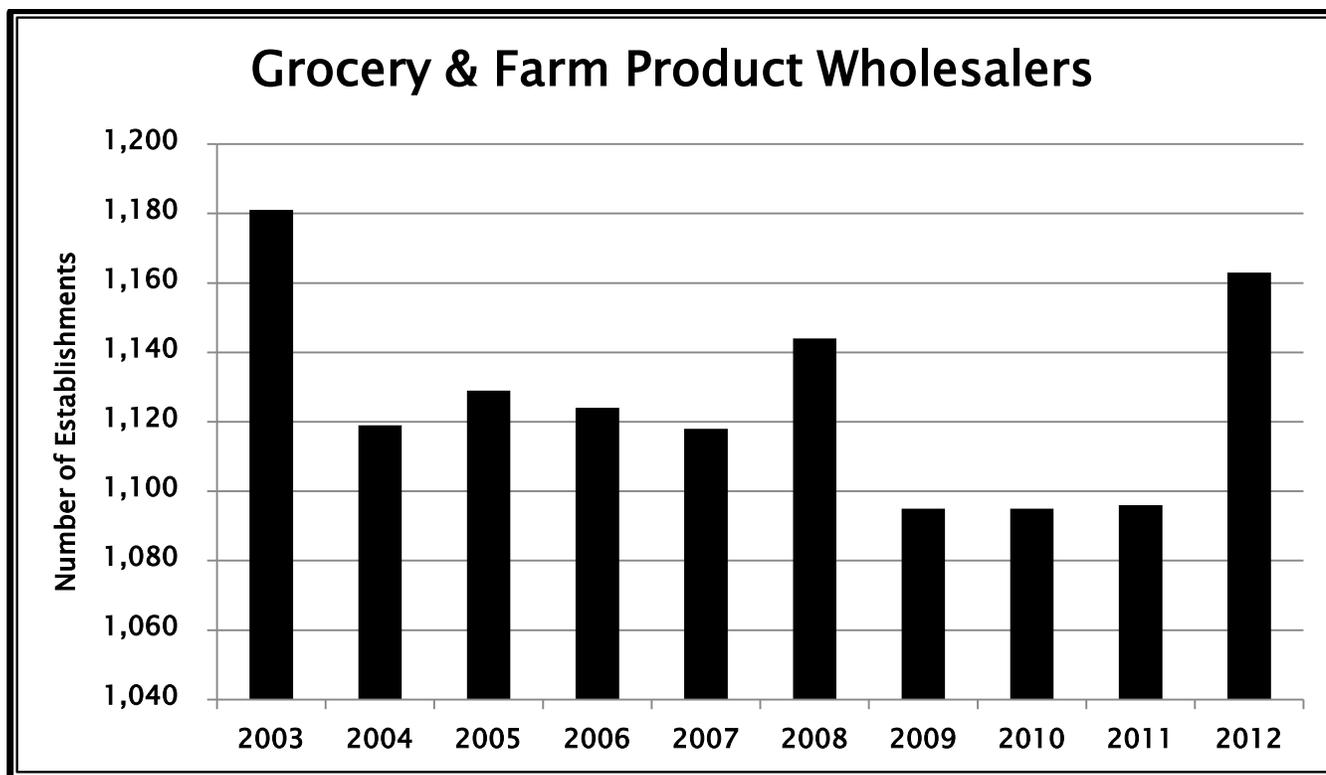


FIGURE 21 - U.S. CENSUS BUREAU (CENSTATS DATABASE)

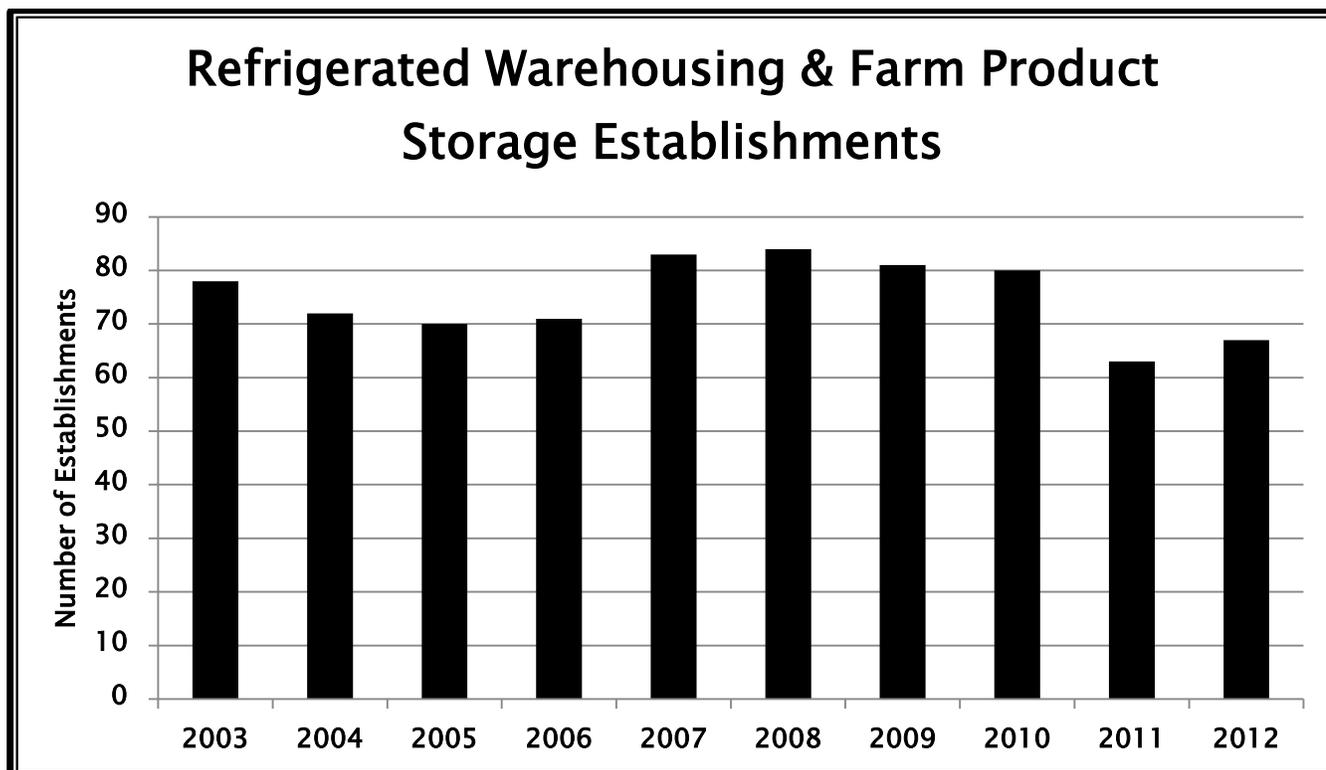


FIGURE 22 - U.S. CENSUS BUREAU (CENSTATS DATABASE)

Washington State Farmland Preservation

Indicator: PRIME AGRICULTURAL SOILS

Measure: 2010 prime farmland, by land cover/use from the National Resources Inventory. The most current NRI data is for 2010.

Background: 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.

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 2010, prime farmland soils used for agriculture (cropland and pastureland) has declined approximately 262,000 acres.
- Overall, prime farmlands have decreased about 12% in the 1982 to 1997 time period.

Sources: Prime farmland, by land cover/use Summary Report, 1997 National Resources Inventory, Revised December 2000

http://www.nrcs.usda.gov/technical/NRI/1997/summary_report/table9.html



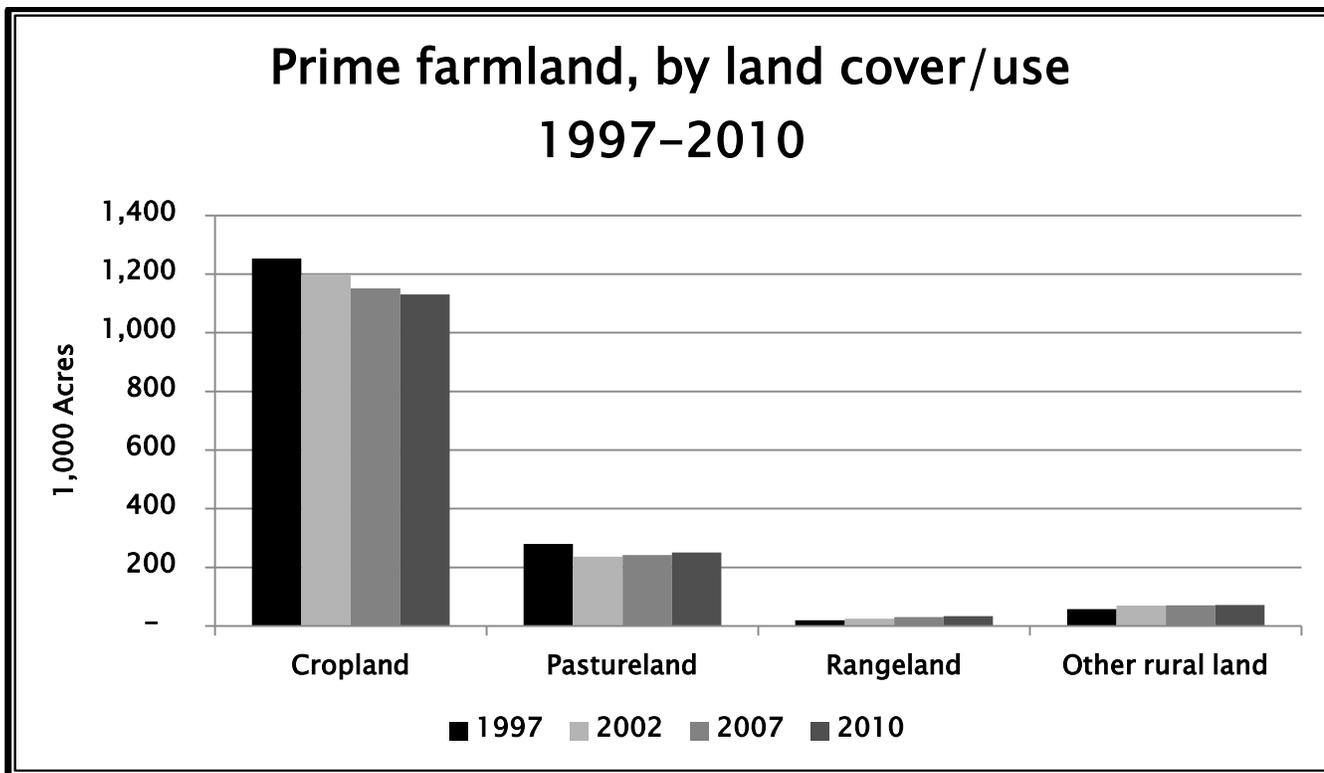


FIGURE 23 - NATURAL RESOURCE INVENTORY

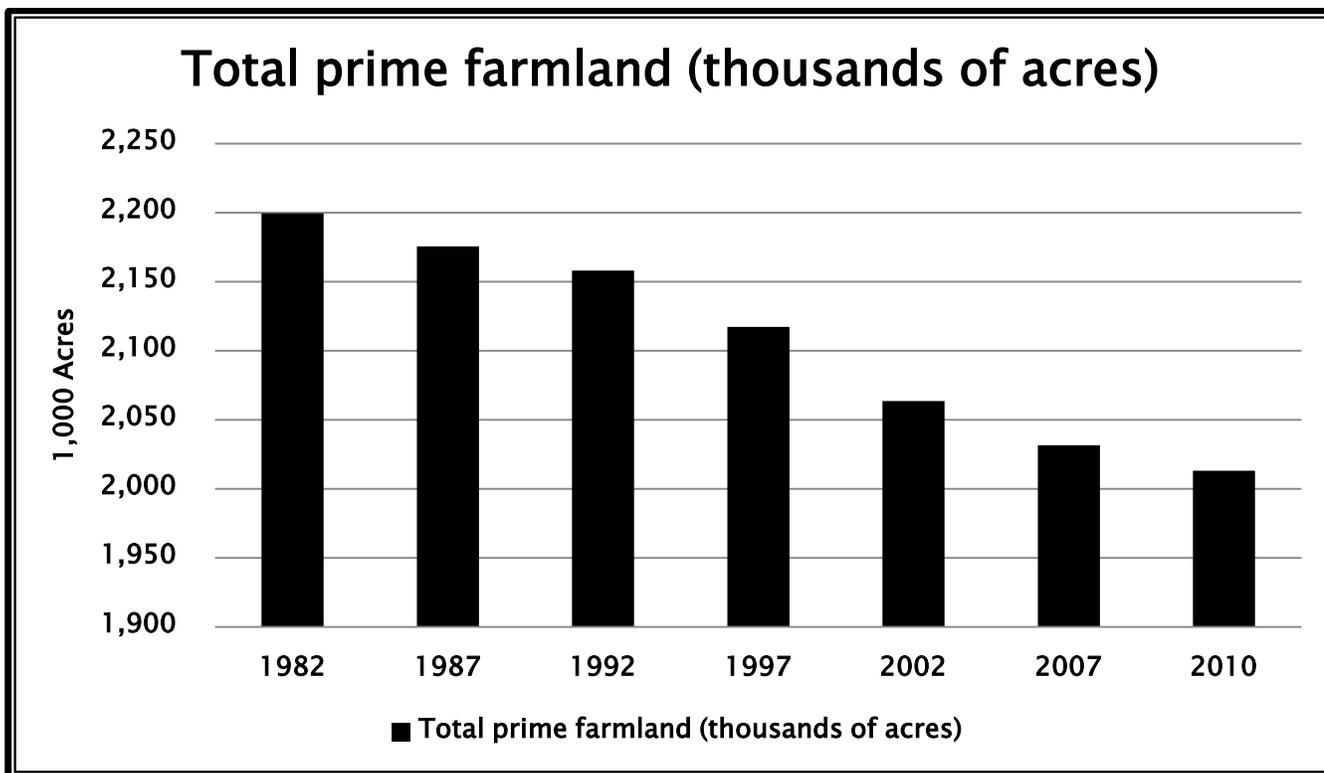


FIGURE 24 - NATURAL RESOURCE INVENTORY

Washington State Farmland Preservation

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:

- Since 2008, production expenses have increase 10 percent.
- The value of agricultural production has increased 22 percent over the same period.
- Since 2002, Hired Farm Labor expenses have increased 50 percent.
- Overall, since 2008, purchased inputs have increased 16 percent.
- Cost of feed purchased for livestock has increased 69 percent since 2002.

Sources:

USDA 2007 Census of Agriculture Washington State Summary:

http://www.agcensus.usda.gov/Publications/2007/Full_Report/Volume_1,_Chapter_1_State_Level/Washington/st53_1_001_001.pdf

Bureau of Economic Analysis – Farm Income Expenses: <http://www.bea.gov/index.htm>



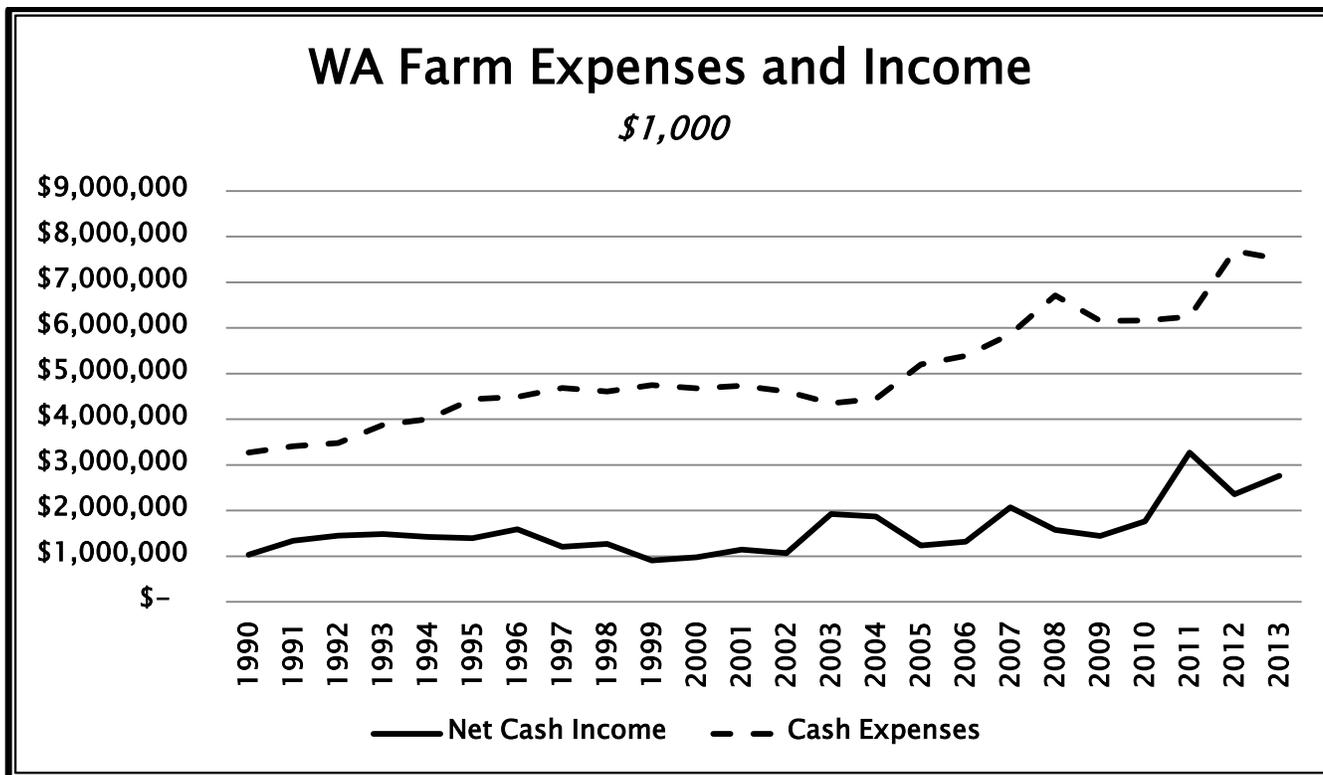


FIGURE 25 - USDA CENSUS OF AGRICULTURE

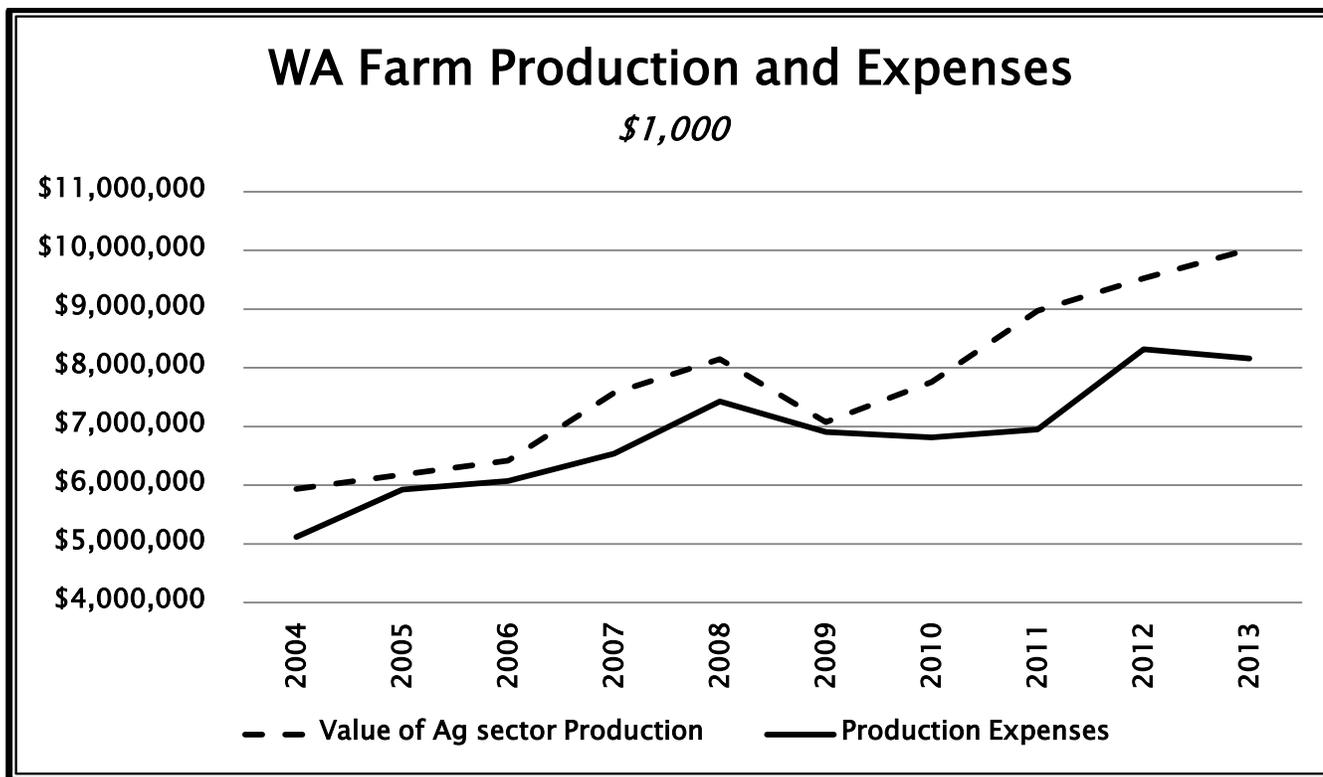


FIGURE 26 - BUREAU OF ECONOMIC ANALYSIS

Washington State Farmland Preservation

Indicator: WASHINGTON FARM INCOME

Measure: Net Value Added 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 is a component of net value added. It is the revenue left over for owners/operators after all expenses, including the cost of hired and contract labor, have been paid out of the revenue earned from final agricultural-sector production.

Annual farm income is the single most watched indicator of farm sector well being as it captures and reflects the entirety of economic activity across the range of production processes, input expenses, and marketing conditions that have persisted during a specific time period.

Trends & Findings:

- Statewide, net farm income in 2013 was \$2.7 billion.
- Nationally in 2012, net farm income as a percent of net value added equaled 70.7 percent. For Washington State, the comparable figure was 62.9 percent. This is an example of the effect of Washington's labor-intensive crops.
- Between 2010 and 2012, the value of crop production increased 27% to \$7.2 billion. During the same period, livestock production increased 15% to \$2.3 billion.
- Between 2010 and 2012, employee compensation paid by Washington farmers grew 29% to \$1.7 billion, up from \$1.3 billion in 2010.

Sources:

USDA ERS Farm Income Data:

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

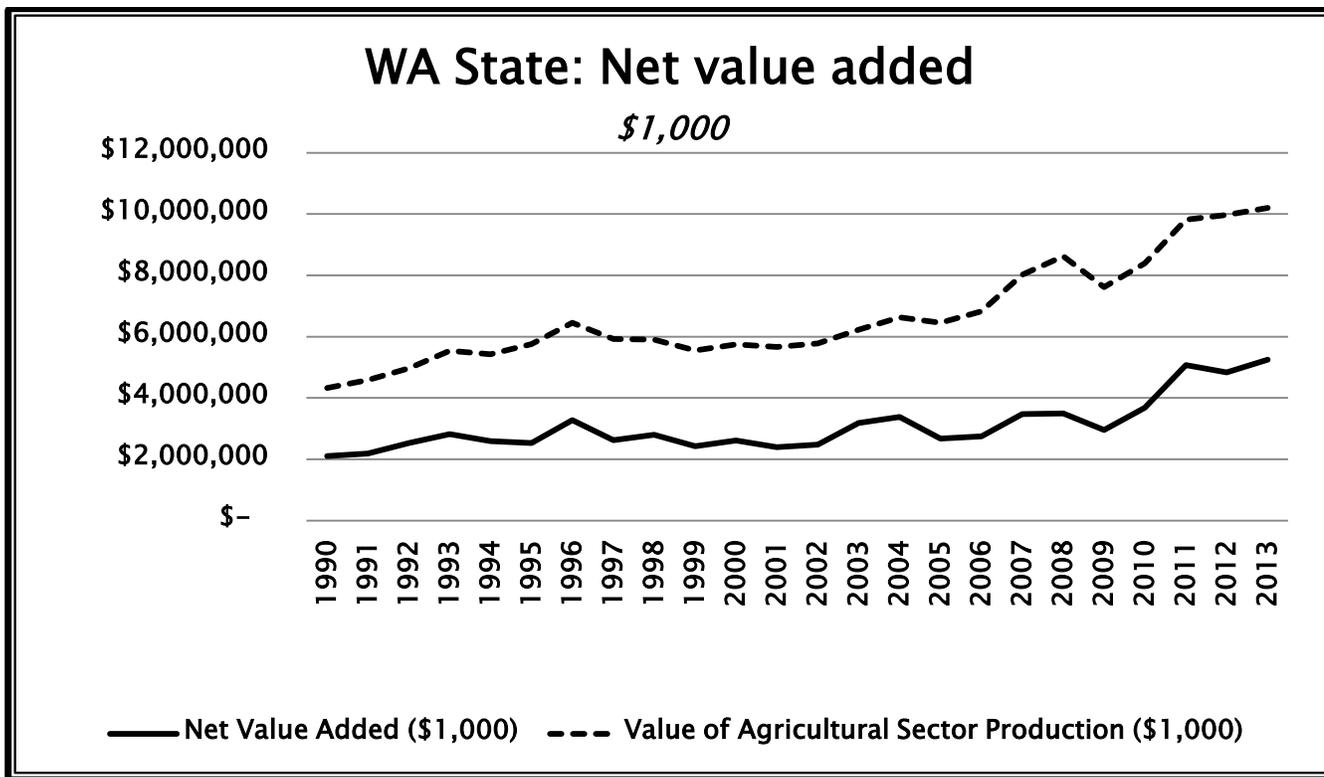


FIGURE 27 - USDA FARM INCOME AND WEALTH STATISTICS

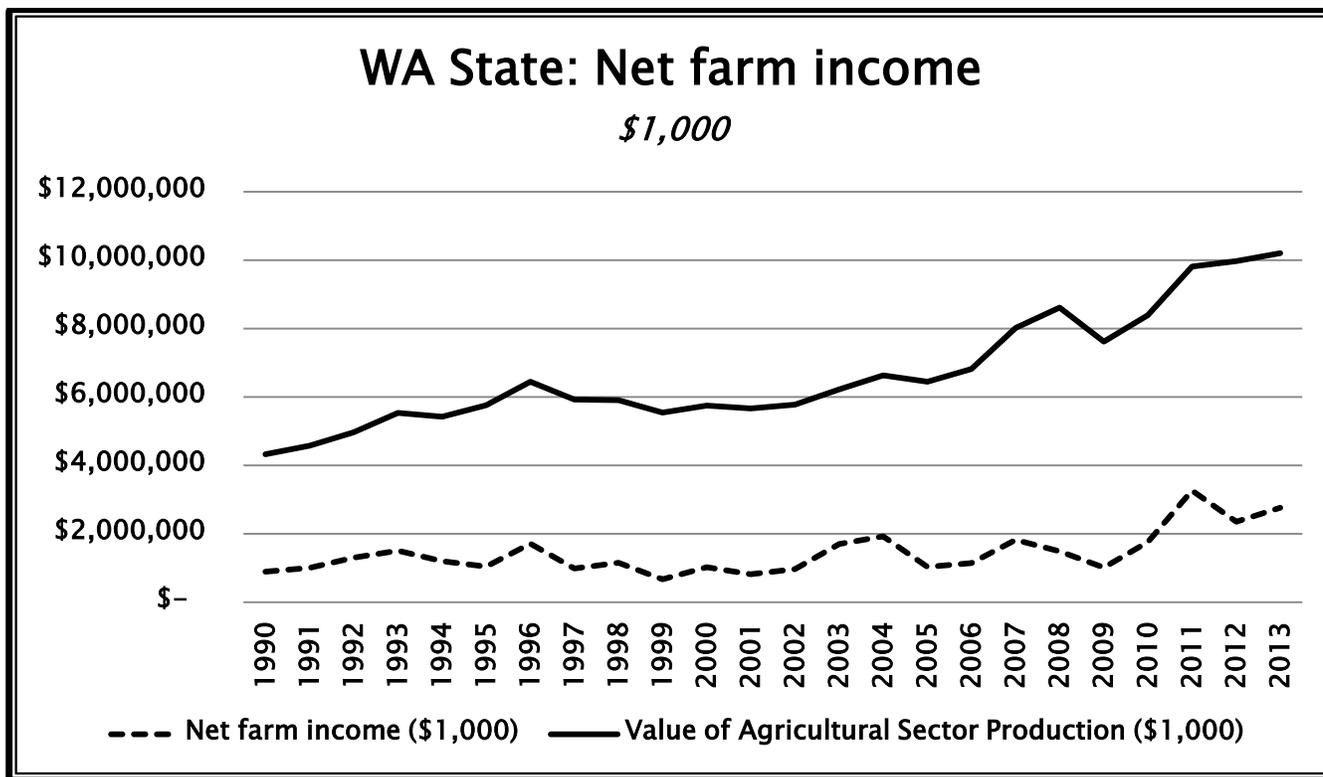


FIGURE 28 - USDA FARM INCOME AND WEALTH STATISTICS

Washington State Farmland Preservation

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 re-circulated 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:

- Statewide, farmers markets reported \$42 million sales in 2013, up four percent from 2012
- According to the WA State Farmers Market Association, farmers markets are located in 32 of 39 counties
- Nationally, in 2013, there are 8,144 farmers markets listed in USDA's National Farmers Market Directory, a 3.6% increase from 2012.

Sources:

Washington State Farmers Market Association: www.wafarmersmarkets.com

WSDA Farmers Market Manual: <http://agr.wa.gov/Marketing/SmallFarm/docs/FMM1.pdf>

Washington State Department of Agriculture



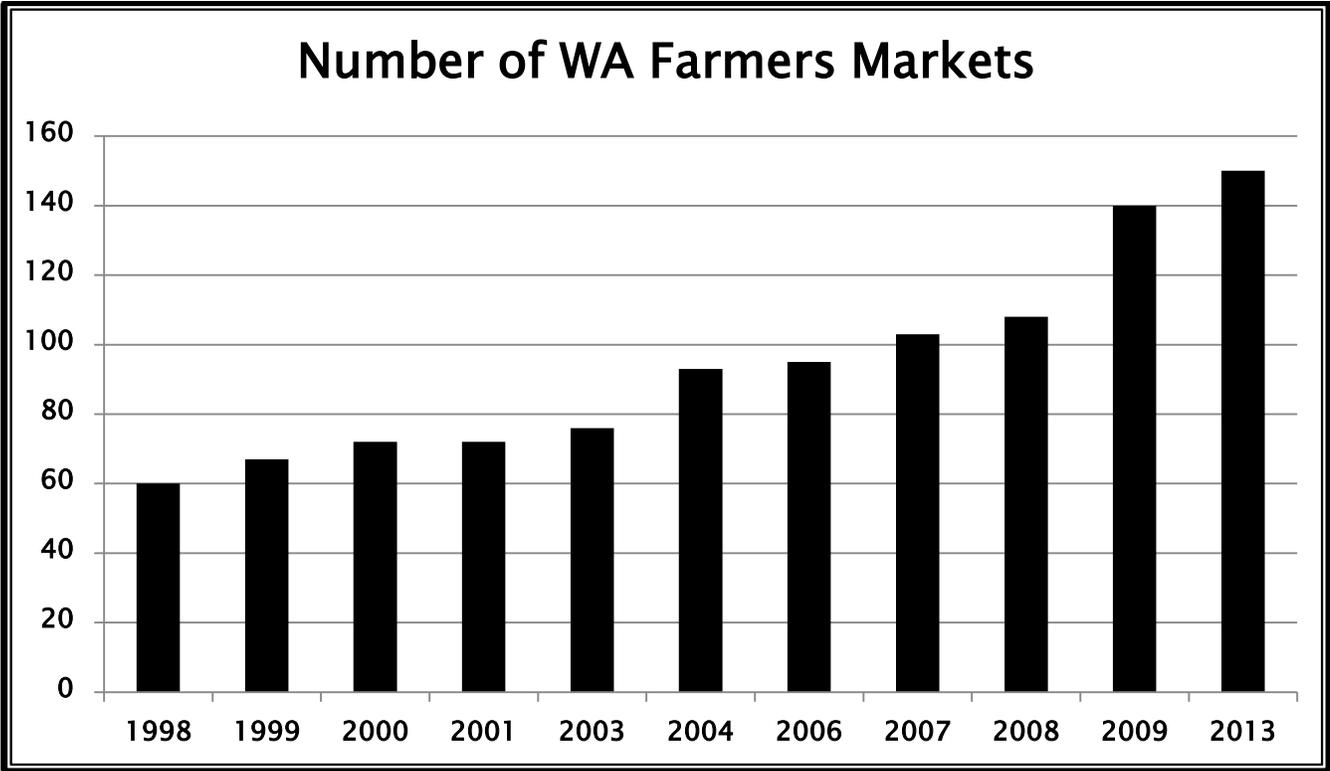


FIGURE 29 - WA STATE FARMERS MARKET ASSOCIATION & WSDA

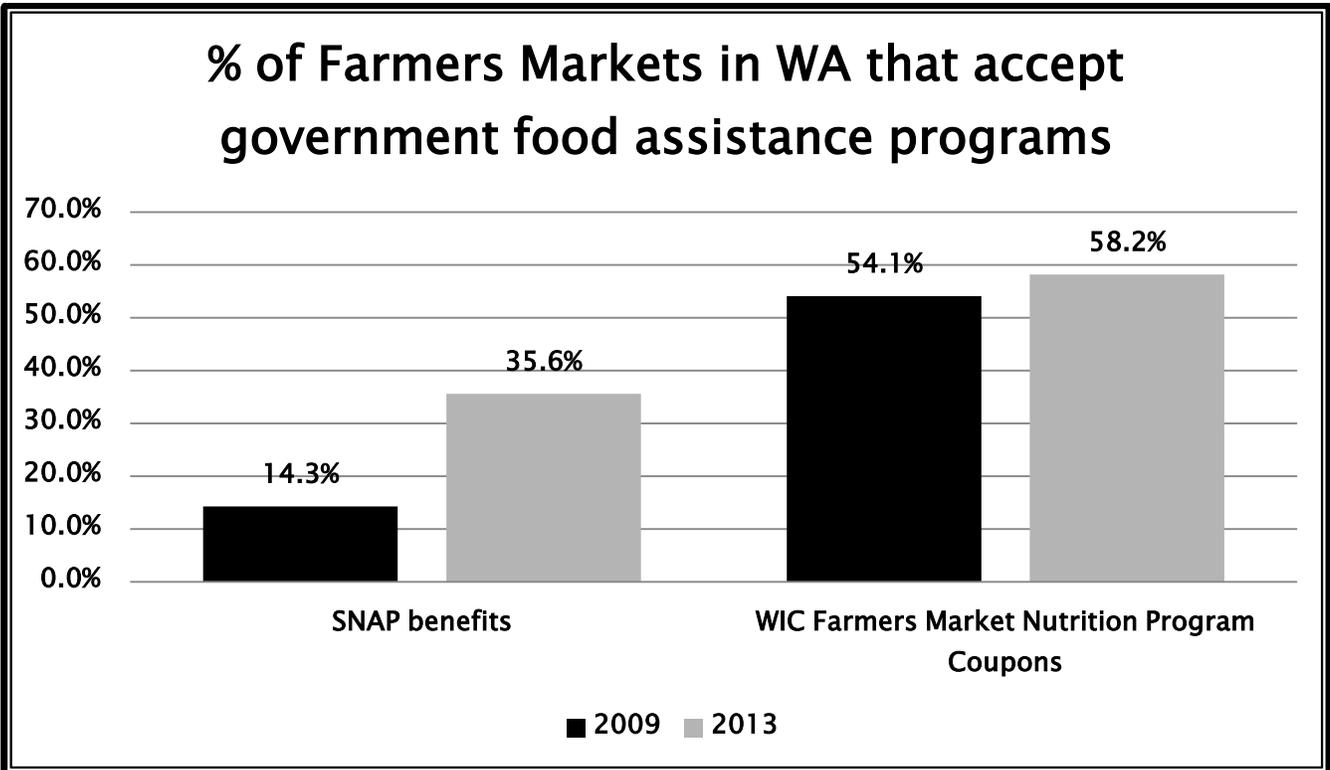


FIGURE 30 - CENTER FOR DISEASE CONTROL - 2013 INDICATOR REPORT

Washington State Farmland Preservation

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. Recent rising costs for diesel and gas, and trends towards increasing electricity costs, are adding to the expenses and decreasing economic viability.

Trends & Findings:

- Petroleum fuel and oil expenditures increased 23% between 2010 and 2012.
- Electricity expenditures increased 14% between 2010 and 2012.
- According to the USDA 2012 Ag Census, overall farm production expenses increased 45% for Washington farmers between 2007 and 2012
- As in prior years, fuel costs accounted for a significant portion of farm production expenditures, with farm operations spending more than \$335 million in 2013.

Sources:

USDA ERS Farm Income Data:

<http://www.ers.usda.gov/Data/farmincome/FinfidmuXls.htm>

USDA 2012 Census of Agriculture

<http://www.agcensus.usda.gov/>



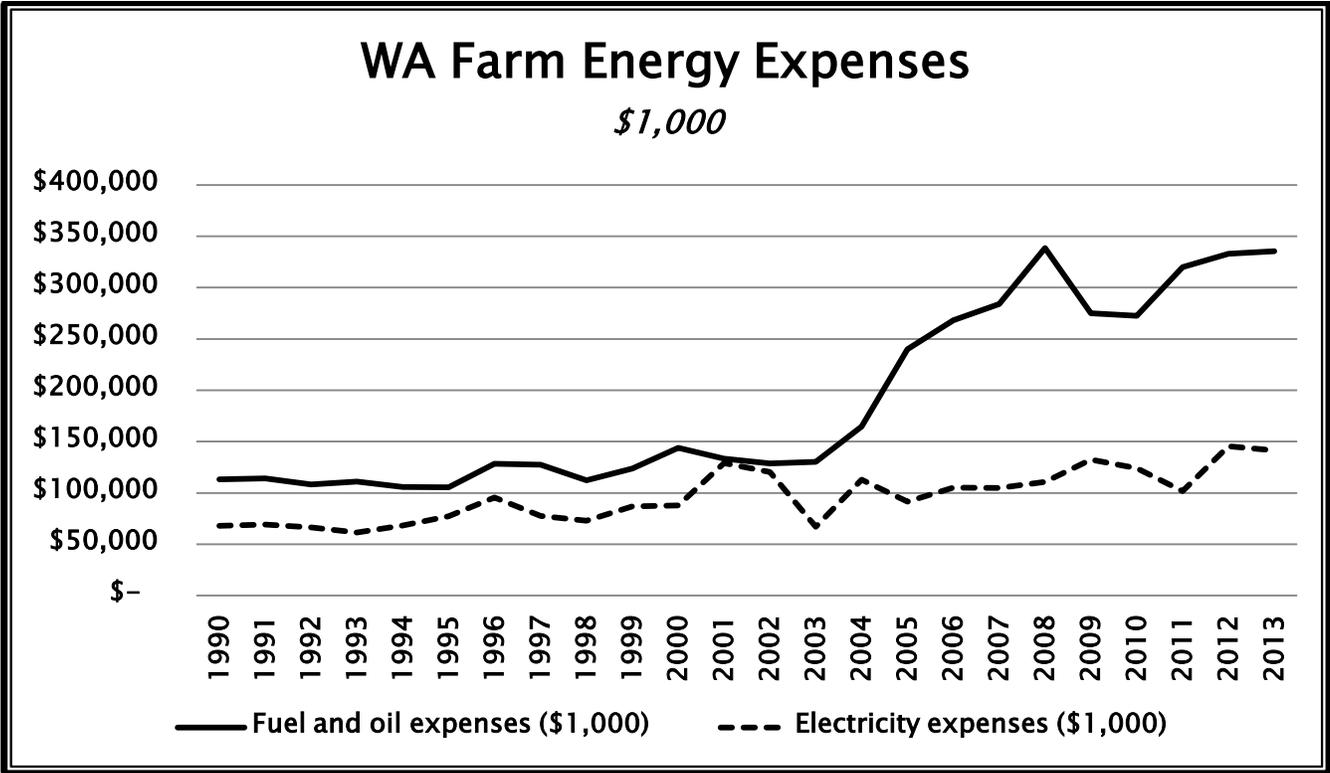


FIGURE 31 - USDA ERS FARM INCOME

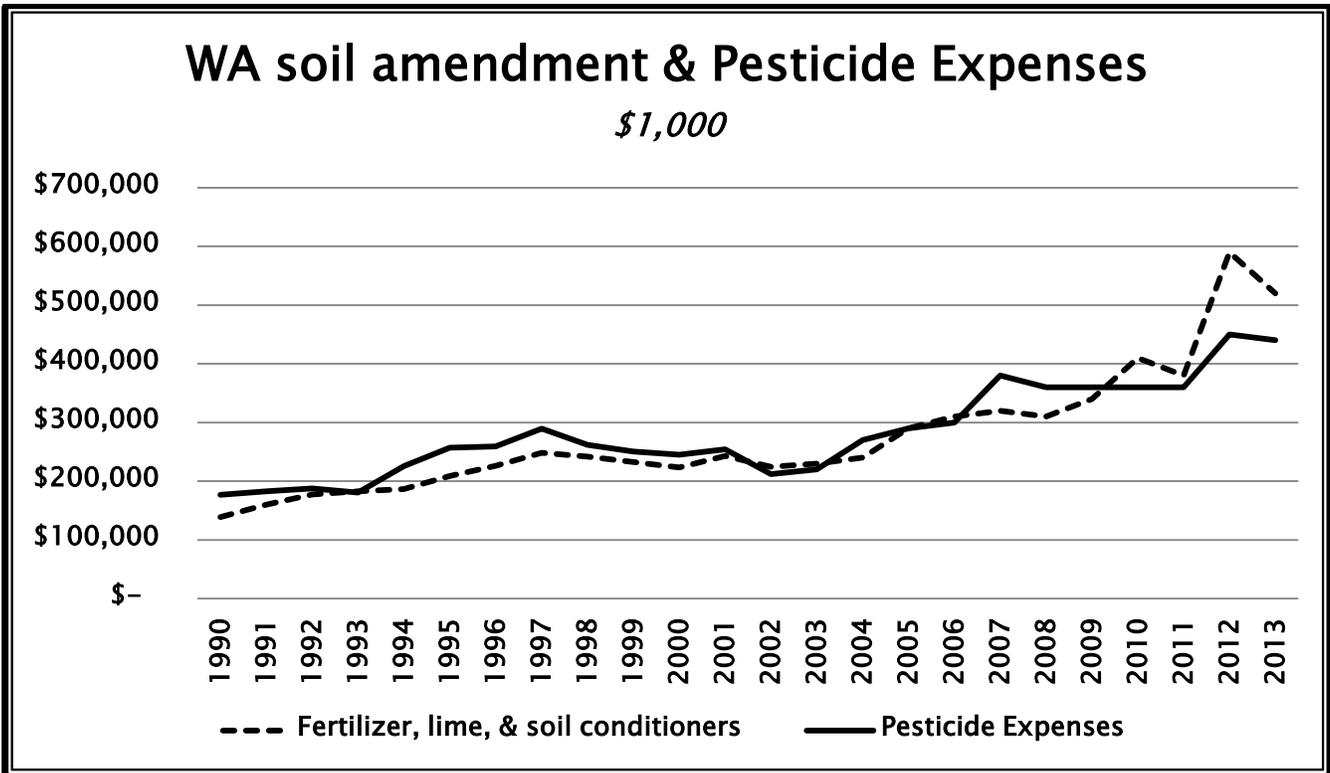


FIGURE 32 - USDA ERS FARM INCOME

Washington State Farmland Preservation

Indicator: CONSUMER PRICE INDEX FOR FOOD

Measure: Consumer Price Index for Food

Background:

The Bureau of Labor Statistics, which started the statistic in 1919, 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 weekly cost of food graphic, the “Thrifty plan” is the least costly of the four, 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:

- The index for fresh fruits rose 1%, but the fresh vegetables index fell 1.1%.
- Meats, poultry and fish are forecast to increase 3.5–4.5% in 2014, and again in 2015.
- Fruits and vegetables are forecast to increase 2.5–3.5% in 2014 with fresh fruits showing the biggest increases at 5–6 percent.
- An increase of 1 percent in the annual relative price of food (i.e., the ratio of food price to the price of all goods and services) was associated with a 0.6–percentage–point increase in the prevalence of food insecurity.

Sources:

USDA–ERS Consumer Price Index for Food:

<http://www.ers.usda.gov/Briefing/cpifoodandexpenditures/consumerpriceindex.htm>

Bureau of Labor Statistics. Forecasts by Economic Research Service

http://www.ers.usda.gov/data-products/food-price-outlook.aspx#.U_enIWPLrws

Prevalence of U.S. Food Insecurity Is Related to Changes in Unemployment, Inflation, and the Price of Food – Economic Research Report No. (ERR–167) June 2014

http://www.ers.usda.gov/publications/err-economic-research-report/err167.aspx#.U_epZWPLrws

USDA Center for Nutrition Policy

<http://www.cnpp.usda.gov/Publications/FoodPlans/MiscPubs/USDAFoodPlansCostofFood>

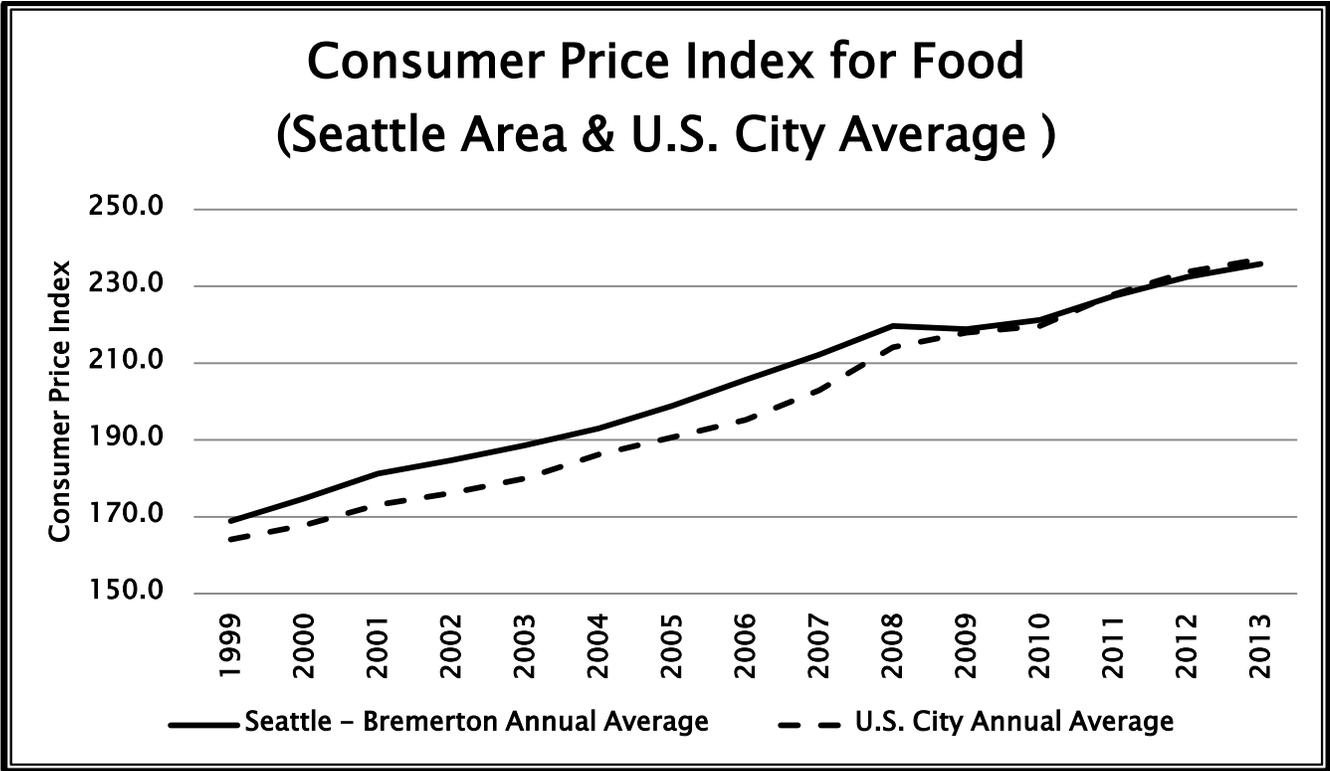


FIGURE 33 - BUREAU OF LABOR STATISTICS

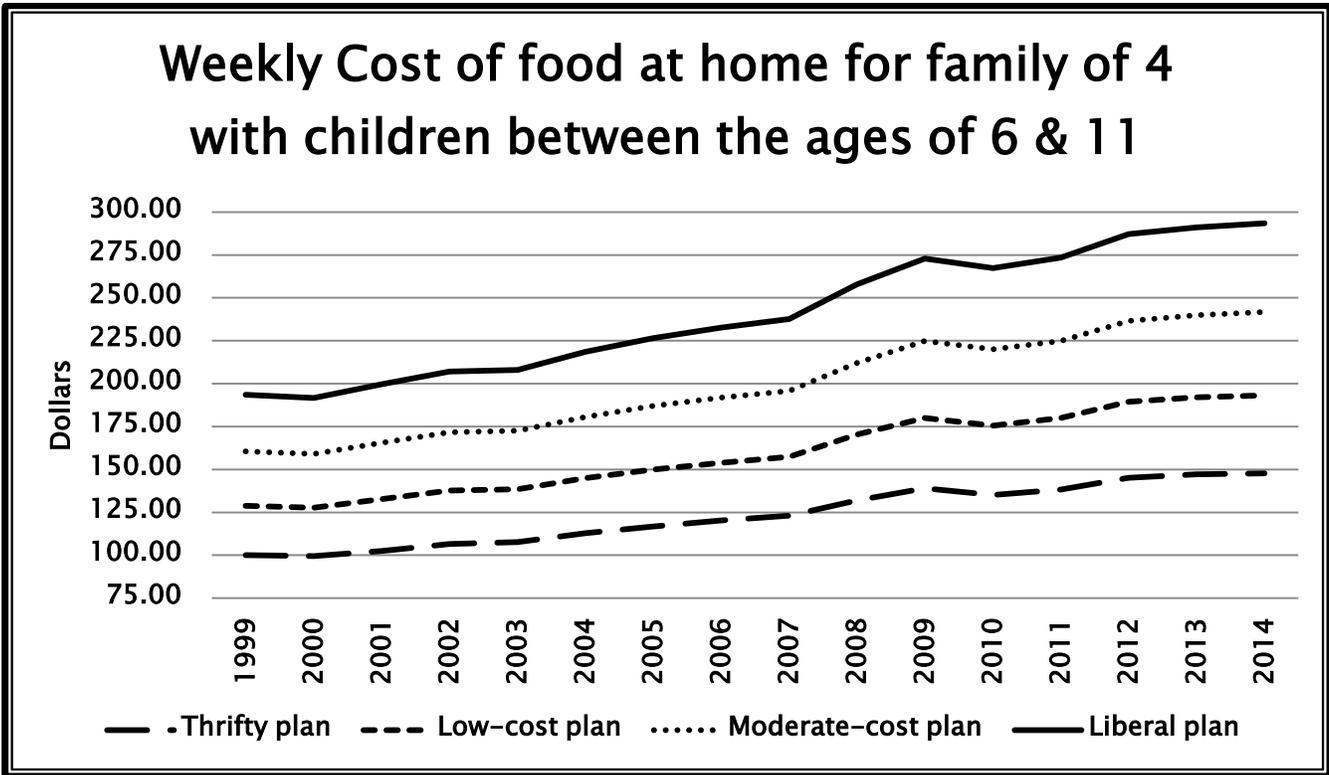


FIGURE 34 - BUREAU OF LABOR STATISTICS

Washington State Farmland Preservation

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 2009 survey did not capture fully all who are engaged, and this year we hope we are more complete. If your land trust is not represented in our survey, please contact 360-407-6200 to be included.
- Strong interest and support continues for working land easements.

Sources:

State Conservation Commission – Office of Farmland Preservation conducted survey, July 2014



<u>Entity</u>	<u>Acres</u>	<u>Number of Easements</u>
PCC Farmland Trust	1,287	13
Chelan-Douglas Land Trust	600	2
King County Farmland Program	14,013	207
Okanogan Land Trust	5,723	19
Blue Mountain Land Trust	457.44	7
Skagit County Farmland Preservation	7,000	115
Columbia Land Trust	390	4
Kittitas County	10,482	8
Whatcom County	826	16
Whidbey Camano Land Trust	735	20
Forterra (may all be Kittitas County projects)	976	6
Jefferson Land Trust	800	13
San Juan County Land Bank	350	15
North Olympic Land Trust	430	32
NW Rangeland Trust	142	1
TOTALS	44,211.4	478

FIGURE 35 - JULY 2014 OFFICE OF FARMLAND PRESERVATION SURVEY

Washington State Farmland Preservation

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 and 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 choose 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, degrees have increased 25%
- Total number of agriculture related degrees including Associate, Bachelor, Master, and Doctorate has increased from 2001/02 doubled since 1994/1995 from 162 degrees to 307 degrees in 2007-2008.
- Associate degrees have increased between 2008/09 and 2012/13 (97 - 141), while bachelor degrees have increased from 123 in 2008/09 to 141 in 2012/13.
- Edmonds Community College, through their newly created Sustainable Ag Program has seen positive gains in associate degrees and are averaging 20 degrees a year since 2010.
- In 2013, of the 296 school districts in Washington, 168 of them offered some sort of agricultural education, a 22% decrease since 2009.

Sources:

Washington Student Achievement Council

<http://www.wsac.wa.gov/>

Office of Superintendent of Public Instruction

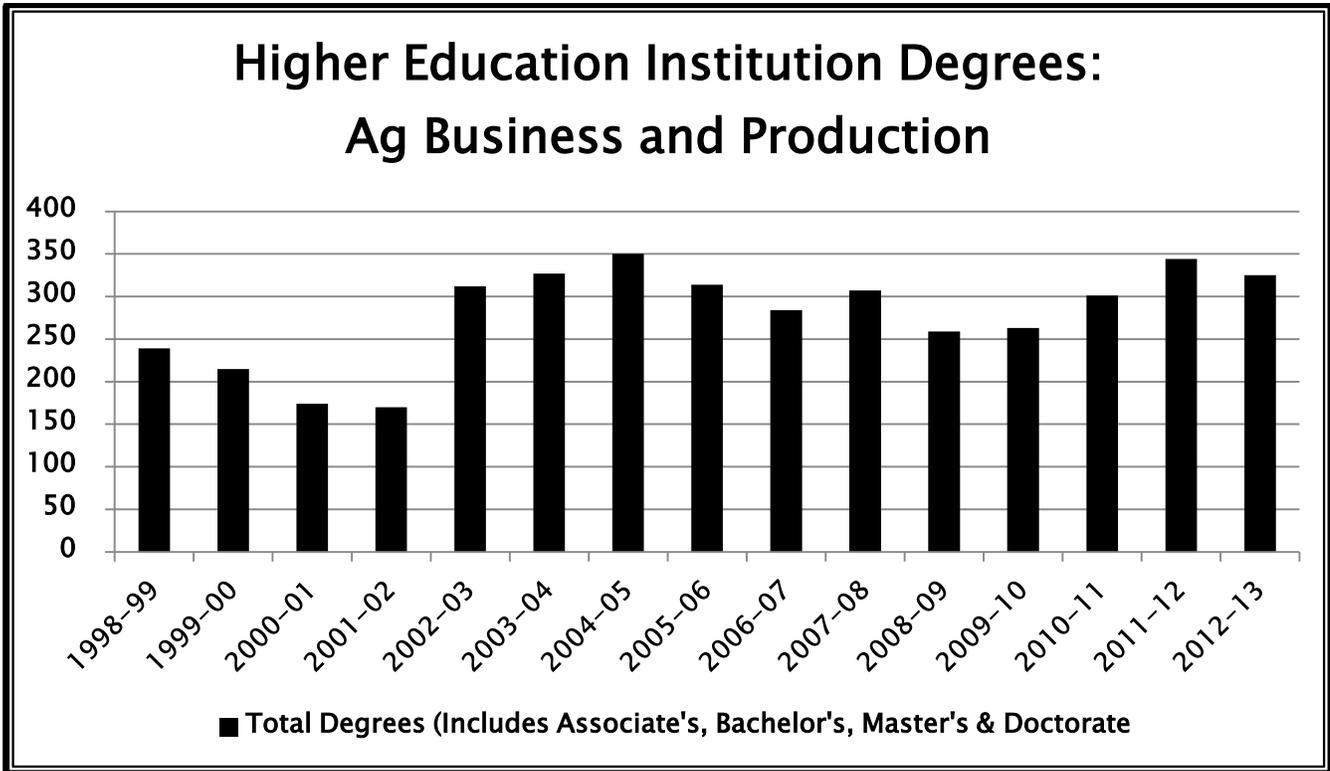


FIGURE 36 - WASHINGTON STUDENT ACHIEVEMENT COUNCIL

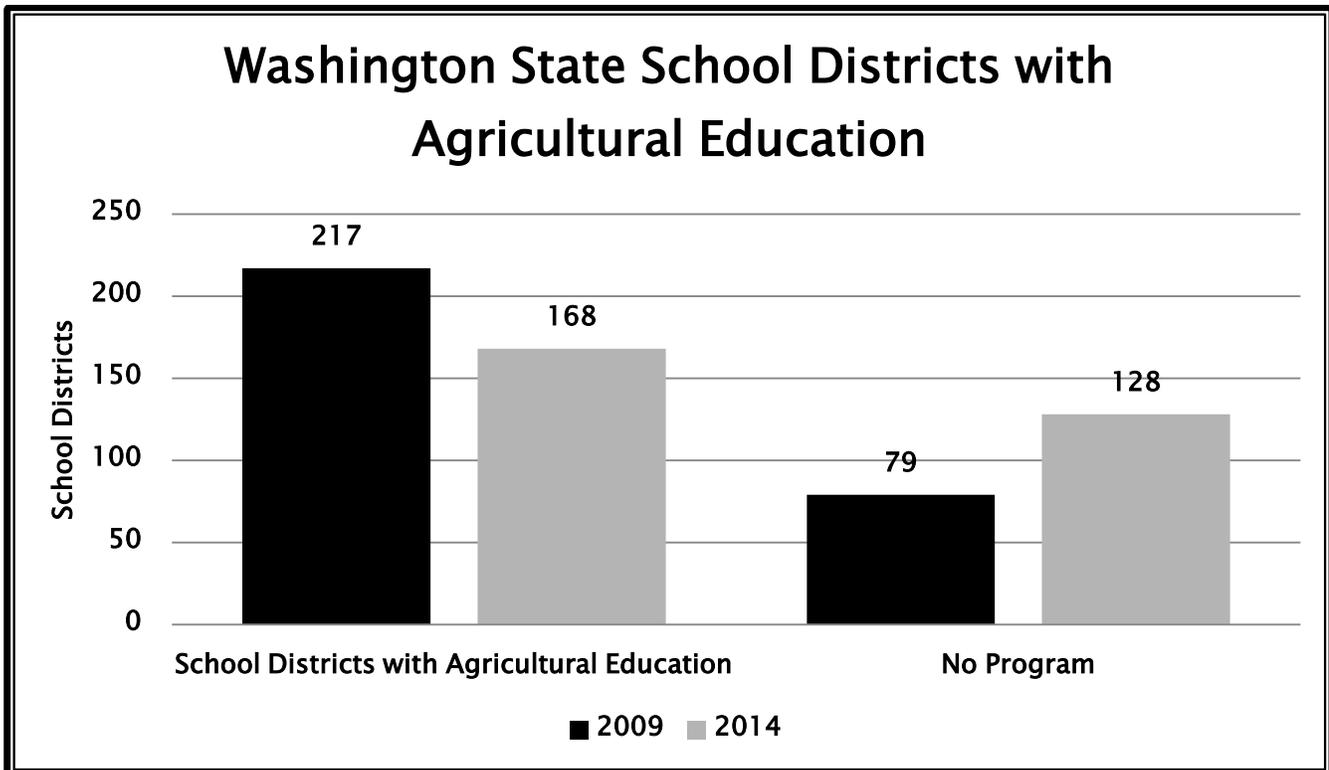


FIGURE 37 - OFFICE OF SUPERINTENDENT OF PUBLIC INSTRUCTION

Washington State Farmland Preservation

Indicator: FARMS BY ORGANIZATION

Measure: Percent of total farm acreage and sales by type of organization.

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

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 nonfamily 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. But despite their diversity, most Washington farms are family farms.

Trends & Findings:

- Farms owned by individuals or families accounted for 89.5% of total farms in Washington in 2012 – a half percent decrease from 2007.
- Farms owned by individuals or families accounted for 34% of total farm acreage, a 7% decrease from 2007.
- In 2012, 2.5 percent of farms were cooperative, estate or trust, and institutional (up 1.1% from 2007) and accounted for 20% of total farm acreage (up 4% since 2007)

Sources:

USDA Census of Agriculture

<http://www.agcensus.usda.gov/>

USDA ERS: America's Diverse Family Farms, 2007 Edition

<http://www.ers.usda.gov/publications/EIB26/>

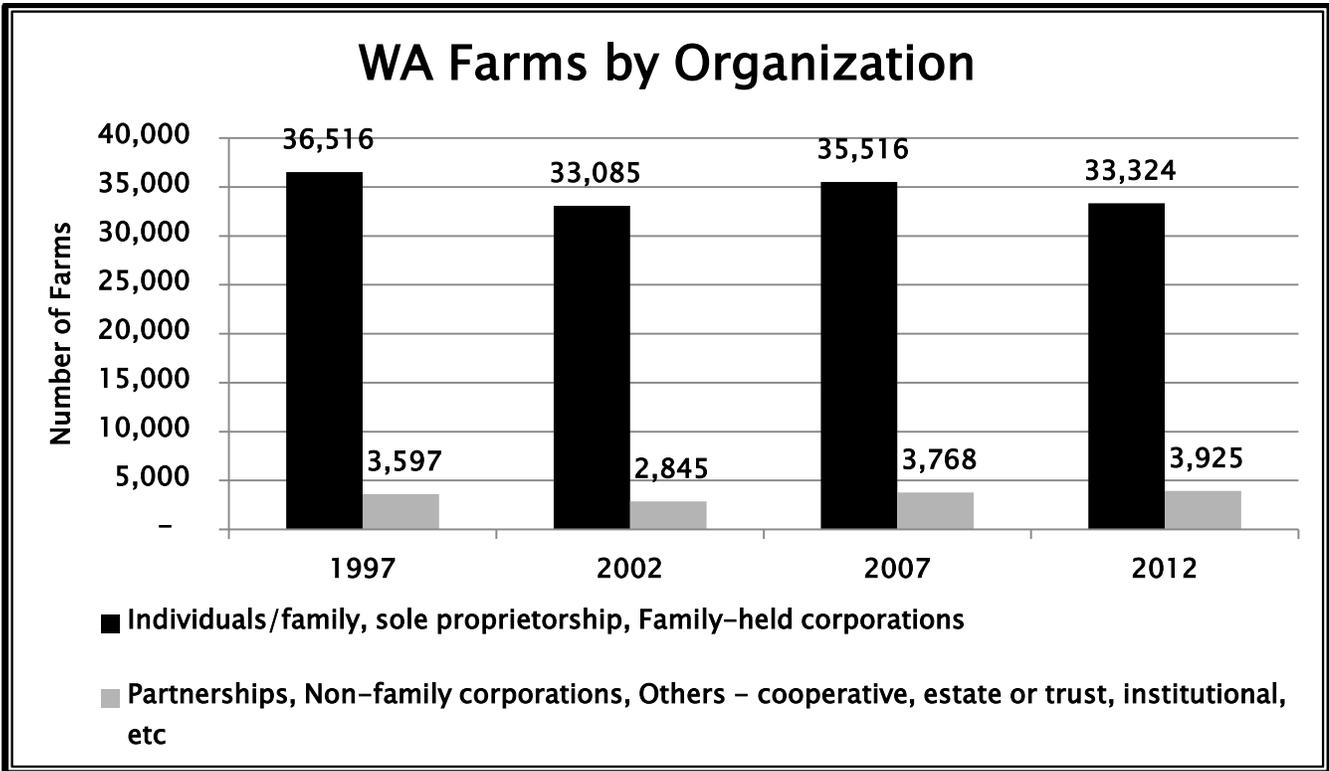


FIGURE 38 - USDA CENSUS OF AGRICULTURE

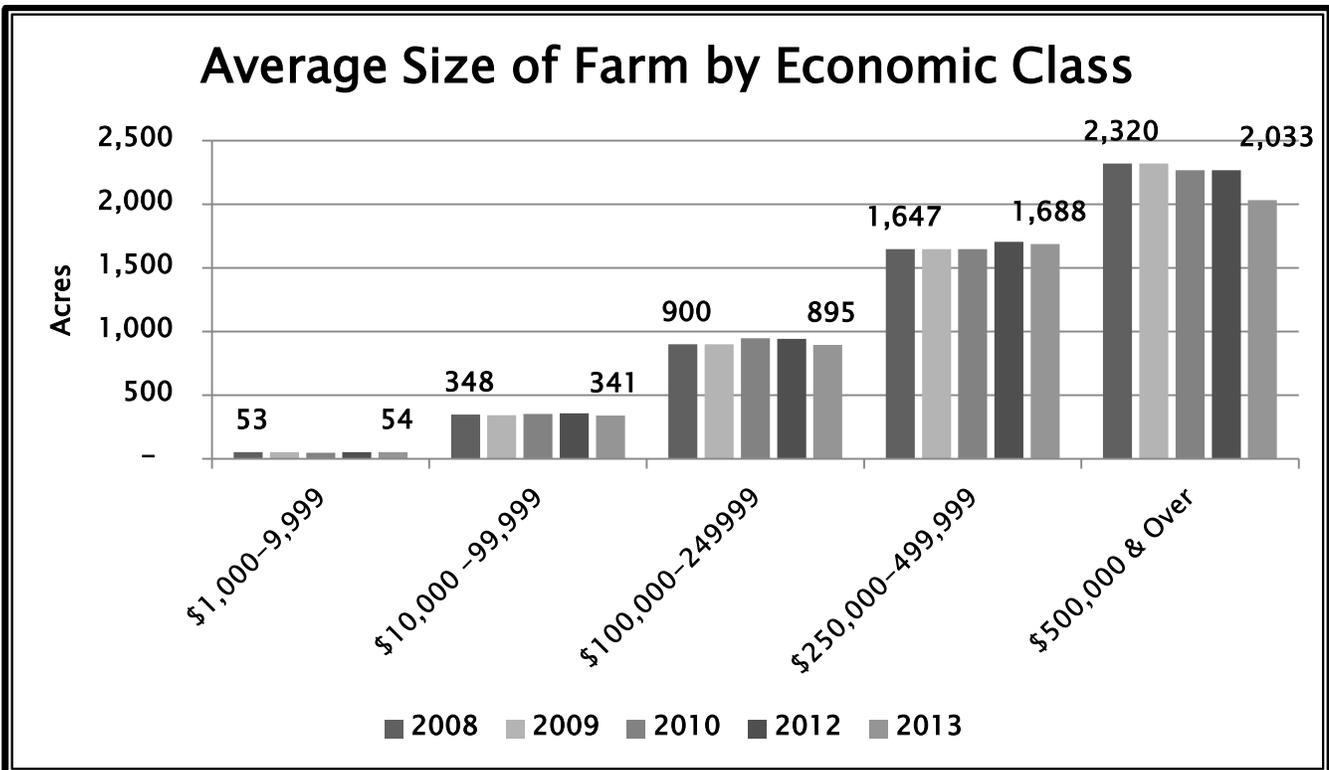


FIGURE 39 - USDA CENSUS OF AGRICULTURE

