

Washington State Snapshot

Agriculture is a [major industry in Washington](#)¹ that contributes extensively to Washington's economy and society by generating income and employment on 39,500 farms in all of Washington's 39 counties. The state's \$40 billion food and agriculture industry contributes 12% to the state's economy and employs 160,000 people. Nearly \$13 billion in food and agricultural products were exported through Washington ports in 2010, the third largest total in the country. The [value of Washington's 2010 agricultural production](#)² reached \$8.25 billion (including government payouts), 13% above the 2009 figure of \$7.30 billion. This is the second highest value on record.

[Washington agriculture is characterized by diversity of products](#)³ and by the importance of products in the national landscape. Washington accounts for 60% of the nation's apple production in addition to being a leading producer of potatoes, stone fruits, farm forest products, fish, shellfish, onions, and mint oils. Record high value of production was set in 2010 for blueberries, corn for grain, dry edible beans, cherries, grapes, pears, sheep and lambs, wool, non-storage onions, and fresh sweet corn.

[Washington's farms](#)⁴ to the west of the Cascade Mountain Range tend to be small, focusing on dairy products, poultry, and berries. Farms to the east are large with wheat, barley, potatoes, fruit, and vegetables being the primary commodities produced. The average farmer: operates a family farm; has a farm spanning 381 acres and worth \$759,146; owns farm machinery and motor vehicles valued at \$83,468; tends to crops worth \$121,115; manages livestock, poultry, and products valued at \$51,878; spends \$376 per day to cover expenses; has a net income of \$45,454 (including government payouts); cares for products with a market value of \$176,436; and owns land worth \$1,650 per acre. More than 20% of Washington farms are operated by women.

Snohomish County Snapshot

The North American Industrial Classification System (NAICS) is the current industry classification standard in the United States. NAICS groups several industries into the agriculture cluster including: agriculture, forestry, fishing, and hunting. The Snohomish County agriculture cluster is centered on crop and animal production. Thus, forestry, fishing, and hunting are not included in this report. The table below depicts [NAICS codes](#)⁵ for the Snohomish County agriculture cluster.

NAICS Code	Industry Title
11AO	Crop and animal production
1151	Support activities for crop production
1152	Support activities for animal production

Employment

The Snohomish County agriculture cluster employs nearly 2,400 workers. Employment within the cluster dropped 11% from 2001 and 2% from 2011. One explanation for decline in employment is that agricultural workers are moving to higher paying jobs in other clusters, such as construction and manufacturing. Farmers are in need of qualified workers but are often unable to offer competitive wages. Average wages in the agriculture cluster range from \$10.95 per hour for field and livestock workers to \$11.59 per hour for all agriculture workers including management and administration. Farmers would need to offer at least \$12 per hour to remain competitive with other industries. Data forecasts a 3% decline in agriculture jobs through 2015. The table below shows industry makeup and average earnings per worker in each industry within the agriculture cluster.

NAICS Code	Industry Title	2012 Jobs	2015 Jobs	% Change	Earnings Per Worker
11AO	Crop and animal production	2,088	2,038	(-2%)	\$32,536
1151	Support activities for crop production	76	71	(-7%)	\$22,641
1152	Support activities for animal production	211	188	(-11%)	\$26,584
		2,375	2,297	(-3%)	\$31,669

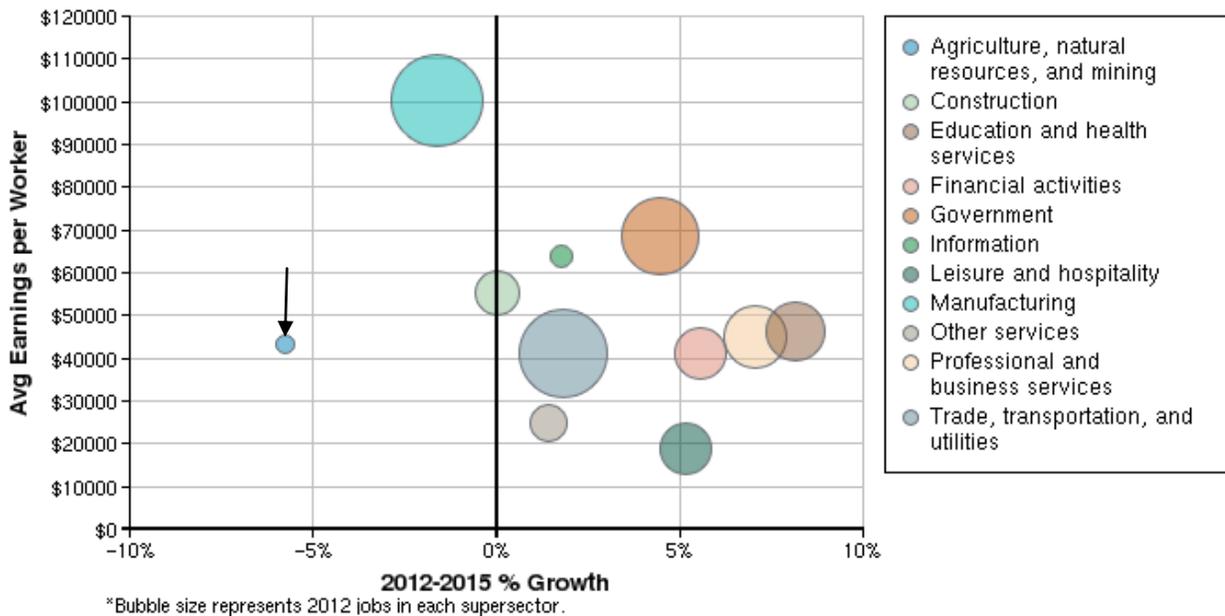
The table below shows the job forecast among the Snohomish County agriculture cluster's top three occupations.

SOC Code	Occupation Title	2012 Jobs	2015 Jobs	% Change	% of Industry
11-9012	Farmers and ranchers	1,31	1,301	(-4%)	57%
45-209A	Miscellaneous agricultural workers	425	421	(-1%)	18%
11-9011	Farm, ranch, and other agricultural managers	259	259	0%	11%

More than half of all employees in agriculture work as farmers and ranchers. This is consistent with state trends; nearly 2/3 of agriculture employment in Washington is in crop production. Agriculture also includes a diverse range of [cutting edge technical careers](#)⁶ such as biological technicians, environmental science and protection technicians, and computer support specialists in careers including environmental science, natural resources, agribusiness, plant science, animal science, food processing and technology, and power and technology.

The figure on the following page shows that while agriculture (indicated with an arrow) is forecasting decline in the number of workers through 2015, average earnings per worker is forecasted to be higher than average earnings per worker in other industries.

2012 - 2015 Size and Growth



Spending and Activity

[Agriculture was the primary industry in Snohomish County in the 1800s](#)⁷. Early settlers who arrived in the Puget Sound in the 1860s marveled at the fertile river valley soil and mild climate which provided ideal conditions for farming. The farms they cultivated provided a good lifestyle for their families and food for other residents. Agriculture soon became one of the defining economic cornerstones in Snohomish County. Fast forward over 200 years and [agriculture is still a key industry in Snohomish County](#)⁸ – a \$154 million industry. [There are nearly 1,600 farms in Snohomish County](#)⁹ of which 70% are family or individually owned. Farms represent approximately 77,000 acres of designated farmland; this reflects a 12% increase over previous years. The average size of farms also increased 6% from 44 to 46 acres each. Small farms dominate Snohomish County where the average farm size is 18 acres. This small-scale, niche farming is important to Snohomish County's agriculture industry; more than 200 new farms started between 1997 and 2002. However, large farms continue to comprise most of the economic output and are therefore an essential component of the future of Snohomish County agriculture; 58% of the 1,600 farms in Snohomish County account for 62% of county-wide farms sales. Agriculture in Snohomish County produces a diverse range of products. [Snohomish County is ranked](#)¹⁰ first in the state in annual milk production per cow, second in the state in broiler chicken production, and third in the state in strawberry production.

Washington was one of the first states to have an organic certification program and has [emerged as a national leader in organic agriculture](#)¹¹. The establishment of national organic standards in 2002 paved

the way for large farmers to expand their acreage of organic crops. In 2007, Washington had 81,472 [certified organic acres](#)¹², up 86% from 2004. An additional 13,183 acres were in transition, suggesting that organic acres reached about 94,500 acres in 2010. The greatest demand for organic, sustainable, and locally grown foods is in the urban areas in the Puget Sound region. About 25 [farms in Snohomish County](#)¹³ reported being certified organic in 2002. A small but increasingly visible fraction of production on these farms can be considered sustainable, meaning products are produced in ways that are ecologically sound, economically viable, socially just, and human to animals.

[Exports drive agriculture](#)¹⁴ more than they do in many other industries. Exporters often list the state where the export originated rather than the state of production. Therefore, Washington is often given credit for exports which were grown or produced elsewhere. While it is difficult to estimate the impact of agricultural exports, it is fair to estimate that Washington exports about one-third of its food and agriculture production. Agricultural exports have grown sharply in the past five years and have recovered since the Great Recession. The value of Washington agricultural exports in 2009 was \$7,529.4 million.

It is important to understand agriculture as it fits into the larger system of economic development and managed growth. Statistics often portray a decline in agricultural products and production. For example, 2007 statistics show a decline in cattle in Snohomish County. However, farm land has been transformed into commercial land meaning there are fewer dairy farms to utilize. In actuality, there are more cattle per farm than in past years showing increased productivity in this area. Having more quality cattle per farm means a greater need for quality hay and local hay farmers profit from this increased demand. This is just one example of how county plans must be taken into account when reviewing agricultural statistics.

Hotspot – Local Goods

Local Goods is the hotspot of agriculture in Snohomish County. Locally grown food was a \$4.8 billion business in the United States in 2008 and the [U.S. Department Agriculture predicts](#)¹⁵ locally grown foods will generate \$7 billion in sales this year. This figure includes food sold directly to consumers at farmers markets or through intermediaries such as grocers and restaurants. [The number of farmers markets](#)¹⁶ in the United States increased from 340 in 1970 to more than 7,000 farmers markets and 4,000 community-supported agricultural systems (CSAs) today. The demand for local food has been driven by consumers who want to support local farms and businesses, purchase healthful and sustainably produced food, interact with farmers, and learn more about the food grown in their region.

[Statewide](#)¹⁷, farmers markets belonging to the [Washington State Farmers Market Association](#)¹⁸ reported nearly \$39 million in sales in 2010, up from \$32 million reported in 2009. Dozens of other farmers markets not part of the association also facilitate substantial sales with dollars going directly to Washington family farmers and the local community. Farmers markets are located in 36 counties and more than 65 markets

in the state feature wireless point-of-sale terminals capable of processing Supplemental Nutrition Assistance Program benefits through an electronic benefits transfer system. To recognize their growing importance [Governor Gregoire proclaimed](#)¹⁹ August 7-13 to be Washington Farmers Market Week.

Local government has long been a champion of Snohomish County agriculture and partners with leaders and experts in the agricultural community to promote Local Goods. The [Snohomish County Focus on Farming](#)²⁰ initiative hosts an annual [Focus on Farming conference](#)²¹ along with regular public meetings. In 2009 Snohomish County Executive Reardon released the [Agricultural Sustainability Project report](#)²², a 325-page report which is the driving force behind the expansion of Snohomish County's agricultural opportunities. The report is the result of farmers, agricultural agencies, advocates, and local government coming together for the preservation and economic prosperity of Snohomish County's farm industry and marks an important point toward positive and far-reaching efforts that support local agriculture. Among new ideas included in the report are: creation of a year-round public farmers' market; a no-net-loss farmland initiative; the processing and distribution of locally produced foods; expansion of current biofuel production and use; organization of a working group to analyze the agricultural land mapping contained in the report; mapping of salmon habitat restoration priority areas; and a review of local, state, and federal regulations that deal with farmland protection and restoration projects.

The newest addition to Snohomish County's emphasis on and commitment to Local Goods is the new nonprofit [Snohomish County Growers Alliance](#)²³. Established in June 2010 by Snohomish County Executive Reardon and local farmers, the Growers Alliance is devoted to advancing economic growth among county farmers. The nonprofit will be owned and operated by farmers who want to increase their opportunities locally and regionally. The local agriculture community is tight-knit and interdependence is required for sustainability. And such, led by local farmers, the Growers Alliance will assist in the development of a permanent and year-round farmers market, find additional ways to increase farm productivity and profitability, and provide a voice for Snohomish County agriculture.

Education and Training

[O*NET Online](#)²⁴ offers a [profile of each occupation in the agriculture cluster](#)²⁵ including: common tasks and activities performed by workers, tools and technology used in the workplace, KSAs (knowledge, skills, and abilities) required to be successful, levels of education and training required to be competitive, work styles and values most commonly found among top workers, national and state wage and employment trends, and related occupations for individuals looking to enter agriculture from another cluster or looking to exit agriculture and move into another cluster. These occupation profiles provide rich information and are a valuable first step to exploring a career in agriculture.

Those interested in pursuing education and training in agriculture have many local options. The [Edmonds Community College Ornamental Horticulture program](#)²⁶ offers several one-year certificate and two-year degree options. Cascadia Community College offers a degree in [Environmental Technologies and Sustainable Practices](#)²⁷. The [Washington State University College of Agriculture, Human, and Natural Resource Sciences](#)²⁸ offers several degree programs with coursework and other programs offered through its [Snohomish County Extension](#)²⁹ branch. The branch also offers a 12-week [Agricultural Entrepreneurship](#)³⁰ course for those wanting to start and sustain a profitable small farm or agriculture enterprise as well as current growers wanting to enhance existing operations. Agriculture workers looking to move into higher level positions would benefit from participating in various forms of continuing education to develop the KSAs needed to become a supervisor or manager. Once established in the agriculture cluster individuals can receive continued support and training from organizations such as the [Northwest Agriculture Business Center](#)³¹. The Northwest Agriculture Business Center provides local farmers with skills and resources necessary to successfully enter into and complete in local agriculture markets.

Innovation, Entrepreneurship, and Sustainability

Biofuels and oilseed crops are a new area of agricultural activity for Snohomish County and represent the latest in innovation, entrepreneurship, and sustainability. In September 2008, County [officials dedicated its new \\$1.25 million Cathcart Dryer Facility](#)³² near Snohomish. Just days after the dedication ceremony, a local farmer began trucking in the first of 400 acres of seed to be dried and crushed on its way to being refined into an alternative fuel source. The Cathcart Dryer Facility was the result of almost four years of collaboration between county government and the farming community to develop new markets for locally-grown products, while at the same time reducing the county's dependence on foreign oil and petroleum-based diesel emissions. By 2014, the county hopes to grow enough seeds to produce 240,000 gallons of biodiesel to power the diesel portion of its fleet of 1,300 trucks, automobiles, and heavy equipment. One of the most unique aspects of the Cathcart Drying Facility is its power source. Methane gas is piped from a sealed county landfill across an internal road, a portion of which is used to power a 15-ton continuous batch dryer. Snohomish County also has its first [biogas plant](#)³³, designed to harness the methane gas in cow manure which can be turned into electricity. Local dairies send cow manure to the plant through underground pipes, and as a result the plant has produced enough energy to power hundreds of homes continuously.

Conclusion

Agriculture is a strong, viable, and essential cluster in the local economy. The community needs local farmers more than ever before. Agriculture is a small industry cluster but one with growth potential if innovation, entrepreneurship, and sustainability remain a priority. Education and training, changing

perceptions, and local government support within the cluster can help ensure that agriculture remains a key industry cluster in Snohomish County for another 200 years.

¹ Washington State Department of Agriculture, <http://agr.wa.gov/AgInWA/>

² United States Department of Agriculture, http://www.nass.usda.gov/Statistics_by_State/Washington/Publications/Current_News_Release/topforty.pdf

³ United States Department of Agriculture, http://www.nass.usda.gov/Statistics_by_State/Washington/Publications/Current_News_Release/topforty.pdf

⁴ Washington Department of Agriculture, <http://agr.wa.gov/AgInWA/docs/PrideOfWashingtonState2011.pdf>

⁵ U.S. Census Bureau, <http://www.census.gov/cgi-bin/sssd/naics/naicsrch?chart=2007>

⁶ Agriculture Center of Excellence, <http://agcenterofexcellence.com/ace/students.cfm#cluster>

⁷ Snohomish County, http://www.co.snohomish.wa.us/documents/County_Services/FocusOnFarming/AgActionPlan1-05.pdf

⁸ Snohomish County, http://www.co.snohomish.wa.us/documents/County_Services/FocusOnFarming/SecA.pdf

⁹ Snohomish County, http://www.co.snohomish.wa.us/documents/County_Services/FocusOnFarming/2007-10-30PressReleaseFINAL.pdf

¹⁰ Snohomish County, http://www1.co.snohomish.wa.us/County_Services/Focus_on_Farming/About/

¹¹ Tilth Producers of Washington, <http://www.tilthproducers.org/bwo-fs0.pdf>

¹² Washington State Department of Agriculture, <http://agr.wa.gov/FoF/docs/FoFStrategicPlan.pdf>

¹³ Snohomish County, http://www.co.snohomish.wa.us/documents/County_Services/FocusOnFarming/SecA.pdf

¹⁴ Washington State Employment Security Department, http://www.workforceexplorer.com/admin/uploadedPublications/11298_2010_Ag_Report_2011Wex.pdf

¹⁵ Seattle pi, <http://www.seattlepi.com/business/article/USDA-Locally-grown-food-a-4-8-billion-business-2267765.php>

¹⁶ Union of Concerned Scientists, http://www.ucsusa.org/assets/documents/food_and_agriculture/market-forces-exec-summary.pdf

¹⁷ Washington State Department of Agriculture, <http://agr.wa.gov/News/2011/11-20.aspx>

¹⁸ Washington State Farmers Market Association, <http://www.wafarmersmarkets.com/>

¹⁹ Washington Department of Agriculture, <http://agr.wa.gov/News/2011/FarmersMarketWeekProclamation2011.pdf>

²⁰ Snohomish County, http://www1.co.snohomish.wa.us/County_Services/Focus_on_Farming/

²¹ Snohomish County, http://www1.co.snohomish.wa.us/County_Services/Focus_on_Farming/Information/Conferences/

²² Snohomish County, http://www1.co.snohomish.wa.us/County_Services/Focus_on_Farming/agsustainability.htm

²³ Snohomish County, http://www.co.snohomish.wa.us/documents/County_Services/FocusOnFarming/CAI.SCGBBusinessPlan.20100331.pdf

²⁴ O*NET Online, <http://www.onetonline.org/>

²⁵ O*NET Online, <http://www.onetonline.org/find/industry?i=11&g=Go>

²⁶ Edmonds Community College, <http://www.edcc.edu/hort/>

²⁷ Cascadia Community College, http://www.cascadia.edu/programs/professional_technical_transfer_degrees/environmental_technologies_sustainable_practices.aspx

²⁸ Washington State University, <http://www.cahe.wsu.edu/>

²⁹ Washington State University, <http://snohomish.wsu.edu/>

³⁰ Cultivating Success, http://www.cultivatingsuccess.org/coursecalendar_WA.htm

³¹ Northwest Agriculture Business Center, <http://www.agbizcenter.org/>

³² Snohomish County Business Journal, <http://www.snohomishcountybusinessjournal.com/article/20081101/SCBJ01/810309902>

³³ HeraldNet, <http://heraldnet.com/article/20090218/NEWS01/702189799/0/COMM0621>