

An Economic Analysis of the

**Food and Agriculture
Sector**

2015

Nevada's Counties



Nevada Department of Agriculture

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The Nevada Department of Agriculture (NDA) promotes sustainable agriculture and natural resources, which work to protect food, fiber, human health and safety and the environment through effective service, regulatory action and agricultural literacy. NDA was established in 1915 by Chapter 561 of the Nevada Revised Statutes. It includes the divisions of:

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- Consumer Equitability,
- Food and Nutrition, and
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An Economic Analysis of the Food and Agriculture Sector Nevada's Counties

INTRODUCTION

Agriculture, natural resources, and related food manufacturing industries represent a set of economic activities which produce goods and services that contribute to the economy of Nevada. These industries use natural resources of forests, croplands and ranches in Nevada to produce raw food commodities. These raw and unprocessed commodities are converted then into finished products by food manufacturing industries and then move through the wholesale and retail distribution chain to final consumers, or to other industry sectors as intermediate goods for further processing. This is the chain of agricultural and related food manufacturing industry activities “from farms and ranches to table” and further. These food and agriculture industries are linked to a broad array of allied suppliers that provide production inputs and supporting services. In addition, natural landscapes and other undeveloped lands provide an array of opportunities for nature-based recreation and eco-tourism.

An economic impact analysis assesses the effect of new or present activities on the overall economy of a region such as a state, county, or city. Any activity that generates payments has an effect on other parts of the local economy, and any expenditure by one person or entity becomes income to another entity. In economic impact analyses, these are called secondary effects and are measured through economic multipliers for each type of activity (industry sector) obtained from regional economic models. This report provides estimates of the economic contributions of broadly defined industries comprising agriculture production and related food manufacturing activities to the economy of Nevada counties in 2012.

For each county, we developed maps showing location and the variety of agriculture producers and food manufacturers. These maps include farmers and ranchers of every size, from large agri-business operations that are the back bone of the county's agriculture sector, to the smaller and mid-sized producers who support only local demand, as well as food manufacturing industries that have a presence in each county and contribute to that county's production output and employment.

METHODOLOGY

Data for this analysis were obtained from the IMPLAN database for all seventeen counties in the State of Nevada for 2012, which in turn were derived from the National Income and Product Accounts for the United States (U.S. Department of Commerce, Bureau of Economic Analysis), the Quarterly Census of Employment and Wages (U.S. Bureau of Labor Statistics), and other sources.

The total food and agriculture sector for each county was defined by those agriculture production industries and food manufacturing industries that have presence in the county. The rationale for including food manufacturing industries in this analysis is that they share a common dependence upon the natural resource base, and they would not exist in the state if not for the basic production activities.

The IMPLAN model includes accounts for industrial and commodity production, employment, labor income, household and institutional consumption, domestic and international trade (imports, exports). Economic multipliers are calculated for each industry to estimate the secondary effects of economic activity. Indirect effects multipliers represent the economic activity generated in the supply chain through the purchase of intermediate inputs from vendor firms, while induced effects multipliers represent the impacts of spending by industry employee households and governments. The total economic impacts were calculated as the sum of direct, indirect, and induced effects. Therefore, while the estimates of this analysis are referred to as “economic impacts,” these values may be better understood as “economic contributions” because they

represent the ongoing economic activity of existing industries rather than a change resulting from new activity introduced to the economy of these counties.

Data used for mapping were collected from Nevada Department of Agriculture (NDA) records, and they include producers who are certified or registered by the NDA through the process of livestock identification or plant industry certification in 2012. Some of the commodities included on the maps had to be grouped for better data management. For example, the Fruits, Vegetables and Other category includes different commodities like, nuts, herbs, hydroponics, etc. The Hay category listed on each map represents only producers who are weed free certified and do not include the total hay producers in each county. Future plans include collecting and providing data on all hay producers in the state, considering the importance of this agriculture commodity to the state's economy. Data for food manufacturing companies are collected from the Nevada Department of Training, Employment and Rehabilitation; Nevada Workforce Informer database for 2014.

EXECUTIVE SUMMARY

Agriculture Production Industries and related food manufacturing industries remain a significant part of Nevada's economy, and it is important to recognize their economic contributions. We evaluated the total economic contributions of these industries for each county in 2012.

This analysis was conducted using the IMPLAN regional economic modeling system and county databases to estimate economic multipliers that capture the additional economic activity generated by the re-spending of income in the local economy. The industry sectors included in this analysis represent a broad array of activities and include agricultural and natural resource commodity production and food manufacturing industries. The total agriculture sector of each county is defined by two major agriculture areas: agriculture production industries and food manufacturing industries that have a significant presence in each county.

This report provides some basic facts about farm and ranching operations, like number of farms, number of operators, and the value of cash receipts from marketing agriculture and food products, but the extent of the total effects of a particular activity or event in each county is measured by employment, output, labor income, exports and imports. Export sales bring dollars to the county economy, which provide for future economic growth. Import sales act as leakages from the county economy. It is important to analyze the changes in economic activity of the food and agriculture sector to determine and measure the contribution these activities have on the total economy of each county.

Economic contribution results will include industry output or sales revenues. Total output contribution includes indirect/induced multiplier effects arising from foreign and domestic exports, total employment impacts (including multiplier effects) of full-time and part-time jobs, and total labor income impacts for employee wages and benefits and business proprietor income data.

Geographically, the size and composition of agriculture production, and related food manufacturing industries, vary across the state of Nevada due to differences in climate, natural resources, population, and settlement patterns. The largest economic contributions occurred in the major metro areas of Clark County and Washoe County, where there are large demands for agriculture and food products and a large workforce available for the food manufacturing industry. The largest counties in terms of total employment impacts, besides the previously mentioned urban areas, were Lyon, Douglas, Churchill, Elko and Humboldt Counties. In terms of labor income impact, other than the two urban areas of Clark and Washoe, the largest counties were Lyon, Humboldt and Douglas County. (Table 1.)

The economic contributions of agriculture and related food manufacturing industries are also relatively more important in many rural areas, where these industries represent a higher share of total economic activity.

TABLE 1. Summary of economic contribution of agriculture production and related food manufacturing industries in Nevada in 2012 by county:

Nevada Counties	Total Employment Impact	Total Labor Income Impact	Total Output Impact
Carson City	288	\$11,665,365	\$62,210,645
Churchill County	964	\$26,375,148	\$171,906,158
Clark County	7,196	\$358,461,145	\$1,697,257,591
Douglas County	1,366	\$51,062,756	\$365,071,319
Elko County	877	\$34,606,601	\$209,460,852
Esmeralda County	62	\$5,129,012	\$49,183,359
Eureka County	215	\$13,513,286	\$85,005,230
Humboldt County	869	\$51,450,955	\$249,926,333
Lander County	179	\$9,259,634	\$60,142,894
Lincoln County	189	\$7,668,609	\$40,534,053
Lyon County	1,544	\$79,050,079	\$338,026,158
Mineral County	89	\$1,553,620	\$17,825,155
Nye County	444	\$15,853,923	\$84,259,269
Pershing County	288	\$17,268,072	\$106,306,637
Storey County	295	\$15,613,097	\$155,002,650
Washoe County	3,752	\$195,278,377	\$1,105,183,113
White Pine County	283	\$8,560,303	\$46,209,152

Source: IMPLAN data for Nevada (2012)

CARSON CITY

Overview

This report provides a profile of the food and agriculture sector and an overview of the economic impact the food and agriculture sector has on the economy of Carson City.

- From the 2012 Census, Carson City had 21 farms, covering 3 percent of land. More than 80 percent of farms were small size farms between 1 to 49 acres.
- In 2012, Carson City's total value of the agriculture sector output was \$50.3 million accounting for 1 percent of the total county's production output. The largest agriculture production industries by output value were:
 - Vegetable and melon farming
 - Greenhouse, nursery, and floriculture production and
 - All other crop farming.

These industries account for more than 63 percent of the total agriculture production output.

The largest food manufacturing industries by output value level were:

- Animal (except poultry) slaughtering, rendering, and processing
- Bread and bakery products manufacturing.

These industries account for more than 50 percent of Carson City food manufacturing output.

The total county employment was 40,834. The food and agriculture sector in Carson City had 198 employees accounting for less than 1 percent of the total city employment.

In 2012, the food and agriculture sector contributed \$6.2 million of labor income to Carson City, accounting for 0.3 percent of the total of Carson City's income.

- Agriculture production in 2012 had \$2.8 million more in exports than imports, creating a trade surplus, or a positive balance of trade. This shows the importance agriculture production has on the Carson City economy. However, food and manufacturing industries had a negative trade balance of \$111.4 million. Negative trading balance shows that most of the Carson City food manufacturing commodities were purchased from outside of the county.
- In 2012, given the economic inter-linkage and multiplier effect, the total economic impact to the Carson City economy from all the agricultural sector activities was \$65.5 million. The total employment and labor income impacts in the Carson City economy from activity of the food and agricultural sector was 297 jobs and \$11.8 million in labor income.

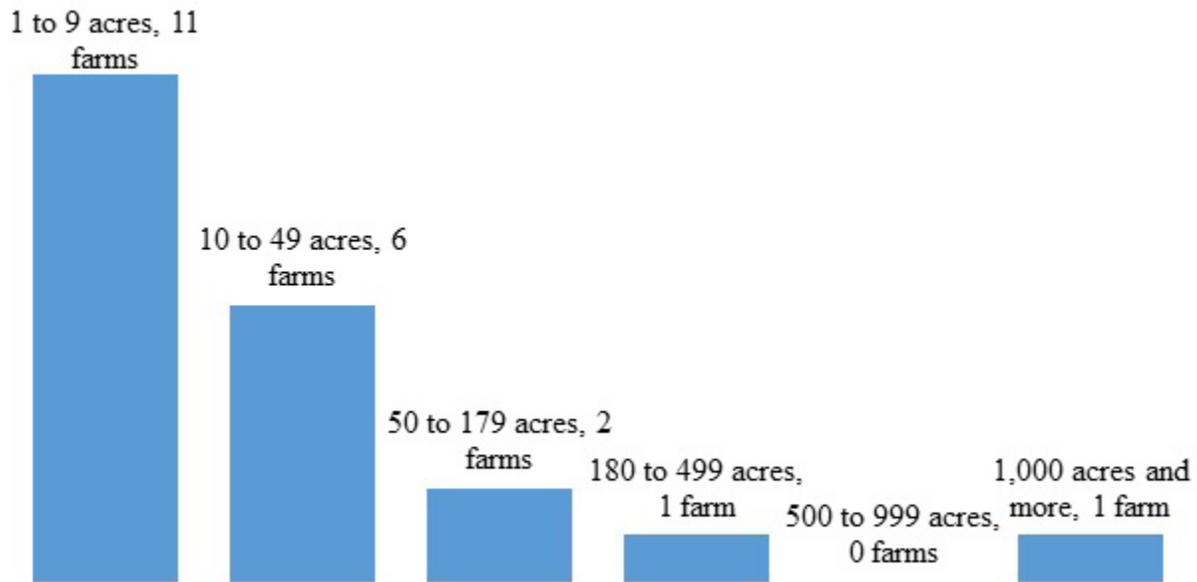
Agriculture Industry Facts

AGRICULTURE LAND AND FARMS

The approximate land area of Carson City was 92,583 acres. There were 21 farms in Carson City covering approximately 2,756 acres, which accounts for 3 percent of land. More than 80 percent of

all farms were small size farms between 1 to 49 acres, 14 percent were mid-size farms between 50 to 499 acres, and 5 percent were large farms with more than 500 acres. (Graph 1.) Data from the Census of Agriculture shows an increase in the total number of farms from 11 farms in 1997 to a steady number of 21 farms in 2002, and same number in 2007, and again in 2012.

GRAPH 1. Farms by Size (acres) - 2012:



Source: <http://quickstats.nass.usda.gov/>

POPULATION AND FARM OPERATORS

The total population of Carson City in 2012 was 54,838. A total of 25 operators were hired on farms and ranch operations. This includes not only a person who operates a farm by doing farm work, but also farm managers and people who are making day-to-day decisions about planting, harvesting, feeding, or marketing. The total number of hired farm workers including paid family members (data excludes contract labor) was 218 with \$1.2 million in total payroll¹.

MARKET VALUE OF AGRICULTURE PRODUCTS SOLD

The market value of agriculture products sold in 2012 was \$5.8 million. Livestock operations were mainly cattle and calves ranching operations, as well as some small sheep, pigs, and equine operations. Crop farming includes mainly land used for haylage, grass silage, and green chop, as well as farm operations growing vegetables and melons. Total farm production expenses were \$4.3 million, and net cash farm income of farm operations was \$1.5 million in the same period.²

¹ Source: 2012 Census of Agriculture, Nevada. This includes total amount paid for farm or ranch labor, including regular workers, part-time workers, and members of the operator's family if they received payments for labor.

² Source: 2012 Census of Agriculture, Nevada.

Analysis of Food and Agriculture Sector Economic Data

From the IMPLAN input-output model databases (2012), there were approximately 203 different industries in Carson City and 6 were agriculture production industries:

- Vegetable and melon farming
- Greenhouse, nursery, and floriculture production
- All other crop farming
- Cattle ranching and farming
- Forestry, forest products, and timber tract production
- Commercial fishing
- Support activities for agriculture and forestry.

Food manufacturing industries of the Carson City are listed below:

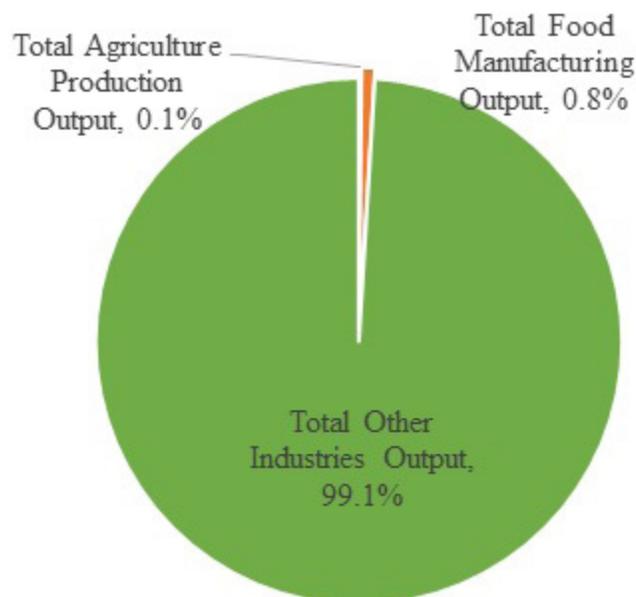
- Animal (except poultry) slaughtering, rendering, and processing
- Nonchocolate confectionery manufacturing
- Bread and bakery product manufacturing
- Cookie, cracker, and pasta manufacturing
- Soft drink and ice manufacturing.

Food manufacturing industries, combined with the agriculture production industries, provide the economic description of the food and agriculture sector of Carson City.

SECTORIAL VALUE OF OUTPUT, EMPLOYMENT AND LABOR INCOME

In 2012, the value of agriculture production output was \$7.1 million, accounting for only 0.1 percent of the total output value of Carson City. The food manufacturing output value accounted for 0.8 percent of the total county's output with a value of \$43.2 million. (Graph 2.)

GRAPH 2. Agriculture Sector Allocation in Total Value of Output (2012)



Source: Minnesota IMPLAN Group, Inc., 2014

Agriculture production industry employment accounted for 0.1 percent, while food manufacturing industry employment accounted for 0.3 percent of the total county’s employment in 2012.

When looking at the levels of labor income, agriculture production industries made up approximately 0.1 percent of the total Carson City labor income or \$474,451, while food manufacturing accounted for 0.3 percent valued at \$5.7 million in 2012.

SECTORIAL VALUE OF EXPORT AND IMPORT

The value of agriculture production exports was \$37.7 million, and the value of imports was \$34.9 million, creating a positive trading balance of \$2.8 million in 2012. The agricultural production sector in Carson City has a positive economic sector in its contribution to the balance of trade. This shows the importance agriculture production has on the Carson City economy. Commodities with the largest negative trading balance were cattle from ranches and farms, other animal products, fruits, and greenhouse, nursery and floriculture products. The food manufacturing sector imported \$111.4 million more than it exports. This trade deficit shows that most of Carson City’s food manufacturing commodities were purchased from outside of the county.

ECONOMIC IMPACT ANALYSIS OF AGRICULTURE SECTOR ON CARSON CITY’S ECONOMY

Economic impact analyses tell us the impact agriculture production and food manufacturing activities have on the total Carson City economy. Table 1. shows the impacts of the agriculture production industries on the Carson City economy.

In 2012, the agriculture production industries had a production level of \$7.1 million, hired 58 people, and a paid labor income of \$2.4 million. The total economic impact generated by Carson City agriculture production activities was \$9.4 million. This means that besides the direct economic benefits agriculture production industries have on the Carson City economy, the indirect and induced impacts on the economy were \$2.3 million. When it comes to total employment and income, due to agriculture production economic activities, an additional 23 jobs were created and \$730,355 in labor income from indirect and induced linkages.

TABLE 1. Economic, Employment, and Labor Income Impacts of the Agricultural Production Industries on the Carson City Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	58	2,408,162	7,092,316
Indirect Effect	13	312,354	1,059,418
Induced Effect	10	418,001	1,214,434
Total Effect	81	3,138,517	9,366,168

Source: Minnesota IMPLAN Group, Inc., 2014

The total economic impact generated by food manufacturing operations was \$53.1 million. Due to economic activity of food manufacturing industries, an additional 67 jobs were created with income of \$2.7 million from indirect and induced linkages (Table 2).

TABLE 2. Economic, Employment, and Labor Income Impacts of the Food Manufacturing Industries on the Carson City Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	140	\$5,935,365	\$43,202,437
Indirect Effect	44	\$1,798,788	\$7,225,588
Induced Effect	23	\$919,022	\$2,659,561
Total Effect	207	\$8,653,175	\$53,087,586

Source: Minnesota IMPLAN Group, Inc., 2014

The broad definition of the food and agriculture sector in this analysis includes agriculture production industries and food manufacturing industries. In 2012, the total economic impact of the food and agriculture sector was \$62.2 million. The total employment impact of the food and agriculture sector had on the county's economy was estimated at 288 people with an income of \$11.7 million. Data are summarized in Table 3.

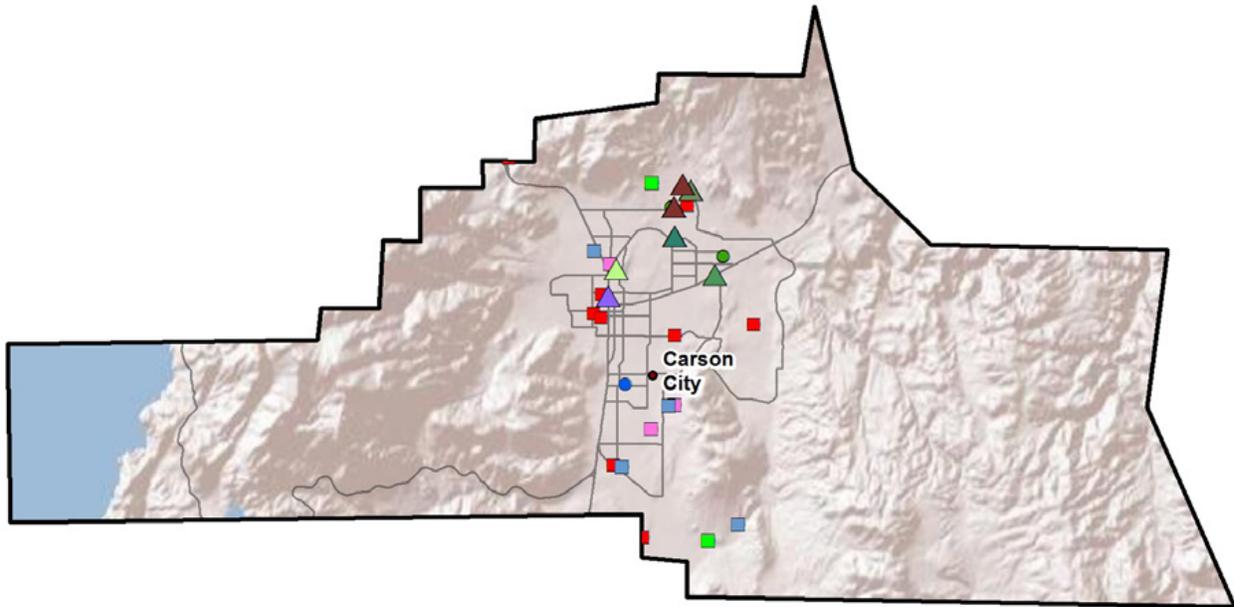
TABLE 3. Economic, Employment, and Labor Income Impacts of the Total Agriculture Sector on the Carson City Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	198	\$8,246,520	\$50,151,151
Indirect Effect	57	\$2,098,560	\$8,241,377
Induced Effect	33	\$1,320,185	\$3,818,118
Total Effect	288	\$11,665,365	\$62,210,645

Source: Minnesota IMPLAN Group, Inc., 2014

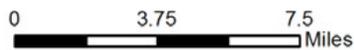
Carson City

Nevada's Agricultural Sector Businesses



Carson City

- | Crops | Livestock | Manufacturer |
|--------------------------|-----------|---------------------------------|
| ● Fruits, Veggies, Other | ■ Cattle | ▲ Nonchocolate Confectionery |
| ● Farmer's Markets | ■ Eggs | ▲ Meat Processed from Carcasses |
| | ■ Horses | ▲ Retail Bakeries |
| | ■ Pigs | ▲ Commercial Bakeries |
| | ■ Sheep | ▲ Tortilla Manufacturing |



CHURCHILL COUNTY

Overview

This report provides a profile of food and agriculture sector industries and an overview of the economic impact the food and agriculture sector has on the Churchill County economy.

- From the 2012 Census, Churchill County had 672 farms, covering approximately 6.3 percent of land. More than 60 percent of farms were small size farms between 1 to 49 acres.
- In 2012, Churchill County's total value of agriculture sector output was \$156.4 million accounting for 6 percent of the total county production output. The largest industries when it comes to agriculture production output value are:
 - Dairy cattle and milk production
 - All other crop farming, and
 - Cattle ranching and farming.

These industries account for more than 90 percent of the total Churchill County's agriculture production output.

Food manufacturing industry:

- Animal (except poultry) slaughtering, rendering, and processing, had an output of \$10.6 million.

Total county employment was 22,119. The agriculture sector in Churchill County had 695 employees accounting for 3.1 percent of the total county employment.

In 2012, the Churchill County agriculture sector labor income was \$22.2 million, accounting for 3.2 percent of the total county's income.

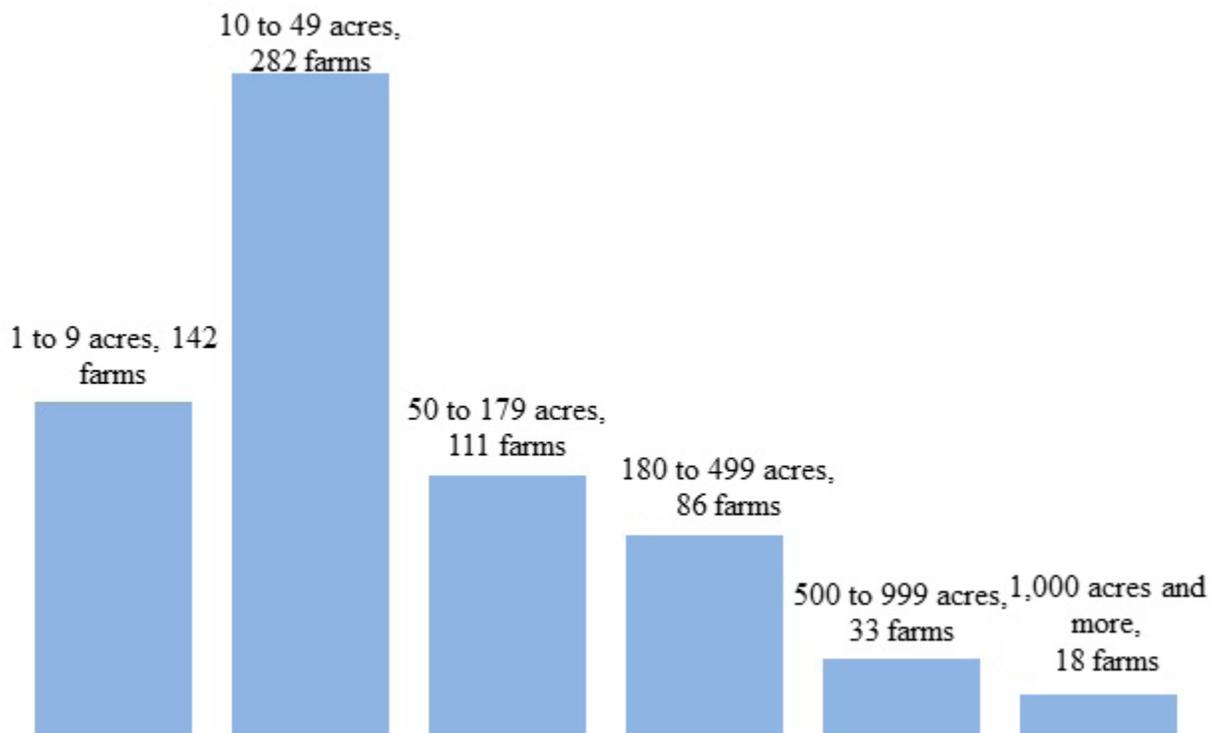
- Agriculture production realized \$96.5 million more in exports than imports, creating a positive trading balance. A trade surplus in agriculture production is important in contributing to the Churchill County economy. Food manufacturing industries created \$62.8 million more in imports than exports. This trade deficit shows that most of Churchill County food manufacturing commodities were purchased from outside of the county.
- In 2012, given the economic inter-linkage and multiplier effect, the total economic impact to the Churchill County economy from food and agriculture sector activities was \$171.9 million. Total employment and labor income impacts in the Churchill County economy from activity of the agricultural sectors was 964 jobs and \$26.4 million in labor income.

Agriculture Industry Facts

LAND AND FARMS

Approximate land area of Churchill County is 3,155,596 acres. In 2012, there were 672 farms in this county, covering 197,232 acres or 6.3 percent of land. The average size of the farm was 294 acres. Approximately 63 percent or 424 farms were small size farms between 1 to 49 acres, 29 percent were mid-size farms between 50 to 179 acres. Only a small number of farms, 8% or 51 farms, were large farms with 500 to 1,000 acres or more. (Graph 1.)

GRAPH 1. Farm by Size (acres) - 2012:



Source: <http://quickstats.nass.usda.gov/>

Data from the Census of Agriculture shows a constant increase in the number of farms, from 341 farms in 1997, to 498 farms in 2002, then to 529 farms in 2007, to 672 in 2012.

POPULATION AND FARM OPERATORS

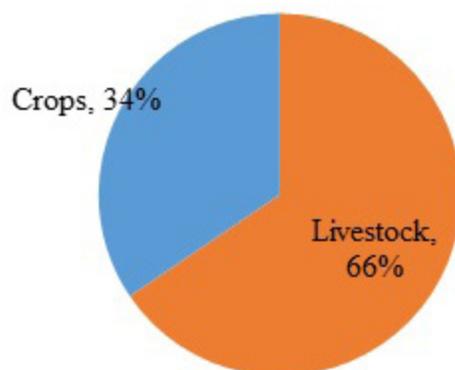
24,375 people were living in Churchill County in 2012. A total of 1,045 operators were hired on farm and ranch operations, including not only people who operate a farm by doing farm work, but also farm managers and those making day-to-day decisions about planting, harvesting, feeding, or marketing. The total number of hired farm labor, including total hired workers as well as paid family members (data exclude contract labor), was 857 with \$10.8 million in total payroll³.

MARKET VALUE OF AGRICULTURE PRODUCTS SOLD

In 2012, cash receipts from sales of agriculture products in Churchill County were \$89.9 million. The market value of livestock, poultry, and their products sold was \$58.9 million (66 percent), while the value of cash receipts from sales of crops, including nursery and greenhouse crops, was \$31.0 million (34 percent) (Graph 2.)

³ Source: 2012 Census of Agriculture, Nevada. This includes total amount paid for farm or ranch labor, including regular workers, part-time workers, and members of the operator's family if they received payments for labor.

GRAPH 2. Total cash receipts, percent by commodity, 2012:



Source: 2012 Census of Agriculture, Nevada

Cattle, including calves sales in 2012, was \$14.0 million, and milk from cow operations had sales of \$37.4 million, accounting for almost 87 percent of the total value of livestock sales. Sheep, goats, wool, and milk operation sales were \$6.0 million. Other livestock operations included equine operations, poultry and eggs operations, hogs and pigs operations, and other animals and their products operations. In 2012, the total of 44,159 acres of agriculture land was used for all hay and haylage, grass silage, and green chop growth. There were 358 farm operations growing all hay, including alfalfa, other tame, small grain, and wild (dry).

Approximately 24 farm operations were growing and harvesting vegetables melons, potatoes, and sweet potatoes for sale, including snap beans, beets, cantaloupes, carrot, dry onions, potatoes, pumpkin, squash, sweet corn, tomatoes, watermelons, and other vegetables harvested on proximity.

There were 19 farms with land in orchards covering 38 acres of agriculture land. Approximately 24 farms in 2012 were growing and selling different type of fruits: noncitrus, apples, apricots, cherries, grapes, nectarines, peaches, pears, plumbs, berries, raspberries, and nuts.

Analysis of Agriculture Sector Economic Data

From the IMPLAN input-output model databases (2012), there were approximately 145 different industries in Churchill County, and 6 were from the agriculture production sector industries:

- Grain farming
- Vegetable and melon farming
- Fruit farming
- Greenhouse, nursery, and floriculture production
- All other crop farming
- Cattle ranching and farming
- Dairy cattle and milk production
- Animal production, except cattle and poultry and eggs
- Forestry, forest products, and timber tract production
- Support activities for agriculture and forestry.

The main food manufacturing industry for this county was:

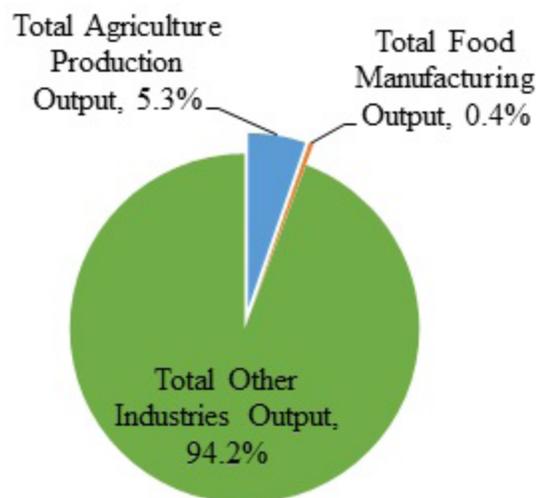
- Animal (except poultry) slaughtering, rendering, and processing.

The food manufacturing industries, combined with agriculture production sector industries, provide the economic description of the food and agriculture sector of Churchill County.

SECTORIAL VALUE OF OUTPUT, EMPLOYMENT AND LABOR INCOME

In 2012, the total value of agriculture production output was \$145.8 million, accounting for 5.3 percent of the total output value of Churchill County. The food manufacturing output accounted for only 0.4 percent of total output with \$10.6 million. (Graph 3.).

GRAPH 3. Agriculture Sector Allocation in Total Value of Output (2012):



Source: Minnesota IMPLAN Group, Inc., 2014

The top 20 economic industries by value of output created \$1.8 billion in output, which was approximately 65 percent of the value of the county's total output. Two Churchill County agricultural production industries were in the top 20 in value of output: dairy cattle and milk production with an output of \$74.9 million, and all other crop farming, which consists mainly of alfalfa hay, with an output value of \$49.9 million. Dairy cattle and milk production was ranked 12th, and all other crop farming was ranked as the 15th largest of Churchill County's industries in regard to the value of production.

The total employment of agriculture production accounted for 3.0 percent, while the food manufacturing industries accounted for only 0.2 percent of the total county's employment in 2012.

When looking at the levels of labor income, the agriculture production industries made up approximately 3.0 percent of the total Churchill County labor income valued at approximately \$20.9 million, while food manufacturing accounted for only 0.2 percent, with a value of \$1.4 million in labor income in 2012.

SECTORIAL VALUE OF EXPORT AND IMPORT

The value of agriculture production exports in Churchill County was \$142.7 million and the value of agriculture production imports was \$46.2 million, creating a positive trading balance of \$96.5 million in 2012. Agriculture production commodities with positive trading balances were all other crop farming, cattle from ranches and farms, dairy cattle and milk products, and timber and forest nursery products, while grains, vegetables and melons, logs and roundwood, were the largest importing commodities. By identifying input-output sector commodities that are imported, the county can target these sectors for import substitution efforts. The agricultural production sector in Churchill County is a positive economic sector in its contribution to the balance of trade. This shows the importance the agriculture sector has on the Churchill County economy. Looking at the top 20 exporters in Churchill County, the dairy cattle and milk production industries had export sales valued at \$73.5 million, which was 4.1 percent of the total county's exports, and was ranked as the 8th largest industry in value of exports.

The food manufacturing industries created \$62.8 million more in imports than exports. Negative trading balance shows that most of Churchill County food manufacturing commodities were purchased from outside of the county.

ECONOMIC IMPACT ANALYSIS OF AGRICULTURE SECTOR ON CHURCHILL COUNTY ECONOMY

Economic impact analysis will tell us the impact of agriculture production and food manufacturing activities on the total Churchill County economic activity. Table 1. shows the impacts of the activities by the food and agricultural sector on the Churchill County economy.

In 2012, agriculture production had a production level of \$145.8 million, hired 661 people, and paid labor income of \$20.86 million. The total economic impact generated by Churchill County's agriculture production activities was \$160.6 million. This means that besides the direct economic benefits agriculture production industries have on the Churchill County economy, the indirect and induced impacts on the economy were \$14.8 million. When it comes to total employment and income, due to agriculture production economic activities, an additional 260 jobs were created, and \$3.9 million in labor income came from indirect and induced linkages.

TABLE 1. Economic, Employment, and Labor Income Impacts of the Agricultural Production Industries on the Churchill County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	661	\$20,856,871	\$145,832,921
Indirect Effect	177	\$1,754,264	\$8,046,826
Induced Effect	83	\$2,170,442	\$6,727,289
Total Effect	921	\$24,781,577	\$160,607,036

Source: Minnesota IMPLAN Group, Inc., 2014

Food manufacturing industries in 2012 had a production output of \$10.5 million and employed 34 people with a labor income of \$1.4 million. The total economic impact generated by food manufacturing operations in Churchill County was \$11.3 million. Due to economic activity of food man-

ufacturing industries, an additional 8 jobs were created with an income of \$227,534 from indirect and induced linkages. (Table 2).

TABLE 2. Economic, Employment, and Labor Income Impacts of the Food Manufacturing Industries on the Carson City Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	34	\$1,366,038	\$10,549,335
Indirect Effect	3	\$85,938	\$311,474
Induced Effect	5	\$141,595	\$438,313
Total Effect	42	\$1,593,571	\$11,299,122

Source: Minnesota IMPLAN Group, Inc., 2014

The broad definition of the food and agriculture sector in this analysis includes agriculture production industries and food manufacturing industries. In 2012, the total economic impact of the agriculture sector was \$171.9 million. The total employment impact of agriculture sector on county's economy was estimated at 964 people. Data are summarized in Table 3.

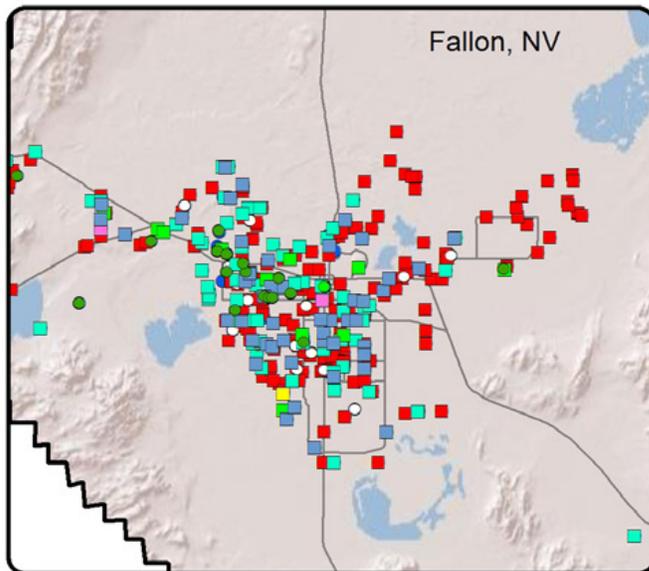
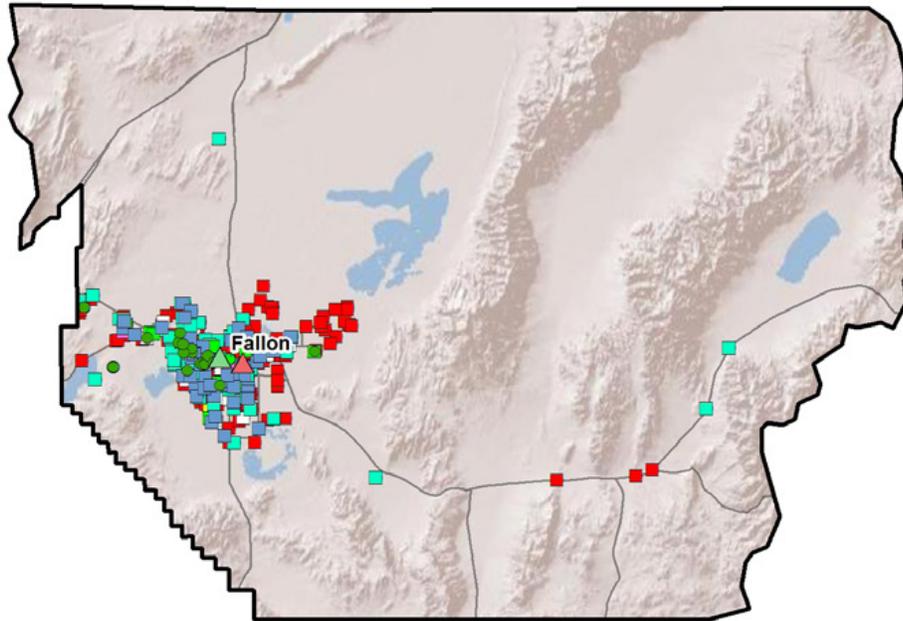
TABLE 3. Economic, Employment, and Labor Income Impacts of the Total Agriculture Sector on the Carson City Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	695	\$22,222,909	\$156,382,256
Indirect Effect	181	\$1,840,202	\$8,358,300
Induced Effect	88	\$2,312,037	\$7,165,602
Total Effect	964	\$26,375,148	\$171,906,158

Source: Minnesota IMPLAN Group, Inc., 2014

Churchill County

Nevada's Agricultural Sector Businesses



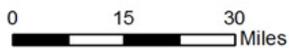
Churchill County

Crops

- Fruits, Veggies, Other
- Farmer's Markets
- Hay
- Honey
- Nursery

Livestock

- Cattle
- Chickens
- Eggs
- Dairy
- Goats
- Horses
- Sheep



CLARK COUNTY

Overview

This report provides a profile of the food and agriculture sector industries and an overview of the economic impact the food and agriculture sector has on the Clark County economy.

- From the 2012 Census, Clark County had 252 farms, covering approximately 0.3 percent of land. More than 70 percent of farms were small size farms between 1 to 49 acres.
- In 2012, Clark County's total value of the total agriculture sector output was \$1.2 billion accounting for 0.9 percent of the total county production output. The largest industries when it comes to agriculture production output values are:
 - All other crop farming
 - Vegetable and melon farming, and
 - Greenhouse, nursery, and floriculture production.

These industries account for more than 60 percent of Clark County's total agriculture production output.

The largest industries when it comes to food manufacturing output value are:

- Ice cream and frozen dessert manufacturing, and
- Bread and bakery product manufacturing.

These food manufacturing industries account for 40 percent of the total food manufacturing output.

Total county employment was 1,092,159 in 2012. The agriculture sector in Clark County had 3,598 employees, accounting for 0.33 percent of the total county employment.

In 2012, the Clark County agriculture sector labor income was \$161.7 million, accounting for 0.3 percent of the total county's income.

- Agriculture production had \$579.4 million more in imports than exports. Food manufacturing industries created \$4.2 million more in imports than exports. Negative trading balance shows that most of Clark County agriculture production and food manufacturing commodities were purchased from outside of the county.
- In 2012, given the economic inter-linkage and multiplier effect, the total economic impact to the Clark County economy from the agriculture sector activities was \$1.7 billion. The total employment and labor income impacts in the Clark County economy from activity of the agricultural sectors was 7,196 jobs and \$358.5 million in labor income.

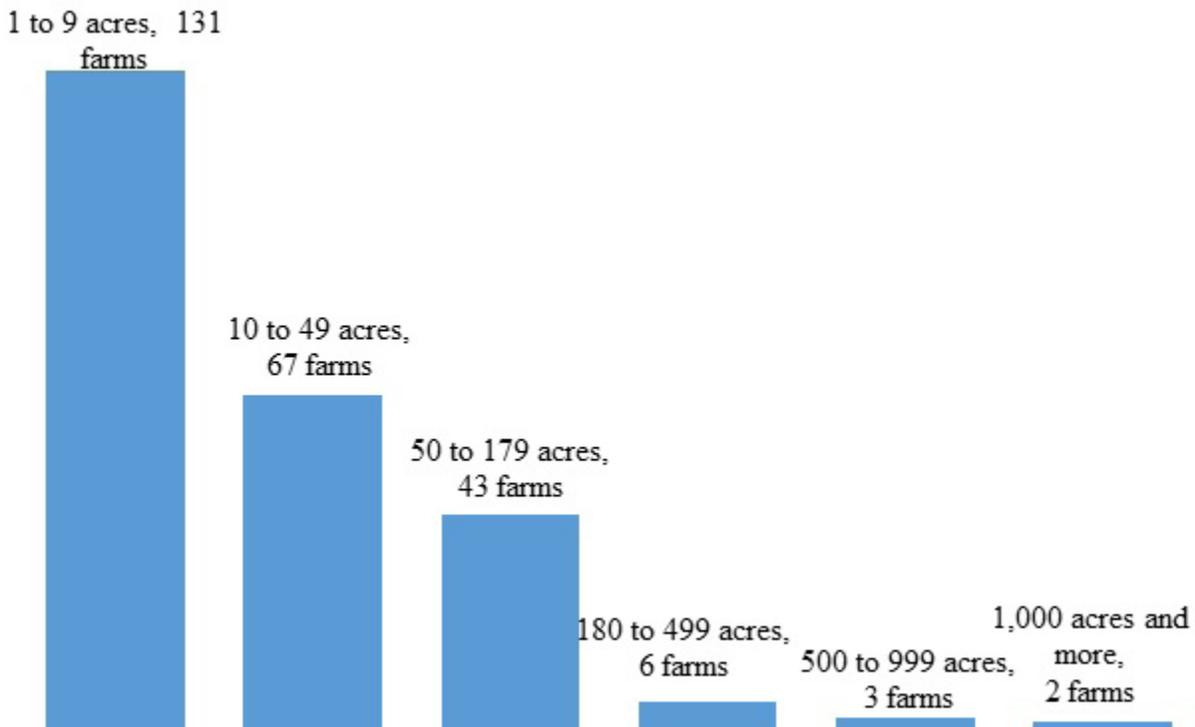
Agriculture Industry Facts

AGRICULTURE LAND AND FARMS

The approximate land area of Clark County is 5,050,556 acres. In 2012, there were 252 farms in Clark County covering 15,620 acres of land. That counts for only 0.3 percent of land. The average

size of the farms was 62 acres. When it comes to the size of farms, 79 percent or 198 farms were small size farms between 1 to 49 acres, 19 percent or 49 were mid-size farms (50 to 499 acres) and 2 percent or 5 farms are large size farms with 500 to 1,000 or more acres. (Graph 1.)

GRAPH 1. Farm by Size (acres) - 2012:



Source: <http://quickstats.nass.usda.gov/>

POPULATION AND FARM OPERATORS

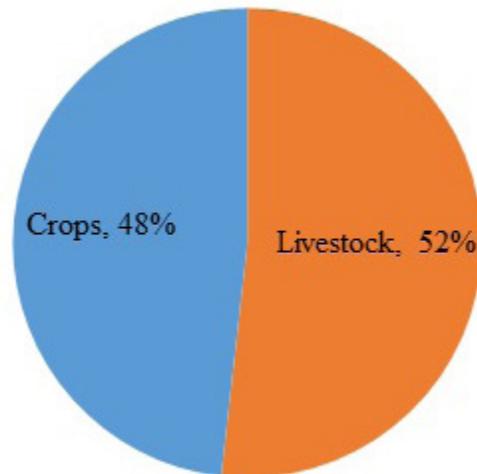
The total population of Clark County in 2012 was 2,000,759 people. 488 operators were hired on Clark County farm and ranch operations in 2012. These include people who operate a farm by doing farm work, as well as farm managers who are making day-to-day decisions about planting, harvesting, feeding, or marketing. The total number of farm labor that includes total hired workers and paid family members (data exclude contract labor) was 830 with \$3.1 million in total payroll.⁴

MARKET VALUE OF AGRICULTURE PRODUCTS SOLD

The total market value of agriculture products sold in 2012 in Clark County was \$6.8 million. The market value of livestock, poultry, and their products sales were \$3.5 million (52 percent), while the value of crops, including nursery and greenhouse crops was \$3.3 million (48 percent). (Graph 1.)

⁴ Source: 2012 Census of Agriculture, Nevada. This includes total amount paid for farm or ranch labor, including regular workers, part-time workers, and members of the operator's family if they received payments for labor.

GRAPH 2. Total cash receipts, percent by commodity, 2012:



Source: 2012 Census of Agriculture, Nevada.

Livestock operations in Clark County include equine operations, cattle and calves and milk operations, all poultry operations, all goats, including meat and milk operations, and sheep and lamb operations.

In 2012, there were 74 farm operations harvesting hay (all hay including alfalfa, other tame, small grain and wild, dry). Approximately 240 acres of land were used on 24 farms for vegetables and vegetable harvest. Harvested vegetables in Clark County include beans, cantaloupes, carrots, cucumbers, eggplant, kale, lettuce, onions, peas, potatoes, squash, and tomatoes. There were 18 farms with land in orchards covering 185 acres of land.

Fruits and nuts growing and harvesting operations include noncitrus fruits, apples, apricots, grapes, peaches, pears, plums and prunes, pomegranates, nuts, and berries.

Analysis of Agriculture Sector Economic Data

From the IMPLAN input-output model databases (2012), there were approximately 300 different industries in Clark County and 8 were in the agriculture production industries:

- Vegetable and melon farming
- Fruit farming
- Greenhouse, nursery, and floriculture production
- All other crop farming
- Cattle ranching and farming
- Animal production, except cattle and poultry and eggs
- Forestry, forest products, and timber tract production
- Support activities for agriculture and forestry.

The food manufacturing sector has a significant presence in Clark County. Food manufacturing industries that will be included in this agriculture sector analysis are listed below:

- Confectionery manufacturing from purchased chocolate
- Nonchocolate confectionery manufacturing
- Frozen food manufacturing
- Fruit and vegetable canning, pickling, and drying
- Fluid milk and butter manufacturing
- Ice cream and frozen dessert manufacturing
- Animal (except poultry) slaughtering, rendering, and processing
- Seafood product preparation and packaging
- Bread and bakery product manufacturing
- Cookie, cracker, and pasta manufacturing
- Tortilla manufacturing
- Snack food manufacturing
- Coffee and tea manufacturing
- Flavoring syrup and concentrate manufacturing
- Seasoning and dressing manufacturing
- All other food manufacturing
- Soft drink and ice manufacturing
- Breweries
- Distilleries
- Tobacco product manufacturing.

SECTORIAL VALUE OF OUTPUT, EMPLOYMENT AND LABOR INCOME

The total value of agriculture production industries' output in 2012 was \$43.5 million, accounting for only 0.03 percent of the total output value of Clark County. Food manufacturing industries had output values of \$1.1 billion, contributing approximately 1 percent to the total county output.

Clark County is an urban county and agriculture production does not have a significant influence on the total output, employment, or labor income of this county. However, because of its large population and strong tourism, entertainment and service industries, Clark County presents a large market for direct sales opportunities when it comes to agriculture production and food manufacturing.

Looking at the agriculture production sector industries of Clark County, some operations are gaining significant importance for the economy. Those operations include all other crop farming, vegetable and melon farming, and greenhouse, nursery, and floriculture production operations.

When it comes to total employment of agriculture production, support activities for agriculture and forestry industry represent the largest employing industry accounting for more than 60 percent of total employment within the agriculture production sector.

Four of the largest food manufacturing sector industries, in regards to total food manufacturing output, were ice cream and frozen dessert manufacturing, bread and bakery product manufacturing, soft drink and ice manufacturing, and fluid milk and butter manufacturing. Combined, these industries accounted for almost 60 percent of the value of total food manufacturing output.

SECTORIAL VALUE OF EXPORT AND IMPORT

The agriculture production sector in 2012 had \$37.3 million in exports and \$616.7 million in imports, creating \$579.4 million more in imports than exports. The agriculture production commodities with positive trading balance were oilseeds and agriculture, and forestry support services, while vegetables and melons, and fruits were major importing commodities.

Food manufacturing industries created \$4.2 million more in imports than exports. Among all food manufacturing industries, ice cream and frozen desserts was the only industry that created \$161.8 million more in exports, while processed animal (except poultry) meat and rendered byproducts and processed poultry meat products were the largest food manufacturing importer. Negative trading balances show that most of Clark County agriculture production and food manufacturing commodities were purchased from outside of the county.

ECONOMIC IMPACT ANALYSIS OF AGRICULTURE SECTOR ON CLARK COUNTY ECONOMY

Economic impact analyses tell us the impact agriculture production and food manufacturing activities had on the total Clark County economy.

In 2012, the agriculture production sector output was \$43.5 million, 460 people were hired, and paid income was \$16.31 million. The total economic impact generated by Clark County agriculture production industries was \$65.3 million. This means that besides the direct economic benefits agriculture production industries have on the Clark County economy, the indirect and induced impacts on the economy were \$21.8 million. When it comes to total employment and income, agriculture production economic activities added an additional 211 jobs, creating \$8.5 million in labor income from indirect and induced linkages. (Table 1.)

TABLE 1. Economic, Employment, and Labor Income Impacts of the Agricultural Production Industries on the Clark County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	460	\$16,313,080	\$43,524,698
Indirect Effect	104	\$3,782,923	\$9,041,076
Induced Effect	107	\$4,727,866	\$12,752,957
Total Effect	671	\$24,823,869	\$65,318,731

Source: Minnesota IMPLAN Group, Inc., 2014

Food manufacturing industries in 2012 had a production output of \$1.1 billion, employed 3,137 people with a labor income of \$145.56 million. The total economic impact generated by food manufacturing operations was \$1.6 billion. Due to economic activity of food manufacturing industries, an additional 3,388 jobs were created with income of \$188.1 million from indirect and induced linkages. (Table 2).

TABLE 2. Economic, Employment, and Labor Income Impacts of the Food Manufacturing Industries on the Clark County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	3,137	\$145,557,527	\$1,132,064,234
Indirect Effect	1,959	\$125,056,902	\$329,622,087
Induced Effect	1,429	\$63,022,847	\$170,252,539
Total Effect	6,525	\$333,637,276	\$1,631,938,860

Source: Minnesota IMPLAN Group, Inc., 2014

The broad definition of the food and agriculture sector in this analysis includes agriculture production industries and food manufacturing industries. In 2012, the total economic impact of the food and agriculture sector was \$1.7 billion. The total employment impact of the food and agriculture sector on Clark County's economy was estimated at 7,198 people with income of \$358.5 million. Data are summarized in Table 3.

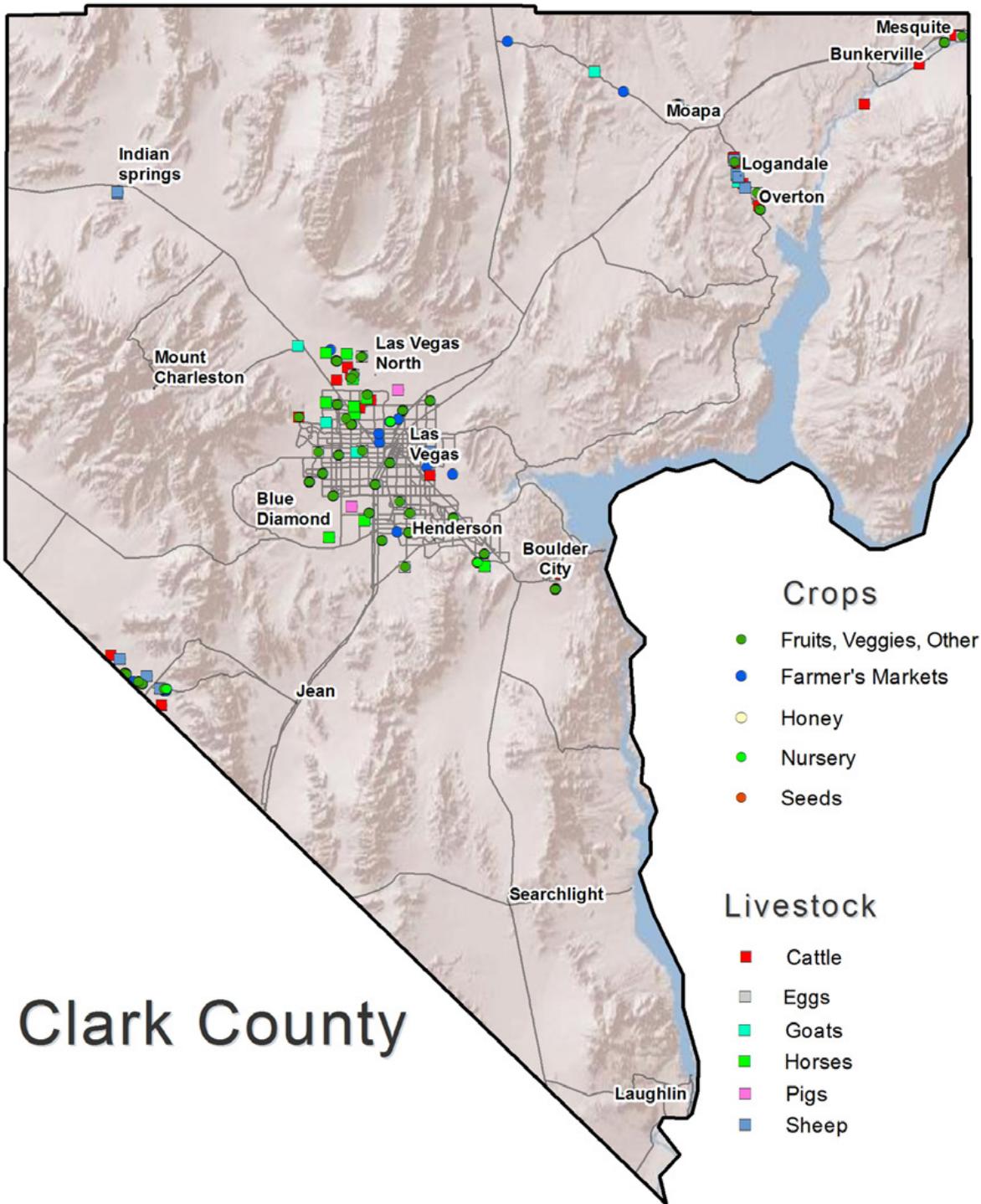
TABLE 3. Economic, Employment, and Labor Income Impacts of the Total Agriculture Sector on the Clark County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	3,597	\$161,870,607	\$1,175,588,932
Indirect Effect	2,063	\$128,839,825	\$338,663,163
Induced Effect	1,536	\$67,750,713	\$183,005,496
Total Effect	7,196	\$358,461,145	\$1,697,257,591

Source: Minnesota IMPLAN Group, Inc., 2014

Clark County

Nevada's Agricultural Sector Businesses



DOUGLAS COUNTY

Overview

This report provides a profile of the food and agriculture sector and an overview of the economic impact the food and agriculture sector has on the Douglas County economy.

- From the 2012 Census, Douglas County had 255 farms, covering approximately 22 percent of land. More than 50 percent of farms were small size farms between 1 to 49 acres.
- In 2012, Douglas County's total value of agriculture sector output was \$301.9 million, accounting for 8 percent of the total county production output.

Two largest industries when it comes to agriculture production output value are:

- All other crop farming, and
- Cattle ranching and farming.

These two industries accounts for more than 70 percent of total Douglas County's agriculture production output.

- Coffee and tea manufacturing accounts for more than 70 percent of Douglas County food manufacturing output.

Total county employment was 29,481. The agriculture sector in Douglas County had 715 employees, accounting for 2.4 percent of the total County employment.

In 2012, labor income of the Douglas County food and agriculture sector was \$33.5 million, accounting for 3.1 percent of the total County's labor income.

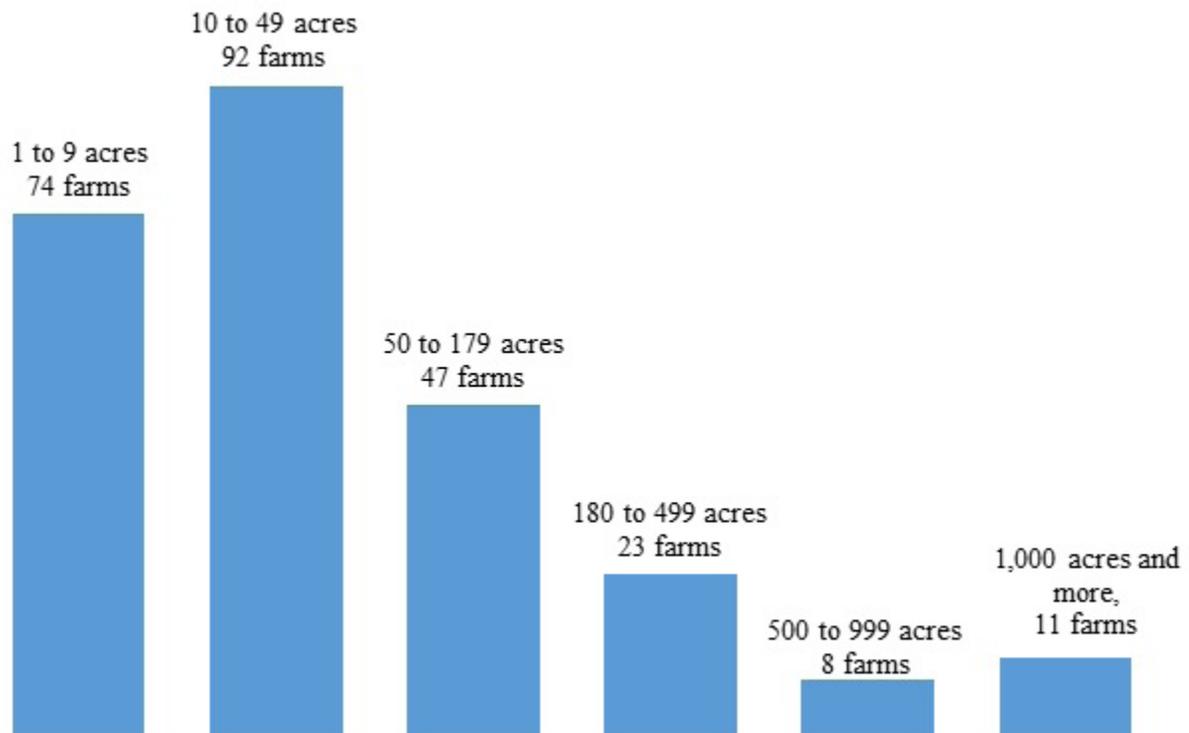
- Agriculture production had \$49.1 million more in imports than exports; however, food and manufacturing industries realized \$122.1 million more in exports than imports. The total agriculture sector of Douglas County realized \$73.1 million more in exports than in imports, showing a trade surplus, contributing to the balance of trade in Douglas County.
- In 2012, given the economic inter-linkage and multiplier effect, the total economic impact to the Douglas County economy from food and agriculture sector activities was \$365.1 million. The total employment and labor income impacts in the Douglas County economy from activity of the Food and Agricultural Sectors was 1.366 jobs and \$51.1 million in labor income.

Agriculture Industry Facts

AGRICULTURE LAND AND FARMS

The approximate land area of Douglas County is 454,220 acres. There were 255 farms in Douglas County covering 100,944 acres of land, which counts for 22.2 percent of land. The average size of the farm was 396 acres. Approximately 65 percent or 166 farms were small size farms between 1 to 49 acres, 27 percent or 70 farms were mid- size farms between 50 to 499 acres, and 7 percent were large farms with 500 to 1,000 or more acres. (Graph 1.)

GRAPH 1. Farm by Size (acres) - 2012:



Source: <http://quickstats.nass.usda.gov/>

POPULATION AND FARM OPERATORS

The total population of Douglas County in 2012 was 46,996. A total of 408⁵ operators were hired on Douglas County farm and ranch operations in 2012, and that includes not only people doing farm work, but also farm managers who are making day-to-day decisions about planting, harvesting, feeding, or marketing. The total number of hired farm workers, as well as paid family members (data exclude contract labor) was 399 with \$4.8 million in total payroll.⁶

MARKET VALUE OF AGRICULTURE PRODUCTS SOLD

The market value of cattle, including calves, sold in 2012 was \$5.5 million. Other livestock operations include specialty animals, sheep, including lamb, wool operations, hogs, goats and milk operations, equine operations, poultry (including eggs), and honey operations.

In 2012, 15,555 acres of agriculture land in Douglas County was used for all hay and haylage, grass silage, and green chop growth. Approximately 7 farm operations were harvesting vegetables on a total of 30 acres of land, and a few farm operations were growing nursery, greenhouse, floriculture, and propagative materials.

⁵ Source: 2012 Census of Agriculture, Nevada (page 321)

⁶ Source: 2012 Census of Agriculture, Nevada. This includes total amount paid for farm or ranch labor, including regular workers, part-time workers, and members of the operator's family if they received payments for labor.

Analysis of Agriculture Sector Economic Data

From the IMPLAN input-output model databases (2012), there were approximately 180 different industries in Douglas County, and only 8 were agriculture production industries:

- Grain farming
- Vegetable and melon farming
- All other crop farming
- Cattle ranching and farming
- Dairy cattle and milk production
- Animal production, except cattle and poultry and eggs
- Forestry, forest products, and timber tract production
- Support activities for agriculture and forestry.

Food manufacturing industries of Douglas County are listed below:

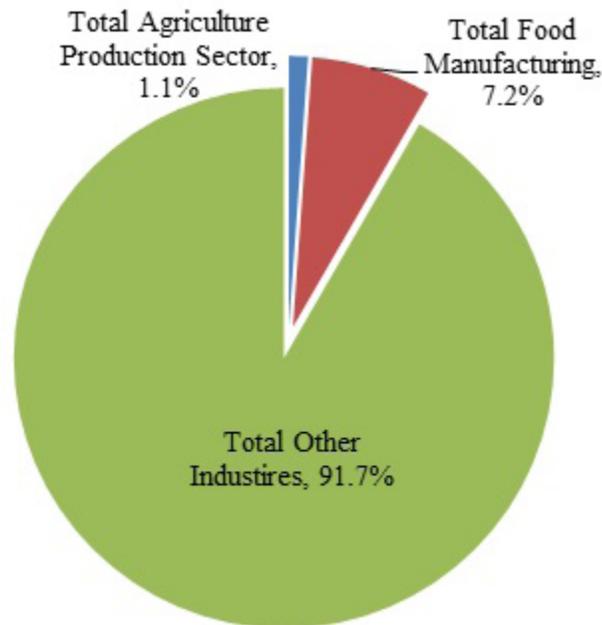
- Confectionery manufacturing from purchased chocolate
- Frozen food manufacturing
- Fruit and vegetable canning, pickling, and drying
- Ice cream and frozen dessert manufacturing
- Bread and bakery product manufacturing
- Coffee and tea manufacturing.

Food manufacturing industries, combined with agriculture production industries, in this report provide the economic description of the food and agriculture sector of Douglas County.

SECTORIAL VALUE OF OUTPUT, EMPLOYMENT AND LABOR INCOME

The total value of agriculture production output in 2012 was \$37.9 million, accounting for only 1.0 percent of the total output value of Douglas County. Food manufacturing production output was valued at \$264.0 million, which was 7.2 percent of the total output value. (Graph 2.)

GRAPH 2. Agriculture Sector Allocation in Total Value of Output (2012):



Source: Minnesota IMPLAN Group, Inc., 2014

Total employment of agriculture production accounted for only 1.2 percent, and food manufacturing industries accounted for 1.2 percent of the total county's employment in 2012. When looking at the levels of labor income, agriculture production industries made up approximately 1.0 percent of the total Douglas County labor income with \$10.2 million, while food manufacturing accounted for 2.2 percent with a value of \$23.4 million in labor income in 2012.

The top 20 industries by value of output, created \$2.4 billion or approximately 66 percent of the value of Douglas County's total output. Two of the food manufacturing industries were in top 20 industries: coffee and tea manufacturing was ranked as the 4th largest industry with an output of \$206.9 million and accounted for almost 6 percent of the total Douglas County production output. Fruit and vegetable canning, pickling, and drying was ranked as the 20th largest industry with \$40.9 million in output. The coffee and tea manufacturing sector was ranked as the 16th largest industry out of top 20 in regards to labor income.

SECTORIAL VALUE OF EXPORT AND IMPORT

The total value of exports of agriculture production in Douglas County in 2012 was \$30.3 million, and the value of imports was \$79.4 million, creating \$49.1 million more in imports than exports. The agriculture production commodities with positive trading balance were all other crop farming, cattle from ranches and farms, dairy cattle and milk products, and forest, timber, and forest nursery products. The commodities with the largest trade deficits were fruits, grains, vegetables and melons, and greenhouse, nursery, and floriculture. Trade deficits show that most of Douglas County agriculture production commodities were purchased from outside of the county. The food manufacturing industries had \$122.1 million more in exports than imports, contributing positively

to the Douglas County economy. Coffee and tea products had a balanced trade surplus, as well as canned, pickled and dried fruits and vegetables. Processed animal and poultry meats as well as fluid milk and butter had a balanced trade deficit, indicating that these are the industries in need of import substitution efforts.

The top 20 exporters in Douglas County accounted for 76 percent of the total export value. One agriculture production industry was in the top 20, all other crop farming, and was ranked the 19th largest exporting industry. Two food manufacturing industries were also in the top 20; coffee and tea was ranked the 3rd largest, while canned, pickled, and dried fruits and vegetables was ranked the 12th largest exporting industry in regard to the total value of exports.

ECONOMIC IMPACT ANALYSIS OF AGRICULTURE SECTOR ON DOUGLAS COUNTY ECONOMY

Economic impact analyses tell us the impact of agriculture production and food manufacturing activities on the total Douglas County economy. In 2012, the agriculture production industries' output value was \$37.9 million, hired 349 people, and paid labor income of \$10.19 million. The total economic impact generated by agriculture production industries of Douglas County were \$53.7 million. This means that besides the direct economic benefits agriculture production industries have on the Douglas County economy, the indirect and induced impacts on the economy were \$15.8 million. When it comes to total employment and income, due to agriculture production sector economic activities, an additional 225 jobs were created and \$3.5 million in labor income from indirect and induced linkages. (Table 1.)

TABLE 1. Economic, Employment, and Labor Income Impacts of the Agricultural Production Industries on the Douglas County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	349	\$10,188,559	\$37,928,898
Indirect Effect	183	\$2,144,566	\$11,477,611
Induced Effect	42	\$1,371,060	\$4,333,016
Total Effect	574	\$13,704,185	\$53,739,525

Source: Minnesota IMPLAN Group, Inc., 2014

Food manufacturing industries in 2012 had a production output of \$264.0 million and employed 367 people with labor income of \$23.4 million. Total economic impacts generated by food manufacturing operations was \$311.3 million. Due to economic activity of food manufacturing industries, an additional 425 jobs were created with an income of \$14.0 million from indirect and induced linkages. (Table 2).

TABLE 2. Economic, Employment, and Labor Income Impacts of the Food Manufacturing Industries on the Douglas County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	367	\$23,358,431	\$264,010,257
Indirect Effect	310	\$10,219,548	\$35,370,554
Induced Effect	115	\$3,780,592	11,950,983
Total Effect	792	\$37,358,571	\$311,331,794

Source: Minnesota IMPLAN Group, Inc., 2014

The definition of the food and agriculture sector in this analysis includes agriculture production industries and food manufacturing industries. In 2012, the total economic impact of the food and agriculture sector was \$365.1 million. The total employment impact the food and agriculture sector had on the county's economy was estimated at 1,366 people with an income of \$51.1 million. Data are summarized in Table 3.

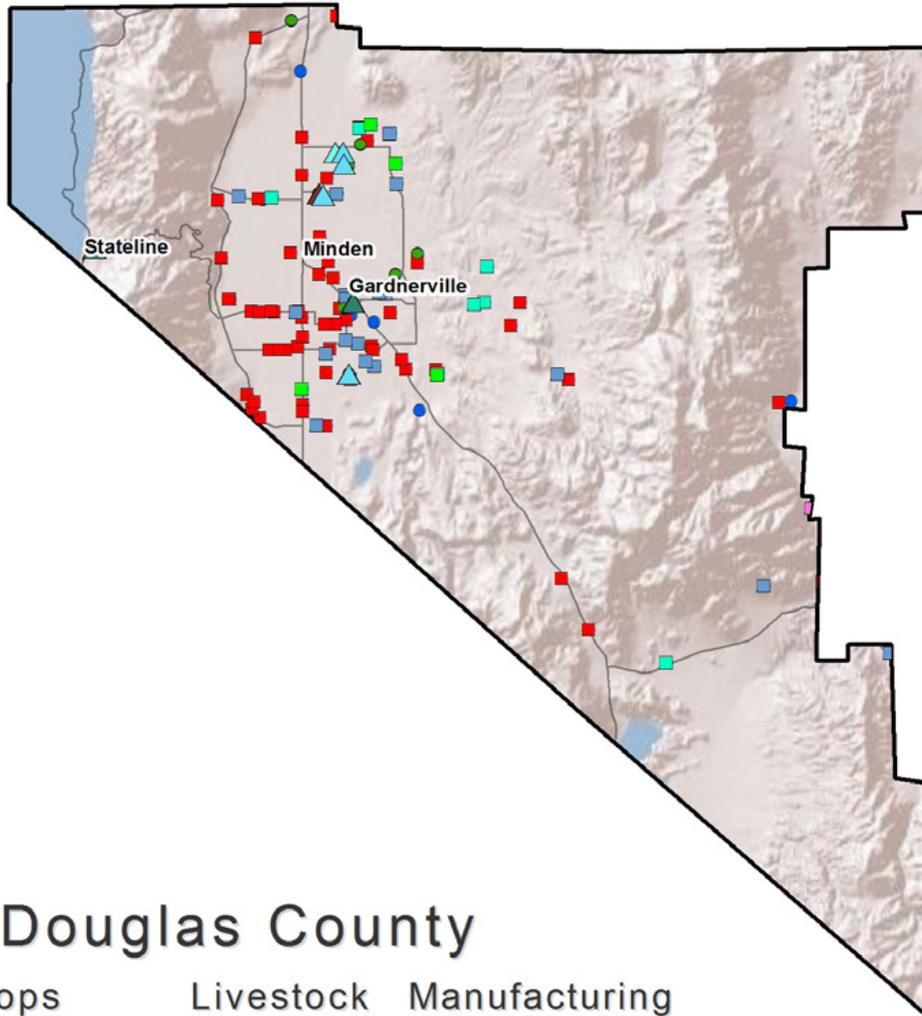
TABLE 3. Economic, Employment, and Labor Income Impacts of the Total Agriculture Sector on the Douglas County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	716	\$33,546,990	\$301,939,155
Indirect Effect	493	\$12,364,114	\$46,848,165
Induced Effect	157	\$5,151,652	\$16,283,999
Total Effect	1,366	\$51,062,756	\$365,071,319

Source: Minnesota IMPLAN Group, Inc., 2014

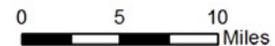
Douglas County

Nevada's Agricultural Sector Businesses



Douglas County

- | Crops | Livestock | Manufacturing |
|--------------------------|-----------|-------------------------------|
| ● Fruits, Veggies, Other | ■ Cattle | ▲ Confectionery |
| ● Farmer's Markets | ■ Eggs | ▲ Fruit and Vegetable Canning |
| ● Honey | ■ Goats | ▲ Ice Cream & Frozen Dessert |
| ● Nursery | ■ Horses | ▲ Commercial Bakeries |
| | ■ Pigs | ▲ Coffee and Tea |
| | ■ Sheep | ▲ Frozen Fruit and Vegetable |



ELKO COUNTY

Overview

This report provides a profile of the food and agriculture sector and an overview of the economic impact the food and agriculture sector has on the Elko County economy.

- From the 2012 Census, Elko County had 552 farms, covering approximately 19.4 percent of land. When it comes to the size of farms, they are evenly distributed between small, mid and large size measured in acres.
- In 2012, Elko County's total value of total agriculture sector output was \$175.5 million, accounting for 4.1 percent of the total county production output. The largest industries when it comes to agriculture production output value are:
 - Cattle ranching and farming, and
 - All other crop farming. These industries account for more than 95 percent of the total Elko County agriculture production output.

The food manufacturing industry:

- Soft drink and ice manufacturing, account for more than 87 percent of the Elko County food manufacturing output.

Total county employment was 26,648 in 2012. The food and agriculture sector in Elko County had 635 employees accounting for 2.4 percent of the total county's employment.

In 2012, Elko County labor income of the food and agriculture sector was \$25.2 million, accounting for 1.7 percent of the total county's labor income.

- Agriculture production had \$78.5 million more in exports than imports, contributing positively to the trading balance of Elko County. The agricultural production sector in Elko County is a positive economic sector, contributing to a favorable balance of trade. This shows the importance of agriculture to the Elko County economy. The food manufacturing industries had \$113.8 million more in imports than exports. Negative trading balances show that most of Elko County's food manufacturing commodities were purchased from outside of the county.
- In 2012, given the economic inter-linkage and multiplier effect, the total economic impact to the Elko County economy from food and agriculture sector activities was \$209.5 million. The total employment and labor income impacts in the Elko County economy from activity of the food and agricultural sector was 877 jobs and \$34.6 million in labor income.

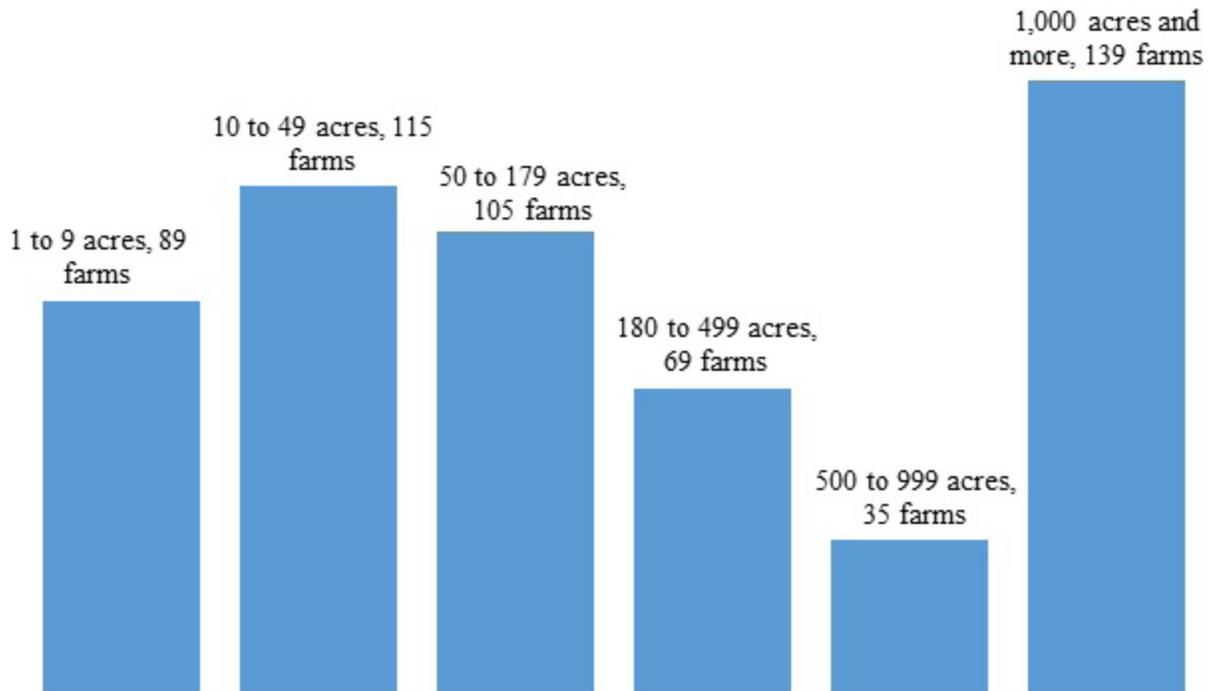
Agriculture Industry Facts

AGRICULTURE LAND AND FARMS

In 2012, the approximate land area of Elko County was 10,988,685 acres. There were 552 farms in Elko County covering 2,126,980 acres of land, which counts for 19.4 percent of land in farms. Average size of the farm was 3,853 acres. Approximately 37 percent or 204 farms were small size farms

between 1 to 49 acres, 32 percent were mid-size farms (50 to 499), and 32 percent or 174 are large size farms with 500 to 1,000 or more acres. (Graph 1.)

GRAPH 1. Farm by Size (acres) – 2012:



Source: <http://quickstats.nass.usda.gov/>

POPULATION AND FARM OPERATORS

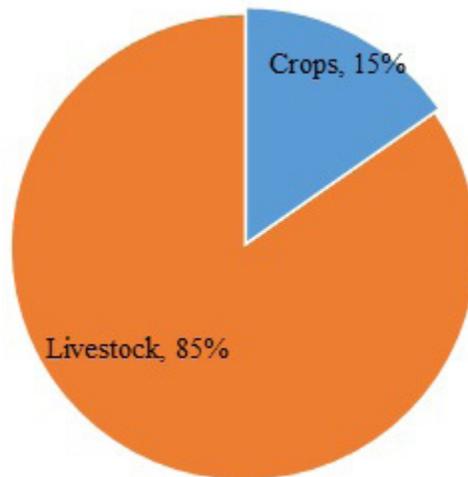
The total population of Elko County in 2012 was 51,216 people. A total of 920 operators were hired on Elko County farm and ranch operations in 2012, including people who operate a farm by doing farm work, as well as farm managers making day-to-day decisions about planting, harvesting, feeding, or marketing. The total number of hired farm labor, including total hired workers and paid family members (data exclude contract labor) was 616 with \$8.5 million in total payroll.⁷

MARKET VALUE OF AGRICULTURE PRODUCTS SOLD

In 2012, cash receipts from sales of food and agriculture products were \$95.6 million. The market value of livestock, poultry, and their product sales were \$80.9 million (85 percent), while the value of crops, including nursery and greenhouse crops, was \$14.6 million (15 percent). (Graph 2.)

⁷ Source: 2012 Census of Agriculture, Nevada. This includes total amount paid for farm or ranch labor, including regular workers, part-time workers, and members of the operator's family if they received payments for labor.

Graph 2. Total cash receipts, percent by commodity, 2012:



Source: 2012 Census of Agriculture, Nevada

Cattle, including calves, sold in 2012 was \$76.1 million, accounting for almost 94 percent of the total value of livestock sales. Equine sales were \$1.2 million. Other livestock operations include sheep, including lamb operations, wool operations, poultry (including eggs), goats and milk operations, and hogs.

In 2012, 101,359 acres of agriculture land in Elko County were used for all hay and haylage, grass silage, and green chop growth. There were approximately 7 farm operations harvesting vegetables, melons, potatoes, and sweet potatoes for sale.

Analysis of Agriculture Sector Economic Data

From the IMPLAN input-output model databases (2012), there were approximately 152 different industries in Elko County and 6 were agriculture production industries:

- Vegetable and melon farming
- Greenhouse, nursery, and floriculture production
- All other crop farming
- Cattle ranching and farming
- Animal production, except cattle, poultry, and eggs
- Support activities for agriculture and forestry.

Food manufacturing industries in Elko County are listed below:

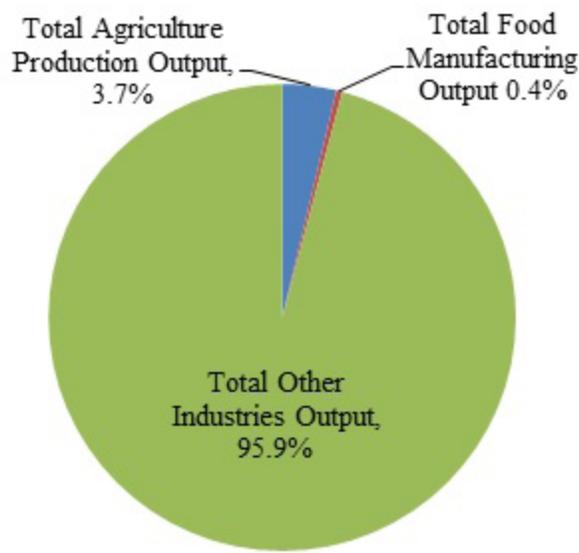
- Bread and bakery product manufacturing
- Soft drink and ice manufacturing.

These food manufacturing industries combined with agriculture production industries provide the economic description of the total food and agriculture sector of Elko County.

SECTORIAL VALUE OF OUTPUT, EMPLOYMENT AND LABOR INCOME

The total value of agriculture production output in 2012 was \$158.1 million, accounting for 3.7 percent of the total output value of Elko County. Food manufacturing output accounted for only 0.4 percent of total output value with \$17.4 million in 2012 (see Graph 3.).

GRAPH 3. Agriculture Sector Allocation in Total Value of Output (2012):



Source: Minnesota IMPLAN Group, Inc., 2014

The top 20 Elko County industries made up approximately \$3.3 billion, or 77 percent of the total Elko County output. Two agriculture production industries were in the top 20 industries in the value of output. These industries were cattle ranching and farming with an output of \$82.5 million, ranked as the 12th largest industry, and all other crop farming industry, ranked as the 14th largest industry with an output value of \$69.1 million.

Total employment of the agriculture production sector in 2012 accounted for 2.3 percent of the total county's employment. The food manufacturing industries accounted for only 0.1 percent of total county employment. The top 20 Elko County industries by level of employment made up approximately 70 percent of the total county employment, and cattle ranching and farming was ranked as the 20th largest industry in regard to total county employment.

When looking at the levels of labor income, the agriculture production industries made up approximately 1.6 percent of the total Elko County labor income, valued at approximately \$23.9 million, while food manufacturing accounted for only 0.1 percent, with a value of \$1.2 million in labor income in 2012.

SECTORIAL VALUE OF EXPORT AND IMPORT

The value of agriculture production industry exports in Elko County in 2012 was \$149.5 million and \$70.9 million in imports, creating \$ 78.5 million more in exports than imports, contributing positively to Elko County’s trading balance. The largest exporting commodities were all other crop farming, and cattle from ranches and farms. Grains, vegetables and melons, and fruit were the largest imported commodities. The agricultural production sector in Elko County is a positive economic sector contributing to a favorable balance of trade. This shows the importance of agriculture to Elko County’s economy.

Two of the Elko County agriculture production industries were in the top 20 exporting industries in 2012. These top 20 industries made up approximately 87 percent of the county’s total exports. Cattle from ranches and farms had an export value of \$76 million and was ranked as the 6th largest exporter. All other crop farming had export sales of \$61.1 million and was ranked as the 8th largest exporter.

Food manufacturing industries had \$113.8 million more in imports than exports. A trade deficit shows that most of Elko County’s food manufacturing commodities were purchased from outside of the county. By identifying input-output sector commodities that are imported, the county can target these sectors for import substitution efforts.

ECONOMIC IMPACT ANALYSIS OF AGRICULTURE SECTOR ON ELKO COUNTY ECONOMY

Economic impact analyses tell us the impact that agriculture production and food manufacturing activities have on the total Elko County economy. Table 1. shows the impacts of the activities by the agricultural sector on the Elko County economy.

In 2012, the agriculture production industries had a production output of \$158.1 million, hired 600 people, and paid labor income of \$23.94 million. The total economic impact of the agriculture production sector of Elko County was \$189.4 million. This means that besides the direct economic benefits agriculture production industries have on the Elko County economy, the indirect and induced impacts on the economy were \$31.3 million. When it comes to total employment and income, due to agriculture production sector economic activities, an additional 224 jobs were created, in addition to \$8.5 million in labor income from indirect and induced linkages.

TABLE 1. Economic, Employment, and Labor Income Impacts of the Agricultural Production Industries on the Elko County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	600	\$23,943,200	\$158,101,357
Indirect Effect	128	\$5,249,324	\$21,784,552
Induced Effect	96	\$3,245,997	\$9,519,710
Total Effect	824	\$32,438,521	\$189,405,619

Source: Minnesota IMPLAN Group, Inc., 2014

Food manufacturing industries in 2012 had a production output of \$17.4 million and employed 35 people with a labor income of \$1.22 million. The total economic impact generated by food man-

ufacturing operations was \$20.1 million. Due to the economic activity of food manufacturing industries, an additional 18 jobs were created with an income of \$950,892 from indirect and induced linkages. (Table 2).

TABLE 2. Economic, Employment, and Labor Income Impacts of the Food Manufacturing Industries on the Elko County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	35	\$1,217,188	\$17,441,697
Indirect Effect	11	\$729,500	\$1,965,230
Induced Effect	7	\$221,392	\$648,306
Total Effect	53	\$2,168,080	\$20,055,233

Source: Minnesota IMPLAN Group, Inc., 2014

The broad definition of the food and agriculture sector in this analysis includes agriculture production industries and food manufacturing industries. In 2012, the total economic impact of the food and agriculture sector was \$209.5 million. The total employment impact of the food and agriculture sector on the Elko County economy was estimated at 877 people with an income of \$34.60 million. Data are summarized in Table 3.

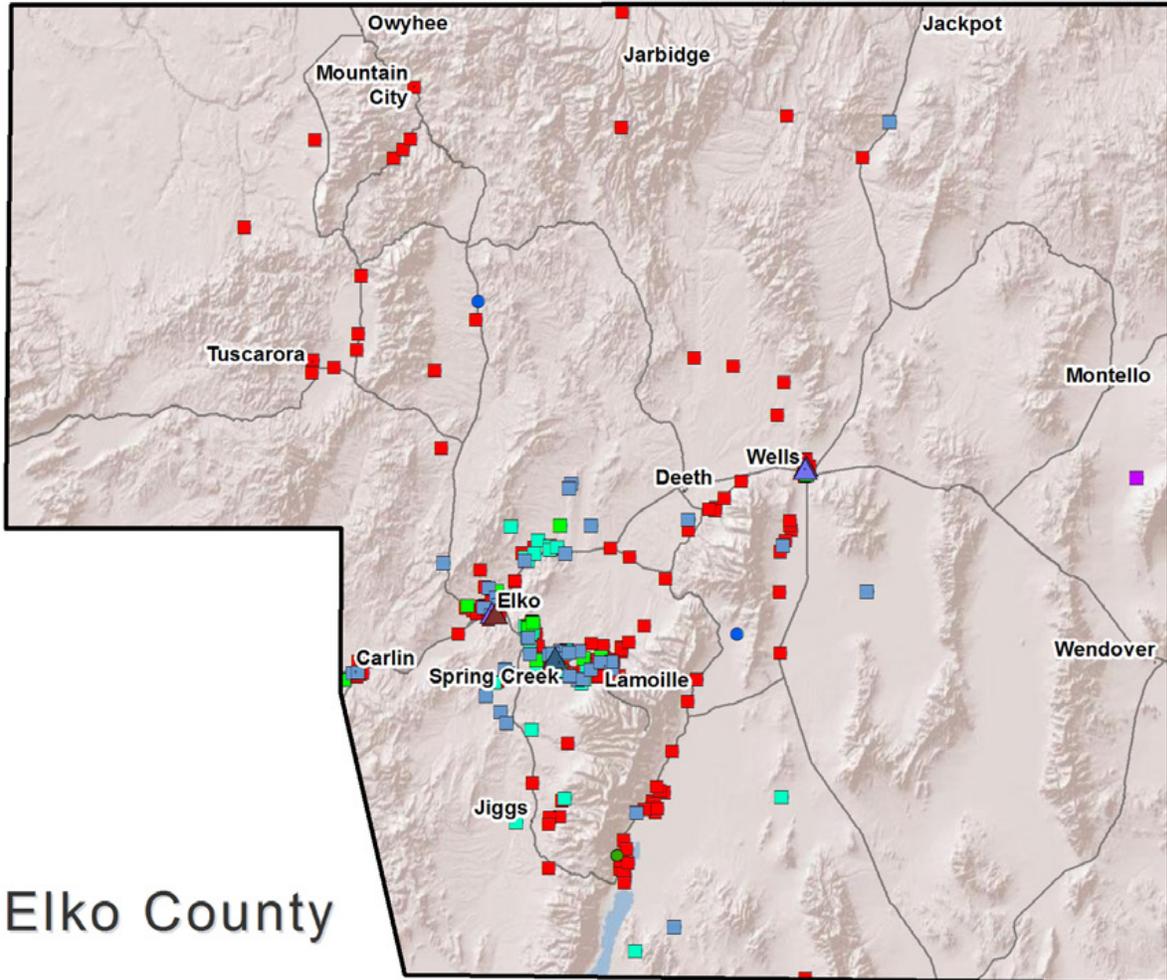
TABLE 3. Economic, Employment, and Labor Income Impacts of the Total Agriculture Sector on the Elko County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	635	\$25,160,388	\$175,543,054
Indirect Effect	139	\$5,978,824	\$23,749,782
Induced Effect	103	\$3,467,389	\$10,168,016
Total Effect	877	\$34,606,601	\$209,460,852

Source: Minnesota IMPLAN Group, Inc., 2014

Elko County

Nevada's Agricultural Sector Businesses



Elko County

- | Crops | Livestock | Manufacturing |
|--------------------------|------------|-------------------------------|
| ● Fruits, Veggies, Other | ■ Cattle | ▲ Retail Bakeries |
| ● Farmer's Markets | ■ Chickens | ▲ Commercial Bakeries |
| ● Nursery | ■ Goats | ▲ Bottled Water Manufacturing |
| | ■ Horses | ▲ Ice Manufacturing |
| | ■ Llamas | ▲ Breweries |
| | ■ Sheep | |



ESMERALDA COUNTY

Overview

This report provides a profile of the food and agriculture sector and an overview of the economic impact the food and agriculture sector has on the economy of Esmeralda County.

- From the 2012 Census, Esmeralda County had only 38 farms, covering approximately 1.5 percent of land. When it comes to the size of farms, they are evenly distributed between small, mid, and large size measured in acres.
- In 2012, Esmeralda County's total value of total agriculture sector output was \$41.9 million, accounting for 39.2 percent of the total county production output.

The largest industries when it comes to agriculture production output value are:

- All other crop farming, and
- Vegetable and melon farming. These industries account for more than 96 percent of the total Esmeralda County agriculture production output.

Food manufacturing industry:

- Other animal food manufacturing accounts for more than 17 percent of Esmeralda County's food manufacturing output.

Total county employment was 706. The agriculture sector in Esmeralda County had 35 employees, accounting for 5.0 percent of the total county employment.

In 2012, the Esmeralda County agriculture sector labor income was \$4.6 million, accounting for 21.9 percent of the total county's labor income.

- The agriculture production sector in Esmeralda County had \$21.5 million in exports, accounting for 26.7 percent of total county exports. Esmeralda County imported \$8.7 million (9.5 percent of total import value of this county), creating \$12.8 million more in exports than imports, contributing positively to the Esmeralda County trade balance. The food manufacturing sector had \$15.6 million more in exports than imports, contributing to a positive trading balance of this sector in the amount of \$10.1 million. This shows the importance of agriculture to the Esmeralda County economy.
- In 2012, given the economic inter-linkage and multiplier effect, the total economic impact to the Esmeralda County economy from agriculture sector activities was \$49.2 million. The total employment and labor income impacts in the Esmeralda County economy from activity of the food and agricultural sector was 62 jobs and \$5.1 million in labor income.

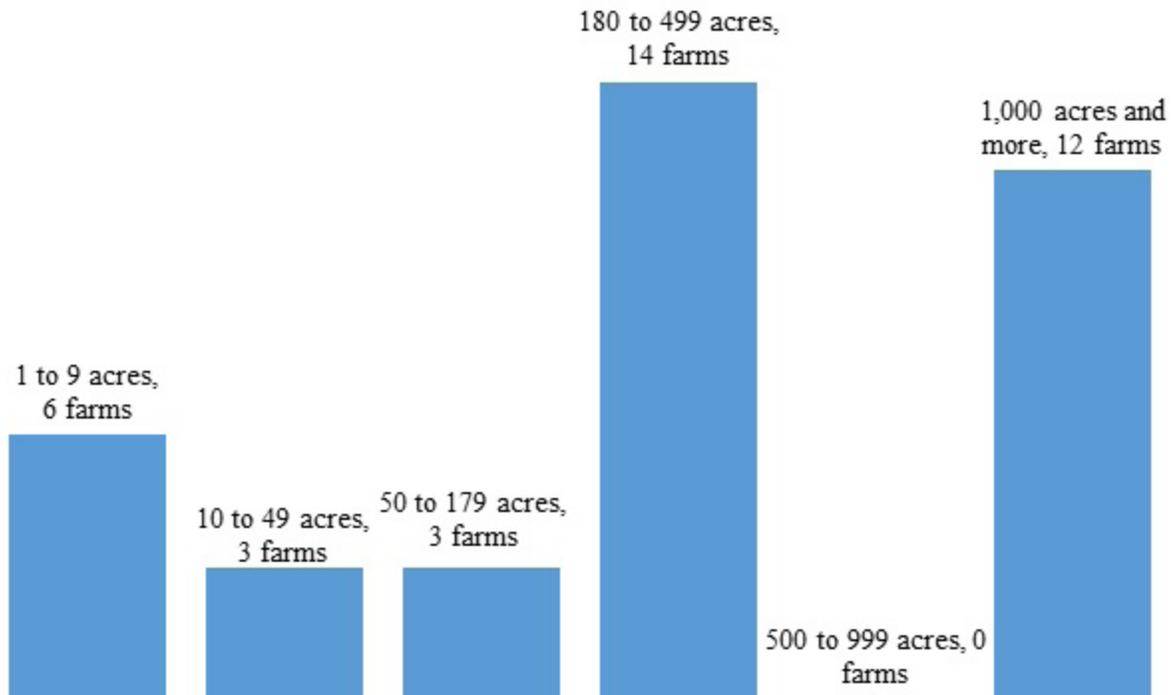
Agriculture Industry Facts

AGRICULTURE LAND AND FARMS

In 2012, the approximate land area of Esmeralda County was 2,292,410 acres. There were 38 farms in Esmeralda County covering 34,606 acres of land, which accounts for only 1.5 percent of land in farms. The average farm size was 911 acres. Approximately 24 percent or 9 farms were small size

farms between 1 to 49 acres, 45 percent or 17 were mid-size farms (50 to 499 acres), and 31 percent or 12 farms are large size farms with 500 to 1,000 or more acres. (Graph 1.)

GRAPH 1. Farm by Size (acres) - 2012:



Source: <http://quickstats.nass.usda.gov/>

POPULATION AND FARM OPERATORS

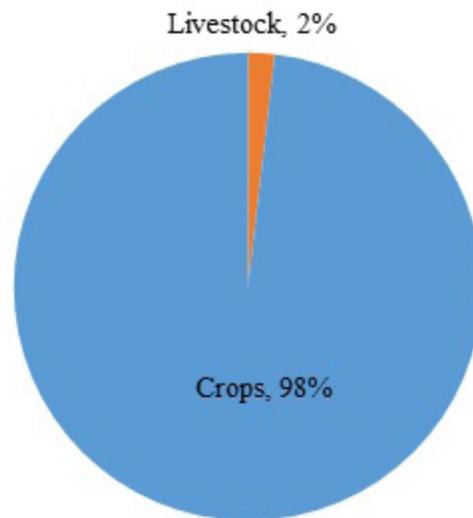
The total population of Esmeralda County was 5,941 in 2012. 62 operators were hired on Esmeralda County farm and ranch operations in 2012, and that includes not only a person who operates a farm by doing farm work, but also farm managers and people who are making day-to-day decisions about planting, harvesting, feeding, or marketing. The total number of hired workers, including paid family members (data excludes contract labor), was 90 with \$878,000 in total payroll.⁸

MARKET VALUE OF AGRICULTURE PRODUCT SOLD

Cash receipts from sales of agriculture products in 2012 were \$39.2 million. The market value of livestock, poultry, and their product sales were \$12.2 million (31 percent), while the value of crops, including nursery and greenhouse crops, was \$27.0 million (69 percent). (Graph 1.)

⁸ Source: 2012 Census of Agriculture, Nevada. This includes total amount paid for farm or ranch labor, including regular workers, part-time workers, and members of the operator's family if they received payments for labor.

GRAPH 2. Total cash receipts, percent by commodity, 2012:



Source: 2012 Census of Agriculture, Nevada

Livestock operations in Esmeralda County include all equine, all poultry operations, all goats, including meat and milk operations, and cattle and calve operations. In 2012, 16,500 acres of agriculture land in Esmeralda County was used for all hay and haylage, grass silage, and green chop growth. Vegetable and fruit growing operations do not have a significant presence in Esmeralda County.

Analysis of Agriculture Sector Economic Data

From the IMPLAN input-output model databases (2012), there were approximately 39 different industries in Esmeralda County, and only 4 were in the agriculture production industries:

- Vegetable and melon farming
- All other crop farming
- Cattle ranching and farming
- Animal production, except cattle and poultry and eggs.

The major food manufacturing industry is:

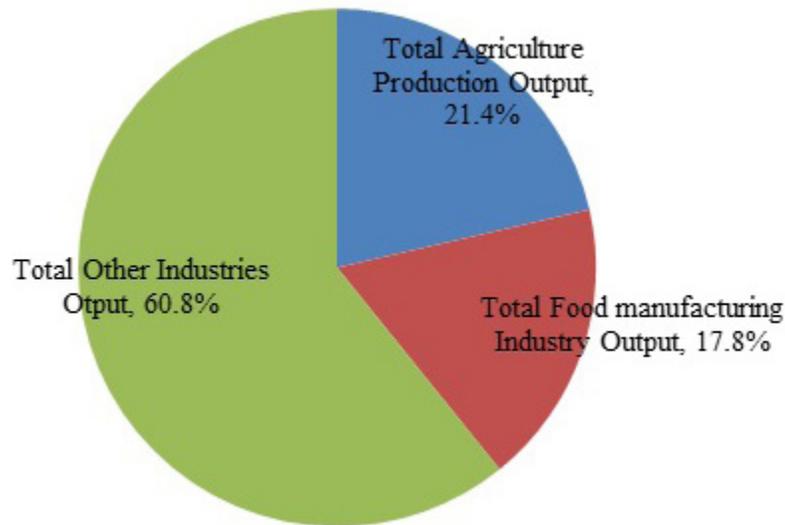
- Other animal food manufacturing.

Food manufacturing industries, combined with agriculture production industries, provide the economic description of agriculture sector of Esmeralda County.

SECTORIAL VALUE OF OUTPUT, EMPLOYMENT AND LABOR INCOME

The total value of agriculture production output was \$23.0 million, accounting for 21.4 percent of the total output value of Esmeralda County. The food manufacturing output was \$19.1 million accounting for 17.8 percent of the total county's output.

GRAPH 3. Agriculture Sector Allocation in Total Value of Output (2012):



Source: Minnesota IMPLAN Group, Inc., 2014

The top 20 Esmeralda County industries made up approximately \$96.6 million, or 90 percent of the total Esmeralda County output. All other crop farming was in the top 20 industries with an output of \$20.2 million, ranked as the 9th largest industry. The other animal food manufacturing industry was ranked as the 12th largest industry in regards to output, with a value of \$14.6 million.

Total employment of the agriculture production sector in 2012 accounted for 3.0 percent of the total county's employment. The food manufacturing industry accounted for 2.0 percent of total county employment. Top 20 industries by level of employment made up 93.9 percent of total Esmeralda County employment. All other crop farming was ranked 9th as the largest industry in regards to total county employment. Other animal food manufacturing was ranked as the 12th largest employing industry in the county.

When looking at the levels of labor income, the agriculture production industries made up approximately 19.1 percent of the total Esmeralda County labor income valued at approximately \$4.0 million, while the food manufacturing accounted for only 2.8 percent of total labor income in 2012. Top 20 industries accounted for almost 98 percent of the total employment income. All other crop farming was ranked the 2nd largest, and vegetable and melon farming was ranked the 7th largest in regards to the value of labor income in the county. Other animal food manufacturing was ranked as the 6th largest in regards to county's labor income.

SECTORIAL VALUE OF EXPORT AND IMPORT

In the 2012, the agriculture production sector in Esmeralda County had \$21.5 million in exports accounting for 26.7 percent of total county exports, and \$8.7 million in imports (9.5 percent of total import value of this county), creating \$12.8 million more in exports than imports.

The top 20 exporting industries in Esmeralda County in 2012 made up approximately 98.6 percent of the total county's exports. Several agriculture sectors were in the top 20 exporters:

- All other crop farming products ranked as the number 1 exporter
- Other animal food manufacturing was ranked 2nd largest,
- Forest, timber, and forest nursery products was ranked 8th largest
- Vegetables and melons ranked 10th,
- Cattle from ranches and farms ranked 13th
- Logs and roundwood was ranked the 18th exporter in regards to the total value of Esmeralda County's export.

The agriculture production of Esmeralda County is a positive economic sector contributing to the favorable balance of trade. This shows the importance the agriculture sector has on the economy in Esmeralda County. The food manufacturing sector had \$15.6 million more in exports than imports, contributing to a positive trading balance of this sector in the amount of \$10.1 million.

ECONOMIC IMPACT ANALYSIS OF AGRICULTURE SECTOR ON ESMERALDA COUNTY ECONOMY

An economic impact analysis tells us the impact of agriculture production and food manufacturing activities on the total Esmeralda County economy. Table 1. shows the impacts of the activities by agricultural sector on the Esmeralda County economy.

In 2012, agriculture production industries had a production output of \$22.9 million, hired 21 people, and a paid labor income of \$3.99 million. The total economic impact of agriculture production on Esmeralda County economy was \$25.4 million. This means that besides the direct economic benefits agriculture production industries have on the Esmeralda County economy, the indirect and induced impacts on economy were \$2.5 million. When it comes to total employment and income, due to agriculture production sector economic activities, an additional 15 jobs were created and \$303,143 in labor income from indirect and induced linkages.

TABLE 1. Economic, Employment, and Labor Income Impacts of the Agricultural Production Industries on the Esmeralda County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	21	\$3,992,201	\$22,899,190
Indirect Effect	8	\$244,684	\$1,819,106
Induced Effect	7	\$58,459	\$706,149
Total Effect	36	\$4,295,344	\$25,424,445

Source: Minnesota IMPLAN Group, Inc., 2014

Food manufacturing industries in 2012 had a production output of \$19.1 million, employed 14 people with a labor income of \$576,026. Total economic impact generated by food manufacturing operations was \$23.8 million. Due to economic activity of food manufacturing industries, an additional 12 jobs were created with an income of \$257,642 from indirect and induced linkages. (Table 2).

TABLE 2. Economic, Employment, and Labor Income Impacts of the Food Manufacturing Industries on the Esmeralda County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	14	\$576,026	\$19,053,772
Indirect Effect	11	\$246,345	\$4,569,858
Induced Effect	1	\$11,297	\$135,284
Total Effect	26	\$833,668	\$23,758,914

Source: Minnesota IMPLAN Group, Inc., 2014

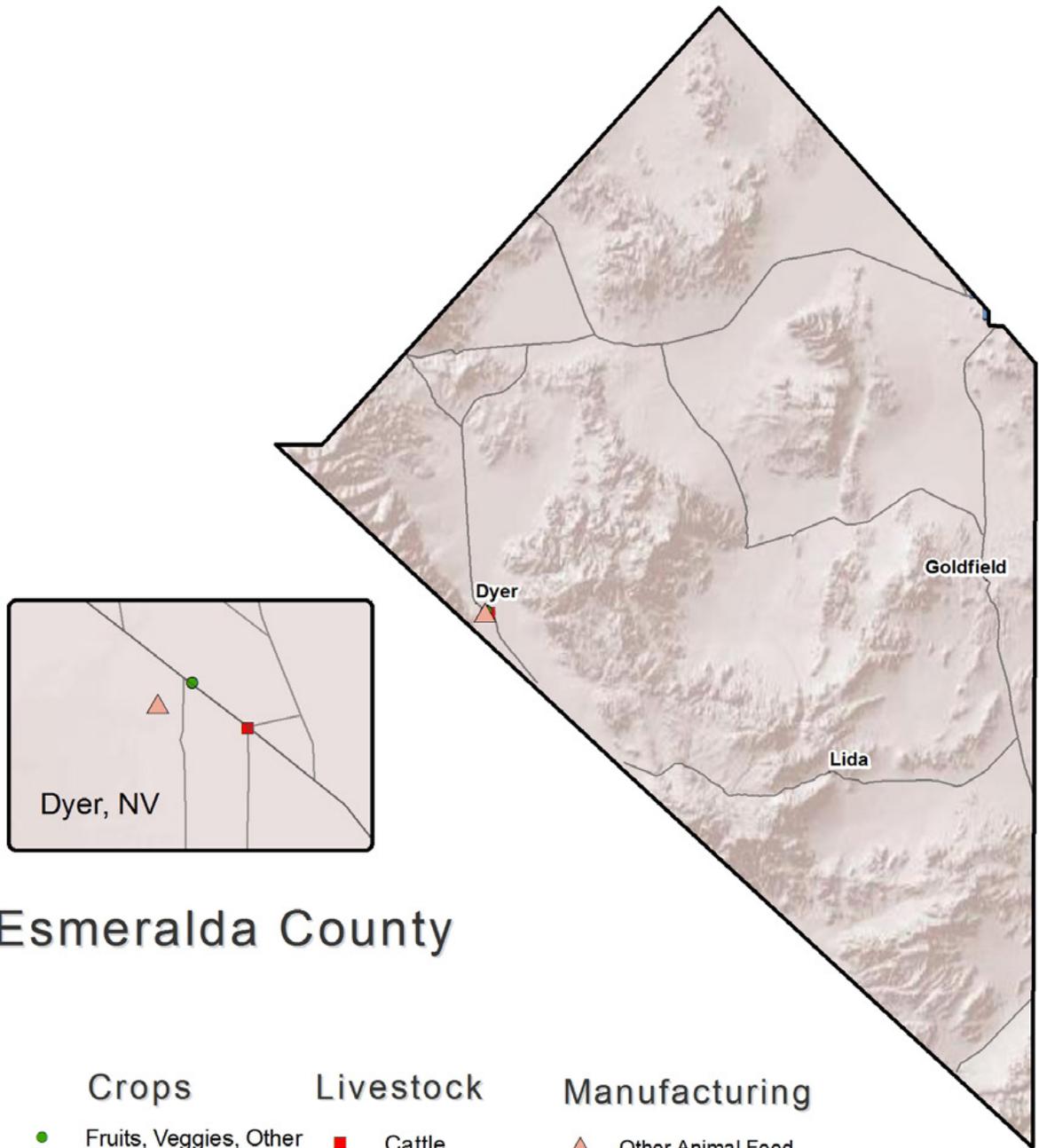
The broad definition of the food and agriculture sector in this analysis includes agriculture production industries and food manufacturing industries. In 2012, the total economic impact of the food and agriculture sector was \$49.2 million. The total employment impact the food and agriculture sector had on the county's economy was estimated at 62 people with an income of \$5.2 million. Data are summarized in Table 3.

TABLE 3. Economic, Employment, and Labor Income Impacts of the Total Agriculture Sector on the Esmeralda County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	35	\$4,568,227	\$41,952,962
Indirect Effect	19	\$491,029	\$6,388,964
Induced Effect	8	\$69,756	\$841,433
Total Effect	62	\$5,129,012	\$49,183,359

Source: Minnesota IMPLAN Group, Inc., 2014

Esmeralda County Nevada's Agricultural Sector Businesses



EUREKA COUNTY

Overview

This report provides a profile of the food and agriculture sector and an overview of the economic impact the food and agriculture sector has on the Eureka County economy.

- From the 2012 Census, Eureka County had 101 farms, covering approximately 23.9 percent of land. When it comes to the size of farms, approximately 50 percent were large farms with 1,000 acres or more.
- In 2012, Eureka County's total value of agriculture sector output was \$65.5 million, accounting for 2.5 percent of the total county production output.

The largest industries when it comes to agriculture production output value are:

- All other crop farming, and
- Cattle ranching and farming. These industries account for more than 99 percent of the total Eureka County agriculture production output.

Total county employment was 5,663. The agriculture sector in Eureka County had 134 employees, accounting for 2.4 percent of the total county employment.

In 2012, Eureka County labor income from the agriculture sector was \$11.1 million, accounting for 2.1 percent of the total county's labor income.

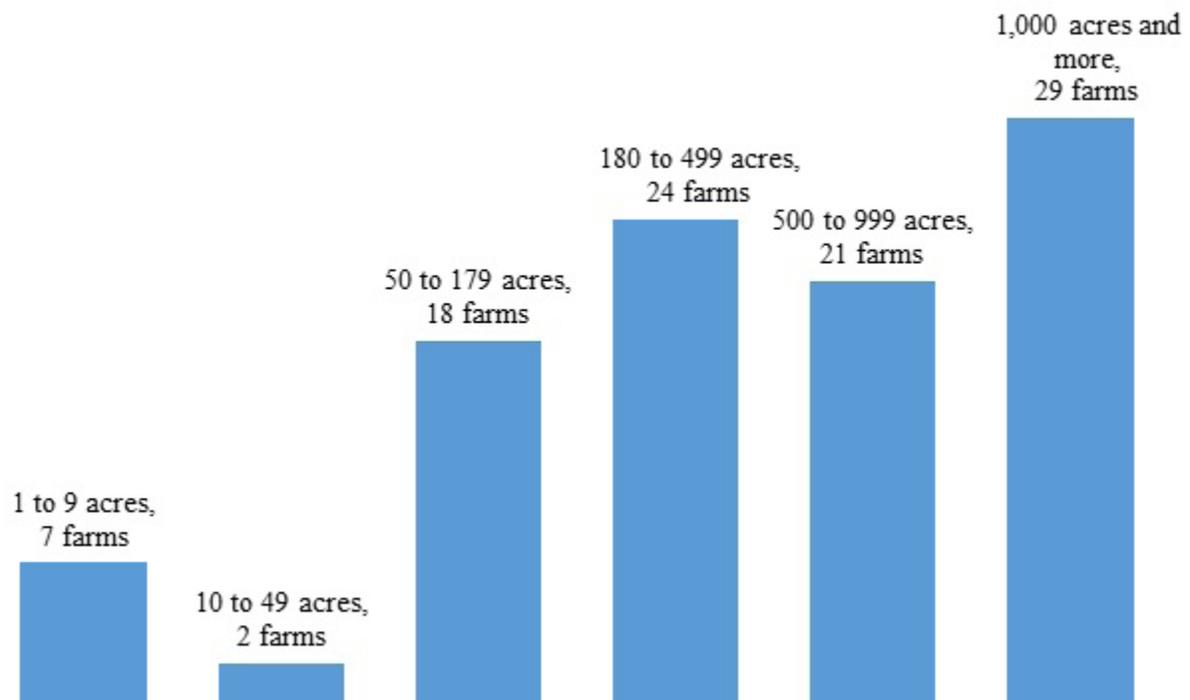
- The agriculture sector in Eureka County had \$58.8 million in exports, accounting for 2.6 percent of total county exports, and \$18.8 million in imports (3.1 percent of total import value of this county), creating \$40.0 million more in exports than imports. Agriculture production is a positive economic sector in Eureka County, contributing to a favorable balance of trade. This shows the importance of agriculture to the Eureka County economy.
- In 2012, given the economic inter-linkage and multiplier effect, the total economic impact to the Eureka County economy from activities by the agricultural sectors was \$85.0 million. The total employment and labor income impacts in the Eureka County economy from activity of the food and agricultural sector was 215 jobs and \$13.5 million in labor income.

Agriculture Industry Facts

AGRICULTURE LAND AND FARMS

In 2012, the approximate land area of Eureka County was 2,672,436 acres. There were 101 farms in Eureka County covering 638,848 acres of land, which counts for 23.9 percent of land in farms. The average size of a farm was 6,325 acres. Approximately 9 percent or 9 farms were small farms between 1 to 49 acres, 42 percent were mid-size farms between 50 to 499 acres, and 50 percent or 50 farms were large farms between 500 to 1,000 acres. (Graph 1.)

GRAPH 1. Farm by Size (acres) - 2012:



Source: <http://quickstats.nass.usda.gov/>

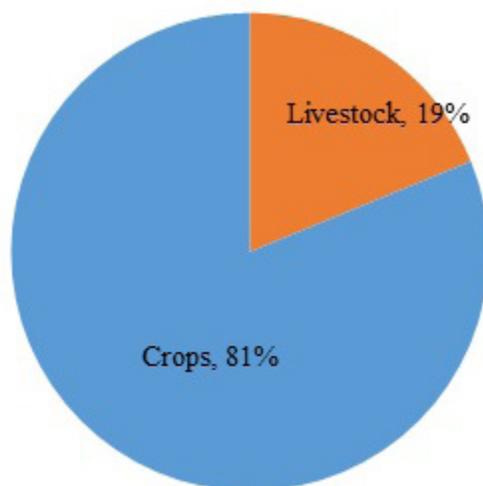
POPULATION AND FARM OPERATORS

The total population of Eureka County in 2012 was 17,048 people. 171 operators were hired in Eureka County farm and ranch operations in 2012, including not only a person who operates a farm by doing farm work, but also farm managers and people who are making day-to-day decisions about planting, harvesting, feeding, or marketing. The total number of hired workers, including paid family members (data exclude contract labor) was 225 with \$2.8 million in total payroll.

MARKET VALUE OF AGRICULTURE PRODUCTS SOLD

In 2012, cash receipts from sales of agriculture products were \$36.0 million. The market value of livestock, poultry, and their product sales were \$6.8 million (19 percent), while the value of crops, including nursery and greenhouse crops, was \$29.2 million (81 percent). (Graph 2)

GRAPH 2. Total cash receipts, percent by commodity, 2012



Source: 2012 Census of Agriculture, Nevada

Cattle and calves operations were the main livestock operations, with sales of \$6.7 million in 2012. In 2012, 43,577 acres of agriculture land in Eureka County were used for all hay and haylage, grass silage, and green chop growth. There were 71 farm operations harvesting hay (all hay including alfalfa, other tame, small grain, and wild).

Analysis of Agriculture Sector Economic Data

From the IMPLAN input-output model databases (2012), there were approximately 64 different industries in Eureka County, and 4 were in the agriculture production sector:

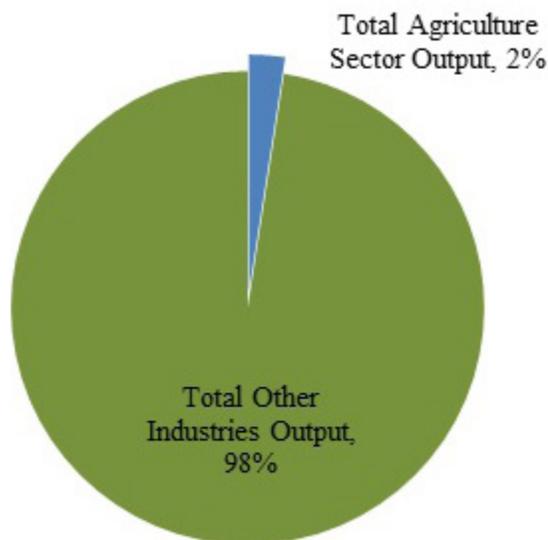
- All other crop farming
- Cattle ranching and farming
- Animal production, except cattle and poultry and eggs
- Support activities for agriculture and forestry.

Food manufacturing industries do not have a significant presence in Eureka County, so our definition of the total agriculture sector for this county will not include food manufacturing.

SECTORIAL VALUE OF OUTPUT, EMPLOYMENT AND LABOR INCOME

In 2012, the total value of agriculture sector output was \$65.5 million, accounting for only 2.5 percent of the total output value of Eureka County. (Graph 3.)

GRAPH 3. Agriculture Sector Allocation in Total Value of Output (2012):



Source: Minnesota IMPLAN Group, Inc., 2014

The top 20 industries by value of output created \$2.7 billion in output, which was 99.3 percent of the value of the county's total output in 2012. Two Eureka County agricultural sector industries were in the top 20 in value of output – all other crop farming with an output of \$49.4 million was the 2nd largest, and cattle ranching and farming, with an output value of \$15.7 million, was the 5th largest of Eureka County's industries in regards to sectoral output.

The top 20 Eureka County industries made up approximately 97 percent of total county employment in 2012. Cattle ranching and farming was ranked as the 14th largest industry in regards to sectorial employment.

When looking at the level of labor income, the top 20 of 64 industries in Eureka County accounted for 98.9 percent of the total labor income. Sectorial labor income is the sum of sectorial employee compensation and proprietor income. In 2012, the all other crop farming sector was ranked as the 2nd largest industry when it comes to total labor income, with a value of approximately \$2.0 million, and the cattle ranching and farming industry was ranked as the 14th largest in regards to total sectorial income.

SECTORIAL VALUE OF EXPORT AND IMPORT

In 2012, the agriculture sector in Eureka County had \$58.8 million in exports, accounting for 2.6 percent of the total county exports, and \$18.8 million in imports (3.1 percent of total import value of this county), creating \$40.0 million more in exports than imports. Agriculture production in Eureka County is a positive economic sector, contributing to a favorable balance of trade.

All other crop farming products and cattle from ranches and farms were industries that created more in exports than imports, contributing significantly to a positive trade balance in the agriculture production sector. Grains were the agriculture commodity with the largest negative trading balance. The top 20 exporters accounted for approximately 99.7 percent of total county exports

and three agriculture sector industries are ranked in the top 20 exporters: all other crop farming products was ranked as 2nd, cattle from ranches and farms 4^h, and forest, timber, and forest nursery products was ranked as the 5th largest among the county’s 64 industries in value of exports. This shows the importance of agriculture production to the Eureka County economy. Food manufacturing commodities were purchased from outside of the county.

ECONOMIC IMPACT ANALYSIS OF AGRICULTURE SECTOR ON EUREKA COUNTY ECONOMY

Economic impact analyses tell us the impact agriculture production and food manufacturing activities have on the total Eureka County economy. Table 1. shows the impacts of these activities on the Eureka County economy.

In 2012, agriculture production industries had a production output of \$66.3 million, hired 134 people, and paid labor income of \$11.61 million. The total economic impact the agriculture production sector had on Eureka County was \$85.0 million. This means that besides the direct economic benefits agriculture production industries have on the Eureka County economy, the indirect and induced impacts on the economy were \$18.6 million. When it comes to total employment and income, due to agriculture production sector economic activities, an additional 81 jobs were created and \$1.91 million in labor income from indirect and induced linkages.

TABLE 1. Economic, Employment, and Labor Income Impacts of the Agricultural Production Industries on the Eureka County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	134	\$11,607,072	\$66,363,924
Indirect Effect	67	\$1,664,315	\$17,139,680
Induced Effect	14	\$241,899	\$1,501,626
Total Effect	215	\$13,513,286	\$85,005,230

Source: Minnesota IMPLAN Group, Inc., 2014

Eureka County

Nevada's Agricultural Sector Businesses

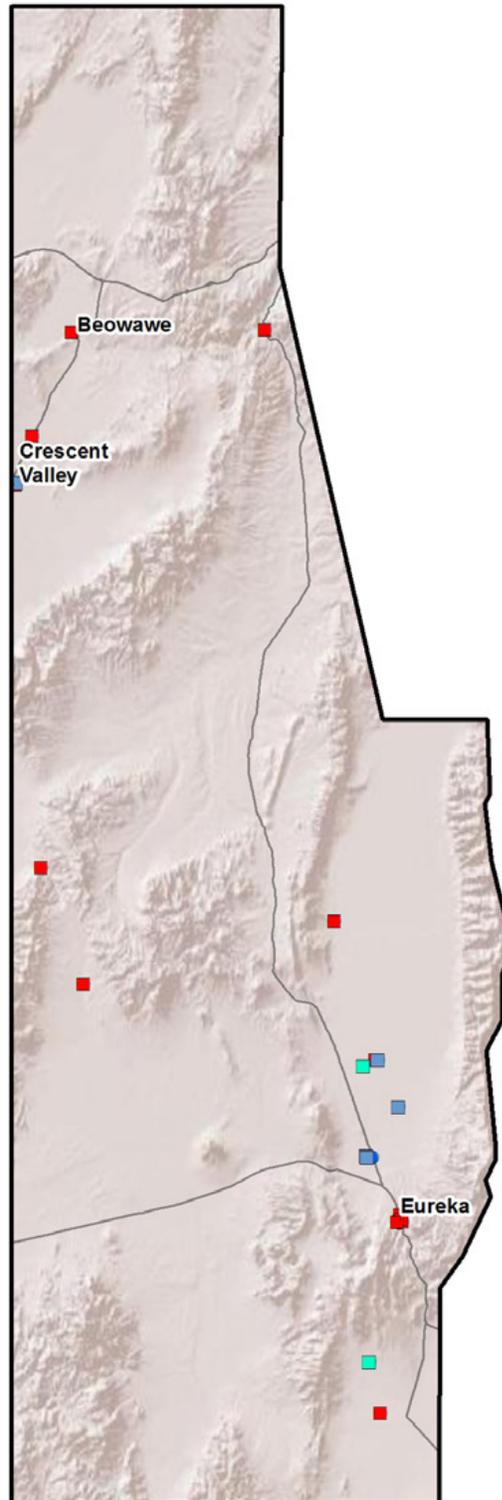
Eureka County

Crops

- Farmer's Markets
- Hay

Livestock

- Cattle
- Goats
- Sheep



HUMBOLDT COUNTY

Overview

This report provides a profile of the food and agriculture sector and an overview of the economic impact the food and agriculture sector has on the economy of Humboldt County.

- From the 2012 Census, Humboldt County had 359 farms, covering approximately 13.1 percent of land. When it comes to size of farms measured in acres, they are evenly distributed between small, mid, and large size.
- In 2012, Humboldt County's total value of agriculture sector output was \$210.4 million accounting for 9 percent of the total county production output.

The largest industries when it comes to agriculture production output value are:

- All other crop farming
- Cattle ranching and farming, and
- Vegetable and melon farming. These industries account for more than 95 percent of total Humboldt County agriculture production output.

Food manufacturing industry:

- Fruit and vegetable canning, pickling, and drying account for more than 98 percent of the Humboldt County food manufacturing output.

Total county employment was 10,554. The agriculture sector in Humboldt County had 540 employees, accounting for 5.1 percent of the total county employment.

In 2012, the agriculture sector labor income in Humboldt County was \$38.8 million, accounting for 6.1 percent of the total county's labor income.

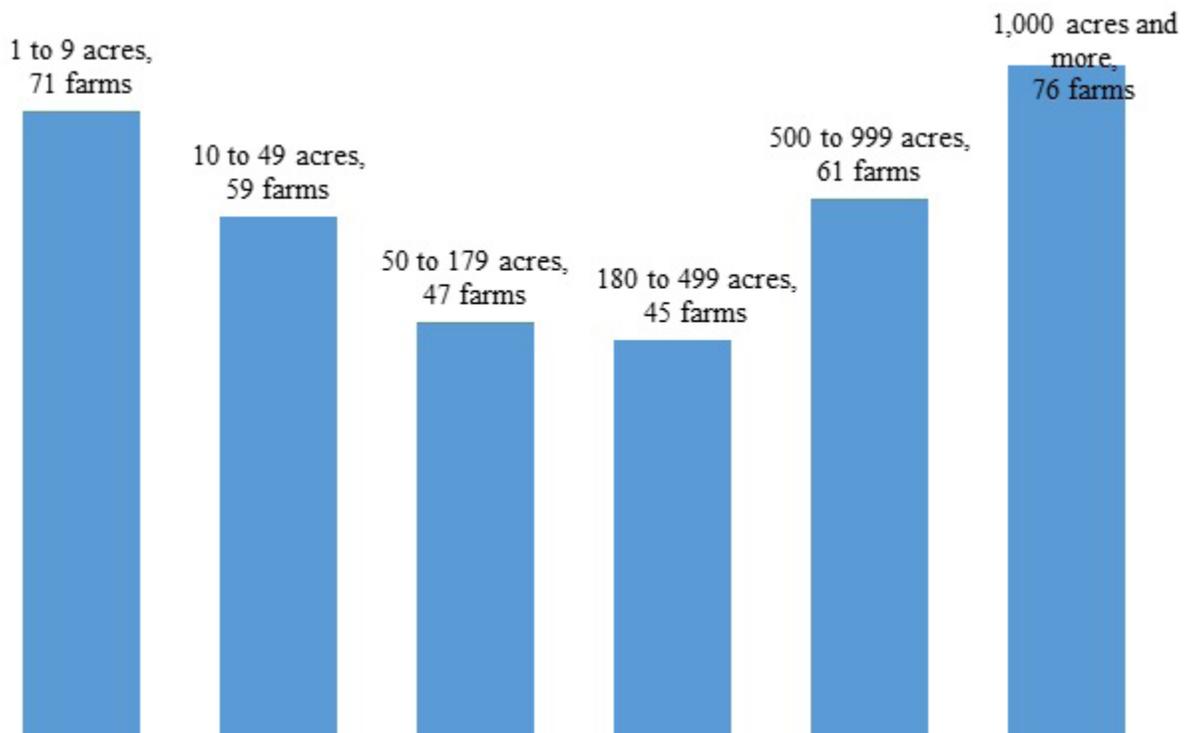
- The food and agriculture sector in Humboldt County had \$155.3 million in exports, accounting for 8.8 percent of total exports for the county, and \$48.8 million in imports (3.1 percent of total import value of this county), creating \$106.6 million more in exports than imports. This shows the importance the agriculture sector has on the Humboldt County economy. Food manufacturing industries had \$8.9 million more in imports than exports. A trade deficit shows that most of Humboldt County food manufacturing industries purchase inputs from outside of the county.
- In 2012, given the economic inter-linkage and multiplier effect, total economic impact to the Humboldt County economy from activities by the agricultural sectors was \$249.9 million. Total employment and labor income impacts in the Humboldt County economy from activity of the agricultural sectors was 869 jobs and \$51.5 million in labor income.

Agriculture Industry Facts

AGRICULTURE LAND AND FARMS

In 2012, the approximate land area of Humboldt County was 6,170,097 acres. There were 359 farms in Humboldt County covering 808,872 acres of land, which counts for 13.1 percent of land in farms. The average size of the farm was 2,253 acres. Approximately 36 percent, or 130 farms, were small size farms between 1 to 49 acres, 26 percent or 92 farms were mid-size farms between 50 to 499 acres, and 38 percent or 137 farms were large size farms with 500 to 1,000 acres and more. (Graph 1).

GRAPH 1. Farm by Size (acres) - 2012:



Source: <http://quickstats.nass.usda.gov/>

POPULATION AND FARM OPERATORS

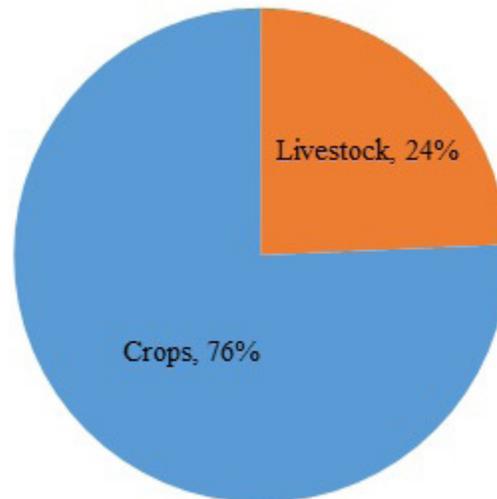
The total population of Humboldt County in 2012 was 17,048 people. The total number of all operators hired in Humboldt County farm and ranch operations in 2012 was 613, and that included a person who operates a farm by doing farm work, farm managers, and a person who is making day-to-day decisions about planting, harvesting, feeding, or marketing. The total number of hired farm labor, including total hired workers and paid family members (data exclude contract labor), was 687 with \$11.8 million in total payroll. ⁹

⁹ Source: 2012 Census of Agriculture, Nevada

MARKET VALUE OF AGRICULTURE PRODUCTS SOLD

In 2012, cash receipts from sales of agriculture products were \$135.3 million. The market value of livestock, poultry, and their product sales were \$32.9 million (24 percent), while the value of crops, including nursery and greenhouse crops, was \$102.4 million (76 percent). (Graph 2.)

GRAPH 2. Total cash receipts, percent by commodity, 2012:



Source: 2012 Census of Agriculture, Nevada

Cattle including calves operations were main livestock operations with sales of \$32.5 million. In 2012, 102,485 acres of agriculture land in Humboldt County was used for all hay and haylage, grass silage and green chop growth. There were a few small farm operations growing vegetables and fruits.

Analysis of Agriculture Sector Economic Data

From the IMPLAN input-output model databases (2012), there were approximately 119 different industries in Humboldt County, and only 9 were from agriculture production industries:

- Grain farming
- Vegetable and melon farming
- Greenhouse, nursery, and floriculture production
- All other crop farming
- Cattle ranching and farming
- Dairy cattle and milk production
- Poultry and egg production
- Animal production, except cattle and poultry and eggs
- Support activities for agriculture and forestry.

Food manufacturing industries in Humboldt County are listed below:

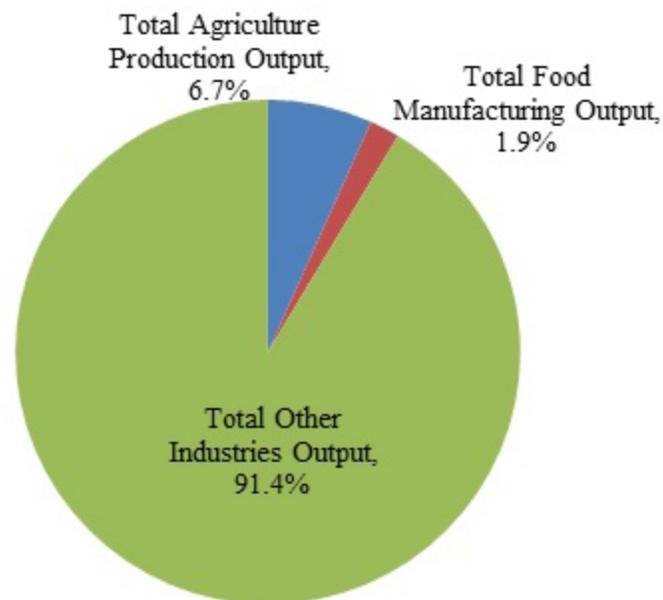
- Fruit and vegetable canning, pickling, and drying
 - Bread and bakery product manufacturing.
-

These food manufacturing industries, combined with agriculture production industries, provide the economic description for the food and agriculture sector of Humboldt County.

SECTORIAL VALUE OF OUTPUT, EMPLOYMENT AND LABOR INCOME

The total output value for the agriculture production sector in 2012 was \$163.5 million, accounting for 7 percent of the total output value of Humboldt County. Total output for the food manufacturing sector was valued at \$46.9 million, which was 1.9 percent of the total county's output value. (Graph 3.)

GRAPH 3. Agriculture Sector Allocation in Total Value of Output (2012):



Source: Minnesota IMPLAN Group, Inc., 2014

The top 20 Humboldt County industries by value of output created \$2.0 billion, accounting for 80.7 percent of the total output value in 2012. Three agricultural production industries were ranked in the top 20 in value of output: all other crop farming with an output of \$94.9 million or 3.9 percent of the total Humboldt County value of output; cattle ranching and farming, which consists mainly of alfalfa hay, with an output value of \$46.2 million or 1.6 percent of total county's value of output; and vegetable and melon farming with an output of \$21.8 million or 0.9 percent of the total output. All other crop farming, cattle ranching and farming, and vegetable and melon farming were ranked as 4th, 10th, and 19th of Humboldt County's largest industries. It is also important to mention that fruit and vegetable canning, pickling, and drying was ranked as the 8th largest industry in regard to total output.

The top 20 Humboldt County industries made up approximately 69 percent of the total county employment in 2012. All other crop farming was ranked as the 14th largest industry in regard to sectorial employment, accounting for approximately 1.8 percent of total county's employment.

When looking at the levels of labor income, the top 20 of 119 industries in Humboldt County accounted for 77.4 percent of the total labor income. Sectorial labor income is the sum of sectorial employee compensation and proprietor income. In 2012, the all other crop farming sector was ranked as the 5th largest industry when it comes to total labor income, and it made up approximately 3.0 percent of the total Humboldt County labor income, valued at approximately \$19.3 million. The vegetable and melon farming industry was ranked as the 18th largest, with \$8.2 million in labor income accounting for 1.4 percent of total sectorial income.

SECTORIAL VALUE OF EXPORT AND IMPORT

In 2012, all agriculture sectors in Humboldt County had \$155.3 million in exports, accounting for 8.8 percent of total county exports, and \$48.8 million in imports (3.1 percent of total import value of this county), creating \$106.6 million more in exports than imports. This shows the importance of the agriculture sector to the Humboldt County economy.

Looking at commodity trade data for Humboldt County, agriculture production sector commodities with a positive trading balance were all other crop farming products, cattle from ranches and farms products, and vegetables and melons. Grains and fruits had a negative trading balance. Food manufacturing industries had \$8.9 million more in imports than exports. Canned, pickled, and dried fruits and vegetables was the only industry that created a positive trade balance within the sector. Negative trading balances show that most of Humboldt County's food manufacturing industries purchase inputs from outside of the county. By identifying commodities that are imported, a county can target these for import substitution.

The top 20 exporters accounted for approximately 91.0 percent of the total county exports and three agriculture production industries were ranked as follows: all other crop farming products was the 2nd largest exporter; cattle from ranches and farms was the 7th largest; and vegetables and melons was the 10th largest among the county's 119 industries in value of exports. The canned, pickled, and dried fruits and vegetables as the 6th largest in regards to total value of exports from Humboldt County.

ECONOMIC IMPACT ANALYSIS OF AGRICULTURE SECTOR ON HUMBOLDT COUNTY ECONOMY

Economic impact analyses tell us the impact agriculture production and food manufacturing activities have on the total Humboldt County economy. Table 1. shows the impacts of the activities by the agricultural sector on the Humboldt County economy.

In 2012, agriculture production industries had a production level of \$163.5 million, hired 447 people, and paid labor income of \$34.67 million. The total economic impact of the agriculture production sector in Humboldt County was \$196.2 million. This means that besides the direct economic benefits agriculture production industries have on the Humboldt County economy, the indirect and induced impacts on the economy were \$32.7 million. When it comes to total employment and income, due to agriculture production sector economic activities, an additional 288 jobs were created and \$10.7 million in labor income from indirect and induced linkages.

TABLE 1. Economic, Employment, and Labor Income Impacts of the Agricultural Production Industries on the Humboldt County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	447	\$34,670,658	\$163,491,128
Indirect Effect	184	\$7,156,095	\$20,909,086
Induced Effect	104	\$3,508,012	\$11,774,038
Total Effect	735	\$45,334,765	\$196,174,252

Source: Minnesota IMPLAN Group, Inc., 2014

Food manufacturing industries in 2012 had a production output of \$46.9 million and employed 93 people with a labor income of \$4.1 million. Total economic impact generated by food manufacturing operations was \$53.8 million. Due to economic activity of food manufacturing industries, an additional 40 jobs were created with an income of \$2.0 million from indirect and induced linkages. (Table 2).

TABLE 2. Economic, Employment, and Labor Income Impacts of the Food Manufacturing Industries on the Humboldt County Economy, 2012:

Impact Type	Employment	Labor Income	Economic
Direct Effect	93	\$4,124,831	\$46,886,846
Indirect Effect	26	\$1,511,352	\$5,253,715
Induced Effect	14	\$480,007	\$1,611,520
Total Effect	133	\$6,116,190	\$53,752,081

Source: Minnesota IMPLAN Group, Inc., 2014

The broad definition of the food and agriculture sector in this analysis includes agriculture production industries and food manufacturing industries. In 2012, the total economic impact of the food and agriculture sector was \$249.9 million. The total employment impact of the agriculture sector on the county's economy was estimated at 869 people with an income of \$51.45 million. Data are summarized in Table 3.

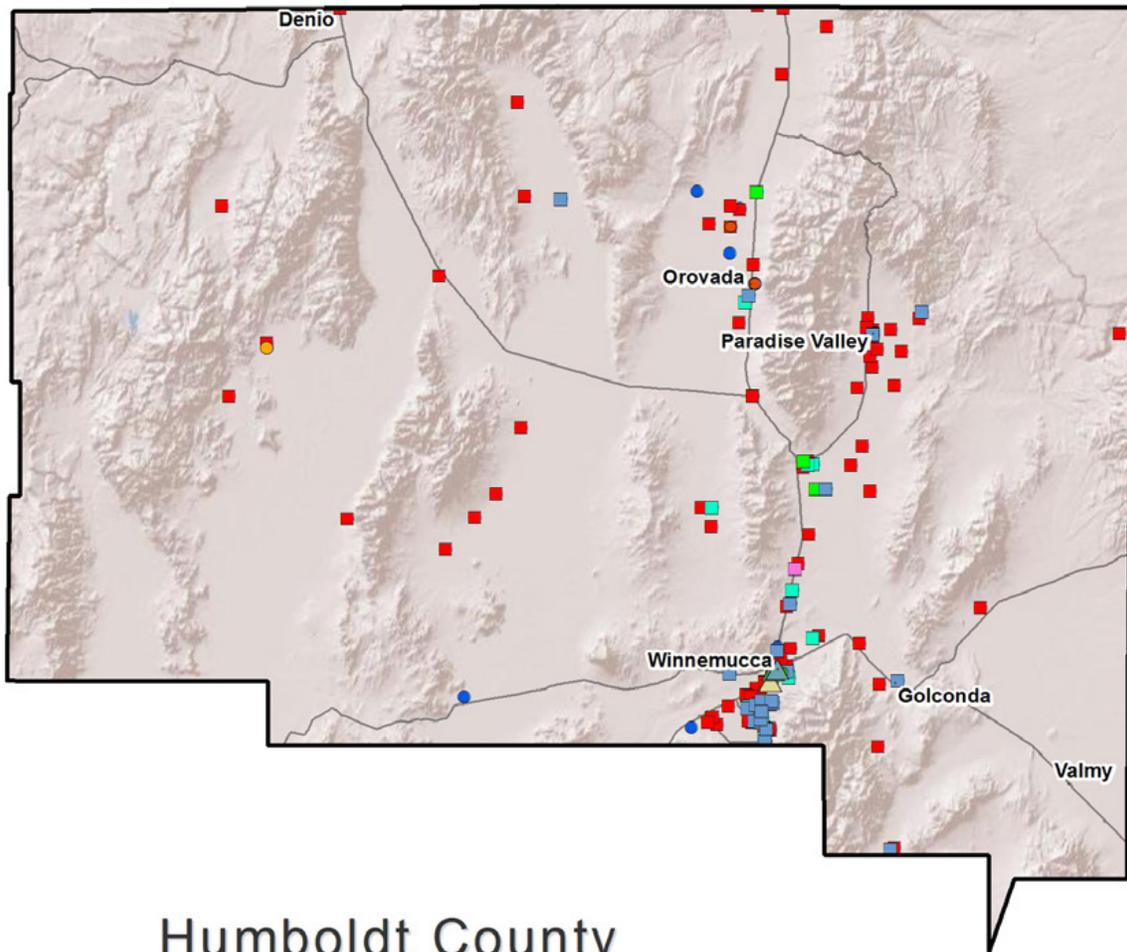
TABLE 3. Economic, Employment, and Labor Income Impacts of the Total Agriculture Sector on the Humboldt County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	540	\$38,795,489	\$210,377,974
Indirect Effect	211	\$8,667,447	\$26,162,801
Induced Effect	118	\$3,988,019	\$13,385,558
Total Effect	869	\$51,450,955	\$249,926,333

Source: Minnesota IMPLAN Group, Inc., 2014

Humboldt County

Nevada's Agricultural Sector Businesses



Crops

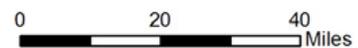
- Fruits, Veggies, Other
- Hay
- Nursery
- Seeds

Livestock

- Cattle
- Chickens
- Eggs
- Dairy
- Goats
- Horses
- Llamas
- Pigs
- Sheep

Manufacturing

- ▲ Confectionery
- ▲ Tortilla Manufacturing
- ▲ Mayonnaise, Dressing, and Sauce



LANDER COUNTY

Overview

This report provides a profile of the food and agriculture sector and an overview of what the economic impact the agriculture sector has on the economy of Lander County.

- From the 2012 Census, Lander County had 124 farms, covering approximately 8.9 percent of land. When it comes to size of farms, 32 percent of them are large with 1,000 and more acres.
- In 2012, Lander County's total value of agriculture sector output was \$50.7 million, accounting for 3.7 percent of the total county production output.

The largest industries when it comes to agriculture production output value are:

- All other crop farming, and
- Cattle ranching and farming. These industries account for more than 98 percent of the total Lander County agriculture production output.

Total county employment was 4,388. The agriculture sector in Lander County had 116 employees accounting for 2.6 percent of the total county employment.

In 2012, labor income from the agriculture sector in Lander County was \$7.6 million, accounting for 2.5 percent of the total county's labor income.

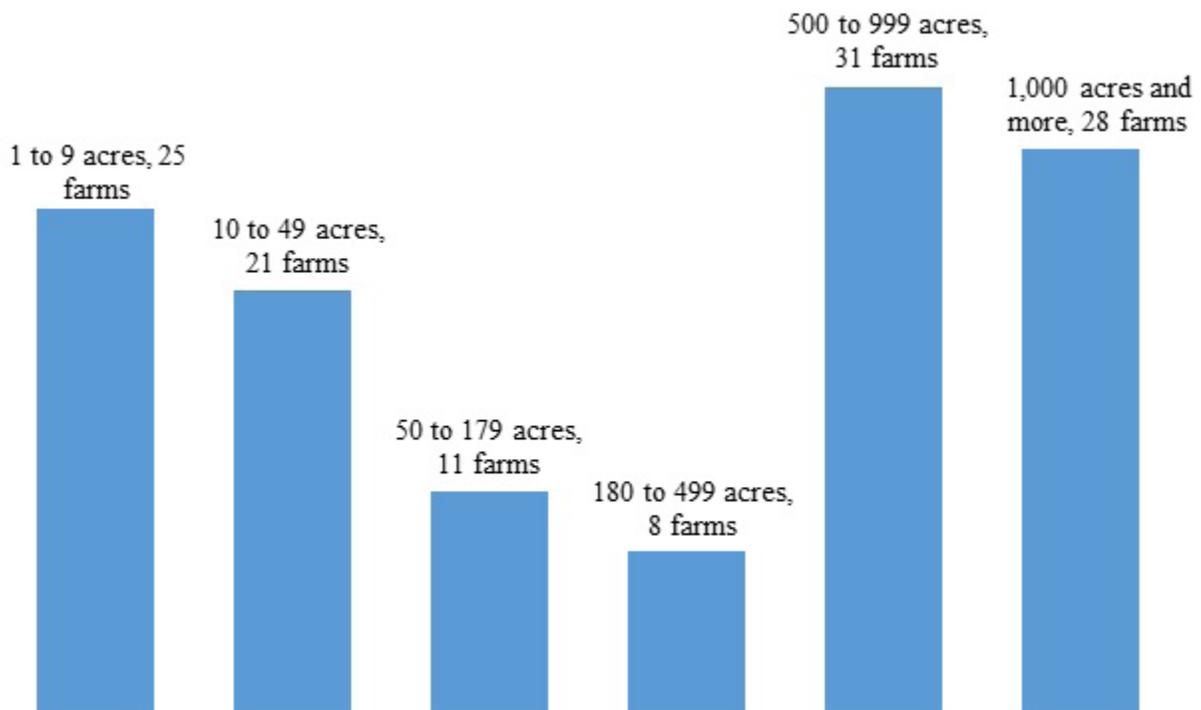
- The agriculture production sector in Lander County had \$48.9 million in exports, accounting for 4.4 percent of total county exports, and \$17.8 million in imports (2.2 percent of total import value of this county), creating \$31.2 million more in exports than imports. The agriculture sector in Lander County had a positive balance of trade. This shows the importance of the agriculture sector to the Lander County economy.
- In 2012, given the economic inter-linkage and multiplier effect, total economic impact to the Lander County economy from activities by the agricultural sectors was \$60.1 million. Total employment and labor income impacts in the Lander County economy from activity of the agricultural sectors was 179 jobs and \$9.3 million in labor income.

Agriculture Industry Facts

AGRICULTURE LAND AND FARMS

In 2012, the approximate land area of Lander County in acres was 3,513,659. There were 124 farms in Lander County covering 313,957 acres of land, which accounts for 8.9 percent of land in farms. The average farm size was 2,532 acres. Approximately 37 percent or 46 farms were small size farms between 1 to 49 acres, 15 percent or 19 farms were mid-size farms (50 to 499 acres), and 48 percent or 59 farms are large size farms with 500 to 1,000 or more acres. (Graph 1).

GRAPH 1. Farm by Size (acres) - 2012:



Source: <http://quickstats.nass.usda.gov/>

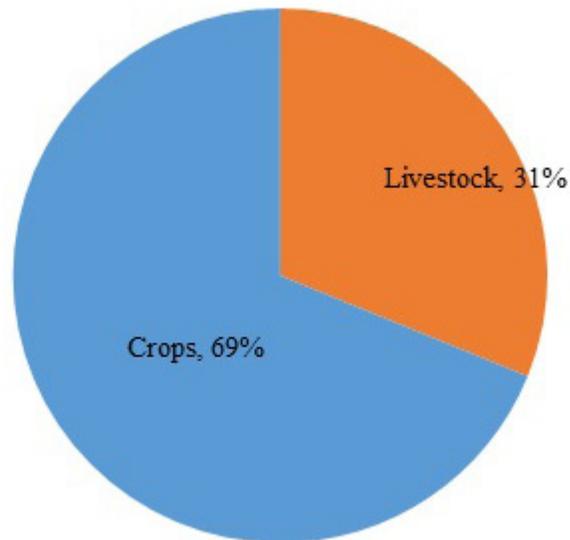
POPULATION AND FARM OPERATORS

The total population of Lander County in 2012 was 5,941. A total of 195 operators were hired on Lander County farm and ranch operations in 2012, and that number includes a person who operates a farm by doing farm work, and farm managers who are making day-to-day decisions about planting, harvesting, feeding, or marketing. The total number of hired workers, including paid family members (data exclude contract labor), was 218 with \$2.4 million in total payroll.

MARKET VALUE OF AGRICULTURE PRODUCTS SOLD

In 2012, cash receipts from sales of agriculture products were \$39.2 million. The market value of livestock, poultry, and their product sales were \$12.2 million (31 percent), while the value of crops, including nursery and greenhouse crops, was \$27.0 million (69 percent). (Graph 2.)

GRAPH 2. Total cash receipts, percent by commodity, 2012:



Source: 2012 Census of Agriculture, Nevada

Cattle, including calves, sold in 2012 was \$12.0 million, accounting for the highest percentage (approximately 98 percent) of the value of livestock sales. Other livestock operations included sheep and lamb production, all goat operations, equine operations, poultry, and aquaculture.

In 2012, 37,336 acres of agriculture land in Lander County was used for all hay and haylage, grass silage, and green chop growth. There were 66 farm operations growing and harvesting hay (all hay including alfalfa, other tame, small grain, and wild).

Analysis of Agriculture Sector Economic Data

From the IMPLAN input-output model databases (2012), there were approximately 81 different industries in Lander County, and only 5 were agriculture production industries:

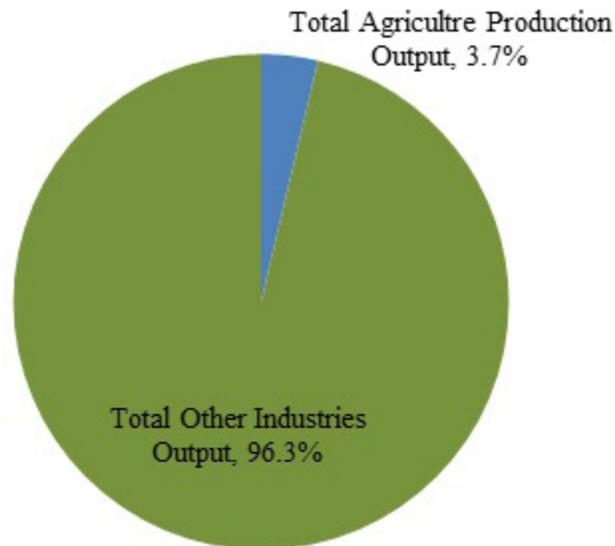
- Vegetable and melon farming
- Greenhouse, nursery, and floriculture production
- All other crop farming
- Cattle ranching and farming
- Animal production, except cattle and poultry and eggs
- Support activities for agriculture and forestry.

There is no significant presence of food manufacturing industries, so agriculture production industries will be the only segment of the food and agriculture sector reported for Lander County.

SECTORIAL VALUE OF OUTPUT, EMPLOYMENT AND LABOR INCOME

The total value of agriculture production output in 2012 was \$50.7 million, accounting for 3.7 percent of the total output value of Lander County. (Graph 3.)

GRAPH 3. Agriculture Sector Allocation in Total Value of Output (2012):



Source: Minnesota IMPLAN Group, Inc., 2014

The top 20 Lander County industries made up approximately \$1.3 billion, or 95 percent of total Lander County output. Two agriculture production industries were in the top 20 industries in the value of output. These industries were all other crop farming, with an output of \$35.5 million, ranked as the 2nd largest industry, and cattle ranching and farming, ranked as the 11th largest industry, with an output value of \$14.6 million.

The total employment in the agriculture production sector in 2012 accounted for 2.6 percent of the total county's employment. The top 20 Lander County industries by level of employment made up approximately 85 percent of the total county employment, and all other crop farming was ranked as the 14th largest industry in regard to total county employment. Cattle ranching and farming was ranked as the 21st largest industry when it comes to sectoral level of employment.

The total labor income of agriculture production accounted for 2.5 percent of the total county's income. However, when looking at the levels of labor income, the top 20 industries accounted for 94 percent of the total employment income, and all other crop farming was ranked 6th in the top 20, with \$6.7 million in value of labor income.

SECTORIAL VALUE OF EXPORT AND IMPORT

In 2012, agriculture production in Lander County had \$48.9 million in exports, accounting for 4.4 percent of total county exports, and \$17.8 million in imports (2.2 percent of total import value of this county), creating \$31.2 million more in exports than imports. Agriculture production in Lander County had a positive balance of trade. This shows the importance of the agriculture sector to the Lander County economy.

Looking at commodity trade data, all other crop farming products, and cattle from ranches and farms, and forest, timber and forest nursery products were industries that created more in exports than imports, contributing to a positive trade balance in the agriculture production sector, while grains were the commodity with the largest negative trade balance. Negative trading balances show that industry purchase inputs were from outside of the county. By identifying input-output sector commodities that are imported, the county can target these sectors for import substitution efforts.

The top 20 exporting industries in Lander County in 2012 made up approximately 98.3 percent of the county's total export. Cattle from ranches and farms was in the top 20, with export sales of \$13.3 million and was ranked as the 6th largest exporter in this county, accounting for 1.2 percent of total exports. The other agriculture sector industry, ranked 17th in top 20 exports of the county, was forest, timber, and forest nursery products, with \$3.8 million more in exports than imports.

ECONOMIC IMPACT ANALYSIS OF AGRICULTURE SECTOR ON LANDER COUNTY ECONOMY

Economic impact analyses tell us the impact that the food and agriculture sector activities have on the Lander County economy. (Table 1)

In 2012, the agriculture production industries had a production level of \$50.7 million, hired 116 people, and a paid labor income of \$7.61 million. The total economic impact of the agriculture production sector of Lander County was \$60.1 million. This means that besides direct economic benefits agriculture production industries have on the Lander County economy, the indirect and induced impacts on the economy were \$9.5 million. When it comes to total employment and income, due to agriculture production sector economic activities, an additional 63 jobs were created as well as \$1.65 million in labor income from indirect and induced linkages.

TABLE 1. Economic, Employment, and Labor Income Impacts of the Agricultural Production Industries on the Lander County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	116	\$7,605,326	\$50,678,027
Indirect Effect	49	\$1,305,053	\$7,785,266
Induced Effect	14	\$349,255	\$1,679,600
Total Effect	179	\$9,259,634	\$60,142,893

Source: Minnesota IMPLAN Group, Inc., 2014

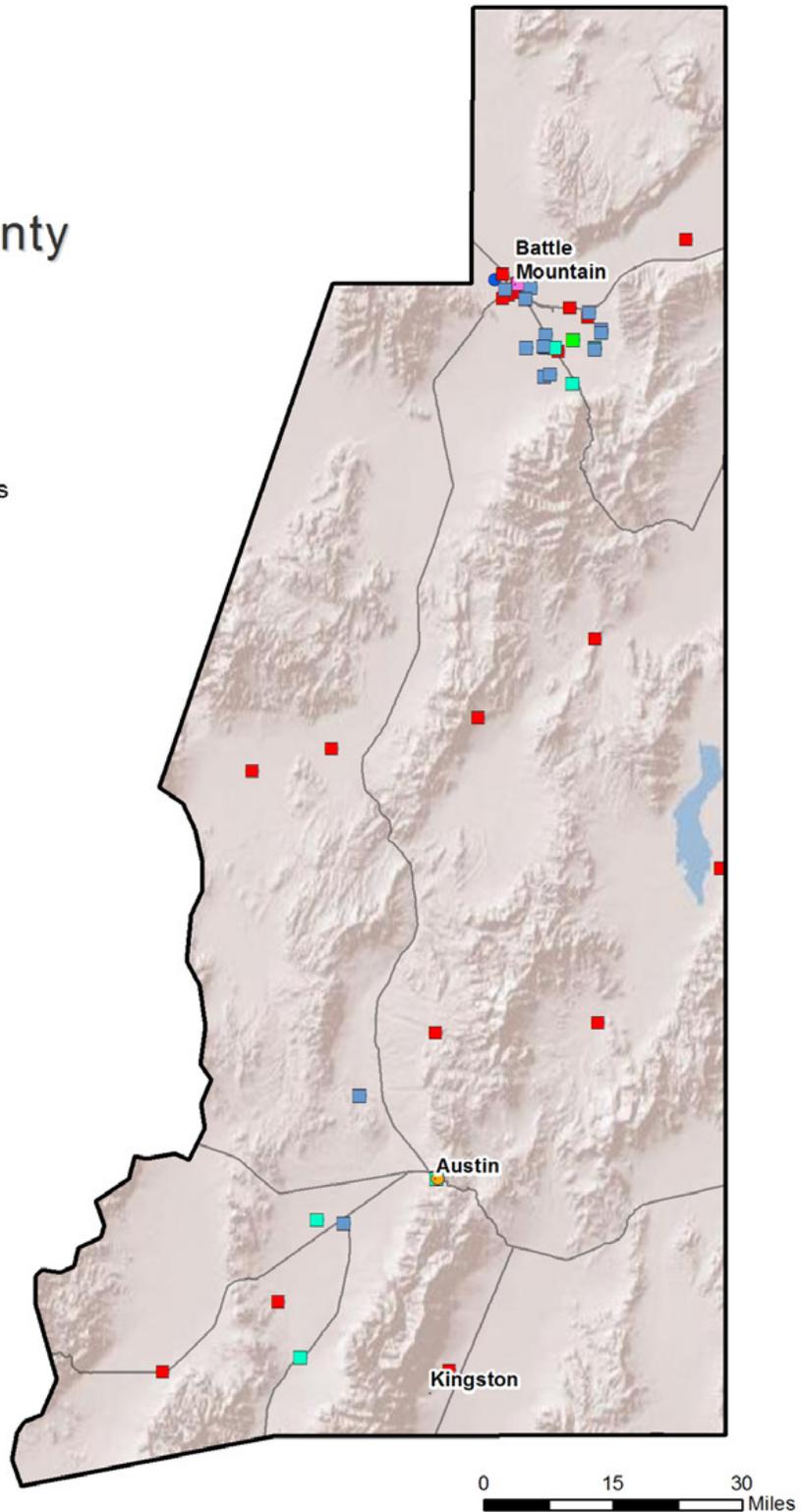
Lander County

Nevada's Agricultural Sector Businesses

Lander County

- Crops
- Farmer's Markets
 - Hay

- Livestock
- Cattle
 - Goats
 - Horses
 - Pigs
 - Sheep



LINCOLN COUNTY

Overview

This report provides a profile of the food and agriculture sector and an overview of what economic impact the food and agriculture sector has on the economy of Lincoln County.

- From the 2012 Census, Lincoln County had 185 farms. When it comes to the size of farms, they are somewhat evenly distributed between small, mid, and large size farms.
- In 2012, Lincoln County's total value of the food and agriculture sector output was \$34.6 million, accounting for 15.4 percent of the total county production output.

The largest industries when it comes to agriculture production output value are:

- All other crop farming, and
- Cattle ranching and farming. These industries account for more than 92 percent of the total Lincoln County agriculture production output.

Total county employment was 1,943. The agriculture sector in Lincoln County had 139 employees, accounting for 7.1 percent of the total county employment.

In 2012, labor income from the food and agriculture sector in Lincoln County was \$6.3 million, accounting for 7.6 percent of the total county's labor income.

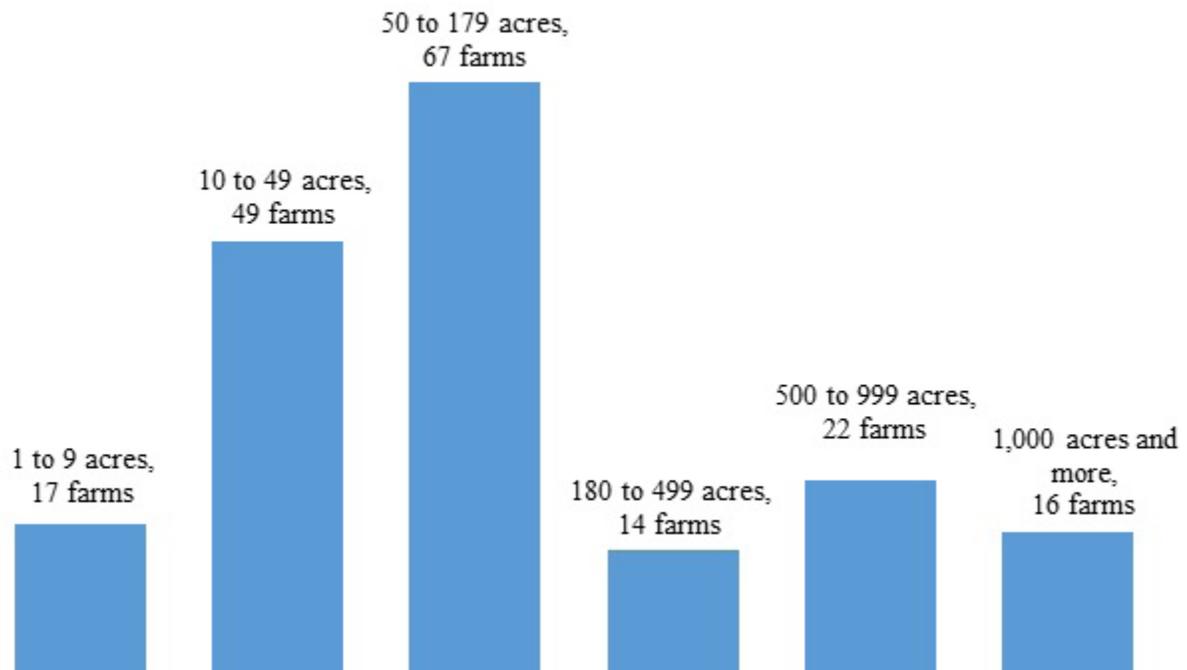
- The agriculture production sector in Lincoln County had \$32.6 million in exports, accounting for 29.5 percent of total county exports, and \$9.8 million in imports (4.0 percent of the total import value of this county), creating a positive trade balance of \$22.8 million. Agriculture production in Lincoln County had a positive balance of trade. This shows the importance of the agriculture sector on the Lincoln County economy.
- In 2012, given the economic inter-linkage and multiplier effect, the total economic impact to the Lincoln County economy from activities by the food and agricultural sectors was \$40.5 million. Total employment and labor income impacts in the Lincoln County economy from activity of the food and agricultural sectors was 189 jobs and \$7.7 million in labor income.

Agriculture Industry Facts

AGRICULTURE LAND AND FARMS

In 2012, the approximate land area in Lincoln County was 6,805,248 acres. There were 185 farms in Lincoln County covering 46,271 acres of land. The average farm size was 472 acres. Approximately 36 percent or 66 farms were small size farms between 1 to 49 acres, 44 percent or 81 farms were mid-size farms between 50 to 499 acres, and 20 percent or 38 farms were large size farms with 500 to 1,000 acres and more. (Graph 1.)

GRAPH 1. Farm by Size (acres) - 2012:



Source: <http://quickstats.nass.usda.gov/>

POPULATION AND FARM OPERATORS

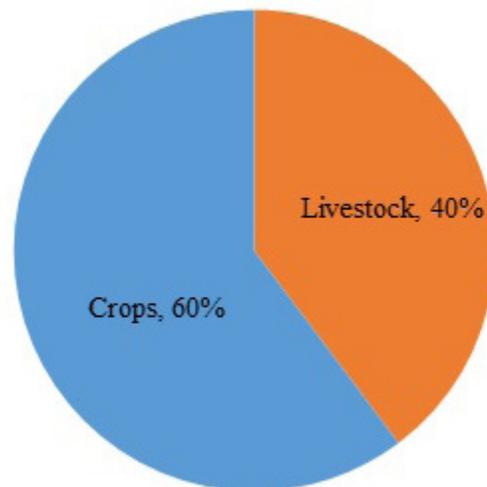
The total population of Lincoln County was 5,405 in 2012. 281 of all operators were hired on Lincoln County farm and ranch operations in 2012, and that includes people who operate a farm by doing farm work and farm managers who are making day-to-day decisions about planting, harvesting, feeding, or marketing. The total number of hired workers, including paid family members (data excludes contract labor), was 385 with \$4.2 million in total payroll.¹⁰

MARKET VALUE OF AGRICULTURE PRODUCTS SOLD

In 2012, cash receipts from sales of agriculture products were \$23.2 million. The market value of livestock, poultry, and their product sales was \$9.2 million (40 percent), while the value of crops, including nursery and greenhouse crops, was \$14.0 million (60 percent). (Graph 2.)

¹⁰ Source: 2012 Census of Agriculture, Nevada.

GRAPH 2. Total cash receipts, percent by commodity, 2012:



Source: 2012 Census of Agriculture, Nevada

The largest livestock industry was made up of cattle and calves and had \$9.0 million in sales in 2012. Other livestock operations were sheep and lamb, wool production, goats, and milk operations, as well as equine, poultry, and other animal operations.

In 2012, 97 farms were using 17,566 acres of agriculture land in Lincoln County for all hay and haylage, grass silage, and green chop growth. There were approximately 19 farm operations growing vegetables (beans, broccoli, cantaloupes, fresh cut herbs, peppers, potatoes, pumpkins, squash, tomatoes, sweet corn, and watermelons), and fruit (noncitrus, apples, apricots, cherries, pears, peaches, nuts, and berries).

Analysis of Agriculture Sector Economic Data

From the IMPLAN input-output model databases (2012), there were approximately 81 different industries in Lincoln County and only 7 were from the agriculture production sector:

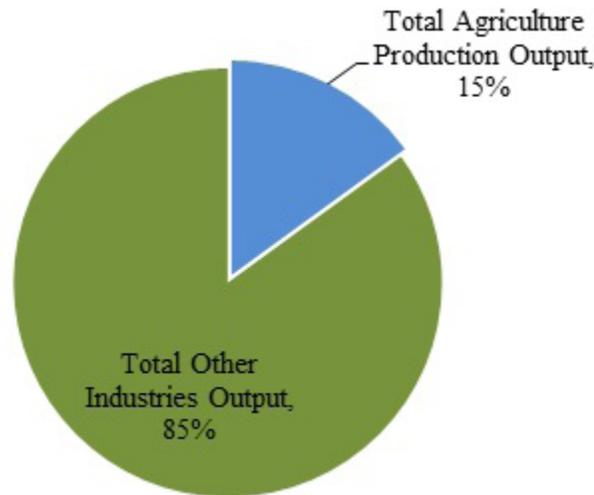
- Vegetable and melon farming
- Fruit farming
- Greenhouse, nursery, and floriculture production
- All other crop farming
- Cattle ranching and farming
- Animal production, except cattle and poultry and eggs
- Support activities for agriculture and forestry.

There is no significant presence of the food manufacturing industries, so agriculture production industries will be the only segment of agriculture sector reported on for Lincoln County.

SECTORIAL VALUE OF OUTPUT, EMPLOYMENT AND LABOR INCOME

The total value of agriculture production sector output in 2012 was \$34.6, accounting for 15.4 percent of the total output value of Lincoln County. (Graph 3.)

GRAPH 3. Agriculture Sector Allocation in Total Value of Output (2012):



Source: Minnesota IMPLAN Group, Inc., 2014

The top 20 industries by value of output for this county created \$177.7 billion in output, which was 78.7 percent of the value of the county's total output in 2012. One agricultural production industry was in the top 20 in the value of output: cattle ranching and farming, with an output of \$10.5 million, which accounted for 4.7 percent of the total Lincoln County value of output. Cattle ranching and farming was ranked as the 6th largest Lincoln County industry in regard to output value.

When it comes to the total employment in 2012, all other crop farming was ranked as the 8th largest industry, accounting for 3.4 percent of the total county employment, while cattle ranching and farming was ranked 11th, with 2.3 percent contributing to the total employment of this county.

When looking at the levels of labor income, the top 20 of 81 industries in Lincoln County accounted for 82.7 percent of the total labor income. Sectorial labor income is the sum of sectorial employee compensation and proprietor income. In 2012, the all other crop farming sector was ranked as the 4th largest industry when it comes to total labor income, with \$4.4 million, and it made up approximately 5.3 percent of the total Lincoln County labor income.

SECTORIAL VALUE OF EXPORT AND IMPORT:

In 2012, the agriculture production sector in Lincoln County had \$32.6 million in exports accounting for 29.5 percent of total county exports, and \$9.8 million in imports (4.0 percent of total import value of this county), creating a positive trading balance of \$22.8 million. The agriculture production sector of Lincoln County is a positive economic sector contributing to the favorable balance of trade. This shows the importance of the agriculture sector for the Lincoln County economy.

Looking at commodity trade data for Lincoln County, within the agriculture production sector, all other crop farming products, cattle from ranches and farms products, and forest, timber, and forest nursery products are industries that create more in exports than imports, contributing to a positive trade balance in the agriculture production sector. The only agriculture commodity with a negative trade balance in the same period was grains. By identifying commodities that are imported, a county can target these for import substitution.

The top 20 exporting industries in Lincoln County in 2012 made up approximately 85.4 percent of the county's total exports. All other crop farming was in the top 20, with export sales of \$19.0 million, and was ranked as the number 1 largest exporter in this county, accounting for 17.1 percent of total exports. Other two agriculture production sector industries that ranked 4th and 14th in the top 20 exports of the county were cattle from ranches and farms, with \$9.6 million more in exports and forest, timber, and forest nursery products, with \$2.3 million more in exports than imports.

ECONOMIC IMPACT ANALYSIS OF AGRICULTURE SECTOR ON LINCOLN COUNTY ECONOMY

Economic impact analyses tell us the impact that the food and agriculture sector activities have on the total Lincoln County economy. (Table 1).

In 2012, the agriculture production industries had a production level of \$34.6 million, hired 138 people, and paid labor income of \$6.28 million. Give the multiplier impact, the total economic impact of the food and agriculture sector in Lincoln County was \$40.5 million. This means that besides the direct economic benefits the food and agriculture industries have on the Lincoln County economy, the indirect and induced impacts on the economy were \$5.9 million. When it comes to total employment and income, due to the food and agriculture sector economic activities 51 jobs were created as well as \$1.38 million in labor income from indirect and induced linkages.

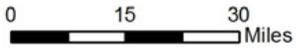
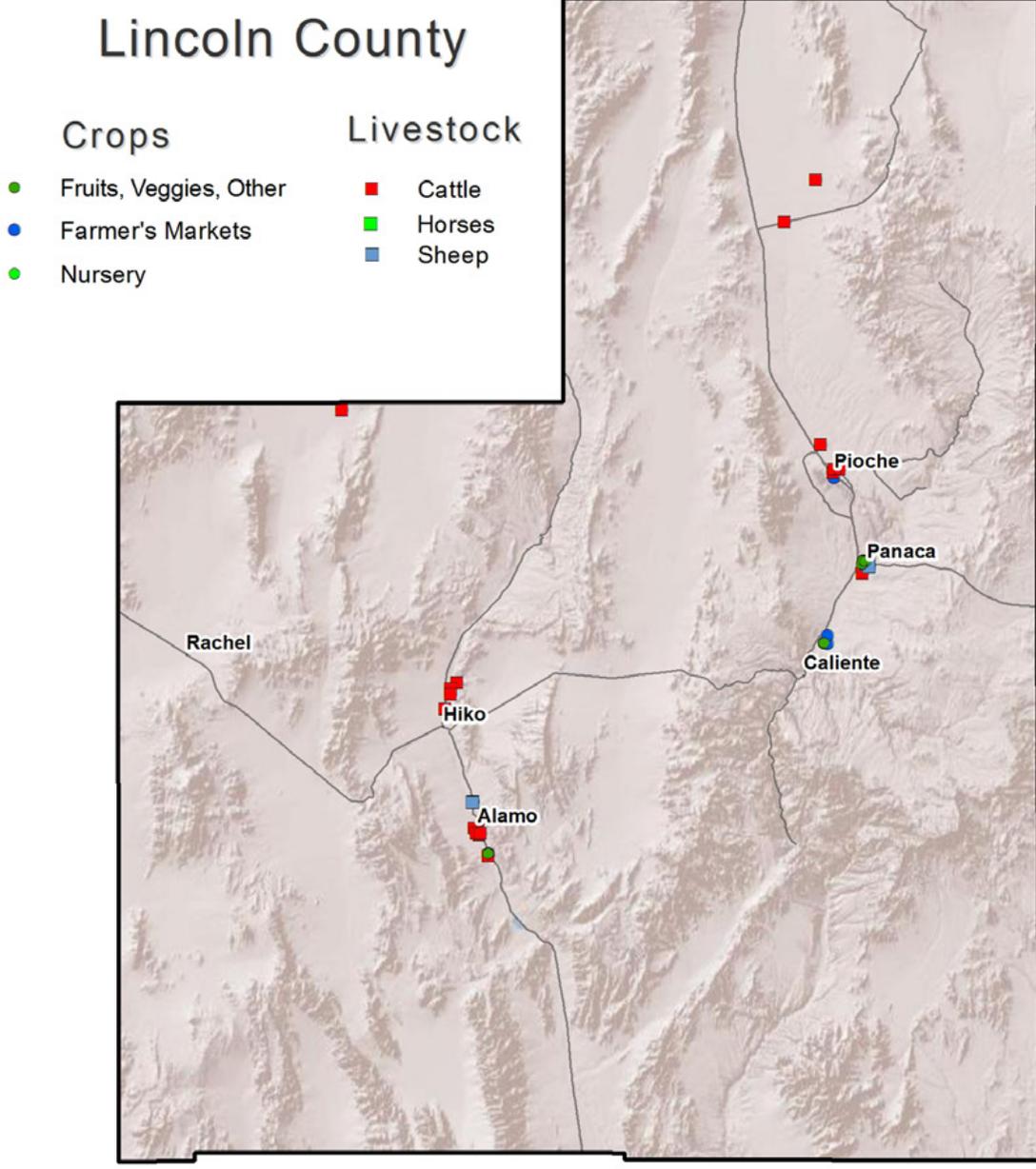
TABLE 1. Economic, Employment, and Labor Income Impacts of the Agricultural Production Industries on the Lincoln County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	138	\$6,284,213	\$34,637,244
Indirect Effect	36	\$1,012,332	\$4,210,961
Induced Effect	15	\$372,064	\$1,685,848
Total Effect	189	\$7,668,609	\$40,534,053

Source: Minnesota IMPLAN Group, Inc., 2014

Lincoln County

Nevada's Agricultural Sector Businesses



LYON COUNTY

Overview

This report provides a profile of the food and agriculture sector and an overview of the economic impact the food and agriculture sector has on the economy of Lyon County.

- From the 2012 Census, Lyon County had 462 farms covering 28.6 percent of land. More than 50 percent of farms were small size farms between 1 to 49 acres.
- In 2012, Lyon County's total value of the food and agriculture sector output was \$261.4 million, accounting for 9.4 percent of the total county production output.

The largest industries when it comes to agriculture production output value are:

- All other crop farming
- Vegetable and melon farming
- Cattle ranching and farming, and
- Dairy cattle and milk production. These industries account for 92 percent of the total Lyon County agriculture production output.

The largest food manufacturing industry is:

- Fruit and vegetable canning, pickling, and drying, which accounts for 97 percent of the total value of food manufacturing output.

Total county employment was 16,838. The agriculture sector in Lyon County had 906 employees accounting for 5.4 percent of the total county employment.

In 2012, Lyon County labor income in the agriculture sector was \$60.4 million, accounting for 9.0 percent of the total county's labor income.

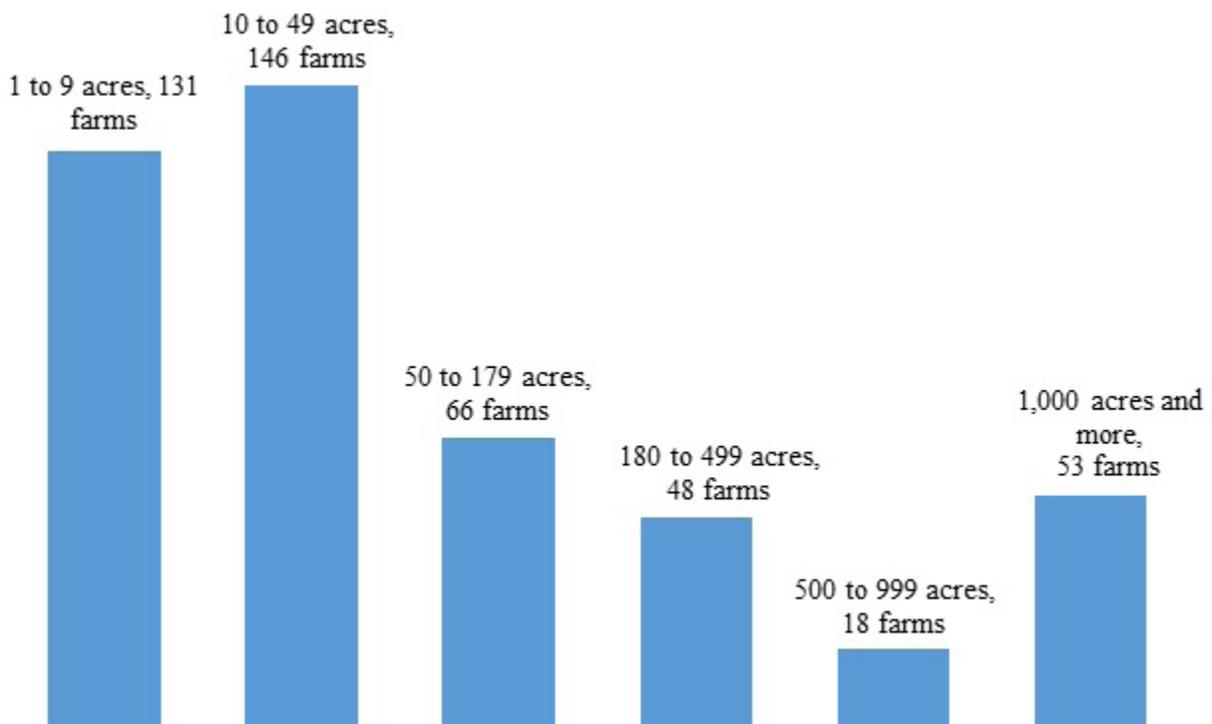
- The agriculture production sector in Lyon County had \$164.5 million in exports, accounting for 9.9 percent of total county exports, and \$45.6 million in imports (1.7 percent of total import value of this county), creating \$118.9 million more in exports than imports. The agriculture production sector of Lyon County had a positive balance of trade. This shows the importance of the agriculture sector to the Lyon County economy. Food manufacturing industries had \$65.0 million more in imports than exports. Negative trading balances show that most of Lyon County's food manufacturing commodities were purchased from outside of the county.
- In 2012, given the economic inter-linkage and multiplier effect, the total economic impact to the Lyon County economy from activities by the food and agricultural sector was \$338.0 million. The total employment and labor income impacts in the Lyon County economy from activity of the food and agricultural sector was 1,544 jobs and \$79.1 million in labor income.

Agriculture Industry Facts

AGRICULTURE LAND AND FARMS

In 2012, the approximate land area of Lyon County was 1,280,689 acres. There were 462 farms in Lyon County covering 366,006 acres of land, which accounts for 28.6 percent of land in farms. The average size of the farm was 792 acres. Approximately 60 percent or 277 farms were small size farms between 1 to 49 acres, 25 percent or 114 farms were mid-size farms between 50 to 499 acres, and 15 percent or 71 farms were large size farms with 500 to 1,000 acres and more. (Graph 1.)

GRAPH 1. Farm by Size (acres)- 2012:



Source: <http://quickstats.nass.usda.gov/>

POPULATION AND FARM OPERATORS

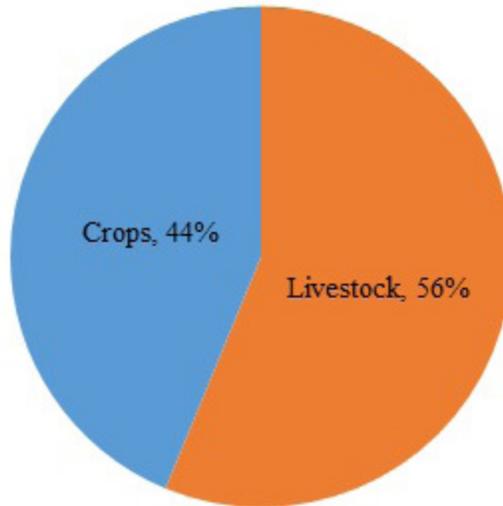
The total population of Lyon County in 2012 was 51,327. A total of 782 operators were hired in Lyon County farm and ranch operations in 2012, and that included people who operate a farm by doing farm work, and farm managers who are making day-to-day decisions about planting, harvesting, feeding, or marketing. The total number of hired farm workers, including paid family members (data exclude contract labor), was 1,159 with \$16.5 million in total payroll.¹¹

¹¹ Source: 2012 Census of Agriculture, Nevada

MARKET VALUE OF AGRICULTURE PRODUCTS SOLD

In 2012, cash receipts from sales of agriculture products were \$133.0 million. The market value of livestock, poultry, and their product sales was \$74.8 million (56 percent), while the value of crops, including nursery and greenhouse crops, was \$58.2 million (44 percent). (Graph 2.)

GRAPH 2. Total cash receipts, percent by commodity, 2012:



Source: 2012 Census of Agriculture, Nevada

Livestock operations comprise of cattle, including calves, dairy operations, sheep and lamb operations, wool production, goats, and milk operations, as well as equine, poultry, and other animal (rabbits) operations.

In 2012, 198 farms were using 61,523 acres of agriculture land in Lyon County for all hay and haylage, grass silage, and green chop growth. There were 37 farm operations growing vegetables (beans, beets, carrots, onions, potatoes, pumpkins), and fruit (noncitrus, apples, apricots, peaches, etc.).

Analysis of Agriculture Sector Economic Data

From the IMPLAN input-output model databases (2012), there were approximately 183 different industries in Lyon County, and only 8 were from the agriculture production sector:

- Grain farming
- Vegetable and melon farming
- Greenhouse, nursery, and floriculture production
- All other crop farming
- Cattle ranching and farming
- Dairy cattle and milk production
- Animal production, except cattle and poultry and eggs
- Support activities for agriculture and forestry.

The major food manufacturing industries in Lyon County are listed below:

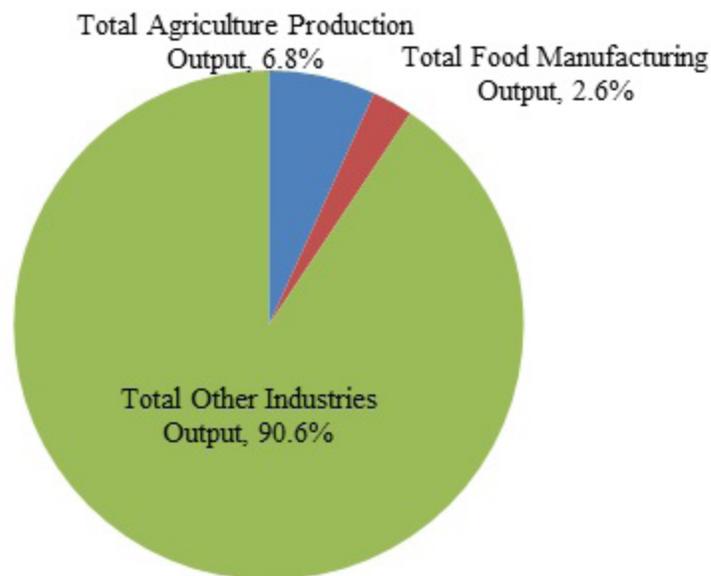
- Confectionery manufacturing from purchased chocolate
- Fruit and vegetable canning, pickling, and drying
- Bread and bakery product manufacturing.

These food manufacturing industries combined with agriculture production industries provide the economic description of the total agriculture sector in Lyon County.

SECTORIAL VALUE OF OUTPUT, EMPLOYMENT AND LABOR INCOME

In 2012, the total value of agriculture production sector output was \$189.2 million, accounting for 6.8 percent of the total output value of Lyon County. The food manufacturing industries' output was valued at \$72.2 million, which was 2.6 percent of the total county's output value. (Graph 3.)

GRAPH 3. Agriculture Sector Allocation in Total Value of Output (2012):



Source: Minnesota IMPLAN Group, Inc., 2014

The top 20 industries, by value of output for this county, created \$1.5 billion in output, which was 55.3 percent of the value of Lyon County's total output in 2012. Two Lyon County agricultural production industries were in the top 20 in value of output: all other crop farming had an output of \$81.3 million and was 2.9 percent of the total Lyon County value of output; and vegetable and melon farming, with an output value of \$49.8 million, was 1.8 percent of the total county's value of

output. In 2012, the all other crop farming, cattle ranching and farming, and vegetable and melon farming were ranked as the 5th and 14th largest of Lyon County's industries in regard to output value.

The total employment of the agriculture production sector in 2012 accounted for 4.5 percent of the total county's employment, while the food manufacturing industries accounted for only 0.9 percent of total county employment. All other crop farming was the industry with the largest employment within the agriculture production sector, and fruit and vegetable canning, pickling, and drying was the food manufacturing industry with the largest employment count.

When looking at the levels of labor income, the agriculture production industries made up approximately 8.2 percent of the total Lyon County labor income, valued at \$54.9 million, while food manufacturing accounted for only 0.8 percent, with value a of \$5.5 million in 2012. The top 20 of 119 industries in Lyon County accounted for 57.6 percent of total labor income. Sectorial labor income is the sum of sectorial employee compensation and proprietor income. In 2012, the vegetable and melon farming industry was ranked as the 4th largest, with \$22.7 million in labor income, accounting for 3.4 percent of total sectorial income. All other crop farming sector was ranked as the 5th largest industry when it comes to the total labor income, with \$19.7 million and it made up approximately 2.9 percent of the total Lyon County labor income.

SECTORIAL VALUE OF EXPORT AND IMPORT

In the 2012, the agriculture production sector in Lyon County had \$164.5 million in exports, accounting for 9.9 percent of total county exports, and \$45.6 million in imports (1.7 percent of total import value of this county), creating \$118.9 million more in exports than imports. The agriculture production sector of Lyon County is a positive economic sector contributing to the favorable balance of trade. This shows the importance the agriculture sector has on the Lyon County economy.

Looking at commodity trade data for Lyon County, all other crop farming products, vegetables and melons, cattle from ranches and farms products, and dairy cattle and milk products created more in exports than imports, contributing significantly to a positive trade balance in the agriculture production sector. The agriculture production commodities with negative trade balances were grains, fruit, and logs and roundwood. The top 20 exporting industries in Lyon County in 2012 made up approximately 63.6 percent of the county's total exports. The vegetables and melons industry was in the top 20, with export sales of \$45.1 million, and it was ranked as the 11th largest exporter.

Food manufacturing industries had \$65.0 million more in imports than exports. Canned, pickled and dried fruits and vegetables was the only industry that created a positive trade balance within the sector. Negative trading balances show that most of Lyon County's food manufacturing commodities were purchased from outside of the county. By identifying input-output sector commodities that are imported, the county can target these sectors for import substitution efforts.

ECONOMIC IMPACT ANALYSIS OF AGRICULTURE SECTOR ON LYON COUNTY ECONOMY

Economic impact analyses tell us the impact agriculture production and food manufacturing activities have on the total Lyon County economy. Table 1. shows the impacts of the activities by the agricultural sector on the Lyon County economy.

In 2012, agriculture production industries had a production level of \$189.2 million, hired 761 people, and paid labor income of \$54.85 million. The total economic impact of the agriculture production sector in Lyon County was \$252.5 million. This means that besides the direct economic benefits agriculture production industries have on the Lyon County economy, the indirect and induced impacts on the economy were \$63.3 million. When it comes to total employment and income, due to agriculture production sector economic activities, an additional 555 jobs were created and \$15.15 million in labor income from indirect and induced linkages.

TABLE 1. Economic, Employment, and Labor Income Impacts of the Agricultural Production Industries on the Lyon County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	761	\$54,852,949	\$189,219,570
Indirect Effect	401	\$10,469,107	\$43,758,682
Induced Effect	154	\$4,675,991	\$19,556,628
Total Effect	1,316	\$69,998,047	\$252,534,880

Source: Minnesota IMPLAN Group, Inc., 2014

Food manufacturing industries in 2012 had a production output of \$72.2 million and employed 144 people with a labor income of \$5.51 million. The total economic impact generated by food manufacturing operations was \$85.5 million. Due to economic activity of food manufacturing industries, an additional 84 jobs were created with an income of \$3.54 million from indirect and induced linkages. (Table 2).

TABLE 2. Economic, Employment, and Labor Income Impacts of the Food Manufacturing Industries on the Lyon County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	144	\$5,507,408	\$72,209,934
Indirect Effect	64	\$2,947,465	\$10,782,822
Induced Effect	20	\$597,159	\$2,498,522
Total Effect	228	\$9,052,032	\$85,491,278

Source: Minnesota IMPLAN Group, Inc., 2014

The broad definition of the food and agriculture sector in this analysis includes agriculture production industries and food manufacturing industries. In 2012, the total economic impact of the food and agriculture sector was \$388.0 million. The total employment impact of the agriculture sector on the county's economy was estimated at 1,544 people, with an income of \$79.05 million. Data are summarized in Table 3.

TABLE 3. Economic, Employment, and Labor Income Impacts of the Total Agriculture Sector on the Lyon County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	905	\$60,360,357	\$261,429,504
Indirect Effect	465	\$13,416,572	\$54,541,504
Induced Effect	174	\$5,273,150	\$22,055,150
Total Effect	1,544	\$79,050,079	\$338,026,158

Source: Minnesota IMPLAN Group, Inc., 2014

Lyon County

Nevada's Agricultural Sector Businesses

Lyon County

Crops

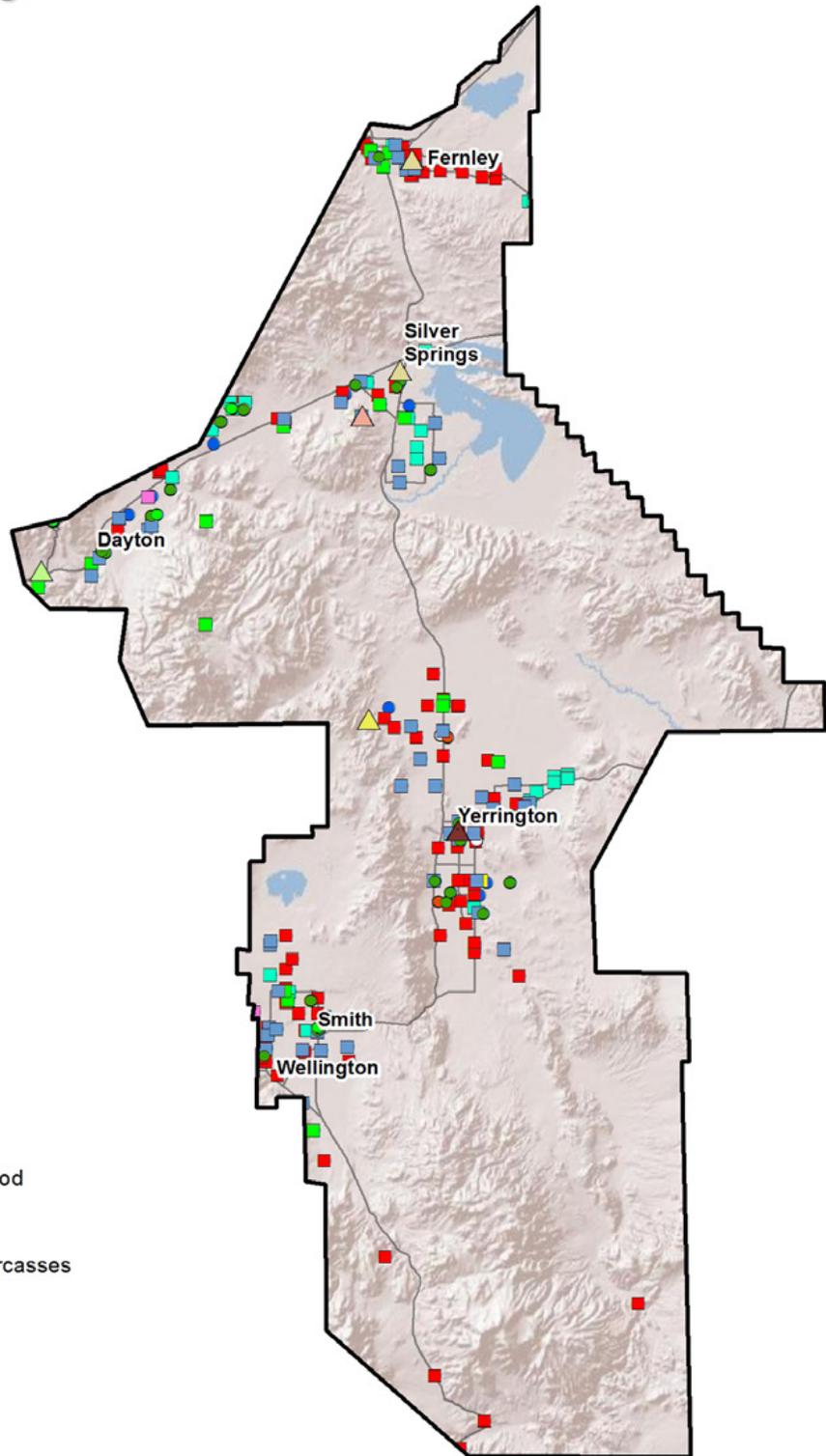
- Fruits, Veggies, Other
- Farmer's Markets
- Hay
- Honey
- Nursery
- Seeds

Livestock

- Cattle
- Chickens
- Eggs
- Dairy
- Goats
- Horses
- Llamas
- Pigs
- Sheep

Manufacturing

- ▲ Other Animal Food
- ▲ Confectionery
- ▲ Dried and Dehydrated Food
- ▲ Cheese Manufacturing
- ▲ Meat Processed from Carcasses
- ▲ Commercial Bakeries



MINERAL COUNTY

Overview

This report provides a profile of the food and agriculture sector and an overview of the economic impact that the food and agriculture sector has on the economy of Mineral County.

- From the 2012 Census, Mineral County had 119 farms covering 28.6 percent of land. 66 percent of farms were small size farms between 1 to 49 acres.
- In 2012, Mineral County's total value of the food and agriculture sector output was \$11.9 million accounting for 4.6 percent of the total county production output.

The largest industries when it comes to agriculture production output value are:

- All other crop farming
- Cattle ranching and farming, and
- Dairy cattle and milk production.

These industries account for 96 percent of Mineral County's total agriculture production output.

Total county employment was 1,880. The agriculture sector in Mineral County had 56 employees accounting for 3.0 percent of the total county employment.

In 2012, Mineral County labor income of the food and agriculture sector was \$794,353, accounting for 1.0 percent of the total county's labor income.

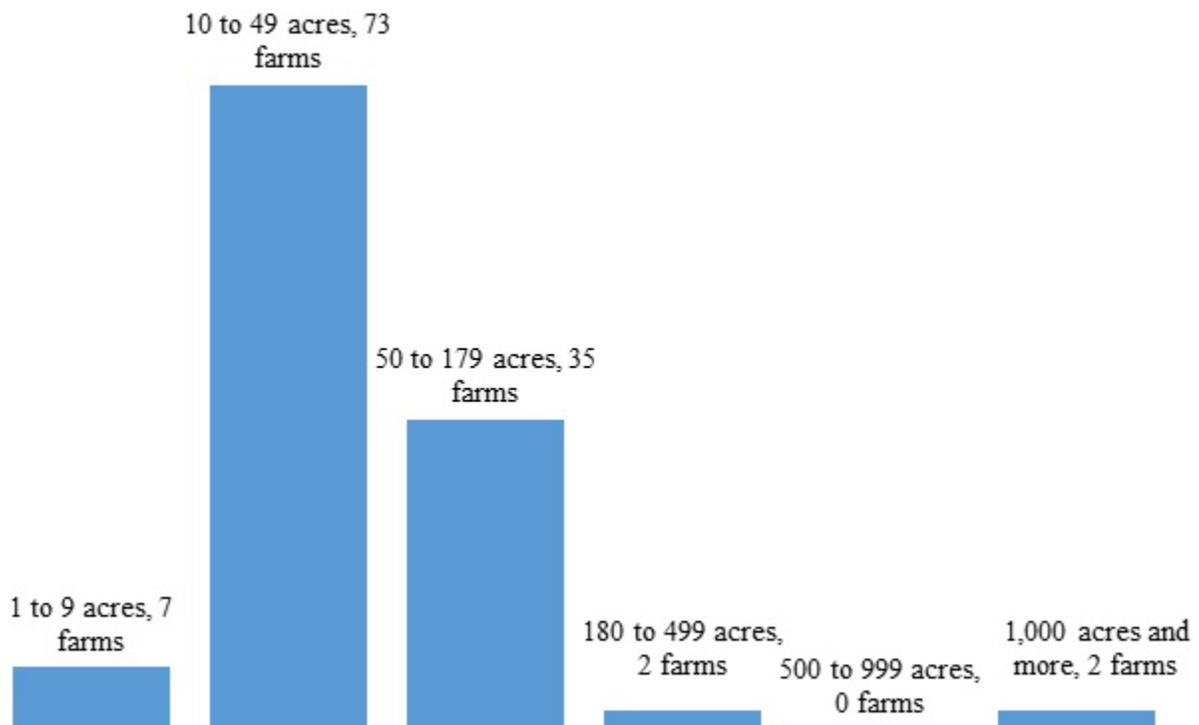
- The food and agriculture sector in Mineral County had \$8.8 million in exports accounting for 8.2 percent of total export of the county, and \$1.9 million in imports (0.9 percent of the total import value of this county), creating \$6.8 million more in exports than imports. The food and agricultural sector in Mineral County had a positive balance of trade. This shows the importance of agriculture to Mineral County's economy.
- In 2012, given the economic inter-linkage and multiplier effect, the total economic impact to the Mineral County economy from activities by the food and agricultural sectors was \$17.8 million. Total employment and labor income impacts in the Mineral County economy from activity of the food and agricultural sectors was 89 jobs and \$1.6 million in labor income.

Agriculture Industry Facts

AGRICULTURE LAND AND FARMS

In 2012, the approximate land area of Mineral County in acres was 2,401,816. There were 119 farms in Mineral County. Approximately 67 percent or 80 farms were small size farms between 1 to 49 acres, 31 percent or 37 farms were mid-size farms between 50 to 499 acres, and 2 percent or 2 farms were large size farms with 500 to 1,000 acres and more. (Graph 1.)

Graph 1. Farm by Size (acres) - 2012:



Source: <http://quickstats.nass.usda.gov/>

POPULATION AND FARM OPERATORS

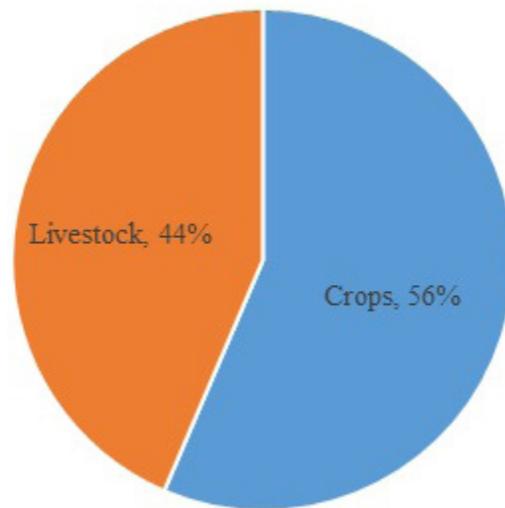
Mineral County had a population of 4,653 in 2012. 110 operators were hired in Mineral County farm and ranch operations in 2012, and that includes not only a person who operates a farm by doing farm work, but also farm managers and those who are making day-to-day decisions about planting, harvesting, feeding, or marketing. The total number of hired farm workers, including paid family members (data exclude contract labor), was 52, with \$289,000 in total payroll.¹²

MARKET VALUE OF AGRICULTURE PRODUCTS SOLD:

In 2012, cash receipts from sales of agriculture products were \$884,000. The market value of live-stock, poultry, and their product sales was \$385,000 (44 percent), while the value of crops, including nursery and greenhouse crops, was \$449,000 (56 percent). (Graph 2.)

¹² Source: 2012 Census of Agriculture, Nevada

GRAPH 2. Total cash receipts, percent by commodity, 2012:



Source: 2012 Census of Agriculture, Nevada

Livestock operations include cattle and calves, sheep and lamb operations, wool production, goats, milk operations, and equine, poultry, and other animal operations. In 2012, 20,934 acres of agriculture land in Mineral County were used for all hay and haylage, grass silage and greenchop growth.

Analysis of Agriculture Sector Economic Data

From the IMPLAN input-output model databases (2012), there were approximately 76 different industries in Mineral County, and 7 were from the agriculture production sector:

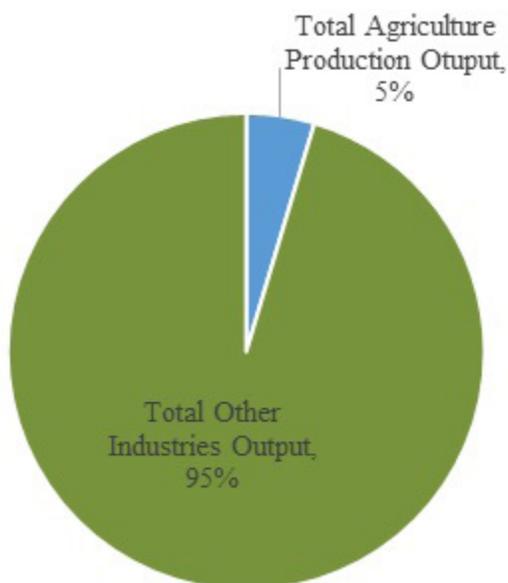
- Greenhouse, nursery, and floriculture production
- All other crop farming
- Cattle ranching and farming
- Dairy cattle and milk production
- Animal production, except cattle and poultry and eggs.

There is no significant presence of food manufacturing industries, so agriculture production industries will be the only segment of the food and agriculture sector of Mineral County.

SECTORIAL VALUE OF OUTPUT, EMPLOYMENT AND LABOR INCOME

The total value of agriculture production sector output was \$11.8 million, accounting for 4.6 percent of the total output value of Mineral County. (Graph 3.)

GRAPH 3. Agriculture Sector Allocation in Total Value of Output (2012):



Source: Minnesota IMPLAN Group, Inc., 2014

The top 20 industries by value of output for this county created \$213.9 billion in output, which was 83 percent of the total output value of Mineral County in 2012. Cattle ranching and farming accounted for 1.4 percent of the total Mineral County value of output, with \$3.6 million and was ranked as the 15th largest Mineral County industry in regard to output value.

The agriculture production industries accounted for 3.0 percent of the total value of employment. Dairy cattle and milk production was the largest employing industry within the agriculture production sector, along with cattle ranching and farming. These two industries accounted for almost 85 percent of the total employment within the agriculture production sector of Mineral County. Agriculture production labor income accounted for only 1.0 percent of the total income value for the county.

SECTORIAL VALUE OF EXPORT AND IMPORT

In 2012, agriculture production in Mineral County had \$8.8 million in exports, accounting for 8.2 percent of total county exports, and \$1.9 million in imports (0.9 percent of total import value of this county), creating \$6.9 million more in exports than imports.

Looking at commodity trade data for Mineral County, dairy cattle and milk products and cattle from ranches and farm products created more in exports than imports, contributing significantly to a positive trade balance. The agriculture commodities with a negative trade balance were grains, vegetables and melons, and fruit. By identifying commodities that are imported, a county can target these for import substitution. The agricultural production sector in Mineral County had a positive balance of trade.

The top 20 exporting industries in Mineral County in 2012 made up approximately 89.3 percent of the total county's exports. Two agriculture production industries were in the top 20 of exporters: dairy cattle and milk products, with export sales of \$6.0 million and ranked as the 5th largest exporter; and cattle from ranches and farms, with \$2.0 million more in exports and ranked as the 10th largest exporter.

ECONOMIC IMPACT ANALYSIS OF AGRICULTURE SECTOR ON MINERAL COUNTY ECONOMY

Economic impact analyses tell us the impact that the food and agriculture sector activities have on the total Mineral County economy. (Table 1). In 2012, the agriculture production industries had a production level of \$12.1 million, hired 57 people, and had a paid labor income of \$0.883 million. The total economic impact of the agriculture production sector of Mineral County was \$17.8 million. This means that besides the direct economic benefits agriculture production industries have on the Mineral County economy, the indirect and induced impacts on the economy were \$5.7 million. When it comes to total employment and income, due to agriculture production sector economic activities, an additional 32 jobs were created, as well as \$669,995 in labor income from indirect and induced linkages.

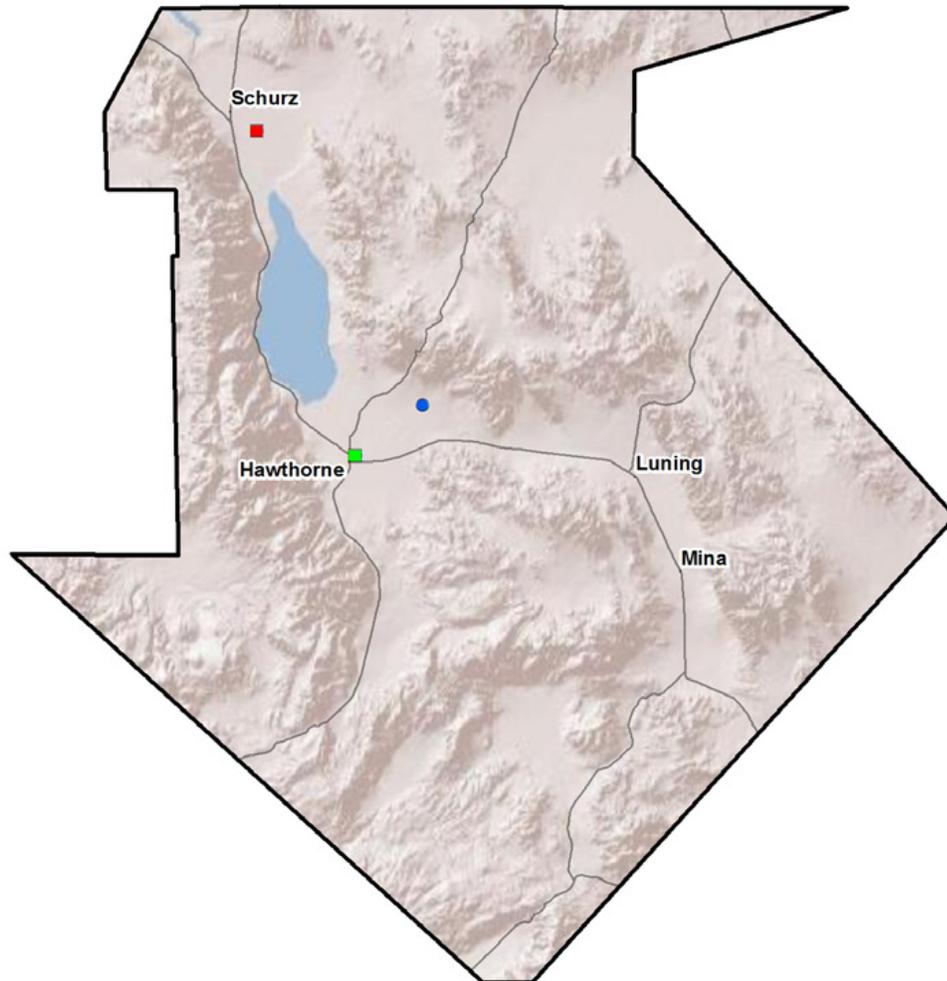
TABLE 1. Economic, Employment, and Labor Income Impacts of the Agricultural Production Industries on the Mineral County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	57	\$883,625	\$12,088,511
Indirect Effect	28	\$540,151	\$5,243,979
Induced Effect	4	\$129,844	\$492,665
Total Effect	89	\$1,553,620	\$17,825,155

Source: Minnesota IMPLAN Group, Inc., 2014

Mineral County

Nevada's Agricultural Sector Businesses



Mineral County

Crops

- Farmer's Markets
- Nursery

Livestock

- Cattle
- Horses



NYE COUNTY

Overview

This report provides a profile of the food and agriculture sector and an overview of the economic impact that the food and agriculture sector has on the economy of Nye County.

- From the 2012 Census, Nye County had 198 farms covering less than 1 percent of land. More than 60 percent of farms were small size farms between 1 to 49 acres.
- In 2012, Nye County's total value of the food and agriculture sector output was \$70.9 million, accounting for 2.9 percent of the total county production output.

The largest industries when it comes to agriculture production output value are:

- All other crop farming
- Cattle ranching and farming, and
- Dairy cattle and milk production.

These industries account for 95 percent of Nye County's total agriculture production output.

The largest food manufacturing industries are:

- Fluid milk and butter manufacturing, and
- Coffee and tea manufacturing, accounting for 90 percent of the total value of food manufacturing output.

Total county employment was 15,059. The food and agriculture sector in Nye County had 321 employees accounting for 2.1 percent of the total county employment.

In 2012, the food and agriculture sector labor income in Nye County was \$12.2 million, accounting for 1.7 percent of the total county's labor income.

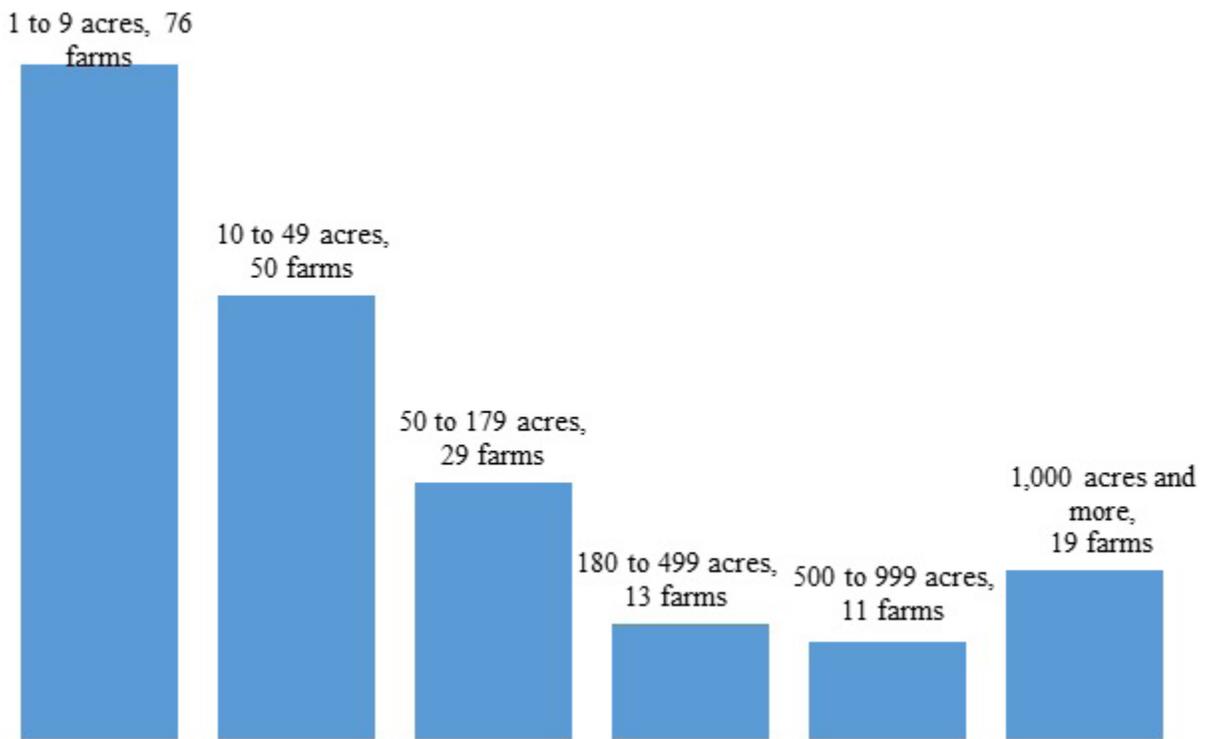
- The agriculture production sector in Nye County had \$37.9 million in exports, accounting for 2.6 percent of total county exports, and \$30.0 million in imports (1.4 percent of the total import value of this county), creating \$7.9 million more in exports than imports. The agriculture production sector of Nye County had a positive balance of trade. This shows the importance the agriculture sector has on the Nye County economy. Food manufacturing industries had \$81.8 million more in imports than exports. Negative trading balances show that most of Nye County's food manufacturing commodities were purchased from outside of the county.
- In 2012, given the economic inter-linkage and multiplier effect, the total economic impact to the Nye County economy from activities by the food and agricultural sector was \$84.3 million. The total employment and labor income impacts in the Nye County economy from activity of the food agricultural sectors was 444 jobs and \$15.9 million in labor income.

Agriculture Industry Facts

AGRICULTURE LAND AND FARMS

In 2012, the approximate land area of Nye County was 11,636,437 acres. There were 198 farms in Nye County covering 65,116 acres of land, which accounts for 0.6 percent of land in farms. The average size of a farm was 329 acres. Approximately 64 percent or 126 farms were small size farms between 1 to 49 acres, 21 percent or 42 were mid-size farms (50 to 179 acres) and 15 percent or 30 farms were large size farms with 500 to 1,000 or more acres. (Graph 1.)

GRAPH 1. Farm by Size (acres) - 2012:



Source: <http://quickstats.nass.usda.gov/>

POPULATION AND FARM OPERATORS

A total of 42,963 people lived in Nye County in 2012. 327 operators were hired on Nye County farm and ranch operations in 2012, and that includes people who operate a farm by doing farm work, and farm managers who are making day-to-day decisions about planting, harvesting, feeding, or marketing. The total number of hired farm workers, including paid family members (data exclude contract labor), was 238 with \$2.4 million in total payroll.¹³

¹³ Source: 2012 Census of Agriculture, Nevada

MARKET VALUE OF AGRICULTURE PRODUCTS SOLD

In 2012, cash receipts from sales of agriculture products were \$39.2 million. Livestock operations include cattle and calves, hogs and pigs, sheep and lamb production, goat operations, equine operations, poultry, and aquaculture.

In 2012, 37,336 acres of agriculture land in Nye County were used for all hay and haylage, grass silage, and green chop growth. There were 55 farm operations growing and harvesting hay (all hay including alfalfa, other tame, small grain, and wild).

Analysis of Agriculture Sector Economic Data

From the IMPLAN input-output model databases (2012), there were approximately 150 different industries in Nye County and 7 were from agriculture production industries:

- Tree nut farming
- Greenhouse, nursery, and floriculture production
- All other crop farming
- Cattle ranching and farming
- Dairy cattle and milk production
- Animal production, except cattle and poultry and eggs
- Support activities for agriculture and forestry.

The food manufacturing industries in Nye County are listed below:

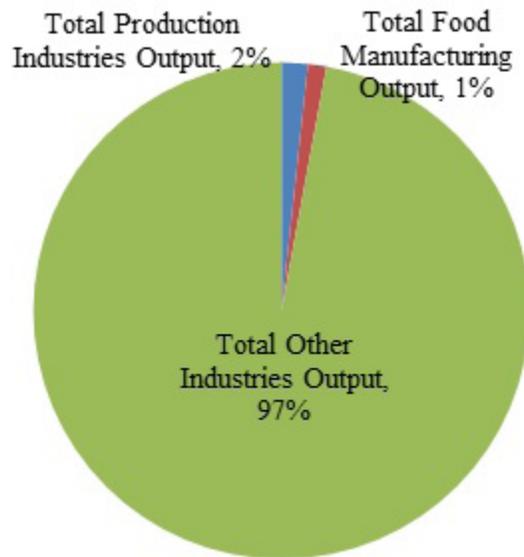
- Fluid milk and butter manufacturing
- Bread and bakery product manufacturing
- Coffee and tea manufacturing
- Soft drink and ice manufacturing.

Food manufacturing industries, combined with agriculture production industries, provide the economic description of the total food and agriculture sector of Nye County.

SECTORIAL VALUE OF OUTPUT, EMPLOYMENT AND LABOR INCOME

The total value of agriculture production sector output was \$42.3 million, accounting for only 2 percent of the total output value of Nye County. The food manufacturing industries' total output was valued at \$28.6 million, which was 1.2 percent of the total county's output value. (Graph 2.)

Graph 2. Agriculture Sector Allocation in Total Value of Output (2012):



Source: Minnesota IMPLAN Group, Inc., 2014

Three Nye County agricultural production industries dominate in value of agriculture production output: all other crop farming with an output of \$18.3 million; cattle ranching and farming, with an output value of \$12.6 million; and dairy cattle and milk production, with an output value of \$9.3 million.

The total employment in the agriculture production sector in 2012 accounted for 1.9 percent of the total county's employment. The food manufacturing industries accounted for only 0.2 percent of total county employment.

When looking at the levels of labor income, the agriculture production industries made up approximately 1.6 percent of the total Nye County labor income, valued at approximately \$11.4 million, while food manufacturing accounted for only 0.1 percent of the total county's labor income in 2012.

All other crop farming, cattle ranching and farming, and dairy cattle and milk production were the largest industries when it comes to employment and income within agriculture production. Fluid milk and butter manufacturing, and coffee and tea manufacturing, are major industries when it comes to the value of output (total output of \$17.5 million and \$8.2 million), as well as employment and labor income within the food manufacturing sector.

SECTORIAL VALUE OF EXPORT AND IMPORT

In 2012, the agriculture production sector in Nye County had \$37.9 million in exports, accounting for 2.6 percent of total county exports, and \$30.0 million in imports (1.4 percent of total import value of this county), creating \$7.9 million more in exports than imports. The agriculture production sector of Nye County is a positive economic sector contributing to the positive balance of trade. This shows the importance the agriculture sector has on the Nye County economy.

Looking at agriculture production commodity trade data for Nye County, all other crop farming products, cattle from ranches and farms, dairy cattle and milk products, and forest, timber, and forest nursery are commodities that created more in exports than imports, contributing to a positive trade balance. The agriculture commodities with negative trade balances were grains, vegetables, and fruits. The top 20 exporting industries in Nye County in 2012 made up approximately 88 percent of the county's total exports. Two agriculture production sector industries were in the top 20: all other crop farming products was ranked as the 14th largest exporter, with \$16.2 million in export sales, accounting for 1.1 percent of total county exports; and cattle from ranches and farms was ranked as the 20th largest exporting industry, with \$11.0 million in export sales.

Food manufacturing industries had \$81.8 million more in imports than exports. However, one food manufacturing industry was in the top 20 list of exporters: fluid milk and butter was ranked as the 17th largest industry, with \$15.3 million in export sales. Negative trading balances show that most of the Nye County food manufacturing commodities were purchased from outside of the county. By identifying input-output sector commodities that are imported, the county can target these sectors for import substitution efforts.

ECONOMIC IMPACT ANALYSIS OF AGRICULTURE SECTOR ON NYE COUNTY ECONOMY

Economic impact analyses tell us the impact agriculture production and food manufacturing activities have on the total Nye County economy. Table 1. shows the impacts of the activities by the agriculture production sector on the Nye County economy. In 2012, the agriculture production industries had a production level of \$42.3 million, hired 293 people, and a paid labor income of \$11.39 million. The total economic impact of the agriculture production sector of Nye County was \$52.2 million. This means that besides the direct economic benefits the agriculture production industries have on Nye County economy, the indirect and induced impacts on the economy were \$9.9 million. When it comes to total employment and income, due to the agriculture production sector economic activities, an additional 100 jobs were created in addition to \$2.7 million in labor income from indirect and induced linkages.

TABLE 1. Economic, Employment, and Labor Income Impacts of the Agricultural Production Industries on the Nye County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	293	\$11,392,904	\$42,294,049
Indirect Effect	61	\$1,608,389	\$5,761,330
Induced Effect	39	\$1,132,044	\$4,150,028
Total Effect	393	\$14,133,337	\$52,205,407

Source: Minnesota IMPLAN Group, Inc., 2014

Food manufacturing industries in 2012 had a production output of \$28.6 million and employed 27 people with a labor income of \$855,148. The total economic impact generated by food manufacturing operations was \$32.1 million. Due to the economic activity of food manufacturing industries, an additional 24 jobs were created with an income of \$0.87 million from indirect and induced linkages. (Table 2).

TABLE 2. Economic, Employment, and Labor Income Impacts of the Food Manufacturing Industries on the Nye Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	27	\$855,148	\$28,606,817
Indirect Effect	19	\$728,188	\$2,943,513
Induced Effect	5	\$137,250	\$503,532
Total Effect	51	\$1,720,586	\$32,053,862

Source: Minnesota IMPLAN Group, Inc., 2014

The broad definition of the food and agriculture sector in this analysis includes agriculture production industries and food manufacturing industries. In 2012, the total economic impact of the food and agriculture sector was \$84.3 million. The total employment impact of the food and agriculture sector on the county's economy was estimated at 444 people with income of \$15.9 million. Data are summarized in Table 3.

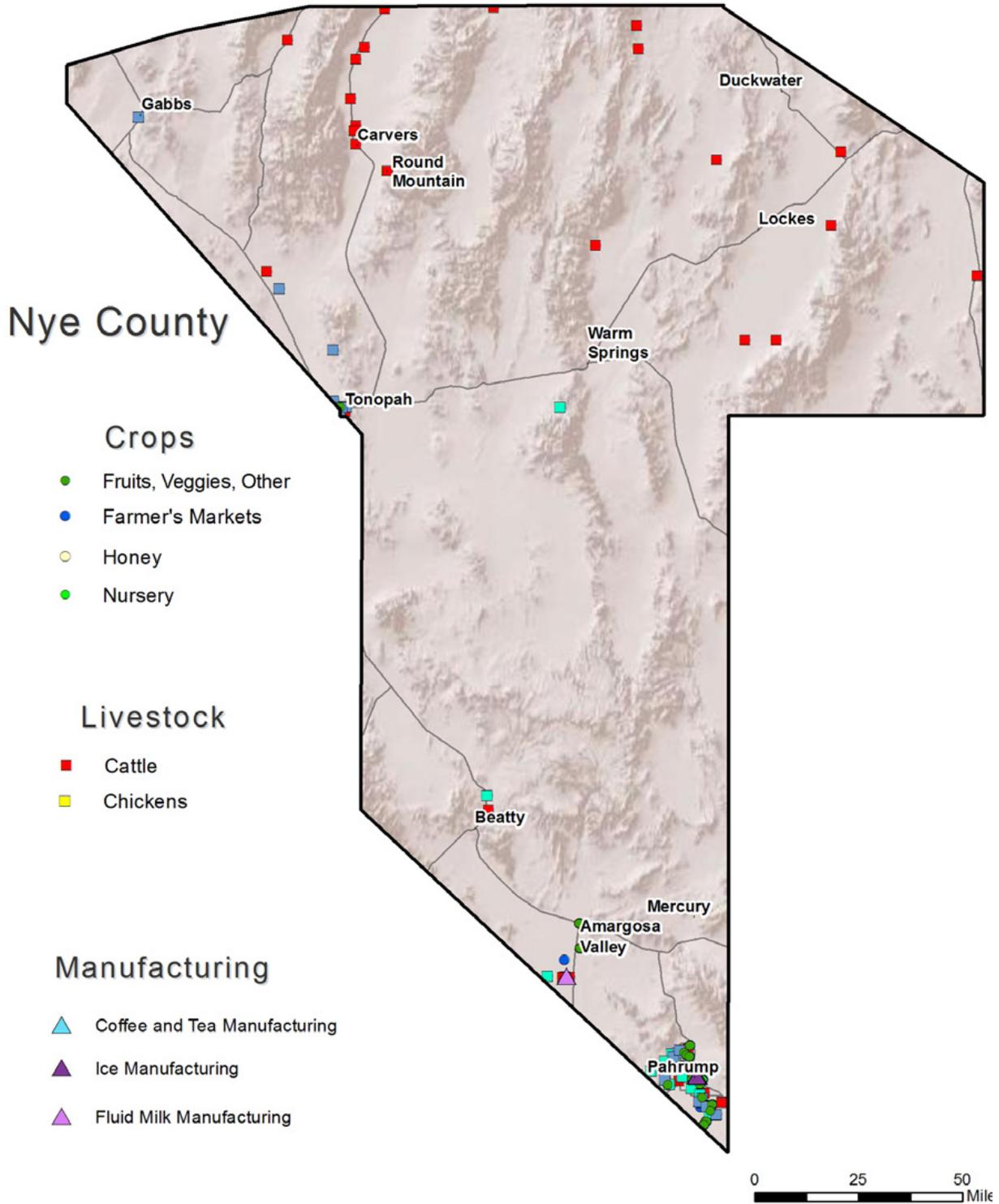
TABLE 3. Economic, Employment, and Labor Income Impacts of the Total Agriculture Sector on the Nye County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	320	\$12,248,052	\$70,900,866
Indirect Effect	80	\$2,336,577	\$8,704,843
Induced Effect	44	\$1,269,294	\$4,653,560
Total Effect	444	\$15,853,923	\$84,259,269

Source: Minnesota IMPLAN Group, Inc., 2014

Nye County

Nevada's Agricultural Sector Businesses



PERSHING COUNTY

Overview

This report provides a profile of the food and agriculture sector and an overview of the economic impact the food and agriculture sector has on the economy of Pershing County.

- From the 2012 Census, Pershing County had 154 farms covering 7.7 percent of land. When it comes to the size of farms measured in acres, farms were equally distributed between small, mid, and large size farms.
- In 2012, Pershing County's total value of the food and agriculture sector output was \$100.3 million, accounting for 18.4 percent of the total county production output.

The largest agriculture production industries when it comes to output value were:

- All other crop farming
- Cattle ranching and farming, and
- Dairy cattle and milk production. These industries account for 96 percent of Pershing County's total agriculture production output.

The largest food manufacturing industry was:

- Soybean and other oilseed processing, accounting for 97 percent of the total value of food manufacturing output.

The total county employment was 2,365. The food and agriculture sector in Pershing County had 237 employees, accounting for 10 percent of the total county employment.

In 2012, Pershing County's labor income from the agriculture sector was \$16.3 million, accounting for 12.1 percent of the total county labor income.

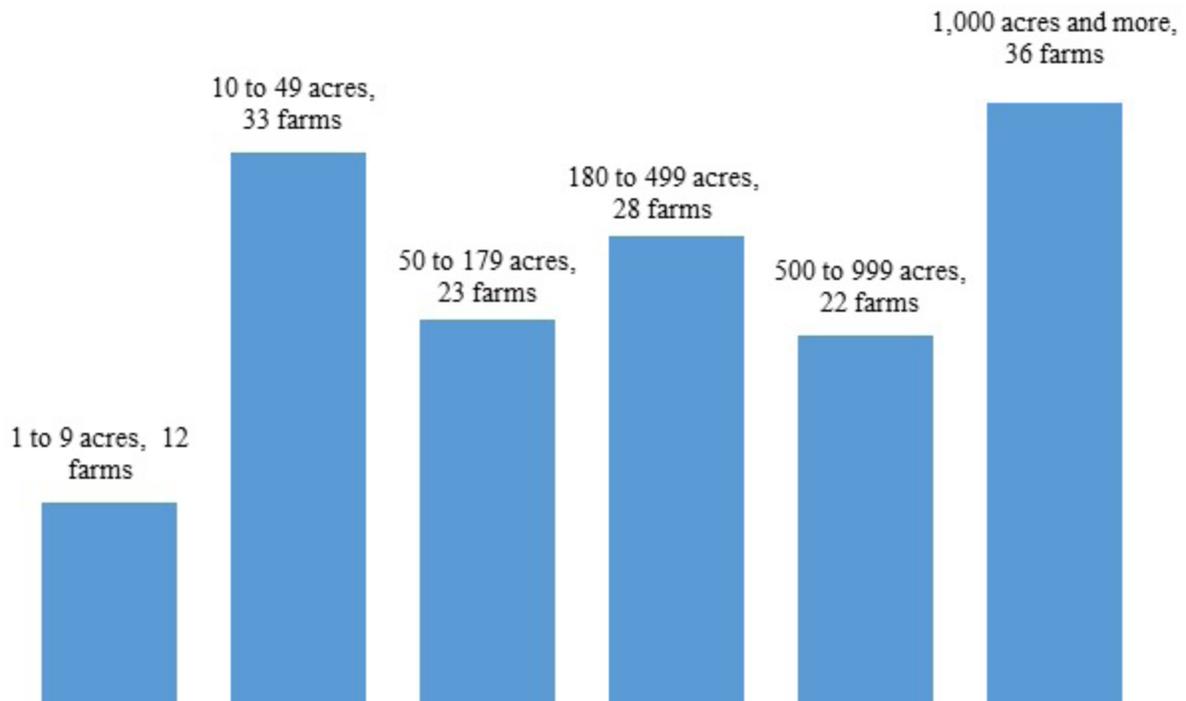
- The agriculture production sector in Pershing County had \$86.0 million in exports, accounting for 19.8 percent of total county exports, and \$34.5 million in imports, or 62 percent of total import value of this county, creating \$51.5 million more in exports than imports. The agriculture production of Pershing County is a positive economic sector contributing to a favorable balance of trade. This shows the importance of agriculture to the county's overall economy. The food manufacturing sector had a negative trade balance of \$4.9 million, creating more in imports than exports in 2012. Negative trading balances show that most of Pershing County food manufacturing industries purchase inputs from outside of the county.
- In 2012, given the economic inter-linkage and multiplier effect, the total economic impact to the Pershing County economy from activities by the food and agricultural sectors was \$106.3 million. The total employment and labor income impacts in the Pershing County economy from the food and agricultural sectors was 288 jobs and \$17.3 million in labor income.

Agriculture Industry Facts

AGRICULTURE LAND AND FARMS

In 2012, the approximate land area of Pershing County was 3,863,423 acres. There were 154 farms covering 299,290 acres of land, which accounts for 7.7 percent of land in farms. The average size of a farm was 1,943 acres. Approximately 29 percent or 45 farms were small size farms between 1 to 49 acres, 33 percent or 51 were mid-size farms (50 to 499 acres), and 38 percent or 58 farms were large size farms with 500 to 1,000 or more acres. (Graph 1.)

GRAPH 1. Farm by Size (acres)- 2012:



Source: <http://quickstats.nass.usda.gov/>

POPULATION AND FARM OPERATORS

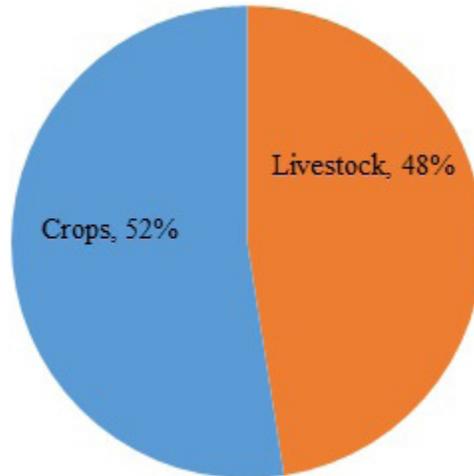
42,963 people lived in Pershing County in 2012. 265 operators were hired on Pershing County farm and ranch operations in 2012, including people who operate a farm by doing farm work and farm managers who are making day-to-day decisions about planting, harvesting, feeding, or marketing. The total number of hired farm workers, including paid family members (data exclude contract labor), was 279 with \$6.8 million in total payroll.¹⁴

¹⁴ Source: 2012 Census of Agriculture, Nevada

MARKET VALUE OF AGRICULTURE PRODUCTS SOLD

In 2012, cash receipts from sales of agriculture products were \$52.7 million. Cash receipts from livestock operations were \$29.8 million, or 48 percent of total value, and receipts from marketing crop commodities were \$32.9 million, or 52 percent of total value. (Graph 2.)

GRAPH 2. Total cash receipts, percent by commodity, 2012:



Source: 2012 Census of Agriculture, Nevada

Livestock operations with sales include cattle and calves, hogs and pigs, sheep and lamb production, goats operations, equine operations, and poultry operations.

In 2012, 42,710 acres of agriculture land in Pershing County were used for all hay and haylage, grass silage, and green chop growth. Vegetable and fruit growing operations do not have a significant presence in Pershing County.

Analysis of Agriculture Sector Economic Data

From the IMPLAN input-output model databases (2012), there were approximately 79 different industries in Pershing County, and 6 were from agriculture production industries:

- Grain farming
- All other crop farming
- Cattle ranching and farming
- Dairy cattle and milk production
- Animal production, except cattle and poultry and eggs
- Support activities for agriculture and forestry.

Food manufacturing industries of Pershing County are listed below:

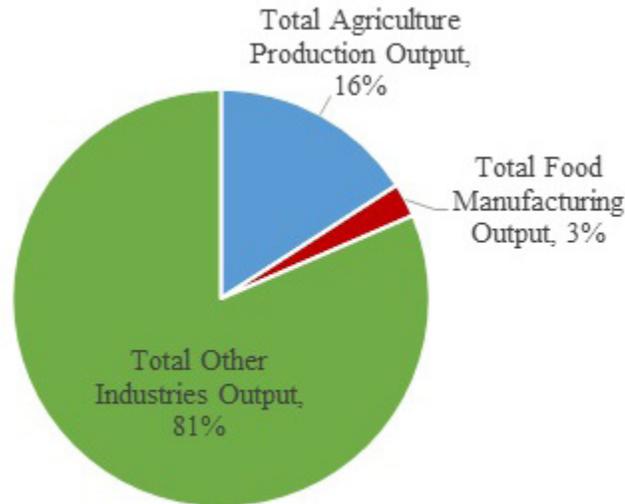
- Soybean and other oilseed processing
- Bread and bakery product manufacturing.

The food manufacturing industries, combined with the agriculture production industries, provide the economic description of the total agriculture sector of Pershing County.

SECTORIAL VALUE OF OUTPUT, EMPLOYMENT AND LABOR INCOME

The total value of agriculture production sector output was \$86.4 million, accounting for 15.9 percent of the total output value of Pershing County. The total output of food manufacturing industries was 13.9 million, accounting for only 2.6 percent of the total sectorial output. (Graph 3.)

Graph 3. Agriculture Sector Allocation in Total Value of Output (2012):



Source: Minnesota IMPLAN Group, Inc., 2014

The top 20 industries made up approximately \$506.5 million in output, or 93 percent of the total Pershing County output in 2012. Two agricultural production industries were in the top 20 industries in the value of output: cattle ranching and farming, with an output of \$16.2 million, ranked as the 7th largest; and grain farming, with an output value of \$3.3 million, ranked as the 17th largest of Pershing County's 79 industries in total value of production. The soybean and other oilseed processing industry was ranked as the 8th largest industry in regards to production output.

The total employment of the agriculture production sector accounts for approximately 10 percent of the total county's employment. Food manufacturing industries accounted for only 0.2 percent of total county employment. The top 20 industries account for more than 84 percent of the total employment, and three agriculture sector industries were ranked in the top 20: all other crop farming, ranked as the 3rd largest industry; cattle ranching and farming was ranked as the 11th largest industry; and grain farming was ranked as the 14th largest of Pershing County's 79 industries in total employment.

When looking at the levels of labor income, the agriculture production industries made up approximately 11.9 percent of the total Pershing County labor income, valued at approximately \$16.0 million, while food manufacturing accounted for only 0.2 percent of the total county's labor income in 2012. The top 20 industries made up 94 percent of the total county labor income. Three agriculture production industries were ranked in top 20. All other crop farming was ranked 3rd, with \$13.7 million in labor income, which was 10.2 percent of total Pershing County labor income. The other two industries were cattle ranching and farming, ranked 13th, and dairy cattle and milk production, ranked as the 19th largest industry in regard to income.

SECTORIAL VALUE OF EXPORT AND IMPORT

In 2012, the agriculture production sector in Pershing County had \$86.0 million in exports, accounting for 19.8 percent of total county exports, and \$34.5 million in imports (or 62 percent of total import value of this county), creating \$51.6 million more in exports than imports. Agriculture production in Pershing County is a positive economic sector contributing to the favorable balance of trade. This shows the importance the agriculture sector has on the county's overall economy.

All other crop farming products, cattle from ranches and farms, dairy cattle and milk, and forest, timber, and forest nursery products, created more in exports than imports, contributing significantly to a positive trade balance. The commodity with the largest negative trade balance was oilseeds.

The top 20 exporting industries in Pershing County in 2012 made up approximately 95 percent of the county's exports. Five agriculture production sector industries were in the top 20: all other crop farming products was ranked as the 2nd largest exporter, with \$53.3 million in export sales, accounting for 12.0 percent of the county's exports; cattle from ranches and farms was ranked as the 4th largest exporting industry, with \$16.2 in export sales; forest, timber, and forest nursery products was ranked 9th; dairy cattle and milk products was 10th; and grains was ranked as the 14th largest exporting commodity.

The food manufacturing sector had a negative trade balance of \$4.9 million, creating more in imports than in exports in 2012. Only two industries within food manufacturing had a positive trading balance: soybean oil and cakes and other oilseed products, and shortening and margarine and other fats and oils products. Negative trading balances show that most of Pershing County food manufacturing industries purchase inputs from outside of the county. By identifying input-output sector commodities that are imported, the county can target these sectors for import substitution efforts.

ECONOMIC IMPACT ANALYSIS OF AGRICULTURE SECTOR ON PERSHING COUNTY ECONOMY

Economic impact analyses tell us the impact agriculture production and food manufacturing activities have on the total Pershing County economy. Table 1. shows the impacts of the activities by the agricultural production sector.

In 2012, agriculture production industries had a production level of \$86.4 million, hired 228 people, and a paid labor income of \$16.02 million. The total economic impact of the agriculture production sector of Pershing County was \$91.6 million. This means that besides the direct economic benefits that agriculture production industries have on Pershing County economy, the indirect and induced impacts on the economy were \$5.2 million. When it comes to total employment and income, due to the agriculture production sector economic activities, an additional 50 jobs were created as well as \$972,000 in labor income from indirect and induced linkages.

TABLE 1. Economic, Employment, and Labor Income Impacts of the Agricultural Production Industries on the Pershing County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	228	\$16,015,013	\$86,387,100
Indirect Effect	33	\$489,969	\$2,444,089
Induced Effect	17	\$481,595	\$2,726,099
Total Effect	278	\$16,986,577	\$91,557,288

Source: Minnesota IMPLAN Group, Inc., 2014

Food manufacturing industries in 2012 had a production output of \$13.9 million, employed 9 people with a labor income of \$0.238 million. The total economic impact generated by food manufacturing operations was \$14.8 million. Due to the economic activity of food manufacturing industries, an additional 1 job was created with an income of \$43,737 from indirect and induced linkages. (Table 2).

TABLE 2. Economic, Employment, and Labor Income Impacts of the Food Manufacturing Industries on the Pershing County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	9	\$237,758	\$13,919,740
Indirect Effect	1	\$36,341	\$787,827
Induced Effect	0	\$7,396	\$41,782
Total Effect	10	\$281,495	\$14,749,349

Source: Minnesota IMPLAN Group, Inc., 2014

The broad definition of the food and agriculture sector in this analysis includes agriculture production industries and food manufacturing industries. In 2012, the total economic impact of the food and agriculture sector was \$106.3 million. The total employment impact of the food and agriculture sector on the county's economy was estimated at 288 people with an income of \$17.3 million. Data are summarized in Table 3.

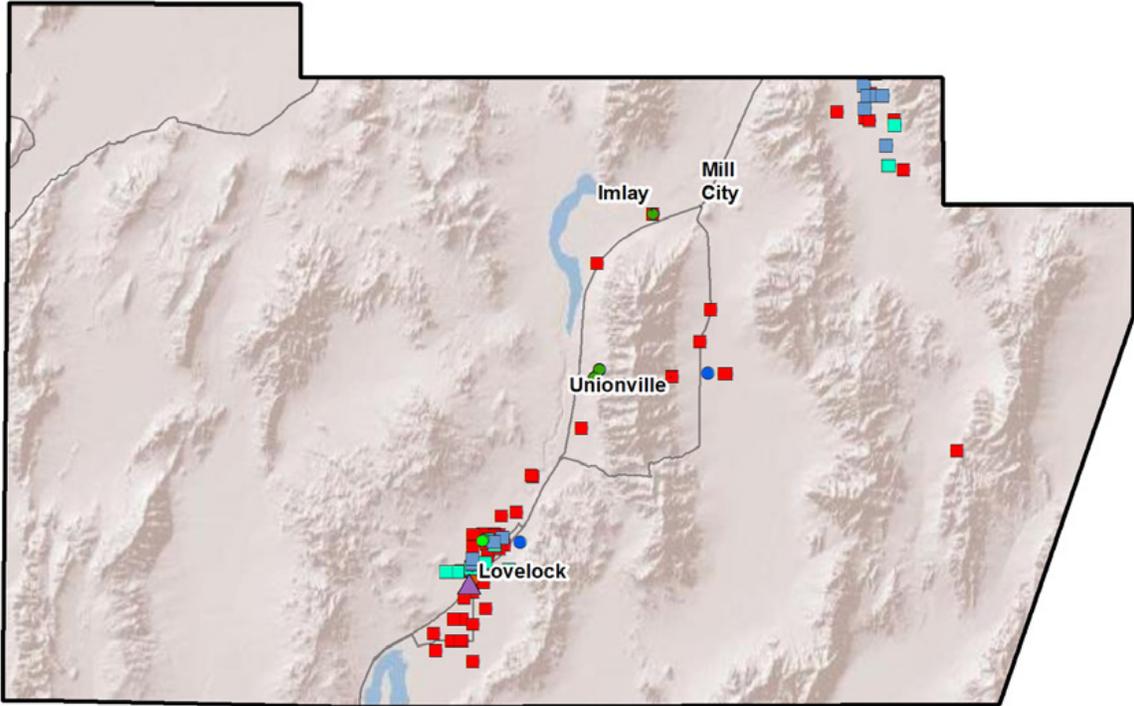
TABLE 3. Economic, Employment, and Labor Income Impacts of the Total Agriculture Sector on the Pershing County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	237	\$16,252,771	\$100,306,840
Indirect Effect	34	\$526,310	\$3,231,916
Induced Effect	17	\$488,991	\$2,767,881
Total Effect	288	\$17,268,072	\$106,306,637

Source: Minnesota IMPLAN Group, Inc., 2014

Pershing County

Nevada's Agricultural Sector Businesses



Pershing County

- | Crops | Livestock | Manufacturing |
|--------------------------|-----------|--|
| ● Fruits, Veggies, Other | ■ Cattle | ▲ Soybean and Other Oilseed Processing |
| ● Farmer's Markets | ■ Goats | |
| ● Nursery | ■ Pigs | |
| ● Seeds | ■ Sheep | |



STOREY COUNTY

Overview

This report provides a profile of the food and agriculture sector and an overview of the economic impact the food and agriculture sector has on the economy of Storey County.

- From the 2012 Census, Storey County had 6 farms covering 0.1 percent of land. Those farms were small size farms between 1 to 49 acres.
- In 2012, Storey County's total value of the food and agriculture sector output was \$142.8 million, accounting for 14.4 percent of the total county production output.

The largest industry when it comes to production output value was support activities for agriculture and forestry. The largest food manufacturing industry was dog and cat food manufacturing.

Total county employment was 4,507. The food and agriculture sector in Storey County had 219 employees, accounting for 5.0 percent of the total county employment.

In 2012, the labor income of Storey County's food and agriculture sector was \$11.5 million, accounting for 5.4 percent of the total county's labor income.

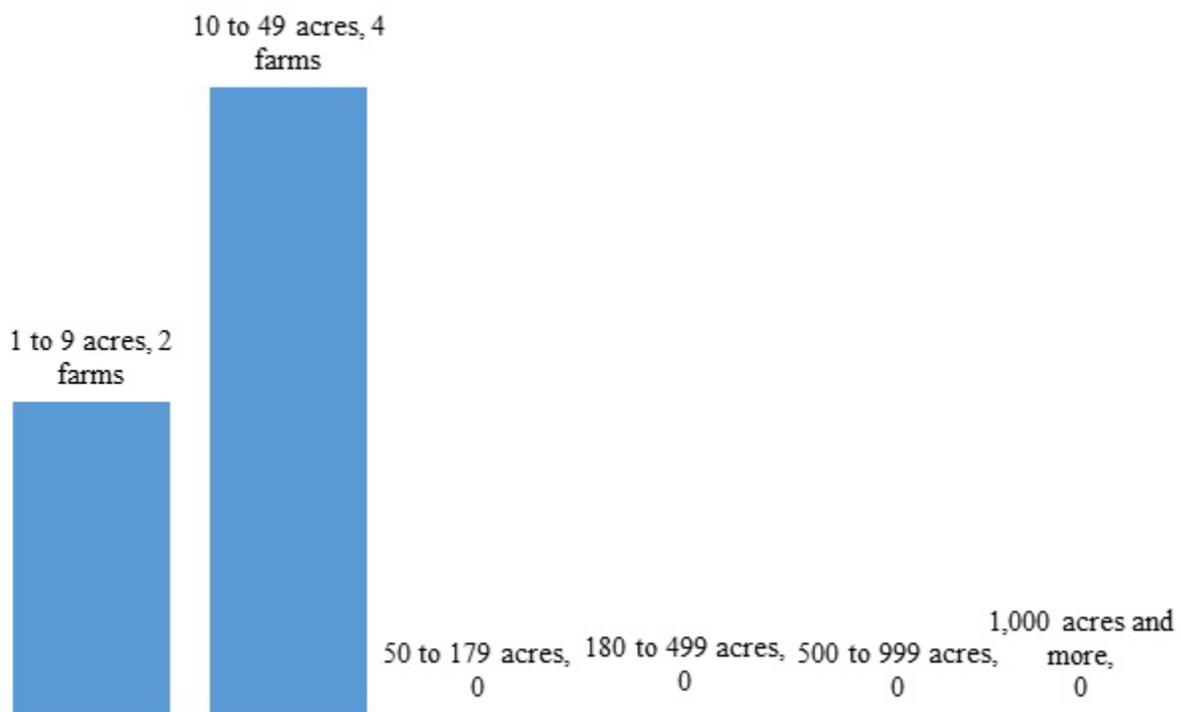
- In 2012, the agriculture production sector created \$19.2 million more in imports than exports. The food manufacturing industries had \$139.1 million in exports and \$38.5 million in imports, creating a positive trade balance of \$100.6 million.
- In 2012, given the economic inter-linkage and multiplier effect, the total economic impact to the Storey County economy from activities by the food and agricultural sectors was \$155.0 million. The total employment and labor income impacts in the Storey County economy from activity of the food and agricultural sectors was 295 jobs and \$15.6 million in labor income.

Agriculture Industry Facts

AGRICULTURE LAND AND FARMS

In 2012, the approximate land area of Storey County was 168,269 acres. There were 6 farms in Storey County covering 86 acres of land, which counts for 0.1 percent of land in farms. The average size of a farm was 14 acres. All of the farms in Storey County were small size farms between 1 to 49 acres. (Graph 1.)

GRAPH 1. Farm by Size (acres) - 2012:



Source: <http://quickstats.nass.usda.gov/>

POPULATION AND FARM OPERATORS

Storey County had a population of 3,935 in 2012. 11 operators were hired on farm and ranch operations in 2012, including people who operate a farm by doing farm work, and farm managers who are making day-to-day decisions about planting, harvesting, feeding, or marketing.

MARKET VALUE OF AGRICULTURE PRODUCTS SOLD

Because of the small number of farms and operations, most of data on cash receipts from sales are withheld from disclosing.

Analysis of Agriculture Sector Economic Data

From the IMPLAN input-output model databases (2012), there were approximately 91 different industries in Storey County; however, agriculture production industries have a small presence. Only one industry was included in the agriculture production sector:

- Support activities for agriculture and forestry.

Food manufacturing industries in the Storey County economy are listed below:

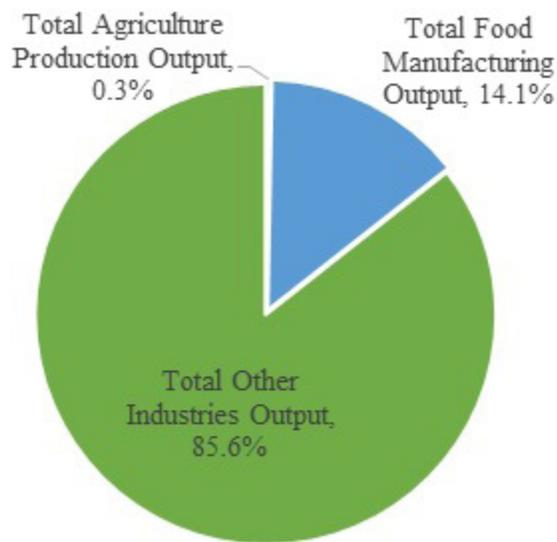
- Dog and cat food manufacturing
- Other animal food manufacturing
- Confectionery manufacturing from purchased chocolate
- Non-chocolate confectionery manufacturing
- Bread and bakery product manufacturing.

These food manufacturing industries combined with agriculture production industries provide the economic description of the total food and agriculture sector of Storey County.

SECTORIAL VALUE OF OUTPUT, EMPLOYMENT AND LABOR INCOME

The total value of the agriculture production sector output was \$2.6 million, accounting for only 0.3 percent of the total output value of Storey County. However, the total output of the food manufacturing industries was \$140.2 million, accounting for only 14.1 percent of the total sectorial output. (Graph 2.)

GRAPH 2. Agriculture Sector Allocation in Total Value of Output (2012):



Source: Minnesota IMPLAN Group, Inc., 2014

The top 20 industries made up approximately \$858.3 million in the value of output, or 86 percent of Storey County's total output in 2012. The dog and cat food manufacturing industry was ranked as the 2nd largest industry in regards to production output, with \$124.3 million, or 13 percent of the total output.

The total employment of agriculture production sector in 2012 accounted for 1.8 percent of the total county's employment. The food manufacturing industries accounted for 3.0 percent of total county employment. The top 20 industries account for more than 75 percent of total employment. The dog and cat food manufacturing was ranked as the 8th largest industry, and support activities for agriculture and forestry was ranked as the 12th largest industry in total county employment.

When looking at levels of labor income, the agriculture production industries made up approximately 1.2 percent of the total Storey County labor income, valued at approximately \$2.5 million, while food manufacturing accounted for 4.2 percent, valued at \$9.0 million in labor income in 2012. In 2012, the top 20 industries made up 83 percent of the total Storey County labor income and dog and cat food manufacturing was ranked as the 7th largest industry with \$7.0 million, or 3 percent of the total labor income.

SECTORIAL VALUE OF EXPORT AND IMPORT

In 2012, the agriculture production sector in Storey County had \$2.6 million in exports, and \$21.8 million in imports, creating \$19.2 million more in imports than exports. The food manufacturing industries had \$139.1 million in exports and \$38.5 million in imports, creating positive trade balance of \$100.6 million.

The top 20 exporting industries in Storey County in 2012 made up approximately 92 percent of the county's exports. Two food manufacturing industries were in the top 20 exporters: dog and cat food manufacturing was ranked as the 2nd largest industry, with \$124.4 million in export sales, and non-chocolate confectioneries were ranked as the 13th largest industry, with 9.1 million in exports.

ECONOMIC IMPACT ANALYSIS OF AGRICULTURE SECTOR ON STOREY COUNTY ECONOMY

Economic impact analyses tell us the impact the agriculture production and food manufacturing activities have on the Storey County economy. Table 1. shows the impacts of the activities by the agricultural production sector on the Storey County economy.

In 2012, agriculture production industries had a production level of \$2.6 million, hired 82 people, and had a paid labor income of \$2.52 million. The total economic impact of the agriculture production sector of Storey County was \$2.9 million. This means that besides the direct economic benefits the agriculture production industries have on the Storey County economy, the indirect and induced impacts on the economy were \$359,940. When it comes to total employment and income, due to the agriculture production sector economic activities, an additional 2 jobs were created as well as \$82,463 in labor income from indirect and induced linkages.

TABLE 1. Economic, Employment, and Labor Income Impacts of the Agricultural Production Industries on the Storey County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	82	\$2,520,725	\$2,571,582
Indirect Effect	0	\$25,262	\$94,548
Induced Effect	2	\$57,201	\$265,392
Total Effect	84	\$2,603,188	\$2,931,522

Source: Minnesota IMPLAN Group, Inc., 2014

Food manufacturing industries in 2012 had a production output of \$140.2 million and employed 137 people with labor income of \$9.00 million. The total economic impact generated by food manufacturing operations was \$152.1 million. Due to the economic activity of food manufacturing industries, an additional 74 jobs were created with an income of \$4.1 million from indirect and induced linkages. (Table 2).

TABLE 2. Economic, Employment, and Labor Income Impacts of the Food Manufacturing Industries on the Storey County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	137	\$8,958,145	\$140,180,913
Indirect Effect	65	\$3,758,155	\$10,527,951
Induced Effect	9	\$293,609	\$1,362,264
Total Effect	212	\$13,009,909	\$152,071,128

Source: Minnesota IMPLAN Group, Inc., 2014

The broad definition of the food and agriculture sector in this analysis includes agriculture production industries and food manufacturing industries. In 2012, the total economic impact of the food and agriculture sector was \$155.0 million. The total employment impact of the food and agriculture sector on the county's economy was estimated at 295 people with an income of \$15.6 million. Data are summarized in Table 3.

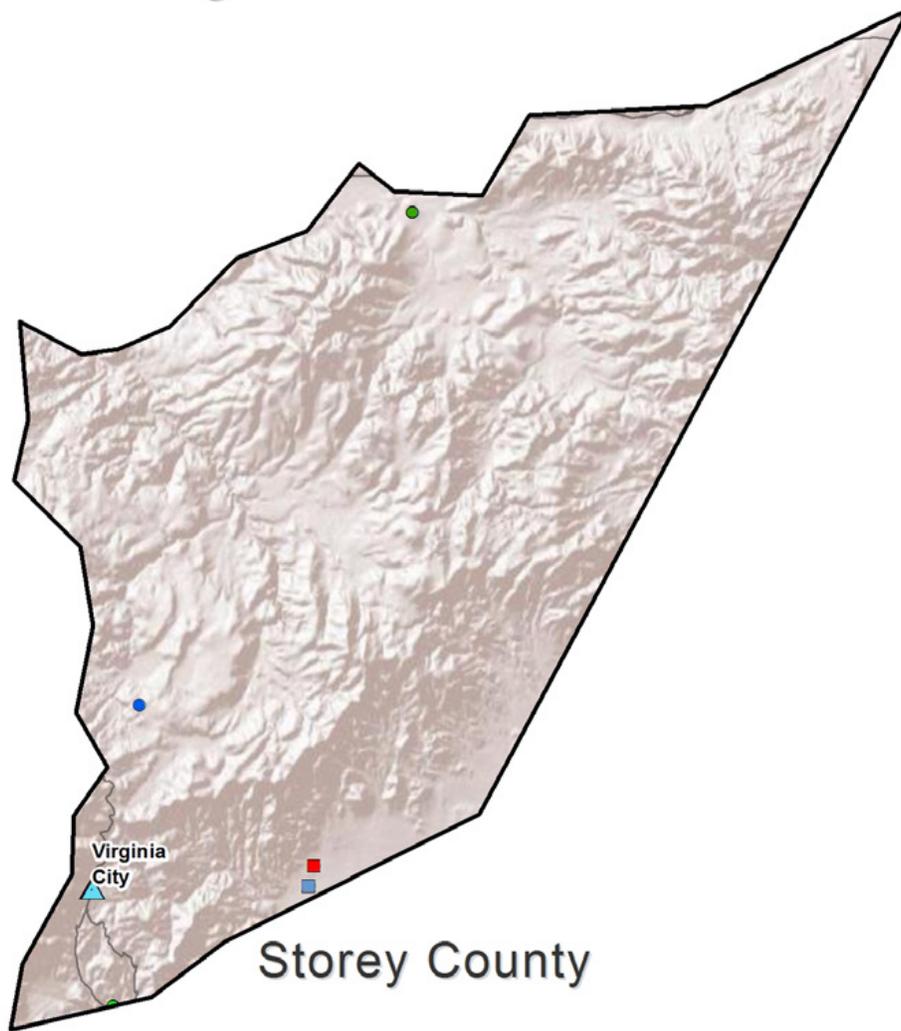
TABLE 3. Economic, Employment, and Labor Income Impacts of the Total Food and Agriculture Sector on the Storey County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	219	\$11,478,870	\$142,752,495
Indirect Effect	65	\$3,783,417	\$10,622,499
Induced Effect	11	\$350,810	\$1,627,656
Total Effect	295	\$15,613,097	\$155,002,650

Source: Minnesota IMPLAN Group, Inc., 2014

Storey County

Nevada's Agricultural Sector Businesses



- | Crops | Livestock | Manufacturing |
|--------------------------|-----------|--|
| ● Fruits, Veggies, Other | ■ Cattle | ▲ Coffee and Tea Manufacturing |
| ● Farmer's Markets | ■ Eggs | ▲ Confectionery |
| | ■ Horses | ▲ Dog and Cat Food Manufacturing |
| | ■ Sheep | ▲ Other Animal Food |
| | | ▲ Nonchocolate Confectionery Manufacturing |



WASHOE COUNTY

Overview

This report provides a profile of the food and agriculture sector and an overview of the economic impact the food and agriculture sector has on the economy of Washoe County.

- From the 2012 Census, Washoe County had 479 farms, covering 11.0 percent of land. Approximately 69 percent of farms were small size farms between 1 to 49 acres.
- In 2012, Washoe County's total value of the food and agriculture sector output was \$802.8 million, accounting for 2.5 percent of the total county production output.

The largest industries when it comes to agriculture production output value are:

- Cattle ranching and farming, and
- Vegetable and melon farming. These industries account for 58 percent of the total Washoe County agriculture production output.

The largest food manufacturing industries:

- Fluid milk and butter manufacturing,
- Seasoning and dressing manufacturing, and
- Breakfast cereal manufacturing. These industries account for 63 percent of the total value of food manufacturing output.

Total county employment was 242,348. The food and agriculture sector in Washoe County had 1,713 employees, accounting for 0.7 percent of the total county employment.

In 2012, the food and agriculture sector labor income of Washoe County was \$85.5 million, accounting for less than 1 percent of the total county's labor income.

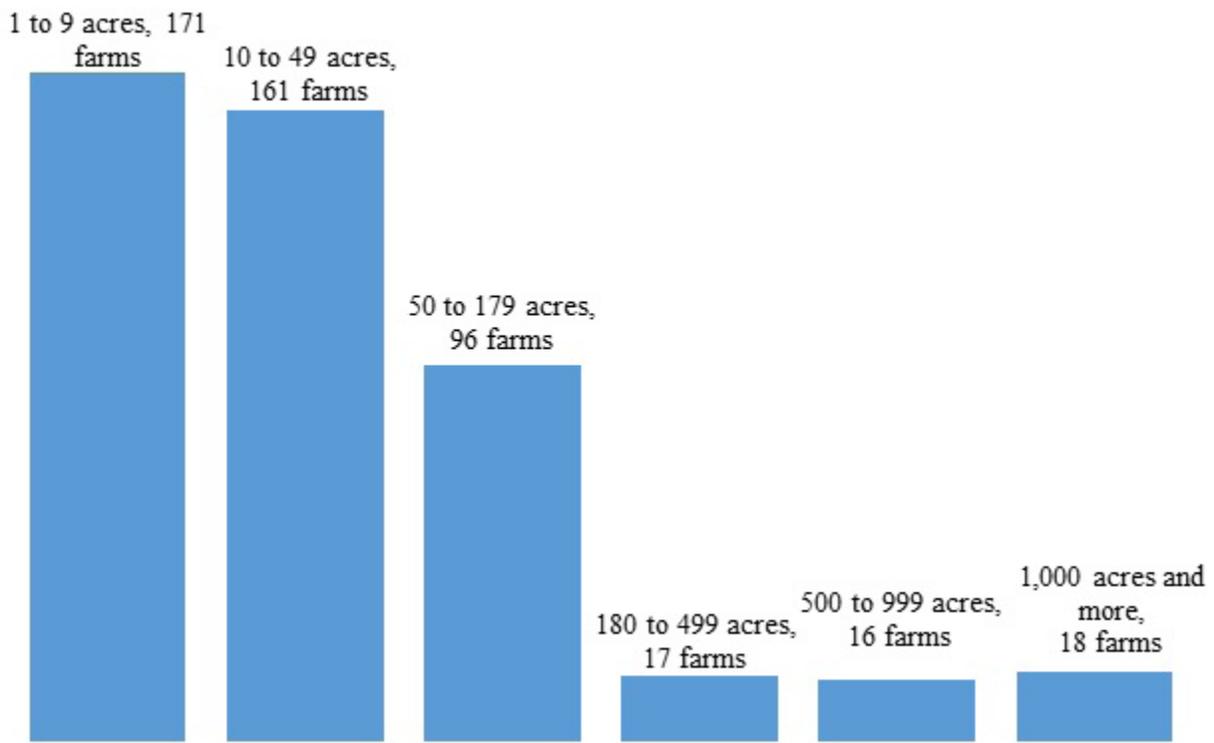
- The agriculture production sector in Washoe County had \$54.5 million in exports, and \$241.7 million in imports, creating \$187.2 million more in imports than exports. Food manufacturing industries had \$508.3 million more in imports than exports in 2012. Negative trading balances show that most of the Washoe County agriculture sector commodities were purchased from outside of the county.
- In 2012, given the economic inter-linkage and multiplier effect, the total economic impact to the Washoe County economy from activities by the food and agricultural sectors was \$1.1 billion. Total employment and labor income impacts in the Washoe County economy from activity of the food and agricultural sectors was 3,752 jobs and \$195.3 million in labor income.

Agriculture Industry Facts

AGRICULTURE LAND AND FARMS

In 2012, the approximate land area of Washoe County was 4,033,516 acres. There were 479 farms in Washoe County, covering 442,697 acres of land, which counts for 11.0 percent of land in farms. The average size of the farm was 924 acres. Approximately 69 percent or 332 farms were small size farms between 1 to 49 acres, 24 percent or 113 were mid-size farms (50 to 499 acres), and 7 percent or 34 farms were large size farms with 500 to 1,000 or more acres. (Graph 1.)

GRAPH 1. Farm by Size (acres) - 2012:



Source: <http://quickstats.nass.usda.gov/>

POPULATION AND FARM OPERATORS

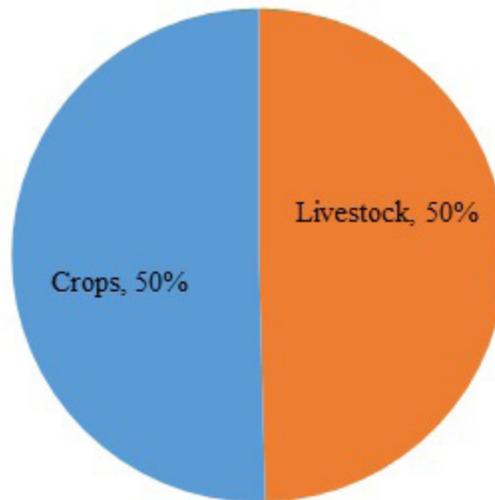
429,908 people lived in Washoe County in 2012. A total of 838 operators were hired on Washoe County farm and ranch operations in 2012, including people who operate a farm by doing farm work, and farm managers who are making day-to-day decisions about planting, harvesting, feeding, or marketing. The total number of hired farm workers, including paid family members (data exclude contract labor), was 463 with \$3.7 million in total payroll.¹⁵

MARKET VALUE OF AGRICULTURE PRODUCTS SOLD

In 2012, cash receipts from sales of agriculture products were \$16.5 million, and 50 percent were from the sale of livestock products, or \$8.23 million, and 50 percent were from crop sales, or \$8.3 million. (Graph 2.)

¹⁵ Source: 2012 Census of Agriculture, Nevada

GRAPH 2. Total cash receipts, percent by commodity, 2012:



Source: 2012 Census of Agriculture, Nevada

Livestock operations include cattle and calves, hogs and pigs, sheep and lamb production, wool production, goat operations, equine operations, poultry, and aquaculture.

In 2012, 37,336 acres of agriculture land in Washoe County were used for all hay and haylage, grass silage, and green chop growth. Vegetables grown and harvested in Washoe County include: cucumbers and pickles, garlic, fresh cut herbs, lettuce, onions, peas, peppers, potatoes, pumpkins, squash, sweet corn, and tomatoes. There were 24 farms with 48 acres of land in orchards. Fruit operations included non-citrus operations, apples, cherries, grapes, peaches, and pears.

Analysis of Agriculture Sector Economic Data

From the IMPLAN input-output model databases (2012), there were approximately 284 different industries in Washoe County, and 8 were from agriculture production industries:

- Vegetable and melon farming
- Greenhouse, nursery, and floriculture production
- All other crop farming
- Cattle ranching and farming
- Dairy cattle and milk production
- Animal production, except cattle and poultry and eggs
- Commercial logging
- Support activities for agriculture and forestry.

Food manufacturing industries in Washoe County are listed below:

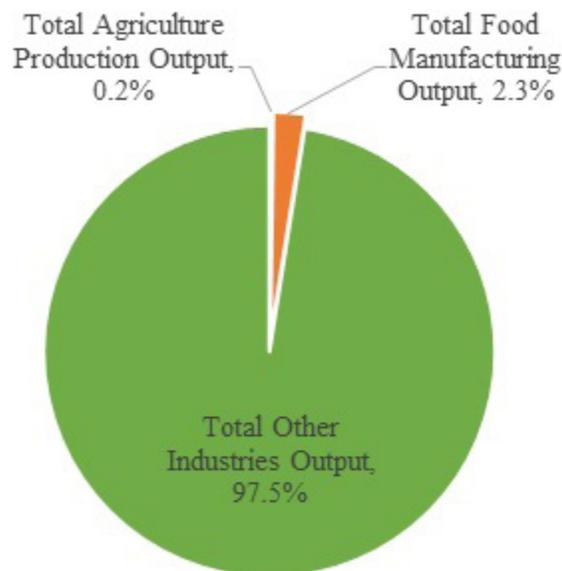
- Other animal food manufacturing
- Breakfast cereal manufacturing.

- Confectionery manufacturing from purchased chocolate
- Non-chocolate confectionery manufacturing
- Frozen food manufacturing
- Fluid milk and butter manufacturing
- Animal (except poultry) slaughtering, rendering, and processing
- Seafood product preparation and packaging
- Bread and bakery product manufacturing
- Cookie, cracker, and pasta manufacturing
- Tortilla manufacturing
- Coffee and tea manufacturing
- Flavoring syrup and concentrate manufacturing
- Seasoning and dressing manufacturing
- All other food manufacturing
- Soft drink and ice manufacturing
- Breweries.

These food manufacturing industries, combined with agriculture production industries, provide the economic description of the total food and agriculture sector of Washoe County.

SECTORIAL VALUE OF OUTPUT, EMPLOYMENT AND LABOR INCOME

The total value of the agriculture production sector output was \$58.4 million, accounting for only 0.2 percent of the total output value of Washoe County. Food manufacturing industries have an output valued at \$744.4 million, accounting for 2.3 percent of the total Washoe County output. (Graph 3.)



Source: Minnesota IMPLAN Group, Inc., 2014

When looking the value of output of agriculture production industries, the cattle ranching and farming and vegetable and melon farming industries were the largest agriculture production industries. Fluid milk and butter manufacturing, seasoning and dressing manufacturing, and breakfast cereal manufacturing were the largest food manufacturing industries when it comes to food manufacturing output value.

The total employment of the agriculture production sector in 2012 accounted for only 0.2 percent of the total county's employment, and the food manufacturing industries accounted for only 0.5 percent of total county employment.

The agriculture production industries made up only 0.1 percent of the total Washoe County labor income, with values of approximately \$16.6 million, while food manufacturing accounted for only 0.6 percent, with values of \$68.9 million in labor income in 2012.

SECTORIAL VALUE OF EXPORT AND IMPORT

In the 2012, the agriculture production sector in Washoe County had \$54.5 million in exports, and \$241.7 million in imports, creating \$187.2 million more in imports than exports. The food manufacturing industries had \$508.3 million more in imports than exports in 2012. Negative trading balances show that most of the Washoe County agriculture sector commodities were purchased from outside of the county.

Oilseeds, fluid milk and butter, seasonings and dressings, and breakfast cereal products were industries with positive trade balances, while fruit, dairy cattle and milk products, processed animal meat, as well as processed poultry meat products, were major importers for this county. By identifying input-output sector commodities that are imported, the county can target these sectors for import substitution efforts.

The top 20 exporting industries in Washoe County in 2012 made up approximately 64 percent of the county's total exports. Seasonings and dressings were ranked as the 18th largest food manufacturing exporter, with \$118.6 million in export sales, and fluid milk and butter was ranked as the 19th largest exporting food manufacturing industry, with \$113.8 in export sales.

ECONOMIC IMPACT ANALYSIS OF AGRICULTURE SECTOR ON WASHOE COUNTY ECONOMY

Economic impact analyses tell us the impact agriculture production and food manufacturing activities have on the total Washoe County economy. Table 1. shows the impacts of the activities by the agricultural production sector on the Washoe County economy.

In 2012, agriculture production industries had a production level of \$58.4 million, hired 482 people, and had a paid labor income of \$16.6 million. The total economic impact of the agriculture production sector of Washoe County was \$80.2million. This means that besides the direct economic benefits agriculture production industries have on the Washoe County economy, the indirect and induced impacts on the economy were \$21.8 million. When it comes to total employment and income, due to agriculture production sector economic activities, an additional 212 jobs were created as well as \$8.8 million in labor income from indirect and induced linkages.

TABLE 1. Economic, Employment, and Labor Income Impacts of the Agricultural Production Industries on the Washoe County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	482	\$16,580,504	\$58,380,949
Indirect Effect	107	\$4,234,369	\$9,809,419
Induced Effect	105	\$4,602,479	\$12,011,872
Total Effect	694	\$25,417,352	\$80,202,240

Source: Minnesota IMPLAN Group, Inc., 2014

Food manufacturing industries in 2012 had a production output of \$744.4 million, employed 1,230 people with a labor income of \$68.9 million. The total economic impact generated by food manufacturing operations was \$1.02 billion. Due to the economic activity of food manufacturing industries, an additional 1,828 jobs were created with an income of \$101.0 million from indirect and induced linkages. (Table 2).

TABLE 2. Economic, Employment, and Labor Income Impacts of the Food Manufacturing Industries on the Washoe County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	1,230	\$68,881,976	\$744,416,411
Indirect Effect	1,117	\$69,563,588	\$198,638,895
Induced Effect	711	\$31,415,461	\$81,925,567
Total Effect	3,058	\$169,861,025	\$1,024,980,873

Source: Minnesota IMPLAN Group, Inc., 2014

The broad definition of agriculture sector in this analysis includes agriculture production industries and food manufacturing industries. In 2012, the total economic impact of the food and agriculture sector was \$1.1 billion. The total employment impact of the total food and agriculture sector on the county's economy was estimated at 3,752 people with an income of \$195.3 million. Data are summarized in Table 3.

TABLE 3. Economic, Employment, and Labor Income Impacts of the Total Food and Agriculture Sector on the Washoe County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	1,712	\$85,462,480	\$802,797,360
Indirect Effect	1,224	\$73,797,957	\$208,448,314
Induced Effect	816	\$36,017,940	\$93,937,439
Total Effect	3,752	\$195,278,377	\$1,105,183,113

Source: Minnesota IMPLAN Group, Inc., 2014

Washoe County

Nevada's Agricultural Sector Businesses

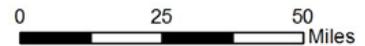
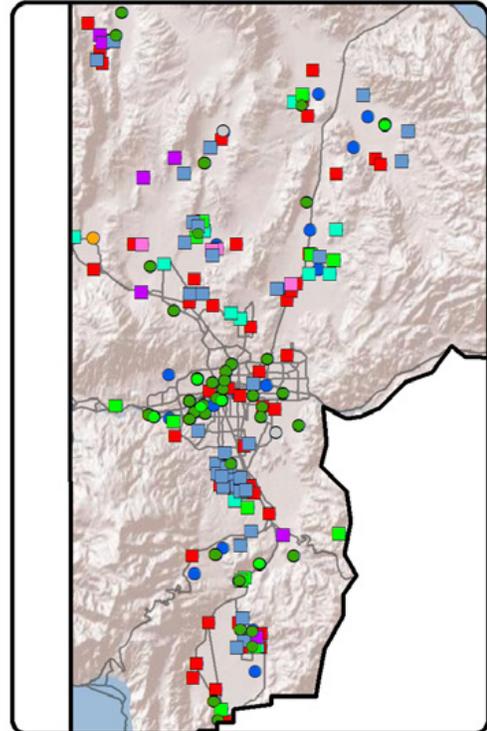
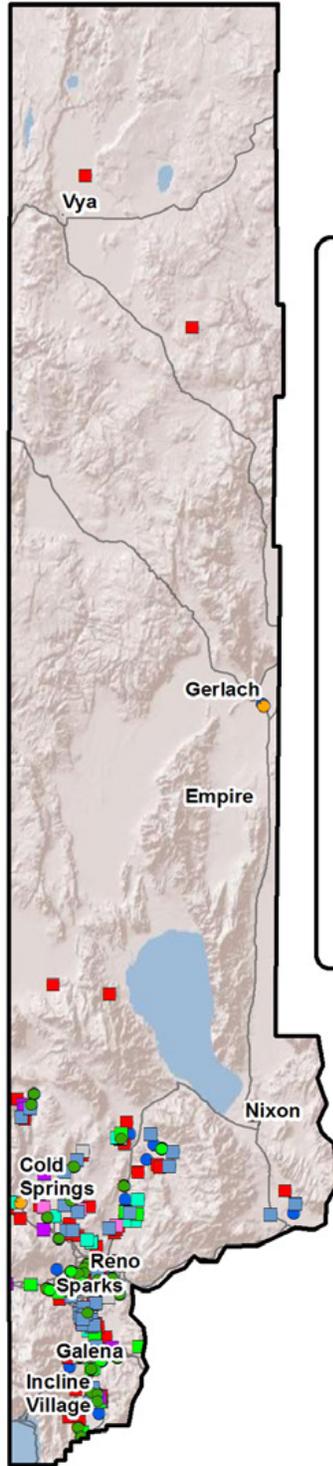
Washoe County

Crops

- Fruits, Veggies, Other
- Farmer's Markets
- Hay
- Honey
- Nursery
- Seeds

Livestock

- Cattle
- Eggs
- Goats
- Horses
- Llamas
- Pigs
- Sheep



WHITE PINE COUNTY

Overview

This report provides a profile of the food and agriculture sector and an overview of the economic impact the food and agriculture sector has on the economy of White Pine County.

- From the 2012 Census, White Pine County had 160 farms covering 3.4 percent of land. Farms were distributed evenly between small size (1 to 49 acres), mid-size (50 to 499 acres), and large size farms (500 to 1000 or more).
- In 2012, White Pine County's total value of the food and agriculture sector output was \$34.8 million, accounting for 2.7 percent of total county production output.

The largest industries when it comes to agriculture production output value are:

- All other crop farming, and
- Cattle ranching and farming. These industries account for 85 percent of the total White Pine County agriculture production output.

The food manufacturing industry, and soft drink and ice manufacturing, had less than \$1 million in production output in 2012.

The total county employment was 5,492. The food and agriculture sector in White Pine County had 176 employees accounting for 3.2 percent of the total county employment.

In 2012, the food and agriculture sector labor income in White Pine County was \$6.8 million, accounting for 2.4 percent of the total county's labor income.

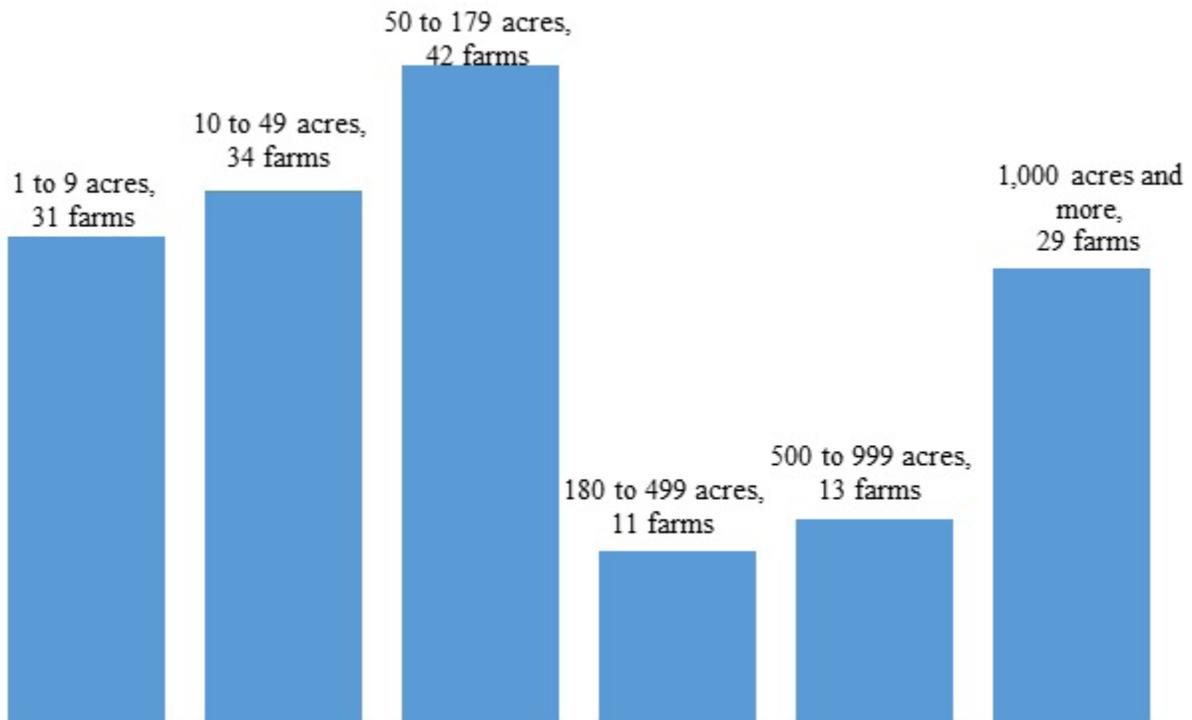
- The agriculture production sector in White Pine County had \$28.9 million in exports, and \$9.5 million in imports, creating \$19.4 million more in exports than imports. The agriculture production sector of White Pine County had a positive balance of trade. This shows the importance the agriculture sector has on the White Pine County economy.
- In 2012, given the economic inter-linkage and multiplier effect, the total economic impact to the White Pine County economy from activities by the food and agricultural sectors was \$46.2 million. The total employment and labor income impacts in the White Pine County economy from activity of the food and agricultural sectors was 283 jobs and \$8.6 million in labor income.

Agriculture Industry Facts

AGRICULTURE LAND AND FARMS

In 2012, the approximate land area of White Pine County was 5,680,416 acres. There were 160 farms in White Pine County covering 193,315 acres of land, which counts for 3.4 percent of land in farms. Approximately 41 percent or 65 farms were small size farms between 1 to 49 acres, 33 percent or 53 were mid-size farms (50 to 499 acres), and 26 percent or 42 farms were large size farms (500 to 1,000 or more acres). (Graph 1.)

GRAPH 1. Farm by Size (acres) - 2012:



Source: <http://quickstats.nass.usda.gov/>

POPULATION AND FARM OPERATORS

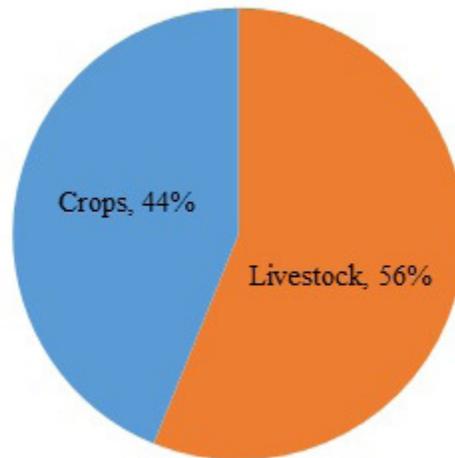
White Pine County had a population of 10,042 in 2012. 270 operators were hired on White Pine County farm and ranch operations in 2012, including people who operate a farm by doing farm work, and farm managers who are making day-to-day decisions about planting, harvesting, feeding, or marketing. The total number of hired farm workers, including paid family members (data exclude contract labor), was 268 with \$3.1 million in total payroll.¹⁶

MARKET VALUE OF AGRICULTURE PRODUCTS SOLD

In 2012, cash receipts from sales of agriculture products were \$20.7 million. Cash receipts from livestock operations were \$11.6 million, or 56 percent of the total value, and receipts from marketing crop commodities were \$9.1 million, or 44 percent of the total value.

¹⁶ Source: 2012 Census of Agriculture, Nevada

GRAPH 2. Total cash receipts, percent by commodity, 2012:



Source: 2012 Census of Agriculture, Nevada

Livestock operations with sales include cattle and calves, hogs and pigs, sheep and lamb production, goat operations, equine operations, and poultry operations.

In 2012, 42,710 acres of agriculture land in White Pine County were used for all hay and haylage, grass silage, and green chop growth. Vegetable and fruit growing operations have a small presence in White Pine County.

Analysis of Agriculture Sector Economic Data

From the IMPLAN input-output model databases (2012), there were approximately 110 different industries in White Pine County, and 7 were from agriculture production industries:

- Grain farming
- Greenhouse, nursery, and floriculture production
- All other crop farming
- Cattle ranching and farming
- Dairy cattle and milk production
- Animal production, except cattle and poultry and eggs
- Support activities for agriculture and forestry.

Food manufacturing industries of the White Pine County economy are listed below:

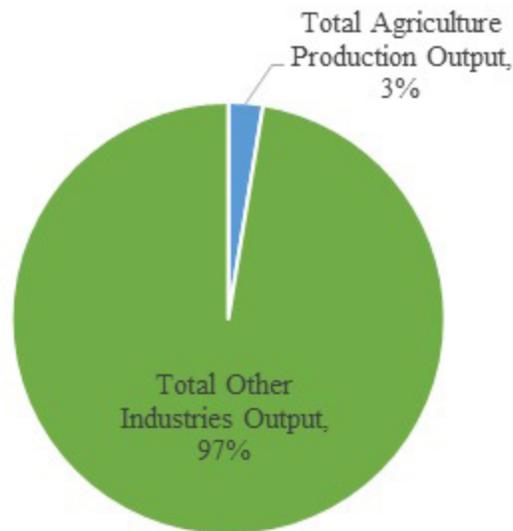
- Soft drink and ice manufacturing.

These food manufacturing industries, combined with agriculture production industries, provide the economic description of the total food and agriculture sector of White Pine County.

SECTORIAL VALUE OF OUTPUT, EMPLOYMENT AND LABOR INCOME

The total value of agriculture production sector output was \$33.8 million, accounting for 2.6 percent of the total output value of White Pine County. Food manufacturing industries' output value accounted for 0.03 percent and do not have a large impact on total output. (Graph 3.)

GRAPH 3. Agriculture Sector Allocation in Total Value of Output (2012):



Source: Minnesota IMPLAN Group, Inc., 2014

The top 20 industries made up approximately \$1.2 billion in output, or 88 percent of the total White Pine County output in 2012. Two agricultural production industries dominate in value of agriculture production output: all other crop farming with an output of \$18 million, ranked as the 9th largest; and cattle ranching and farming, with an output value of \$10.7 million, ranked as the 17th largest of White Pine County's 110 industries in total value of production.

The total employment of the agriculture production sector accounts for approximately 3.2 percent of the total county's employment.

When looking at the levels of labor income, agriculture production industries made up approximately 2.3 percent of the total White Pine County labor income, valued at \$6.8 million. In 2012, the top 20 industries made up 84.1 percent of the total White Pine County labor income. One agriculture production industry was ranked in the top 20. All other crop farming was ranked 11th with \$4.7 million in labor income.

SECTORIAL VALUE OF EXPORT AND IMPORT

In 2012, the agriculture production sector in White Pine County had \$28.9 million in exports, and \$9.5 million in import, creating \$19.4 million more in exports than imports. The agriculture production sector of White Pine County had a positive balance of trade. This shows the importance the agriculture sector has on the White Pine County economy. All other crop farming products, cattle from ranches and farms, and dairy cattle and milk, created more in exports than imports, contrib-

uting significantly to a positive trade balance. Oilseeds was the agriculture production commodity with the largest trade deficit. By identifying commodities that are imported, a county can target these for import substitution.

The top 20 exporting industries in White Pine County in 2012 made up approximately 96 percent of the county’s exports. Three agriculture production sector industries were in top 20: all other crop farming products was ranked as the 4th largest exporter; cattle from ranches and farms was ranked as the 9th largest exporting industry; and dairy cattle and milk products was the 17th largest exporting industry in regards to exporting.

ECONOMIC IMPACT ANALYSIS OF AGRICULTURE SECTOR ON WHITE PINE COUNTY ECONOMY

Economic impact analyses tell us the impact agriculture production and food manufacturing activities have on the total White Pine County economy. Table 1. shows the impacts of the activities by the agricultural sector production on the White Pine County economy.

In 2012, the agriculture sector had a production level of \$34.8 million, hired 176 people, and had a paid labor income of \$6.81 million. The total economic impact of the agriculture production sector of White Pine County was \$46.2 million. The total employment impact of the agriculture sector on the county’s economy was estimated at 283 people with an income of \$8.6 million. This means that besides the direct economic benefits the agriculture sector has on the White Pine County economy, the indirect and induced impacts on the economy were \$11.4 million. When it comes to total employment and income, due to the agriculture sector economic activities, an additional 107 jobs were created and \$1.8 million in labor income from indirect and induced linkages.

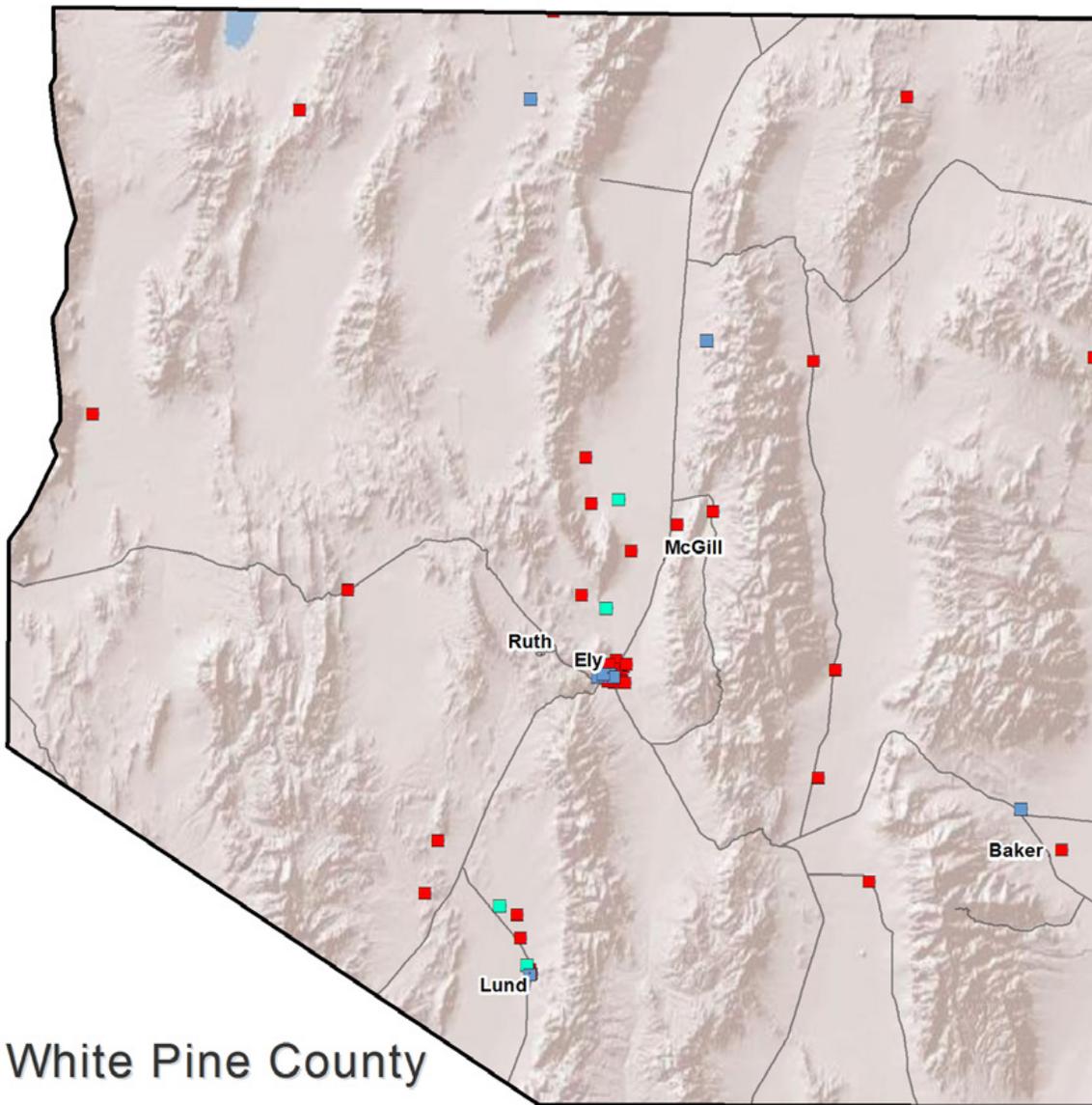
TABLE 1. Economic, Employment, and Labor Income Impacts of the Food and Agricultural Sector on the White Pine County Economy, 2012:

Impact Type	Employment	Labor Income	Output
Direct Effect	176	\$6,810,164	\$34,759,566
Indirect Effect	89	\$1,229,387	\$9,380,199
Induced Effect	18	\$520,752	\$2,069,387
Total Effect	283	\$8,560,303	\$46,209,152

Source: Minnesota IMPLAN Group, Inc., 2014

White Pine County

Nevada's Agricultural Sector Businesses



White Pine County

Crops

● Farmer's Markets

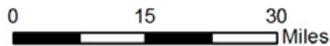
Livestock

■ Cattle

■ Goats

■ Pigs

■ Sheep



Appendix 1. Glossary of Terms

Contribution (economic) represents the gross change in economic activity associated with an industry, event, or policy in an existing regional economy.

Employee compensation is comprised of wages, salaries, commissions, and benefits such as health and life insurance, retirement, and other forms of cash or non-cash compensation.

Employment is a measure of the number of jobs involved, including full-time, part-time, and temporary/seasonal positions. It is not a measure of full-time equivalents (FTE).

Exports are sales of goods to customers outside the region in which they are produced, which represents a net inflow of money to the region. This also applies to sales of services to customers visiting from other regions.

IMPLAN is a computer-based input-output modeling system that enables users to create regional economic models and multipliers for any region consisting of one or more counties or states in the United States. The current version of the IMPLAN software, version 3, accounts for commodity production and consumption for 440 industry sectors, 10 household income levels, taxes to local/state/federal governments, capital investment, imports and exports, transfer payments, and business inventories. Regional datasets for individual counties or states are purchased separately.

Impact, or total impact, is the change in total regional economic activity (e.g., output or employment) resulting from a change in final demand, direct industry output, or direct employment, estimated based on regional economic multipliers.

Imports are purchases of goods and services originating outside the region of analysis.

Income is the money earned within the region from production and sales. **Total income** includes labor income such as wages, salaries, employee benefits, and business proprietor income, plus other property income.

Multipliers capture the total effects, both direct and secondary, in a given region, generally as a ratio of the total change in economic activity in the region relative to the direct change. Multipliers are derived from an I-O model of the regional economy. Multipliers may be expressed as ratios of sales, income, or employment, or as ratios of total income or employment changes relative to direct sales. Multipliers express the degree of interdependency between sectors in a region's economy and therefore vary considerably across regions and sectors. A sector-specific multiplier gives the total changes to the economy associated with a unit change in output or employment in a given sector (i.e., the direct economic effect) being evaluated. Indirect effects multipliers represent the changes in sales, income, or employment within the region in backward-linked industries supplying goods and services to businesses (e.g., increased sales in input supply firms resulting from more nursery industry sales). Induced effects multipliers represent the increased sales within the region from household spending of the income earned in the direct and supporting industries for housing, utilities, food, etc. An imputed multiplier is calculated as the ratio of the total impact divided by direct effect for any given measure (e.g., output, employment).

Output is the dollar value of a good or service produced or sold, and is equivalent to sales revenues plus changes in business inventories.

Sector is an individual industry or group of industries that produce similar products or services or that have similar production processes. Sectors are classified according to the North American Industrial Classification System (NAICS).

References

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