

The Contribution of the Beef Industry to Arizona's Economy: State and County Profiles

Ashley Kerna, George Frisvold, Trent Teegestrom, and Russell Tronstad

Cooperative Extension

Department of Agricultural and Resource Economics

The University of Arizona

May 2014



COLLEGE OF
AGRICULTURE
& LIFE SCIENCES

AGRICULTURAL AND
RESOURCE ECONOMICS



COLLEGE OF
AGRICULTURE
& LIFE SCIENCES

COOPERATIVE EXTENSION

This publication is a summary report of *The Contribution of the Beef Industry to the Arizona Economy*. It includes a beef industry profile for the state of Arizona as well as for each of Arizona's 15 counties. These profiles provide an estimate of the contribution of the beef industry to the local county economy, a summary of cattle ranching activities in the region, and a determination of whether cattle ranching is part of the county's economic base.

A copy of the full report is available at
<http://cals.arizona.edu/arec/pubs/beefindustryeconcontrib.html>

Acknowledgments

The authors thank the Arizona Cattlemen's Association for the commissioning and funding of this study. Additional resources were provided by The University of Arizona College of Agriculture and Life Sciences, Cooperative Extension, and the Department of Agricultural and Resource Economics. Funds for acquisition of economic modeling software and data were provided by U.S. Department of Commerce Economic Development Administration (EDA) Grant 07-66-06410-02. Thanks also go to Dan Faulkner, University of Arizona Extension Beef Specialist, and George Ruyle, University of Arizona Professor and Rangeland Management Extension Specialist, for their expertise on the beef industry and for reviewing this publication and providing valuable suggestions. Finally, thanks go to Nancy Bannister for editing, designing, and formatting this report. The final contents of this report and any errors, mistakes, or omissions are the responsibility of the primary author.

© 2014

The Department of Agricultural and Resource Economics

The University of Arizona

The University of Arizona is an equal opportunity, affirmative action institution. The University does not discriminate on the basis of race, color, religion, sex, national origin, age, disability, veteran status, or sexual orientation in its programs and activities.

Any products, services, or organizations that are mentioned, shown, or indirectly implied in this publication do not imply endorsement by The University of Arizona.

Table of Contents

Introduction..... 4

State of Arizona 6

Apache County..... 8

Cochise County 10

Coconino County 12

Gila County..... 14

Graham County 16

Greenlee County 18

La Paz County..... 20

Maricopa County 22

Mohave County..... 24

Navajo County 26

Pima County 28

Pinal County 30

Santa Cruz County 32

Yavapai County 34

Yuma County 36

References..... 38

Introduction

Cattle ranching remains an important part of Arizona agriculture, making various contributions to Arizona county economies and to the state economy as a whole. The beef industry extends beyond **cattle production** (cow-calf ranches and feedlots) and includes the value-added activities from **cattle processing** in slaughter and leather and hide tanning and finishing establishments. In addition, economic activity in the beef industry has multiplier effects, generating additional jobs and sales in the local economy. The beef industry purchases inputs from other sectors of the economy (indirect effects) and earnings (profits and wages) from the industry are spent on Arizona goods and services (induced effects). These multiplier effects provide additional stimulus to other sectors of the local economy that one can measure by output (sales), value added (GDP), labor income, and jobs.

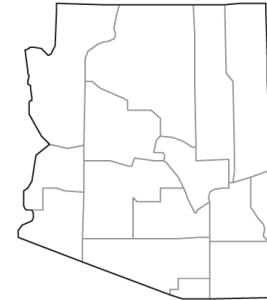
This is a summary report of *The Contribution of the Beef Industry to the Arizona Economy*. It includes a beef industry profile for the state of Arizona and as well as for each of Arizona's 15 counties. These profiles report the contribution of the beef industry to the local economy, a summary of cattle ranching activities in the region, and a determination of whether cattle ranching is part of the region's economic base.

Each profile refers to a particular geographic area (either the state as a whole or one of Arizona's counties). Each area is modeled individually using the IMPLAN Group, LLC software, with the model reflecting conditions of the local economy. This is an important consideration for several reasons. First, the beef industry definition provided above is not consistent across geographies. At the state level, there are numerous ranching operations, animal slaughtering establishments, and leather and hide tanning and finishing establishments. This is not necessarily the case at the county level. Some Arizona counties do not have any cattle processing establishments. For these counties, the beef industry is comprised solely of the beef cattle ranching sector. Each profile has a footnote that denotes the industry definition used. Second, when inputs are purchased or incomes are spent outside of the region; those dollars leave the area and no longer circulate throughout the local economy. This phenomenon is called "leakage" and results in a discrepancy between the state results and the sum of the 15 county results. For example, in the state model, a rancher in Gila County can buy inputs from a business in Maricopa County and there would be no leakage out of the Arizona state economy, the geographic area modeled. In the Gila County model, however, those purchases result in leakage because the area being modeled is the Gila County economy. Therefore, the economic contribution of the beef industry to Arizona is greater than the sum of the contributions from each individual county.

Finally, we provide some definitions of terms from the IMPLAN modeling system. **Labor income** includes all forms of employment income, including employee compensation (wages and benefits) and proprietor income. **Jobs** refer to full-time and part-time wage and salary employment. Persons who are self-employed, proprietors, or unpaid family workers are not included in the jobs estimates. **Proprietor income**, however, is counted as part of labor income.

Output is the value of production. In IMPLAN, this represents annual production estimates for the year of the data set valued in producer prices. **Value added** is the difference between total output and the cost of intermediate inputs. It equals gross output (sales or receipts and other operating income, plus inventory change) minus intermediate inputs (consumption of goods and services purchased from other industries or imported). Value added consists of compensation of employees, taxes on production and imports less subsidies (formerly indirect business taxes and nontax payments), and gross operating surplus.

THE CONTRIBUTION OF THE BEEF INDUSTRY TO THE STATE OF ARIZONA



In 2011, the estimated contribution of the beef industry¹ to total economic output in the state of Arizona was \$1.7 billion.

Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Output	\$1,212,768,378	\$325,835,672	\$166,545,091	\$1,705,149,141
Value Added	\$168,323,652	\$160,933,702	\$101,875,619	\$431,132,973
Employment	5,411	1,974	1,373	8,758
Labor Income	\$101,033,446	\$81,555,669	\$57,366,323	\$239,955,438

Source: IMPLAN Group, LLC, 2011

The beef industry in the state of Arizona is comprised of the beef cattle ranching sector with estimated output (sales) of \$816 million, the animal processing sector with output (sales) of about \$389 million, and the leather and hide tanning and finishing sector with output (sales) of \$7.3 million (USDA, NASS, 2011; IMPLAN Group, LLC, 2011). Total direct output from the industry is more than \$1.2 billion. The direct effects of the beef industry also include more than \$168 million in value added (the local equivalent of gross domestic product, GDP), \$101 million in labor income (proprietor’s income plus employee compensation), and 5,411 jobs (part- and full-time jobs).

Economic activity of the beef industry also has multiplier effects, generating additional jobs and sales in other sectors of the state economy. Indirect effects account for beef industry purchases of inputs, while induced effects account for proprietor and employee spending from their incomes. These multiplier effects provide additional stimulus to the state economy. Accounting for these multiplier effects, **the total contribution of the beef industry to the Arizona economy is \$1.7 billion in output, \$431 million in value added, and about \$240 million in labor income.**

Every 100 beef industry jobs in Arizona support an additional 62 jobs in other industries. The beef industry supports 8,758 jobs. 5,411 of those jobs are directly attributed to the beef industry and the additional 3,347 jobs are a result of economic activity stimulated by the beef industry that occurs in other sectors of the Arizona economy (IMPLAN Group, LLC, 2011).

¹ The beef industry in Arizona is comprised of the beef cattle ranching sector, the animal processing sector, and the leather and hide tanning and finishing sector.

The Arizona beef cattle ranching sector manages 71% of the state’s cattle and calf inventory, which is valued at more than \$1 billion. The state inventory of 911,334 represents valuable assets that can be placed at risk by prolonged drought or weather extremes. The beef industry manages 71% of these assets while the dairy industry manages the remaining 29% (USDA, 2014c).

Sales of cattle accounted for 18.8% of total Arizona agricultural sales, placing it as the 3rd highest agricultural commodity sold.

Agricultural Product	Farms	Sales (\$1,000)	Percent of Total Sales
<i>Total Sales</i>	20,005	3,732,113	100.0%
Vegetables, melons, potatoes, and sweet potatoes	1,750	764,062	20.5%
Milk and other dairy products from cows	104	762,957	20.4%
Cattle and calves	3,364	700,307	18.8%
Other crops and hay	1,287	425,203	11.4%
Nursery, greenhouse, floriculture, and sod	453	315,548	8.5%
Cotton and cottonseed	388	224,486	6.0%
Horses, ponies, mules, burros, and donkeys	1,954	31,801	0.9%
Sheep, goats, and their products *	4,250	11,276	0.3%
Aquaculture	34	5,363	0.1%
Grains, oilseeds, dry beans, and dry peas	2,015	(D)	(D)
Fruits, tree nuts, and berries	966	(D)	(D)
Poultry and eggs	922	(D)	(D)
Hogs and pigs	354	(D)	(D)
Other animals and other animal products	660	(D)	(D)
Cut Christmas trees and short rotation woody crops	3	(D)	(D)
Tobacco	-	-	-

- represents zero; (D) Data withheld to avoid disclosing data for individual farms.

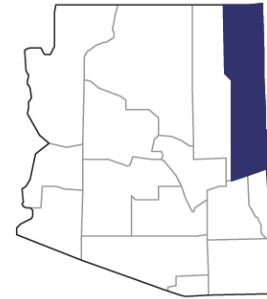
Source: USDA, 2014c.

21% of Arizona farms are specialized in beef cattle ranching. This means that 4,215 farms in Arizona have more than 50% of their total agricultural sales originating from the sale of cattle and calves (USDA, 2014c).

The total market value of capital assets of Arizona beef cattle operations is more than \$5.2 billion. Assets in land, buildings, and machinery in Arizona beef cattle operations average more than \$1.2 million per ranching operation, significantly higher than the national average (USDA, 2014c).

Grazing is the dominant land use in the state of Arizona. Approximately 73% of Arizona’s total land area is grazing land. When focusing only on Arizona’s agricultural lands, grazing accounts for 98%, with crop land accounting for the remaining 2% (USDA, ERS, 2014).

THE CONTRIBUTION OF THE BEEF INDUSTRY TO APACHE COUNTY



In 2011, the estimated contribution of the beef industry² to total economic output in Apache County was \$11.2 million.

Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Output	\$9,553,719	\$1,523,702	\$135,704	\$11,213,125
Value Added	\$1,545,380	\$1,016,109	\$84,476	\$2,645,965
Employment	397	16	1	414
Labor Income	\$180,044	\$271,851	\$32,650	\$484,545

Source: IMPLAN Group, LLC, 2011

The beef industry in Apache County is comprised of the beef cattle ranching sector with estimated output (sales) of \$8.6 million and the animal processing sector with output (sales) of about \$1 million (USDA, NASS, 2011; IMPLAN Group, LLC, 2011). Total direct output from the industry is approximately \$9.6 million. The direct effects of the beef industry also include more than \$1.5 million in value added (the local equivalent of gross domestic product, GDP), \$180,000 in labor income (proprietor’s income plus employee compensation), and 397 jobs (part- and full-time jobs).

Economic activity of the beef industry also has multiplier effects, generating additional jobs and sales in other sectors of the local economy. Indirect effects account for beef industry purchases of inputs, while induced effects account for proprietor and employee spending from their incomes. These multiplier effects provide additional stimulus to the local economy. Accounting for these multiplier effects, **the total contribution of the beef industry to the Apache County economy is \$11.2 million in output, \$2.6 million in value added, about \$485,000 in labor income, and 414 total jobs.**

18% of Apache County farms are specialized in beef cattle ranching. This means that 1,022 farms in Apache County have more than 50% of their total agricultural sales originating from the sale of cattle and calves. Ranches specializing in cattle production are the third most numerous type of agricultural operation in this county (USDA, 2014c).

² The beef industry in Apache County is comprised of the beef cattle ranching sector and the animal processing sector. It does not include the leather and hide tanning and finishing sector because there are no local operations.

Apache County accounts for 4% of Arizona’s inventory of cattle and calves.

Inventory of cattle in Apache County is estimated to be 32,682 head, accounting for 4% of Arizona’s total inventory (USDA, 2014c).

Sales of cattle accounted for 36.5% of total Apache County agricultural sales.

Apache County	Farms	Sales (\$1,000)	Percent of Total Sales
Total Sales	5,591	24,194	100.0%
Vegetables, melons, potatoes, and sweet potatoes	550	11,328	46.8%
Cattle and calves	632	8,826	36.5%
Sheep, goats, and their products	2,142	1,287	5.3%
Other crops and hay	120	1,220	5.0%
Horses, ponies, mules, burros, and donkeys	251	735	3.0%
Grains, oilseeds, dry beans, and dry peas	595	586	2.4%
Other animals and other animal products	42	84	0.3%
Fruits, tree nuts, and berries	16	38	0.2%
Milk and other dairy products from cows	15	26	0.1%
Nursery, greenhouse, floriculture, and sod	7	25	0.1%
Poultry and eggs	61	19	0.1%
Hogs and pigs	38	19	0.1%
Cotton and cottonseed	-	-	
Aquaculture	-	-	
Cut Christmas trees and short rotation woody crops	-	-	
Tobacco	-	-	

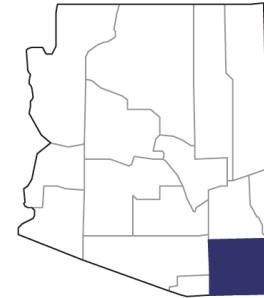
- represents zero; (D) Data withheld to avoid disclosing data for individual farms.

Source: USDA, 2014c.

Beef cattle ranching is part of Apache County’s economic base. The location quotient (LQ) is a measure used in regional economics to assess the relative importance of a sector to a local economy. An LQ greater than 1.00 indicates the sector employs more people (and produces more output) than is needed just to meet demands of local residents. An LQ greater than 1.25 indicates that the sector is part of a county’s *economic base* – exporting goods and services outside the county and bringing money into the county from outside. The LQ of 3.53 demonstrates that employment in cattle ranching in Apache County is more than 3 and a half times the national average and that ranching is part of the county’s economic base (DOL, BLS, 2011: QCEW Data).

The beef cattle ranching sector in Apache County is a net exporter. Apache County's beef cattle ranching sector exports a total of \$4.7 million outside the county, bringing money into the local economy. It accounts for 12% of total agricultural exports and 0.5% of economy wide exports. Of the 116 sectors in the county economy, the cattle ranching sector is ranked 40th in exports (IMPLAN Group, LLC, 2011).

THE CONTRIBUTION OF THE BEEF INDUSTRY TO COCHISE COUNTY



In 2011, the estimated contribution of the beef industry³ to total economic output in Cochise County was \$59.1 million.

Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Output	\$52,406,567	\$4,454,071	\$2,199,908	\$59,060,546
Value Added	\$6,294,084	\$2,638,696	\$1,345,559	\$10,278,339
Employment	234	35	20	289
Labor Income	\$6,249,910	\$830,670	\$584,996	\$7,665,577

Source: IMPLAN Group, LLC, 2011

The beef industry in Cochise County is comprised of the beef cattle ranching sector with output (sales) of \$34.5 million and the animal processing sector with output (sales) of \$17.9 million (USDA, NASS, 2011; IMPLAN Group, LLC, 2011). Total direct output from the industry is more than \$52.4 million. The direct effects of the beef industry also include approximately \$6.3 million in value added (the local equivalent of gross domestic product, GDP), \$6.2 million in labor income (proprietor’s income plus employee compensation) and 234 jobs (part- and full-time jobs).

Economic activity of the beef industry also has multiplier effects, generating additional jobs and sales in other sectors of the local economy. Indirect effects account for beef industry purchases of inputs, while induced effects account for proprietor and employee spending from their incomes. These multiplier effects provide additional stimulus to the local economy. Accounting for these multiplier effects, **the total contribution of the beef industry to the Cochise County economy is \$59.1 million in output, \$10.3 million in value added, \$7.7 million in labor income, and 289 total jobs.**

30% of Cochise County farms are specialized in beef cattle ranching. This means that 324 farms in Cochise County have more than 50% of their total agricultural sales originating from the sale of cattle and calves. Ranches specializing in cattle production are the most numerous type of agricultural operation in this county (USDA, 2014c).

³ The beef industry in Cochise County is comprised of the beef cattle ranching sector and the animal processing sector. It does not include the leather and hide tanning and finishing sector because there are no local operations.

Cochise County accounts for 6% of Arizona’s inventory of cattle and calves.

Inventory of cattle in Cochise County is estimated to be about 56,725 head, accounting for more than 6% of Arizona’s inventory (USDA, 2014c).

Cattle sales data are not disclosed in Cochise County to protect individual info.

Cochise County	Farms	Sales (\$1,000)	Percent of Total Sales
Total Sales	1,093	149,998	100%
Grains, oilseeds, dry beans, and dry peas	50	36,661	24%
Fruits, tree nuts, and berries	151	32,616	22%
Other crops and hay	95	21,072	14%
Cotton and cottonseed	11	5,265	4%
Horses, ponies, mules, burros, and donkeys	110	729	0.5%
Sheep, goats, and their products	85	564	0.4%
Other animals and other animal products	66	323	0.2%
Poultry and eggs	136	297	0.2%
Hogs and pigs	66	166	0.1%
Vegetables, melons, potatoes, and sweet potatoes	26	(D)	
Milk and other dairy products from cows	14	(D)	
Cattle and calves	346	(D)	
Nursery, greenhouse, floriculture, and sod	19	(D)	
Aquaculture	-	-	
Cut Christmas trees and short rotation woody crops	-	-	
Tobacco	-	-	

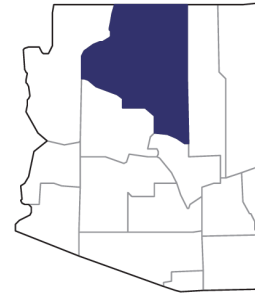
- represents zero; (D) Data withheld to avoid disclosing data for individual farms.

Source: USDA, 2014c.

Beef cattle ranching is part of Cochise County’s economic base. The location quotient (LQ) is a measure used in regional economics to assess the relative importance of a sector to a local economy. An LQ greater than 1.00 indicates the sector employs more people (and produces more output) than is needed just to meet demands of local residents. An LQ greater than 1.25 indicates that the sector is part of a county’s *economic base* – exporting goods and services outside the county and bringing money into the county from outside. The LQ of 4.23 demonstrates that employment in cattle ranching in Cochise County is more than 4 times the national average and that ranching is part of the county’s economic base (DOL, BLS, 2011: QCEW Data).

The beef cattle ranching sector in Cochise County is a net exporter. Cochise County's beef cattle ranching sector exports a total of \$9.9 million outside the county, bringing money into the local economy. It accounts for 4% of total agricultural exports and 0.5% of economy wide exports. Of the 117 sectors in the county economy, the cattle ranching sector is ranked 40th in exports (IMPLAN Group, LLC, 2011).

THE CONTRIBUTION OF THE BEEF INDUSTRY TO COCONINO COUNTY



In 2011, the estimated contribution of the beef industry⁴ total economic output in Coconino County was \$25.8 million.

Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Output	\$22,509,981	\$2,610,151	\$634,334	\$25,754,466
Value Added	\$3,605,707	\$1,507,581	\$385,273	\$5,498,562
Employment	304	33	6	343
Labor Income	\$755,001	\$533,380	\$210,694	\$1,499,074

Source: IMPLAN Group, LLC, 2011

The beef industry in Coconino County is comprised of the beef cattle ranching sector with output (sales) estimated at \$20.2 million and then animal processing sector with output (sales) estimated at \$2.3 million (USDA, NASS, 2011; IMPLAN Group, LLC, 2011). Total direct output from the industry is more than \$22.5 million. The direct effects of the beef industry also include more than \$3.6 million in value added (the equivalent of gross domestic product, GDP), \$755,000 in labor income (proprietor’s income plus employee compensation, and 304 jobs (part- and full-time jobs).

Economic activity of the beef industry also has multiplier effects, generating additional jobs and sales in other sectors of the local economy. Indirect effects account for beef industry purchases of inputs, while induced effects account for proprietor and employee spending from their incomes. These multiplier effects provide additional stimulus to the local economy. Accounting for these multiplier effects, **the total contribution of the beef industry to the Coconino County economy is \$25.8 million in output, \$5.5 million in value added, \$1.5 million in labor income and 343 jobs.**

31% of Coconino County farms are specialized in beef cattle ranching. This means that 696 farms in Coconino County have more than 50% of their total agricultural sales originating from the sale of cattle and calves. Ranches specializing in cattle production are the second most numerous type of agricultural operation in this county (USDA, 2014c).

⁴ The beef industry in Coconino County is comprised of the beef cattle ranching sector and the animal processing sector. It does not include the leather and hide tanning and finishing sector because there are no local operations.

Coconino County accounts for 5% of Arizona’s inventory of cattle and calves.

Inventory of cattle in Coconino County is estimated to be about 49,318 head, accounting for 5% of Arizona’s inventory (USDA, 2014c).

Sales of cattle accounted for 73.6% of total Coconino County agricultural sales.

Coconino County	Farms	Sales (\$1,000)	Percent of Total Sales
Total Sales	2,239	25,812	100.0%
Cattle and calves	481	19,009	73.6%
Sheep, goats, and their products	492	2,816	10.9%
Vegetables, melons, potatoes, and sweet potatoes	238	1,974	7.6%
Aquaculture	3	666	2.6%
Horses, ponies, mules, burros, and donkeys	134	661	2.6%
Other animals and other animal products	31	246	1.0%
Grains, oilseeds, dry beans, and dry peas	257	198	0.8%
Nursery, greenhouse, floriculture, and sod	18	125	0.5%
Hogs and pigs	31	45	0.2%
Fruits, tree nuts, and berries	9	39	0.2%
Other crops and hay	34	21	0.1%
Poultry and eggs	29	11	0.0%
Milk and other dairy products from cows	-	-	
Cotton and cottonseed	-	-	
Cut Christmas trees and short rotation woody crops	-	-	
Tobacco	-	-	

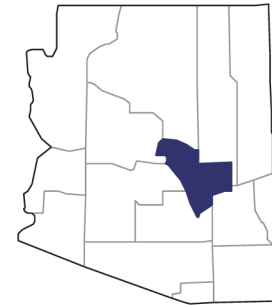
- represents zero; (D) Data withheld to avoid disclosing data for individual farms.

Source: USDA, 2014c.

Beef cattle ranching is part of Coconino County’s economic base. The location quotient (LQ) is a measure used in regional economics to assess the relative importance of a sector to a local economy. An LQ greater than 1.00 indicates the sector employs more people (and produces more output) than is needed just to meet demands of local residents. An LQ greater than 1.25 indicates that the sector is part of a county’s *economic base* – exporting goods and services outside the county and bringing money into the county from outside. The LQ of 2.21 demonstrates that employment in cattle ranching in Coconino County is more than twice the national average and that ranching is part of the county’s economic base (DOL, BLS, 2011: QCEW Data).

The beef cattle ranching sector in Coconino County is a net exporter. Coconino County's beef cattle ranching sector exports a total of \$13.9 million outside the county, bringing money into the local economy. It accounts for 33% of total agricultural exports and 0.3% of economy wide exports. Of the 190 sectors in the county economy, the cattle ranching sector is ranked 54th in exports (IMPLAN Group, LLC, 2011).

THE CONTRIBUTION OF THE BEEF INDUSTRY TO GILA COUNTY



In 2011, the estimated contribution of the beef industry⁵ to total economic output in Gila County was \$14.1 million.

Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Output	\$12,650,063	\$743,301	\$699,766	\$14,093,131
Value Added	\$1,949,866	\$393,325	\$400,502	\$2,743,693
Employment	63	7	6	76
Labor Income	\$1,814,625	\$201,662	\$201,911	\$2,218,199

Source: IMPLAN Group, LLC, 2011

The beef industry in Gila County is comprised of the beef cattle ranching sector with estimated output (sales) of \$3.4 million and the animal processing sector with output (sales) of \$9.2 million (USDA, NASS, 2011; IMPLAN Group, LLC, 2011). Total direct output for the industry is more than \$12.6 million. The direct effects of the beef industry also include more than \$1.9 million in value added (the local equivalent of gross domestic product, GDP), \$1.8 million in labor income (proprietor’s income plus employee compensation), and 63 jobs (part- and full-time jobs).

Economic activity of the beef industry also has multiplier effects, generating additional jobs and sales in other sectors of the local economy. Indirect effects account for beef industry purchases of inputs, while induced effects account for proprietor and employee spending from their incomes. These multiplier effects provide additional stimulus to the local economy. Accounting for these multiplier effects, **the total contribution of the beef industry to the Gila County economy is \$14.1 million in output, \$2.7 million in value added, \$2.2 million in labor income, and 76 total jobs.**

53% of Gila County farms are specialized in beef cattle ranching. This means that 104 farms in Gila County have more than 50% of their total agricultural sales originating from the sale of cattle and calves. Ranches specializing in cattle production are the most numerous type of agricultural operation in this county (USDA, 2014c).

⁵ The beef industry in Gila County is comprised of the beef cattle ranching sector and the animal processing sector. It does not include the leather and hide tanning and finishing sector because there are no local operations.

Gila County accounts for 1% of Arizona’s inventory of cattle and calves. Inventory of cattle in Gila County is estimated to be 10,626 head, accounting for 1% of Arizona’s inventory (USDA, 2014c).

Sales of cattle accounted for 81.8% of total Gila County agricultural sales.

Gila County	Farms	Sales (\$1,000)	Percent of Total Sales
Total Sales	195	3,752	100.0%
Cattle and calves	69	3,071	81.8%
Other animals and other animal products	7	141	3.8%
Grains, oilseeds, dry beans, and dry peas	5	117	3.1%
Sheep, goats, and their products	11	87	2.3%
Fruits, tree nuts, and berries	12	57	1.5%
Nursery, greenhouse, floriculture, and sod	4	26	0.7%
Hogs and pigs	3	1	0.0%
Vegetables, melons, potatoes, and sweet potatoes	2	(D)	
Other crops and hay	4	(D)	
Poultry and eggs	7	(D)	
Horses, ponies, mules, burros, and donkeys	18	(D)	
Milk and other dairy products from cows	-	-	
Cotton and cottonseed	-	-	
Aquaculture	-	-	
Cut Christmas trees and short rotation woody crops	-	-	
Tobacco	-	-	

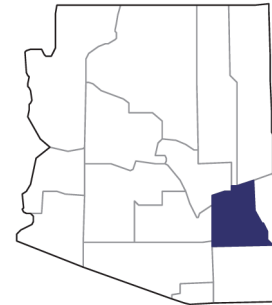
- represents zero; (D) Data withheld to avoid disclosing data for individual farms.

Source: USDA, 2014c.

Beef cattle ranching is part of Gila County’s economic base. The location quotient (LQ) is a measure used in regional economics to assess the relative importance of a sector to a local economy. An LQ greater than 1.00 indicates the sector employs more people (and produces more output) than is needed just to meet demands of local residents. An LQ greater than 1.25 indicates that the sector is part of a county’s *economic base* – exporting goods and services outside the county and bringing money into the county from outside. The LQ of 4.35 demonstrates that employment in cattle ranching in Gila County is more than 4 times the national average and that ranching is part of the county’s economic base (DOL, BLS, 2011: QCEW Data).

Local demand for cattle exceeds Gila County production, therefore the beef cattle ranching sector must import cattle from other counties. All cattle produced in Gila County are used to meet local demand. Local demand exceeds supply. Thus, the beef cattle ranching sector in Gila County is a net importer (IMPLAN Group, LLC, 2011).

THE CONTRIBUTION OF THE BEEF INDUSTRY TO GRAHAM COUNTY



In 2011, the estimated contribution of the beef industry⁶ to total economic output in Graham County was \$4.8 million.

Impact Type	Direct Effect	Indirect & Induced Effects	Total Effect
Output	\$4,556,062	\$292,247	\$4,848,309
Value Added	\$763,637	\$174,395	\$938,032
Employment	17	2	19
Labor Income	\$333,503	\$71,460	\$404,963

Source: IMPLAN Group, LLC, 2011

The beef industry in Graham County is comprised solely of the beef cattle ranching sector with estimated output (sales) of \$4.6 million (USDA, NASS, 2011). The animal processing and leather and hide tanning and finishing sectors are not included because there are no local operations. The direct effects of the beef industry also include more than \$763,000 in value added (the local equivalent of gross domestic product, GDP), \$333,000 in labor income (proprietor’s income plus employee compensation), and 17 jobs (part- and full-time jobs).

Economic activity of the beef industry also has multiplier effects, generating additional jobs and sales in other sectors of the local economy. Indirect effects account for beef industry purchases of inputs, while induced effects account for proprietor and employee spending from their incomes. These multiplier effects provide additional stimulus to the local economy. Accounting for these multiplier effects, **the total contribution of the beef industry to the Graham County economy is \$4.8 million in output, \$938,000 in value added, \$405,000 in labor income, and 19 total jobs.**

33% of Graham County farms are specialized in beef cattle ranching. This means that 138 farms in Graham County have more than 50% of their total agricultural sales originating from the sale of cattle and calves. Ranches specializing in cattle production are the most numerous type of agricultural operation in this county (USDA, 2014c).

⁶ The beef industry in Graham County is comprised solely of the beef cattle ranching sector. It does not include the animal processing sector or the leather and hide tanning and finishing sector because there are no local operations.

Graham County accounts for 1% of Arizona’s inventory of cattle and calves.

Inventory of cattle in Graham County is estimated to be 12,635 head, accounting for 1% of Arizona’s inventory (USDA, 2014c).

Sales of cattle accounted for 2.6% of total Graham County agricultural sales.

Graham County	Farms	Sales (\$1,000)	Percent of Total Sales
Total Sales	412	170,885	100.0%
Grains, oilseeds, dry beans, and dry peas	17	14,275	8.4%
Cattle and calves	104	4,436	2.6%
Fruits, tree nuts, and berries	41	2,719	1.6%
Other crops and hay	92	2,203	1.3%
Vegetables, melons, potatoes, and sweet potatoes	4	766	0.4%
Horses, ponies, mules, burros, and donkeys	54	402	0.2%
Other animals and other animal products	15	101	0.1%
Sheep, goats, and their products	24	43	0.03%
Poultry and eggs	25	27	0.02%
Hogs and pigs	13	17	0.01%
Nursery, greenhouse, floriculture, and sod	8	(D)	
Cotton and cottonseed	48	(D)	
Cut Christmas trees and short rotation woody crops	3	(D)	
Milk and other dairy products from cows	-	-	
Aquaculture	-	-	
Tobacco	-	-	

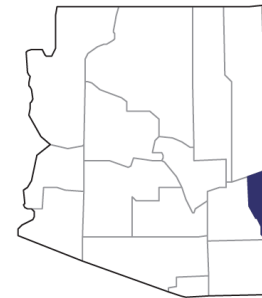
- represents zero; (D) Data withheld to avoid disclosing data for individual farms.

Source: USDA, 2014c.

Cattle ranching is part of Graham County’s economic base. The location quotient (LQ) is a measure used in regional economics to assess the relative importance of a sector to a local economy. An LQ greater than 1.00 indicates the sector employs more people (and produces more output) than is needed just to meet demands of local residents. An LQ greater than 1.25 indicates that the sector is part of a county’s *economic base* – exporting goods and services outside the county and bringing money into the county from outside. Data is not available for Graham County because the federal government does not report county-level economic data that could reveal business information about specific operations. From data reported for other counties, however, it is possible to estimate that the LQ for Graham County beef cattle ranching is between 1.41 and 4.25. From this approximate measure, Graham County has more employment in beef cattle ranching than the national average and that ranching is part of the county’s economic base (DOL, BLS, 2011: QCEW Data).

The beef cattle ranching sector in Graham County is a net exporter. Graham County's beef cattle ranching sector exports a total of \$2.6 million outside the county, bringing money into the local economy. It accounts for 4% of total agricultural exports and 0.3% of economy wide exports. Of the 126 sectors in the county economy, the cattle ranching sector is ranked 34th in exports (IMPLAN Group, LLC, 2011).

THE CONTRIBUTION OF THE BEEF INDUSTRY TO GREENLEE COUNTY



In 2011, the estimated contribution of the beef industry⁷ to total economic output in Greenlee County was \$3.3 million.

Impact Type	Direct Effect	Indirect & Induced Effects	Total Effect
Output	\$2,932,309	\$359,504	\$3,291,813
Value Added	\$491,482	\$230,251	\$721,733
Employment	9	3	12
Labor Income	\$92,083	\$107,289	\$199,372

Source: IMPLAN Group, LLC, 2011

The beef industry in Greenlee County is comprised solely of the beef cattle ranching sector with estimated direct output (sales) of \$2.9 million (USDA, NASS, 2011). The animal processing and leather and hide tanning and finishing sectors are not included because there are no local operations. The direct effects of the beef industry also include more than \$491,000 in value added (the equivalent of gross domestic product, GDP), \$92,000 in labor income (proprietor’s income plus employee compensation), and 9 jobs (part- and full-time jobs).

Economic activity of the beef industry also has multiplier effects, generating additional jobs and sales in other sectors of the local economy. Indirect effects account for beef industry purchases of inputs, while induced effects account for proprietor and employee spending from their incomes. These multiplier effects provide additional stimulus to the local economy. Accounting for these multiplier effects, **the total contribution of the beef industry to the Greenlee County economy is \$3.3 million in output, \$722,000 in value added, \$200,000 in labor income, and 12 total jobs.**

30% of Greenlee County farms are specialized in beef cattle ranching. This means that 47 farms in Greenlee County have more than 50% of their total agricultural sales originating from the sale of cattle and calves. Ranches specializing in cattle production are the second most numerous type of operation in this county (USDA, 2014c).

⁷ The beef industry in Greenlee County is comprised solely of the beef cattle ranching sector. It does not include the animal processing sector or the leather and hide tanning and finishing sector because there are no local operations.

Greenlee County accounts for 1% of Arizona’s inventory of cattle and calves.

Inventory of cattle in Greenlee County is estimated to be 7,837 head, accounting for 1% of Arizona’s inventory (USDA, 2014c).

Cattle sales data are not disclosed in Greenlee County to protect individual info.

Greenlee County	Farms	Sales (\$1,000)	Percent of Total Sales
Total Sales	159	9,737	100.0%
Other crops and hay	15	1,345	13.8%
Sheep, goats, and their products	20	248	2.5%
Horses, ponies, mules, burros, and donkeys	30	160	1.6%
Aquaculture	3	120	1.2%
Poultry and eggs	11	3	0.0%
Hogs and pigs	4	2	0.0%
Milk and other dairy products from cows	1	(D)	
Cattle and calves	55	(D)	
Nursery, greenhouse, floriculture, and sod	1	(D)	
Cotton and cottonseed	6	(D)	
Grains, oilseeds, dry beans, and dry peas	11	(D)	
Fruits, tree nuts, and berries	12	(D)	
Other animals and other animal products	2	(D)	
Vegetables, melons, potatoes, and sweet potatoes	-	-	
Cut Christmas trees and short rotation woody crops	-	-	
Tobacco	-	-	

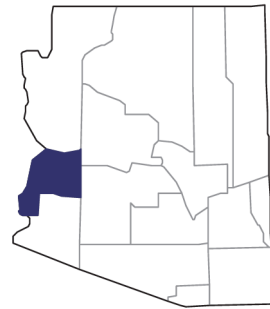
- represents zero; (D) Data withheld to avoid disclosing data for individual farms.

Source: USDA, 2014c.

Cattle ranching is part of Greenlee County’s economic base. The location quotient (LQ) is a measure used in regional economics to assess the relative importance of a sector to a local economy. An LQ greater than 1.00 indicates the sector employs more people (and produces more output) than is needed just to meet demands of local residents. An LQ greater than 1.25 indicates that the sector is part of a county’s *economic base* – exporting goods and services outside the county and bringing money into the county from outside. Data is not available for Greenlee County because the federal government does not report county-level economic data that could reveal business information about specific operations. From data reported for other counties, however, it is possible to estimate that the LQ for Greenlee County beef cattle ranching is between 1.41 and 4.25. From this approximate measure, Greenlee County has more employment in beef cattle ranching than the national average and that ranching is part of the county’s economic base (DOL, BLS, 2011: QCEW Data).

The beef cattle ranching sector in Greenlee County is a net exporter. Greenlee County's beef cattle ranching sector exports a total of \$1.5 million outside the county, bringing money into the local economy. It accounts for 7% of total agricultural exports and 0.1% of economy wide exports. Of the 78 sectors in the county economy, the cattle ranching sector is ranked 26th in exports (IMPLAN Group, LLC, 2011).

THE CONTRIBUTION OF THE BEEF INDUSTRY TO LA PAZ COUNTY



In 2011, the estimated contribution of the beef industry⁸ to total economic output in La Paz County was \$2.3 million.

Impact Type	Direct Effect	Indirect & Induced Effects	Total Effect
Output	\$2,096,243	\$185,476	\$2,281,719
Value Added	\$351,351	\$82,589	\$433,940
Employment	12	1	13
Labor Income	\$33,327	\$23,150	\$56,477

Source: IMPLAN Group, LLC, 2011.

The beef industry in La Paz County is comprised solely of the beef cattle ranching sector with estimated direct output (sales) of \$2.1 million (USDA, NASS, 2011). The animal processing and leather and hide tanning and finishing sectors are not included because there are no local operations. The direct effects of the beef industry also include more than \$351,000 in value added (the equivalent of gross domestic product, GDP), \$33,000 in labor income (proprietor’s income plus employee compensation), and 12 jobs (part- and full-time jobs).

Economic activity of the beef industry also has multiplier effects, generating additional jobs and sales in other sectors of the local economy. Indirect effects account for beef industry purchases of inputs, while induced effects account for proprietor and employee spending from their incomes. These multiplier effects provide additional stimulus to the local economy. Accounting for these multiplier effects, **the total economic contribution of the beef industry to the La Paz County economy is \$2.3 million in output, \$434,000 in value added, \$56,000 in labor income and 13 total jobs.**

18% of La Paz County farms are specialized in beef cattle ranching. This means that 23 farms in La Paz County have more than 50% of their total agricultural sales originating from the sale of cattle and calves. Ranches specializing in cattle production are the second most numerous type of agricultural operation in this county (USDA, 2014c).

⁸ The beef industry in La Paz County is comprised solely of the beef cattle ranching sector. It does not include the animal processing sector or the leather and hide tanning and finishing sector because there are no local operations.

La Paz County accounts for 1% of Arizona’s inventory of cattle and calves.

Inventory of cattle in La Paz County is estimated to be 11,437 head, accounting for 1% of Arizona’s inventory (USDA, 2014c).

Sales of cattle accounted for 2.6% of total La Paz County agricultural sales.

La Paz County	Farms	Sales (\$1,000)	Percent of Total Sales
Total Sales	125	183,243	100.0%
Other crops and hay	72	97,744	53.3%
Cotton and cottonseed	16	26,366	14.4%
Grains, oilseeds, dry beans, and dry peas	17	8,627	4.7%
Cattle and calves	27	4,709	2.6%
Nursery, greenhouse, floriculture, and sod	6	6	0.0%
Sheep, goats, and their products	4	4	0.0%
Vegetables, melons, potatoes, and sweet potatoes	3	(D)	
Milk and other dairy products from cows	1	(D)	
Fruits, tree nuts, and berries	1	(D)	
Poultry and eggs	2	(D)	
Hogs and pigs	5	(D)	
Horses, ponies, mules, burros, and donkeys	1	(D)	
Other animals and other animal products	1	(D)	
Aquaculture	-	-	
Cut Christmas trees and short rotation woody crops	-	-	
Tobacco	-	-	

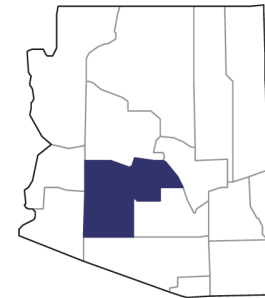
- represents zero; (D) Data withheld to avoid disclosing data for individual farms.

Source: USDA, 2014c.

Cattle ranching is part of La Paz County’s economic base. The location quotient (LQ) is a measure used in regional economics to assess the relative importance of a sector to a local economy. An LQ greater than 1.00 indicates the sector employs more people (and produces more output) than is needed just to meet demands of local residents. An LQ greater than 1.25 indicates that the sector is part of a county’s *economic base* – exporting goods and services outside the county and bringing money into the county from outside. Data is not available for La Paz County because the federal government does not report county-level economic data that could reveal business information about specific operations. From data reported for other counties, however, it is possible to estimate that the LQ for La Paz County beef cattle ranching is between 1.41 and 4.25. From this approximate measure, it is clear that La Paz County has more employment in beef cattle ranching than the national average and that ranching is part of the county’s economic base (BLS QCEW, 2011).

The beef cattle ranching sector in La Paz County is a net exporter. La Paz County's beef cattle ranching sector exports more than \$850,000 outside the county, bringing money into the local economy. It accounts for 0.3% of total agricultural exports and 0.2% of economy wide exports. Of the 109 sectors in the county economy, the cattle ranching sector is ranked 47th in exports (IMPLAN Group, LLC, 2011).

THE CONTRIBUTION OF THE BEEF INDUSTRY TO MARICOPA COUNTY



In 2011, the estimated contribution of the beef industry⁹ to total economic output in Maricopa County was \$575.9 million.

Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Output	\$431,969,840	\$76,151,586	\$67,822,930	\$575,944,356
Value Added	\$43,274,140	\$46,551,454	\$42,665,200	\$132,490,794
Employment	1,449	527	551	2,527
Labor Income	\$52,671,640	\$27,533,367	\$24,471,783	\$104,676,789

Source: IMPLAN Group, LLC, 2011

The beef industry in Maricopa County is comprised of the beef cattle ranching sector with estimated output (sales) of \$92.4 million, the animal processing sector with output (sales) of \$332.2 million, and the leather and hide tanning and finishing sector with output (sales) of \$7.3 million. Total direct output from the industry is \$431.9 million. The direct effects of the beef industry also include \$43.3 million in value added (the equivalent of gross domestic product, GDP), \$52.7 million in labor income (proprietor’s income plus employee compensation), and 1,449 jobs (part- and full-time jobs).

Economic activity of the beef industry also has multiplier effects, generating additional jobs and sales in other sectors of the local economy. Indirect effects account for beef industry purchases of inputs, while induced effects account for proprietor and employee spending from their incomes. These multiplier effects provide additional stimulus to the local economy. Accounting for these multiplier effects, **the total contribution of the beef industry to the Maricopa County economy is \$575.9 million, \$132.5 million in value added, \$104.7 in labor income, and 2,527 jobs.**

8% of Maricopa County farms are specialized in beef cattle ranching. This means that 201 farms in Maricopa County have more than 50% of their total agricultural sales originating from the sale of cattle and calves. Ranches specializing in cattle production are the second most numerous type of agricultural operation in this county (USDA, 2014c).

⁹ The beef industry in Maricopa County is comprised of the beef cattle ranching sector, the animal processing sector, and the leather and hide tanning and finishing sector.

Maricopa County accounts for 20% of Arizona’s inventory of cattle and calves. Inventory of cattle in Maricopa County is estimated to be 181,835 head, accounting for 20% of Arizona’s inventory (USDA, 2014c).

Cattle sales data are not disclosed in Maricopa County to protect individual info.

Maricopa County	Farms	Sales (\$1,000)	Percent of Total Sales
Total Sales	2479	1,003,475	100.0%
Milk and other dairy products from cows	45	398,256	39.7%
Nursery, greenhouse, floriculture, and sod	148	128,888	12.8%
Other crops and hay	247	119,298	11.9%
Vegetables, melons, potatoes, and sweet potatoes	84	101,259	10.1%
Grains, oilseeds, dry beans, and dry peas	141	47,976	4.8%
Cotton and cottonseed	79	40,457	4.0%
Horses, ponies, mules, burros, and donkeys	605	13,644	1.4%
Fruits, tree nuts, and berries	261	9,016	0.9%
Aquaculture	10	3,330	0.3%
Hogs and pigs	71	748	0.1%
Sheep, goats, and their products	129	521	0.1%
Cattle and calves	222	(D)	
Poultry and eggs	192	(D)	
Other animals and other animal products	191	(D)	
Cut Christmas trees and short rotation woody crops	-	-	
Tobacco	-	-	

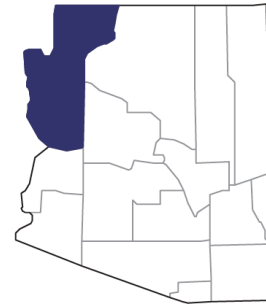
- represents zero; (D) Data withheld to avoid disclosing data for individual farms.

Source: USDA, 2014c.

Beef cattle ranching is not considered part of Maricopa County’s economic base, primarily because the county is largely an urban area. The location quotient (LQ) is a measure used in regional economics to assess the relative importance of a sector to a local economy. An LQ greater than 1.00 indicates the sector employs more people (and produces more output) than is needed just to meet demands of local residents. An LQ greater than 1.25 indicates that the sector is part of a county’s *economic base* – exporting goods and services outside the county and bringing money into the county from outside. The LQ of 0.19 demonstrates that employment in cattle ranching in Maricopa County is approximately 20% of the national average and is not considered part of the county’s economic base (DOL, BLS, 2011: QCEW Data).

Local demand for cattle exceeds Maricopa County production, therefore the beef cattle ranching sector must import cattle from outside the county. Although Maricopa County has approximately \$91.6 million in cattle exports (equaling 9% of total agricultural exports and 0.1% of economy wide exports), it is still a net importer of cattle due to demand from a large animal processing facility (IMPLAN Group, LLC, 2011).

THE CONTRIBUTION OF THE BEEF INDUSTRY TO MOHAVE COUNTY



In 2011, the estimated contribution of the beef industry¹⁰ to total economic output in Mohave County was \$9.3 million.

Impact Type	Direct Effect	Indirect & Induced Effects	Total Effect
Output	\$7,880,996	\$1,467,649	\$9,348,645
Value Added	\$1,320,927	\$866,368	\$2,187,295
Employment	66	11	77
Labor Income	\$1,291,947	\$379,621	\$1,671,568

Source: IMPLAN Group, LLC, 2011.

The beef industry in Mohave County is comprised solely of the beef cattle ranching sector with estimated direct output (sales) of \$7.9 million (USDA, NASS, 2011). The animal processing and leather and hide tanning and finishing sectors are not included because there are no local operations. The direct effects of the beef industry also include approximately \$1.3 million in value added (the equivalent of gross domestic product, GDP), \$1.3 million in labor income (proprietor’s income plus employee compensation), and 66 jobs (part- and full-time jobs).

Economic activity of the beef industry also has multiplier effects, generating additional jobs and sales in other sectors of the local economy. Indirect effects account for beef industry purchases of inputs, while induced effects account for proprietor and employee spending from their incomes. These multiplier effects provide additional stimulus to the local economy. Accounting for these multiplier effects, **the total economic contribution of the beef industry to the Mohave County economy is \$9.3 million in output, \$2.2 in value added, \$1.7 million in labor income, and 77 total jobs.**

40% of Mohave County farms are specialized in beef cattle ranching. This means that 133 farms in Mohave County have more than 50% of their total agricultural sales originating from the sale of cattle and calves. Ranches specializing in cattle production are the most numerous type of agricultural operation in this county (USDA, 2014c).

¹⁰ The beef industry in Mohave County is comprised solely of the beef cattle ranching sector. It does not include the animal processing sector or the leather and hide tanning and finishing sector because there are no local operations.

Data are not available regarding Mohave County inventory of cattle and calves.

Data on the total inventory of cattle and calves in Mohave County is not disclosed by the Census of Agriculture to protect individual ranch information (USDA, 2014c).

Sales of cattle accounted for 25.3% of total Mohave County agricultural sales.

Mohave County	Farms	Sales (\$1,000)	Percent of Total Sales
Total Sales	335	30,184	100.0%
Other crops and hay	19	13,157	43.6%
Cattle and calves	126	7,635	25.3%
Cotton and cottonseed	10	6,963	23.1%
Aquaculture	3	474	1.6%
Horses, ponies, mules, burros, and donkeys	40	361	1.2%
Vegetables, melons, potatoes, and sweet potatoes	8	220	0.7%
Nursery, greenhouse, floriculture, and sod	30	158	0.5%
Other animals and other animal products	23	148	0.5%
Poultry and eggs	42	21	0.1%
Milk and other dairy products from cows	2	(D)	
Grains, oilseeds, dry beans, and dry peas	1	(D)	
Fruits, tree nuts, and berries	18	(D)	
Hogs and pigs	1	(D)	
Sheep, goats, and their products	24	(D)	
Cut Christmas trees and short rotation woody crops	-	-	
Tobacco	-	-	

- represents zero; (D) Data withheld to avoid disclosing data for individual farms.

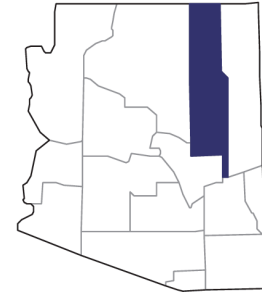
Source: USDA, 2014c.

Beef cattle ranching is not considered part of Mohave County's economic base.

The location quotient (LQ) is a measure used in regional economics to assess the relative importance of a sector to a local economy. An LQ greater than 1.00 indicates the sector employs more people (and produces more output) than is needed just to meet demands of local residents. An LQ greater than 1.25 indicates that the sector is part of a county's *economic base* – exporting goods and services outside the county and bringing money into the county from outside. The LQ of 0.95 demonstrates that employment in cattle ranching in Mohave County is 5% lower than the national average and that ranching is not considered part of the county's economic base (DOL, BLS, 2011: QCEW Data).

The beef cattle ranching sector in Mohave County is a net exporter. Mohave County's beef cattle ranching sector exports a total of \$7.7 million outside the county, bringing money into the local economy. It accounts for 18% of total agricultural exports and 0.3% of economy wide exports. Of the 224 sectors in the county economy, the cattle ranching sector is ranked 63rd in exports (IMPLAN Group, LLC, 2011).

THE CONTRIBUTION OF THE BEEF INDUSTRY TO NAVAJO COUNTY



In 2011, the estimated contribution of the beef industry¹¹ to total economic output in Navajo County was \$62.6 million.

Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Output	\$57,004,802	\$4,363,570	\$1,193,080	\$62,561,452
Value Added	\$8,733,937	\$2,488,143	\$711,000	\$11,933,079
Employment	335	40	11	386
Labor Income	\$1,779,324	\$947,226	\$334,421	\$3,060,970

Source: IMPLAN Group, LLC, 2011

The beef industry in Navajo County is comprised of the beef cattle ranching sector with estimated output (sales) of \$51.3 million and the animal processing sector with output (sales) of \$5.7 million (USDA, NASS, 2011; IMPLAN Group, LLC, 2011). Total direct output from the industry is more than \$57 million. The direct effects of the beef industry also include more than \$8.7 million in value added (the local equivalent of gross domestic product, GDP), \$1.8 million in labor income (proprietor's income plus employee compensation), and 335 jobs (part- and full-time jobs).

Economic activity of the beef industry also has multiplier effects, generating additional jobs and sales in other sectors of the local economy. Indirect effects account for beef industry purchases of inputs, while induced effects account for proprietor and employee spending from their incomes. These multiplier effects provide additional stimulus to the local economy. Accounting for these multiplier effects, **the total contribution of the beef industry to the Navajo County economy is \$62.6 million in output, \$11.9 in value added, \$3.1 million in labor income, and 386 total jobs.**

22% of Navajo County farms are specialized in beef cattle ranching. This means that 828 farms in Navajo County have more than 50% of their total agricultural sales originating from the sale of cattle and calves. Ranches specializing in cattle production are the second most numerous type of operation in this county (USDA, 2014c).

¹¹ The beef industry in Navajo County is comprised of the beef cattle ranching sector and the animal processing sector. It does not include the leather and hide tanning and finishing sector because there are no local operations.

Navajo County accounts for 3% of Arizona’s inventory of cattle and calves.

Inventory of cattle in Navajo County is estimated to be 26,133 head, accounting for 3% of Arizona’s inventory (USDA, 2014c).

Cattle sales data are not disclosed in Navajo County to protect individual info.

Navajo County	Farms	Sales (\$1,000)	Percent of Total Sales
Total Sales	3846	64,515	100.0%
Vegetables, melons, potatoes, and sweet potatoes	628	4,234	6.6%
Sheep, goats, and their products	1114	1,100	1.7%
Grains, oilseeds, dry beans, and dry peas	652	1,019	1.6%
Horses, ponies, mules, burros, and donkeys	209	736	1.1%
Nursery, greenhouse, floriculture, and sod	17	404	0.6%
Other crops and hay	95	164	0.3%
Other animals and other animal products	38	71	0.1%
Poultry and eggs	82	35	0.1%
Fruits, tree nuts, and berries	14	16	0.0%
Cattle and calves	601	(D)	
Hogs and pigs	50	(D)	
Aquaculture	1	(D)	
Milk and other dairy products from cows	-	-	
Cotton and cottonseed	-	-	
Cut Christmas trees and short rotation woody crops	-	-	
Tobacco	-	-	

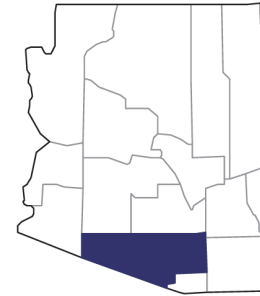
- represents zero; (D) Data withheld to avoid disclosing data for individual farms.

Source: USDA, 2014c.

Cattle ranching is part of Navajo County’s economic base. The location quotient (LQ) is a measure used in regional economics to assess the relative importance of a sector to a local economy. An LQ greater than 1.00 indicates the sector employs more people (and produces more output) than is needed just to meet demands of local residents. An LQ greater than 1.25 indicates that the sector is part of a county’s *economic base* – exporting goods and services outside the county and bringing money into the county from outside. Data is not available for Navajo County because the federal government does not report county-level economic data that could reveal business information about specific operations. From data reported for other counties, however, it is possible to estimate that the LQ for Navajo County beef cattle ranching is between 1.41 and 4.25. From this approximate measure, it is clear that Navajo County has more employment in beef cattle ranching than the national average and that ranching is part of the county’s economic base (DOL BLS, 2011).

The beef cattle ranching sector in Navajo County is a net exporter. Navajo County's beef cattle ranching sector exports a total of \$26.5 million outside the county, bringing money into the local economy. It accounts for 20% of total agricultural exports and 1.6% of economy wide exports. Of the 159 sectors in the county economy, the cattle ranching sector is ranked 11th in exports (IMPLAN Group, LLC, 2011).

THE CONTRIBUTION OF THE BEEF INDUSTRY TO PIMA COUNTY



In 2011, the estimated total economic contribution of the beef industry¹² in Pima County was \$18.1 million.

Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Output	\$14,256,220	\$2,692,752	\$1,169,387	\$18,118,359
Value Added	\$2,147,511	\$1,610,587	\$707,113	\$4,465,211
Employment	43	23	11	76
Labor Income	\$1,255,941	\$654,695	\$395,055	\$2,305,691

Source: IMPLAN Group, LLC, 2011

The beef industry in Pima County is comprised of the beef cattle ranching sector with estimated output (sales) of \$10.3 million and the animal processing sector with output (sales) of \$3.9 million (USDA, NASS, 2011; IMPLAN Group, LLC, 2011). Total direct output from the industry is more than \$14.2 million. The direct effects of the beef industry also include more than \$2.1 million in value added (the local equivalent of gross domestic product, GDP), \$1.3 million in labor income (proprietor’s income plus employee compensation), and 43 jobs (part- and full-time jobs).

Economic activity of the beef industry also has multiplier effects, generating additional jobs and sales in other sectors of the local economy. Indirect effects account for beef industry purchases of inputs, while induced effects account for proprietor and employee spending from their incomes. These multiplier effects provide additional stimulus to the local economy. Accounting for these multiplier effects, **the total contribution of the beef industry to the Pima County economy is \$18.1 million in output, \$4.5 million in value added, \$2.3 million in labor income, and 76 jobs.**

21% of Pima County farms are specialized in beef cattle ranching. This means that 176 farms in Pima County have more than 50% of their total agricultural sales originating from the sale of cattle and calves. Ranches specializing in cattle production are the second most numerous type of operation in this county (USDA, 2014c).

¹² The beef industry in Pima County is comprised of the beef cattle ranching sector and the animal processing sector. It does not include the leather and hide tanning and finishing sector because there are no local operations.

Pima County accounts for 2% of Arizona’s inventory of cattle and calves.

Inventory of cattle in Pima County is estimated to be 18,312 head, accounting for 2% of Arizona’s inventory (USDA, 2014c).

Cattle sales data are not disclosed in Pima County to protect individual info.

Pima County	Farms	Sales (\$1,000)	Percent of Total Sales
Total Sales	855	97,287	100.0%
Cotton and cottonseed	15	10,486	10.8%
Other crops and hay	19	10,122	10.4%
Horses, ponies, mules, burros, and donkeys	155	7,649	7.9%
Vegetables, melons, potatoes, and sweet potatoes	56	1,989	2.0%
Other animals and other animal products	82	1,178	1.2%
Hogs and pigs	24	375	0.4%
Poultry and eggs	102	54	0.1%
Milk and other dairy products from cows	1	(D)	
Cattle and calves	154	(D)	
Nursery, greenhouse, floriculture, and sod	74	(D)	
Grains, oilseeds, dry beans, and dry peas	11	(D)	
Fruits, tree nuts, and berries	44	(D)	
Aquaculture	1	(D)	
Sheep, goats, and their products	51	(D)	
Cut Christmas trees and short rotation woody crops	-	-	
Tobacco	-	-	

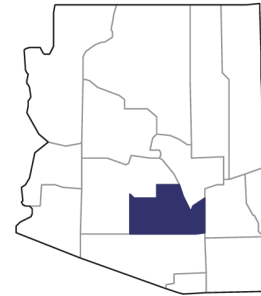
- represents zero; (D) Data withheld to avoid disclosing data for individual farms.

Source: USDA, 2014c.

Cattle ranching is not considered part of Pima County’s economic base. The location quotient (LQ) is a measure used in regional economics to assess the relative importance of a sector to a local economy. An LQ greater than 1.00 indicates the sector employs more people (and produces more output) than is needed just to meet demands of local residents. An LQ greater than 1.25 indicates that the sector is part of a county’s *economic base* – exporting goods and services outside the county and bringing money into the county from outside. Data is not available for Pima County because the federal government does not report county-level economic data that could reveal business information about specific operations. From data reported for other counties, however, it is possible to estimate that the LQ for Pima County beef cattle ranching is less than 1.00. From this approximate measure, it is clear that Pima County does not have more employment in beef cattle ranching than the national average and that ranching is not considered part of the county’s economic base. This is primarily because the county is largely an urban area (DOL, BLS, 2011: QCEW Data).

The beef cattle ranching sector in Pima County is a net exporter. Pima County's beef cattle ranching sector exports a total of \$10.2 million outside the county, bringing money into the local economy. It accounts for 5% of total agricultural exports and 0.05% of economy wide exports. Of the 302 sectors in the county economy, the cattle ranching sector is ranked 152nd in exports (IMPLAN Group, LLC, 2011).

THE CONTRIBUTION OF THE BEEF INDUSTRY TO PINAL COUNTY



In 2011, the estimated contribution of the beef industry¹³ to total economic output in Pinal County was \$466.3 million.

Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Output	\$440,574,414	\$18,026,630	\$7,687,276	\$466,288,320
Value Added	\$73,342,830	\$11,683,141	\$4,902,452	\$89,928,423
Employment	659	149	58	866
Labor Income	\$27,312,727	\$4,012,532	\$1,865,938	\$33,191,196

Source: IMPLAN Group, LLC, 2011

The beef industry in Pinal County is comprised of the beef cattle ranching sector with estimated output (sales) of \$432.4 million and the animal processing sector with output (sales) of \$8.2 million (USDA, NASS, 2011; IMPLAN Group, LLC, 2011). Total direct output from the industry is approximately \$440.6 million. The direct effects of the beef industry also include more than \$73.3 million in value added (the local equivalent of gross domestic product, GDP), \$27.3 million in labor income (proprietor’s income plus employee compensation), and 659 jobs (part- and full-time jobs).

Economic activity of the beef industry also has multiplier effects, generating additional jobs and sales in other sectors of the local economy. Indirect effects account for beef industry purchases of inputs, while induced effects account for proprietor and employee spending from their incomes. These multiplier effects provide additional stimulus to the local economy. Accounting for these multiplier effects, **the total contribution of the beef industry to the Pinal County economy is \$466.3 million in output, \$89.9 million in value added, \$33.2 million in labor income, and 866 total jobs.**

14% of Pinal County farms are specialized in beef cattle ranching. This means that 135 farms in Pinal County have more than 50% of their total agricultural sales originating from the sale of cattle and calves. Ranches specializing in cattle production are the third most numerous type of agricultural operation in this county (USDA, 2014c).

¹³ The beef industry in Pinal County is comprised of the beef cattle ranching sector and the animal processing sector. It does not include the leather and hide tanning and finishing sector because there are no local operations.

Pinal County accounts for 34% of Arizona’s inventory of cattle and calves.

Inventory of cattle in Pinal County is estimated to be 306,517 head, accounting for 34% of Arizona’s inventory. This is the largest share of any Arizona county (USDA, 2014c).

Sales of cattle accounted for 33.9% of total Pinal County agricultural sales.

Pinal County	Farms	Sales (\$1,000)	Percent of Total Sales
Total Sales	938	927,737	100.0%
Cattle and calves	160	314,683	33.9%
Milk and other dairy products from cows	24	294,886	31.8%
Cotton and cottonseed	148	94,008	10.1%
Other crops and hay	241	91,840	9.9%
Grains, oilseeds, dry beans, and dry peas	161	61,800	6.7%
Fruits, tree nuts, and berries	34	7,781	0.8%
Horses, ponies, mules, burros, and donkeys	127	1,661	0.2%
Sheep, goats, and their products *	74	457	0.0%
Other animals and other animal products	41	317	0.0%
Hogs and pigs	21	6	0.0%
Vegetables, melons, potatoes, and sweet potatoes	30	(D)	
Nursery, greenhouse, floriculture, and sod	37	(D)	
Poultry and eggs	70	(D)	
Aquaculture	7	(D)	
Cut Christmas trees and short rotation woody crops	-	-	
Tobacco	-	-	

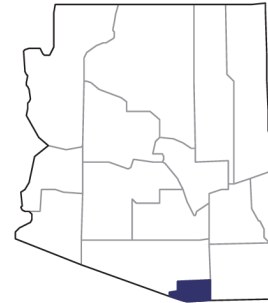
- represents zero; (D) Data withheld to avoid disclosing data for individual farms.

Source: USDA, 2014c.

Beef cattle ranching is part of Pinal County’s economic base. The location quotient (LQ) is a measure used in regional economics to assess the relative importance of a sector to a local economy. An LQ greater than 1.00 indicates the sector employs more people (and produces more output) than is needed just to meet demands of local residents. An LQ greater than 1.25 indicates that the sector is part of a county’s *economic base* – exporting goods and services outside the county and bringing money into the county from outside. The LQ of 5.56 demonstrates that employment in cattle ranching in Pinal County is more than 5 and a half times the national average and that ranching is part of the county’s economic base (DOL, BLS, 2011: QCEW Data).

The beef cattle ranching sector in Pinal County is a net exporter. Pinal County's beef cattle ranching sector exports a total of \$421 million outside the county, bringing money into the local economy. It accounts for 38% of total agricultural exports and 6.2% of economy wide exports, the highest share of all Arizona counties. Of the 206 sectors in the county economy, the cattle ranching sector is ranked 3rd in exports (IMPLAN Group, LLC, 2011).

THE CONTRIBUTION OF THE BEEF INDUSTRY TO SANTA CRUZ COUNTY



In 2011, the estimated contribution of the beef industry¹⁴ to total economic output in Santa Cruz County was \$5.9 million.

Impact Type	Direct Effect	Indirect & Induced Effects	Total Effect
Output	\$5,029,576	\$887,001	\$5,916,577
Value Added	\$843,002	\$498,199	\$1,341,201
Employment	32	8	40
Labor Income	\$310,029	\$214,418	\$524,447

Source: IMPLAN Group, LLC, 2011

The beef industry in Santa Cruz County is comprised solely of the beef cattle ranching sector with estimated direct output (sales) of \$5.0 million (USDA, NASS, 2011). The animal processing and leather and hide tanning and finishing sectors are not included because there are no local operations. The direct effects of the beef industry also include \$843,000 in value added (the equivalent of gross domestic product, GDP), \$310,000 in labor income (proprietor’s income plus employee compensation), and 32 jobs (part- and full-time jobs).

Economic activity of the beef industry also has multiplier effects, generating additional jobs and sales in other sectors of the local economy. Indirect effects account for beef industry purchases of inputs, while induced effects account for proprietor and employee spending from their incomes. These multiplier effects provide additional stimulus to the local economy. Accounting for these multiplier effects, **the total contribution of the beef industry to the Santa Cruz County economy is \$5.9 million in output, \$1.3 million in value added, \$524,000 in labor income, and 40 total jobs.**

44% of Santa Cruz County farms are specialized in beef cattle ranching. This means that 105 farms in Santa Cruz County have more than 50% of their total agricultural sales originating from the sale of cattle and calves. Ranches specializing in cattle production are the most numerous type of operation in this county (USDA, 2014c).

¹⁴ The beef industry in Santa Cruz County is comprised solely of the beef cattle ranching. It does not include the animal processing sector or the leather and hide tanning and finishing sector because there are no local operations.

Santa Cruz County accounts for 2% of Arizona’s inventory of cattle and calves.

Inventory of cattle in Santa Cruz County is estimated to be 21,177 head, accounting for 2% of Arizona’s inventory (USDA, 2014c).

Sales of cattle accounted for 90.6% of total Santa Cruz County agricultural sales.

Santa Cruz County	Farms	Sales (\$1,000)	Percent of Total Sales
Total Sales	236	14,658	100.0%
Cattle and calves	97	13,282	90.6%
Horses, ponies, mules, burros, and donkeys	42	527	3.6%
Fruits, tree nuts, and berries	13	349	2.4%
Other animals and other animal products	8	106	0.7%
Vegetables, melons, potatoes, and sweet potatoes	11	83	0.6%
Poultry and eggs	12	11	0.1%
Nursery, greenhouse, floriculture, and sod	11	(D)	
Other crops and hay	5	(D)	
Grains, oilseeds, dry beans, and dry peas	2	(D)	
Hogs and pigs	2	(D)	
Sheep, goats, and their products *	8	(D)	
Milk and other dairy products from cows	-	-	
Cotton and cottonseed	-	-	
Aquaculture	-	-	
Cut Christmas trees and short rotation woody crops	-	-	
Tobacco	-	-	

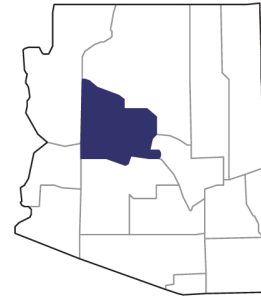
- represents zero; (D) Data withheld to avoid disclosing data for individual farms.

Source: USDA, 2014c.

Beef cattle ranching is part of Santa Cruz County’s economic base. The location quotient (LQ) is a measure used in regional economics to assess the relative importance of a sector to a local economy. An LQ greater than 1.00 indicates the sector employs more people (and produces more output) than is needed just to meet demands of local residents. An LQ greater than 1.25 indicates that the sector is part of a county’s *economic base* – exporting goods and services outside the county and bringing money into the county from outside. The LQ of 9.57 demonstrates that employment in cattle ranching in Santa Cruz County is nearly 10 times the national average and that ranching is part of the county’s economic base (DOL, BLS, 2011: QCEW Data).

The beef cattle ranching sector in Santa Cruz County is a net exporter. Santa Cruz County's beef cattle ranching sector exports a total of \$2.8 million outside the county, bringing money into the local economy. It accounts for 18% of total agricultural exports and 0.4% of economy wide exports. Of the 149 sectors in the county economy, the cattle ranching sector is ranked 44th in exports (IMPLAN Group, LLC, 2011).

THE CONTRIBUTION OF THE BEEF INDUSTRY TO YAVAPAI COUNTY



In 2011, the estimated contribution of the beef industry¹⁵ to total economic output in Yavapai County was \$48.6 million.

Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Output	\$43,774,556	\$3,583,388	\$1,281,910	\$48,639,854
Value Added	\$6,369,839	\$2,156,362	\$776,777	\$9,302,978
Employment	204	32	12	248
Labor Income	\$2,051,403	\$790,595	\$382,106	\$3,224,105

Source: IMPLAN Group, LLC, 2011

The beef industry in Yavapai County is comprised of the beef cattle ranching sector with estimated output (sales) of \$37 million and the animal processing sector with output (sales) of approximately \$6.8 million (USDA, NASS, 2011; IMPLAN Group, LLC, 2011). Total direct output from the industry is approximately \$43.8 million. The direct effects of the beef industry also include approximately \$6.4 million in value added (the local equivalent of gross domestic product, GDP), \$2.1 million in labor income (proprietor’s income plus employee compensation), and 204 jobs (part- and full-time jobs).

Economic activity of the beef industry also has multiplier effects, generating additional jobs and sales in other sectors of the local economy. Indirect effects account for beef industry purchases of inputs, while induced effects account for proprietor and employee spending from their incomes. These multiplier effects provide additional stimulus to the local economy. Accounting for these multiplier effects, **the total contribution of the beef industry to the Yavapai County economy is \$48.6 million in output, \$9.3 million in value added, \$3.2 million in labor income, and 248 total jobs.**

28% of Yavapai County farms are specialized in beef cattle ranching. This means that 260 farms in Yavapai County have more than 50% of their total agricultural sales originating from the sale of cattle and calves. Ranches specializing in cattle production are the second most numerous type of operation in this county (USDA, 2014c).

¹⁵ The beef industry in Yavapai County is comprised of the beef cattle ranching sector and the animal processing sector. It does not include the leather and hide tanning and finishing sector because there are no local operations.

Yavapai County accounts for 5% of Arizona’s inventory of cattle and calves.

Inventory of cattle in Yavapai County is estimated to be 43,144 head, accounting for 5% of Arizona’s inventory (USDA, 2014c).

Sales of cattle accounted for 62% of total Yavapai County agricultural sales.

Yavapai County	Farms	Sales (\$1,000)	Percent of Total Sales
Total Sales	940	41,628	100%
Cattle and calves	257	25,856	62%
Nursery, greenhouse, floriculture, and sod	64	7,782	19%
Horses, ponies, mules, burros, and donkeys	154	4,247	10%
Vegetables, melons, potatoes, and sweet potatoes	57	1,133	3%
Fruits, tree nuts, and berries	84	649	2%
Other animals and other animal products	94	643	2%
Other crops and hay	47	591	1%
Grains, oilseeds, dry beans, and dry peas	7	452	1%
Poultry and eggs	120	167	0.4%
Sheep, goats, and their products	59	101	0.2%
Hogs and pigs	9	7	0.0%
Milk and other dairy products from cows	-	-	
Cotton and cottonseed	-	-	
Aquaculture	-	-	
Cut Christmas trees and short rotation woody crops	-	-	
Tobacco	-	-	

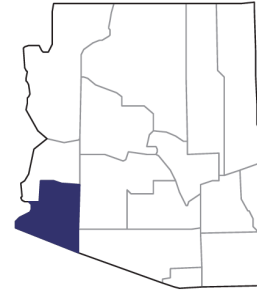
- represents zero; (D) Data withheld to avoid disclosing data for individual farms.

Source: USDA, 2014c.

Cattle ranching is part of Yavapai County’s economic base. The location quotient (LQ) is a measure used in regional economics to assess the relative importance of a sector to a local economy. An LQ greater than 1.00 indicates the sector employs more people (and produces more output) than is needed just to meet demands of local residents. An LQ greater than 1.25 indicates that the sector is part of a county’s *economic base* – exporting goods and services outside the county and bringing money into the county from outside. Data is not available for Yavapai County because the federal government does not report county-level economic data that could reveal business information about specific operations. From data reported for other counties, however, it is possible to estimate that the LQ for Yavapai County beef cattle ranching is between 1.41 and 4.25. From this approximate measure, it is clear that Yavapai County has more employment in beef cattle ranching than the national average and that ranching is part of the county’s economic base (DOL, BLS, 2011: QCEW Data).

The beef cattle ranching sector in Yavapai County is a net exporter. Yavapai County's beef cattle ranching sector exports a total of \$25.8 million outside the county, bringing money into the local economy. It accounts for 24% of total agricultural exports and 0.7% of economy wide exports. Of the 226 sectors in the county economy, the cattle ranching sector is ranked 39th in exports (IMPLAN Group, LLC, 2011).

THE CONTRIBUTION OF THE BEEF INDUSTRY TO YUMA COUNTY



In 2011, the estimated contribution of the beef industry¹⁶ to total economic output in Yuma County was \$141.2 million.

Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Output	\$128,509,692	\$9,344,484	\$3,335,372	\$141,189,548
Value Added	\$21,093,724	\$6,179,112	\$2,076,014	\$29,348,849
Employment	266	80	31	378
Labor Income	\$6,787,531	\$2,853,992	\$1,109,503	\$10,751,025

Source: IMPLAN Group, LLC, 2011

The beef industry in Yuma County is comprised of the beef cattle ranching sector with estimated output (sales) of \$125.4 million and the animal processing sector with output (sales) of \$3.1 million (USDA, NASS, 2011; IMPLAN Group, LLC, 2011). Total direct output from the industry is more than \$128.5 million. The direct effects of the beef industry also include \$21.1 million in value added (the local equivalent of gross domestic product, GDP), \$6.8 million in labor income (proprietor’s income plus employee compensation), and 266 jobs (part- and full-time jobs).

Economic activity of the beef industry also has multiplier effects, generating additional jobs and sales in other sectors of the local economy. Indirect effects account for beef industry purchases of inputs, while induced effects account for proprietor and employee spending from their incomes. These multiplier effects provide additional stimulus to the local economy. Accounting for these multiplier effects, **the total contribution of the beef industry to the Yuma County economy is \$141.2 million in output, \$29.3 million in value added, \$10.8 million in labor income, and 378 total jobs.**

4% of Yuma County farms are specialized in beef cattle ranching. This means that 23 farms in Yuma County have more than 50% of their total agricultural sales originating from the sale of cattle and calves. Ranches specializing in cattle production are the fifth most numerous type of operation in this county (USDA, 2014c).

¹⁶ The beef industry in Yuma County is comprised of the beef cattle ranching sector and the animal processing sector. It does not include the leather and hide tanning and finishing sector because there are no local operations.

Data are not available regarding Yuma County inventory of cattle and calves.

Data on the total inventory of cattle and calves in Yuma County is not disclosed by the Census of Agriculture to protect individual ranch information (USDA, 2014c).

Cattle sales data are not disclosed in Yuma County to protect individual info.

Yuma County	Farms	Sales (\$1,000)	Percent of Total Sales
Total Sales	562	985,009	100.0%
Vegetables, melons, potatoes, and sweet potatoes	53	579,124	58.8%
Other crops and hay	182	66063	6.7%
Grains, oilseeds, dry beans, and dry peas	88	52023	5.3%
Nursery, greenhouse, floriculture, and sod	9	2850	0.3%
Other animals and other animal products	19	849	0.1%
Aquaculture	6	337	0.0%
Horses, ponies, mules, burros, and donkeys	24	169	0.0%
Hogs and pigs	16	73	0.0%
Poultry and eggs	31	12	0.0%
Milk and other dairy products from cows	1	(D)	
Cattle and calves	33	(D)	
Cotton and cottonseed	55	(D)	
Fruits, tree nuts, and berries	256	(D)	
Sheep, goats, and their products	13	(D)	
Cut Christmas trees and short rotation woody crops	-	-	
Tobacco	-	-	

- represents zero; (D) Data withheld to avoid disclosing data for individual farms.

Source: USDA, 2014c.

Cattle ranching is part of Yuma County’s economic base. The location quotient (LQ) is a measure used in regional economics to assess the relative importance of a sector to a local economy. An LQ greater than 1.00 indicates the sector employs more people (and produces more output) than is needed just to meet demands of local residents. An LQ greater than 1.25 indicates that the sector is part of a county’s *economic base* – exporting goods and services outside the county and bringing money into the county from outside. Data is not available for Yuma County because the federal government does not report county-level economic data that could reveal business information about specific operations. From data reported for other counties, however, it is possible to estimate that the LQ for Yuma County beef cattle ranching is between 1.41 and 4.25. From this approximate measure, it is clear that Yuma County has more employment in beef cattle ranching than the national average and that ranching is part of the county’s economic base (DOL, BLS, 2011: QCEW Data).

The beef cattle ranching sector in Yuma County is a net exporter. Yuma County's beef cattle ranching sector exports a total of \$124.4 million outside the county, bringing money into the local economy. It accounts for 7% of total agricultural exports and 3% of economy wide exports. Of the 198 sectors in the county economy, the cattle ranching sector is ranked 6th in exports (IMPLAN Group, LLC, 2011).

References

- IMPLAN Group, LLC. 2011. IMPLAN System (data and software). 16740 Birkdale Commons Parkway, Suite 206, Huntersville, NC 28078 www.IMPLAN.com
- U.S. Department of Agriculture (USDA). 2014c. *2012 Census of Agriculture: Arizona State and County Data*, Volume 1, Geographic Area Series, Part 3 AC-12-A-3. Issued May 2014. Available at <http://www.agcensus.usda.gov/Publications/2012/2/>.
- U.S. Department of Agriculture (USDA), Economic Research Service (ERS). 2014. “Data Products: Major Land Uses.” Available at <http://www.ers.usda.gov/data-products/major-land-uses.aspx#.UvLE0z1dWi4>. Accessed February 5, 2014.
- U.S. Department of Agriculture (USDA), National Agricultural Statistics Service (NASS). 2011. *Arizona Agricultural Statistics Bulletin*.
- U.S. Department of Labor (DOL), Bureau of Labor Statistics (BLS). 2011. “Quarterly Census of Employment and Wages (QCEW).” Available at http://bls.gov/location_quotient/ControllerServlet.