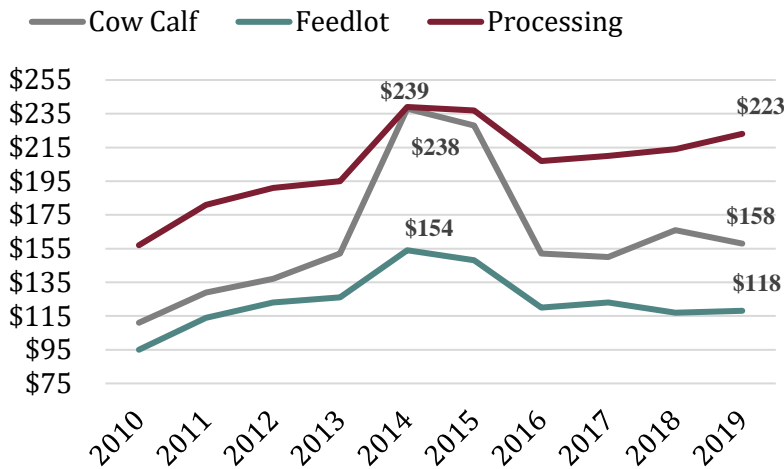




2019 Contribution of the Washington Beef Sector to the Washington Economy

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Figure 1: 2010 to 2019 Cattle Prices



Regional market Structure

Washington's beef industry is unique in the Pacific Northwest. No other Pacific Northwest state has all three production sectors: cow-calf, feedlot, and packers as large collectively as Washington does. Washington has several competitive cattle production advantages in forage grazing, grain production, a strong hay production industry, local sources of byproduct feedstuffs, and a good transportation system for cattle movements to grazing, feedlots, and packers as well as marketing beef products to both export and domestic markets.

The modeled 2019 Washington cattle production inventories based on the most current USDA reports were 228,000 calves produced, 564,000 finished feedlot steers and heifers sent to slaughter, and 1,146,000 head of cattle slaughtered. This study is an update from the 2014 Economic Contribution Study. Figure 1 presents cattle prices used in the studies and highlights price changes between 2014 and 2019. The 2014 study coincided with cattle industry record high prices and for all beef sectors 2019 prices declined. The cow-calf sector price fell -34%, the feedlot sector fell -23% and the processing or slaughter sector fell -7%. Although the processing sector price fell the least, this sector has the largest production inventory of 1.146 million head and have the largest price value reflecting large operating costs for purchasing cattle inventory, labor and maintenance cost of the production facilities.

The cattle industry generated \$2.456 billion dollars in direct total output and contributed over \$4.686 billion of total economic output. This occurred in two ways. Indirect effects of cattle industry purchases of cattle business inputs (everything from hay, grain, rent, and medical supplies to business services including veterinarian, accounting and legal expenses). As illustrated in Table 1, the cattle industry purchases of business inputs, and subsequent business-to-business sales, generated \$1.361 billion of economic activity in 2019. The induced effect is the personal purchases by cattle producers, their employees and business employees throughout the production chain personal expenditures in Washington such as eating in local restaurants, health care, rent and all other personal expenses.

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Table 1: 2019 Washington Beef Sector Economic Contribution Results

Total Output				
	Direct	Indirect	Induced	Total
Cow-calf	\$233,644,754	\$141,025,935	\$108,102,120	\$482,772,809
Feedlots	\$527,217,185	\$459,631,414	\$169,358,128	\$1,156,206,727
Processing	\$1,695,472,180	\$760,447,591	\$590,718,191	\$3,046,637,962
Total	\$2,456,334,119	\$1,361,104,940	\$868,178,439	\$4,685,617,498

Value Added				
	Direct	Indirect	Induced	Total
Cow-calf	\$120,164,548	\$73,973,133	\$67,273,603	\$261,411,284
Feedlots	\$36,245,053	\$186,921,800	\$105,411,380	\$328,578,233
Processing	\$220,399,868	\$460,287,653	\$367,740,584	\$1,048,428,105
Total	\$376,809,469	\$721,182,586	\$540,425,567	\$1,638,417,622

Employment				
	Direct	Indirect	Induced	Total
Cow-calf	691	967	611	2,270
Feedlots	213	1,656	956	2,826
Processing	2,684	3,897	3,330	9,912
Total	3,589	6,521	4,898	15,007

The induced effect generated an additional \$868 million in economic activity. The total of all effects is \$4.685 billion dollars. Thus, every dollar generated directly by the cattle industry contributes an additional \$1.91 in additional economic activity by businesses supporting the needs of the cattle industry and their vendors.

Similarly, Table 1 reports the state's value added and jobs. The total value added is the cattle industry's contribution to state GDP, which is \$1.638 billion dollars. The cattle industry high use of within state inputs such as farm produced feed and byproduct feedstuffs and high use of labor generates \$4.35 of state GDP for each dollar directly contributed to by the cattle industry. The results are similar for jobs. The total number of jobs supported by the cattle industry is 15,077. Jobs has a multiplier of 4.18 for each job directly in the cattle industry.

Table 2 presents a comparison of the 2014 and 2019 Economic Contribution studies. The total output economic contribution decreased by more than \$1 billion dollars. The decrease is due to the decline in record prices from 2014 to 2019 and the multiplier effect of decreased direct cattle industry output in the indirect and induced effects throughout the state economy. However, offsetting the price decline negatively effecting industry direct output, the cattle industry value added contribution to state GDP increased by \$51.7 million dollars. This is in part due to spending patterns. At record high prices cattle producers purchased new trucks, tractors and equipment that are mostly produced out of state contributing little to value added state GDP. When prices declined after 2014 spending patterns concentrated within the state. This is further supported by the 1,075 increase in jobs whose wages are included in value added state GDP.

Table 2: Comparative 2014 to 2019 Economic Contribution Results
Total Output

	2014	2019	Change
Cow-calf	\$639,150,023	\$482,772,809	(\$156,377,214)
Feedlots	\$1,552,382,348	\$1,156,206,727	(\$396,175,621)
Processing	\$3,499,196,556	\$3,046,637,962	(\$452,558,594)
Total	\$5,690,728,927	\$4,685,617,498	(\$1,005,111,429)

Value Added

	2014	2019	Change
Cow-calf	\$373,519,260	\$261,411,284	(\$112,107,976)
Feedlots	\$327,628,556	\$328,578,233	\$949,677
Processing	\$885,541,200	\$1,048,428,105	\$162,886,905
Total	\$1,586,689,016	\$1,638,417,622	\$51,728,606

Employment

	2014	2019	Change
Cow-calf	3,166	2,270	(896)
Feedlots	2,972	2,826	(146)
Processing	7,795	9,912	2,117
Total	13,933	15,007	1,074