

Economic Impact of Pork Production in Alberta

Prepared For

Alberta Pork

With Funding Support from Alberta Livestock and Meat
Agency

Prepared By

Serecon Inc.

October, 2015



serecon

October 20, 2015

Mr. Darcy Fitzgerald
Alberta Pork
4828 – 89th Street
Edmonton, Alberta
T6E 5K1

Dear Mr. Fitzgerald:

**RE: EVALUATION OF THE ECONOMIC IMPACT OF PORK PRODUCTION IN ALBERTA
OUR FILE #865412.1**

We have attached our Final Report outlining the significant contribution that pork production makes to the province of Alberta. Our approach includes the use of economic multipliers and we have outlined our methodology and the results in the attached document. This includes estimates of the direct, indirect and induced impacts on the economy.

Our research has made use of the actual information in the cost of production which makes this analysis more accurate than others which have used averages and estimates of costs as the basis for their work. Ultimately, the relative importance of the sector is impressive. In addition to having a significant overall impact, the distribution of the impacts – mainly in rural areas – is also of importance.

It has been a pleasure to conduct this study on behalf of Alberta Pork. Please do not hesitate to contact me should you require any additional information.

Yours truly,
SERECON INC.



Robert Burden, CVA, P.Ag., MBA
Edmonton Office

Enclosure

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Pork Industry Overview

Background

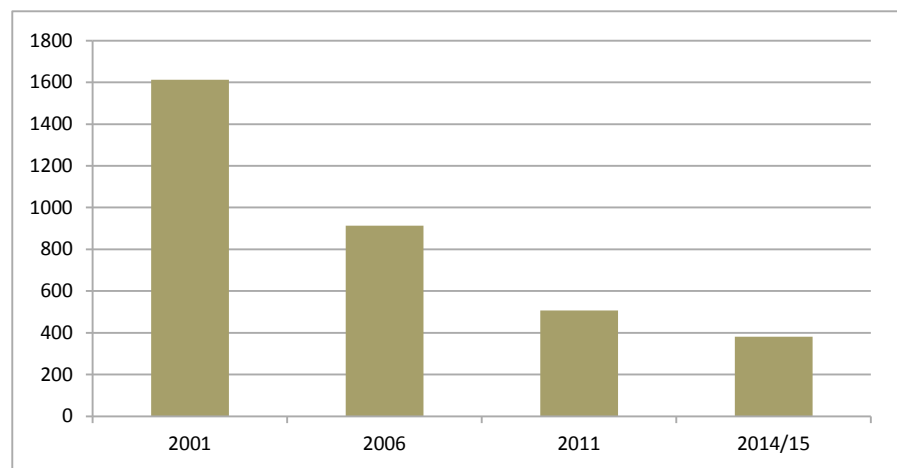
Pork production has a long history in Alberta, but recent animal health and pricing issues have created significant challenges for the sector. These challenges have impacted production, resulting in a dramatic shift in both economics, number of producers and herd size. The following numbers are based on the Statistics Canada Census of Agriculture, combined with information obtained from Alberta Pork and through our survey of producers for the Cost of Production.

Pork Numbers

The following graph depicts trends in the industry over the past 14 years. Figure 1 shows the number of Alberta farms producing sows and gilts, since 2001. Figure 2 shows the number of breeding sows and gilts, over the same time period.

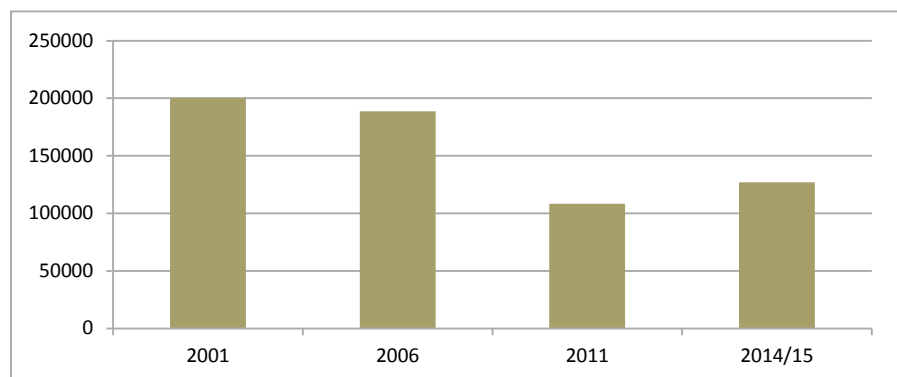
Farm Numbers

Figure 1: Number of Farms Reporting Sows and Gilts



Breeding Animals

Figure 2: Number of Breeding Sows and Gilts



Cost of
Production -
Summary of
Trends, 2011-2014

Figures 1 and 2 show a dramatic decrease in both the number of hog farms and the number of breeding animals, but particularly in the number of farms. This reflects the trend of consolidation of hog production in larger operations. There are now a little over half the number of breeding animals, and a quarter the number of hog producers, as compared to 14 years ago. This decline in numbers appears to be stabilizing, with the number of animals actually increasing since 2011.

Economic impacts of the sector are directly related to the amount spent in production of pork. The Alberta Pork Cost of Production study has been running since 2012, at which time the 2011 COP was calculated. The original study included 23 producers, followed by 25 in 2012, 21 in 2013, and (to date) 19 in 2014.

Figure 3 summarizes the Alberta Pork Cost of Production results for the years 2011 through 2014. The contribution margin for each year is highlighted in Figure 3. "Contribution" represents the portion of sales revenue that is not consumed by variable costs, and so contributes to covering fixed costs. Contribution is thus a key building block of break-even analysis.

Figure 3: Cost of Production, 2011-2014 (\$ per live kg)

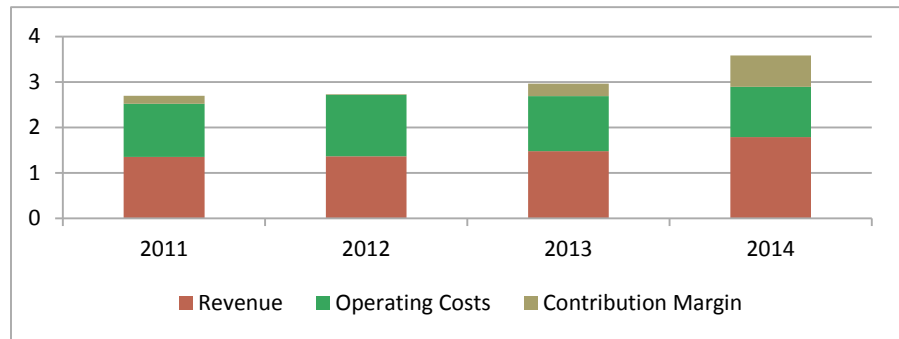


Figure 3 shows a positive contribution margin for the pork producers in the study in 2011. This was followed by a very rough year in 2012, with almost no contribution margin. 2012 saw rapidly increasing feed costs, which hurt many of the operations in the survey. 2013 was a stronger year for the producers in the study, with a strong contribution margin amounting to about 18% of revenue.

Profitability of Pork
Production Increased
Strongly in 2014

2014 turned out to be a good year for hog production in Alberta, driven primarily by very strong prices and decreased feed costs. The contribution margin for 2014 was \$0.69 per live kg. As seen in Figure 3, in 2014, revenue was well up from the 2011-2013 period, with a contribution margin far exceeding that in the earlier years.

Some Basic
Demographics

Just to put the industry into context, the total number of hogs produced in Alberta for calendar 2014 was estimated at 3 million (CANSIM Table 003-0100). While over 800 farms reported having hogs, the total commercial herd is estimated to 127,000 sows at this time. Gross revenue for Alberta pork production is calculated to be approximately \$670 million, in 2014.

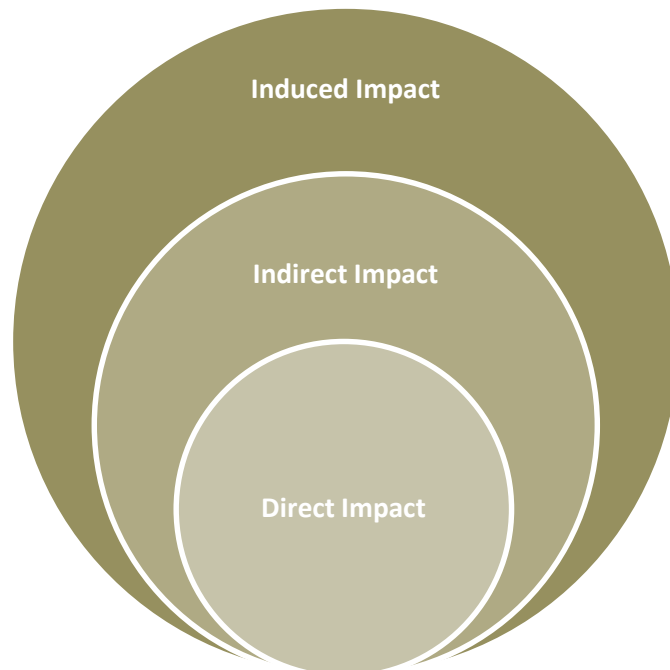
This basic demographic information is the starting point for any economic impact analysis. Costs included in generating this output ripple through the economy creating opportunity and jobs in other related and unrelated sectors. Impact assessment qualifies these impacts and provides an estimate of them in a quantitative approach.

Economic Impact Methodology

Types of Economic Impact Measured

Economic multipliers are used to measure the economic activity that is generated when purchases and investments are made by a business or sector, including the resulting spin-off activities. Types of economic impacts measured for Alberta pork production include the following:

Figure 4: Types of Economic Impact



Economic Impact is Measured at Different Levels of Inclusiveness

- **Direct Impacts**
impacts on the expanding industry - payments made to suppliers of labour, equipment and services by the industry where the new economic activity takes place (i.e. payments by hog operations to employees, for feed, etc.)
- **Indirect Impacts**
impacts on the backward-linked industries that supply inputs to the industry creating the new economic activity (e.g. feed producers must increase production)
- **Induced Impacts**
impacts of spending the increased household income resulting from the new economic activity (e.g. spending by employees of the feeding operation and its upstream industries)

Categories of Economic Impact

Impacts on different aspects of the economy are measured

Example: impact on employment

Economic Multipliers used

The direct, indirect and induced impacts of Alberta pork production can be quantified in a number of different ways, each of which describes a different aspect of the economic impact. The categories of economic impact that were calculated for the pork production sector include the following:

- **Economic Output:** is a measure of all sales by producing companies in the province. This includes intermediate goods and services consumed in the production process
- **GDP:** Gross Domestic Product can be defined as output with all intermediate goods and services subtracted. It is a measure of value added, where value added = economic output – intermediate inputs
- **Labour Income:** the gross income earned by employees in the province
- **Employment:** the number of people employed in the province

Each of these categories will have direct, indirect and induced effects. For example, the employment impact would include the following types of impact:

- **Direct employment impact:** the employees working in the pork production sector – farm workers and managers
- **Indirect employment impact:** the employees working in the agribusiness supply industries that supply inputs used in pork production – workers in feed companies and plants producing other inputs
- **Induced employment impact:** the additional employment that results from the increased consumer spending flowing from direct and indirect impacts – spending by workers in pork operations and upstream input industries leads to creation of jobs in other industries, e.g. Tim Horton’s

The following multipliers were used for the purpose of estimating the economic impact of pork production in Alberta. They are taken from Table 3 and Table 7 of *Alberta Economic Multipliers 2010*, “Summary Commodity Code M112A (Live Animals)¹:

Figure 5: Economic Multipliers Used

	Table 3 (direct and indirect impacts)	Table 7 (direct, indirect and induced impacts)
Economic Output	2.389	2.586
GDP at Basic Prices	0.588	0.705
Labour Income	0.298	0.349
Employment	0.101	0.112

¹ <http://www.finance.alberta.ca/aboutalberta/economic-multipliers/2010/Alberta-Economic-Multipliers-2010.pdf>

Economic impacts measured are specific to Alberta's economy

Table 3 of the Alberta Economic Multipliers presents multipliers for the direct and indirect impacts on the Alberta economy resulting from the economic activity of pork production. The impacts on economic output, GDP and labour income are expressed as impacts per dollar of output in pork production. The impacts on employment are expressed as jobs per \$10,000 of output in pork production. Table 7 is analogous, however, it also includes an estimate of the induced impacts on the economy, in addition to direct and indirect effects.

Interpretation of results – relative impacts

Generally speaking, economic multipliers are best suited to making relative, rather than absolute estimates. In other words, economic multipliers are best used to assess which of several activities has greater impacts on the economy, rather than the absolute impact of any single activity. On the other hand, they do provide an excellent way to observe the relative impacts of a sector on the surrounding economy.

Employment estimates

It should also be noted that the multipliers provided by Alberta Finance, and used in the estimates reported here, are for production of all "live animals". They are specific to Alberta, but do not differentiate pork production from other livestock production sectors. In particular, we recommend caution in the interpretation of employment impacts. It is well known that there are large differences in terms of labour requirements per dollar of output between, e.g., a cow-calf operation and a pork barn. On the other hand, pork production is intensive in term of labour use. As a result we would suggest that the estimates are conservative.

Economic Impact Results

Alberta pork production
– gross revenue of \$670
million

The economic impact of Alberta pork production was estimated using the findings of the Cost of Production survey for 2014. Specifically, pork production in Alberta was derived from the average gross returns per sow, and the average size of the Alberta herd (most currently estimated at 127,000 sows). This gave an estimated gross revenue of \$670 million for pork production in Alberta, in 2014. This is the output for the pork production sector, to which economic multipliers were applied (see economic impacts below).

Impacts on Alberta's
economic output

Direct and indirect impacts of Alberta pork production on economic output were quantified at \$1.602 billion. When induced impacts are also included, the impact on economic output is \$1.734 billion. This tells us that, when the responses of related industries and households are considered, **the impact of the pork sector's \$670 million of sales on the Alberta economy amounts to \$1.734 billion of total output.**

It is important to understand that these figures only represent the primary production sector. Recent estimates for the pork packing and processing sector suggest that they have an additional impact on total output of \$1.2 billion and result in an additional 5,100 jobs².

Impacts on Alberta's GDP

Direct and indirect impacts of Alberta pork production on the province's GDP were quantified at \$395 million. When induced impacts are also included, **the impact on Alberta's GDP is \$473 million (with another \$465 million at the processing level).** This also quantifies the impact of the pork sector on Alberta's economy, with the difference that this GDP measure nets out the value of intermediate inputs from economic output, and only includes value added.

Impacts on labour
income

Direct and indirect impacts of Alberta pork production on the province's labour income were quantified at \$200 million. When induced impacts are also considered, the impact on Alberta's labour income is \$234 million. Thus, when the responses of related industries and households are accounted for, **the impact of Alberta's primary pork sector on the province's labour income is \$234 million (\$290 million at the processing level).**

Impacts on employment

Direct and indirect impacts of Alberta pork production at the farm level on the province's employment requirements were estimated to amount to 6,781 jobs. This increases by a further 5,100 when the processing sector impact is considered. When also considering induced impacts, the impact on labour requirements is estimated at 7,510 jobs. That is, **labour requirements driven by pork production, when accounting for related industries and households, equate to 7,510 jobs.**

Summary of economic impacts

Geographic distribution of impacts on economic output

Figure 6: Economic Impact from Primary Pork Production, Alberta, 2014

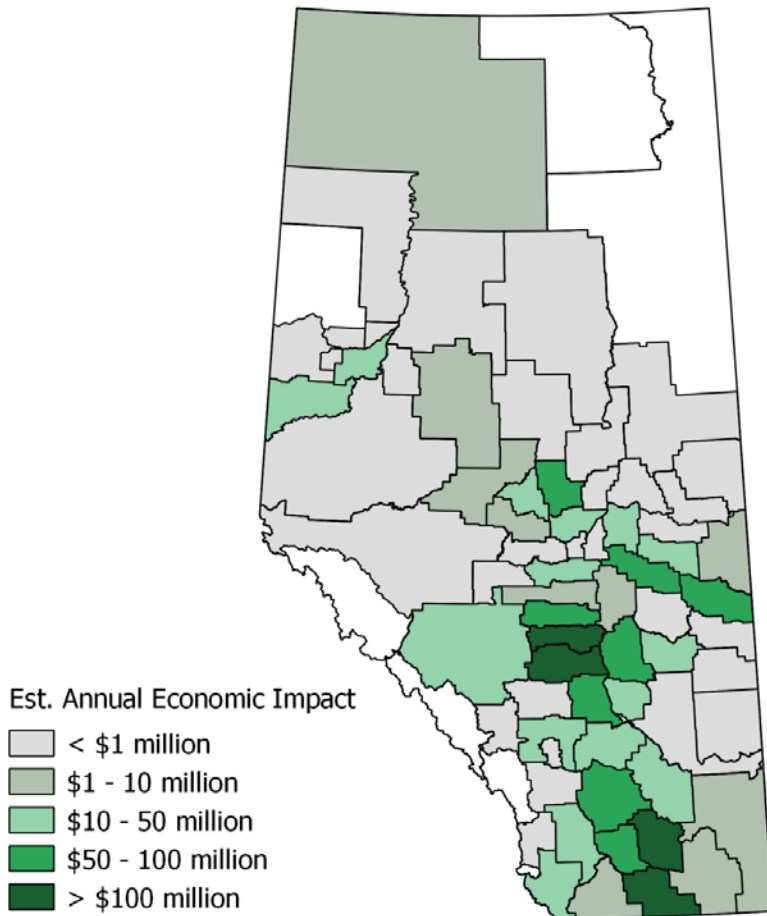
Impacts	Economic Output	GDP at Basic Prices	Labour Income	Employment
	(\$ millions)	(\$ millions)	(\$ millions)	(jobs)
Direct & Indirect	\$1,602	\$395	\$200	6,781
Induced	\$132	\$78	\$34	729
Direct, Indirect & Induced	\$1,734	\$473	\$234	7,510

It is also of interest to extrapolate these findings to see the distribution of the economic impact within Alberta, across the various Counties. The most recent accurate information on pork inventories by County is the Census of Agriculture conducted by Statistics Canada for the day May 10, 2011. That dataset was used to estimate a distribution, first using the distribution of the 82% of the category "Sows and Gilts for Breeding" that was both non-zero and not suppressed by Statistics Canada. The remaining 18% was then allocated to Counties according to the May 10, 2011 Census of Agriculture pork inventory category "Total Pigs".

The table and maps that follow show the results of that evaluation. The distribution is, of course, only as accurate as the Census of Agriculture distribution of pork inventory, and assumes that distribution has remained relatively stable since 2011, despite some significant changes in the pork industry over the past 4 years. Nonetheless, it does provide the following insights:

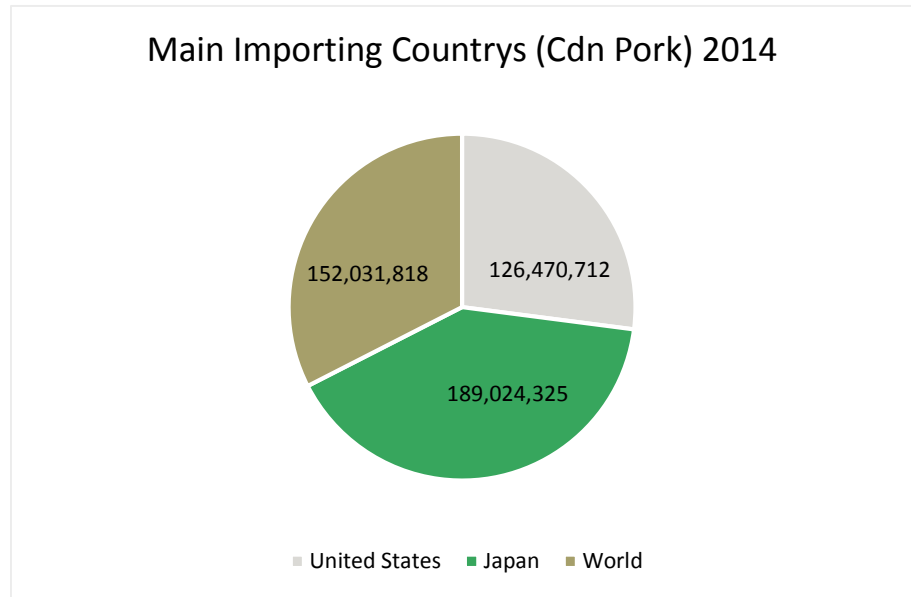
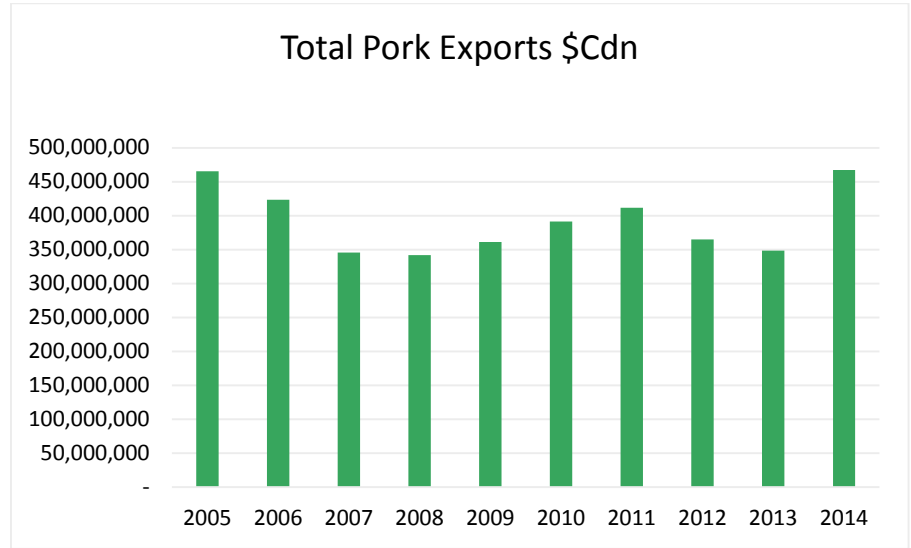
- **there are four counties – Lacombe, Warner, Red Deer and Taber - where the total impact from the pork industry on economic output is greater than \$100 million**
- **the economic impacts are concentrated in rural regions of the province**

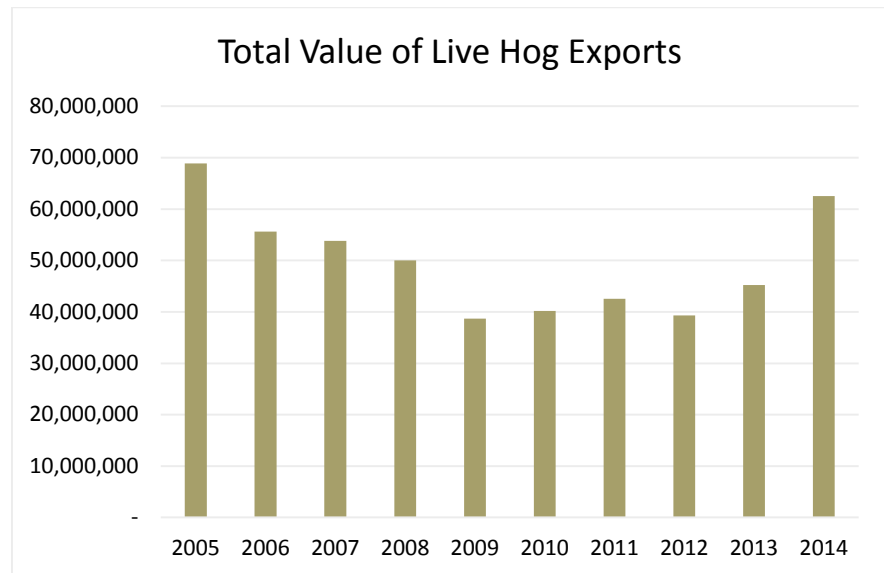
Figure 3: Estimates of Economic Impact from Pork, by Country (Direct, Indirect and Induced)



Exports

In addition to the impacts outlined above, pork production in Alberta is an export heavy industry earning foreign capital for the country. Pork is exported live, and is also exported in both processed and partially processed forms. This provides a critical source of foreign currency. The two main importers remain the US and Japan, but a significant amount also goes to other regions of the world. The following graphs are based on information provided by Alberta Agriculture and Rural Development.





The US is by far the main market for live hog exports, accounting for almost 100% over the past two years. In 2014 there were 614,794 hogs exported to the United States.

Challenges in the Pork Industry

All this said, the contribution of the Alberta pork industry cannot be taken for granted. Recent market and other operational issues have created significant challenges for the sector.

1) Commodity price risk continues to be a struggle for Canadian pork producers. There are a limited number of tools available to producers to help them decrease their risk. The fact that all futures contracts are in American dollars and tend to be quite large significantly reduces their usefulness to Alberta producers.

Not only does a Canadian producer need to hedge their production, but they also need dollar contracts to hedge the dollar, and the size of these do not often match up therefore a producer needs to be very large in order utilize this complex procedure.

2) Access to capital is another issue facing producers. Even when producers are committed to growth, Canadian lending institutions remain wary of the pork industry and are hesitant to forward any capital to producers. This limits producer's ability to expand, purchase inputs or repair and rebuild infrastructure. Reduced lending restricts the industry's ability to grow and increase production which also inhibits growth along the value chain and reduces potential jobs and wealth. This is impeding a real economic opportunity for the entire value chain.

3) Access to labour, at any price, is another major issue facing pork production in Alberta. While not all producers are equally affected - small producers can often get by on family farm and part time labour; however labour is a critical issue for the whole sector. The large non colony farms are the ones who face the biggest labour issue as these producers need to hire full time staff. Foreign labour is very important to these producers as there is a shortage of available labour in Canada overall.

4) The operating reality of the North American hog industry is resulting in a significant increase in the scale economies associated with production. As a result, the US herd has the ability to ramp up production very quickly. This significantly affects pricing, and Alberta producers are already at a significant disadvantage relating to open price discovery already. The largest producer in the United States is larger than all the production in western Canada.

Sustainability

In spite of these issues, the Alberta pork industry has a number of factors that are positives to the future and the sustainability of the industry. There are a number of programs both industry and government led that ensure the quality of the product. Some of these programs include:

- CQA – Canadian Quality Assurance
- ACA – Animal Care Assessment
- Alberta Pork Biosecurity Risk Programs
- Swine ID and Traceability
- NRCB – Natural resource Conservation Board
- CFIA – Canadian food Inspection Agency

The purpose of these programs is to ensure consumers in Canada and to the World that Albertan and Canadian Pork is safe to consume and is of the highest quality. Also, they ensure that animals are treated humanely and that the production practices do not spread diseases and that protection for the environment is ensured.

Conclusion

\$1.73 Billion in contributions by pork farms

7,510 FTEs created by pork producers

In total, we estimate that the primary pork production sector contributes \$1.6 billion to the Alberta economy when including direct and indirect impacts, and \$1.73 billion when induced impacts are considered. This figure increases by over \$1.2 billion when the processing sector impacts are considered.

We estimate that 7,510 jobs are required as a result of the impacts of pork production throughout Alberta's economy, through both related industries and household income. The majority of these jobs occur in rural Alberta and provides critical employment opportunities for small communities. Again, this figure increases by over 5,100 when the impact of the processing sector are considered.

Analysis clearly indicates that pork production is a significant economic driver in the province of Alberta. Not only do farmers spend money in their local regions, but the jobs created help to keep the local community vibrant and alive. It should be noted that these farms helped to create significant economic spinoffs and employment for further value chain partners in processing and distribution.

Results in Context

For every sow in production in Alberta, there are economic impacts, as outlined in this report. The following examples position the economic impacts within the context of pork production.

The number of people employed per sow:

- direct and indirect employment – 0.05 jobs
- induced employment – 0.01 jobs
- **total employment impact – 0.06 jobs**

Labour income per sow:

- direct and indirect impacts - \$1,573
- induced impact - \$269
- **total labour income impact - \$1,842**

The number of people employed per average farm:

- direct and indirect employment – 17.8 jobs
- induced employment – 1.9 jobs
- **total employment impact – 19.7 jobs**

The economic output per average farm:

- direct and indirect impacts - \$4.204 million
- induced impact - \$0.347 million
- **total impact on economic output - \$4.551 million**

GDP added to the economy by each sow:

- direct and indirect impacts - \$3,104
- induced impact - \$618
- **Total GDP added - \$3,722**

Tax revenue provided by each sow through worker income (combined federal and Alberta tax at 32% (TaxTips.ca)):

- direct and indirect impacts - \$503
- induced impact - \$87
- **total impact on tax revenue - \$590**

Hogs in Alberta consumed just over 1 million Mt of feed grains in 2014. This amounts to total of 8,529 kg consumed per sow equivalent.

Appendix A: Preliminary Cost of Production Results

Alberta Pork COP Model - Preliminary Survey Results for 2014				
SUMMARY - 19 Farrow to Finish Producers Surveyed	Revenue (\$ per KG live)			
	Average	Median	Range	
			Minimum	Maximum
Revenue from Hog Operation	\$1.792	\$1.819	\$1.630	\$2.007
SUMMARY - 19 Farrow to Finish Producers Surveyed	COP (\$ per KG live)			
	Average	Median	Range	
			Minimum	Maximum
Cost of Production				
A) Operating Costs				
Livestock Purchased (Sows/Gilts, Boars, Feeder Pigs)	\$0.047	\$0.032	\$0.000	\$0.523
Breeding Costs (AI supplies, semen)	\$0.004	\$0.000	\$0.000	\$0.026
Feed	\$0.792	\$0.829	\$0.577	\$0.995
Purchased Feed	\$0.593	\$0.622	\$0.105	\$0.849
Farm Grown Milled Feed	\$0.199	\$0.307	\$0.000	\$0.558
Veterinary & Medicines	\$0.033	\$0.032	\$0.021	\$0.067
Utilities	\$0.042	\$0.040	\$0.003	\$0.097
Natural Gas / Propane / Coal	\$0.013	\$0.013	\$0.000	\$0.042
Electricity	\$0.021	\$0.019	\$0.000	\$0.053
Communication (mobile & land)	\$0.001	\$0.000	\$0.000	\$0.003
All Utilities, if lumped together	\$0.005	\$0.000	\$0.000	\$0.059
Freight & Transportation	\$0.020	\$0.014	\$0.000	\$0.074
Contracted Trucking	\$0.011	\$0.000	\$0.000	\$0.064
Truck/Vehicle Operation (Fuel & Maintenance)	\$0.009	\$0.001	\$0.000	\$0.028
Tractor & Equipment Operation (Fuel & Maintenance)	\$0.003	\$0.000	\$0.000	\$0.020
Repairs & Maintenance	\$0.038	\$0.026	\$0.001	\$0.113
Building Repairs & Maintenance	\$0.019	\$0.006	\$0.000	\$0.090
Equipment Repairs & Maintenance	\$0.002	\$0.000	\$0.000	\$0.011
Building and Equipment Repairs & Maintenance (if lumped together)	\$0.004	\$0.000	\$0.000	\$0.069
Barn Supplies	\$0.013	\$0.006	\$0.000	\$0.085
Straw & Bedding	\$0.001	\$0.001	\$0.000	\$0.005
Office & Business Costs	\$0.005	\$0.000	\$0.000	\$0.029
Legal, Accounting & Marketing	\$0.004	\$0.000	\$0.000	\$0.024
Office Equipment & Supplies	\$0.001	\$0.000	\$0.000	\$0.010
Insurance	\$0.009	\$0.000	\$0.000	\$0.028
Custom Charges	\$0.019	\$0.003	\$0.000	\$0.126
Manure Removal	\$0.010	\$0.000	\$0.000	\$0.056
Dead Pig Disposal	\$0.000	\$0.000	\$0.000	\$0.002
Other and/or All Custom Charges (if lumped together)	\$0.009	\$0.000	\$0.000	\$0.126
Lease & Rental Costs	\$0.000	\$0.000	\$0.000	\$0.007
Operating Costs	\$1.014	\$1.061	\$0.818	\$1.304
B) Labour & Management				
Hired/Paid Labour	\$0.022	\$0.000	\$0.000	\$0.117
Unpaid/Family Labour	\$0.065	\$0.055	\$0.000	\$0.177
Paid Management	\$0.003	\$0.000	\$0.000	\$0.043
Unpaid/Family Management	\$0.053	\$0.054	\$0.000	\$0.120
Labour & Management Costs	\$0.143	\$0.129	\$0.056	\$0.266
Operating Costs (including Labour, excluding Management)	\$1.101	\$1.103	\$0.934	\$1.359
C) Capital Costs				
Depreciation	\$0.063	\$0.060	\$0.039	\$0.138
Depreciation - Barns & Associated Equipment	\$0.058	\$0.053	\$0.037	\$0.137
Depreciation - Other Buildings	\$0.004	\$0.005	\$0.000	\$0.017
Depreciation - Vehicles, Machinery & Equipment	\$0.002	\$0.001	\$0.000	\$0.010
Investment Cost	\$0.056	\$0.041	\$0.027	\$0.143
Investment Cost - Land	\$0.001	\$0.001	\$0.001	\$0.003
Investment Cost - Barns & Associated Equipment	\$0.051	\$0.040	\$0.019	\$0.139
Investment Cost - Other Buildings	\$0.003	\$0.004	\$0.000	\$0.012
Investment Cost - Vehicles, Machinery & Equipment	\$0.001	\$0.000	\$0.000	\$0.005
Operating Interest	\$0.023	\$0.024	\$0.019	\$0.030
Taxes	\$0.000	\$0.000	\$0.000	\$0.002
Capital Costs	\$0.143	\$0.134	\$0.099	\$0.309
TOTAL COST OF PRODUCTION	\$1.300	\$1.349	\$1.035	\$1.591
CONTRIBUTION MARGIN (Return to Capital & Management)	\$0.692	\$0.650	\$0.450	\$0.905
PROFIT / LOSS	\$0.493	\$0.477	\$0.231	\$0.805

Appendix B: Estimated Economic Impact

Economic Impact of Pork Production (Direct, Indirect & Induced), by County

	Total Output Impact (Direct & Indirect)	Total Output Impact (Direct, Indirect & Induced)
Lower Athabasca		
Bonnyville No. 87	\$484,826	\$524,714
Lac La Biche County	\$6,762	\$7,319
Lower Peace		
Mackenzie No. 23	\$1,816,499	\$1,965,949
Northern Lights No. 22	\$374,070	\$404,846
North Saskatchewan		
Beaver County	\$51,292,529	\$55,512,557
Brazeau County	\$190,511	\$206,185
Camrose County No. 22	\$3,587,989	\$3,883,187
Clearwater County	\$29,279,668	\$31,688,615
Lamont County	\$9,731,525	\$10,532,174
Leduc County	\$24,278,352	\$26,275,822
Minburn County No. 27	\$16,766,041	\$18,145,446
St. Paul County No. 19	\$354,949	\$384,152
Sturgeon County	\$20,286,882	\$21,955,959
Vermilion River County No. 24	\$4,542,408	\$4,916,129
Wainwright No. 61	\$73,142,439	\$79,160,141
Wetaskiwin County No. 10	\$1,656,430	\$1,792,710
Red Deer		
Kneehill County	\$64,077,043	\$69,348,901
Lacombe County	\$145,293,918	\$157,247,792
Paintearth County No. 18	\$32,838,210	\$35,539,933
Ponoka County	\$73,931,441	\$80,014,057
Red Deer County	\$122,515,813	\$132,595,647
Starland County	\$46,050,561	\$49,839,312
Stettler County No. 6	\$59,717,675	\$64,630,871

	Total Output Impact (Direct & Indirect)	Total Output Impact (Direct, Indirect & Induced)
South Saskatchewan		
Cardston County	\$79,656,749	\$86,210,408
Cypress County	\$3,380,456	\$3,658,579
Forty Mile County No. 8	\$7,234,041	\$7,829,213
Lethbridge County	\$82,384,454	\$89,162,531
Newell County No. 4	\$34,193,121	\$37,006,317
Pincher Creek No. 9	\$36,659,401	\$39,675,507
Rocky View No. 44	\$12,688,020	\$13,731,911
Taber	\$101,330,687	\$109,667,541
Vulcan County	\$85,672,183	\$92,720,754
Warner County No. 5	\$140,209,033	\$151,744,554
Wheatland County	\$38,171,789	\$41,312,325
Willow Creek No. 26	\$44,617,588	\$48,288,444
Upper Athabasca		
Barrhead County No. 11	\$44,919,218	\$48,614,890
Big Lakes	\$3,179,962	\$3,441,589
Lac Ste. Anne County	\$4,703,077	\$5,090,017
Westlock County	\$56,829,745	\$61,505,341
Woodlands County	\$3,726,967	\$4,033,599
Yellowhead County	\$384,896	\$416,563
Upper Peace		
Birch Hills County	\$26,213,392	\$28,370,065
Clear Hills No. 21	\$766,463	\$829,523
Grande Prairie County No. 1	\$12,208,696	\$13,213,151
Greenview No. 16	\$539,490	\$583,875
Saddle Hills County	\$147,838	\$160,001
TOTAL -- Alberta	\$1,602,033,808	\$1,733,839,117