



Final Report

# **COMPETITIVENESS OF THE CANADIAN CATTLE FEEDING SECTOR: REGULATORY AND POLICY ISSUES, COSTS AND OPPORTUNITIES**

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Prepared for  
**National Cattle Feeders' Association**

Submitted by  
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## Executive Summary

The National Cattle Feeders' Association (NCFA) Strategic Plan is built upon three pillars: Growth and Sustainability; Competitiveness; and, Industry Leadership. The strategic objective of the Competitiveness pillar is to “Ensure regulators and policy makers understand the business realities and priorities of the cattle feeder business, within the context of the value chain.”

An identified initiative to achieve this objective is to “build an inventory and complete an economic analysis of the most problematic and costly federal and provincial regulations and industry practices in order to focus NCFA advocacy efforts on the challenges that have the greatest impact on the day-to-day competitiveness of Canadian feedlot operations.”

In support of the initiative, the NCFA engaged the services of *Noblepath Strategic Consulting Inc.* to conduct a series of focus groups to identify and prioritize regulations and/or practices impeding the competitiveness of the feedlot sector, and analyze the economic impact of the most significant impediments. *RIAS Inc.* partnered with *Noblepath* on the economic analysis portion of the project.

## Methodology

- **Issue Identification:** Six Focus Groups were convened – one per member province of the NCFA. A total of 50 feedlot cattle value chain representatives participated in the Focus Group sessions and were led through a structured process to: validate the feedlot value chain model; identify and rank regulations, policies and practices that negatively impact competitiveness (from the perspective of day-to-day operations); and, describe the nature of the impact of the identified issues. Through the Focus Group process 14 issues were identified. The NCFA staff and Board then selected the following **six priority issues that were subject to further examination and economic analysis:**
  - **Traceability**
  - **Export Impediments**
  - **Drug Harmonization**
  - **Inspection Practices**
  - **Transportation Regulations**
  - **Labour Availability**
- **Cost Assessment:** A cost assessment process by *RIAS Inc.* was undertaken for the above six priority issues. As a follow-up to the initial impact descriptions provided by the Focus Group participants, *RIAS Inc.* conducted a series of interviews with selected experts in the value chain to solicit a range of estimates for key variables used in the analysis. Using Statistics Canada data, other statistical information sources, appropriate input-output multipliers, and application of cost models; estimates were developed of direct costs, indirect costs, and overall measures.
- **Opportunity Options:** During each Focus Group session, participants provided suggestions for opportunities to address the identified issues, which were reviewed and supplemented by the NCFA Board.

## Priority Issues

### Traceability:

*Issue:* In 2015 the CFIA completed a second round of consultations on amendments to the *Health of Animals Regulations* including issues related to traceability. While supporting a number of the CFIA proposals, three specific areas of concern were identified, all related to Movement Reporting:

- Reporting at the time when the animals are received;
- Proposed two-year time frame for full individual animal movement reporting at intermediate sites; and
- Various proposals to change and streamline the process by which export data are recorded and reported, particularly as relates to proposed changes to the scope and validity period of animal health export certificates.

*Cost:* The estimated total direct, indirect, and induced economic effects would be \$84 million in GDP, \$55.9 million in labour income, and 905 FTE jobs.

*Opportunities:* Options identified include:

- Not requiring more than premises identification;
- Implementation of a cost-effective mechanism to identify/record cattle that remain in Canada rather than shortening the validity period of export certificates;
- Research on better tag retention and technology; and
- Providing regulators with better exposure to the value chain.

### Export Impediments:

*Issue:* A range of export impediments were raised including: CAN brand requirements, border unloading requirements, border backlogs, age verification, and requirements for wet signatures on export certificates.

*Cost:* The total direct, indirect and induced economic impacts would be \$6.5 million in GDP, \$4.4 million in labour income and 71 FTE jobs.

*Opportunities:* Options identified include:

- Negotiate with the US for a change in branding and unloading requirements for export feeder cattle;
- Negotiate with the US for a lifting of the age verification requirement for export cull cattle; and
- Encourage priority development and implementation of e-certification for cattle exports to the US.

## **Drug Harmonization:**

*Issue:* Historically Canada and the US have maintained independent review and approval systems for veterinary drug submissions. This has resulted in some differences in approvals, withdrawal times, and/or dosages. Given the extensive trade in meat, there is no human or animal health rationale for Canada and the US to have varying regulations related to withdrawal times, dosage, or approved medications.

*Cost:* In total, these issues add an estimated \$89.9 million in costs for Canada's beef production industry. The impact is \$101.8 million of GDP, \$67.3 million in labour income and 1,127 jobs.

*Opportunities:* Options identified include:

- Encourage drug companies to make simultaneous submissions to the Canadian and US regulatory authorities;
- Support initiatives under the Regulatory Cooperation Council; and
- Raise this issue in the political domain, as necessary.

## **Inspection Practices:**

*Issue:* Inconsistent application of regulations and inspection methods are a costly and frustrating scenario for cattle feeders. By way of example, inconsistent application of regulations can result in cattle being held longer at the border, which is costly and impacts upon animal welfare. Other examples provided related to on-farm feed inspections and export certification/inspection issues.

*Cost:* With regards to issues at the Canada/US border, at an average cost of \$5,050 per delay (due to inconsistency) and assuming 0.5% of shipments are delayed, the estimated cost of inspection errors is about \$178,000 per year, resulting in a loss of \$218,000 in GDP, \$145,000 in lost income, and 2 FTE jobs.

*Opportunities:* Options identified include:

- Enhance training and technology for CFIA inspectors;
- CFIA implement a more structured recourse mechanism; and
- Development of joint industry/government guidelines for interpretation of regulations for which there is the most variance in application.

## **Transportation Regulations:**

*Issue:* CFIA has been consulting on the *Health of Animals Regulations* as relates to the transportation of animals. The most recent proposal would see required time for breaks for cattle to be reduced from the current 52 hours to 36 hours. These changes, along with required drivers' breaks by Transport Canada, and the potential requirement for electronic on-board recorders, will create an unworkable scenario for some parts of the country. Whenever an animal needs to be offloaded, bruising or injury may occur, reducing meat quality.

*Cost:* Total economic impacts of these transportation barriers are estimated to be \$4.1 million in reduced GDP, \$2.5 million in labour income and 59 fewer jobs.

*Opportunities:* Options identified include:

- Encourage the federal government to develop a transportation policy that takes into account animal welfare and Canadian geographic realities;
- Activate provincial decision-makers in impacted provinces to advocate with their federal counterparts; and
- Flexibility or exemption for livestock transporters from strict application of electronic on-board recorders to ensure animal welfare is not compromised.

### **Labour Availability:**

*Issue:* Labour challenges for feedlot operators are acute in some parts of the country and changes by the federal government to the Temporary Foreign Worker Program (TFWP) have made the scenario even more challenging. These labour shortages are felt by feedlot operations but even more so by the livestock-processing sector.

*Cost:* Ongoing research by the Canadian Agricultural Human Resource Council and the Conference Board of Canada indicates that current labour shortages in beef production are 8.7%. Applying this 8.7% rate to the feeders/feedlot sector, this suggests that over 2,500 jobs in the sector remain vacant. If cattle feeders and feedlot operators were able to fill these vacancies, it is estimated that output in the sector could increase by \$268 million. There are currently 1,000 vacancies in Canadian meat packing plants; this results in 4,200- 7,000 fewer jobs in the economy. Wages from these 1,000 vacancies mean another \$98 million is not being created in the economy.

*Opportunities:* Options identified include:

- Advocate with the federal government for an agriculture-focused TFWP that considers packers part of the agriculture value chain and thus privy to the agriculture exemptions;
- Advocate with federal politicians and bureaucrats for uptake and corresponding funding by the federal government of the *Workforce Action Plan for Agriculture and Agri-Food*;
- Promote ongoing partnerships and aligned messaging from all those linked to the livestock value chain; and
- Create political pressure at the provincial level to advocate their federal counterparts for immediate change.

## Conclusion

Cattle feeders comprise the most valuable part of beef production in Canada, generating a total of \$9.86 billion in sales, \$4.1 billion in GDP including \$2.69 billion in labour income (wages) and 82,687 full-time jobs in the Canadian economy.

There are opportunities to generate even greater benefits to Canadians. Through an inclusive approach, the NCFA has successfully built a prioritized inventory of the most problematic and costly regulatory and policy issues affecting the competitiveness of cattle feeders. **The table below ranks the six issues examined in this report, and summarizes the potential gains that could be achieved.**

Issue	Potential Gains for the Feedlot Sector	Total Potential Gains to the Canadian Economy		
	Revenues (\$000)	GDP (\$000)	Labour Income (\$000)	Jobs (FTEs)
Labour Availability	\$268,134	\$328,474	\$218,681	3,539
Drug Harmonization				
Harmonization	\$85,356	\$101,789	\$67,302	1,127
Lack of Access	\$62,282	\$76,297	\$50,795	822
Traceability	\$68,546	\$83,969	\$55,902	905
Export Impediments	\$5,343	\$6,538	\$4,351	71
Transportation Regulations	\$4,500	\$4,127	\$2,516	59
Inspection Practices	\$178	\$218	\$145	2.3



# I Introduction

## A. Context

Established in 2007, the National Cattle Feeders' Association (NCFA) represents Canadian cattle feeders on national issues and works in collaboration with other cattle organizations and government to strengthen and improve the cattle feeding industry. The NCFA is the one organization in Canada through which cattle feeders can speak with a unified voice. Cattle feeders are a critical lynchpin in the beef value chain. (see *Annex 1 – 'Background on Beef Value Chain'*)

The NCFA Strategic Plan is built upon three pillars: Growth and Sustainability; Competitiveness; and, Industry Leadership (see *Annex 2 'Pillars of Success'*). The strategic objective of the Competitiveness pillar is to “Ensure regulators and policy makers understand the business realities and priorities of the cattle feeder business, within the context of the value chain.”

A key initiative to achieve this objective is to “build an inventory and complete an economic analysis of the most problematic and costly federal and provincial regulations and industry practices in order to focus NCFA advocacy efforts on the challenges that have the greatest impact on the day-to-day competitiveness of Canadian feedlot operations.”

In support of the initiative, the NCFA engaged the services of *Noblepath Strategic Consulting Inc.* to conduct a series of focus groups to identify and prioritize regulations and/or practices impeding the competitiveness of the feedlot sector, and analyze the economic impact of the most significant impediments. *RIAS Inc.* partnered with *Noblepath* on the economic analysis portion of the project.

This report provides an important evidence-based document that will enhance the dialogue of the NCFA with government regulators and policy makers as well as political decision makers.

## B. Objective

“Build an inventory of the most problematic and costly federal and provincial regulations and industry practices in order to focus NCFA efforts on beneficial reforms and changes.” (NCFA Strategic Plan)

## C. Methodology

### Issue Identification

*Approach:* To achieve this objective, six Focus Groups were convened – one per member province of NCFA (five half-day workshops and one teleconference).

*Participants:* Provincial staff or NCFA Board members invited a small but strategic group of individuals who each play an important part in the value chain of the beef sector. In most sessions, the following representatives were present:

- Provincial staff member;
- Provincial NCFA Board member;
- Two to three cattle feeders from the host province;

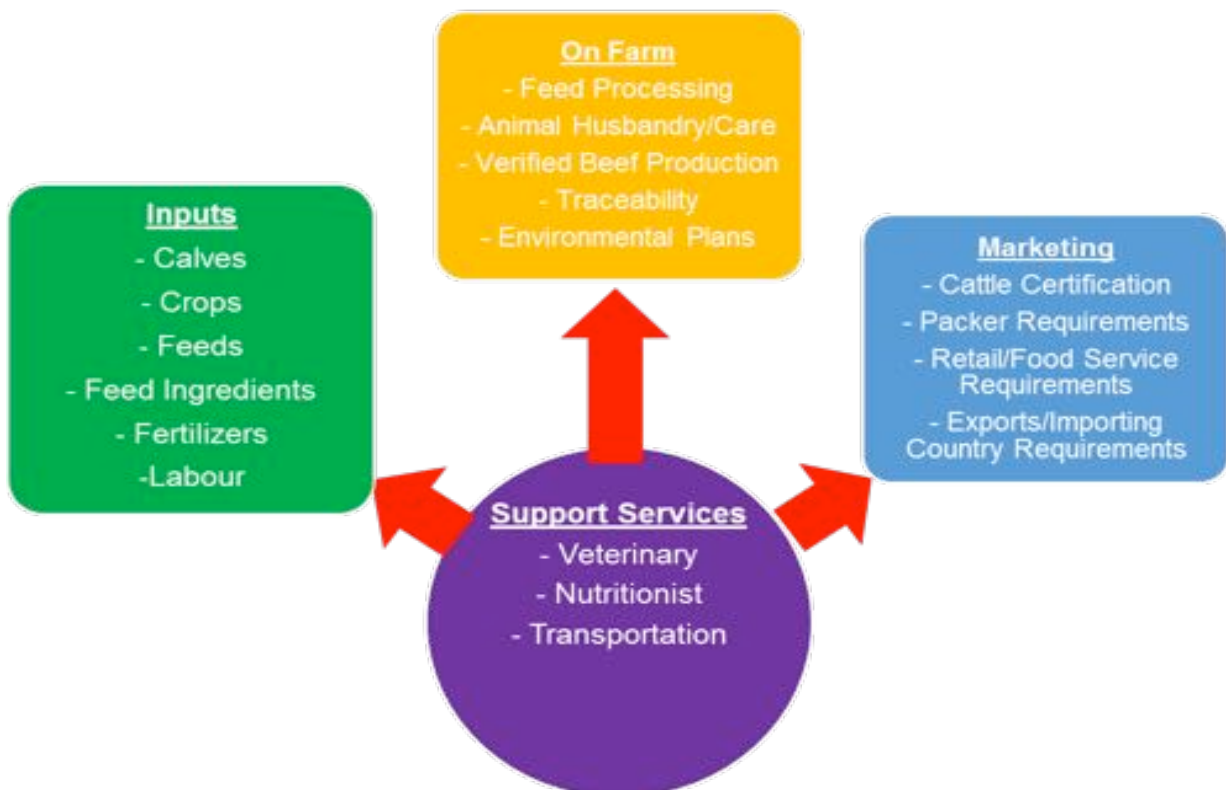
- One to two cow-calf ranchers; and
- One to two service industry representatives (veterinarians, feed mill operators, truckers).

A total of 50 value chain representatives participated at the Focus Groups (see Annex 3 for complete list of participants per province):

- Alberta – 10
- British Columbia – 6
- Saskatchewan – 7
- Manitoba – 12
- Quebec – 10
- Ontario – 5

*Focus Group Approach:* Guided by the Feedlot Cattle Value Chain diagram below, the following questions were asked:

1. Are there elements missing in the Value Chain model?;
2. For each element in the Value Chain, what regulations, policies and/or practices (government and industry) are you expected to comply with that are causing problems for you?;
3. For the items identified in Question 2, what challenges or issues have you experienced that have negatively impacted your competitiveness? Please provide examples.;
4. Please notionally rank the impact of each of the identified regulations/policies/practices;
5. For each of the high impact items, please provide details as to the scope of the problems; and
6. For each of the problematic areas identified in Question 5, please describe the nature of the impacts – Financial? Time? Relevance? Other?



While introducing the process, the *Noblepath* facilitator encouraged participants to be as specific as possible in order to have the detail required for a fulsome economic analysis.

Participants were also encouraged to describe the issue from the perspective of their day-to-day operations.

The workshops were conducted in an informal manner to encourage a free flow of conversation. *Noblepath* captured key issues on flip charts and participants prioritized them. The complete list of issues and identified priority issues are listed in *Annex 4 and Annex 5*.

## **D. Priority Issues**

As described above, the focus group sessions resulted in the identification of 14 issues that are having an impact on the competitiveness of the cattle-feeding sector. The NCFA staff and Board then selected six priority issues from the 14 identified issues that were subject to further examination and economic analysis within this report. The six priority areas relate to:

1. Traceability;
2. Export Impediments;
3. Drug Harmonization;
4. Inspection Practices;
5. Transportation Regulations; and
6. Labour Availability.

This report concentrates on these six priority areas. In *Annex 6* you will find a summary of the input received on the other eight issues raised in the focus groups.

For each of the six priority areas this report provides:

- A description of the issue;
- An analysis of the economic impact of the issue; and
- An identification of opportunities to address the issue.

## **E. Economic Assessment Methodology**

To estimate the potential impacts on cattle feeders' revenues and the overall economy of addressing the six priority issues, *RIAS Inc.* conducted a series of interviews with selected experts in the value chain to solicit a range of estimates for key variables used in our analysis. Minimum, most likely and maximum values were assigned to key variables based on this expert input, which enabled us to verify that our impact estimates are reasonable using Monte-Carlo analysis.<sup>1</sup>

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<sup>1</sup> Monte Carlo analysis is a computer-based technique of analysis that accepts information about important input variables in the form of ranges of values and distributions of possible variables that are subject to uncertainty. The results of the analysis are expressed in terms of the expected outcome and the probabilities of key outcomes occurring.

## Estimating Direct Costs – Standard Cost Model Analysis

Direct costs to comply with government regulations, policies and processes are those costs that can be traced directly to tangible activities carried out by a business to meet the requirements of a government regulation, policy or process. Such costs decrease GDP in an industry sector by increasing expenses (both labour and capital) to achieve a given level of output (revenues).

*RIAS Inc.*'s analysis of direct compliance costs is based on a Standard Cost Model (SCM) approach.<sup>2</sup> SCM-based approaches have been incorporated into Regulatory Impact Analysis (RIA) requirements in Canada by the federal government, the Government of Alberta, and the Government of Ontario. In its simplest form, SCM involves estimating regulatory costs for a typical stakeholder, then scaling the costs to the entire stakeholder population according to the following formula:

$$\text{Cost} = \underbrace{\text{quantity} \times \text{price} \times \text{frequency}}_{\text{Cost per stakeholder}} \times \underbrace{\text{stakeholders}}_{\text{Population of affected stakeholders}}$$

Where:

- **Quantity** = Units or time required for a specific information obligation or regulatory compliance activity (for example 10 hours of admin staff time);
- **Price** = The price per unit or hourly wage rate applied to the quantity;
- **Frequency** = The number of times per year that the activity would be undertaken; and
- **Stakeholders** = The population of stakeholders impacted by the regulatory requirements, which can vary by regulation/policy, and by requirement (e.g. # of facilities affected, # of cattle affected, etc.).

## Estimating Indirect Costs

Indirect costs to business can also arise when, in response to a government regulation, policy or process, businesses are forced to alter their behaviour in a manner that is less efficient, resulting in lower revenue. Indirect costs include opportunity costs, such as the lost production or sales that result when businesses divert resources away from business activities and towards compliance activities.

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<sup>2</sup> Governments worldwide have adopted SCM as a best practice for assessing administrative and compliance burden of regulations. The Organization for Economic Cooperation and Development (OECD) has endorsed SCM as an effective approach to assessing administrative costs, provides access to the *International Standard Cost Model Manual* at <http://www.oecd.org/regreform/regulatory-policy/34227698.pdf>.

## Overall measures

Quantitative estimates of the economic impact for each of the priority issues reflect the impacts on revenues for cattle feeders, as well as the resulting direct, indirect and induced effects on the Canadian economy in terms of GDP, labour income, and jobs. The estimates provided in this report are based on the input-output multipliers for livestock production in Canada developed by Kulshreshtha et al (2012) for the Canadian Cattlemen's Association.

## Key Parameters Used in the Analysis

A number of key parameters for the cattle industry were used in our analysis, as outlined in Tables 1 & 2.

**Table 1: Provincial Weighting of Total Beef Exports and Total Beef Production**

	Export weight	Production weight
Newfoundland	0.00%	0.02%
Prince Edward Island	0.00%	0.32%
Nova Scotia	0.04%	0.27%
New Brunswick	1.01%	0.17%
Quebec	7.97%	7.28%
Ontario	13.37%	13.96%
Manitoba	13.69%	6.47%
Saskatchewan	26.30%	12.50%
Alberta	33.35%	55.01%
British Columbia	4.26%	4.00%

**Table 2: Exports of Feeder and Fed Cattle**

	Exported Feeder Cattle	Exported Fed Cattle
Total head of cattle	274,061	687,918
# of loads	3,915	17,198
# of shipments	3,915	3,127
# of cattle per load	70	40
# of loads per shipment	1	5.5
Cattle slaughtered in Canada per year	3,190,133	

Sources: Statistics Canada CANSIM Tables 002-0044, 003-0032, 003-0083, Agriculture and Agri-food Canada *Red meat and livestock export reports 2013*, and estimates collected from experts.

Note: Export data are reported by the province of origin of the commodity. When the province of origin is unknown, the data reflect the province of entry into the United States.

Much of Canada’s slaughter and export data is available at the provincial level. Therefore, the direct impacts to feedlots or beef farms selling for slaughter or export was estimated at the provincial level, based on the weight of exports or production in each province. The direct impacts were then aggregated into Western Canada, Eastern Canada, and Alberta. Impacts were estimated at the national level when only national data was available and shared to the regions. Export-related issues were weighted based on the average number of cattle exported from each province per year. Other impacts were shared between provinces based on the 2012/2013 farm receipts from cattle farming in Canada from Statistics Canada. Note that some provinces show as 0% due to rounding.

The economic impacts use the multipliers developed by Kulshreshtha et al (2012). The Type II multipliers (total direct, indirect and induced multipliers) for Canada’s feedlot industry were sourced from the Kulshreshtha et al (2012) report tables 7.3, 8.3, and 9.3, as shown in Table 3 below.

**Table 3: Total Direct, Indirect and Induced Multipliers**

	<b>GDP</b>	<b>Labour Income</b>	<b>FTEs per Million \$</b>	<b>Source</b>
<b>Eastern Canada</b>	0.917	0.559	13.2	Table 8.3
<b>Western Canada</b>				
Alberta	1.057	0.729	7.9	Table 9.3
Manitoba, Saskatchewan, and British Columbia	1.312	0.888	11.2	Table 7.3
<b>Canada</b>	1.351	0.878	13.4	Table 6.3

Source: Kulshreshtha et al. (2012) Person Years per \$ million were converted to full-time equivalents assuming 2,000 hours per FTE job.

The underlying assumption of any IO model is that the cost savings would be used to expand production. The model conservatively assumes a 1 to 1 ratio of costs to output. That is, a \$1 cost savings would amount to a \$1 increase in production and a corresponding \$1 increase in input purchases.

## II Traceability

### Highlights

- CFIA completed 2<sup>nd</sup> round of consultations on amendments to *Health of Animals Regulations* including issues related to traceability.
- NCFA has specific areas of concern with the regulations – all related to movement reporting.
- For example, in total, the added costs of a shorter certification validity period (as proposed in regulations) would result in an additional \$68.5 million in costs to exporters. The total direct, indirect, and induced economic effects would be \$84 million in GDP, \$55.9 million in labour income and 905 FTE jobs.
- NCFA also has challenges with the existing regulations.

### A. The Issue

*Prioritized in Focus Groups by: All member provinces.*

**Relevant Regulations or Policy:** On May 13, 2015, the CFIA released a proposal to amend Part XV of the federal *Health of Animals Regulations* to address gaps and other miscellaneous issues related to traceability. This was the second round of consultation on the proposal. The regulatory amendment proposals were intended to address:

- Livestock Species that Share Diseases;
- The Time Period to Report;
- Geographical Precision;
- Movement of Livestock; and
- Miscellaneous Items.

**Current Status of Issue:** On July 6, 2015, the NCFA provided comprehensive input to the consultation. While supporting a number of proposals, three specific areas of concern were identified, all related to Movement Reporting:

- Reporting at the time when animals are received does not add value to traceability;
- Proposed two-year time frame for full individual animal movement reporting at intermediate sites would entail significant costs to industry, and is not feasible given current technology; and
- Proposals to change and streamline the process by which livestock export data are recorded and reported are highly problematic, particularly as relates to:
  - Animal health certificates only issued for those animals being exported;
  - Animal health certificates to be issued for each lot of animals as part of an individual shipment with a single destination; and
  - Animal health certificates to be valid for a period of 24 hours.

**Challenges with existing regulations:** During the focus group discussions, concerns identified included:

- Problems with tag retention that could be solved with better technology. As well, the existing technology, i.e. RFID readers, is often not used appropriately;
- When animals are moved from premises several times the ownership is unclear and tag replacement is not the answer;
- There is a risk to representing the existing system as effective to trading partners and public stakeholders, given the gaps in technology and compliance; and
- In Quebec there is concern with the cost of identifying calves brought into the province with the Agri-traceability tags (\$0.80 per tag).

### **Concerns regarding the proposed new regulations:**

This is the second round of consultation for proposed regulations on traceability designed to close the gaps in the existing system. Focus group participants who had been consulted previously considered the proposed regulations from this round to not reflect what had been agreed upon in the first round. Concern was expressed that the current proposal extends beyond “traceability” and crosses into “export” requirements by including reference to a time standard for the validity of export certificates. Participants were also of the view that there was insufficient communication of this round and that the proposals, as presented, were not clear.

Questions asked by focus group participants were:

1. Do veterinary clinics need to report the receipt and shipment of individual animals; and
2. Does the information about individual animals sent for grazing on another, non-contiguous pasture need to be recorded? Further to that, does land leased for grazing need to have premises identification?

Apart from the questions raised above, specific regulatory proposals that will have an impact on the cattle sector and are considered to be economic barriers are:

1. The proposal that the validity of export certificates be reduced from 30 days to 24 hours was seen to have the most serious potential regulatory impact. There are a number of events that can occur within the last 24 hours prior to shipment that change the number of animals on an export certificate, or other pertinent information. As well, it may not be possible to receive the required CFIA signatures within the 24-hour period;
2. An increased tracking need for live animals and carcasses in packing plants was raised as another concern. This will impact costs at all levels of the value chain. Some of the proposed requirements for that sector are:
  - Animals without tags are to be treated as ‘suspect’ and undergo enhanced inspection;
  - All electronic and non-electronic tags need to be recorded; and
  - Identification of animal’s ante-mortem, not just on the rail as at present;
3. Concern about the ambiguity of reporting from departure sites was raised. While the present proposal puts the onus on the receiving site to report the information to the database, there was some indication that may change in the future and would be very costly. The Canadian Cattle Identification Agency “Cattle Implementation Plan” [http://www.canadaid.com/documents/CIP\\_Abridged\\_2014-07-09\\_EN.pdf](http://www.canadaid.com/documents/CIP_Abridged_2014-07-09_EN.pdf) recommends that the reporting of animal movement data include move-in information only, with the optional reporting of animal move-out data; and



4. The proposal exempts intermediate sites (auction markets, community pastures, assembly yards and buying stations) at present but clearly states that they will be involved in the regulations in the future. This would have a significant financial impact at all levels of the value chain.

## B. The Costs

### Focus Group Perspective:

There was discussion on the questionable need for an elaborate traceability system. Even with the existing system, it was speculated that there was minimum return on investment.

In Quebec, where an advanced traceability program is in place, the incremental cost for this program was considered a competitive disadvantage in relation to the rest of Canada and the US.

Examples of costs that could be incurred, as well as present costs, include:

- With respect to the proposal that there be a 24-hour period of validity for the export certificate, this could result in the refusal of entry of an export load at the border due to the expiration of the validity of the certificate. The costs vary according to shipment size, distance from border, stage of finishing, etc. Additional information can be obtained from exporters in each province;
- In general, every time there is a need to run an animal through a chute to read the tag, the cost is about \$4/head. This cost is incurred for tag replacement requirements that are being considered;
- The packing plant cost to identify live animals before the rail could be calculated based on the 4600 animals a day being put through the plant at present and the ensuing reduction in line speed that this requirement will produce;
- If requirements for reporting at departure are put in place, the cow-calf producer would be seriously impacted. Read-in and read-out is not workable; and
- Reading individually at the intermediate sites is being proposed and would cost all the value chain.

### Economic Impact Assessment:

CFIA's proposal to reduce the period of validity from 30 days to 24 hours for the export certificate could result in the refusal of entry of an export load at the border due to the expiration of the validity of the certificate. There would also be increased tracking needs for live animals and carcasses in packing plants that could impact costs at all levels of the value chain.

**Table 4: Traceability – Impact Measures**

Issue	Measure	Variables and calculation
<b>1a. Export certificate validity period</b>	Direct cost of refusal of entry	Average cost per shipment (by size of shipment) X % of shipments delayed X # of shipments/year
<b>1b. Increased tracking requirements</b>	Costs to read tags	\$cost/head X # of cattle tracked at each stage of value chain

## Assumptions

Reducing the certification period from 30 days to 24 hours would have significant impacts for producers. Experts estimated that over 90% of current certificates are more than 24 hours old for exported fed cattle. In total, 10 to 33% of exported shipments could be delayed under the new regime. Weather, truck breakdowns, CFIA availability or changes in the importers timing could all delay shipments and cause exporters to have to recertify their shipments.

The cost per shipment could vary from \$1000 per shipment for the direct cost to recertify and even over \$50 per head (\$10,000 for a shipment of slaughter cattle). A delayed or cancelled shipment creates shrink, feeding, handling, transportation and recertification costs.

Additionally, the cost to read a tag is about \$4. If the CFIA requires all farms, slaughterhouses, feedlots, etc. to read tags on exit, each animal headed for slaughter or export could be scanned an additional 3 to 5 times in its life before being sent for slaughter from a feedlot.

**Table 5: Assumptions for Traceability Analysis**

	Min	Most likely	Max
<b>Export Certificate Validity Period</b>			
Cost per shipment to recertify	\$800	\$1,000	\$10,000
% of shipments that must be recertified	10%	30%	33%
<b>Additional Tag Reading Costs on Exit</b>			
Cost to read tag		\$4	
Additional tag readings per year	3	4	5

## Results

In total, the added costs of a shorter certification validity period would result in an additional \$68.5 million in costs to exporters. The total direct, indirect, and induced economic effects would be \$84 million in GDP, \$55.9 million in labour income and 905 FTE jobs.

**Table 6: Traceability – Estimated Economic Impacts**

	Impact on Revenues	Total Direct, Indirect, and Induced Economic Impacts		
	(000)	GDP (000)	Labour Income (000)	FTE Jobs
<b>Eastern Canada</b>	\$15,099	\$13,846	\$8,440	199
<b>Western Canada</b>	\$53,447	\$70,123	\$47,461	706
Alberta	\$37,250	\$39,374	\$27,155	492
Manitoba, Saskatchewan, and British Columbia	\$16,197	\$30,749	\$20,306	214
<b>Canada</b>	\$68,546	\$83,969	\$55,902	905

## C. The Opportunities

It was agreed that enhancing traceability would be best achieved by focusing on the desired outcomes and examining how they can be achieved in the existing system (i.e. using manifests) and that traceability should not impede commerce. The following proposals were put forward:

- **Do not require more than the premises ID** as the other information regarding premises is already in the provincial database;
- If there is an issue related to animals remaining in Canada after the issuance of export certificates, there is a **need for a cost-effective mechanism to identify and record those animals that stay in Canada rather than shortening the validity period of export certificates;**
- **Research is required on better retention of tags and better technology in general;** and
- **Regulators need better exposure to the value chain** and to be educated on the impacts of their proposals.

The CFIA is continuing to review the regulatory approach to traceability. The NCFA continues to dialogue with the CFIA to ensure the cattle feeders' perspectives are recognized and considered in future regulatory and policy deliberations. The economic analysis within this report will strengthen the NCFA case to the CFIA and political decision makers on a workable traceability system.

## III Export Impediments

### Highlights

- A range of export impediments were raised including: CAN brand requirements, border unloading requirements, border backlogs, age verification and requirements for wet signatures.
- Many of these US requirements are imbedded in regulations, which can be a lengthy process to amend.
- The Regulatory Cooperation Council has proven to be a valuable venue to move some of these issues forward.
- The impact on revenues of cattle branding and wet signatures – if the wet signatures could not be faxed or emailed – is \$5.3 million per year. The total direct, indirect and induced economic impacts would be \$6.5 million in GDP, \$4.4 million in labour income and 71 FTE jobs.

### A. The Issue

*Prioritized in Focus Groups by: British Columbia and Saskatchewan.*

*Raised by Quebec and Alberta.*

**Relevant Regulations or Policy:** Chapter 5.2 of the Accredited Veterinarian's Manual describes inspection and certification requirements for the export of cattle and bison to the U.S., following the implementation of the Final Bovine spongiform encephalopathy (BSE) Rule by the USDA on November 19, 2007. <http://www.inspection.gc.ca/animals/terrestrial-animals/diseases/accredited-veterinarian-s-manual/chapter-5/eng/1345235704516/1345235803337?chap=2>

The manual outlines the health certification requirements for exports to the US related to:

- Both the slaughter and non-slaughter categories of animals;
- Age determination and Certification, including:
  - Visual inspection;
  - Birth record; and
  - Dentition;
- Additional certification requirements for non-slaughter cattle; and
- Specific certification requirement for slaughter cattle.

The manual further provides guidance regarding:

- Inspections at US Ports of Entry;
- The export of cattle with different export certificates in the same truck; and
- Cattle from different locations exported on the same export certificate.

**Current Status of Issue:** The CFIA has regular consultations with their counterparts in the USDA to discuss the respective country import requirements. Many of the US requirements are imbedded in regulations, which can be a lengthy process to amend.

For provinces where most of the calves/cattle are exported to the US (BC and SK) for feeding and/or slaughter, export requirements are a significant issue. A combination of US federal and state requirements result in the need to brand feeders with a large CAN brand. As well, they need to be unloaded at the border for inspection by the US federal veterinarian. Neither the brand nor the unloading is required for slaughter cattle.

A related issue is the availability of border crossings in various provinces. BC is particularly challenged by a busy border at Cranbrook, the Kingsgate crossing. Due to the number of fat cattle (about 80-90% BC fed cattle cross for slaughter) an appointment must be booked well in advance and trucks for crossing must be lined up by 7:30 in the morning of the crossing.

Another impediment is the need to verify the ages of cull cattle for slaughter in the US. Since dentition is not conclusive after the age of six years, it was considered important that there be greater credibility and attention assigned to age verification for export through the Age Verification Program. Areas of the country that are not shipping cull cows are not interested in that program. The rate of compliance is low throughout the country.

Concerns were raised regarding the need to have CFIA signatures on work that has been performed by the accredited veterinarian. In some areas, a trial e-certification initiative has implemented faxes instead of wet signatures. However, this remains more onerous than just using scans and emails. Participants suggested that the need to have the work of an accredited veterinarian verified by a CFIA veterinarian should be re-examined.

## **B. The Costs**

### **Focus Group Perspective:**

Branding the CAN brand probably adds about \$2-\$3 (BC estimate) and \$5 (SK estimate) per head plus real issue of public perception due to backlash against branding.

Cranbrook, the Kingsgate crossing, is closest for most ranchers in BC but very busy with fed cattle, so only about 8 loads a day of feeders can go over, only 4 days a week, limiting the number of feeders sent and calves raised in Canada.

In BC the other option, the Coutts border crossing, is further to travel, adding about \$10/head.

The price of calves in BC is harmonized with Washington therefore the cost of shipping should be the only difference if the regulatory burden is equalized.

**SCENARIO**

- Calves bought in Canada and branded in chute;
- Taken out of pen, weighed, put on truck, travel 7 hours;
- At border: unloaded and loaded – potential for bruising, shrinkage, safety concerns, animal welfare issues;
- Will have reduced quality of condition by the time they are unloaded at feedlot in US; and
- The costs of age verification depend on the class of cattle involved – there is loss of market for some animals. It was calculated at \$56 on finished cattle and around \$34+ for cows.

**Economic Impact Assessment:**

For provinces where most of the calves/cattle are exported to the US (BC and SK) for feeding and/or slaughter, export requirements are a significant barrier. A combination of US federal and state requirements results in the need to brand feeders with a large CAN brand. As well, they need to be unloaded at the border for inspection by the US federal veterinarian. Neither the brand nor the unloading is required for slaughter cattle. Availability of border crossings in various provinces is also an issue, as is the need to verify the ages of culled cattle for slaughter in the US, and the requirement for CFIA signatures on work that has been performed by the accredited veterinarian.

**Table 7: Export Barriers – Impact Measures**

<b>Issue</b>	<b>Measure</b>	<b>Variables and calculation</b>
<b>2a. CAN branding</b>	Cost of branding	# of cattle shipped per year X cost of branding/hd
<b>2b. Age verification</b>	Cost of age verification	Average number of finished steers and heifers per year X cost of age verification
<b>2c. Wet signatures by vets</b>	Cost savings of scans/emails vs wet signatures	(Time per wet signature – time for scan/email) X Hourly vet wage X # of signatures per shipment X # of shipments

**Assumptions**

Branding CAN on exported feeder cattle creates additional costs and lost income for producers. The direct cost of the branding is approximately \$5 per head, however a number of experts identified additional costs, such as damage to a choice part of the animal hide, risks from unloading and reloading cattle, and effects of feed conversion as result of animal pain and suffering. The cost per feeder cattle of branding ranges between \$5 and \$25 per exported feeder.

Wet signatures are required for each export shipment. Often a vet would have to make a significant trip to hand-deliver papers to a certified CFIA vet to get stamps and signatures. The time could be significant: with up to 2-5 hours of round trip travel, not including the cost of materials. With fax signatures, there is significant travel cost savings. Electronic signatures would likely not save much time spent preparing signatures, however, they may increase the readability of documents and result in fewer errors.

**Table 8: Assumptions for Export Barriers Analysis**

	Min	Most Likely	Max
<b>Costs of branding per head</b>	\$5	\$15	\$25
<b>Cost of wet signatures</b>			
Hours per wet signature without fax/electronic method	2	4	5
<b>Vet hourly wage</b>		\$43.75	

Costs of age verification could not be quantified at this time. While NCFA’s focus group sessions identified this as a cost issue, our interviews with experts did not yield any estimates of how often age verification procedures were performed. There also appears to be a large difference in cost between just tagging from birth and the dental check method. The latter is more expensive and not very accurate, according to experts we interviewed. Therefore, we were unable to develop a credible estimate of the impacts of age verification.

**Results**

The impact on revenues of cattle branding and wet signatures – if the wet signatures could not be faxed or emailed – is \$5.3 million per year. The total direct, indirect and induced economic impacts would be \$6.5 million in GDP, \$4.4 million in labour income and 71 FTE jobs.

**Table 9: Export Barriers – Estimated Economic Impacts**

	Impact on Revenues		Total Direct, Indirect, and Induced Economic Impacts	
	(000)	GDP (000)	Labour Income (000)	FTE Jobs
<b>Eastern Canada</b>	\$1,196	\$1,097	\$669	16
<b>Western Canada</b>	\$4,147	\$5,441	\$3,682	55
Alberta	\$1,782	\$1,884	\$1,299	24
Manitoba, Saskatchewan, and British Columbia	\$2,365	\$3,557	\$2,383	31
<b>Canada</b>	\$5,343	\$6,538	\$4,351	71

## **C. The Opportunities**

### **Branding and unloading requirements for feeder cattle to the US need to be changed through negotiation.**

- There is some indication that the US may be willing to talk about the CAN brand; and
- Better identification technology may allow the scanning of all animals without unloading, if that remains an issue.

### **Age requirement for cull cattle needs to be lifted through negotiation.**

- The difficulty of age verification over six years poses a risk to certification and causes a liability for accredited veterinarians. It is no longer necessary;
- Due to the limitations of age verification through dentition, there are a number of cows over six years of age, however under the required "born after" birth date of March 1999, that do not qualify for export certification and are sold at reduced prices to Canadian packers. In addition to the revenue impact on producers, cows in this category are using Canada's limited slaughter capacity ("hook space") that should be more appropriately used for finished steers and heifers; and
- In the absence of lifting the requirements, encourage complete traceability (tagging and documentation) on animals for export to demonstrate age.

### **Encourage priority development and implementation of E-certification**

- The e-certification pilot is using fax rather than more effective email;
- While it is an improvement, faxes become lost or unreadable;
- No reason it cannot be done as they are using e-manifests;
- Challenge may be encountered in remote areas where there is not coverage for internet; and
- Issue if the CFIA vet not in office – could add a day to the shipment.



## IV Drug Harmonization

### Highlights

- Given the extensive trade in meat, there is no human or animal health rationale for varying regulations between Canada and the US for withdrawal times, dosage or approval of medications.
- This situation creates a significant competitive disadvantage for Canadian cattle feeders.
- In total, these issues add an estimated \$89.9 million in costs for Canada's beef production industry. The impact is \$101.8 million of GDP, \$67.3 million in labour income and 1,127 jobs.
- The Regulatory Cooperation Council presents an important venue for change in this area.

### A. The Issue

*Prioritized by: Alberta and Saskatchewan. Raised by all member provinces.*

**Relevant Regulations or Policy:** The Veterinary Drugs Directorate, Health Canada, under the authority of the *Food and Drugs Act and Food and Drug Regulations*, oversees the approval, registration and use of veterinary drugs in Canada. The Centre for Veterinary Medicine, US Food and Drug Administration is responsible for the regulation of veterinary drugs in the US.

**Current Status of Issue:** Historically Canada and the US have maintained independent review and approval systems for veterinary drug submissions. This has resulted in some differences in approvals, withdrawal times, and/or dosages.

Participants highlighted the fact that, given the extensive trade in meat, there is no human or animal health rationale for Canada and the US to have varying regulations related to withdrawal times, dosage or approved medications.

Examples of differences in withdrawal times, which create logistical difficulties for exporters of fat cattle, are:

- Oxytetracycline needed for liver abscesses – seven to nine-day withdrawal time in Canada and zero in US; and
- MGA needed for suppression of heat – 24-hour withdrawal time in Canada and zero in US.

Another veterinary drug/medicated feed related issue is related to generic versus brand veterinary drugs. Generics, which are less expensive than brand names, are allowed to be used in feed only with script and so a single dosage is allowed. Brand name drugs can be used at a range of doses, which allows for multiple uses.

The US gets most drugs and medicated feed ingredients on the market earlier than in Canada and at a cheaper cost. Even emerging forms of multivitamins are not readily available in Canada. The approval regime appears to be about two years behind that in the US for both prescription and non-prescription drugs.

Examples of US medication advantages include:

- Zilmax, and implants like Draxin and Exceed were available earlier in the US;
- A feed additive to control ticks and biting flies is available in the US but not here;
- American producers can use products for purposes not allowed in Canada; and
- Vaccines are cheaper in the US.

Own Use Imports continue to be of value and the opportunity should not be denied to producers. Ivermectin would not have been made available at comparable prices in Canada without the pressure due to this import avenue.

On a related note, products to control plant pests are also slow to be approved here and are much more expensive e.g. leafy spurge.

## **B. The Costs**

### **Focus Group Perspective:**

Differing withdrawal time for MGA:

- Creates losses if heifers come into heat because MGA withdrawn then shipment delayed; and
- Injuries, shrinkage and devalued meat.

In Canada, producers need DIN # or prescription for pre-made mineral mixes. Mineral mixes are much cheaper in the US but producers have problems with dosage due to varying regulatory regimes.

For one year Draxin was available in US and not Canada and during that time it cost \$1.70 in Canada and \$1.00 in US, creating a significant competitive advantage.

Zilmax was not available in Canada for two years, creating approximately a \$20-30 advantage per head for US producers.

In general, with varying withdrawals, exporters have had scenarios of attempting to isolate animals and errors being discovered during which the whole pen was devalued, costing thousands of dollars.

It will be important to weigh the cost to animal health if long-term antibiotic use is eliminated entirely.

## Economic Impact Assessment:

Given the extensive trade in meat, there is no human or animal health rationale for Canada and the US to have varying regulations related to withdrawal times, dosage or approved medications. The US gets most drugs and medicated feed ingredients on the market earlier than in Canada and at a cheaper cost. Even emerging forms of multivitamins are not readily available in Canada. The approval regime appears to be about two years behind that in the US for both prescription and non-prescription drugs.

**Table 10: Drug Harmonization – Impact Measures**

Issue	Measure	Variables and calculation
<b>3a. Can-U.S. withdrawal time differences</b>	Cost of export delays	Avg delay time X Avg cost of delay per shipment X % of shipments delayed per year X Total number of shipments per year
<b>3b. Generic/brand dosage differences for in-feed use</b>	Cost of Rx's for single dose vs. range of dosages/uses	# of generic drug Rx's per head X Avg \$/hr for vet X Avg # of Rx's per head X # of cattle
<b>3c. Delayed access to vet drugs in Canada</b>	Examples of cost using Draxin and Zomax	Avg # of treatments required/ head X Can-US price difference X # of cattle

## Assumptions

Three issues were examined: the impact of longer withdrawal times for MGA and oxytetracycline; the difference in costs for mineral mixes between the U.S. and Canada; and the additional 10% to 20% cost of drugs and animal health care for feedlots in Canada.

Separately, we have also estimated the direct and economic impact of lack of competitive access to veterinary drugs in Canada, which puts Canadian cattle production at a disadvantage compared to the U.S.

**Table 11: Assumptions for Drug Harmonization Barriers Analysis**

	Min	Most Likely	Max
<b>Heifers % share of slaughtered cattle</b>		30%	
<b>Cost per heifer showing signs of heat</b>		\$200	
<b>% share of heifers showing signs of heat</b>	1%	2.50%	5%
<b>% of slaughter cattle on liver abscess drugs</b>		60	
<b>Cost per head</b>	\$3.00	\$4.00	\$5.00
<b>Average price premium of vet and drug costs in Canada</b>	10%	15%	20%
<b>Feedlot farm expenditures on all vet care and medicine per year</b>		\$177.5 million x 50%	
<b>Average cost per head for a drug not being available in Canada</b>	\$1	\$15	\$30

## Results

The cost of a 24-hour MGA withdrawal time is particularly high. Approximately 1% to 5% of heifers off of MGA for 24 hours will begin to show signs of heat, resulting in significantly reduced meat quality. Additionally, the long withdrawal time for oxytetracycline incentivizes many producers to use more expensive liver abscess drugs that cost more to avoid the lost marketing opportunities of a 7 to 9-day withdrawal time. With up to 60% of the herd on liver abscess drugs, the additional cost per head adds up. In addition, the costs of drug approvals in Canada as well as a relatively slow regulatory process leads to higher prices for mineral mixes – about \$2 per head – and animal health care costs for Canada’s beef farmers.

In total, these issues add an estimated \$89.9 million in costs for Canada’s beef production industry. The impact is \$101.8 million of GDP, \$67.3 million in labour income and 1,127 jobs.

**Table 12: Drug Harmonization Barriers – Estimated Economic Impacts**

	Impact on Revenues	Total Direct, Indirect, and Induced Economic Impacts		
	(000)	GDP (000)	Labour Income (000)	FTE Jobs
<b>Eastern Canada</b>	\$25,817	\$23,674	\$14,432	341
<b>Western Canada</b>	\$59,539	\$78,115	\$52,870	786
Alberta	\$31,763	\$33,573	\$23,155	419
Manitoba, Saskatchewan, and British Columbia	\$27,776	\$44,541	\$29,715	367
<b>Canada</b>	\$85,356	\$101,789	\$67,302	1,127

Additionally, based on input from veterinarians working with the feedlot industry, lack of competitive access to veterinary drugs creates a cost disadvantage for Canada’s industry of about \$15 per head. It is estimated that these additional costs result in over \$62 million per year in reduced output, \$76.3 million in GDP, \$50.8 million in labour income and 822 fewer jobs.

**Table 13: Access to Veterinary Drugs Barriers – Estimated Economic Impacts**

	Impact on Revenues	Total Direct, Indirect, and Induced Economic Impacts		
	(000)	GDP (000)	Labour Income (000)	FTE Jobs
<b>Eastern Canada</b>	\$13,712	\$12,574	\$7,665	181
<b>Western Canada</b>	\$48,570	\$63,723	\$43,130	641
Alberta	\$34,262	\$36,214	\$24,977	452
Manitoba, Saskatchewan, and British Columbia	\$14,308	\$27,509	\$18,153	189
<b>Canada</b>	\$62,282	\$76,297	\$50,795	822

## **C. The Opportunities**

- **Encourage drug companies to make simultaneous submissions** (Canada/US);
- **Support initiatives under the Regulatory Cooperation Council** for regulators (Health Canada for veterinary drugs and pest control products, CFIA for biologics) to harmonize approval processes with the US; and
- **Raise this in political domain** to garner political pressure to address these barriers in a timely manner.

## V Inspection Practices

### Highlights

- Inconsistent application of regulations and inspection methods are a costly and frustrating scenario for cattle feeders.
- For example, inconsistent application of regulations by the CFIA results in cattle being held longer at the border, which is costly and impacts animal welfare. Other examples provided related to on-farm feed inspections and export certification/inspection issues.
- At an average cost of \$5,050 per delay (due to inspection inconsistency) and assuming 0.5% of shipments are delayed, the estimated cost of errors is about \$178,000 per year, resulting in a loss of \$218,000 in GDP, \$145,000 in lost income, and 2 FTE jobs.

### A. The Issue

*Prioritized by: Manitoba and Ontario. Raised by British Columbia and Saskatchewan.*

Frustrations were expressed in the focus groups with the inconsistency of enforcement and interpretation of regulations/practices by CFIA employees. Some examples provided related to on-farm feed inspections and export certification/inspection issues.

### B. The Costs

#### Focus Group Perspective:

In Ontario there is frustration with inconsistency of inspection related to Table 4 of the Feeds Regulations. Producers in some areas are not allowed to administer the necessary amount of medication.

In an export example, inconsistent application of regulations by the CFIA resulted in cattle being held longer at the border, which is costly and impacts animal welfare. In a particular case two loads of cattle went from same farm but the drivers took the opposite paper work so CFIA held the loads up far longer than they needed to be.

#### Economic Impact Assessment:

Industry representatives identified inconsistency of enforcement and interpretation of regulations/practices by CFIA employees as a concern. Inconsistent application of regulations results in cattle being held longer at the border, which is costly and impacts animal welfare. Other examples provided related to on-farm feed inspections and export certification/inspection issues.

**Table 14: CFIA Practices – Impact Measures**

Issue	Measure	Variables and calculation
<b>4a. Delays at border</b>	Cost of delays	Avg length of delay X Cost/hour of delay X # of times delays take place per exporter X Number of exporters
<b>4b. Animal health/meat quality impacts</b>	Impacts on sales revenue	Avg. price reduction due to animal health/meat quality issues X # of cattle affected

### Assumptions

An estimated 0.5% to 1% of shipments of cattle are delayed or turned around because of inspection error or inconsistency. Delays could be as simple as having someone move new paperwork to the border, or could result in cattle needing to be returned to their point of origin. Possible costs vary substantially from \$100 per shipment to \$50 per head or about \$10,000 per shipment for a shipment of fed cattle.

**Table 15: Assumptions for Inconsistency of CFIA Practices**

	Min	Most Likely	Max
Cost per shipment	\$100	\$5,050	\$10,000
% of shipments delayed	0.50%	0.50%	1%

Experts that we interviewed were unable to provide estimates of animal health/meat quality impacts for this issue, so these potential impacts have not been estimated.

### Results

At an average cost of \$5,050 per delay and assuming 0.5% of shipments are delayed, the estimated cost of inspection errors is about \$178,000 per year, resulting in a loss of \$218,000 in GDP, \$145,000 in lost income, and 2 FTE jobs.

**Table 16: Inconsistency of CFIA Practices – Estimated Economic Impacts**

	Impact on Revenues (000)	Total Direct, Indirect, and Induced Economic Impacts		
		GDP (000)	Labour Income (000)	FTE Jobs
<b>Eastern Canada</b>	\$39	\$36	\$22	0.5
<b>Western Canada</b>	\$139	\$182	\$123	1.8
Alberta	\$98	\$103	\$71	1.3
Manitoba, Saskatchewan, and British Columbia	\$41	\$79	\$52	0.5
<b>Canada</b>	\$178	\$218	\$145	2.3

## C. The Opportunities

- **This appears to be primarily a training and technology issue.** As well, industry recognizes that many inspectors are not from rural areas and need to be exposed to agricultural practices and cattle husbandry. This requires a government policy that allows for government officials to commit time and resources to doing on-site educational experiences;
- **There needs to be a more structured recourse mechanism with CFIA** given the lack of familiarity with farming practices and lack of training. This mechanism would need to be nimble and responsive to have any real impact; and
- **Detailed guidelines for interpretations of regulations that experience the most variance in application would be of value.** These could be developed jointly with industry and government.



## VI Transportation Regulations

### Highlights

- CFIA has been consulting on the *Health of Animals Regulations* as it relates to transportation of animals. The most recent proposal would see required time for breaks for cattle to be reduced from the current 52 hours to 36 hours.
- These changes, along with required drivers' breaks by Transport Canada, and the potential requirement for electronic on-board recorders, will create an unworkable scenario for some parts of the country.
- Each time an animal needs to be offloaded, bruising or injury may occur, reducing meat quality. These costs have the potential to be very high just before slaughter.
- Total economic impacts of these transportation barriers are estimated to be \$4.1 million in reduced GDP, \$2.5 million in labour income and 59 fewer jobs.

### A. The Issue

*Prioritized by: Ontario and Quebec. Raised by all member provinces.*

**Relevant Regulations or Policy:** Since 2013, the CFIA has been consulting regarding proposed amendments to *Part XII Health of Animals Regulations* (Transportation of Animals). The most recent proposal would see the time frame for cattle to travel without food, water or rest would be 36 hours, a reduction from the current 52 hours. Transport Canada also has regulations regarding mandated driver breaks, which must be factored in to the time frames for animal transportation (below latitude 60 degrees, drivers are limited to 14 hours on duty in any 24-hour period. This 14 hours includes a maximum of 13 hours driving time. Rest periods are eight consecutive hours in a 24-hour period, as well as an additional two-hour period of rest that must be taken in blocks of no less than 30 minutes). The US Department of Transportation's Federal Motor Carrier Safety Administration will be implementing mandatory electronic on-board recorders (EOBR) in 2017. The Canadian Truckers Alliance is advocating for a universal Canada/US approach to level the playing field. Provincial governments have requirements for maximum load weights, which are not always consistent.

**Current Status of Issue:** It is understood that *Canada Gazette I* pre-publication of amendments to the *Health of Animals Regulations* (Transportation of Animals) is awaiting final approval. No time frame has been given.

The proposed new regulations that would reduce the time required for food, water and rest harmonize that period with the US. This reduced period was considered to be unworkable from some of the remote areas of the province to Ontario slaughter plants.

In Quebec, where most cattle are slaughtered outside the province, truck weight allowances in different states and provinces creates problems and inefficiencies as they need to load to the lowest common denominator. Quebec also cited concerns related to regulations regarding the transport of downer animals.

Transport Canada’s regulations regarding mandated driver breaks can be an issue for animal transporters. Electronic logbooks/EOBR will create an additional cost per vehicle, and may generate an automatic shutdown of the vehicle. There needs to be flexibility on the rules for maximum travel hours when trucks have a mechanical breakdown, there is adverse weather, etc. In addition, the lack of infrastructure (e.g. unloading/loading sites) to give suitable animal breaks means flexibility is required.

There was also concern expressed regarding the responsibility of transporters in traceability – they should not be responsible for ensuring that all animals have tags.

In a couple of provinces, it was pointed out that many transporters are about to retire and the next generation of drivers are not interested in taking on more work with animal transport.

**B. The Costs**

**Focus Group Perspective:**

The costs of animal transport are variable and relate to a number of factors.

Regulatory requirements for animal and driver breaks can significantly increase the time (thus cost) of transportation and impact the welfare of the animal and quality of the beef.

**Economic Impact Assessment:**

**Table 17: Transportation Regulations – Impact Measures**

Issue	Measure	Variables and calculation
<b>5a. Transportation delays</b>	Cost of transportation delays	Avg. length of delay X cost/hour of delay for transporter X # of times delays take place per shipment X number of shipments
<b>5b. Animal health/ meat quality impacts</b>	Impacts on sales revenue of delays	Additional shrinkage (proxy for animal health and meat quality impacts) X # of cattle affected

Transportation barriers appear to be of greatest issue for feeders/feedlot operators in Ontario and Quebec. Experts noted that most of Canada’s export feeder and slaughter cattle in the West are within a few hours of the border and can be delivered within Canada’ truck regulation guidelines. However, any sort of transportation delays has a direct effect on animal welfare and meat quality. The additional cost of shrinkage per head of a 1 hour compared to a 6 to 8-hour trip is about \$42/head, although shrinkage loss plateaus at about \$50/head for longer journeys. One expert estimated that a lack of infrastructure could cost about \$15/head for cattle that must travel long distances.

Another expert interviewed from Ontario indicated that about 300,000 cattle are transported east-west in Canada. Therefore, the upper bound cost to the industry is \$4.5 million (300,000 head x \$15/head for long distance travel) for a lack of infrastructure, although not all shipments would be affected.

Transportation regulations have the potential to impose high costs just before slaughter. One expert said that there have been cases where animals were kept on trucks that could not be operated because the truck driver had to automatically shut down after a certain period of time

at a packing plant. The expert stated that cattle can suffer bruising, injury and additional shrinkage because of these delays just before slaughter, which could reduce the value of meat by up to \$125 per head. However, we were unable to ascertain how frequently this happens.

**Results**

Using the estimated cost of additional shrinkage of \$15/hd, the total impact on revenues is \$4.5 million for feeders/feedlot operators in Ontario and Quebec. Since cattle reach a maximum level of shrink after about 12 hours, it is unlikely that differences in east-west shipping times (various points of origin in Ontario and Quebec to various destinations in the West) would affect the \$15/head cost due to shrinkage. Additional costs each time an animal needs to be offloaded, and the impact of reduced meat quality due to bruising or injury, have not been included.

**Table 18: Transportation Barriers – Estimated Economic Impacts**

	Impact on Revenues	Total Direct, Indirect, and Induced Economic Impacts		
	(000)	GDP (000)	Labour Income (000)	FTE Jobs
<b>Eastern Canada</b>	\$4,500	\$4,127	\$2,516	59
<b>Western Canada</b>	\$0	\$0	\$0	0
Alberta	\$0	\$0	\$0	0
Manitoba, Saskatchewan, and British Columbia	\$0	\$0	\$0	0
<b>Canada</b>	\$4,500	\$4,127	\$2,516	59

Total economic impacts are estimated to be \$4.1 million in reduced GDP, \$2.5 million in labour income and 59 fewer jobs.

**C. The Opportunities**

- Federal government needs to **develop a transportation policy that takes into account animal welfare and geographic realities**. This will require an educational effort to Transport Canada officials and a partnering and aligning of messages with the transport sector. Political influence also has potential impact on this issue;
- **Activate provincial decision-makers in affected provinces (Ontario and Quebec)** to advocate their federal counterparts for policies that are realistic in their approach to animal transportation; and
- **Livestock transporters may require flexibility or exemption from strict application of the EOBR to ensure animal welfare is not compromised**. This may require advocacy efforts with the federal government and/or the Canadian Truckers Alliance.

## VII Labour Availability

### Highlights

- Labour challenges for feedlot operators are acute in some parts of the country and changes by the federal government to the Temporary Foreign Worker Program (TFWP) have made the scenario even more challenging. These labour shortages are felt by feedlot operations but even more so by the livestock-processing sector.
- Ongoing research by the Canadian Agricultural Human Resource Council (CAHRC) and the Conference Board of Canada indicates that current labour shortages in beef production are 8.7%. Applying this 8.7% rate to the feeders/feedlot sector, this suggests that over 2,500 jobs in the sector remain vacant. If cattle feeders and feedlot operators were able to fill these vacancies, it is estimated that output in the sector could increase by \$268 million.
- There are currently 1,000 vacancies in Canadian meat packing plants; this results in 4,200- 7,000 fewer jobs in the economy. Wages from these 1,000 vacancies mean another \$98 million is not being created in the economy.

### A. The Issue

*Prioritized by: Alberta, Saskatchewan and Manitoba.*

**Relevant Regulations or Policy:** Temporary Foreign Worker Program, Permanent Residency Policy, Knowledge and Skills Training Programs and Policy,

**Current Status of Issue:** In 2014/15 the Conservative government overhauled the Temporary Foreign Worker Program (TFWP) that made it more difficult for employers to bring in foreign workers. NCFCA lobbied actively against these changes. NCFCA also successfully lobbied to ensure cattle feeders were included in the ‘agriculture exemption’ so that a number of the new rules under the TFWP did not apply to feedlot operators. However, the changes did apply to the livestock-processing sector and the impacts were severe on a sector that already faced labour shortages. NCFCA continues to work with the Canadian Meat Council and the Canadian Cattlemen’s Association to lobby for the return of an effective and efficient TFWP. Not only do cattle feeders continue to have labour shortages on their feedlots but also the acute labour challenges within the processing sector have a direct impact on the demand for product from feedlots and thus the growth potential and sustainability of cattle feeders.

During the election campaign, the current Liberal government made the commitment to ‘*fix the TFWP and return it to its original purpose – filling jobs when unqualified Canadian simply cannot be found*’. Although a Parliamentary Committee has committed to reviewing the program the ‘fix’ is not expected quickly.

NCFCA has also been an active partner in promoting the *Workforce Action Plan for Agriculture and Agri-Food*. Interest from government on this front has been limited to date.

A shortage of skilled manpower is more acute in some areas than others. In the western provinces, it was pointed out that labour is more readily available in eastern Canada. As well, labour in the US is cheaper than in Canada, creating a competitive advantage there.

One of the largest impacts of the labour shortage is on packers. Costs are passed back down through the production chain. The level of the skill required in the packing plant and the difficult environment makes it important that skilled foreign workers be available and retained. Canadian employees are generally less inclined to remain in a position with difficult conditions than foreign workers who are working toward landed immigrant status.

At the farm and ranch level, skilled labour is increasingly needed, as compliance with regulatory requirements is becoming more challenging. Examples are tagging calves and being required to record certain information for future traceability requirements, more scanning, more movement reporting, etc. A shortage of labour on the farm can lead to welfare issues, as animals may not be monitored appropriately. Labour shortages may also result in more antibiotic use, as sick/injured animals may not be detected early enough to prevent progression.

Participants repeatedly stated that limited labour is a barrier to business expansion.

It was stated that the foreign workers program is impeded by federal policy, not provincial policy. The average for procurement of an immigrant employee is 2.5 years.

**B. The Costs**

**Focus Group Perspective:**

- The program in Canada that allows permanent residence of foreign workers is not clear, is lengthy and too onerous;
- There is an investment of \$8-10 K before worker arrives;
- There is a risk that they may not come and/or may not be the right person for the job; and
- The costs of insufficient labour are loss of production, growth, time and potential for animal welfare concerns.

**Economic Impact Assessment:**

A shortage of skilled manpower is more acute in some areas than others. In the western provinces, it was pointed out that labour is more readily available in eastern Canada. As well, labour in the US is cheaper than in Canada, creating a competitive advantage there.

**Table 19: Labour Barriers – Impact Measures**

Issue	Measure	Variables and calculation
<b>6a. Shortage of labour for packers</b>	Impacts on revenue	Estimated % decrease in production due to skilled labour shortages X revenue for packers
<b>6b. Shortage of labour at farm level</b>	Impacts on animal welfare	Estimated impacts on price/quality of meat due to increased sickness (estimated as a cost/head)

Canada's agricultural workforce is facing significant labour market and human resource challenges.

At a national level, agriculture employs approximately 336,200 workers and has an estimated vacancy rate of 9% for non-seasonal positions and 20% for seasonal positions. According to an AAFC Strategic Issues Tracking Survey of agricultural producers, 9% of farmers in 2013 mentioned labour shortages as the single most important issue facing Canadian agriculture, up from 1% in 2011 (Environics, 2013).

The AAFC Strategic Issues Tracking Survey found that labour shortages were mentioned more by those in Atlantic Canada (19%) and Quebec (15%), than Ontario or the Prairies, and by larger operations (13% with sales of \$250,000 or more) and incorporated farms (13%). In addition, a 2009 study conducted by the Canadian Agricultural Human Resource Council estimates that vacancy rates in the agriculture industry are about 10% for small farms (197 vacant positions compared to a total reported 2009 workforce of 2,066 workers, including owner/operators) and were most acute in seasonal occupations, with 27% percent of the demand for seasonal workers on small farms unfilled (CAHRC, 2011).

On larger farms, vacancies were estimated at about 9% (or 25,000 job vacancies) for non-seasonal positions across the entire sector and 20% (16,560 vacant positions) for seasonal positions. The labour shortages are prevalent across all types of farm operations and positions, but were most acute in Atlantic Canada (17%) and British Columbia (15%).

A recent Farm Credit Canada (FCC) report lists agriculture labour as the top issue in its "Five key agriculture economic issues to watch in 2015."<sup>3</sup> According to the FCC, the number of workers needed to sustain farm operations grows between 1 to 1.5 per cent per year. To attract labour, farm wages increased an average of more than three per cent per year over the last decade. This exceeded wage increases in most other parts of the economy.

## **Impacts on Cattle Feeders**

For cattle feeders, skilled labour is increasingly needed, as compliance with regulatory requirements is becoming more challenging. Examples are tagging calves and being required to record certain information for future traceability requirements, more scanning, more movement reporting, etc.

Ongoing research by the CAHRC and the Conference Board of Canada indicates that current labour shortages in beef production are 8.7%. Applying this 8.7% rate to the feeders/feedlot sector, this suggests that over 2,500 jobs in the sector remain vacant. If cattle feeders and feedlot operators were able to fill these vacancies, it is estimated that output in the sector could increase by \$268 million.

Table 20 below shows the estimated economic impacts of labour shortages in the feeders/feedlot sector by region. It is estimated that \$59 million in revenues in the feedlot sector in Eastern Canada are lost due to labour shortages, \$209 million in Western Canada, and \$147 million in Alberta.

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<sup>3</sup> <https://www.fcc-fac.ca/en/about-fcc/media-newsroom/news-releases/2014/canadian-agriculture-in-strong-position-going-into-two-thousand-and-fifteen.html>

**Table 20: Labour Shortages in the Feeders/Feedlot Sector – Estimated Economic Impacts**

	Impact on Revenues	Total Direct, Indirect, and Induced Economic Impacts		
	(000)	GDP (000)	Labour Income (000)	FTE Jobs
<b>Eastern Canada</b>	\$59,033	\$54,133	\$32,999	779
<b>Western Canada</b>	\$209,101	\$274,341	\$185,682	2,760
Alberta	\$147,502	\$155,910	\$107,529	1,947
Manitoba, Saskatchewan, and British Columbia	\$61,599	\$118,431	\$78,153	813
<b>Canada</b>	\$268,134	\$328,474	\$218,681	3,539

Total impacts of labour shortages in the feeders/feedlot sector are also shown in Table 19, with a \$328 million impact on GDP across Canada, about \$219 million in labour income and a total of over 3,500 jobs throughout the economy.

The estimates cited above are conservative, as they do not take into account the impact of labour shortages in other parts of the value chain on feedlot production. Labour shortages in cow-calf and backgrounding operations negatively affect production, which reduces the supply of cattle to the feedlot sector. Labour shortages in the packing/processing sector (see next section) reduce both the volume of cattle purchased and the prices that are paid for cattle from the feedlot sector. To some extent, this reduced demand from domestic packers and processors may be offset by increased exports by feedlot operators, but the overall competitiveness of the Canadian beef sector is negatively affected.

### **Impacts on Packers and Processors**

The level of the skill required in packing plants and the difficult environment makes it important that skilled foreign workers be available and retained. Canadian employees are generally less inclined to remain in a position with difficult conditions than foreign workers who are working toward landed immigrant status. The costs of insufficient labour are loss of production, growth, time and potential for animal welfare concerns.

In 2015, the Canadian Cattlemen’s Association issued a brief report on Workforce Economic Impact, focused primarily on the impacts of labour shortages for beef packers. Their report found that workforce shortages are not allowing packing plants to operate at capacity, thereby reducing revenue by \$14/head. Beef packers’ inability to add value to their product due to labour shortages results in an \$11.2 million loss to Canadian GDP annually.

The report also found that there are currently 1,000 vacancies in Canadian meat packing plants; this results in 4,200-7,000 fewer jobs in the economy. Wages from these 1,000 vacancies mean another \$98 million is not being created in the economy.

With an estimated 530 vacancies, Alberta beef plants have experienced over 53% of the economic impacts from the workforce shortage, resulting in an estimated 2,100-3,500 fewer jobs in the province. Wages from these vacancies mean another \$61.8 million is not created in the provincial economy.

## C. The Opportunities

- **Agriculture-focused TFWP that considers packers part of the agriculture value chain and thus privy to the agriculture exemptions.** This is a political decision and advocacy efforts need to be directed accordingly to that audience;
- **Uptake and corresponding funding by the federal government of the *Workforce Action Plan for Agriculture and Agri-Food*.** This can be achieved with support both from the bureaucratic and political level;
- **Ongoing partnerships and aligned messaging** from all those linked to the livestock value chain; and
- **Creation of political pressure at provincial level** to advocate their federal counterparts for immediate change.



## VIII Conclusion

Cattle feeders comprise the most valuable part of beef production in Canada, generating a total of \$9.86 billion in sales, \$4.1 billion in GDP including \$2.69 billion in labour income (wages) and 82,687 full-time jobs in the Canadian economy.

However, there are opportunities to address key regulatory and policy issues affecting the competitiveness of cattle feeders that could generate even greater benefits to Canadians.

**Table 21 below ranks the 6 issues examined in this report, and summarizes the potential gains that could be achieved.**

**Table 21: Summary of Potential Economic Gains, by Issue**

Issue	Potential Gains for the Feedlot Sector	Total Potential Gains to the Canadian Economy		
	Revenues (\$000)	GDP (\$000)	Labour Income (\$000)	Jobs (FTEs)
<b>Labour Availability</b>	\$268,134	\$328,474	\$218,681	3,539
<b>Drug Harmonization</b>				
Harmonization	\$85,356	\$101,789	\$67,302	1,127
Lack of Access	\$62,282	\$76,297	\$50,795	822
<b>Traceability</b>	\$68,546	\$83,969	\$55,902	905
<b>Export Impediments</b>	\$5,343	\$6,538	\$4,351	71
<b>Transportation Regulations</b>	\$4,500	\$4,127	\$2,516	59
<b>Inspection Practices</b>	\$178	\$218	\$145	2.3

As we conclude this report, we return to the initial objective:

*“Build an inventory of the most problematic and costly federal and provincial regulations and industry practices in order to focus NCFA efforts on beneficial reforms and changes.”*  
(NCFA Strategic Plan)

This project has successfully built that inventory and more importantly the NCFA members themselves have created that inventory – along with the input from partners within the beef value chain. This inclusive approach included 6 focus groups and 50 participants in total and thus gives credibility to the inventory as those who work in the sector on a daily basis have validated it.

The focus group process, along with the input from the NCFA Board and staff, also allowed a process of prioritizing the inventory of issues so that the NCFA resources can be focused on addressing the issues that have the most significant impact on competitiveness.

This economic analysis completed on the priority issues, the NCFA is armed with evidence-based data that will enhance the dialogue and increase the influence the NCFA can have on government officials and political decision makers.

This report will serve as an 'information portal' by which briefing notes, talking points and letters will be developed for NCFA engagement with government officials and political champions. This will ensure consistent and fact-based messages.

NCFA will work to determine a proactive communication plan to launch the report both to members, partners and government decision makers.

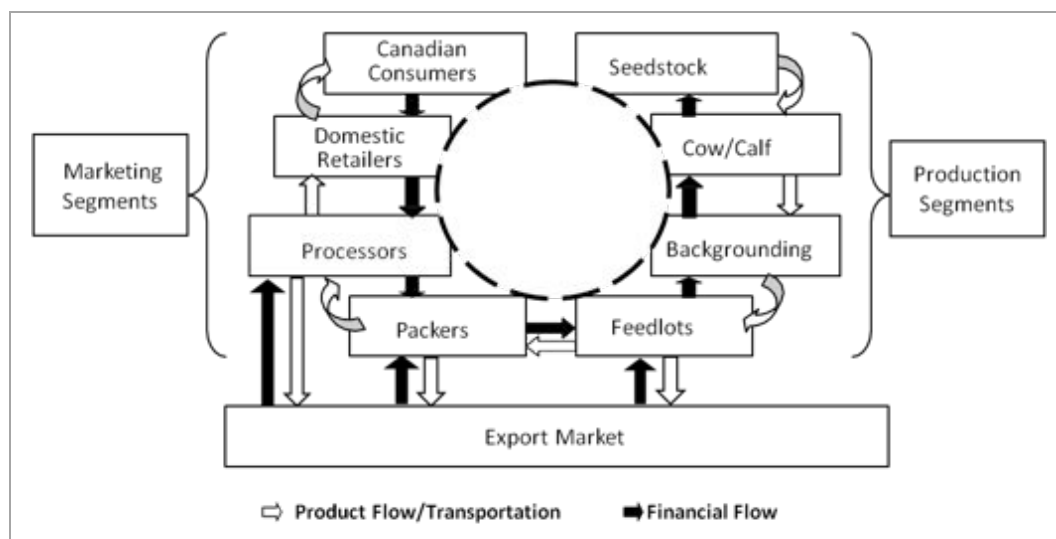
This project is an excellent step in moving the NCFA Strategic Plan forward and will serve as an example to addressing other items within the Plan.

# Annex 1 – Background on Beef Value Chain

## Beef Production in Canada

As of July 2015, there were 11.1 million cattle in beef production. Beef cattle production is found in all provinces with the largest production in Alberta. Together, Alberta, Saskatchewan, Manitoba and Ontario represent 81% of beef cattle production. Total farm cash receipts from beef production in 2014 totalled \$9.8 billion.

Figure 1: The Canadian Beef Sector Value Chain



Source: Adapted from Schroeder (2003)

The four key production operations in the cattle and beef industry are described below:

1. Cow-calf or ranching operations: primary function is to produce calves from breeding stock. Calves may be sold to feedlots, backgrounding operations or retained on the farm/ranch;
2. Backgrounding: primary function is to grow the animals on either pasture or pens until they are ready for a full finishing diet, typically at less than one year of age;
3. Feedlots: primary function is to feed cattle on a scientifically derived grain and protein based diet until the animal reaches slaughter weight at around 1,300 pounds. These “fed cattle” are typically less than two years of age; and
4. Packers and Processors: primary function is to slaughter cattle and market beef to retailer and foodservice businesses domestically and around the world.

Live cattle are sold as either feeder cattle or slaughter cattle. Feeder cattle move onto pasture or feeding lots. Slaughter cattle are either cattle that have been fed (fed cattle) or breeding animals (cows and bulls). Slaughter cattle are sold by feedlots or ranchers (breeding animals) to packing plants. Packers and processors in turn sell the beef either domestically or internationally to retail and foodservice distributors (Grier, 2005).

## **Cow-calf operations**

Cow-calf operations traditionally breed their animals over the summer and calving occurs nine months later. Calves are then weaned from the mothers between September and November, when they reach a weight of about 450 to 600 pounds.

Cow-calf operations generate revenue through the sale of calves or other younger steers and heifers. The operations also generate revenue through the sale of cull cows (cows that no longer have a productive reproductive capacity). The cull cow portion of the enterprise's revenue might amount to 10-20% depending on the year and other circumstances.

The cow-calf sector is very diverse with regard to structure. Some cow-calf operations are full time commercial ranches while others are diversified operations with only small cow/calf enterprises. Some operations are mixed farms while others are fully integrated breeding, backgrounding and feeding businesses. The main costs of operation include winter feed and bedding costs as well as pasture.

## **Backgrounding**

Backgrounding is the process of feeding younger weaned calves a high forage diet, whether in a feedlot or on a pasture, increasing their weight to around 700 to 950 pounds. Once these cattle reach the desired weight, they move to the feedlot finishing stage.

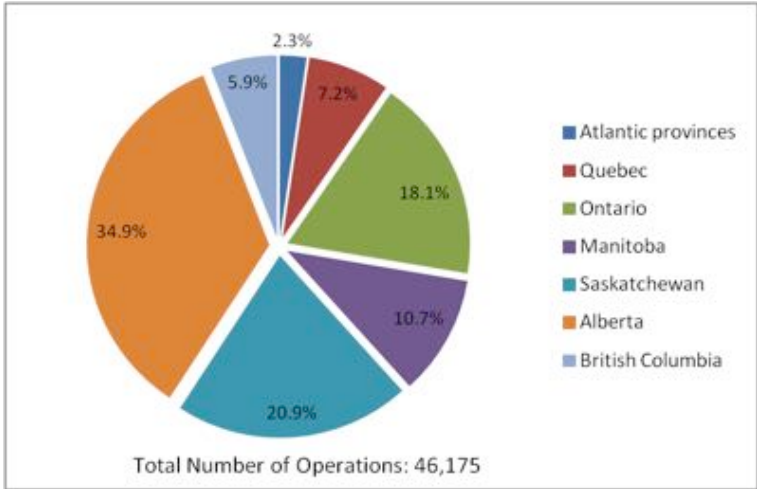
## **Cattle feeders**

Feedlot finishing by cattle feeders involves highly specialized feedlots that grow cattle to market weight. Feedlots can range in capacity from a few hundred head to tens of thousands. Feedlot operators either purchase calves or feeder cattle from cow-calf and backgrounding operations, or custom feed cattle for clients on a fee-for-service basis. Depending on how much they weigh when they entered the feedlot, cattle are usually ready for market at 12 to 24 months of age, and weigh between 1,000 and 1,300 pounds.

Cattle feeders' revenues are generated from the sale of finished cattle to the packer or for export. Primary cost factors are feed and the feeder cattle that were placed on feed. The cost of the feeder cattle placed on feed typically amounts to well over 70% of total costs. Cost of feed will amount to roughly 15%. All other costs combined, such as veterinary, transportation and administration are less than 20% of total costs.

As of July 2015, cattle feeders had about 1.54 million head of cattle and calves in production. Almost 35% of cattle feeders operate in Alberta, followed by Saskatchewan at 21%, Ontario at 18%, Manitoba at just under 11%, Quebec at approximately 7%, and BC at 6%, as shown in Figure 2 below.

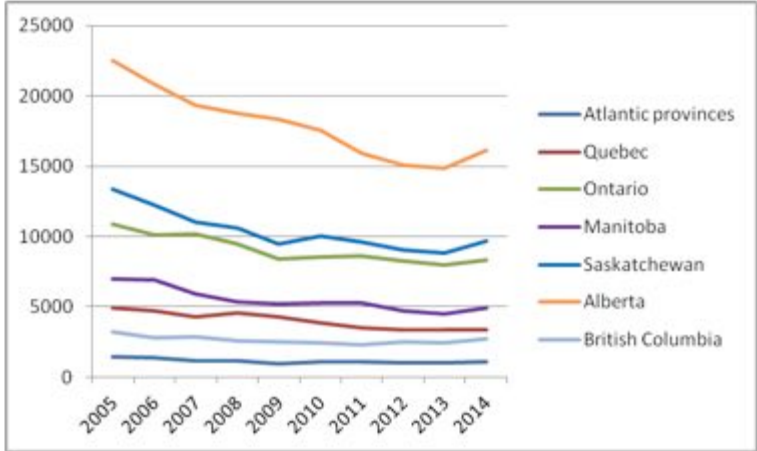
**Figure 2: Provincial Distribution of Cattle Feeders (2014)**



Source: Statistics Canada. CANSIM Table 002-0044

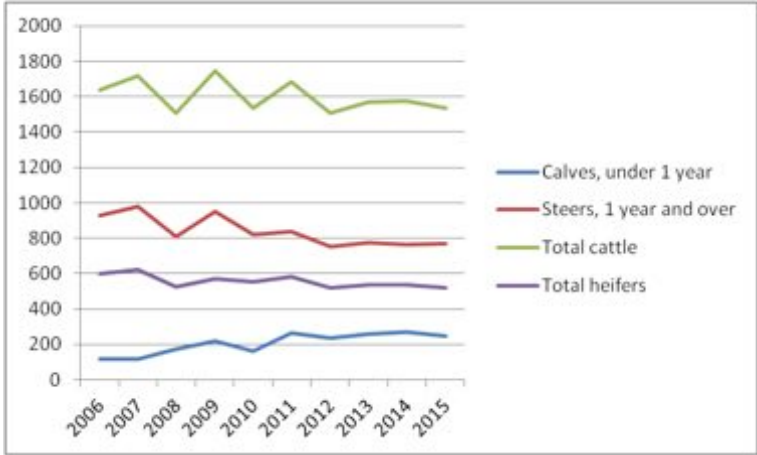
There are regional differences in feedlot finishing operations, with feedlots in Western Canada being much larger than those in Eastern Canada. In Ontario and Quebec, feedlots range in size from 50 to 10,000 head, and cattle are often fed in barns rather than outdoors as in the Western Provinces (FCC, 2012). In Alberta and Saskatchewan, feedlots generally range in size from 1,000 to 45,000 head (CCA, 2013).

**Figure 3: Number of Cattle Feeder Operations by Province (2005-2014)**



Source: Statistics Canada. CANSIM Table 002-0044

**Figure 4: Inventories of Cattle, by Type, on Cattle Feeder Operations (000 head, on July 1 of each year)**



Source: Statistics Canada CANSIM Table 003-0032

Total head of cattle on feeder operations has averaged 16 million over the past 10 years. The number of steers and heifers has fallen slightly, while the stock of calves on feeder operations has increased.

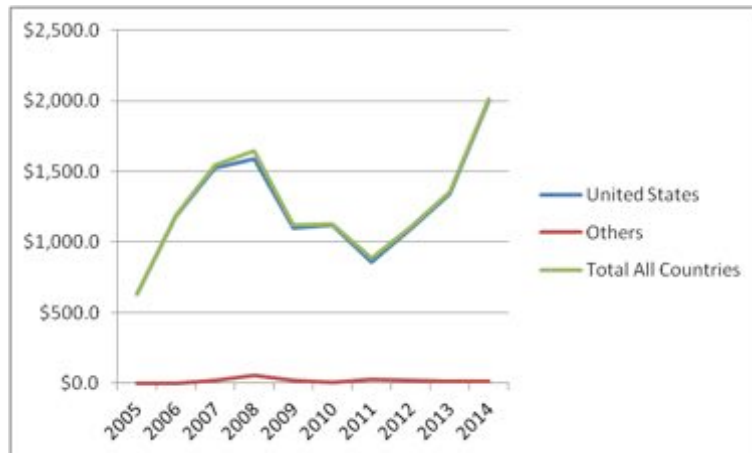
**Packers**

Beef packers generate revenue through the sale of beef. The overwhelming majority of beef is sold as sub-primal cuts in a box while a much smaller share is sold as either carcass beef or further processed in tray ready containers. Other important sources of revenue include by-products such as the hide and edible and inedible offal. The key cost component of the packing sector is the cost of the cattle. Cattle costs comprise about 85-90% of total costs. Labor, transport, administration and other costs comprise the remaining 10% of total costs.

**Export Market**

On average, about 20% of beef cattle produced in Canada every year are exported, 99% of these exports are to the U.S. market. In 2014, 1.24 million head of cattle were exported to the U.S., at a value of just over \$2 billion.

**Figure 5: Exports of Live Bovine Animals (\$ millions)**



Source: Industry Canada – Trade Data Online

## **Economic Contribution of the Beef Sector Value Chain in Canada**

According to a study prepared for Canfax Research Services, Canadian Cattleman's Association, entitled "Economic Impacts of Livestock Production in Canada – A Regional Multiplier Analysis" (Kulshreshtha et al, 2012), the ripple effects of the beef production value-chain (depicted in Figure 1 above) throughout the Canadian economy generate:

- \$33 billion worth of sales of goods and services;
- \$13 billion in Gross Domestic Product (GDP);
- \$8 billion in labour income; and
- over 228,800 jobs in the country.

### **Impacts by Sub-Sector**

Kulshreshtha et al (2012) estimated the following economic contributions of various value chain sub-sectors for the 2011 calendar year:<sup>4</sup>

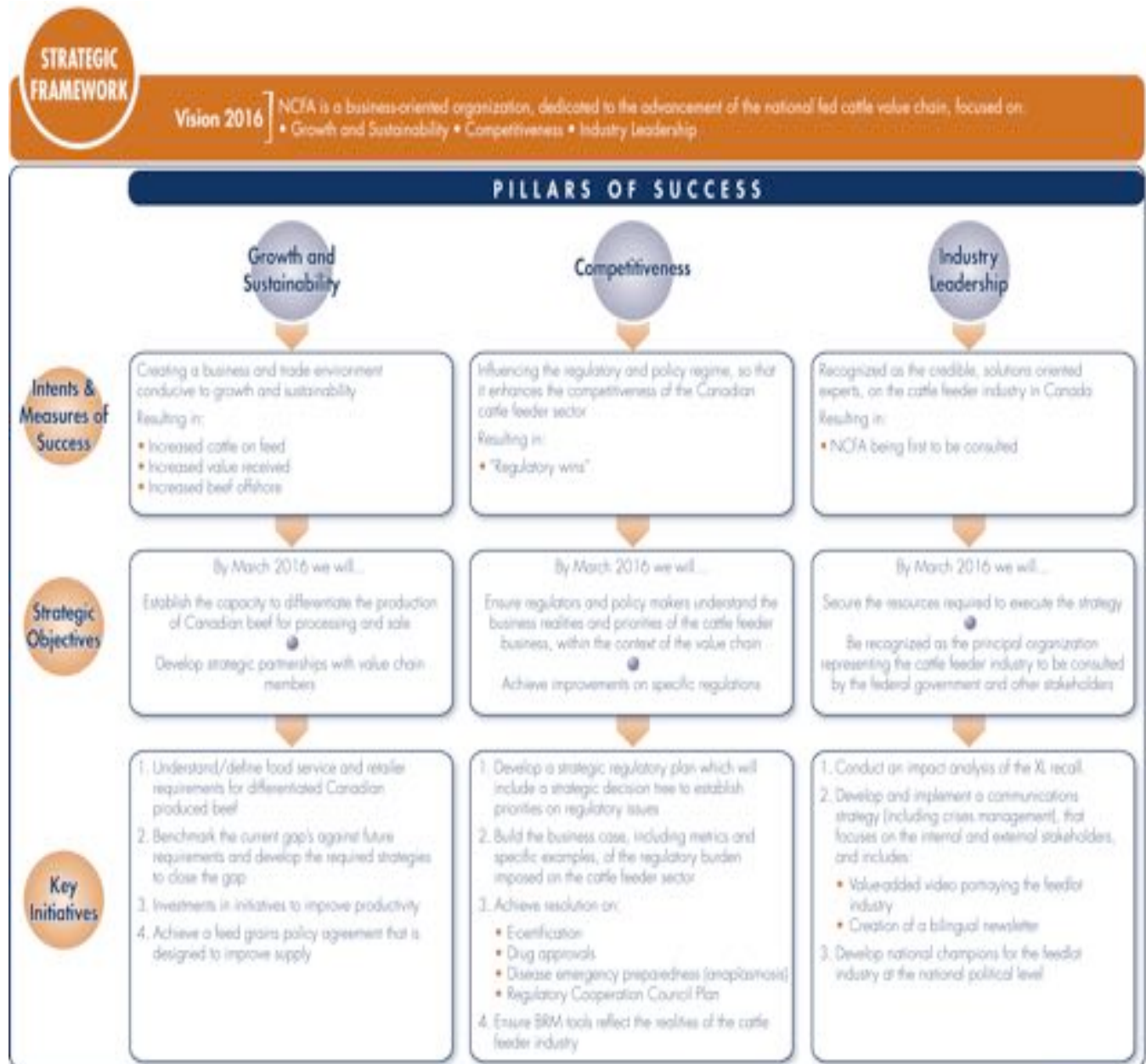
- **The feedlot sub-sector generates a total of \$9.86 billion in sales, \$4.1 billion in GDP including \$2.69 billion in labour income (wages) and 82,687 full-time jobs;**
- The cow/calf sector generates \$1.68 billion in sales, contributed \$714 million to GDP including \$440 million in wages and supported 14,259 full-time equivalent jobs; and
- The backgrounding sector generates \$8.2 billion in sales, contributed \$3.0 billion to GDP including \$1.85 billion in wages and supported 68,218 equivalent full-time jobs.

The packers/processing sub-sectors generate an estimated \$31.7 billion in sales of goods and services, \$12.4 billion in GDP including, \$7.1 billion in wages and the employment of 196,690 workers.

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<sup>4</sup> Economic impacts for the individual sub-sectors do not add to the sector total, as the sector total estimates have been adjusted to eliminate double counting.

# Annex 2 – NCFA Pillars of Success



© Meat Strategy Edge



## **Annex 3 – Barriers to Competitiveness Workshops**

### **Lethbridge AB, June 22, 2015**

Cathy Jo Noble, Carolyn Inch	Noblepath
Casey Vander Ploeg	NCFA/Provincial Staff
Herb Groenenboom*	NCFA Board
Darren Bevans	Cow-Calf
TJ Larson, Leighton Kolk, Curtis Vander Heyden*	Feeders
Jeff Smith	Buyer
Phil Klassen, Oliver Schunicht	Veterinarians
Ryan Crisdell	Processor/Packer

### **Kelowna BC, June 23, 2015**

Cathy Jo Noble, Carolyn Inch	Noblepath
Andrea van Iterson	Provincial Staff
Keith Balcaen	Cow-Calf
Joe Heemskerk, August Bremer*	Feeders
Aaron Canart	Buyer
Jason MacGillivray	Veterinarian

### **Saskatoon SK, June 24, 2015**

Cathy Jo Noble, Carolyn Inch	Noblepath
Leanne Thompson	Provincial Staff
Steven Pylot, Chad Ross	Cow-Calf
Ryan Thompson*	Feeder
Brad Welter	Buyer
Tim Armstrong	Feed Co.
Jeremy Ross	Veterinarian

### **Portage la Prairie MB, June 29, 2015**

Cathy Jo Noble, Carolyn Inch	Noblepath
Melinda German, Maureen Cousins	Provincial Staff
Martin Unrau, Trevor Atchison	Cow-Calf
Art Petkau, Larry Schweitzer*	Feeders
Cliff Penno, Brad Martin	Buyers
Gord Kingdon	Transporter
Reid Teetart	Financial
Darren Cowan	Veterinarian
Ben Fox	Processor/Packer

### **Montreal QC, July 10, 2015**

Peter Brackenridge	Noblepath
André Roy, Nathalie Coté, Jean-Sébastien Roy	Provincial Staff
Jean-Philippe Deschênes-Gilbert	Provincial Staff
Stanley Christensen	Cow-Calf
Michel Daigle*, Jacques Desrosiers*	Feeders
André Ricard, Jean-Marc Paradis, Rémi Ouellet	Feeders

### **Ontario, July 29, 2015 (conference call)**

Cathy Jo Noble, Peter Brackenridge	Noblepath
Jim Clark*, Jack Chaffe*	Feeders
Matt McCall	Buyer and Feeder
Randy Scott (Chair, Ontario Trucking)	Transporter
Ken Metzger	Veterinarian

\*chairs and board members of national/provincial cattle associations

## Annex 4 – Issues Identified in Alberta, British Columbia and Quebec

### Barriers to Competitiveness – NCFW Workshops – June 22-July 30, 2015

Issues	Alberta	British Columbia	Quebec
<b>Province Specific Industry Structure</b>	Most AB cattle are born, fed and slaughtered in the province. Less export, due to low Canadian calf supply, and very few import of feeders or fats – mainly related to market factors.	BC cattle are slaughtered primarily in US and the distances are not significant. Ease of export important so border issue focus.	In QC the majority of their feeders are from out-of-province and they send the majority of their fat-cattle out-of-province for slaughter so the price of transport is significant.
<b>Critical Issues</b>	<ol style="list-style-type: none"> <li>1. Traceability proposals</li> <li>2. Harmonize Canada/US residue levels and withdrawal requirements</li> <li>3. Labour</li> <li>4. Integrity of Age Verification System</li> <li>5. Harmonize Canada/US Drug Approvals</li> </ol>	<ol style="list-style-type: none"> <li>1. Export</li> <li>2. Traceability proposals</li> </ol>	<ol style="list-style-type: none"> <li>1. Traceability proposals</li> <li>2. Transport costs increasing price of calves</li> <li>3. Harmonize industry programs</li> <li>4. Slow approval of feed by-products</li> </ol>
<b>General issues</b> (Numbers in brackets indicate priority of issue as judged by participants)	<ul style="list-style-type: none"> <li>– Water Licence Administration</li> <li>– Land Use</li> <li>– Product of Canada – 60 day residency</li> <li>– Harmonize Canada/US Drug Approvals (2)</li> <li>– Harmonize Canada/US residue levels and withdrawal requirements (8)</li> <li>– CFIA Audit process for on-farm feed mills</li> <li>– Labour (7)</li> <li>– Unloading of feeder exports at border for scanning and CAN branding (1)</li> <li>– Transport Canada potential requirement or electronic log books (2)</li> </ul>	<ul style="list-style-type: none"> <li>– Difficult to import calves from US</li> <li>– Exports - CAN and Unloading (14)</li> <li>– Facilities / Capacity at border</li> <li>– Harmonized Dosages/ Harmonized Access to Drugs (3)</li> <li>– Agriculture Waste Rules</li> <li>– Access to Antibiotics (3)</li> <li>– Lack of incentive for VBP and Age Verification</li> <li>– Traceability and potential new regulations (8)</li> <li>– E-certification (2)</li> </ul>	<ul style="list-style-type: none"> <li>– Cost of transporting calves (5)</li> <li>– Import barriers for calves – state specific</li> <li>– Cost of Agri-Traceability tag for imports</li> <li>– non-uniform application of vaccination policies</li> <li>– differing truck weight allowances in different States and Provinces</li> <li>– CFIA - slow review of approved feed ingredients (5)</li> <li>– medicated feeds in QC require a prescription (for a fee)</li> <li>– use of bedding adds biomass for disposal</li> <li>– shortage of qualified workers</li> </ul>

Issues	Alberta	British Columbia	Quebec
	<ul style="list-style-type: none"> <li>- Digital Documentation i.e. e-certification and electronic manifests (1)</li> <li>- Phosphorus limits – potential environment regulation (1)</li> <li>- Integrity of Age Verification System (6)</li> <li>- Workable Traceability System (9)</li> <li>- Limits on access to antibiotics (1)</li> <li>- Access to Own Use Imports (2)</li> </ul>	<ul style="list-style-type: none"> <li>- CFIA consistency of application regulations and practices</li> <li>- Driver mandated breaks Transport Canada</li> </ul>	<ul style="list-style-type: none"> <li>- Animal Welfare: Prov. Regs coming</li> <li>- transportation of downers (3)</li> <li>- multiple industry quality programs costly (6)</li> <li>- limiting the time-frame for validity of export certificates (3)</li> <li>- Environmental Farm Plans and “co-conditionality” of programs. Provincial government requires implementation of the programs (e.g. environmental farm plans) or the producer will lose access to government subsidies.</li> <li>- Certification costly</li> <li>- Packer costs passed to feeders</li> <li>- Better informed consumers (6)</li> <li>- Export conditions need to be practical</li> <li>- Shortage of large animal vets</li> </ul>

## Annex 5 – Issues Identified in Saskatchewan, Manitoba and Ontario

### Barriers to Competitiveness – NCFE Workshops – June 22-July 30, 2015

Issues	Saskatchewan	Manitoba	Ontario
<b>Province Specific Industry Structure</b>	SK cattle are slaughtered both in province and exported to US and Ontario. Issues related to capacity of infrastructure (ie trucking) as industry growing.	MB cattle are usually not finished in the province. They may be backgrounded there but then are shipped to the US, Ontario or AB for finishing and slaughter.	ON not producing enough feeders so source from east, west and US. Most slaughtered in province. Feed sources an issue as corn quality a problem.
<b>Critical Issues</b>	<ol style="list-style-type: none"> <li>1. Harmonized withdrawal and harmonized approvals and access to pharmaceuticals</li> <li>2. E-certification</li> <li>3. Labour</li> <li>4. Traceability proposals</li> </ol>	<ol style="list-style-type: none"> <li>1. Consistency of CFIA enforcement</li> <li>2. Traceability proposals</li> <li>3. Labour</li> <li>4. Crop research</li> </ol>	<ol style="list-style-type: none"> <li>1. Consistency of CFIA enforcement</li> <li>2. Transportation regs on breaks</li> <li>3. Harmonized Canada/ US drug approval/ withdrawal times</li> <li>4. Traceability</li> </ol>
<b>General issues</b> (Numbers in brackets indicate priority of issue as judged by participants)	<ul style="list-style-type: none"> <li>- Lack of research on Canadian crops to provide feed advantage</li> <li>- Harmonized withdrawal and harmonized approvals and access to pharmaceuticals (8)</li> <li>- Dosage allowance on generics versus brand name drugs (2)</li> <li>- Own Use Imports</li> <li>- Labour (6)</li> <li>- E-certification (7)</li> <li>- Branding – CAN for export</li> <li>- Unloading at border</li> <li>- CFIA simplify and consistent criteria (1)</li> <li>- Age verification for exports</li> <li>- Traceability (3)</li> </ul>	<ul style="list-style-type: none"> <li>- Consistency in enforcement of CFIA regulations (8)</li> <li>- Provincial nutrient management planning (4)</li> <li>- Government support for VBP</li> <li>- Access to US calves/ regulatory barriers</li> <li>- Crop research – industry leadership and government money (5)</li> <li>- Canadian Grain Commission – bond requirements (3)</li> <li>- Traceability/proposed regulations (7)</li> <li>- E-certification (1)</li> <li>- Removal of age verification (2)</li> <li>- Barriers to importing forages from US</li> </ul>	<ul style="list-style-type: none"> <li>- CFIA's inconsistency of enforcement and interpretation of regulations (4)</li> <li>- Transportation rules on mandated animal and driver breaks (3)</li> <li>- Harmonized Canada/US drug approval and drug withdrawal times (2)</li> <li>- Traceability (2)</li> <li>- Confusion and duplication of industry quality assurance programs (i.e. Verified Beef, NCFE Feedlot Assessment Tool) (1)</li> <li>- Neonicotinoid (1)</li> <li>- Lack of verification and enforcement on claims on consumer packaging of beef products (1)</li> </ul>

Issues	Saskatchewan	Manitoba	Ontario
	<ul style="list-style-type: none"> <li>- Transportation regulations (1)</li> <li>- Trust in feed safety</li> </ul>	<ul style="list-style-type: none"> <li>- Ongoing access to use of antibiotics/drugs in Canadian production (2)</li> <li>- Harmonized access to advanced fertilizers</li> <li>- Costs of disease surveillance (TB)</li> <li>- Branding (CAN) for exporting/unloading at border</li> <li>- Lack of rural vets</li> <li>- Harmonized approval/ access to feed ingredients/drugs (1)</li> <li>- Own use imports – ongoing existence of this tool (2)</li> <li>- Harmonized access to pest control</li> <li>- Transport requirements – food/water/rest for animals and driver break requirements (4)</li> <li>- Financing</li> <li>- Harmonized approval/ access to feed ingredients/drugs</li> <li>- Costs of SRM disposal in Canada vs US</li> <li>- Labour challenges caused by increased complexity of regulatory requirements and lack of labour (access to temporary foreign workers and permanent) in processing plants and beyond (7)</li> </ul>	<ul style="list-style-type: none"> <li>- Antibiotics resistance (in animals I think is what he was referencing) – lack of research (1)</li> </ul>

## **Annex 6 – Additional Issues Raised in Focus Groups**

### **Crops**

*Prioritized by: Manitoba. Raised by Ontario and Saskatchewan.*

#### **Crops Barriers:**

It was pointed out that more crop research is required. In the US corn varieties have much higher yields than our varieties due, it was suggested, to higher government subsidies for research into feed grains. Wheat research to support ethanol production is subsidized in Canada, while feed grains are not.

There needs to be research into barley so that Canada can be more competitive with cool weather crops.

It was noted that the cost of corn seed is not the same east to west in the country. As well fungicides and fertilizers are cheaper in the US.

There are restrictions on imports of straw from US.

The production of canola is limited in relation to the US, as a certain chemically treated seed is not allowed in Canada.

Ontario feeders are facing a special challenge as recent regulations restricting the use of neonicotinoids on corn seed reduce the efficiency of feed production. The issue is related to a reduction in the bee population and Ontario regulators have come out ahead of the other provinces and the US in this legislation.

#### **Crops Costs:**

Growing feed crops is more expensive in Canada. While this is due to climate in large part, it is also related to variety research and availability of varieties e.g. Roundup Ready Alfalfa cannot be grown here.

According to the Grain Farmers of Ontario, not using neonicotinoid treated seeds would result in a 3- to 20-bushel-per-acre loss for farmers.

#### **Crops Proposed Solutions:**

Research required on cool climate crops. As well, import from US and Europe of novel crops would be helpful.

Harmonization of regulatory regimes at an international and interprovincial level would be beneficial for competitiveness.

## **Veterinarians**

*Raised by: Manitoba and Quebec.*

### **Veterinary Barriers:**

In general, there is a shortage of large animal veterinarians. In Manitoba, the subsidization of rural practices may be removed, which will increase the problem.

### **Veterinary Costs:**

Veterinary costs related to regulatory requirements are primarily in the areas of import and export at the present time. Accredited large animal practitioners perform these services on behalf of CFIA.

### **Veterinary Proposed Solutions:**

A proposal that veterinary technicians perform some of the export inspection functions was put forward. The practitioner can verify this work.

It was also proposed that the provincial governments subsidize large animal practice, especially as some of the requirements for animal welfare and medications are becoming more complex.

## **Financing**

*Raised by: Manitoba.*

### **Financing Barriers:**

It was speculated that financial institutions are more receptive to working with crops than the livestock sector.

There was a discussion about the lack of brand inspection in Manitoba and how this can affect lending.

### **Financing Costs:**

Specific costs of financing were not discussed.

### **Financing Proposed Solutions:**

Farm financing institutions should consider cattle operations more favourably.



## **Packer Requirements**

*Raised by: Manitoba, Quebec and Ontario.*

### **Packers Barriers:**

Due to the high profile of meat recalls, there is concern that the CFIA is increasing its demands on packers and that those costs are being passed on to producers. Those pressures also result in a reduction of the number of packing plants, as medium sized packers can't profitably meet higher standards. These closures have an impact on transportation costs and concentrate packer presence in the hands of very few.

There is some difficulty exporting fed cattle to the US for slaughter as they are considered "Canadian fed". The trade implications may be addressed by Canada's WTO challenge of the COOL legislation in the US.

Market pressure being applied through consumers and large customers like McDonald's and A&W represents a challenge for the industry. While this was raised and prioritized as a production challenge by Ontario and other provinces, the competitiveness link is not clear as consumers globally are making similar demands.

### **Packers Costs:**

The presence of fewer packers increases transportation costs for many producers.

Uninformed consumer demands increase production costs.

### **Packers Proposed Solutions:**

The federal government needs to continue its pressure to eliminate the restrictions based on the COOL legislation in the US so that Canadian feeders can send their animals south for processing where the economics dictate.

Small and medium sized packers can be encouraged to continue in business with some government incentive programs to bring them up to national standards.

## Environmental Plans

Raised by: Alberta, Manitoba and Quebec.

### Environmental Plan Barriers:

Increasingly provincial governments are imposing the need for environmental plans that include waste and water management. The requirements vary province to province:

Quebec requires comprehensive plans that must be prepared, and monitored annually, by independent agronomists. There is “co-conditionality” of programs meaning that subsidies will be forfeited unless aspects of the environmental plans are implemented.

Alberta expansion is limited due to the *Agricultural Operations Practices Act*

- Relates to need for certain amount of irrigated land per 1000 head;
- Most pressing is manure disposal;
- If regulations become tighter, as is expected due to NDP provincial government, will impact all the value chain – ranchers, truckers, feeders, auction markets;
- Requirement for bedding in trucks for humane transport (CFIA) increases the volume to dispose;
- At present soil testing only monitors nitrogen levels;
- If phosphorus levels monitored, becomes a lot more stringent; and
- To expand operations, records proving land available needed to be provided to Alberta Environment (NRCB).

In British Columbia, requirements vary between the Lower Mainland, where environmental impacts tightly regulated, and the Interior.

- Water licencing now in place and pay for usage if for consumption and for irrigation.

In Manitoba, there have been strict environmental laws for some time:

- Concerns were expressed about the lack of science when it comes to the regulatory climate in Manitoba;
- Significant requirements about nutrient management, setback distances, phosphorus requirements, mortalities management, engineering requirements, etc. It would be extremely challenging to build a new feedlot in Manitoba under the current environment. There is an extensive permitting process for feedlots. There are also requirements about water usage and licensing. By way of example, <http://www.producer.com/2014/12/rules-regulations-restrictions-how-to-navigate-manure-management-policies/> and <http://www.gov.mb.ca/conservation/envprograms/livestock/index.html?print>
- Environmental Farm Plan process is quite onerous for livestock operations versus grain operations;
- Also municipal requirements once a livestock operation reaches a certain size;
- The ban on the cosmetic use of pesticides has potential effects on agricultural sector due to spread of weeds from urban centres to rural areas; and
- Workplace health and safety regulations and requirements in Manitoba. There are significant differences in premium costs versus places like Alberta.

## **Environmental Regulation Costs:**

Costs per province vary but they are an increasing amount of the fixed cost of production.

## **Environmental Regulatory Climate Proposed Solutions:**

Concern about lack of science with respect to some regulatory limitations could be countered with proper scientific decision-making.

## **Animal Husbandry**

*Raised by: Alberta, Saskatchewan, Manitoba and Quebec.*

### **Animal Husbandry Barriers:**

The beef sector is aware that public opinion has an impact on the marketability of their products. For that reason, industry initiatives like the Verified Beef Program (VBP) deal with food safety, biosecurity, and animal welfare. However, it appears that there will be demands based on market forces (similar to that led by McDonald's) that go beyond the existing program. There are a variety of programs available and it was often suggested that industry should take the initiative in developing a single, credible program, whether it be by enhancing VBP or adopting another.

The existing VBP does not have enough credibility, as there is not third party oversight. Until then, producers are unlikely to adopt it unless it is a packer requirement.

Animal welfare is a large issue in view of public opinion of the feeder sector. The province of Quebec will be putting into place mandatory animal welfare requirements that will have large administrative costs. There is some indication that, like Quebec, there will be a need to have mandatory programs for pain management in other provinces.

The feedlot care assessment tool that accompanies the updated Code of Practice is being validated by Dr. Joyce Van Donkersgoed at feedlots across the country. It will be ready in the event that there is demand from consumers and packers for a verifiable set of humane practices.

The Age Verification Program (AVP) is similar in that it is voluntary and there is little incentive to be involved. About 40% of producers are doing it and the data is about 90% accurate. Provinces that primarily export their fat cattle for slaughter voiced support for strengthening this program to enhance credibility of the certification process.

### **Animal Husbandry Costs:**

The cost of implementation of a program similar to VBP is primarily related to record keeping.

NCFAs creation of a Feedlot Assessment Tool is seen as duplicative with VBP.

In the event of mandatory pain management, there will be a huge increase in the cost to perform the procedures and to record the events.

Packers may start demanding programs that deal with all pressures (on-farm animal welfare, environment and biosecurity). All these programs have a cost; creates a competitiveness issue when not mandatory.

## **Animal Husbandry Proposed Solutions:**

Industry and government need to work together to educate consumers regarding existing animal husbandry practices.

Industry programs need to continue to be government sponsored so that the cost of implementation of new requirements does not become prohibitive.

The concern re: potential packer demands for a VBP Plus can be addressed by creating a system that encourages participation.

The non-uniform application of vaccination policies that can create health issues in feedlots can be addressed through industry led and supported quality assurance programs like VBP.

## **Access to Calves – Imports**

*Raised by: Quebec, Alberta British Columbia, Saskatchewan and Ontario*

### **Import Barriers:**

In general, there is a shortage of calves for feeding across the country due to shrinking of the cow-calf industry. A similar situation exists in the US. Therefore, at the national level there is presently not a large volume of calves being imported for feeding. However, were there to be a shift in herd sizes or currency values, the situation may change and the difficulty of importing feeder calves as outlined in the restricted feeder program may become a barrier.

In the west, due to the factors indicated, there is not an economic incentive to import calves for feeding. In Quebec and Ontario, the US is among the source of calves. In Ontario it was noted that while they enjoy a good relationship with Canadian regulators for imports, sometimes their hours of service could be an impediment to importing calves.

### **Import Costs:**

If market conditions made it more feasible to import calves for fattening, the segregation requirements in the approved feedlots would be onerous.

### **Import Proposed Solutions:**

Before BSE, inspection occurred only at source and destination, not at the border. These conditions applied in both directions. These conditions should be re-considered.

## **Feed and Feed Processing**

*Prioritized by: Quebec. Raised by Alberta, Saskatchewan and Ontario.*

### **Feed and Feed Processing Barriers:**

On-farm feed processing is a common practice for feeders. CFIA inspects feed mixing based on the size of the operation with larger operations being inspected at least once annually. Cross batch contamination of medicated feeds presents the biggest concern for CFIA. As a result, they have implemented onerous record keeping requirements, some of which are clearly of limited value. For example, the requirement to track the pen to which every load of mixed feed is fed does not have regulatory value as the identity of the animals in that pen is not kept.

The annual inspections are lengthy and time consuming. Too often it appears that the inspectors are not familiar with on-farm processes. There is variability between expectations of inspectors and the expectations are not clearly defined. This is important with respect to the implementation of Table 4 related to medication levels.

As well, there is concern about the length of time it takes for CFIA to amend its list of approved feed ingredients. This is especially important to Quebec feeders where new options for feed (e.g. food processing by-products) present themselves frequently.

Another issue is related to the potential requirement of the Canadian Grain Commission to bond feed mills. Small operations may be required to carry a bond of \$5-600K, a charge that will be passed to customers.

Concerns related to drug approvals for medicated feeds are dealt with under priority issues.

### **Feed and Feed Processing Costs:**

Potential cost of bonding feed mills.

Potential cost of more CFIA inspections of on-farm feed processing.

Cost of record keeping for feed audits high and no return as there is not a record of the animals in each pen.

Cost of inconsistency in CFIA inspections.

### **Feed and Feed Processing Proposed Solutions:**

To hasten approval of by-products, use "incorporation by reference".

More ethanol plants needed in Canada to be able to access more Distillers Dried Grains with Solubles (DDGS). That makes the cattle industry more competitive in the US than in Canada.

Need to re-evaluate the CFIA inspection regime so that it is not so onerous and has a positive impact.

## **Annex 7 – Resources for Economic Analysis**

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# Annex 8 – Interview Questionnaire

## Purpose of this Questionnaire

RIAS Inc. was commissioned on behalf of NCFA to prepare estimates of the value of reform opportunities for NCFA members related to six government regulatory and policy issues that are restricting the growth and competitiveness of the industry, as identified in NCFA’s draft report “Barriers to Competitiveness” (August 2015).

The six priority issues are:

1. Traceability;
2. Export barriers;
3. Drug harmonization barriers;
4. Inconsistency of CFIA practices;
5. Transportation regulations; and
6. Labour barriers.

Each of the six issues are summarized below along with a set of targeted questions regarding information we need to allow us to develop estimates of potential cost savings to NCFA members of resolving the issues.

Your name was provided to us by NCFA as an expert on some of the issues we are examining. Your feedback on the questions posed under the 6 issues outlined below (those that are relevant to your business and/or of interest to you) would be greatly appreciated. Our report will not identify or attribute to you or your company any specific information that you may provide to us.

We will contact you shortly to set up a time that is convenient for you for a brief discussion by phone (about 30 minutes).

Thank you in advance for any assistance you can provide.

## 1. Traceability Interview Questions

### Issue

CFIA’s proposed regulations would reduce the validity of export certificates from 30 days to 24 hours, which would have a serious potential regulatory impact. There would also be increased tracking needs for live animals and carcasses in packing plants was that could impact costs at all levels of the value chain.

### Proposed measures

Issue	Measure	Variables and calculation
<b>1a. Export certificate validity period</b>	Direct cost of refusal of entry	Average cost per shipment (by size of shipment) X % of shipments delayed X # of shipments/year
<b>1b. Increased tracking requirements</b>	Costs to read tags	\$4/head X # of cattle tracked at each stage of value chain (e.g. 4,600 per day for packers)

## Questions

**1a. Export Certificate Validity Period** (direct cost of refusal of entry) – the proposal to reduce the period of validity from 30 days to 24 hours for the export certificate could result in the refusal of entry of an export load at the border due to the expiration of the validity of the certificate. Costs vary according to shipment size, distance from border, stage of finishing, etc.

- What % of loads are currently shipped with certificates older than 24 hours?;
- What challenges/costs would be expected to meet the 24 hour period, or if certificates expire e.g. for accredited veterinarians to provide certification within a 24-hour window?;
- With a 24-hour validity period, what % of shipments do you think could suffer from delays from refusal of entry at the border due to expiry of an export certificate? Would this vary by province?;
- What is a reasonable estimate of the cost per shipment of refusal of entry e.g. additional transportation costs, animal handling, re-certification?;
- Does it vary by province? Does it vary by size of shipment? If so what is the range of costs?; and
- Where would we find data on the number of shipments per year, by province? (or can we convert # head to per shipment using a standard conversion (average #head/truck, or using the recommended square footage/head for transport).

**1b. Increased Tracking Requirements** – increased tracking needs for live animals and carcasses in packing plants – costs to run an animal through a chute to read the tag is about \$4/head. This cost is incurred for tag replacement requirements that are being considered. Packing plant cost to identify live animals before the rail could be calculated based on the 4,600 animals a day being put through the plant at present and the ensuing reduction in line speed that this requirement will produce. If requirements for reporting at departure are put in place, the cow-calf producer would be seriously impacted. Read-in and read-out is not workable. Reading individually at the intermediate sites is being proposed and would cost all the value chain.

- What is the cost to read a tag (\$4)? What would the range in costs be? Does it vary by province? Does it vary by stage in the value chain (i.e. Cow-calf, Backgrounding, Feeders, Packers, Exporters); and
- Are all parts of the supply chain affected? Which ones (Cow-calf, Backgrounding, Feeders, Packers, Exporters)? How many cattle would be tracked at each stage annually? (Where could we get this data?)

## 2. Export barriers Interview Questions

### Issue

For provinces where most of the calves/cattle are exported to the US (BC and SK) for feeding and/or slaughter, export requirements are a significant barrier. A combination of US federal and state requirements result in the need to brand feeders with a large CAN brand. As well, they need to be unloaded at the border for inspection by the US federal veterinarian. Neither the brand nor the unloading is required for slaughter cattle. Availability of border crossings in various provinces is also an issue, as is the need to verify the ages of culled cattle for slaughter in the US, and the requirement for CFIA signatures on work that has been performed by the accredited veterinarian.



## Proposed measures

Issue	Measure	Variables and calculation
<b>2a. CAN branding</b>	Cost of branding	# of cattle shipped per year X \$2 to \$5
<b>2b. Age verification</b>	Cost of age verification	Average number of finished steers (heifers) per year X \$56 (\$34)
<b>2c. Wet signatures by vets</b>	Cost savings of scans/emails vs wet signatures	(Time per wet signature – time for scan/email) X Hourly vet wage X # of signatures per shipment X # of shipments

## Questions

**2a. CAN Brand** – US federal and state requirements to brand feeders with a large CAN brand – CAN brand adds about \$2-\$3 (BC estimate) and \$5 (SK estimate) per head, plus real issue of public perception due to backlash against branding.

- *Only feeders are branded? Under 1 yr or including feeder yearlings (1-2 years);*
- *Do we have data on the number of feeders exported to the US by province per year? Or, what % of the int'l exports of cattle per year = exports of “feeders” to US?; and*
- *Is \$2-3/head or \$5/head reasonable? What would the range be? Does it vary by province?*

**2b. Age verification** – costs estimated at \$56 on finished cattle and around \$34+ for cows.

- *What numbers of cattle and cows do these costs apply to? Just international exports?; and*
- *What would be the range of costs for cattle and cows, by province?*

**2c. Availability of Border Crossings** – Cranbrook, the Kingsgate crossing, is closest for most ranchers in BC but very busy with fed cattle, so only about 8 loads a day of feeders can go over, only 4 days a week, limiting the number of feeders sent and calves raised in Canada. In BC the other option, the Coutts border crossing, is further to travel, adding about \$10/head.

- *Does this apply only to feeders?;*
- *Is this an issue only in BC, or in other provinces as well?; and*
- *How many cattle are affected, and are the \$10/head in additional costs reasonable (considering sizes of loads, distances travelled, etc.)? Considering all the factors, what would be a reasonable range of costs?*

**2d. Costs of Wet Signatures by Vet** – CFIA signatures on work that has been performed by the accredited veterinarian. In some areas, a trial e-certification initiative has implemented faxes instead of wet signatures. However, this remains more onerous than just using scans and emails.

- *Please explain the process of obtaining wet signatures. Does it go beyond additional vet costs e.g. need for pick-up of the certificates at CFIA offices?;*
- *What is the hourly wage paid for vets? Does it vary by province?;*
- *How many signatures are required (per shipment?);*
- *How many certificates are issued per year?; and*
- *What is the time savings of moving to scans/emails compared to wet signatures?*

### 3. Drug Harmonization Barriers Interview Questions

#### Issue

Given the extensive trade in meat, there is no human or animal health rationale for Canada and the US to have varying regulations related to withdrawal times, dosage or approved medications. The US gets most drugs and medicated feed ingredients on the market earlier than in Canada and at a cheaper cost. Even emerging forms of multivitamins are not readily available in Canada. The approval regime appears to be about two years behind that in the US for both prescription and non-prescription drugs.

#### Proposed measures

Issue	Measure	Variables and calculation
<b>3a. Can-U.S. withdrawal time differences</b>	Cost of export delays	Avg delay time X Avg cost of delay per shipment X % of shipments delayed per year X Total number of shipments per year
<b>3b. Generic/brand dosage differences for in-feed use</b>	Cost of Rx's for single dose vs. range of dosages/uses	# of generic drug Rx's per head X Avg \$/hr for vet X Avg # of Rx's per head X # of cattle
<b>3c. Delayed access to vet drugs in Canada</b>	Examples of cost using Draxin and Zomax	Avg # of treatments required/ head X Can-US price difference X # of cattle OR generalized estimate based on % difference in treatment/feed costs between Canada and the US

#### Questions

**3a. Can-U.S. withdrawal time differences** – exporters have had scenarios of attempting to isolate animals and errors being discovered during which the whole pen was devalued, costing thousands of dollars. For example: Oxytetracycline needed for liver abscesses – 7-9 day withdrawal time here and 0 in US. MGA needed for suppression of heat – 24 hour withdrawal time here and 0 in US. Differing withdrawal time for MGA creates losses if heifers come into heat because MGA withdrawn then shipment delayed, leading to injuries, shrinkage and devalued meat.

- *We have 2 examples – Oxytet, which could affect all cattle, and MGA which would affect only heifers. Considering all drugs used and differences in withdrawal periods, how often does this issue delay shipments? What % of shipments would you say are affected?; and*
- *How do delays affect costs (cost of holding, or loss of value?)*

**3b. Generic/brand dosage differences for in-feed use** – In Canada, producers need DIN # or prescription for pre-made mineral mixes. Mineral mixes are much cheaper in the US but producers have problems with dosage due to varying regulatory regimes (this issue needs to be verified).

- Explain this issue. How does this affect feed lot costs?;
- Vet costs: How much additional time is required by vets, per head?; and
- Feed costs: Does it affect prices paid for feed as well? What would you estimate the average impact on feed costs to be?

**3c. Delayed access to vet drugs in Canada** – The US gets most drugs and medicated feed ingredients on the market earlier than in Canada and at a cheaper cost. For example: for one year Draxin was available in US and not Canada and during that time it cost \$1.70 in Canada and \$1.00 in US, creating a significant competitive advantage. Zilmax was not available in Canada for two years, creating approximately a \$20-30 advantage per head.

- We have only 2 examples. But in some instances, vet drugs are available in Canada first, or at a lower cost (based on discussion with CAHI); and
- Considering this, on average, what would you estimate the impacts on treatment and feed costs to be (average % difference in costs between Canada and the US?) Are there studies or data available to verify these cost differentials?

**4. Inconsistency of CFIA Practices Interview Questions**

**Issue**

NCFAs members have identified concerns about inconsistency in of enforcement and interpretation of regulations/practices by CFIA employees. Some examples provided related to on-farm feed inspections and export certification/inspection issues.

**Proposed measures**

**Table 14: CFIA Practices – Impact Measures**

Issue	Measure	Variables and calculation
<b>4a. Delays at border</b>	Cost of delays	Avg length of delay X Cost/hour of delay X # of times delays take place per exporter X Number of exporters
<b>4b. Animal health/meat quality impacts of Table 4 medication issues</b>	Impacts on sales revenue	Avg. price reduction due to animal health/meat quality issues X # of cattle affected

**Questions**

**4a. Delays at border** – inconsistent application of regulations by the CFIA resulted in cattle being held longer at the border, which is costly and impacts animal welfare. In a particular case two loads of cattle went from same farm but the drivers took the opposite paper work so CFIA held the loads up far longer than they needed to be.

- *How often does this issue cause delays at the border? What % of shipments would you say are affected?;*
- *How do delays affect costs?; and*
- *What are the impacts on animal welfare due to delays at the border? Do delays affect meat quality – therefore, lower prices at sale?*

**4b. Animal health/meat quality impacts of Table 4 medication issues**

- *Please explain the Table 4 issues; and*
- *What % of cattle might be affected and what would be an estimated impact on animal health/meat quality (in terms of reduced price/revenues)?*

**5. Transportation Regulations Interview Questions**

**Issue**

Regulatory requirements for animal and driver breaks can significantly increase the time (thus cost) of transportation and impact the welfare of the animal and quality of the beef.

**Proposed measures**

**Table 17: Transportation Regulations – Impact Measures**

<b>Issue</b>	<b>Measure</b>	<b>Variables and calculation</b>
<b>5a. Transportation delays</b>	Cost of transportation delays	Avg. length of delay X cost/hour of delay for transporter X # of times delays take place per shipment X number of shipments
<b>5b. Animal health/meat quality impacts of delays</b>	Impacts on sales revenue of delays	Avg. price reduction due to animal health/meat quality issues X # of cattle affected

**Questions**

**5a. Transportation delays** – Transport Canada’s regulations regarding mandated driver breaks could become an issue for animal transporters. Electronic logbooks may generate an automatic shutdown of the vehicle. Need to have flexibility on rules for maximum travel hours when have a mechanical breakdown, weather, etc. Lack of infrastructure available to give animal breaks means flexibility is required.

- *What level of delay in shipments is the industry currently experiencing due to transport regulations? Are the delays consistent across provinces (issue in Quebec?); and*
- *How are costs affected (e.g. average increase in cost/head for transport)? Where would we find data to verify this effect (e.g. costs of transport/head over time)?*

**5b. Animal health/meat quality impacts of delays** –

- *Do transportation delays/lack of infrastructure affect animal welfare?; and*
- *To what extent do these impact on meat quality, prices and revenues (average % change in price/head)? Is % shrinkage the best overall impact measure?*

**6. Labour Barriers Interview Questions**

**Issue**

A shortage of skilled manpower is more acute in some areas than others. In the western provinces, it was pointed out that labour is more readily available in eastern Canada. As well, labour in the US is cheaper than in Canada, creating a competitive advantage there. The costs of insufficient labour are loss of production, growth, time and animal welfare.

**Proposed measures**

**Table 19: Labour Barriers - Impact Measures**

Issue	Measure	Variables and calculation
<b>6a. Shortage of labour for packers</b>	Impacts on production	Estimated % decrease in production due to skilled labour shortages X revenue for packers
<b>6b. Shortage of labour at farm level</b>	Impacts on animal welfare	Estimated impacts on price/quality of meat due to increased sickness

**Questions**

**6a. Shortage of labour for packers** – The level of the skill required in the packing plant and the difficult environment makes it important that skilled foreign workers be available and retained. Canadian employees are generally less inclined to remain in a position with difficult conditions than foreign workers who are working toward landed immigrant status.

- *To what extent do skill shortages affect production for packers (% decrease in production due to labour shortages)?; and*
- *OR, do we have data on labour costs for packers in US vs. Canada?*

**6b. Shortage of labour at farm level** – At the farm and ranch level, skilled labour is increasingly needed as compliance with regulatory requirements is becoming more challenging. Examples are tagging calves and being required to record certain information for future traceability requirements, more scanning, more movement reporting, etc. A shortage of labour on the farm can lead to welfare issues as animals may not be monitored appropriately. Labour shortages may also result in more antibiotic use as sick/injured animals may not be detected early enough to prevent progression.

- *To what extent do skill shortages affect production at the farm level (% decrease in production due to labour shortages)?;*
- *To what extent do labour shortages affect animal welfare as measured by reduced meat quality (estimated average % decrease in price/sales)? Where would we find data to verify this effect (e.g. change in volume of cattle by grade level over time)?; and*
- *Are costs affected? For example, are drug treatment costs increasing over time due to more sick/injured cattle? Where would we find data to verify this effect (e.g. increased rates of antibiotic use/cost on feedlots)?*



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