PRICE DISCOVERY TASK FORCE

Price discovery is essential for producers and packers making marketing decisions; policy makers determining the impact of trade actions; and government delivered programs like price insurance and disaster relief. With growing concern about reduced cash volumes reported to Canfax and the negative implications this could have on price discovery in the Canadian fed cattle market, the Canadian Cattlemen's Association appointed a Price Discovery Task Force in March 2014. The purpose of the task force is to investigate the issue and identify what type of information is essential and what options exist to improve the price reporting and price discovery process moving forward.

WHAT IS PRICE DISCOVERY?

Price discovery is the process of buyers and sellers arriving at a transaction price for a given quality and quantity of a product at a given time and place. Price discovery involves several interrelated concepts:

- Market structure (size, location, competitiveness)
- Market behavior (procurement/ pricing mechanisms)
- Market information and price reporting (timeliness, reliability, frequency, type of information)
- Futures markets and risk management alternatives

Price discovery is frequently confused with price determination. These two are related but different concepts. Price determination is the interaction of supply and demand which determines the market price level.

Why is it important?
Price discovery provides the means for achieving price determination and therefore the equilibrium supply and demand for the market. Without this producers do not know what the final consumer demand is for a product, as the price signal is unclear. Consumers establish value for a product at the retail level; this value must then be transmitted back through the supply chain to the producer. This signal of value is communicated through price for a given quality of product.

In the past discussions about price discovery have included ways of identifying quality differences in cattle and carcasses. If cattle could be segregated and paid on these differences a signal would be sent back to producers about what attributes are important to consumers.

Problems with price discovery usually occur when there is either a strong demand for beef coupled with a large supply of beef or there is a weak demand and small supply. At other times price discovery is generally efficient (Ward and Schroeder[1]).

BACKGROUND

Over the last 15 years the fed cattle market in North America has changed. ***Market structures*** have changed as the retail, packing and feedlot industries have become more consolidated and the average size has increased. Managing supplies in large packing operations is costly. Predictable flows of cattle can improve scheduling for these plants which translates into reduced costs.

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[1] Schroeder, Ted, Clement Ward, James Mintert and Derrell Peel. February 1997. Beef Industry Price Discovery: A Look Ahead. The Research Institute on Livestock Pricing.

Market behavior has changed as pricing mechanisms have moved from being predominantly on a live basis to a rail basis in an effort to more accurately capture quality and send the appropriate price signal back to the producer. Emphasis on quality and yield grade through grid premiums and discounts has grown. The market has moved from being cash dominated to grids, formulas, contracts and to a lesser extent packer owned as managing supplies on both the buy and sell side has become more important.

Market Information has had to adjust to the evolving needs and demands created by these changing structures and behaviors. As trade has moved away from open markets to selling directly to packers there is limited market transparency in some areas. This resulted in the US moving from a Voluntary Price Reporting (VPR) system to Mandatory Price Reporting (MPR) system in 1999 in order to collect formula and contract information from packers.

The use of ***futures markets*** and ***risk management*** strategies have become mainstream for many large operations as volatile commodity markets for both inputs and outputs put margins at risk. In some cases, financing is dependent upon a risk management strategy that includes Alternative Marketing Arrangements (AMAs) or price insurance.

Increased use of AMAs have been driven by: (1) large risk of profit margins; (2) price can be connected to quality and yield information sending a stronger price signal through the supply chain than buying on the average; (3) improved efficiencies through planning supply movements that translates into reduced costs for both the feeder and the packer; and (4) economics drive packer and feedlot decisions to use one marketing arrangement over another. Grid deals may occur more frequently when there are large premiums on quality cattle; while forward contracts may be more popular when supplies are tight. Hence, the current market situation will play a role in how fed cattle are traded.

MARKETING COSTS

No market is a free market. All price mechanisms whether through the cash market, contract, or formulas have risk, transaction costs and varying levels of information available to participants. Uncertainty in the quality of the final product represents risk to the packer. If the packer is risk adverse they will pay less for the product they have less information about. For the feedlot the cash market can be risky in that animals may not be marketed in the most optimal week; this is of particular concern if using a time sensitive product (e.g. beta agonists). Increased use of time sensitive products to maximize production has increased demand for timely marketing by feedlots.

Research by Koontz (2014[2]) indicates that the opportunity costs of participating in the cash market are potentially high. Cash markets can be relatively disorderly and expensive to use. Making use of formulas or forward contract reduces these costs. Animals are marketed in a timelier manner so that animal performance is improved and feedlots are more efficient.

AMAs facilitate the transmission of clear price signals about what the marketplace prefers and does not prefer. At the same time they also have costs associated with them. In order to fully benefit from a grid sorting is necessary and feed rations may need to be adjusted to eliminate over-finishing and other non-specification cattle.

All pricing mechanisms have pros and cons. No one pricing mechanism (cash, grid, formula, contract, etc.) has been proven to be better or more effective than another in all market situations. Therefore,

[2] Koontz, Stephen R. 2014. Price Discovery Research Project – Policy Recommendations Summary.

the choice of one pricing mechanism over another will vary depending on the fed cattle characteristics, quality, location, and relationship between the feeder and packer. Just as economics determines if the beef industry expands or liquidates. Ultimately, economics will determine the amount of cash cattle. No matter what pricing mechanism is used, the volume used by one pricing mechanism affects the other mechanisms and therefore the availability and cost of information becomes the important factor for price discovery across different pricing mechanisms.

THINNING CASH TRADE

Cash markets for fed cattle are thinning in North America. There are a growing number of grid, formula and contract cattle. But only cash cattle are currently reported in Canada with no price reporting mechanism for grid, formula or contracted cattle. *If quality cattle are increasingly moved through AMAs, then where are the poorer quality cattle being sold? Are they making up the cash market and therefore becoming the base price for the better quality cattle?*

Thin cash markets are not new to agricultural commodities. The size of the fed cattle cash market continues to be larger than that for hogs, dairy products, egg, and poultry products in the US. There are strong economic incentives for these commodities to trade through alternative means from the cash market. While individual firms (both feeders and packers) have benefited from these changes, the market has not necessarily (Koontz, 2014).

MARKET INFORMATION

The primary function of markets is to coordinate the allocation of scarce resources among differing production alternatives. Markets must communicate information about relative consumer demands for products back to those in control of the product. Broadly defined, market information includes all data and analysis used by market participants to make decisions. Availability of and access to market information has been found to impact price discovery in cattle markets (Schroeder et. al. 1997[3]). The goal of public data is to achieve as close as possible, equal market information for buyers and sellers. The absence of current market information creates market inefficiencies (Anderson et. al. 1998[4]).

In fact, Anderson et. al. (1998) found the loss of public information

The Free Rider Problem

A public good is something where consumption by one individual does not impact the consumption of that good by another individual. They are non-excludable. Cash markets and market information are public goods. This makes them vulnerable to being overused and underprovided for if left to the marketplace. Even when businesses sell copyrighted information through subscriptions, free-riding (the using of information without paying for it) is notorious. Free-riding prevents the collection and provisions of these services from being larger and more robust.

Cash markets fall victim to the tragedy of the commons, as the market thins and information is used by a growing number of cattle under AMAs. Formula cattle free-ride on a base price discovered in the cash market. Other up and down stream users also use this market information to make decisions.

[3] Schroeder, Ted, Clement Ward, James Mintert and Derrell Peel. February 1997. Beef Industry Price Discovery: A Look Ahead. The Research Institute on Livestock Pricing.

[4] Anderson, John, Clement Ward, Stephen Koontz, Derrell Peel, and James Trapp. 1998. Experimental Simulation of Public Information Impacts on Price Discovery and Marketing Efficiency in the Fed Cattle Market. Journal of Agricultural and Resource Economics 23(1):262-278

hurt production efficiency and therefore increased feeding costs and impacted feeders more than packers. Ward et al. (2001[5]) showed additional information on forward contracting was associated with lower, less variable cash prices and higher contract prices and increased marketing efficiency. In October 2013 when USDA was temporarily shut down, the industry was reminded that transparency of market information is valuable and comes with a cost.

The information needs of various users depend on the sector, market structure and participants behavior. Changes within the industry mean participants' market information needs have changed and market information has not always kept pace. Increased use of AMAs requires different information than a market dominated by cash trade.

Historically when cash dominated, timeliness of market information was of critical importance for producers and packers making marketing decisions every week. As the market has moved to more AMAs accuracy of historical basis and seasonality (futures, basis, options, cash trend, etc.) have become more important. Producers are looking for information that helps determine when you have additional risk or an opportunity at the time cattle are placed or even before. Forecasts of local supply and demand are currently available in a general sense through cattle on feed reporting. Knowing if you expect a bear or a bull market and how cash, formula and contracts have performed in past bear and bull markets can also be helpful. As time gets close for those cattle to be moved, examining the cash trend is also important. But the timeliness of it is less critical than for those selling on the cash.

THE CANADIAN SITUATION

In Canada the dynamics within cash trading have changed, such that many of the trades have a premium or discount component not known until once the animal is slaughtered (grid), or the price is based on a five area average (formula); therefore these trades are unable to be used in the current price discovery system. In addition, reduced inventories mean there are simply fewer cattle altogether.

Year	**Weekly Average Cash volumes**
	Head reported
2008	5,834
2009	6,474
2010	6,505
2011	4,586
2012	3,106
2013	1,705
Jan-Apr 2014	793

Weekly volumes of fed cattle cash trade have declined significantly over the last several years from 6,500 head in 2010 to 1,700 head per week on average in 2013. In 2013, only 23% of fed cattle were traded on the cash market with other marketing arrangements used primarily being forward contracts (48% in 2013) and grid/formula (29%).

ENHANCED VOLUNTARY CASH REPORTING?

The question has been asked as to whether enhanced voluntary cash reporting would provide adequate price discovery or are alternative measures necessary? The voluntary price reporting system by Canfax for fed cattle has been highly accurate over the years with the price reporting reflecting internal packer averages. This is not to say it is without risks. Any voluntary system is at risk if producers choose to

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[5] Ward, Clement, Stephen Koontz, Derrell Peel and James Trapp. 2001. Lessons learned from Research with the fed cattle market stimulator. Western Agricultural Economics Association Annual Meeting. Logan, Utah.

report when they receive a low price but do not report when they receive a high price and vice versa. When the cash market is very thin, small changes can create swings in the average. The unwillingness o f some firms to report prices voluntarily also raises the question among data users as to whether market reports are representative of actual trade.

The bigger issue is not having any cash cattle to report, at all. A mandatory system will not help if there is limited cash cattle trade. In the US, under mandatory price reporting they are experiencing the same issues as Alberta simply because there are no cash cattle. It is undeniable that cash trade is so thin some weeks that there are no prices reported. When cash only represents 23% of cattle traded, even if there was 100% reporting it is still small volumes on a weekly basis.

Fed cattle slaughter in western Canada averaged 30,750 head/week in 2013 (with a range of 13-39,700 head), at 23% that is 7,000 head for cash reporting in any given week (with a range of 3-9,000 head). Live exports at 5–8,000 head/week are not adding much to price discovery with only 7% negotiated (around 450 head) and 10% negotiated grid (not captured in the current reporting system) all others are formula or contract cattle. This could still result in weeks where a cash price is not reported.

Being able to validate that the cash prices reported are representative of the bulk of trade volumes would be valuable in building confidence. This validation could come through reporting of other types of pricing mechanisms. **Therefore, alternative measures are necessary. Primarily through enhanced reporting on alternative pricing mechanisms.**

It is noted that Canfax reported 1,700 head/week on average in 2013, which represents only 24% of the cash trade. **Therefore, enhancing cash reporting must also be a key outcome of this Task Force.**

CANADA IS A DIFFERENT MARKET

The Canadian cattle market is different from the US in that using the futures as a proxy for the cash market raises additional issues. First, there is still the exchange rate risk; requiring producers to hedge the dollar as well as the live or feeder cattle futures. Second, there is still basis risk, which fluctuates with local supply and demand situations, as well as transaction costs of doing business across the border. This can include trade barriers and a 'thicker' border which prevents prices from arbitraging.

In addition, programs like price insurance and agri-stability rely upon cash price reporting. As cash trade thins to the point that fed cattle prices are not reported some weeks, concerns are raised about the viability of these programs. This is of particular importance, as historical data is needed to calculate program premiums and coverage levels. The hog industry, with no local market, uses the CME futures for their price insurance program but the volatility from the futures results in premiums six times higher than those in the cattle program. This additional expense, limits the participation in the program.

A Canadian cash price is needed to calculate cash to futures or cash to cash basis. The basis is a key measure in evaluating the Canadian market performance relative to the US. It is used to evaluate damages incurred by producers in trade action suits like mandatory Country of Origin Labelling (mCOOL) and hence accuracy is of critical importance. While the shrinking numbers of grid/formula cattle depend on the cash market for a base price, the growing numbers of contract cattle depend on the futures market and accurate historical data to negotiate basis levels.

Maintaining price discovery in Canada is a priority.

PRICE DISCOVERY AND REPORTING RECOMMENDATIONS FOR CANADA

Price discovery is critical for sending the correct price signal from the consumer to the producer. There must be a level of **confidence** in data **accuracy** to address needs for market participants, program delivery (e.g. price insurance, agri-stability and disaster relief) and trade disputes. In these situations, data may be available on a delayed basis to build historical comparisons in the development of programs. This means that not all data required will be useful immediately for the producer and packer; but is still valuable for industry to collect.

Any recommendations must address the needs of the following three uses/audiences:

1. **Timely** information for **producers** making marketing decisions (particularly those selling cash)
2. **Program requirements** for price insurance, income and disaster programs
3. Credible and reliable **historical** data for long-term price discovery analysis and policy, regulatory, and strategy development by industry and government (including trade actions)

There must be confidence that the prices reported are **representative** of the bulk of cattle traded in any given week (**volume**). Market dynamics are constantly changing and incentives to sell/buy cattle on a cash, grid, formula, or forward contract basis also change.

In order for any reporting system to not only be valid today, but also five or ten years from now a series of market information reports must be available on each of these pricing mechanisms. This will allow for verification of the accuracy of the cash market against the pricing mechanisms with the most volume at any point in the future. **Consistency** in how these pricing mechanisms are defined and reported will provide clarity to the market and build confidence based on the price discovery framework as a whole and not just based on cash trade volumes that may or may not exist.

This requires a balance between **accuracy** and **timeliness** of information for difference audience needs. Hence, not all information will contribute to price discovery in the current week, but may be a verification of the cash price reported on a delayed basis.

The reporting system must address **confidentiality** for individual participant data and moral hazard issues for price insurance programs.

PROGRAM DATA REQUIREMENTS

1. **Agri-Stability** - Regional calf, feeder, fed, and cow prices (slaughter and breeding)
   - Use data to establish inventory values and are a component of benchmark margins
   - Can work with a lag of a month or more.
2. **Advance Payments Program** – Regional calf, feeder, fed cattle prices and related basis
   - Currently uses data in conjunction with futures prices to establish advance rates
   - Can work with a lagged data to establish advance rates.
3. **Western Livestock Price Insurance** – Calf, feeder, and fed cattle prices
   - CANFAX data is used in conjunction with auction market data which is separately collected to establish settlement prices for the insurance program.
   - Timely data is required for WLPIP for settlement prices

If data were not available, or were not available in a timely enough manner, the administration for these programs would look to find other sources of data. In many cases these alternatives would be proxies, which would be weaker. This could result in less accurate program benefits, and/or delayed program benefits for producers. For price insurance more noise from using CME futures markets would result in higher premiums for producers, potentially impacting the viability of the program.

REPORTING FRAMEWORK CRITERIA

As new market information collection and reporting is designed, Dr. Ted Schroeder recommended, such a system must possess the following characteristics:

1. Accurate, representative, reliable, and difficult to manipulate
2. Strive for as close to 100% of relevant industry firm participation as is feasible
3. Auditable and verifiable
4. Timely
5. Compiled and reported by an independent third party
6. Easy, clear, and low cost for firms to provide information
7. Easy for industry participants to access and interpret reported information
8. Transparent in collecting and reporting procedures
9. Sensitive to confidentiality
10. Flexible to modify procedures and reporting methods as needed
11. Adaptable to make adjustments to process and reported information as needed
12. Periodic review of procedures used to collect and report price information and statistical analysis of the transactions comprising a report is strongly recommended. The nature of the underlying transactions that populate a report is critical to design of reporting methods and appropriate interpretation by users of the reported information.

Any system for collecting and reporting market information that might be developed that does not possess all of these attributes will be less effective.

ASSUMPTIONS

Dr. Ted Schroeder has pointed out that the challenge with going to incentive programs to encourage cash trade or mandating cash volumes as a fix, is that it ignores many of the motivations that exist to move away from the cash marketing in the first place. Motivations such as reduced search time, reduced negotiating costs, timeliness of guaranteed delivery dates, and operating efficiencies. Forcing producers to go back to cash for price discovery negates many of the advantage of marketing agreements and forward contracts.

1. Any reporting system must reflect marketing realities, and not force the use of any one marketing method for the system to work.
2. Enhancing reporting on cash cattle will not serve the industry in the long run
3. All three uses of data (producers, programs, policy and regulatory) are critical to the LT industry sustainability

Dr. Schroeder went on to note that thinning or disappearance of the cash market does not mean that a market for fed cattle cannot still function effectively and efficiently. The value of the cash market is in providing that market signal about current and upcoming supply and demand. This comes in the form of a base price.

There are alternatives for finding base price information: If you had a clear indication of (1) future cattle and beef supply; (2) cattle and beef demand; and (3) a summary of price valuations that reflect supply and demand expectations**. Base price values could be** negotiated over longer horizons based on information about anticipated supply and demand and longer term cattle prices could be reported to market reporters much like negotiated cash market prices currently are collected and reported to provide information to industry participants.

This creates a long list of market information which may or may not be valuable to the Canadian industry and may or may not be feasible to collect. The point is to collect an array of alternative market prices and information.

> *The current environment calls for collecting and reporting additional information on forward fed cattle prices that were not needed when the current USDA mandatory price reporting system was designed. In particular, reporting weighted averages and associated price variation for forward prices for deliveries scheduled for future months is additional price information that is increasing in relevance and potential value. – Ted Schroeder*

A ROADMAP FOR CANADA

Mandatory Price Reporting (MPR) significantly increased the depth of data available in the US. Like any price reporting system a balance between demands for timeliness, accuracy, and confidentiality of individual packer information had to be reached. Many adjustments and improvements have been made to MPR over the years that have made the information more valuable for industry. Information on the US MPR and private data collection systems were gathered through a series of interviews with market analysts and organizations. A summary of the key findings are presented, along with an overview of the current price reporting system in the US and Canada. Then ways of enhancing market information and cash trade fed cattle and boxed beef pricing in Canada are proposed.

FED CATTLE TRADE

LESSONS LEARNED FROM US MANDATORY PRICE REPORTING

In 1996, it was recommended to USDA that contract or formula pricing premiums and discounts, based on carcass merit, should be captured and reported, and that a negotiated grid pricing structure be developed, with the base price and spreads determined by competitive bidding between buying interests. In October 1996 AMS started reporting national summaries of carcass premiums and discounts for fed cattle on a weekly basis. It was noted at the time that several potential base prices can be used and that premiums and discounts vary widely. Consequently, even with enhanced market information cattle feeders must understand the options for choosing base prices, premiums and discounts and the trade-offs within grids, especially for quality cattle (Schroeder et. al. 1997).

MPR has a series of daily and weekly weighted average reports available for fed cattle (on a regional and national basis) including[6]:

1. **Negotiated** – A <u>cash</u>/spot deal negotiated between buyer and seller where the price is known at the time the deal is struck and will not change regardless of how the cattle perform. All that is needed for payment is weight. <u>Grid</u> trades are considered an important part of cash trade where the base price is negotiated between buyer and seller and is known at the time the deal is struck and delivery is usually expected within 14 days. However, the final net price will be determined by applying a series of premiums and discounts after slaughter based on cattle performance.
    a. All cash sales are reported with a separate section for negotiated grid base prices
    b. Packers must submit actual head count, price, estimated weight of the lot, estimated dressing %, estimated % Choice or better and the state of origin
    c. Daily reports show Live FOB and Dressed Delivered sales only
2. **Net Formula & Grid Prices** – The <u>formula</u> base price is not negotiated but is based on some other price (e.g. plant average, Five State average) or value determining mechanism that may or may not be known at the time the deal is struck. The final net price for <u>formula and grid</u> cattle is determined after premiums and discounts are applied.
    a. All net formula sales are reported with a separate section for negotiated grid net sales
    b. NOTE: Formula base prices are NOT published on any report
    c. Net prices are reported once cattle have been slaughtered and all kill data is known
    d. Packers must submit the final net price, actual weights, actual dressing percentage, % Choice or Better, as well as all premiums and discounts which were applied to that specific lot.
    e. These net prices along with actual weight and grading information are what shows up in the Formula report.
    f. Cattle sold on the "high of the week" will show up under the Formula-Live category on the reports.
3. **Forward Contracts** – A price based off the CME Live Cattle Futures. This base price is normally a moving target that the producer has the option to nail down at some point during the life of the contract. The final net price paid to the producer after any adjustments (premiums/discounts) have been made to the forward contract base.
    a. Contract volumes, delivery month and basis are first reported on the Committed and Delivery Report when the contract is signed (the base price is submitted by not published)
    b. NOTE: There is no daily report as it does not meet the 3/70/20 guideline
    c. Weekly Forward Contract Net prices are published after slaughter and all kill data is known
    d. Packers must submit the final net price, actual weights, actual dressing percentage, actual % Choice or better and state of origin. If any premiums or discounts were applied to the lot then the plant must submit these as well.
    e. These net prices and actual grading data are shown on the forward contract report.

The five state weekly weighted average price is the most comprehensive and it could be argued that it is the most representative of cash market conditions. It is definitely used as such by industry.

[6] Information from this section comes from USDA, MPR's User Guidelines

Negotiated grid base prices are considered an important part of the cash market and are reported separately.

MPR has made it possible to compare prices from the different procurement mechanisms. Ward (2014) has done just that for the 12 years from 2001-2013[7]. Overall, the different pricing mechanisms track each other closely as the fed cattle market moves up and down seasonally and cyclically. Thus, each mechanism is generally representative of broad market conditions (that is price determination), but they do not all necessarily reflect what might be affecting prices within and between weeks (that is price discovery). Deviations are evident but usually for just a few weeks and not for extended periods. No single pricing mechanism was consistently higher or lower than others on an annual basis for the 12 years examined.

- As could be expected net grid prices reported for this week, track close with negotiated cash price for the previous week.
- Cash is used in most formulas in some shape or form, so they also track closely as well.
- Differences between cash and forward contract prices have been significantly different at certain periods. Cash prices tend to be lower than forward contracts in bear markets; while cash tends to be higher than forward contracts in bull markets. Price differences between these two mechanisms are obviously impacted by the time period price discovery took place as forward contracts are all reported on after slaughter and all premium and discounts are applied.

MPR Strengths and Weaknesses

Strengths:

- Confidence in the accuracy and transparency of cash prices reported is high, despite small volumes, as 'none reporting' is very hard to do with packer audits.
- MPR gives confidence to those choosing to use the cash market, with greater depth of data gained.
- While small cash volumes do raise concerns, there is little concern about lower quality cattle being disproportionately reported on the cash, and manipulating the market, with MPR.

Weaknesses:

- Inflexibility to adjust to changing market dynamics, as definitions change (particularly for forward contracts)
- There has been a trend of decreasing commentary that verifies through matching bids and sells. There has been a loss of market reporters who can decide if the data makes sense, as there is only one or two hours between when data is received and published by the USDA. This allows little time for statistical verification.
- There is the challenge with balancing timeliness and accuracy as well as usefulness of how data is reported.

How to improve current US fed cattle market reporting?

There is a growing volume of trade that fall outside of MPRs strictly defined categories. For example, a

[7] AGEC-615 Extent of Alternative Marketing Arrangements for Fed Cattle and Hogs, 2001-2013
http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-5942/AGEC-615web2014.pdf
AGEC-616 Price Comparison of Alternative Marketing Arrangements for Fed Cattle, 2001-2013
http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-5932/AGEC-616web.pdf

negotiated sale with a basis off the nearby futures, five state average, or last week's average for delivery within 14 days or less are not captured within the current negotiated reporting system. These cattle are sold on a basis relationship and priced that day – does that make them a negotiated trade? The argument is that these sales could be considered negotiated price trades and included in cash reporting, adding volumes and robustness to the current price discovery system.

The inflexibility within the regulated system means that it takes significant amount of time before these issues are addressed, a voluntary price reporting system could allow for more flexibility with regular reviews. There will be a review of MPR in 2015 but any market information added to an enhanced reporting system must be useful to industry. Changes being considered include:

- As non-traditional cash volumes increase, are there ways to add to spot price discovery with these trades or would it cause confusion?
    - Can clarity be added to category definitions to reflect current market practices? What are the unintended consequences of doing that?
    - Basis bids on the spot markets are another mechanism for price discovery where the final price is known at the time of sale.
    - How to deal with spot base bids (e.g. five area average -2)
- Formula and Forward Contract net prices:
    - Clarify reporting week for Net price after slaughter - currently prices are reported two weeks after slaughter with all premiums and discounts applied. So there is a significant lag but prices get plugged into the current week (when final payment is made). It would be better if there was a lag on reporting and the correct week was identified. The question is which week would be appropriate?
        - The week committed to packer or the week slaughtered?
    - Base prices for formulas are currently excluded from MPR. Would require negotiations to include them. However, since the base price is typically from the cash MPR report it does not make sense to do this.
    - Lack of timeliness in reports - there could be preliminary report that would be useful for price discovery with final prices reported later.
        - May not have prices for a preliminary report, but volumes could be reported earlier

US Industry Issues

Larger feedlots who are selling every week are not too concerned about getting a base price every week as it evens out over 3-4 weeks. However, smaller custom feedlots feel that if there is no price on the week they need to sell that this is serious concern that is compounded by the fact that smaller feedlots have less bargaining power than large commercial lots. Cash sellers also resent that they take all the risk in setting the prices for the non-cash players.

Regionally there has been no cash based trade for several years (decades in some cases). In these situations and over the near term producers are adapting. First, there has been increased use of combined volumes to create a five state average. The next step is to then base trade off the five state average with a basis or move to formula trading for these regions.

REPLACEMENTS FOR THE CASH MARKET

Concerns about losing the cash market stem from what the cash market provides in terms of: (1)

creating a base price, (2) market information, and (3) transparency of price signals for supplies to adjust to. Market information can be developed for other pricing mechanisms, but the primary challenge is timeliness that brings transparency to the price signals received by producers. Any grid, formula or contract with premiums and discounts do not have net prices available until after slaughter, creating a lag that is typically two or more weeks from the time a base price was negotiated and price discovery took place. The timeliness of market information from the cash market is a valuable asset to this pricing mechanism. However, as trading has evolved to be more out front, how critical is the timeliness of this information for producers and packers?

If the only value of a cash market is to create a <u>base price</u>, what alternatives are out there if the cash market is indeed dead?

1. Live Cattle Futures
    a. Strengths
        i. High transparency
        ii. With small cash volumes this really is where price discovery is occurring in the US already
        iii. The US has a viable futures market with volume and active trade
    b. Weaknesses
        i. There are challenges using a <u>net</u> price, which is what the Live Cattle Futures are. CME would need to change parameters to act as a base price like No.2 Corn.
        ii. Outside investors have resulted in increased volatility in the futures market, where the relationship to fed cattle trade is not always apparent.
        iii. AFSC's hog program is currently based off of the CME futures because there is no Canadian cash market. Increased volatility from the futures has significantly increased the premiums in that program compared to CPIP. Some of the risk can be addressed in a multi-week rolling average but it would still require higher premiums than what the program currently offers.
        iv. Canada does not have enough volume to support a viable futures market domestically. Using the CME futures adds exchange rate and basis risk which fluctuate with local supply and demand as well as trade barriers that "thicken" the border.
2. Boxed Beef
    a. Pros
        i. Boxed beef prices act as a check for fed cattle prices. By basing fed prices off the boxed beef price this gives producers confidence they are getting the right price signal from the market
    b. Concerns
        i. Again this is a <u>net</u> national price, not a <u>base</u> price.
        ii. Need to choose Choice/Select
        iii. This adds one more variable, <u>the packer margin</u>, and does the feedlot share in the loss. This clouds the issue and would need to be negotiated.
        iv. Having a formula based off the cutout creates <u>no incentive</u> for the packer to push boxed prices higher, as they become a custom operator with a set margin.
        v. Spot boxed beef sales on the daily report are shrinking and the comprehensive report includes forward sales that the producer may not want to be part of the packers calculated <u>risk in the future</u>. However, these forward contracts are

currently small volumes with more formula trade.

vi. It is difficult for the yields to include value added products, so the producer would not be able to capture value from these innovations.

vii. Does not currently capture Case Ready to Retail which is a growing volume.

viii. In order to say anything about live cattle value from the boxed beef report you also need a drop value.

3. Hybrid between the two

NON-PRICE INFORMATION

MPR also provides a number of non-price market information reports with upcoming and current supplies including:

1. **Committed and Delivered** Reports - Packers must submit the number of cattle they scheduled for slaughter (committed) as well as the number of cattle unloaded at the plant that day (delivered).
    a. The packer reports the purchase type (negotiated, grid, formula, or forward contract), head count and state of origin.
    b. This report shows a breakdown by state as to how many cattle were committed and delivered every day.
    c. There is a daily and a weekly report
2. **Premium-Discount Report** – A national summary reflecting all the premiums and discounts the plants expect to have in effect for the current slaughter week.
    a. It also includes a section for the Five State Area with a weighted average of the premiums and discounts based on slaughter capacity for each company.
3. **Packer Owned –** cattle that a packer owns for at least 14 days immediately before slaughter *(*this includes formula and forward contracts*)* – There are 3 sections to this report
    a. Packer Owned volumes slaughtered the prior week and grading information
    b. Prior-week slaughtered formula and forward contract head counts
    c. Forward Contract head count, basis level and delivery month. This section keeps a running total of out front months

However, these reports are not well known or even used regularly by US industry, making them of questionable value.

Weaknesses

- Non-price market information like future supplies of committed cattle (those booked out over the next 90 days) is seen as convoluted and not helpful in producer decision making.
- The number of contracted cattle by month is already in the MPR but is not well used.
- Grids are highly confidential. Base price are reported as well as net prices with volumes but the report is not well known or used.

THE CANADIAN SYSTEM

Canfax has been collecting cash prices in Alberta and Ontario since 1970. Cash trade is currently reported by individual feedlots, custom feeders, brokers and in Ontario auction markets, and includes sales on domestic and live fed cattle exports to the US.

Cash/spot: A deal negotiated between buyer and seller where the price is known at the time the deal is struck but may include performance discounts for heavy weights, over-30-month (OTM) cattle, etc.

Grid and formula cattle are not reported but their volumes are included in the weekly volume. It is assumed these cattle have a base price very close to the weekly average reported with premiums and discounts then applied.

Strengths

- Canfax has been able to sustain Voluntary Price Reporting with feedlot support for over 40 years
- The VPR principles followed by Canfax (as outlined earlier) protect individual feedlot confidentiality
- Information is timely, with fed market updates available throughout the week by Canfax and a weekly average reported on Friday afternoon
- Market transparency
- Data is available to be used as a base price for other pricing mechanisms as well as price insurance and disaster relief programs

Weaknesses

- Excludes grid base prices, formula and forward contract information
- Reduced volumes of cash cattle have:
    - Discouraged individuals to report, as they may “stand out”.
    - In efforts to protect individual trades or due to agreements with packers, prices are not reported. Once this trend starts, the habit of reporting prices is quickly lost even when those reasons are removed.
    - Criticism has been been raised on if cash trade is so small that it is not capturing the high and low ends of trade. With feedlots saying the high is missed and packers saying the low is missed.
    - Increased confidentiality concerns by feedlots that do report.
    - Raised questions on if there is incentive for feedlot to only report low or high prices to make programs “work” for them.
- Auction market reporting in Eastern Canada does not consistently represent quality cattle with extremely wide ranges in weekly trade.
- Feedlot reporting in Eastern Canada is extremely limited

PROPOSED: **FED CATTLE PRICE REPORTING FRAMEWORK**

Type	Who	When	What Reported	Where
Negotiated – **cash/spot** deal negotiated between buyer and seller where the price is known at the time the deal is struck but may include performance discounts (e.g. heavy weights, over-30-month (OTM) cattle, etc.) The packer has the right to lift them immediately. *Prices collected on domestic and live cattle exports.*	Feedlots and Brokers to Canfax (FOB the LOT)	Current	Str/Hfr Combine Weighted average in CDN $/cwt Volume	Canfax Weekly Daily Snapshot
Negotiated Grid (Base) – *Excluded from this reporting system*				
Negotiated Grid (Net) – The base price is negotiated between buyer and seller and is known at the time the deal is struck and delivery is usually expected within 14 days. However, the final net price will be determined by applying a series of premiums and discounts after slaughter based on cattle performance. *The net price reported is the amount paid to the producer divided by the total carcass weight for the lot. The Premiums/Discounts of the Grid are never disclosed and remain propriety.*	Feedlots and Brokers to Canfax (FOB the Packer)	7-14 days after slaughter	Str/Hfr Combined Index Volume	Canfax Weekly
Formula (Base) – *Excluded from this reporting system*				
Formula (Net) – The base price is not negotiated but is based on some other price (e.g. plant average, weighted average price like a 5-State average) or value determining mechanism that may or may not be known at the time the deal is struck. The final net price is determined after premiums and discounts are applied. *The net price reported is the amount paid to the producer divided by the total carcass weight for the lot. Conditions are never disclosed and remain propriety.*	Feedlots and Brokers to Canfax (FOB the Packer)	7-14 days after slaughter	ID the week prior to the kill week Str/Hfr combined index volumes	Canfax Weekly
Forward Contract (Base) – A contract where the base price is determined for delivery at a future date. The base price can be, but is not limited to, a moving target that the producer has the option to nail down at some point during the life of the contract. The final net price paid to the producer after any adjustments (premiums, discounts, or conditions) have been made to the base price. *Conditions of the contract are never disclosed and remain propriety.*	Feedlots and Brokers to Canfax (FOB the Packer)	Current	Volume Base or Flat price – will be adjusted to be consistent in reporting	
Forward Contract (Net) – *Excluded from this reporting system*				

Volumes and consistency are needed to build confidence

- Consistency in reporting is critical; therefore having clearly defined parameters is a must.

Details

a. Negotiated – cash/spot
   i. Reported by feedlots and brokers to Canfax (FOB the Lot)
   ii. Provides a base price and timely market information
   iii. **Definition** is broad enough to include non-traditional cash (e.g. basis bids)
   iv. Do not publish a range to encourage reporting
b. Negotiated grid (net)
   i. Reported by feedlots and brokers to Canfax on a 7-14 day delay (FOB central location)
   ii. Provides verification for cash trade and increases weekly volumes reported
   iii. Adds volumes to a price insurance settlement index
c. Formula (net)
   i. Reported by feedlots and brokers to Canfax on a 7-14 day delay (FOB central location)
   ii. Provides verification for cash trade and gives producers an industry average to evaluate their own performance against.
   iii. Adds volumes to a price insurance settlement index
   iv. Provides accurate and complete historical data to compare against the US formula data in trade disputes.
   v. Week identified will be the week prior to slaughter to match the typical base price used.
d. Forward contracts(base)
   i. Reported by feedlots and brokers to Canfax (FOB central location)
   ii. A broader definition than USDA excludes a specific time requirement between when the contract is made and when pick-up occurs, making it hard to avoid reporting against.
   iii. Provides greater price information on upcoming months to inform negotiations
   iv. Provide early indications of the impact from trade disputes (e.g. May 2013 COOL Amendment)

An **ongoing review process** will ensure price discovery and reporting are meeting industry needs. It is recommended that a CCA task force review the reporting framework every five years and be initiated through the Domestic Agriculture Committee.

Strengths

- Reporting on all four pricing mechanisms, ensures that some level of market information will always be available (albeit delayed in some cases) regardless of how the market changes in the future between the different mechanisms.
- Has a combination of both base and net prices reported
- Enhanced historical data will build confidence in program delivery and trade actions (e.g. COOL).
- Would provide cash, grid and formula data to be used in price insurance settlement index representing 52% of domestic volumes in 2013.
- Conditions, premiums and discounts of formula's and forward contracts are never disclosed.
- The broader definition for cash and forward contracts compared to USDAs MPR ensures that data is collected and cannot be avoided by changing terms.

Weaknesses

- Reporting burden remains on the feedlot

- Details of steers/heifers, volumes, and price ranges will not be provided for all categories in order to ensure confidentiality, this will limit the usefulness of this data while still providing a price signal to the market
    - Ranges are an important aspect of price transparency but will not be reported to encourage feedlot reporting at both the high and low ends of the range
- There is a mix of reporting with some FOB the feedlot and some FOB the packer, which creates a lack of consistency for comparison
- Voluntary reporting means that not all prices will be reported, even with additional categories
- Inclusion of net grid and formula prices available between 7-14 days after slaughter may result in producers no longer able to pick the settlement week on price insurance. There are options where settlement would be determined as the average or high of the four weeks.
- The 12 week option on price insurance may be too close, in which case it would no longer be offered, going to a 14 or 16 week as the nearest. The volume of cattle using the 12 week option is small at the moment. AFSC would need to do more testing to determine what program changes may be needed under the proposed system.

Voluntary Packer Verification

In the US MPR system, packer audits provide a high degree of confidence that non-reporting does not occur. There is potential to have **voluntarily validation** of prices reported from feedlots if packers were willing to provide a limited data set to compare against at certain times of the year. This could be done on a delayed basis by Canfax and would <u>build industry confidence</u> in the data. Packer data would never be published or released, but only used for internal validation purposes only.

This would be of value not only moving forward with the proposed new price reporting framework, but also in the current market to validate cash prices being used by the various government programs until a more robust price reporting system is in place.

The initial data set would be larger to meet the following objectives. Moving forward, we will not be asking for this much data but more of a spot check to evaluate accuracy. The amount of data (number of weeks) and frequency (times per year) of those random spot checks will be determined by this initial data set.

Initial Data Set Objectives:

1. Verify the weighted average cash price for fed cattle in Alberta
2. Develop minimum sample size required for future verification (number of weeks and how often)
3. Determine minimum volume/threshold for weekly cash reporting to be accurate with X degrees (will depend on tolerance level for variance)
4. Evaluate the robustness of the current cash market using Ted Schroeder's recommendations (will need individual lot transactions)

Data Specifications:

- Fed Cattle Cash trade as per the following definition:
  Negotiated – cash/spot deal negotiated between buyer and seller where the price is known at the time the deal is struck but may include performance discounts (e.g. heavy weights, over-30-month (OTM) cattle, etc.) The packer has the right to lift them immediately.
- Price, sex (steer or heifer), number of head, dressing percentage, week, FOB the feedlot
- Poor quality/exotic/dairy animals should either be excluded or clearly identified

- We do not want information that identifies an individual seller/producer, but we need to be able to distinguish transactions by seller/producer to ensure minimum confidentiality requirements are being met.

Until an enhanced price reporting framework is in place, packer verification will only be on cash data. After implementation we will expand this to include grid (net) and formula (net) data (FOB the plant). All of it would be on a historic basis. Packer data would never be published or released, but only used for internal validation purposes only.

Price Reporting as a Program Requirement

Price reporting could become a program requirement for price insurance and disaster programs, through a third-party provider (e.g. Canfax, BFO, FPBQ). This puts the reporting burden on the producer who benefits from having price reporting, as these programs would be negatively impacted if price reporting did not exist. The long term sustainability of the price reporting system is important therefore this requirement should not solely depend on the current programs. If the programs end, there will be no data reported. Therefore, it must a standing requirement for any federal or provincial program requiring price data, as there have typically been disaster programs historically even if it changes over time. This also addresses the moral hazard issue for AFSC if the people in the program are the only people reporting. As program participation fluctuates depending on market condition, it is key to also tie it to Agri-Stability so that producers must make the choice at the beginning of the year to participate and commit to reporting for the entire year.

Strengths

- Encourages reporting from those who benefit, reducing the free rider issue
- Ensures long term sustainability of programs that rely on price reporting

Weaknesses

- Having whoever receives the checks from programs reporting prices creates confusion for brokers and custom feedlots that provide risk management services to producers/clients who own the cattle. The owner of the cattle would need to report in order to be eligible for Agri-Stability.
- Producers would need one-stop reporting, where Canfax/BFO/FPBQ is the designated third-party collecting prices. However, this raises the question of who would be responsible for compliance checking and how that would increase costs of the programs. Compliance would have to be done by the program administration. Given the wide variety of how programs are administered across provinces there is potential of a wide variance in how a program requirement is enforced.
- Somehow Canfax is going to need to be paid. Canfax could charge AFSC for the additional data and compliance services and build them into the premium cost. Producers do not want price insurance premiums to go up, will need to find another way.
- Timeliness of reporting will be key to avoid having producers provide a years' worth of prices at the end of the year to be eligible for Agri-Stability. This would necessitate revisions and help with historical accuracy but not with price discovery.

BOXED BEEF PRICE REPORTING

Boxed beef reporting provides a valuable check on where the wholesale market is going and is one step closer to the consumer in terms of price signals. This provides clarity on quality grading premiums.

Unlike the hog market which has a formula based for a "carcass" cutout, the beef industry has a "boxed beef" cutout. This creates subtle differences in interpretation and use that are important for the producer to understand. The hog "carcass" cutout estimates the value of a hanging carcass from the individual pieces. While the "boxed beef" cutout estimates the value of the individual pieces once they are in a box, after fabrication. The boxed beef cutout provides an overall performance indicator for the fabricated beef industry.

LESSONS LEARNED FROM THE US

Mandatory Price Reporting (MPR) has two boxed beef reports. The daily report provides spot trades 0-21 days out; while the comprehensive weekly report includes all sale types, all delivery periods, all delivery locations and braded program information. These reports provide a single national price versus the old fixed location of Omaha plus basis for transportation.

There needs to be a certain level of consistency in the SKUs for the cutout model. With changing cuts and how strict reporting is there is a portion of volumes that are not captured by these reports.

The Daily (spot) Report

- All beef transactions are original sales from cattle slaughtering firms regulated by MPR to first time buyers (including processors).
- Sales are negotiated, with the product delivering within 0-21 calendar days to the domestic market.
- Prices are quoted in U.S. dollars per 100 lbs (cwt)
- Beef cut items are from non-dairy bred steer and heifer beef, and are referenced according to the Institutional Meat Purchase Specifications (IMPS) when possible.
- Cut items are no older than 14 days from the date of manufacture, and are limited to the USDA Choice and Select grades.
- Branded product is excluded (e.g. Certified Angus Beef)
- Ground beef and beef trimmings are from both dairy bred and non-dairy bred steer/heifer beef, and are no older than 7 days from the time of manufacture.
- Sale prices of all beef items are quoted on an F.O.B. plant basis (delivered price minus freight cost).

The Weekly Comprehensive Report

- All sales types (cash, formula, contract)
- All delivery periods
- All delivery locations (domestic and export)
- Fresh, frozen, and aged product
- All MCOOL categories
- Only fed steer/heifer beef, no cow or blended cow product
- Prime, Choice, Select, ungraded, and branded product (Note: Select branded product is absorbed into the Select category)
- Only packer's beef item codes equivalent to an IMPS item are used in these cutout calculations.
- Specialty cut product, small box product and small chub GB are examples of items we don't equate to IMPS.
- Cut items do not include dairy bred steer/heifer source, but we do use dairy bred in trimmings and grinds.

The Daily (spot) Report

Volumes on the daily report are very thin compared to the total volumes that are actually sold.

There has been a trend towards more formula based trade, which is harder to capture in the current reporting systems. Formulas may be based on a five day rolling after to remove some of the volatility in the daily report. However, some are still based off of a Tues or Wednesday price leaving both sides open to outlier trade. Foodservice wants to know the price on the menu. Knowing the price in advance is more important than receiving the lowest price. So they may lock in a flat price on a monthly or quarterly basis. Retailers want confidence by purchasing in advance (6 weeks) on contract or a flat price when running features. When the market is volatile contract volumes decrease as no buyer want the exposure if the market falls and packers demand a higher price to cover their risk.

The Comprehensive Weekly Report

The comprehensive weekly report includes all sale types (spot, formula, forward contracts), any delivery time (beyond 21 days), and all destinations (domestic and export product). With so much formula trade based on Monday's high for a particular product, this is the only way to capture that trade and provide robust prices for individual items that are thinly traded in the daily report. However, there is potential to highlight outlier trades that can disrupt and distract the market. This is more of a concern for the pork market where there is more exported product, than for beef where there is not necessarily as much forward contracts. While the spot trade in the daily report remains the benchmark for basing formula trades off of (despite having thin volumes), the comprehensive report is being used more and more by industry as a barometer of wholesale market trends.

MPR Strengths and Weaknesses

MPR collects data for industry to use, it does not influence the way packers do business. Data collection must be flexible enough to reflect market realities; with reporting by packers straightforward and relatively easy with as little reporting burden as possible.

Strengths:

- MPR's ability to <u>capture volumes</u> and it <u>auditability</u>. Plants are given notice of when an audit will occur and which lots will be reviewed. Lot data is examined to ensure it matches what was submitted to USDA. They also randomly pick a slaughter data and plants must show how each animal was reported to AMS. Producer confidence in MPR is shown in their willingness to consider pricing off of the cutout, and the convenience it provides.

Weaknesses:

- Untimeliness, reporting burden (twice a day) on packers
- Do not know when product is killed only when the transaction took place. That is when price discovery took place. These trades could be two weeks out or two months out. However, analysts interviewed did not see value in reporting formula and contracts separately from the comprehensive.
- <u>Export volumes</u> in the comprehensive add <u>volatility</u> from the currency exchange
- <u>New products</u> developed do not show up on the negotiated daily report. These items are frequently priced on formulas off of the primal value and average yield. Therefore, daily (spot) cutouts do not reflect value added items and packers alone reap the benefits. The full impact of these value added items are muted in the comprehensive report.
- Regulations mean there is a certain amount of <u>inflexibility</u> to make changes as the market evolves.
- Ongoing feedback and improvements are needed particularly on cutout <u>yield updates</u>. The yields on the pork carcass cutout was automated on a two year cycle.
- <u>Case Ready</u> to Retail from the packer are currently excluded from all boxed beef reports. As these volumes increase finding ways to include them in the future are needed.

Urner Barry is a voluntary reporting system based on bulk of sales. They have a daily survey of buyers and sellers with buys and sells matched. Unlike USDA which is 0-21 days for their daily report, they are 0-10 days, domestic sales only with a bulk of trade range reported. While USDA is able to include more data in the 0-21 days and therefore address confidentiality concerns by going three weeks out, there can actually be three separate and distinct markets that show up in the Urner Barry reporting. Due to confidentiality concerns Urner Barry does not report volumes, although they are captured internally. While the spot prices reported by Urner Barry and MPR can be very different for individual prices, once rolled up into a cutout they are very similar. This allowed Urner Barry prices to be used when USDA was closed in September 2013.

Lessons for Voluntary Reporting Systems

The goal for any reporting system is to create timely, accurate and unbiased market reports. How then, do you create an incentive to report voluntarily?

- Provide a service to clients
- Build a relationship with contacts so that you can ask hard questions and they still answer the phone when you call the next time
- There is a lot of learn with market reporting. At Urner Barry it takes five years to be considered a full market reporter. You must be able to exchange information confidentially, be a sounding board, and provide valuable non-price information.
- Must dedicate adequate resources to get the quote right
- Be aggressive

Lessons on consolidation and confidentiality

MPR has confidentiality regulations that protect individual packer information. MPR has a 3/70/20 rule that requires at least three packers reporting, no one company can account for 70% or more of the volume, or be the sole source more than 20% of the time, over a 60 day period. By going out 21 days on spot trades included in the daily report this prevents any single large trade from setting the market and conceals individual packer positions.

Urner Barry has a shorter selling period of 0-10 days to reflect individual weekly trade more accurately but do not report volumes because of confidentiality. They do reference MPR volumes as they are an important aspect of market transparency.

How to improve current boxed beef reporting?

As the meat market moves to formula pricing, the free rider problem becomes acute with the question of how to get a base price.

- Is there room to broaden the definition of cash to increase volume without distorting the prices reported? As definitions are revised there is the question of how to interpret new data, creating an added cost to the system.
- Include export products on the daily to increase volume. However, this would also add volatility from the currency exchange
- Separate out export prices like FAS currently reports export volumes

Retail Data

Packers would like retail scanner data to help make marketing decisions. In particular, retail cut prices that can be compared to the equivalent wholesale items in order to better understand margins. NCBA has their Fresh Look Report; the challenge is that retail features make it difficult to match data.

Cooperation on this would create an incentive for packers to report.

The boxed beef report acts as a check on fed cattle prices in Canada. Is there a way we create a check for the boxed beef report with domestic buyers (foodservice, retailers) similar to what Urner Barry does that would increase confidence and provide a useful service at the same time.

THE CANADIAN SYSTEM

The Canadian Boxed Beef Report is a weekly report that is comparable to the US daily (spot) report. Individual weighted average beef prices are provided by the Canadian Meat Council (CMC) who collects data from the packers. The cutout model yields are maintained by Canfax Research Services (CRS) who publishes the weekly report with primal values, cutout values, and individual price comparisons to US equivalent cuts.

Reported prices and volumes meet the following criteria:

- Sales are negotiated with delivery to the domestic market within 0-21 days.
- Canadian sales only; except on thin meats and trim where all sales including export volumes are included.
- Prices are quoted in Canadian dollars per pound (lb).
- Beef cut items are from non-dairy bred steer and heifer beef.
- Cut items are no older than 14 days from the date of manufacture and are limited to AAA and AA grades.
- Branded product (Certified Angus Beef, Canada Gold, etc.) are excluded.
- Ground beef and beef trimmings are from both dairy bred and non-dairy bred steer/heifer beef and are no older than 7 days from the time of manufacture.
- Prices are quoted FOB the plant (delivery price minus freight cost).
- Load counts are equal to 40,000 pounds.

Strengths

- Formula trade in Canada is significantly smaller than in the US because it would require using a US price as a base exposing retailers and foodservice to exchange rate and basis risk. Therefore the current system captures the majority of trade.

Weaknesses

- Lack of timeliness - there is no back up at CMC when someone is on vacation or when they have their annual general meeting. For several years, the report was consistently provided the following Wednesday. This was ideal as it provided time for the data to be included in the Canfax weekly report on Friday. If there was a reliable Canadian report it could potentially be used as a base for formula trade in the future.

Recommendations:

a. Given the majority of trade is currently being captured, it is recommended that industry continue with the current reporting system and monitor for any future changes in the use of formula and contract trade.
b. <u>Timeliness</u>: A commitment to timely reporting by CMC would potentially allow the Canadian report to become a base for formula trade in Canada.
c. There must be a mechanism to <u>review yields</u> in the cutout model <u>regularly</u> with participation from all packers to ensure ongoing accuracy of the boxed beef model.

FEEDER CATTLE

There have been a number of changes in the structure and marketing practices of the beef industry over the last seven years that must be considered in Canfax's ability to provide prices for all cattle types across Canada.

Then…

- Many of Canfax price series started in 1996 when there were 13.4 million cattle in Canada
- There were numerous packers across the country of various sizes
- The majority of trade was done on the cash market and at public auction markets

Now…

- Cattle inventories in 2013 at 12.27 million head are at levels not seen since 1993
- Western Canada is down to two main packers/buyers
- A large proportion of the trade is done by contract as risk management has become increasingly important and direct feeder sales have increased as feedlots create relationships with suppliers.
- Increased use of direct sales, forward contracts and marketing alliances mean these cattle are not reported through auction markets.

The consolidation in the cattle industry and changes in marketing practices are not going to change in the near future. This raises the question on if certain data series are still robust enough to be maintained by Canfax with current reporting mechanisms.

Criteria for maintaining a data series:

1. Minimum number of head (10 head for a sale to be entered into the Canfax database)
2. Minimum of 3 different reporting sources to maintain Confidentiality in a weekly or monthly series
3. Continuous data series throughout the year

If data series are maintained and the first two criteria are met, there is a possibility of data being published in a weekly or monthly series based only on 30 head of trade. Hence, the third criterion evaluates each data series throughout the course of the year. There are an increasing number of data series that are seasonal, with only enough trade during the fall run. This means there are too few cattle being traded, too often during the year, to create an annual average that is meaningful.

Saskatchewan and Manitoba fed cattle and all cattle prices for the Atlantic Provinces were discontinued in January 2014 due to inadequate volumes. Canfax continues to monitor shrinking volumes of feeder cattle in Manitoba and British Columbia.

Feeder and calf prices available to the programs will eventually have the same problem as fed cattle, with more **direct trade** occurring. There is thinning auction market data that is currently being reported on. Expanded reporting of direct trade for feeder cattle will be needed in the future.

There is the potential of collecting direct trade from feedlots. This could be rolled out at the same time as enhanced fed cattle price reporting. However, we want to be mindful about reporting burden on feedlots.

APPENDIX A: INTERVIEW LIST

Interviews were completed with:

1. Texas Cattle Feeders Association (Jason Slane)
2. Livestock Market Information Centre (Jim Rob)
3. Cattle-Fax (Kevin Good and Alan Smith)
4. AMS, USDA (Brittany Koop)
5. Anne Wasko
6. Lyndsay Smith - *market info that is useful for forward contracting*
7. Dr. Wade Brorsen *at Oklahoma State University who has done work with USDA on market power*
8. Meat and Livestock Australia (Peter Weeks)

On the Boxed Beef side:

1. USDA, AMS (Michael Lynch)
2. Urner Barry (Bruce Longo)
3. GMC (Kevin Grier)
4. USDA (Bill Worlie)