Crop Logistics Working Group III

Maximum Revenue Entitlement (MRE) Subcommittee

Report of Findings

PREAMBLE

This Report of Findings summarizes the work, observations and major findings of the MRE Subcommittee. The Subcommittee was struck by the Crop Logistics Working Group III (CLWG III), and undertook its investigation between March and May 2015.

This Report is structured as follows:

1. Mandate and Membership of the MRE Subcommittee
2. Background
3. Maximum Revenue Entitlement
4. Issue of Costing Review
5. Summary of Major Observations
6. Summary of Major Findings

1.0 MANDATE AND MEMBERSHIP OF THE MRE SUBCOMMITTEE

1.1 Mandate

The MRE Subcommittee mandate, as contained in its Terms of Reference was to:

> "…examine the issue of the Maximum Revenue Entitlement (MRE) provision contained within *The Canada Transportation Act* (Section 150-151)".
>
> "The Subcommittee will: (i) review the MRE as a public policy instrument, and (ii) discuss the issue of a "costing review" and report back to the CLWG III with summary findings for consideration".
>
> "Key to this examination will be liaising with the Canadian Transportation Agency (Agency) and others (e.g. subject matter experts) to seek clarification, discuss perspectives, etc."

1.2 Membership

The MRE Subcommittee was comprised of:

- Dan Mazier (Keystone Agricultural Producers)
- Norm Hall (Agricultural Producers Association of Saskatchewan)
- Art Enns (Prairie Oat Growers Association)
- Greg Northey (Pulse Canada)
- Wade Sobkowich (Western Grain Elevator Association)
- Rick Steinke (Canadian National Millers Association)

- Murdoch MacKay (Canadian Grain Commission – Chair of CLWG III) Steve Pratte (Canadian Canola Growers Association – Chair of MRE Subcommittee)
- Shane Campbell, James Hayward and Matthew Hink (Agriculture and Agri-Food Canada – Secretariat)

2.0 BACKGROUND

In undertaking its examination, the MRE Subcommittee focused its attention on two major issues:

- **Understanding the MRE as a public policy.** The MRE was studied with a view to ensure all Subcommittee Members had a common baseline understanding of the intent, structure and mechanics of the policy. In doing so, the operation and determinations of the MRE were reviewed as well as the underlying policy principles and intent of the design emanating from the Estey and Kroeger studies in 1998 and 1999 respectively which led to government implementation on August 1, 2000. A major area of focus was reviewing and understanding the change in the industry structure of the Grain Handling and Transportation System (GHTS) over the last 15 years.

- **Understanding the issue of a costing review**. This subject was studied with a view to ensure all Subcommittee Members understood the background of why a costing review has been advocated by some stakeholders in the past and currently and the rationale for this position. This entailed review of what a costing review could examine, how it potentially could be scoped and how it could structurally affect the determination of the MRE. Additionally, the impact of the change in the GHTS over the lifespan of the MRE was key to this discussion, as was consideration of several strategic issues.

The MRE Subcommittee convened four conference calls (two of which were with subject matter experts) and had ongoing discussion with the CLWG III at scheduled meetings where briefing updates were provided, issues tabled and CLWG III member input was solicited.

REPORT ON FINDINGS

The remainder of this report summarizes the major observations of the Subcommittee on several specific topics and presents the findings of this examination.

3.0 MAXIMUM REVENUE ENTITLEMENT

3.1 Original Policy Considerations

The history of the MRE was surveyed to appreciate the original thinking that shaped the operational discussions that led to the implementation of the MRE by Government on August 1, 2000. To do so, the 1998 recommendations of Justice W.Z. Estey[1], in his final report were reviewed, as was the 1999 work of Mr. Arthur Kroeger[2] (specifically that of Working Group No. 1 which was focused "rates and revenues").

[1] Estey, W. Z. Grain Handling and Transportation Review – Final Report (December 21, 1998).
[2] Kroeger, A. Grain Handling and Transportation System: Stakeholders' Report (October 5, 1999)

3.1.1. Grain Handling and Transportation Review: Estey (1998)

The Grain Handling and Transportation Review, chaired by Justice Estey, in simple terms, was tasked to examine "what alterations, additions, reductions or other organic changes are required (if any) in the present administrative and commercial regulation of the grain industry, in order to strengthen and enhance the position of Canada in the global grain market?" Specifically around grain transportation rates, the Review examined the maximum "rate cap" which existed at that time.[3]

In the final report, Recommendation No. 7 addressing the rail rate cap stated:

- *"It is recommended that the rate cap be repealed and that agreement proposed by CP be adopted by appropriate legislative action."*

- *"It is further recommended that the economies affected thereby be passed on to the farmer who, for the purposes of this plan, is deemed to be the shipper and therefore entitles to the direct benefit of the freight reduction thereby achieved."*

The Government publically agreed with Justice Estey's recommendations (which provided solution-based broad directions and principles) on May 12, 1999 and appointed Mr. Kroeger to operationalize them by developing an implementation plan, by September 30, 1999.

3.1.2 Grain Handling and Transportation Review: Kroeger (1999)

Under the Chairmanship of Mr. Kroeger, a Working Group was struck to investigate "rates and revenues" and to recommend a way to implement the essence of the Estey recommendation which was taken to be replace the maximum rate scale with a revenue cap approach. The Working Group studied three major options to effect the revenue cap and the major questions debated were: (i) what was an appropriate base ($ per tonne) to initiate the MRE and, (ii) what, if any, adjustments should be applied to the MRE each new crop year? Underlying issues included: (i) how should the future sharing of railway productivity gains be addressed, (ii) the degree of regulation appropriate in a new commercial environment, and (iii) whether monitoring could be a substitute for some degree of regulation?

To aid its work, Mr. Kroeger requested the Agency to undertake an analysis of the railways' costs, revenue, productivity and productivity sharing since 1992, the last costing review completed under *The Western Grain Transportation Act* (WGTA). A major finding of this study was that the contribution of grain to railway constant cost had increased from an average of 27% under the WGTA to an estimated 39% to 42% in 1998.

Major consensus elements of all three options included: (i) setting base year using 1998 Agency data, (ii) separate MRE determinations for CN and CP, (iii) no adjustment for inflation or productivity gains between December 31, 1998 and July 31, 2000, (iv) price indexing would be calculated by Agency using their established methods, (v) revenues from tariff premiums to be included, revenues from car demurrage or contractual penalties paid by shippers was to be excluded from determination, and (vi) the new system

[3] The maximum rate cap (1995-2000) was a mileage-based maximum freight rate established annually by the Agency. It reflected elements such as forecasted inflation and any reduction in grain dependent branch lines. There was no differentiation for origin-destination routing or grain commodity.

to remain in effect through 2004-05 crop year at which time a review was envisioned to determine the effectiveness of the new policy framework.

The three options studied can be summarized as:

- Option No. 1 – base rate of $31.50/tonne[4], inflation based on CTA methodology producing estimated 2004-05 rate of $33.11/tonne.

- Option No. 2 – base rate of $29.06/tonne[5], inflation based on CTA methodology producing estimated 2004-05 rate of $30.55/tonne.

- Option No. 3 – base rate of $25.79/tonne[6], inflation based on CTA methodology less deemed productivity sharing of 3%/year producing estimated 2004-05 rate of $23.36/tonne.

Other issues considered by the Working Group included: (i) issues with compliance and monitoring, (ii) issues of rebates (e.g. penalties for exceeding MRE determination, (iii) duration of the MRE, (iv) tariff structure issues, and (v) sharing benefits with farmers.

The Working Group was unable to come to a consensus recommendation on the option on which to base the MRE.

The final recommendation of Mr. Kroeger's report noted:

- *"Because the Working Group and Steering Committee were unable to achieve a consensus, it will be necessary for the government to decide what measures would be appropriate to deal with the separate but related issues of the revenue cap base and future adjustments to the base."*[7]

- That *"the revenue cap be implemented as a successor to the present rate cap. Starting with a reduction of 12% from 1998 railway revenue in the base year, and with rate reductions in subsequent years being effected by competition rather than regulation."*[8]

3.1.3 Government Implementation of the MRE (2000)

The Government received Mr. Kroeger's report and was required to make the policy decisions to implement the MRE for August 1, 2000. On May 29, 2000, the Government tabled draft legislation (Bill C-34) which contained the framework for the MRE. The policy decision on the base rate was made and the MRE was to be implemented with an 18% reduction from 2000-2001 levels.[9]

3.1.4 Major Subcommittee Observations on Original Policy Considerations

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[4] Base rate set on estimate of 1998 actual revenues, net of incentive rate and "competitive and contiguous rates".
[5] Base rate set on 1998 costs based on 5-year moving average for productivity gains plus the railways' retain 1/3rd of the Agency estimated $9 productivity gains achieved between 1988 and 1998.
[6] Base rate set on 1998 costs based on 3-year moving average.
[7] Kroeger. A. Grain Handling and Transportation System: Stakeholders' Report (October 5, 1999)
[8] Kroeger. A. Letter to Minister Collenette (September 29, 1999)
[9] The base year elements of the MRE formula (addressed in Section 3.2 below) for each railway are specified in Section 151(2) and (3) of the CTA. The base rates at MRE inception were determined to be: CP $26.12/tonne (or 2.91 cents/tonne-mile, and for CN $27.98/tonne (or 2.68 cents/tonne-mile).

- The MRE was originally envisioned to be short-term and was to act as a transition from the maximum rate scale of the WGTA to a deregulated or more fully commercialized pricing environment.

- It was envisioned that it would end five years from implementation in 2004-05 and a review of the grain provisions within *The Canada Transportation Act* should be undertaken.

- It was never envisioned that railway revenues would meet or exceed the MRE due to competitive forces. Overall rates were expected to decrease due to competition, while providing the railways increased price flexibility to encourage efficiencies.

- Agency analysis of railway costing, revenues, productivity and productivity sharing suggested that during the course of the WGTA, the average contribution to constant cost of grain was 27%. For 1998, the Agency concluded that it increased to an estimated 39 to 42%.

3.2 MRE Structure and Operation

The structure and operation of the MRE was reviewed to ensure that all Members had a common baseline of reference. The MRE is an economic regulatory policy instrument that replaced the setting of maximum freight rates for specified western Canadian grain products for specified movements by the prescribed railways (currently CN and CP). The Agency succinctly describes it in general terms as:

- *"…a limit on the overall revenue that can be earned by the Canadian National Railway Company (CN) and the Canadian Pacific Railway Company (CP) shipping regulated grain from prairie elevators or U.S. origins, to terminals in Vancouver, Prince Rupert, Thunder Bay as well as movements of grain up to Thunder Bay or Armstrong Ontario destined to Eastern Canada or for export*."

- *"It is based on a formula that can also be described as a limit to the average revenue per tonne for a given length of haul that prescribed railway companies, CN and CP, can earn, adjusted for the level of inflation of railway input prices."*

- *"The revenue cap was created in August 2000 by an Act of Parliament to replace maximum freight rates. Parliament agreed to let the railway companies set individual rates for shipping western grain, but required them to stay within a total revenue limit based on all western grain movements calculated by the Canadian Transportation Agency in an effort to provide some shipping price protection."*[10]

Transport Canada is responsible for *The Canada Transportation Act*, in which the MRE is contained. Therefore it is the responsible authority for any amendments to, and administration of the Act and its associated Regulations. The Industry Determinations and Analysis Directorate (IDAD) of the Canadian Transportation Agency is responsible for the administration of the MRE, and their main activities to effect this include:

- MRE: annual determination and the price index determinations (e.g. the VRCPI)[11]
- Financial analysis

[10] Canadian Transportation Agency. Backgrounder: Western Grain Revenue Cap Program (Accessed May 5, 2015). [https://www.otc-cta.gc.ca/eng/publication/backgrounder-western-grain-revenue-cap-program]
[11] Volume Related Composite Price Index (VRCPI)

- Railway costing
- Economic analysis

The Agency administers the MRE, they do not set any policy related to it.

The MRE currently applies to the 58 grain and oilseed products listed in "Schedule II" of the CTA and applies regardless of form of unitization: hopper car, box car or container. The Subcommittee reviewed the routings, and variations thereof, which do and do not apply under the MRE.

The MRE formula contains three dynamic variables that change from year to year, along with three static values from the base year. Additionally there is the VRCPI which is a dynamic inflationary factor.[12] The MRE formula may be expressed as:

[A/B + ((C-D) x $0.22)] x E x F

Where:

A – Company revenue for grain movement in base year	(static)
B – Tonnes moved in base year	(static)
C – Miles (average length of haul) in current crop year	(dynamic)
D – Miles (average length of haul) in base year	(static)
E – Tonnes moved in current crop year	(dynamic)
F – VRCPI (Agency determines each year)	(dynamic)

The Subcommittee reviewed various types of revenue streams that are included and excluded from Agency determinations, as well as what may qualify, or not, for reductions to revenue. Table 1 provides a summary.

Table 1 – Example of Elements Included and Excluded from MRE Determinations[13]

Revenue includes amounts received by railways:	**Revenue excludes amounts received by railways:**
• From tariff and contract rates	• Performance penalties paid by shippers
• To ensure car supply	• Demurrage or car storage charges
• For premium service	• Running rights compensation
• For providing interswitching or exchange switching service	
• For additional switching requested by shipper	
• For car hire	
• B.C. carbon tax	
Reductions to railway revenue includes:	**Reductions to railway revenue does not include:**
• Industrial Development Fund (IDF) contributions made by railways for the development of grain-related facilities to a grain company	• Amounts paid by railway to shippers as dispatch
• Amounts paid by railways for interswitching or exchange switching services	• Amounts paid by railways as performance penalties
• Weekend loading	• Amounts paid for running rights

[12] The VRCPI is an inflation index that reflects forecasted price changes for railway, labour, fuel, material and capital purchased and inputs. Since inception (2000-2001) it has averaged around 2%. It is the only MRE dynamic element not based on distance or volume.

[13] Canadian Transportation Agency. Presentation to the Canadian Canola Growers Association (February 2014).

Although both prescribed railways have different base year figures (e.g. revenue, tonneage and mileage) and different current year figures (crop year tonneage and mileage), the Agency calculation of the VRCPI produces one common figure, applicable to both railways.

There are prescribed timelines associated with Agency administration of the MRE. In any given calendar year, the Agency determines and publishes:

- VRCPI for upcoming crop year (beginning August 1st) by April 30th.
- MRE determination for past crop year (ended July 31st) by December 31st.

3.2.1 2013-14 Determinations

For the 2013-14 crop year, the highlights of the MRE determination[14] were as follows:

- Total of 38,461,953 tonnes of regulated grain moved (Schedule II products).
- 18.8% higher volume than 2012-13.
- Average length of haul was 945 miles (1,521 km).

- CP MRE entitlement: $625,273,950.
- CP posted grain revenue: $623,620,236 (-$1,653,714 or 0.3% under)

- CN MRE entitlement: $667,128,937
- CN posted grain revenue: $672,110,852 (+$4,981,915 or 0.7% over)

If a prescribed railway exceeds their MRE determination in a given year, they have 30 days to pay the excess amount plus a penalty fee. The monies are provided to the Western Grains Research Foundation (WGRF) and the penalty fee is assessed as follows: 5% of excess amount if less than 1% of company's MRE determination; 15% of excess amount if more than 1% of company's MRE determination.

Of the 38,461,953 tonnes moved in 2013-14, the predominance of the west coast destination for export is clearly illustrated in Table 2.

Table 2 – MRE Movement 2013-14 (total tonneage and market share)

Destination	Total Tonnes	% Tonneage	% CN	% CP
Vancouver	21,465,321	55.8%	41.5%	58.5%
Prince Rupert	6,111,697*	15.9%	100%	---
Thunder Bay	7,684,181	20.0%	31.7%	68.3%
Eastern Canada	3,200,754	8.3%	54.7%	45.3%
*Note: Port of Prince Rupert is accessed by CN only				

3.2.2 Summary of Historical Comparison of Combined MRE Determinations

Table 3 presents MRE related data for the two Class 1 railways: in the base year, first year and three subsequent five year intervals to illustrate trends.

[14] CTA 2013-14 MRE Decision No. 451-R-2014 (Published December 18, 2014)

Table 3 –Historical Comparison of MRE Determinations (Combined CN and CP)								
Traffic Volume	**Base**	**2000-01**	**2004-05**	**2009-10**	**2013-14**	**Variation 2014-1999**	**Variation 2014-2010**	**Avg. Annual Change**
Total Tonnes Moved (A)	26,331.0	29,234.8	24,312.3	31,916.1	38,462.0	31.6%	20.5%	2.1%
Average Length of Haul (B)	966.9	925.6	903.8	977.3	944.9	2.1%	-3.3%	0.1%
VRCPI	---	1.0000	1.0108	1.0638	1.2691	26.9%	19.3%	1.8%
MRE Determinations								
Allowable Revenue ($000) (C)	710,900.0	760,785.3	629,251.9	923,380.1	1,292,402.9	69.9%	40.0%	4.7%
Allowable Revenue per tonne ($)	27.00	26.02	25.88	28.93	33.60	29.1%	16.1%	1.9%
Allowable Revenue per tonne-mile (cents)	2.79	2.81	2.86	2.96	3.56	26.5%	20.1%	1.8%
MRE Compliance								
Reported Revenue ($000)	---	755,027.0	628,565.1	917,963.8	1,295,731.1	71.6%	41.2%	4.8%
Actual Revenue per tonne ($)	---	25.83	25.85	28.76	33.69	30.4%	17.1%	2.0%
Actual Revenue per tonne-mile (cents)	---	2.79	2.86	2.94	3.57	27.8%	21.1%	1.9%

3.2.3 Major Subcommittee Observations on MRE Structure and Operation

- Hopper car investment is promoted by the MRE, as the regulations determining the VRCPI specifically make allowances for this. However, the VRCPI, as calculated annually by the Agency, is one number that is applied to both railways in their respective formulas. Therefore, if one railway makes a significant investment and the other does not, this is reflected in the formula for both railways. Practically speaking, a railway may not make any hopper car investment in a given year, yet still benefit from the investment by the other railway through the one VRCPI.

- Producer car issues fall under *The Canada Grain Act*.

- There has been significant change in the GHTS during the time the MRE has been in existence and the MRE does not in and of itself inhibit investment in the grain supply chain. The degree of rationalization in the rail network (e.g. a 50% reduction of the grain-dependent branch line network) and the near complete transition in the country grain handling facilities has been significant (including the investment in on-farm storage by producers). The Industrial Development Fund (IDF) provision was used with some frequency in the early 2000's to support this change, but it is the understanding of stakeholders that more recently, its use has declined. The depreciation cost of an IDF investment is an allowable reduction in railway revenue and is amortized over a specified length of time (the length of time being dependent on the type of investment). In order to better understand the IDF, it is suggested that more transparency be provided on the dollars used annually since the MRE was brought into force in 2000.

- The base elements of the MRE, as related to the Agency's railway costing model, are built on 1992 costs, as this was the last time a full costing review was undertaken as per the WGTA quadrennial reviews. There has been significant change to the GHTS since 1992 and therefore on

the productivity associated with the rail system. This issue is addressed in more detail in Section 4.1 below.

- The market structure of the Western Canadian grain sector is unique. Producers do not have a direct influence on the supply chain other than through the sale of product to a grain company, be it an elevator or process facility, to fulfill a contract. It is the grain company that interacts directly with the supply chain.

- The Canadian grain transportation market is not a normally competitive one, due to the nature of the commercial and financial relationships in the supply chain and the domination of the marketplace by two monopolies, an issue that decades of government policy has sought to address.

- Over the period the MRE has been in existence, the market share for Canadian grain traffic between the two railways has averaged approximately 50-50. Annual fluctuations in the market share can generally be attributed to geographical and regional impacts of events such as drought, flooding or other climactic effects on crop yield and production.

3.3 Regulatory Misconceptions

Several regulatory misconceptions which exist were specifically investigated and discussed by the Subcommittee.

3.3.1 MRE Imposes and Absolute Cap on Railway Revenue

The assertion that the MRE imposes an absolute cap on railway revenue derived from the transport of grain was determined to be false. As noted above, the structure and output of the MRE framework is rooted in pricing flexibility, and proportionality. The MRE acts as an overall rate increase moderator, but in its mechanics it is dynamic, reflective of changes in total volume, average length of haul and inflationary factors. Over the last 13 years, total railway revenue / revenue tonne-mile (R/RTM) has increased 2.26% while grain subject to the MRE has increased by 2.24%.

Additionally, there is evidence to suggest that grain revenues are the foundation of railway profitability. 2014 year end results for CN indicate an overall increase in revenue of 14% while grain revenue increased 21% and operating income increased 19%. Likewise for CP, overall revenue increased 5.5% while grain revenue increased 14.7% and operating income increased 26.6%. This example alone would suggest the grain is not a drag on railway earnings.

The MRE, as it was originally conceived and as it operates today, affords the railways rate making freedom, and the ability to price differentially, seasonally, by commodity and by corridor.

3.3.2 Rates and Service

The assertion that if the MRE were relaxed or repealed, railways would provide improved service to the grain sector was examined. There has been no evidence to suggest that railway freight rates are necessarily reflective of service. In the grain sector, there are many movements (e.g. to the USA or Mexico) and commodities (e.g. soybeans) that do not fall under the MRE framework, and they do not receive discernably improved service. Experience in other commodity sectors suggests that unconstrained freight pricing is not related to provision of service (or capacity).

The economics of railway pricing, both in theory and practical application in other industries, suggests that paying higher rates largely means that there is a greater contribution being applied to fixed, or constant costs. In the Canadian grain sector, this is further related to the monopoly position of the railways, as there is no practical or competitive alternative for grain transport, so the business and volumes will always be there. Additionally, the railways are operating their respective businesses and dealing with MRE related issues as can be expected, with their responsibilities to shareholders being first and foremost. As such, they will strive for optimal asset utilization in the achievement of greater profit margins. Given the market, legislative and regulatory environment in which they operate, it is their duty to push all boundaries and employ tactics to ensure they operate at the highest level of profitability possible.

There is publically available data that provides an understanding of the revenue that grain provides to the railways, but there is no public data related to the cost to the railway of providing that service. The question of rates and service cannot be objectively assessed by stakeholders until the railway costs associated with actually providing the service are made public (only the railways and the Agency have this information). Until then it is a one sided argument.

3.3.3 The MRE Creates Issues for Managing Peaks and Adjusting to Changes in Demand

At its core, the MRE is intended to provide railways with the ability to price differentially. A review of pricing analysis illustrates that it took approximately four years for the railways to demonstrate clear application of this, but since then it is observable. The advent of commodity-based pricing, seasonal pricing and reduced rates in certain corridors reflect this. Today, approximately 80% of movements are under multi-block incentives. The fluctuations in demand for grain transport are a structural issue associated with global marketing cycles.

3.3.4 Major Subcommittee Observations on Regulatory Misconceptions

- The assertion that MRE grain rates impede railway investment, or requires cross-subsidization from other commodities is dubious. Only when rail costs of transporting grain are publically revealed can this be verified.

- Railway freight rates and provision of service are not related. Paying a higher freight rate means only that the commodity is likely making a larger contribution to the railways fixed, or constant costs and ultimately serving to enhance the railway's profitability. In the grain sector, this is also related to the monopoly position of the railways, as there is no practical or competitive alternative for grain transport, so the business and volumes will always be there and will move subject to the operational planning of the railway, not the commercial timing of the shipper.

4.0 ISSUE OF COSTING REVIEW

A costing review typically refers to having the Canadian Transportation Agency be directed to undertake a review of the costs embedded in the MRE formula. For the last several years, various stakeholder groups have publically advocated for this, largely centered on the issue of the productivity gains that have been produced in the GHTS, the fact that the MRE framework is based on 1992 cost structure, and there is no provision for costing reviews to officially gauge the extent of these gains and the degree to which they have or have not been shared with producers.

4.1 Background on Issue

Although the annual VRCPI within the MRE is adjusted to reflect year to year changes in the railways' inputs, there is no provision within the CTA to review the railways' actual costs for moving grain. The framework of the former WGTA (1984-1995) is foundational to the current discussion on railway costing.

As previously noted, the WGTA implemented a maximum rate scale which was based on distance. The rate scale was calculated by the Agency on the basis of an annual price index and regular railway costing reviews. The reviews occurred every four years (1984, 1998, and 1992). At the time, the policy decision was that the costing reviews would rebase the grains' contribution to constant costs to 20%, which was deemed reasonable. In the intervening years between reviews, the productivity gains would be captured by the railways. As noted above, the Agency determined over the duration of the WGTA, the annual average contribution was 27%.

At least nine studies between 1998 and 2009 estimated contribution margins between 25 to 70%.[15] A recent study (March 2015) suggested 61%. The Agency's analysis in 2010 supporting interswitching regulations suggested that at that time, the average system-wide (e.g. all traffic) contribution was 20.3%.

Under the MRE, as implemented in 2000, there was no provision for periodic reviews of the policy to assess or examine the productivity gains and the contribution to constant cost. The issue of productivity gains has been a major point of concern from some grain sector stakeholders. This is cited as one of the major arguments for undertaking a costing review, to fully assess the extent of these gains, and likely, enter a political debate as to if these are reasonable, excessive and should be clawed back, redistributed, etc.

4.2 Observed Change in GHTS during time of MRE

The Subcommittee reviewed the appreciable change in the nature of the GHTS since 1999. This change is often referred to as rationalization, which typically is held to mean the decrease in grain dependent branch lines, a significant reduction in primary elevators, and the transition from low-capacity wooden crib elevators in country, to the high throughput concrete elevators. All of these factors have driven overall productivity in the GHTS.

Data furnished by the Grain Monitor, presented in Tables 4 through 6, clearly illustrate the transition in the GHTS infrastructure from 1999 to 2015.

Table 4 - Change in GHTS Infrastructure – Country Collection

	1999	2005	2010	2015	Variation 2015-1999	Variation 2015-2010	Avg. Annual Change
Country Facilities							
Delivery Points	685	283	273	262	-61.8%	-4.0%	-4.1%
Facilities	1,004	385	376	370	-63.1%	0.8%	-4.2%
Primary Elevators	976	356	322	326	-66.6%	1.2%	-4.4%
Process	28	29	45	44	57.1%	-2.2%	3.8%
Storage Capacity (000 tonnes)	7,026.6	5,880.0	6,434.7	7,334.8	4.4%	14.0%	0.3%
Conventional	885	209	176	177	-80.0%	0.6%	-5.3%
High Through-put	119	176	191	193	62.2%	1.0%	4.1%
Facilities by Railway Class							
Class 1	897	339	321	315	-64.9%	-1.9%	-4.3%

[15] These include: Canadian Transportation Agency 1998, Canadian Wheat Board 2001, 2005-06, 2006-07, Government of Alberta 2006, 2007, Canadian Wheat Board 2007-08, Canadian Transportation Agency 2008, Canadian Wheat Board 2008-09, Agricultural Producers Association of Saskatchewan *et al*. 2013-14.

Shortline	107	46	46	55	-48.6%	19.6%	-3.2%
Proportion Shortline	10.7%	11.9%	12.5%	14.9%	39.5%	18.6%	2.6%

Table 5 - Change in GHTS Infrastructure – Railways (miles)							
	1999	**2005**	**2010**	**2015**	**Variation 2015-1999**	**Variation 2015-2010**	**Avg. Annual Change**
Class 1 Miles							
Grain Dependent	4,138.4	3,305.9	3,305.9	2,108.6	-49.0%	-36.2%	-3.3%
Non-Grain	10,689.5	11,945.3	11,945.3	12,902.9	20.7%	8.0%	1.4%
Total	14,827.9	15,251.2	15,251.2	15,011.5	1.2%	-1.6%	0.1%
Shortline Miles							
Grain Dependent	816.3	1,084.4	1,182.4	1,356.0	66.1%	14.7%	4.4%
Non-Grain	3,824.0	2,428.1	1,398.4	1,232.7	-67.8%	-11.8%	-4.5%
Total	4,640.3	3,512.5	2,580.8	2,588.7	-44.2%	0.3%	-2.9%
Total GHTS Railway Miles (Class 1 and Shortline)							
Grain Dependent	4,954.7	4,390.3	4,488.3	3,464.6	-30.1%	-22.8%	-2.0%
Non-Grain	14,513.5	14,373.4	13,343.7	14,135.6	-2.6%	5.9%	-0.2%
Total	19,468.2	18,763.7	17,832.0	17,600.2	-9.6%	-1.3%	-0.6%
Total Proportion Shortline	31.3%	23.0%	16.9%	17.2%	-44.9%	1.9%	-3.0%
Total Proportion Grain Dependent	25.5%	23.4%	25.2%	19.7%	-22.7%	-21.8%	-1.5%

Table 6 - Change in GHTS Infrastructure – Port Terminals							
	1999	**2005**	**2010**	**2015**	**Variation 2015-1999**	**Variation 2015-2010**	**Avg. Annual Change**
Facilities	14	16	15	17	21.4%	13.3%	1.4%
Storage Capacity (000 tonnes)	2,557.4	2,642,6	2,475.6	2,423.9	-5.2%	-2.1%	-0.3%

4.3 Change in Commercial Rates during time of MRE

The Grain Monitor has also tracked changes in commercial indicators over the existence of the MRE. Select metric are provided in Table 7.

Table 7 - Change in Commercial Rates ($)							
	1999	**2005**	**2010**	**2015**	**Variation 2015-1999**	**Variation 2015-2010**	**Avg. Annual Change**
Country Elevation	12.00	13.47	14.56	16.54	37.8%	13.6%	2.5%
Average Rail	---	---	---	---	---	---	---
CN single car rate to Vancouver	36.89	39.42	40.51	49.95	35.4%	23.3%	2.4%
CP single car rate to Vancouver	36.69	38.73	43.89	52.11	42.0%	18.7%	2.8%

Est. of avg. block incentive ($/tonne)[16]	2.30	4.62	6.58	7.45	223.9%	13.2%	14.9%
Blocks of 50+ cars	30.6%	67.7%	79.3%	80.3%	162.4%	1.3%	10.8%
Terminal Elevation	9.12	10.93	12.16	13.73	50.5%	12.9%	3.4%

4.4 Potential Approaches to a Costing Review

Three potential methodological approaches to a costing review were surveyed by the Subcommittee. They all were discussed as having common assumption, such as:

- The Agency would require direction from the Minister of Transport to initiate a review. This may not necessarily require legislation to undertake, but any major adjustment to the MRE would. Legislation was used for the hopper car adjustment in 2007-08.
- The Agency would undertake the costing review analysis.
- A review would likely be a one-time event, with the effect of temporarily recalibrating the MRE.
- All three options are methodologically based on a single year (e.g. the given base year).

The three conceptual options discussed included:

- "Kroeger style" adjustment – examines only the VRCPI.
- Full costing review – examines all or near all of the base year assumptions.
- Mini-costing review – examines select elements.

4.5. Major Subcommittee Observations on the Issue of Costing Review

- The 1992 costing review was undertaken by Agency Staff. At the time it required almost two years to complete (in part due to the data procurement and processing environment). The Agency has an existing methodology and could undertake a review if so directed, likely in a shorter timeframe. Required data to complete a review can be obtained from the railways.

5.0 SUMMARY OF MAJOR OBSERVATIONS

On the basis of this study, the MRE Subcommittee has five key observations:

- **The MRE is a dynamic and elastic framework that ensures the rail service providers derive a profit.** It is proportional, in that the more grain moved, the more revenue earned. In the absence of a true competitive market, the structure of the Canadian grain supply chain and the distances

[16] Multiple-car block incentives are expressed as a discount from the single-car rates published in railway tariffs. The Grain Monitor's "estimate of average block incentive ($/tonne)" reflects its tracking of change over time of the railways' increased use of freight discounts to promote more efficient movement of grain by shippers in car blocks of 50 or greater. At the same time, discounts on movements of less than 50 cars have been gradually eliminated. This can be viewed as one commercial contributor to the efficiency gains made in the GHTS and in the expansion of high-throughput facilities.

required to move grains and oilseed product from country to export, it is intended to keep Canada competitive in global markets and to provide a degree of price protection to grain producers – while ensuring a reasonable return to the rail service providers. Over the last 13 years, total railway revenue / revenue tonne-mile (R/RTM) has increased an average of 2.26% annually while grain subject to the MRE has increased by an average of 2.24% annually.

- **There exists many misconceptions regarding the MRE, its policy intent and effects.** Some of these misconceptions may stem from not having a complete understanding and appreciation of the detailed mechanics of the policy, its original intended purpose, operational design and outputs. Alternatively, some misconceptions may be due to information produced by entities with specific oppositional views to the policy (e.g. from political, philosophical or commercial viewpoints) that employ selective use of, and questionable interpretation of supporting data. There are many examples of publically promoted misinformation regarding the MRE in the aftermath of the 2013-14 rail transportation difficulties and most recently in conjunction with the review of *The Canada Transportation Act* itself.

- **The most concerning of these misconceptions is that the MRE and service to shippers are related.** This is patently false. The assertion that has been made, especially in light of the 2013-14 rail transportation difficulties, is that if Western Canadian grain shippers paid more (e.g. higher tariff rates) for rail service they would receive improved service. It is well established that there is no relationship between the cost of freight and the provision of service in the rail market. For example, Canadian grain and special crops that are not on Schedule II, or non-regulated movements (e.g. domestic or to the USA) do not receive superior service while paying higher rates. Economic analyses clearly indicates rail service providers apply differential pricing and paying a higher freight rate does not guarantee better service. Paying a higher freight rate means only that the commodity is making a larger contribution to the railways' fixed, or constant costs. In the grain sector, this is also related to the monopoly position of the railways, as there is no practical or competitive alternative for grain transport, so the business and volumes will always be there.

- **There exists misconceptions regarding the relationship between the MRE and railway investment.** The design of the MRE policy promotes investment by the rail service providers, and compensates them for hopper car investment and joint-capital projects under the Industrial Development Fund provisions. Similarly, grain sector investment in the GHTS during the existence of the MRE, has been significant with the majority of the productivity gains (from a railway costing perspective) being accrued by the railways. The assertion that the MRE inhibits railway investment and the returns from grain inhibit profitability, and by extension investment, is questionable. If the MRE is truly a drag on railway profitability, to prove this, railway costing data related to Canadian grain transport needs to be made fully public to ascertain the validity of this claim. Currently only the railways and the Agency have this information.

- **The MRE is an important public policy as the Canadian grain transportation market is not competitive and the two service providers wield significant market power.** Of the current 370 primary and process elevators in the GHTS, only four are served by both Class 1 railways. This situation can be described as the operation of two monopolies in the grain transport marketplace. Under the extended interswitching provisions, approximately 50 facilities now have access to this provision (up from 14) although operational use of this is understood to be minimal. Where a business has no effective competition, there is no motivating factor for investment and improving the provision of service. The fundamental issue of railway market power and its negative effects

on commercial relations was clearly identified in the Rail Freight Service Review in 2010, and the Panel noted: "there are no practical ways to directly increase rail competition".[17]

6.0 SUMMARY OF MAJOR FINDINGS

Following this examination, discussion and strategic consideration of both the Subcommittee and the CLWG III, two major findings can be made:

- **Finding No. 1 – The MRE as a public policy tool is working.** Allowing the rail service providers to flexibly price services while ensuring they are adequately compensated, Canadian grain movement is a foundational component of railway profitability. It protects shippers against the potential for unconstrained increase of grain rates (ultimately affecting producers) which only will increase grains' contribution to railway constant cost. The increase in average freight revenue is in step with that of grain.

- **Finding No. 2 – The issues around rail service to shippers** (e.g. to the grain sector and all sectors) **need to be resolved, solutions implemented and operationally demonstrated prior to discussion of a MRE costing review.** These need to be examined separately, as the two issues have been publically conflated. Service issues exist in all sectors, regardless of the freight rate.

On the basis of these two findings, the MRE Subcommittee is of the opinion that long-standing operational and service issues in the rail freight marketplace must be addressed prior to entering a public policy debate regarding the MRE. The eight recommendations documented in the CLWG III Submission to *The Canada Transportation Act* Review that will enhance the efficiency and effectiveness of the grain supply chain and provide enhanced protection for shippers from monopolistic behaviour by the railways require implementation (e.g. ability to have financial consequences for railways included in an Arbitrated Service Level Agreement, amongst others). Additionally, full public disclosure regarding railway costs related to the grain sector is imperative.

[17] Rail Freight Service Review: Final Report (January 2011).