



# **The Canadian Wheat Board**

## **Economic Impact Analysis**



**June 2005**

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## **Executive Summary**

In February 2005, the Canadian Wheat Board (“CWB”) engaged PricewaterhouseCoopers LLP (“PwC”) to assess the economic impact of the CWB’s operations on the **City of Winnipeg, Canada’s Western Provinces** and the **rest of Canada**, examining specific quantitative and qualitative, economic and social benefits. In sections supported by quantitative data, PwC engaged the service of Econometric Research Limited (“ERL”).

PwC’s study also reflects interviews with representatives from provincial governments and key stakeholders as well as interviews with members of the CWB Board of Directors and senior management.

### **The CWB, the World’s Largest Wheat, Barley and Durum Seller**

As a farmer controlled organization, the CWB is the largest single seller of wheat and barley in the world. The CWB generates substantive economic impacts through many channels.

- Through direct costs in the **supply chain by taking delivery and shipping** agricultural products to distant markets.
- Through single desk **marketing and associated branding**, Canadian agricultural exports derive a premium that farmers would not, acting alone, be able to derive.
- Through **administrative spending** on business operations.
- Through **capital investment** for sustaining its business capacity.

These economic contributions will be assessed for the City of Winnipeg, the western provinces and the rest of Canada in terms of:

- Increases in Gross Provincial Incomes (“GPI”);
- Creation of provincial and local employment;
- Augmentation of the tax base for the three levels of government;
- Diversification of the provincial economic base; and
- Promotion of Canadian exports.

## **The CWB's Impact on Canada and Western Canada**

Not surprisingly, given its continental scale of operations and global marketing reach, the CWB has a huge impact on the economies of Canada and western Canada that include:

- **A \$1.6 billion Annual Gross Output<sup>1</sup> Impact on Canada's economy.** The gross output on Canada attributable to total initial expenditures<sup>2</sup> and premiums generated of \$751.7 million is estimated at \$1.6 billion.
- **A \$852 million Annual Gross Provincial Income<sup>3</sup> Impact.** The Gross Provincial Income ("GPI") or Value Added impacts to Canada resulting from \$751.7 million in initial expenditures and premiums generated accounted for over \$851.6 million.
- **14,699 jobs in Canada<sup>4</sup>.** In addition to the 460 positions at the CWB, a further 14,239 full-time, full-year jobs are created in Canada as a result of the initial CWB expenditures and premiums generated.
- **More than \$500 million in annual wages and salaries<sup>5</sup>.** In addition to wages paid to CWB employees, total labour income generated in Canada is estimated to be \$519.3 million.
- **More than \$360 million annually in government revenues<sup>6</sup> across Canada.** Approximately \$360.1 million in taxes paid to all levels of government is generated by CWB's initial expenditures and premiums generated in Canada.

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<sup>1</sup> Gross Output measures the annual economic impact (i.e., the direct, indirect and induced impacts) of all transactions that occur in an economy as a result of a company's initial expenditures. In the case of the CWB, such transactions are triggered by its administrative, capital and direct expenditures, as well as the premiums it generates for farmers through the marketing of wheat, durum and barley. For example, the Gross Output value would include the economic impact of a transaction between the CWB and an office supply retailer for goods purchased by the CWB, the economic impact of the transaction between a wholesale company and the retail office supply company for those same goods, the economic impact of the transaction between the wholesaler and the manufacturer of the goods, and so on. Thus, under the Gross Output approach, the economic impact of the same item can be counted several times. To eliminate the double counting in the Gross Output measure, Value Added or Gross Provincial Income is calculated.

<sup>2</sup> Total initial expenditures include the CWB's administrative expenditures and direct costs of handling and moving the grain to its markets.

<sup>3</sup> Gross Provincial Income ("GPI") also known as Value Added or Gross Domestic Product ("GDP") measures the annual net economic impact (i.e. the direct, indirect and induced impacts) of a company's initial expenditures. It represents the sum of all value added contributed at each stage of production. Only final outputs are counted, intermediate inputs are netted out.

<sup>4</sup> Employment is expressed as the number of equivalent full time jobs measured in person years. As is the case with the monetary measures, employment impacts can be direct, indirect or induced.

<sup>5</sup> Labour Income includes the total earned salaries and wages generated in the economy by the employment impacts.

<sup>6</sup> Taxes in the model are linked with the level of government that is receiving them. For example, taxes on corporate profits are shared between the federal and provincial governments and local (municipal) governments collect business and property taxes. These amounts are included in Gross Output and Value Added.

## **The CWB's Impact on Winnipeg**

The CWB is a major employer in Winnipeg. Since the CWB's headquarters are located in Winnipeg, impacts from operations on the City's economy are significant. These include:

- **A Gross Provincial Income Impact of \$86 million.** The City of Winnipeg can count on annual GPI of \$85.7 million.
- **2,294 jobs in Winnipeg.** In addition to the 460 positions at the CWB, a further 1,834 full-time equivalent jobs are sustained by the CWB's administrative expenditures.
- **More than \$66 million in wages and salaries.** Labour incomes are increased annually by \$66.3 million.
- **Over \$3 million to local government.** The local government collects \$3.1 million annually.

In addition to the sustainable impacts of administrative expenditures, Winnipeg is also impacted by capital expenditures as detailed in Section 6.0 of the report.

## **The CWB's \$752 Million in Sustainable Operations and Premiums Generated**

A profile of the CWB's operations was developed using the annual reports and other financial information provided as a basis for calculating the economic impacts from the administrative, capital and direct expenditures of the CWB. The economic impacts of the premiums generated on wheat, barley and durum sales were also calculated<sup>7</sup>.

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<sup>7</sup> These premiums were derived from Performance Evaluation of the CWB, The CWB and Barley Marketing, Price Pooling and Single-Desk Selling Report and Benchmarks to Measure CWB's Performance as detailed in Appendix A.

For the fiscal year ended July 31, 2004, the following expenditures incurred and premiums generated were:

Administrative Expenditures	\$ 72.0 million
Capital Expenditures	9.9 million
Direct Costs	369.7 million
Premiums Generated	312.6 million
Total	<u>\$764.2 million</u>

The administrative expenditures are gross of recoveries and include \$1.8 million to support grain industry organizations. The capital expenditures are not considered to be sustainable, therefore the total sustainable expenditures and premiums generated were \$751.7 million.

### **Representing 85,000 Farmers, Their Families and Rural Communities in Western Canada**

The CWB has the ability to be a concerted and convincing voice for farmers in a range of fields as diverse as global trade, marketing of wheat, barley and durum, public policy, agriculture, and science. From creating an internationally recognized brand to playing a significant role in preventing the premature introduction of genetically modified wheat, the CWB has been instrumental in promoting and advancing farmers' interests. This ability to influence has also been important in dealing with transportation reform and international trade policy.

The CWB has a deep commitment to western Canadian farmers and operates under the direction of its predominantly farmer-elected Board of Directors.

### **It's About More Than Just Marketing**

The CWB's benefits are felt beyond the act of marketing wheat, durum and barley on behalf of western Canadian farmers. The actions of the CWB are also felt on international trade, by grain companies, other industries, grain research organizations, major port communities, rural communities and farm families. These impacts are assessed on a qualitative basis, however, there could have been significant quantitative impacts that were not measured under the scope of this report.

## **Conclusion**

The CWB is a significant player when it comes to helping farmers face the challenges in their industry which are critical to their ongoing success. The CWB's efforts support the agriculture industry in Canada by acting as a recognizable and influential organization for farmers. The CWB also has a major economic impact on Canada through significant purchasing activities and by the generation of a premium for farmers on wheat, durum and barley sales. The results of this study show that the CWB is a major economic force, with western Canada as a major economic beneficiary. Several other provinces such as Ontario and Quebec also derive economic benefits from the CWB's activities.



## **1.0 Introduction**

The Canadian Wheat Board (“the CWB”) is the largest single seller of wheat and barley in the world, resulting in significant and widespread economic impacts. These economic impacts result from many different sources including the following:

- The CWB’s primary effect is on Gross Domestic Product (“GDP”) and employment income. There is also a benefit to government through tax generation.
- The impact of increased revenues and cost savings to farmers as a result of the single desk.

### **1.1 The Purpose of this Report**

The CWB engaged PricewaterhouseCoopers LLP (“PwC”) to assess the economic impact of the CWB’s direct costs, administrative and capital expenses, and the premiums derived from the operation of the single desk on the City of Winnipeg, the western provinces and Canada. The CWB’s economic activity significantly impacts the Canadian economy through the sustainability of jobs in agricultural and supporting industries, and tax revenues to all levels of government. The results show that the CWB is a major economic force, with western Canada as a major economic beneficiary. Several other provinces such as Ontario and Quebec also derive economic benefits from the CWB’s activities.

PwC’s work plan involved identifying and examining specific quantitative and qualitative economic and social benefits. Important non-economic benefits of the CWB were identified through interviews with internal and external stakeholders, as well as a review of other publicly available information. Comments in this report reflect the feedback and information received by PwC. Appendix A of this report lists the individuals interviewed and other sources of information relied upon by PwC.

In sections supported by quantitative data, PwC engaged the services of Econometric Research Limited (“ERL”). ERL’s review of the economic and social contributions of the CWB is based upon Econometric Research Limited Regional Impact Model (“RIM”) which is basically local/provincial input-output economic model using a refined version of the Statistics Canada Inter-provincial Statistical Data. Sustainable expenditures incurred by the

CWB are multiplied through the economy. Spending on goods and services generates a need for additional goods and services. ERL put the CWB's expenditures through an input-output analysis to track the effect through the economy. The input-output tables generate economic impact multipliers, which estimate the total effect of spending in a particular region.

### **1.2 Quantitative Impacts**

As a farmer controlled organization, the CWB is the largest single seller of wheat and barley in the world. This results in significant and widespread economic impacts. The CWB generates substantive impacts through many channels.

- Through direct costs in the supply chain by taking delivery and shipping agricultural products to distant markets.
- Through single desk marketing and associated branding, Canadian agricultural exports derive a premium that farmers would not, acting alone, be able to derive.
- Through administrative spending on business operations.
- Through capital spending for sustaining its business capacity.

These economic contributions will be assessed for the City of Winnipeg, the western provinces and the rest of Canada in terms of:

- Increases in Gross Provincial Incomes ("GPI");
- Creation of provincial and local employment;
- Augmentation of the tax base for the three levels of government;
- Diversification of the provincial economic base; and
- Promotion of Canadian exports.

### **1.3 Qualitative Impacts**

In addition to the quantification of the economic impacts of the CWB, it is important to note that economic impact indicators cannot in themselves measure the full impacts of this unique Canadian corporation. There is no doubt that the CWB has made significant contributions to

the economies of many rural communities and sustained a way of life for some in rural Canada that would not have existed without its contributions.

PwC interviewed a number of the CWB's stakeholders, as detailed in Appendix A, in determining how the CWB qualitatively impacts the City of Winnipeg, the western provinces and the rest of Canada. Feedback received identified a number of benefits, affecting farmers and other stakeholders in the agriculture industry, which will be further explored in this report and include:

- Exerting significant influence on issues important to farmers, where individually, farmers would have limited influence;
- Providing a level playing field for smaller industry operators by promoting a fair and competitive environment;
- Supporting community causes in rural western Canada and providing scholarships for students pursuing agriculture-related education;
- Through marketing efficiencies created by the economies of scale achieved by all farmers marketing as one through the single desk, lessening the administrative burden and risk management for many farmers and their families;
- Providing Winnipeg, the western provinces and Canada with greater international exposure and promoting their tourism and hospitality industries; and
- Advancing the "Canadian" brand and supporting trade routes for non-board grain and other industries to export markets.

As a major agricultural institution developed to provide individual farmers with marketing clout in a large global marketplace, sustain farm incomes, reduce common expenses and secure new export markets, the CWB has become a major anchor of Canadian farm and economic policy.

## **2.0 The Canadian Wheat Board Profile**

### **2.1 History**

The CWB has a long history that pre-dates its formal establishment in 1935. It is grounded in the experience of farmers and their sense of captivity to the railways, the line elevator companies, and the then Winnipeg Grain Exchange. Farmers wanted greater power and protection for themselves in the grain marketing system. They developed a strong confidence in farmer-controlled approaches.

Government support for an agency to market grain fluctuated over the course of the early 1900's but by the early 1930's it became clear to the government that the CWB was a valuable public policy instrument and that its involvement was going to be long term. It formalized that involvement and enacted the Canadian Wheat Board Act, which came into force on July 5, 1935.

Over the years, the CWB's authority over the marketing of types of grain has varied considerably. At first, deliveries to the CWB were voluntary, and it handled only wheat. Then, during World War II, the CWB was empowered to market all Canadian grains, including oilseeds and Ontario corn. Wheat futures trading was suspended in 1943 in the conditions of wartime and deliveries to the CWB became compulsory. In 1949, Parliament amended the Canadian Wheat Board Act to extend the CWB's marketing responsibility to encompass oats and barley, but retained a clause that required the Act's renewal by Parliament every five years. In 1966, this clause was removed and the Canadian Wheat Board Act became permanent legislation. In 1974, inter-provincial sales of wheat, oats and barley for use in animal feeds within Canada were removed from the sole authority of the CWB. In 1989, the marketing of oats was also removed from the authority of the Board, leaving it responsible only for the marketing of western Canadian wheat and barley both for export and for human consumption domestically.

## **2.2 The CWB's Current Mandate and Governance**

In 1998, following an extensive review of western grain marketing by the federal government, one of the most significant changes in the history of the CWB occurred. The Canadian Wheat Board Act was amended to, among other things, change the CWB's governance and to allow for new payment options for farmers to be developed. On December 31, 1998, a 15-member Board of Directors assumed overall governance responsibility for the CWB. Ten of the Directors are elected by Prairie grain farmers, four are appointed by the federal government and the fifth, the President and CEO, is selected by the Board and appointed by the federal government. Under the new "shared governance" corporate structure the CWB became arms' length from the federal government and became more directly accountable to the farmers it serves.

The CWB became farmer-controlled but its business lines did not change – it remained the single desk marketer of branded, quality western Canadian wheat and barley both domestically and internationally. It exists to serve the needs of approximately 85,000 western Canadian farmers, with a sole mission to maximize their returns from the sale of their grain. The CWB Board of Directors is responsible for establishing strategic direction as well as reviewing and approving strategic plans, budgets, financial statements, as well as the annual business and borrowing plans.

## **2.3 Addressing Major Challenges**

Canadian farmers grow their crops in an environment that supports their ability to grow one of the highest quality products in the world. However, farmers are faced with a number of challenges in producing and marketing their grains, including

- Proximity to tide waters – Canadian farmers have some of the furthest distances to port relative to other producing regions. These long distances to port, as well as the long distances overseas, result in higher transportation costs relative to other international farmers;
- Subsidies to international farmers – Canadian farmers are in a different situation than farmers from other countries who receive much larger subsidies from their government. The use of subsidies is also thought to be the cause of over production resulting in lower market prices;

## ***The Economic Impact Analysis of the Canadian Wheat Board***

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- Strong reliance on export markets – Over 80% of wheat and barley produced in western Canada is exported.

The successes that the CWB has been able to achieve are driven by the quality of the western Canadian grains, the power of farmer support, the single desk and its unique ability to brand western Canadian wheat, durum and barley, and also by its highly skilled employees who leverage these attributes in their marketing approach.

The CWB has faced many challenges in the past and will continue to in the future, including:

- Providing farmers with flexible programs and services to effectively meet their business needs;
- Addressing pressures and pursuing opportunities in World Trade Organization (“WTO”) negotiations;
- Responding to intensifying and evolving competition globally;
- Leveraging the CWB and western Canadian wheat and barley brands with customers; and
- Representing farmers’ interests with government on other marketing related issues.

However, western Canadian farmers, through the CWB have been able to respond to those challenges in part as follows:

- Corporate Governance – A farmer-run corporation with the majority of the CWB Directors elected by farmers;
- Strength in Numbers – With all the wheat and barley grown in western Canada and destined for domestic human consumption or export marketed by the CWB comes the ability to compete with large international competitors;
- Producer Payment Options – Allowing individual farmers to manage their own marketing risks by being able to lock in prices based on futures market prices; and
- Branding – The CWB has been successful in leveraging the Canadian brand in international markets.

## ***The Economic Impact Analysis of the Canadian Wheat Board***

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Western Canadian farmers continue to address the challenges they face using the CWB to assist their efforts to help them achieve the highest prices for their crops and increase flexibility to manage their business.

## **3.0 The Canadian Wheat Board's Operations**

The operations of the CWB are dedicated to current and long-term viability of western Canadian farmers. The CWB's corporate structure, its programs and the Federal Government's programs and legislated endorsement are all in place to better serve farmers in their efforts to achieve the highest possible returns for their crops.

### **3.1 Role of the CWB in the Canadian Grain Trade**

The CWB sells 18 to 24 million tonnes of western Canadian wheat, durum and barley each year to customers in more than 70 countries. Annual sales revenue is in the range of \$4 billion to \$6 billion. All sales revenue, less operating costs, is returned directly to farmers. Its headquarters are in Winnipeg, Manitoba with satellite offices in Vancouver, Saskatoon, Beijing, Tokyo, and Airdrie, Alberta. The CWB has 460 employees, most based in Winnipeg, with 18 Farm Business Representatives located across western Canada. Annual administrative expenditures are approximately \$72 million per year, representing less than 2% of the CWB's revenues.

The CWB plays an important role in the coordination of transportation for wheat, durum and barley grown on the Prairies from country elevators to port locations up to 2000 km away, but does not own or operate any elevators or railways<sup>8</sup>. CWB's market and product development work helps determine customer needs and enables the CWB to advise farmers which classes of grain and varieties are most likely to generate higher returns for them. For some varieties of wheat, durum and barley, the CWB has in place an identity preserved contract program ("IPCP"). The IPCP is designed to develop domestic and international markets for new varieties of western Canadian wheat, durum and barley. Farmers receive incentives for production contracts that allow the CWB to test market new varieties among customers. The program provides a supply of new, high-quality varieties to customers, so that milling and end-use performance can be tested, leading to increased market potential.

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<sup>8</sup> The CWB does own a fleet of approximately 2,000 hopper cars which are used by rail companies for the transport of grain.



Incentives to farmers vary by program. They can include guaranteed acceptance and delivery within the crop year of all production that qualifies for the program; escalating on-farm storage payments; contract premiums; and protein premiums.

### **3.2 The Single Desk**

The CWB is the sole marketer of western Canadian wheat, durum and barley sold for human consumption and/or export. This allows farmers through the single desk of the CWB to hold a monopoly position on the sale of western Canadian wheat, barley and durum. This single-desk system allows the CWB to market western Canadian grain as a branded, premium product to world markets.

The single-desk marketing system and Canada's quality control system established under the Canada Grains Act are intricately linked. The latter establishes the quality parameters for western Canadian wheat, durum and barley with considerable input from the CWB. Only varieties that meet performance criteria are licensed to be grown. The effect is the production of classes of these grains that from agronomic and end users' perspectives (ex. flour millers, maltsters) perform exceptionally well. Furthermore, these systems ensure that the grain that end users receive will perform consistently from cargo to cargo and from year to year. This quality focus allows the CWB to extract a premium from the market and to pass the full value of farmers' grain, including the premium back to farmers.

In an open market like that which exists for canola and other grains, farmers rely on a few, mostly multinational corporations to market their grain. These companies market grain from several countries which decreases interest in promoting one country's grain over another country's. Furthermore, these companies are more likely to market grain as commodities, with limited incentive to market branded products. This means that they trade grain on margins, making every attempt to buy low from farmers and sell high in the market place.

Canada's single-desk system also provides farmers with significant economies of scale in purchasing power when negotiating with key service providers, including railways and grain handlers. Transportation savings in 2003/04 as reported by the CWB were \$51 million,

generated by a combination of freight and terminal rebates, CWB financial penalties for non performance and tendering.

### **3.3 Pooling**

A fundamental premise of the CWB's consolidated approach is to provide farmers with equitable access to global markets and to return the benefits of single desk sales of farmers' crops to those farmers in an equitable way. This is accomplished through pooling. All returns, less marketing costs, are paid to farmers via four pool accounts for wheat, durum, malting barley and feed barley. The pooling system:

- Helps farmers manage uncertainty over timing of sales, by selling throughout the year. Regardless of when grain is sold and the country to which it is sold, all farmers delivering a particular product and choosing pooling as the payment method will receive the same payment for it, after adjustment for transportation.
- Shares the costs of marketing, delivery and distribution across the entire volume of sales in each pool.

Since the 1998 governance changes to the CWB and in response to farmers' expressed preferences for alternatives within the CWB's framework, the CWB has introduced alternative payment options to pooling. The CWB's Producer Payment Options ("PPOs") give farmers the opportunity to control the pricing of their wheat and barley; including how and when they get paid. These options provide farmers the opportunity to manage their own marketing risks, if they so choose.

There are five basic payment options now available to farmers through the CWB in addition to the traditional pooling concept, each with their own beneficial attributes, namely:

- Basis Payment Contract
- Fixed Price Contract
- Early Payment Option
- Daily Price Contract (new for 2005/06)
- Organic Spread Contract (new for 2005/06)

The introduction of these options has been welcomed by farmers as enhancing their business flexibility. It has played an important part in improving farmer endorsement of the CWB.

### **3.4 Financial Guarantees**

CWB's initial payments provide farmers with protection in the event of catastrophic collapses in grain markets. Initial payments currently are approved by the Government and guaranteed based on the CWB's recommendation. This recommendation is based on the CWB's best estimate of pool returns as well as on the Government's own analysis of markets. A risk factor is applied to these estimates to account for potential price decreases. Farmers receive initial payments upon delivery followed by adjustment payments during the year and final payments following the close of that crop year.

The CWB also has a government guarantee on its borrowings. Since the CWB returns all revenues less marketing costs to farmers, it does not have capital or assets against which to borrow. The borrowing guarantee allows the CWB to borrow at competitive rates in order to meet its cash needs.

While most sales are made on a cash basis, credit is requested by customers periodically. Credit guarantees allow the CWB to compete in the global marketplace with large multinational companies who have access to similar (or more generous) credit programs from their respective governments, particularly in the US.

## **4.0 Economic Impact Analysis and Methodology**

### **4.1 Defining Economic Impact**

Sections 5 through 9 of the report present the economic impacts attributable to the CWB's administrative expenditures, capital expenditures, direct costs, and premiums generated on sales of wheat, durum and barley.

The CWB's economic impact analysis demonstrated great economic benefits throughout Canada. A large portion of the CWB's expenditures and resulting indirect and induced spending remain within provincial economies. Thus, unlike some industries that tend to import some of the goods and services required in the production process, the CWB tends to spend comparatively more money locally.

The fundamental principle underlying economic impact analysis is that each dollar spent on goods and services circulates and re-circulates within the economy. This results in multiplication of the effects of the initial expenditure. The circulation and re-circulation is commonly referred to as the *economic multiplier effect*.

The magnitude of the circulation and re-circulation of expenditures depends on the extent to which money 'leaks' out of the economy being measured. For purposes of our analysis, 'leakage' occurs every time that a purchase is made outside of the provincial or Canadian economy. Household savings and taxes paid to different levels of government represent a further 'leakage' of economic impacts.

Provincial and local impacts are determined using inputs that include the sale of goods and services acquired by the CWB, employment costs, and taxes paid. These inputs are entered into the model in order to generate sales (gross output), income (value added), labour income, employment and tax impacts.

We present the following five economic impact measures:

***Gross Output*** measures the annual economic impact (i.e., the direct, indirect and induced impacts) of all transactions that occur in an economy as a result of a company's initial expenditures. In the case of the CWB, such transactions are triggered by its administrative, capital and direct expenditures, as well as the premiums it generates for farmers through the marketing of wheat, durum and barley. For example, the *Gross Output* value would include the economic impact of a transaction between the CWB and an office supply retailer for goods purchased by the CWB, the economic impact of the transaction between a wholesale company and the retail office supply company for those same goods, the economic impact of the transaction between the wholesaler and the manufacturer of the goods, and so on. Thus, under the *Gross Output* approach, the economic impact of the same item can be counted several times. To eliminate the double counting in the *Gross Output* measure, *Value Added* or *Gross Provincial Income* is calculated.

***Gross Provincial Income ("GPI") also known as Value Added or Gross Domestic Product ("GDP")*** measures the annual net economic impact (i.e. the direct, indirect and induced impacts) of a company's initial expenditures. It represents the sum of all value added contributed at each stage of production. Only final outputs are counted, intermediate inputs are netted out.

***Employment*** is expressed as the number of equivalent full time jobs measured in person years. As is the case with the monetary measures, employment impacts can be direct, indirect or induced.

***Labour Income*** includes the total salaries and wages generated in the economy by the employment impacts.

***Taxes*** in the model are linked with the level of government that is receiving them. For example, taxes on corporate profits are shared between the federal and provincial governments and local (municipal) governments collect business and property taxes. These amounts are included in *Gross Output* and *Value Added*.

In addition, our report considers the following economic impact categories:

***Direct Impacts*** are the initial, immediate economic impacts generated by a company's initial expenditures. For example, the direct impacts of the CWB's purchase of goods from an office supply company would be the income the office supply company generates and the jobs created as a result of the sale of those goods.

***Indirect Impacts*** are the impacts of, for example, the office supply company sustaining its operations by purchasing goods and services (e.g., electricity, advertising, cleaning staff, etc.) necessary for their business. Note that the indirect impacts of the *Gross Output* measure would also include these impacts for all parties in the chain of transactions triggered by the CWB's initial expenditures.

***Induced Impacts*** arise from the spending of individuals and business incomes that are generated by the direct and indirect impacts originating from a company's initial expenditures. For example, induced impacts would arise as a result of employees of the office supply company spending a portion of their wages on goods and services for personal enjoyment (e.g., meals, entertainment, etc.)

Together, the direct, indirect and induced impacts accumulate to the *total* impact of any given initial expenditure. Throughout our discussion, we use these and other related terms which are defined in Appendix B: Glossary of Terms.

The presentation of results is organized as follows. We first present the economic impact of the CWB divided into administrative, capital, direct costs and generated premiums on the provincial economies separately and the City of Winnipeg. The detailed results can be found in Appendix C.

### **4.2 Methodology Employed**

Data pertaining to goods and services purchased by the CWB and taxes derived from the CWB revenues have been compiled to demonstrate one aspect of the overall economic impact. Economic impacts attributed to the CWB's revenues and expenditures have been assessed for both the City of Winnipeg, western provinces and the rest of Canada.

The impact model used is a special application of a generic Regional Impact Model (“RIM”) developed by ERL. It is a unique model that captures the economic impact of industrial, agriculture and tourism expenditures at the local level (counties, Central Metropolitan Areas or municipalities), the provincial level (Manitoba, Saskatchewan or Alberta) and the national level. The model is based on a novel technology that integrates input-output analysis and location theory. The system has already been applied to numerous other studies.

The model utilizes a large set of economic and technical databases that are regularly published by Statistics Canada. A short list includes the inter-provincial input-output tables, employment by sector, taxes by type of tax and the level of government collecting it, prices of products and energy used.

Economic impact analysis is a useful mathematical tool capable of quantifying the patterns and magnitudes of interdependence among sectors and activities. It is predicated on two fundamental propositions.

- First, regardless of the inherent value of primary activities such as preserving rural culture, to the extent that activity involves the use of scarce resources, they generate economic consequences that can be measured and compared.
- Second, economic impacts are only partially captured by assessing direct expenditures. Inasmuch as the economy is a complex whole of interdependent and interacting activities, there are some significant indirect and induced impacts associated with the direct expenditures. These indirect and induced impacts are often larger than the direct impacts.

### **4.3 Assumptions**

Some of the assumptions and limitations imposed on our approach and findings include the following:

- We relied on information and assumptions received from various sources which we did not audit or otherwise verify, as detailed in Appendix A.
- Estimates of the economic impacts in the report are generally conservative to avoid overstating the results of the study.
- Complete quantification of all beneficial impacts generated by the CWB is not possible as some benefits are not easily measured. In these instances, we have attempted to address these benefits through qualitative discussion.

- All figures are presented in 2004 Canadian dollars unless otherwise indicated.
- The study areas were the City of Winnipeg, Manitoba, Saskatchewan, Alberta, British Columbia and the rest of Canada.



## **5.0 The Administrative Expenditure Impacts**

Significant economic gains accrue to the City of Winnipeg, Manitoba and to a lesser extent the rest of Canada from the CWB's annual administrative expenditures, which in fiscal 2004 totalled \$72.0 million<sup>9</sup>. Tables 5-1 through 5-5, set out below, summarize these impacts. Provided annual administrative expenditures remain relatively unchanged into the future, it can be assumed that the economic impacts from the CWB's administrative activities will be of a similar magnitude each year.

For purposes of this report, administrative expenditures include:

- Human Resources
- Office Services
- Professional Fees
- Computer Services
- Facilities
- Travel
- Advertising and Promotion
- Training
- Depreciation
- Other
- Grain Industry Organization Funding

The annual administrative expenditures of the CWB result in sustainable economic impacts in the provinces where they are made.

### **5.1 Administrative Expenditures**

Administrative expenditures for fiscal 2004 totalled \$72.0 million, of which \$68.1 million were incurred in Canada. The largest administrative expenditures are made in Manitoba (\$64.2 million) of which Winnipeg represents \$59.9 million. These administrative expenditures are inclusive of \$1.8 million spent on supporting organizations with a focus on improving and maintaining the quality of western Canadian wheat and barley, such as CIGI. The administrative expenditures in the other provinces are modest but meaningful. Expenditures on goods and services purchased outside of the City of Winnipeg, the western provinces and the rest of Canada are considered a 'leakage' from the economy and are not included as a component in the model. Leakage out of the Canadian economy was approximately \$4 million.

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<sup>9</sup> Based on administrative expenditures of \$68.008 million from the CWB's audited financial statements as well as recoveries of \$2.28 million and grain industry organization funding of \$1.836 million.

## 5.2 Gross Output Impacts

Gross output impacts attributable to the CWB's administrative expenditures on the economies of the City of Winnipeg, the western provinces and the rest of Canada were determined by first sub-dividing the total administrative expenditures into major expenditure categories. Sub-divided, these initial expenditures were then applied to the economic impact model.

As summarized in Table 5-1, the fiscal 2004 administrative expenditures of \$72.0 million multiplied 1.65 times through the provincial economies into \$118.6 million in total sales activity. Over \$109.5 million was realized within the Manitoba economy, representing a multiple of 1.71.

**Table 5-1: Gross Output Impacts of 2003-2004 Administrative Expenditures Incurred by the CWB (2004 \$)**

IMPACT: GROSS OUTPUT	WINNIPEG	MANITOBA	SASK	ALBERTA	BC	REST OF CANADA	TOTAL
Initial Expenditure - \$72,036,958	\$59,914,523	\$64,199,295	\$795,352	\$617,075	\$829,196	\$1,612,675	\$72,036,958
<i>Multiplier</i>	1.58	1.71	2.41	1.82	2.53	2.42	1.65
<i>Direct</i>	\$59,426,850	\$63,711,622	\$795,352	\$617,075	\$829,196	\$1,612,675	\$67,565,920
<i>Indirect and Induced</i>	\$35,179,307	\$45,853,787	\$1,121,553	\$502,991	\$1,268,266	\$2,283,809	\$51,030,406
<b>Total Gross Output</b>	<b>\$94,606,157</b>	<b>\$109,565,409</b>	<b>\$1,916,905</b>	<b>\$1,120,066</b>	<b>\$2,097,462</b>	<b>\$3,896,484</b>	<b>\$118,596,326</b>

## 5.3 Gross Provincial Income

GPI or value added impacts measure the net output, or the contribution of value by the CWB, by including only the final goods and services. The initial expenditures multiplied 1.39 times through the economy and generated \$100.4 million in additional GPI to the economy (Table 5-2).

**Table 5-2: Gross Provincial Income of 2003-2004 Administrative Expenditures Incurred by the CWB (2004 \$)**

<b>IMPACT: GROSS PROVINCIAL INCOME OR VALUE ADDED</b>	<b>WINNIPEG</b>	<b>MANITOBA</b>	<b>SASK</b>	<b>ALBERTA</b>	<b>BC</b>	<b>REST OF CANADA</b>	<b>TOTAL</b>
<b>Initial Expenditure - \$72,036,958</b>	<b>\$59,914,523</b>	<b>\$64,199,295</b>	<b>\$795,352</b>	<b>\$617,075</b>	<b>\$829,196</b>	<b>\$1,612,675</b>	<b>\$72,036,958</b>
<i>Multiplier</i>	1.43	1.47	1.72	1.67	1.79	1.32	1.39
<i>Direct</i>	\$45,278,857	\$47,685,453	\$788,320	\$534,369	\$783,115	\$969,217	<b>\$50,760,474</b>
<i>Indirect and Induced</i>	\$40,423,976	\$46,703,694	\$578,045	\$496,727	\$704,261	\$1,152,161	<b>\$49,634,888</b>
<b>Total GPI</b>	<b>\$85,702,833</b>	<b>\$94,389,147</b>	<b>\$1,366,365</b>	<b>\$1,031,096</b>	<b>\$1,487,376</b>	<b>\$2,121,378</b>	<b>\$100,395,362</b>

Over \$94 million of the GPI as reflected in Table 5-2 above resulted from economic activity taking place within the Manitoba economy. The vast majority (\$85.7 million) was incurred in the City of Winnipeg, due to the location of the CWB head office.

## 5.4 Employment

The estimated employment and labour income impacts associated with \$72.0 million in initial 2004 administrative expenditures by the CWB are substantial. As set out in Tables 5-3 and 5-4, in addition to the approximately 460 jobs directly sustained by the CWB, a further estimated 2,060 full-time, full-year jobs are realized within the economy and are attributable to the CWB's administrative expenditures. Of these, the vast majority (1,951 full-time, full-year jobs) are realized within Manitoba.

**Table 5-3: Employment Impacts of 2003-2004 Administrative Expenditures Incurred in the CWB (2004 \$)**

<b>IMPACT: EMPLOYMENT</b>	<b>WINNIPEG</b>	<b>MANITOBA</b>	<b>SASK</b>	<b>ALBERTA</b>	<b>BC</b>	<b>REST OF CANADA</b>	<b>TOTAL</b>
<b>Initial Expenditure - \$72,036,958</b>	<b>\$59,914,523</b>	<b>\$64,199,295</b>	<b>\$795,352</b>	<b>\$617,075</b>	<b>\$829,196</b>	<b>\$1,612,675</b>	<b>\$72,036,958</b>
<i>Multiplier</i>	1.58	1.62	1.55	1.82	1.75	2.38	1.63
<i>Direct</i>	1,163	1,205	20	11	16	13	<b>1,265</b>
<i>Indirect and Induced</i>	671	746	11	9	11	18	<b>795</b>
<b>Total Employment</b>	<b>1,834</b>	<b>1,951</b>	<b>31</b>	<b>20</b>	<b>27</b>	<b>31</b>	<b>2,060</b>

**Table 5-4: Labour Impacts of 2003-2004 Administrative Expenditures Incurred in the CWB (2004 \$)**

<b>IMPACT: LABOUR INCOME</b>	<b>WINNIPEG</b>	<b>MANITOBA</b>	<b>SASK</b>	<b>ALBERTA</b>	<b>BC</b>	<b>REST OF CANADA</b>	<b>TOTAL</b>
<b>Initial Expenditure - \$72,036,958</b>	<b>\$59,914,523</b>	<b>\$64,199,295</b>	<b>\$795,352</b>	<b>\$617,075</b>	<b>\$829,196</b>	<b>\$1,612,675</b>	<b>\$72,036,958</b>
<i>Direct</i>	\$42,776,235	\$44,499,560	\$782,852	\$506,096	\$745,556	\$702,302	<b>\$47,236,366</b>
<i>Indirect and Induced</i>	\$23,547,268	\$27,059,331	\$306,757	\$277,752	\$417,047	\$686,978	<b>\$28,747,865</b>
<b>Total Labour Income</b>	<b>\$66,323,503</b>	<b>\$71,558,891</b>	<b>\$1,089,609</b>	<b>\$783,848</b>	<b>\$1,162,603</b>	<b>\$1,389,280</b>	<b>\$75,984,231</b>

A total of \$76.0 million is generated in wages and salaries (Table 5-4); this translates into an effective average wage of \$36,885.

## **5.5 Tax Generation Impacts**

In addition to the value added and employment impacts, increased government revenues accrue to all three levels of governments as a result of the CWB's administrative expenditures. Total taxes paid as a result of the initial fiscal 2004 expenditures of \$72.0 million translate into an economic impact of almost \$42.9 million as set out in Table 5-5 below. Of this, approximately \$40.4 million in revenues results from economic activity taking place within Manitoba. Table 5-5 illustrates the government revenues accruing to the federal, provincial and local governments. A further breakdown of the taxes by Governmental level is provided in Table 2 Appendix C.

**Table 5-5: Total Tax Generation Impacts of 2002-2003 Operating and Research Expenditures Incurred by the CWB (2004 \$)**

<b>IMPACT: TOTAL TAXES</b>	<b>WINNIPEG</b>	<b>MANITOBA</b>	<b>SASK</b>	<b>ALBERTA</b>	<b>BC</b>	<b>REST OF CANADA</b>	<b>TOTAL</b>
<b>Initial Expenditure - \$72,036,958</b>	<b>\$59,914,523</b>	<b>\$64,199,295</b>	<b>\$795,352</b>	<b>\$617,075</b>	<b>\$829,196</b>	<b>\$1,612,675</b>	<b>\$72,036,958</b>
<i>Federal</i>	\$21,917,022	\$23,986,192	\$336,511	\$285,297	\$381,638	\$441,913	<b>\$25,431,551</b>
<i>Provincial</i>	\$11,838,486	\$13,066,499	\$193,484	\$122,451	\$204,750	\$314,977	<b>\$13,902,161</b>
<i>Local</i>	\$3,072,124	\$3,316,121	\$83,023	\$41,021	\$45,003	\$75,824	<b>\$3,560,992</b>
<b>Total Taxes</b>	<b>\$36,827,632</b>	<b>\$40,368,812</b>	<b>\$613,018</b>	<b>\$448,769</b>	<b>\$631,391</b>	<b>\$832,714</b>	<b>\$42,894,704</b>

The total initial administrative expenditures also include the property and business taxes paid in Winnipeg and the expenditures outside Canada. None of these expenditures will have any Canadian impacts.

## **5.6 Summary of Administrative Expenditure Impacts**

Economic impacts associated with annual CWB administrative expenditures can be further summarized as follows:

- The CWB's \$72.0 million in fiscal 2004 administrative expenditures generated \$118.6 million in gross output.
- Each \$1 million in administrative expenditures translates into approximately \$1.65 million of gross output to the Canadian economy.
- Initial administrative expenditures of \$72.0 million generated GPI of \$100.4 million in Canada.
- Every \$1 million in CWB administrative expenditures generates approximately \$1.39 million in GPI to the Canadian economy.
- The CWB's fiscal 2004 administrative expenditures generated \$42.9 million in taxes to local, provincial and federal governments.
- The CWB, in addition to the approximately 460 employees directly employed by CWB, is directly responsible for sustaining approximately 2,060 full-time jobs in the Canadian economy as a result of administrative expenditures.
- The \$72.0 million in administrative expenditures translated into \$76.0 million in labour income.
- Every \$1 million in CWB administrative expenditures translates into almost \$595,000 in total taxes generated.
- Since the CWB's headquarters are located in Winnipeg, it is natural to expect that Manitoba will derive the largest share of impacts on the administrative expenditures and that Winnipeg, will realize the largest share of the impact on these expenditures in Manitoba. The initial administrative expenditures in Winnipeg exceed \$59.9 million and they drive significant impacts in the area. These include:
  - The City of Winnipeg can count on an annual GPI of \$85.7 million (Table 5-2).
  - In addition to the 460 people employed directly by the CWB, a total of 1,834 full-time equivalent jobs are sustained by the CWB's administrative expenditures (Table 5-3).
  - Labour incomes are increased annually by \$66.3 million supporting an effective annual wage of \$36,163 (Table 5-4).
  - The local governments collect \$3.1 million taxes.

## 6.0 The Capital Expenditure Impacts

The CWB's capital expenditures are normally spent in the areas of:

- Computer systems development and equipment
- Hopper cars
- Furniture and equipment
- Land, building and improvements
- Automobiles
- Leasehold improvements

The capital expenditures are small in comparison to the CWB's administrative and direct expenses. While the CWB incurs capital expenditures on an annual basis, we have opted to consider them outside the sustainable impacts as capital expenditures are not normally considered recurrent to be sustainable.

### 6.1 Gross Output Impacts

As summarized in Table 6-1, the initial expenditure in fiscal 2004 of \$10.0 million multiplied 2.08 times through the economy into a gross output impact of over \$20.7 million, once the resulting indirect and induced expenditures are considered.

**Table 6-1: Gross Output Impacts of \$10.0 Million in Annual Capital Expenditures (2004 \$)**

IMPACT: GROSS OUTPUT	WINNIPEG	MANITOBA	REST OF CANADA	TOTAL
<b>Initial Expenditure - \$9,950,669</b>	<b>\$9,426,939</b>	<b>\$9,426,939</b>	<b>\$523,730</b>	<b>\$9,950,669</b>
<i>Multiplier</i>	<b>1.95</b>	<b>2.06</b>	<b>2.45</b>	<b>2.08</b>
<i>Direct</i>	\$9,426,939	\$9,426,939	\$523,730	<b>\$9,950,669</b>
<i>Indirect and Induced</i>	\$8,955,604	\$9,992,916	\$757,110	<b>\$10,750,026</b>
<b>Total Gross Output</b>	<b>\$18,382,543</b>	<b>\$19,419,855</b>	<b>\$1,280,840</b>	<b>\$20,700,695</b>

### 6.2 Gross Provincial Income

GPI or value added impacts measure the net output, or the contribution of value by the CWB, by including only the final goods and services. GPI is estimated to be in excess of \$10.9 million as the \$10.0 million initial capital expenditure is multiplied 1.09 times through the economy.

**Table 6-2: Gross Provincial Income of \$10.0 million in Annual Capital Expenditures (2004 \$)**

<b>IMPACT: GROSS PROVINCIAL INCOME OR VALUE ADDED</b>	<b>WINNIPEG</b>	<b>MANITOBA</b>	<b>REST OF CANADA</b>	<b>TOTAL</b>
<b>Initial Expenditure - \$9,950,669</b>	<b>\$9,426,939</b>	<b>\$9,426,939</b>	<b>\$523,730</b>	<b>\$9,950,669</b>
<i>Multiplier</i>	<b>1.03</b>	<b>1.08</b>	<b>1.33</b>	<b>1.09</b>
<i>Direct</i>	\$4,274,909	\$4,274,909	\$328,663	<b>\$4,603,572</b>
<i>Indirect and Induced</i>	\$5,416,405	\$5,918,442	\$369,912	<b>\$6,288,354</b>
<b>Total Value Added</b>	<b>\$9,691,314</b>	<b>\$10,193,351</b>	<b>\$698,575</b>	<b>\$10,891,926</b>

Within the City of Winnipeg, GPI associated with the \$9.4 million in capital expenditures are estimated to be approximately \$9.7 million (Table 6-2).

### **6.3 Employment Impacts**

Approximately 165 full-time, full-year jobs result from the annual capital expenditures. Given the vast majority of the CWB capital expenditures are incurred in Winnipeg, approximately 149 of the 165 full-time, full-year jobs created are estimated to occur within Winnipeg (Table 6-3).

**Table 6-3: Employment Impacts of \$10.0 Million in Annual Capital Expenditures (2004 \$)**

<b>IMPACT: EMPLOYMENT</b>	<b>WINNIPEG</b>	<b>MANITOBA</b>	<b>REST OF CANADA</b>	<b>TOTAL</b>
<b>Initial Expenditure - \$9,950,669</b>	<b>\$9,426,939</b>	<b>\$9,426,939</b>	<b>\$523,730</b>	<b>\$9,950,669</b>
<i>Multiplier</i>	<b>2.07</b>	<b>2.15</b>	<b>2.50</b>	<b>2.17</b>
<i>Direct</i>	72	72	4	<b>76</b>
<i>Indirect and Induced</i>	77	83	6	<b>89</b>
<b>Total Employment</b>	<b>149</b>	<b>155</b>	<b>10</b>	<b>165</b>

The created jobs translate into \$6.9 million in total labour income (Table 6-4), which equates to an effective full-time labour income averaging \$41,656 per person. Within the City, full-time full-year employment translates into effective annual wages of approximately \$41,270.

**Table 6-4: Labour Impacts of \$10.0 Million in Annual Capital Expenditures (2004 \$)**

<b>IMPACT: LABOUR INCOME</b>	<b>WINNIPEG</b>	<b>MANITOBA</b>	<b>REST OF CANADA</b>	<b>TOTAL</b>
<b>Initial Expenditure - \$9,950,669</b>	<b>\$9,426,939</b>	<b>\$9,426,939</b>	<b>\$523,730</b>	<b>\$9,950,669</b>
<i>Direct</i>	\$2,925,012	\$2,925,012	\$239,343	<b>\$3,164,355</b>
<i>Indirect and Induced</i>	\$3,224,114	\$3,488,770	\$220,201	<b>\$3,708,971</b>
<b>Total Labour Income</b>	<b>\$6,149,126</b>	<b>\$6,413,782</b>	<b>\$459,544</b>	<b>\$6,873,326</b>

## 6.4 Tax Generation Impacts

Economic activity stimulated by the \$10.0 million in capital expenditures will generate an estimated \$4.5 million in government revenues from direct, indirect and induced taxes. As shown in Table 6-5, tax revenues generated include approximately \$2.6 million in federal taxes, \$1.5 million in provincial taxes, and a further \$316,000 generated locally. The share of tax revenues generated within the City of Winnipeg includes \$2.4 million in federal taxes, approximately \$1.4 million in provincial taxes, and approximately \$280,000 generated locally.

**Table 6-5: Tax Generation Impacts of \$10.0 Million in Annual Capital Expenditures (2004 \$)**

<b>IMPACT: TOTAL TAXES</b>	<b>WINNIPEG</b>	<b>MANITOBA</b>	<b>REST OF CANADA</b>	<b>TOTAL</b>
<b>Initial Expenditure - \$9,950,669</b>	<b>\$9,426,939</b>	<b>\$9,426,939</b>	<b>\$523,730</b>	<b>\$9,950,669</b>
<i>Federal</i>	\$2,376,397	\$2,488,115	\$140,497	<b>\$2,628,612</b>
<i>Provincial</i>	\$1,354,199	\$1,423,600	\$98,752	<b>\$1,522,352</b>
<i>Local</i>	\$280,224	\$293,398	\$22,631	<b>\$316,029</b>
<b>Total Taxes</b>	<b>\$4,010,820</b>	<b>\$4,205,113</b>	<b>\$261,880</b>	<b>\$4,466,993</b>

A further breakdown of the tax impacts are provided in Table 4 and 5 of Appendix C.

## 6.5 Summary of Capital Expenditure Impacts

Impacts associated with \$10.0 million in capital expenditures can be summarized as follows:

- In terms of gross output, \$10.0 million in current capital spending is estimated to generate nearly \$20.7 million in total sales.
- Every \$1 million in initial expenditures translates into approximately \$2.08 million in gross output within Canada.



- The CWB's annual capital spending program will generate approximately \$10.9 million in GPI economy-wide.
- Every \$1 million of the CWB's capital expenditures results in approximately \$1,094,592 in GPI to the Canadian economy.
- The CWB is directly responsible for sustaining approximately 460 full-time, part-time and casual jobs. In addition, the capital expenditures will support approximately 165 full-time, full-year jobs in the Canadian economy.
- Total labour income generated by \$10.0 million in capital expenditures once direct, indirect, and induced impacts are included is \$6.9 million.
- Approximately \$690,000 in total labour income is generated in Canada from every \$1 million of capital spending provided direct, indirect and induced impacts are included.
- Expenditures attributable to \$10.0 million in forecasted capital projects are estimated to generate almost \$4.5 million in total taxes within the Canadian economy.
- Every \$1 million in CWB capital expenditures translates into about \$450,000 in total taxes generated province wide.

The majority of initial capital expenditures are in Winnipeg and exceed \$9.4 million, driving significant impacts on the City. These include:

- Gross output impacts of over \$18.3 million.
- The City of Winnipeg can count on an annual income impact of \$9.7 million with an income multiplier of 1.03.
- A total of 149 full-time equivalent jobs are generated by the CWB's capital expenditures.
- Labour incomes are increased annually by \$6.1 million supporting an effective annual wage of \$41,270. Capital-generated wages are typically higher than average operational wages as they involve high skilled labour.
- The local government collects over \$280,000 in taxes (Table 6-5).

## **7.0 The Direct Costs Impacts**

Moving agricultural products and managing the supply chain of commodities involves substantial expenditures. These expenditures, which represent the CWB's handling and transportation costs to get the grain to market, totalled over \$369.7 million for fiscal 2004 and sustain significant impacts in most of the Canadian provinces. These costs include:

- Freight
- Inventory storage
- Inventory adjustments
- Other direct expenses
- Terminal handling
- Country inventory financing
- Other grain purchases

The rest of Canada, comprising mostly of the area east of Ontario shows the highest expenditures with \$115.6 million, followed by British Columbia with over \$88.4 million. The Prairie Region accounts for over \$165.4 million. It should be noted that these costs only include those incurred by the CWB. Farmers are responsible for paying for the transportation costs to port. The costs borne by farmers represent a significant expenditure which has not been captured in our analysis, but which has important economic impacts in addition to those measured below.

### **7.1 Gross Output Impacts**

The gross output impacts for direct costs were determined based on allocating the total transportation costs according to production in each of the western provinces. As summarized in Table 7-1, the fiscal 2004 direct costs of \$369.7 million multiplied 2.17 times through the economy into over \$803.2 million in total activity.

**Table 7-1: Gross Output Impacts of 2003-2004 Direct Costs Incurred by the CWB (2004 \$) (000's)**

<b>IMPACT: GROSS OUTPUT</b>	<b>MANITOBA</b>	<b>SASK</b>	<b>ALBERTA</b>	<b>BC</b>	<b>REST OF CANADA</b>	<b>TOTAL</b>
<b>Initial Expenditure - \$369,706</b>	<b>\$69,939</b>	<b>\$68,080</b>	<b>\$27,420</b>	<b>\$88,627</b>	<b>\$115,640</b>	<b>\$369,706</b>
<i>Multiplier</i>	<b>2.03</b>	<b>1.84</b>	<b>2.20</b>	<b>2.28</b>	<b>2.35</b>	<b>2.17</b>
<i>Direct</i>	\$69,939	\$68,080	\$27,420	\$88,627	\$115,640	<b>\$369,706</b>
<i>Indirect and Induced</i>	\$72,083	\$57,191	\$32,913	\$113,826	\$157,503	<b>\$433,516</b>
<b>Total Gross Output</b>	<b>\$142,022</b>	<b>\$125,271</b>	<b>\$60,333</b>	<b>\$202,453</b>	<b>\$273,143</b>	<b>\$803,222</b>

## 7.2 Gross Provincial Income

GPI or value added impacts measure the net output, or the contribution of value by the CWB, by including only the final goods and services. The initial expenditure of \$369.7 million multiplied 1.15 times through the economy and generated \$424.0 million in GPI to the Canadian economy.

**Table 7-2: Gross Provincial Income of 2003-2004 Direct Costs Incurred by the CWB (2004 \$) (000's)**

<b>IMPACT: GROSS PROVINCIAL INCOME OR VALUE ADDED</b>	<b>MANITOBA</b>	<b>SASK</b>	<b>ALBERTA</b>	<b>BC</b>	<b>REST OF CANADA</b>	<b>TOTAL</b>
<b>Initial Expenditure - \$369,706</b>	<b>\$69,939</b>	<b>\$68,080</b>	<b>\$27,420</b>	<b>\$88,627</b>	<b>\$115,640</b>	<b>\$369,706</b>
<i>Multiplier</i>	<b>1.09</b>	<b>0.98</b>	<b>1.11</b>	<b>1.20</b>	<b>1.24</b>	<b>1.15</b>
<i>Direct</i>	\$31,911	\$32,332	\$11,816	\$38,907	\$53,921	<b>\$168,887</b>
<i>Indirect and Induced</i>	\$44,612	\$34,693	\$18,488	\$67,283	\$90,005	<b>\$255,081</b>
<b>Total Value Added</b>	<b>\$76,523</b>	<b>\$67,025</b>	<b>\$30,304</b>	<b>\$106,190</b>	<b>\$143,926</b>	<b>\$423,968</b>

It should be noted that the model only considers the direct costs incurred by the CWB and not farmers' direct costs. Including farmers' direct costs would have a significantly greater effect on the economy.

## 7.3 Employment Impacts

Total direct costs sustain an employment impact of 6,736 person years, of which 2,596 are in the Prairie Region (Table 7-3).

Substantial wages and salaries are generated by these economic impacts exceeding \$265.5 million. About \$99.3 million are generated in the Prairie Region followed by

\$95.5 million for the rest of Canada, comprised mostly of the region east of Ontario. British Columbia shows a total wages and salaries impact of over \$70.7 million (Table 7-4).

The large wages and salaries impacts sustain respectable average effective annual average wages of over \$39,400. Ontario's effective annual average wages represent the highest from these impacts and are about \$42,900.

**Table 7-3: Total Employment Impacts of 2003-2004 Direct Costs Incurred by the CWB (2004 \$) (000's)**

<b>IMPACT: EMPLOYMENT</b>	<b>MANITOBA</b>	<b>SASK</b>	<b>ALBERTA</b>	<b>BC</b>	<b>REST OF CANADA</b>	<b>TOTAL</b>
<b>Initial Expenditure - \$369,706</b>	<b>\$69,939</b>	<b>\$68,080</b>	<b>\$27,420</b>	<b>\$88,627</b>	<b>\$115,640</b>	<b>\$369,706</b>
<i>Multiplier</i>	<b>2.16</b>	<b>1.95</b>	<b>2.47</b>	<b>2.41</b>	<b>2.25</b>	<b>2.23</b>
<i>Direct</i>	538	507	180	702	1,089	<b>3,016</b>
<i>Indirect and Induced</i>	623	484	264	987	1,361	<b>3,719</b>
<b>Total Employment</b>	<b>1,161</b>	<b>991</b>	<b>444</b>	<b>1,689</b>	<b>2,450</b>	<b>6,735</b>

**Table 7-4: Total Labour Impacts of 2003-2004 Direct Costs Incurred by the CWB (2004 \$) (000's)**

<b>IMPACT: LABOUR INCOME</b>	<b>MANITOBA</b>	<b>SASK</b>	<b>ALBERTA</b>	<b>BC</b>	<b>REST OF CANADA</b>	<b>TOTAL</b>
<b>Initial Expenditure - \$369,706</b>	<b>\$69,939</b>	<b>\$68,080</b>	<b>\$27,420</b>	<b>\$88,627</b>	<b>\$115,640</b>	<b>\$369,706</b>
<i>Direct</i>	\$20,927	\$16,072	\$7,052	\$28,201	\$40,196	<b>\$112,448</b>
<i>Indirect and Induced</i>	\$26,765	\$18,190	\$10,282	\$42,514	\$55,285	<b>\$153,036</b>
<b>Total Labour Income</b>	<b>\$47,692</b>	<b>\$34,262</b>	<b>\$17,334</b>	<b>\$70,715</b>	<b>\$95,481</b>	<b>\$265,484</b>

A further breakdown on the impact by region is provided in Table 8 of Appendix C.

## **7.4 Tax Generation Impacts**

The direct costs totalling \$369.7 million result in taxes collected by all three levels of government of about \$183.0 million. The federal government derives the largest share with over \$101.3 million, the provincial governments collect \$64.4 million and local governments collect \$17.2 million as shown in Table 7-5.

**Table 7-5: Total Tax Generation Impacts of 2003-2004 Direct Costs Incurred by the CWB (2004 \$) (000's)**

<b>IMPACT: TOTAL TAXES</b>	<b>MANITOBA</b>	<b>SASK</b>	<b>ALBERTA</b>	<b>BC</b>	<b>REST OF CANADA</b>	<b>TOTAL</b>
<b>Initial Expenditure - \$369,706</b>	<b>\$69,939</b>	<b>\$68,080</b>	<b>\$27,420</b>	<b>\$88,627</b>	<b>\$115,640</b>	<b>\$369,706</b>
<i>Federal</i>	\$18,590	\$13,910	\$7,628	\$26,898	\$34,310	<b>\$101,336</b>
<i>Provincial</i>	\$11,206	\$9,044	\$3,904	\$14,726	\$25,545	<b>\$64,425</b>
<i>Local</i>	\$2,192	\$3,432	\$1,308	\$3,172	\$7,121	<b>\$17,225</b>
<b>Total Taxes</b>	<b>\$31,988</b>	<b>\$26,386</b>	<b>\$12,840</b>	<b>\$44,796</b>	<b>\$66,976</b>	<b>\$182,986</b>

A further breakdown of the impact on taxes is provided in Table 9 of Appendix C.

## **7.5 Additional Economic Impacts**

Where an individual province cannot source the required goods and services from their own province, imports are required from other provinces and countries. In the case of direct costs, imports from other provinces are higher than imports from other countries as shown below in Table 7-6. Expenditures are modelled based on costs incurred within the province. Direct costs for Manitoba which were supplied by Saskatchewan are not modelled in Saskatchewan. This fact suggests that the Canadian impacts of direct costs are larger than the sum of the estimated provincial impacts.

**Table 7-6: Imports as a Result of 2003-2004 Direct Cost Incurred by the CWB (2004 \$) (000's)**

<b>IMPACT: TOTAL IMPORTS</b>	<b>MANITOBA</b>	<b>SASK</b>	<b>ALBERTA</b>	<b>BC</b>	<b>REST OF CANADA</b>	<b>TOTAL</b>
<b>Initial Expenditure - \$369,706</b>	<b>\$69,939</b>	<b>\$68,080</b>	<b>\$27,420</b>	<b>\$88,627</b>	<b>\$115,640</b>	<b>\$369,706</b>
<i>From other provinces</i>	\$11,788	\$11,680	\$3,893	\$13,382	\$15,559	<b>\$56,302</b>
<i>From other countries</i>	\$7,459	\$5,825	\$3,413	\$12,680	\$18,507	<b>\$47,884</b>
<b>Total Imports</b>	<b>\$19,247</b>	<b>\$17,505</b>	<b>\$7,306</b>	<b>\$26,062</b>	<b>\$34,066</b>	<b>\$104,186</b>

## **7.6 Summary of Direct Cost Impacts**

Economic impacts associated with the CWB's direct costs can be further summarized as follows:

- The CWB's \$369.7 million in direct costs generated \$803.2 million in gross output in Canada.
- Each \$1 million in direct costs translates into approximately \$2.17 million in gross output in Canada.
- Direct costs generated \$424.0 million in GPI in Canada.

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- Every \$1 million in the CWB's direct costs generates approximately \$1.15 million in GPI to the economy.
- The CWB's direct costs generated \$183.0 million in taxes.
- The CWB is directly responsible for sustaining approximately 460 jobs. In addition, the direct costs supported approximately 6,736 full-time, full-year jobs in the economy.
- The \$369.7 million in direct costs translated into in excess of \$265.5 million in labour income.
- Approximately \$720,000 in total labour income results from every \$1 million of CWB's direct costs providing direct, indirect and induced impacts are included.
- Every \$1 million in CWB's direct costs translates into almost \$494,950 in total taxes generated in the Canadian economy.

## **8.0 The Impacts of the Generated Premiums**

As previously mentioned, the single desk model ensures that all wheat, durum, malting barley, and feed barley produced in western Canada and destined for domestic human consumption or export is marketed by the CWB. The volume generated through this system provides the CWB with significant revenues which in turn make the CWB, and in essence western Canadian farmers, large enough to compete internationally. The single desk provides higher and more stable returns to farmers each crop year, while ensuring that the marketability of the grain remains strong and continues to grow in the future. The single desk model also provides the benefit of management and financial support to industry development for research and education. Overall, this structure is essential and creates favourable economies of scale for the CWB to exploit in all facets of its operations.

### **8.1 Premiums to Farmers**

The CWB is the sole supplier of western Canadian wheat and barley. The CWB has been very successful in this respect, as several studies have indicated that the single desk provides increased returns to farmers of between \$11.50 and \$40 per tonne on board grains<sup>10</sup>.

Wheat	\$11.50 per tonne
Durum	\$25.00 per tonne
Malting Barley	\$35.00 to \$45.00 per tonne

The independent studies estimated the returns to farmers from a single-desk seller marketing system using an economic model that used actual CWB sales transaction data. The results of these independent studies were applied to the production in a normal crop year.

The premiums that the CWB are able to command flow back to the farmers directly and indirectly. Directly, the premiums earned by the CWB translate into higher revenues to the farmers. Indirectly, the CWB continues to invest in the marketing and research of western

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<sup>10</sup> These premiums were derived from Performance Evaluation of the CWB, The CWB and Barley Marketing, Price Pooling and Single-Desk Selling Report and Benchmarks to Measure CWB's Performance as detailed in Appendix A.

Canadian grain in order to ensure the long-term marketability of these products and in turn the long-term viability of the western Canadian farmer.

## 8.2 Gross Output Impacts

As summarized in Table 8-1, the annual premiums to farmers of \$312.6 million multiplied 2.02 times through the economy resulting in \$632.2 million in gross economic output. Over \$366.6 million of the economic output is realized in Saskatchewan due to their high grain production levels, relative to other provinces.

**Table 8-1: Gross Output Impacts of Annual Premiums to Farmers (2004 \$) (000's)**

<b>IMPACT: GROSS OUTPUT</b>	<b>MANITOBA</b>	<b>SASK</b>	<b>ALBERTA</b>	<b>BC</b>	<b>TOTAL</b>
<b>Initial Expenditure - \$312,564</b>	<b>\$36,054</b>	<b>\$188,214</b>	<b>\$87,343</b>	<b>\$953</b>	<b>\$312,564</b>
<i>Multiplier</i>	<b>2.00</b>	<b>1.95</b>	<b>2.19</b>	<b>2.18</b>	<b>2.02</b>
<i>Direct</i>	\$39,886	\$208,752	\$94,509	\$1,044	<b>\$344,191</b>
<i>Indirect and Induced</i>	\$32,306	\$157,857	\$96,826	\$1,038	<b>\$288,027</b>
<b>Total Gross Output</b>	<b>\$72,192</b>	<b>\$366,609</b>	<b>\$191,335</b>	<b>\$2,082</b>	<b>\$632,218</b>

## 8.3 Gross Provincial Income

GPI or value added impacts measure the net output, or the contribution of value by the CWB, by including only the final goods and services. The initial expenditure of \$312.6 million multiplied 1.05 times through the economy and generated in excess of \$327.2 million in GPI to the economy (Table 8-2), the majority of which was created in Saskatchewan.

**Table 8-2: Gross Provincial Income of Annual Premiums to Farmers (2004 \$) (000's)**

<b>IMPACT: GROSS PROVINCIAL INCOME OR VALUE ADDED</b>	<b>MANITOBA</b>	<b>SASK</b>	<b>ALBERTA</b>	<b>BC</b>	<b>TOTAL</b>
<b>Initial Expenditure - \$312,564</b>	<b>\$36,054</b>	<b>\$188,214</b>	<b>\$87,343</b>	<b>\$953</b>	<b>\$312,564</b>
<i>Multiplier</i>	<b>1.09</b>	<b>1.00</b>	<b>1.12</b>	<b>1.20</b>	<b>1.05</b>
<i>Direct</i>	\$21,027	\$106,524	\$47,381	\$554	<b>\$175,486</b>
<i>Indirect and Induced</i>	\$18,396	\$82,036	\$50,730	\$585	<b>\$151,747</b>
<b>Total Value Added</b>	<b>\$39,423</b>	<b>\$188,560</b>	<b>\$98,111</b>	<b>\$1,139</b>	<b>\$327,233</b>



## 8.4 Employment

The estimated employment and labour income impacts associated with \$312.6 million in premiums to farmers are substantial.

An additional 5,444 full-time, full-year jobs are realized within the Canadian economy attributable to the additional spending capabilities as a result of premiums to farmers. Of these, 3,196 full-time, full-year jobs are realized within Saskatchewan. Table 8-3 summarizes total employment impacts.

**Table 8-3: Total Employment Impacts of Annual Premiums to Farmers (2004 \$) (000's)**

<b>IMPACT: EMPLOYMENT</b>	<b>MANITOBA</b>	<b>SASK</b>	<b>ALBERTA</b>	<b>BC</b>	<b>TOTAL</b>
<b>Initial Expenditure - \$312,564</b>	<b>\$36,054</b>	<b>\$188,214</b>	<b>\$87,343</b>	<b>\$953</b>	<b>\$312,564</b>
<i>Multiplier</i>	<b>2.03</b>	<b>1.89</b>	<b>2.06</b>	<b>2.19</b>	<b>1.95</b>
<i>Direct</i>	297	1,691	789	8	<b>2,785</b>
<i>Indirect and Induced</i>	306	1,505	838	10	<b>2,659</b>
<b>Total Employment</b>	<b>603</b>	<b>3,196</b>	<b>1,627</b>	<b>18</b>	<b>5,444</b>

The total employment impact of 5,444 full-time, full-year jobs results in a total labour income of \$177.8 million, or an average of \$32,650 per person annually (Table 8-4).

**Table 8-4: Total Labour Impacts of Annual Premiums to Farmers (2004 \$) (000's)**

<b>IMPACT: LABOUR INCOME</b>	<b>MANITOBA</b>	<b>SASK</b>	<b>ALBERTA</b>	<b>BC</b>	<b>TOTAL</b>
<b>Initial Expenditure - \$312,564</b>	<b>\$36,054</b>	<b>\$188,214</b>	<b>\$87,343</b>	<b>\$953</b>	<b>\$312,564</b>
<i>Direct</i>	\$9,963	\$47,158	\$22,904	\$275	<b>\$80,300</b>
<i>Indirect and Induced</i>	\$12,703	\$53,158	\$31,218	\$403	<b>\$97,482</b>
<b>Total Labour Income</b>	<b>\$22,666</b>	<b>\$100,316</b>	<b>\$54,122</b>	<b>\$678</b>	<b>\$177,782</b>

## 8.5 Tax Generation Impacts

In addition to the value added and employment impacts, increased government revenues accrue to all three levels of government as a result of the premiums earned by farmers. Total taxes paid translate into an economic impact of \$134.2 million. Table 8-5 illustrates the government revenues accruing to the federal, provincial and local governments.

**Table 8-5: Total Tax Generation Impacts of Premiums to Farmers (2004 \$) (000's)**

<b>IMPACT: TOTAL TAXES</b>	<b>MANITOBA</b>	<b>SASK</b>	<b>ALBERTA</b>	<b>BC</b>	<b>TOTAL</b>
<b>Initial Expenditure - \$312,564</b>	<b>\$36,054</b>	<b>\$188,214</b>	<b>\$87,343</b>	<b>\$953</b>	<b>\$312,564</b>
<i>Federal</i>	\$9,169	\$39,785	\$23,266	\$271	<b>\$72,491</b>
<i>Provincial</i>	\$5,752	\$26,531	\$13,717	\$167	<b>\$46,167</b>
<i>Local</i>	\$1,081	\$9,816	\$4,595	\$32	<b>\$15,524</b>
<b>Total Taxes</b>	<b>\$16,002</b>	<b>\$76,132</b>	<b>\$41,578</b>	<b>\$470</b>	<b>\$134,182</b>

A further breakdown of the impact on taxes is provided in Table 11 of Appendix C.

## **8.6 Summary of the Impacts of Generated Premiums**

Based on independent studies detailed in Appendix A, the single desk results in premiums of \$11.50 to \$40 per tonne. The premium arises because of the ability to brand western Canadian wheat and barley, the economies of scale in marketing and the ability to use the market power from the single desk to derive higher revenues for the products. Accordingly, the premiums are not hypothetical and flow into the pockets of farmers who in turn spend them as they spend any other income.

The following impacts are estimated:

- The premiums to farmers of \$312.6 million generated over \$632.2 million in gross output in the economy.
- Each \$1 million in premiums to farmers translates into approximately \$2.02 million in gross output within Canada.
- The total GPI of the premiums is about \$327.2 million with virtually all the impact in the Prairie Region.
- Every \$1 million in premiums to farmers generates approximately \$1.05 million in GPI to the economy.
- The spending of the premiums or consumption sustains an employment impact of 5,444 full-time, full-year jobs, of which 5,427 full-time, full-year jobs are in the Prairie Region.
- Substantial wages and salaries are generated by the impacts approaching \$177.8 million, with virtually all being generated in the Prairie Region.

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- Approximately \$570,000 in total labour income results from every \$1 million of premiums to farmers.
- The wages and salary impacts sustain reasonable average effective annual wages of over \$32,650.
- Taxes collected by all three levels of government on these impacts are approximately \$134.2 million. The federal government derives the largest share with over \$72.4 million, the provincial governments collected a total of \$46.2 million and local governments combined collect just under \$15.6 million.

## **9.0 Summary of Sustainable Impacts**

The recurrent expenditures, those that are expected to be made year in and year out are considered permanent and therefore their impacts are deemed sustainable. Once we add the administrative costs, direct costs and premiums we arrive at a large stream of continuous economic activity that is over \$754.3 million (Table 9-1). These expenditures sustain a steady stream of impacts, particularly in those provinces where direct expenditures are made.

A total GPI of \$851.6 million is permanently added to Canada's GDP by the CWB sustainable impacts of which \$596.7 million is in the Prairie Region. A total of 14,239 Canadians owe their full-time equivalent jobs to the CWB, of these about 10,025 are in the Prairie Region. Saskatchewan has the highest single province employment impact with 4,218 full-time, full-year jobs. Wages and salaries are permanently raised by these sustainable expenditures, particularly in the Prairie Region. Total wages and salaries associated with these sustainable expenditure impacts are about \$519.3 million of which \$349.8 million are in the Prairie Region.

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**Table 9-1: Total Sustainable Economic Impacts of the CWB (2004 \$) (000's)**

IMPACT: GROSS OUTPUT	WINNIPEG	MANITOBA	SASK	ALBERTA	BC	REST OF CANADA	TOTAL
<b>Initial Expenditure - \$750,443</b>	<b>\$59,915</b>	<b>\$170,192</b>	<b>\$257,089</b>	<b>\$115,380</b>	<b>\$90,409</b>	<b>\$117,253</b>	<b>\$754,307</b>
<i>Multiplier</i>	<b>1.58</b>	<b>1.90</b>	<b>1.92</b>	<b>2.19</b>	<b>2.29</b>	<b>2.36</b>	<b>2.06</b>
<i>Direct</i>	\$59,427	\$173,537	\$277,627	\$122,546	\$90,500	\$117,253	\$781,463
<i>Indirect and Induced</i>	\$35,179	\$150,243	\$216,170	\$130,242	\$116,132	\$159,787	\$772,573
<b>Total Gross Output</b>	<b>\$94,606</b>	<b>\$323,779</b>	<b>\$493,797</b>	<b>\$252,788</b>	<b>\$206,632</b>	<b>\$277,039</b>	<b>\$1,554,036</b>
<i>Multiplier</i>	<b>1.43</b>	<b>1.24</b>	<b>1.00</b>	<b>1.12</b>	<b>1.20</b>	<b>1.25</b>	<b>1.13</b>
<i>Direct</i>	\$45,279	\$100,623	\$139,644	\$59,731	\$40,244	\$54,890	\$395,133
<i>Indirect and Induced</i>	\$40,424	\$109,712	\$117,307	\$69,715	\$68,572	\$91,157	\$456,463
<b>Total Gross Provincial Income</b>	<b>\$85,703</b>	<b>\$210,335</b>	<b>\$256,951</b>	<b>\$129,446</b>	<b>\$108,816</b>	<b>\$146,047</b>	<b>\$851,596</b>
<i>Multiplier</i>	<b>1.58</b>	<b>1.82</b>	<b>1.90</b>	<b>2.13</b>	<b>2.39</b>	<b>2.25</b>	<b>2.02</b>
<i>Direct</i>	1,163	2,040	2,218	980	726	1,102	7,066
<i>Indirect and Induced</i>	671	1,675	2,000	1,111	1,008	1,379	7,173
<b>Total Employment</b>	<b>1,834</b>	<b>3,715</b>	<b>4,218</b>	<b>2,091</b>	<b>1,734</b>	<b>2,481</b>	<b>14,239</b>
<i>Direct</i>	\$42,776	\$75,390	\$64,013	\$30,462	\$29,222	\$40,898	\$239,984
<i>Indirect and Induced</i>	\$23,547	\$66,527	\$71,655	\$41,778	\$43,334	\$55,972	\$279,266
<b>Total Labour Income</b>	<b>\$66,324</b>	<b>\$141,917</b>	<b>\$135,668</b>	<b>\$72,240</b>	<b>\$72,556</b>	<b>\$96,870</b>	<b>\$519,250</b>
<i>Federal</i>	\$21,917	\$51,745	\$54,032	\$31,179	\$27,551	\$34,752	\$199,259
<i>Provincial</i>	\$11,838	\$30,024	\$35,768	\$17,743	\$15,098	\$25,860	\$124,494
<i>Local</i>	\$3,072	\$6,589	\$13,331	\$5,944	\$3,249	\$7,197	\$36,310
<b>Total Taxes</b>	<b>\$36,828</b>	<b>\$88,359</b>	<b>\$103,131</b>	<b>\$54,867</b>	<b>\$45,897</b>	<b>\$67,809</b>	<b>\$360,063</b>

All levels of government derive permanent revenues on these economic impacts. A total of over \$360.1 million is collected in taxes annually with more than \$199.3 million accruing to the federal government, another \$124.5 million accruing to the provincial governments and about \$36.3 million to the local governments. Table 13 in Appendix C contains a more detailed breakdown of the tax impacts.

While the Prairie Region accounts for most of the revenues collected by the three levels of government, a meaningful amount of over \$67.8 million is generated outside the Prairie Region. Within the Prairie Region, Saskatchewan and then Manitoba show the highest tax yields on these impacts. Equally important, personal income taxes and GST account for the highest shares of the tax revenues of the federal government, whereas personal income taxes and provincial indirect business taxes account for the highest contributors to provincial revenues.

## **10.0 Representing Farmers**

Farmers face many challenges in their industry which are critical to their ongoing success, but can distract from the day-to-day operations of their farms. The CWB has the ability to be a concerted and convincing voice for farmers in a range of fields as diverse as global trade, marketing of wheat and barley, public policy, agriculture and science. From creating an internationally recognized brand to playing a significant role in preventing the premature introduction of genetically-modified wheat, the CWB has been instrumental in promoting and achieving farmers' goals.

### **10.1 Branding**

A brand allows a company to define its unique point of differentiation for their product. For the CWB, branding has been an opportunity to promote wheat, durum and barley grown in western Canada as a strong and stable product. A brand can create expectation among the users of the product and the CWB has worked hard at promoting a brand for western Canadian wheat that signifies high quality, reliable wheat, durum and barley for its customers. The substantial size and funds generated by the single desk allow the CWB to market the western Canadian brand of wheat, durum and barley internationally by forging long-term relationships with customers in 70 countries around the world. Western Canadian farmers are represented under the CWB banner, and therefore have significantly more market power than any individual farm operation. The CWB is able to co-ordinate its marketing efforts with those of the Canadian International Grain Institute ("CIGI") which builds on the CWB's technical knowledge. The branding efforts of the CWB are focused on the products' long-term reputation of being high quality, consistent products, with an immaculate health and food safety record. These branding efforts have been extremely successful, as CWB products are internationally recognized for their high-quality and consistency.

The CWB's strong reputation and successes in marketing wheat, durum and barley can have a positive effect on others' marketing of non-board grains in the international market. The CWB brand is known as a "Canadian" brand having high quality and consistency by CWB's customers. Responses to an independent CWB customer survey listed reliability of supply

and quality of product as important elements. The CWB was highly ranked as being successful in meeting those factors. This can have a positive effect on marketing of non-board grains by virtue of the shared “Canadian” brand.

Having the CWB perform the marketing function on behalf of western Canadian farmers creates a far more powerful, cost-effective and less fragmented effort than if the marketing were done by grain companies or individual farmers.

Evidence of the success of the CWB’s branding is seen by its further promotion by users of western Canadian wheat:

- ADM Milling (Canada) identifies flour bags destined for Asia with an image of wheat stalks and the slogan “Canadian Wheat is Best.”
- Pasta maker Danuta in Poland advertises its high end Malma product line as being made with 100% Canadian amber durum.
- Tsingtao beer, bottled by China’s largest brewery, is marketed in their web site as containing at least 50% Canadian malting barley.
- Mister Donut shops in Japan placed waxed sheets advertising No. 1 Canadian Western Red Spring Wheat on customers’ trays as part of a three-month promotion.

## **10.2 Ability to Influence**

Farmers are faced with taking stances on a number of factors confronting their industry. The CWB has the ability to exert significant influence on issues important to farmers, where individually, farmers would have less power.

### **10.2.1 Genetically Modified Wheat**

In 2001, a group representing farmers, the grain industry, technology developers, customers and government formed a working group to develop a comprehensive set of conditions that would be necessary to meet before a genetically modified (“GM”) wheat variety could be introduced to the marketplace.

More recently, the CWB played a part in preventing the premature introduction of Round-Up Ready wheat by Monsanto. The CWB had done its due diligence, noting that approximately 80% of its customers would not accept these genetically modified crops. Realizing this, Monsanto chose to withdraw its application for regulatory approval, thereby deferring the introduction of Roundup-Ready Wheat to sometime in the future when customers are more willing to accept the technology.

GM wheat has not been accepted in the greater market place. Since the CWB has built a reputation of producing consistent and top quality grain, the introduction of GM wheat into western Canadian production would have had devastating results. Currently, GM wheat cannot easily be distinguished from conventionally grown wheat, therefore it would be difficult to qualify a wheat shipment as free of GM wheat. This was of great concern to western Canadian farmers, and thus a major concern for the CWB.

### **10.2.2 Transportation Savings**

The CWB has used legal measures to defend the rights of farmers by taking on the two national railways in level of service complaints. This case came to a successful end in early March 1999 whereby the CWB and CP Rail reached an out of court settlement valued at approximately \$15 million. The CWB had also reached a settlement with CN in 1998 for an undisclosed amount. This legal action led to improved service and balanced the power between the railway service providers' duopoly and the 85,000 western Canadian farmers the CWB serves. Also, transportation savings generated by a combination of freight and terminal rebates, the CWB's financial penalties for non-performance and tendering represent a significant annual savings for farmers, amounting to over \$51 million in 2003/04 as reported by the CWB.

### **10.2.3 Trade Issues**

The international trade policy environment has a direct impact on the ability of the CWB to maximize returns to farmers. On behalf of the farmers it represents, the CWB has a comprehensive trade strategy which includes support to Canada's negotiating teams on WTO issues.



The fact that the CWB is a significant agriculture force and can and does fight for the rights of farmers is an important benefit to farmers. The CWB has successfully defended western Canadian farmers several times. The additional clout in the marketplace that grain farmers receive from the CWB is considerable. The pooling of resources by the CWB ensures that when grain issues emerge, the farmers have resources working towards a solution immediately. The CWB has a record of winning trade disputes with the US.

A number of trade issues were resolved in the past year including the removal of the US duty on durum. Further to this, a WTO panel found the CWB to be acting in accordance with WTO rules governing state trading enterprises and rejected all US allegations regarding the CWB.

Established in 1995, the WTO is the negotiating forum for international trade issues and disputes of its 148 members. On August 1, 2004, WTO members agreed to a framework agreement that is expected to result in the elimination of the CWB's initial payment and borrowing guarantees at some future date, should a WTO agreement ultimately be reached. The framework also states that the future use of monopoly powers will be subject to further negotiations. The WTO negotiations could result in the need for significant changes to CWB operations.

## **11.0 It's About More Than Just Marketing**

The CWB's benefits are felt beyond the act of marketing wheat, durum and barley on behalf of western Canadian farmers. The actions of the CWB are felt on international trade, grain companies, other industries, grain research, major port communities, rural communities, and farm families.

### **11.1 International Exposure**

The CWB is a major player in the international market as the largest single seller of wheat and barley in the world. The CWB is also one of Canada's biggest exporters, moving 18 to 24 million tonnes of grain to over 70 countries annually.

The international exposure of Canada, the western provinces and the City of Winnipeg have produced tremendous opportunities. The CWB's excellent reputation earned by supplying a high quality and consistent product, as demonstrated in an independent customer survey, can be seen as having a positive influence on those marketing other western Canadian grown commodities on the global markets. Canada's profile has also been raised as a result of the CWB's international exposure which has been seen as nothing but beneficial in allowing other industries to enter international markets. The CWB has a long established point of entry into China, first established in 1961 when Canada made its first wheat sales to China. This has been seen by some as an important launch to facilitating other industries to enter the lucrative Chinese market.

The CWB's role as a hub for the wheat and barley industry attracts many international visitors to the City of Winnipeg. In addition to the CWB's customers, professionals in the banking, marketing, grain, logistics, governance, accounting and finance industries are regular visitors supporting the hospitality industry. The international exposure keeps Canada, the western provinces and especially Winnipeg, "on the map".

## **11.2 Grain Companies and Other Industry Operators**

There is a wide variety of companies involved in the grain industry. Many grain companies have a commercial relationship with the CWB as they handle the grain from the country elevators to port.

On behalf of farmers, the CWB ensures a level playing field exists to ensure that all players are able to compete in providing farmers grain handling and other services. Grain companies who earn revenues by providing services to the CWB have the added benefit of dealing with a credit worthy organization, where receivable collections are a certainty. Thus, no margins are lost due to lack of collectibility. Grain handlers also benefit from CWB's financial strength through financing arrangements using CWB's high credit rating.

One of many reasons the grain company head offices are located in Winnipeg is the proximity to the CWB, the Canadian Grain Commission ("CGC"), the Winnipeg Commodity Exchange, and each other. Without the proximity to these entities, there would be some question as to whether or not the grain companies' head offices would be located in Winnipeg. As well, in the absence of the CWB, the possibility for more foreign ownership of grain companies is likely and there is some concern that in the event of more foreign involvement, head offices and the resulting infrastructure may move out of Winnipeg and eventually, Canada. In the absence of the CWB, western Canadian farmers may eventually deal largely with foreign-owned companies headquartered outside Canada. It would be expected that the loss of the grain industry operators from Winnipeg or Canada would have significant negative quantitative impacts, however they were not measured under the scope of this report.

## **11.3 Other Industries**

The economic activities of the CWB impact other supporting industries. The CWB is a significant borrower in the world's capital markets, consistently borrowing at a level over \$5 billion. The CWB is also a very large user of commodity hedging and foreign exchange hedging instruments offered through the major exchanges and highly rated financial

institutions. Due to the CWB's complex financial and business dealings, a number of professional industries such as consulting, legal, and accounting firms benefit.

Other local industries such as advertising and office supply companies benefit economically from the CWB. Although it is not a formal written policy, it has always been the CWB's practice while being conscious of costs, to source locally first, then throughout western Canada, then eastern Canada, then, if required, in the US. This is evident by the small percentage of administrative costs paid to foreign suppliers.

### **11.4 Grain Research**

A small portion of the revenues from grain sales funds research and development. The approximate \$1.8 million contributed annually by the CWB assists in the funding and strategic direction of several organizations. The most notable of these are CIGI and the Canadian Malting Barley Technical Centre ("CMBTC"). CIGI is a non-profit marketing development organization dedicated to promoting Canada's field crop industries in international and domestic markets through educational programming and technical activities. Since 1973, CIGI has hosted over 21,000 program participants from 107 countries. CMBTC is a non-profit independent organization set up to provide technical assistance to the malting barley and brewing industries.

In addition to significant financial support allotted to these organizations, the CWB is also involved in the management of these organizations with representation on both management boards. The CWB was a founding member of CIGI 33 years ago and has maintained a high level of support. This long-term relationship allows CIGI to take on more extensive projects, and in turn provide the CWB with better technical support for both farmers and customers.

The CWB also provides up to \$400,000 annually in scholarships which help students pursuing agricultural related education. This encourages the development of agricultural research scientists which is in the long-term interest of western Canadian grain farmers. These awards are for students pursuing Ph.D. or Masters Degrees, and third-year and fourth-year agricultural students.

The CWB also recently contributed \$400,000 to a new grain storage research facility at the University of Manitoba to be called the Canadian Wheat Board Centre for Grain Storage Research (“the Centre”). The Centre will conduct research aimed at reducing the effects of harmful factors such as insect infestation, mould and excess moisture on grain stored in granaries.

The CWB has also recently announced that it approved capital funding of \$400,000 to the Agri-Food Discovery Place (“AFDP”) at the University of Alberta in Edmonton. The AFDP will house two major research centres: the Crop Utilization and Enhanced Materials Research Centre and the Meat Safety and Processing Research Centre. The AFDP is attracting top-tier researchers and will be a major contributing factor to the University of Alberta becoming a significant player in food science and related product development work. This endeavour demonstrates the CWB’s commitment to assisting efforts to develop more value added processing opportunities for wheat and barley in western Canada.

### **11.5 Major Port Communities**

The economic impacts a port has on a community can be significant. The volume of grain handled through a port will have direct impacts on the economy of those port communities, representing one of the major economic sectors. While a number of grains and other commodities flow through ports, the CWB directs wheat, durum and barley through ports in Prince Rupert, Vancouver, Thunder Bay, Montreal, Quebec City and Churchill. Grain would move in the absence of the CWB, thus preserving the economic impact, however, the movement might be such that some ports would experience more activity than others.

For example, the CWB directs wheat, durum and barley to the Port of Churchill (“POC”) when it is economically sensible to do so. The benefits of moving CWB grains through the POC are two-fold. First, the cost of shipping through Churchill can be lower, depending on geographical location, than terminals in the east and west, thus increasing returns to farmers. Second, the economic spin-offs to the Town of Churchill are increased as a result of activity at the POC, with 400,000 tonnes moving through in 2004. It is questionable whether the POC would remain viable in the absence of the CWB given that it is not owned by any grain

companies. In normal practice, grain companies move more grain through port terminals they own in order to earn profits.

## **11.6 Rural Communities**

Rural communities are the backbone of Canada's agriculture industry. In addition to the substantial positive impact of higher revenues resulting from premiums generated for farmers in rural communities throughout the years, other activities of the CWB have helped to sustain rural communities. One such activity is the logistical support to farmers that have established producer car loading facilities. The CWB has also supported the Farmer Rail Car Coalition ("FRCC") in their efforts to take ownership of the government's fleet of 12,400 hopper cars. FRCC recently put forth a business plan to take ownership of the government-owned fleet. The intent is for FRCC to manage and maintain the railcar fleet. The CWB has provided in-kind support by assisting with the business plan.

Due to the stability of the CWB and its payment programs some farmers have benefited from greater credit worthiness for their operations. In many cases, banks, credit unions and other financial institutions have been more willing to lend to farmers when the farmers produce Board grains.

## **11.7 Farm Families**

Effective and efficient marketing of grain provides extra returns to western farmers. Further, the CWB relieves an administrative burden on farmers due to its focused and connected customer and market research efforts. Pooling provides a very useful risk management tool for farmers by providing a disciplined and diversified marketing strategy under the auspices of the CWB. For some farmers, this is a very valuable benefit.

The CWB's PPOs provide those farmers who wish to exercise more direct control over their marketing with additional pricing risk management tools at lower costs than if they were structuring their own arrangements with programs offered by brokerage firms.

## **12.0 Conclusion**

The results of the study represent the annual benefits attributed to the CWB's economic activity in the City of Winnipeg, the western provinces and the rest of Canada. Some of our observations include:

- The gross output on Canada attributable to total initial expenditures<sup>11</sup> and premiums generated of \$751.7 million is estimated at \$1.6 billion.
- "GPI or value added impacts to Canada resulting from \$751.7 million in initial expenditures and premiums generated accounted for over \$851.6 million.
- In addition to the 460 positions at the CWB, a further 14,239 full-time, full-year jobs are created in Canada as a result of the initial CWB expenditures and premiums generated.
- In addition to wages paid to CWB employees, total labour income generated in Canada is estimated to be \$519.3 million.
- Approximately \$360.1 million in taxes paid to all levels of government is generated by CWB's initial expenditures and premiums generated in Canada.

The CWB has the ability to be a concerted and convincing voice for farmers in a range of fields as diverse as global trade, marketing of wheat, barley and durum, public policy, agriculture, and science. From creating an internationally recognized brand to playing a significant role in preventing the premature introduction of genetically modified wheat, the CWB has been instrumental in promoting and advancing farmers' interests. This ability to influence has also been important in dealing with transportation reform and international trade policy.

The CWB's benefits are felt beyond the act of marketing wheat, durum and barley on behalf of western Canadian farmers. The actions of the CWB are also felt on international trade, by grain companies, other industries, grain research organizations, major port communities, rural communities and farm families. These impacts are assessed on a qualitative basis.

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<sup>11</sup> Total initial expenditures include the CWB's administrative expenditures and direct costs of handling and moving the grain to its markets.

The CWB is a significant player when it comes to helping farmers face the challenges in their industry which are critical to their ongoing success. The CWB's efforts support the agriculture industry in Canada by acting as a recognizable and influential organization for farmers. The CWB also has a major economic impact on Canada through significant purchasing activities and by the generation of a premium for farmers on wheat, durum and barley sales. The results of this study show that the CWB is a major economic force, with western Canada as a major economic beneficiary. Several other provinces such as Ontario and Quebec also derive economic benefits from the CWB's activities.