

THE PACIFIC GREAT EASTERN RAILWAY AND BRITISH COLUMBIA

by

Paul John Stephenson

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Abstract

On February 20, 1912, Premier Richard McBride announced the creation of the Pacific Great Eastern (PGE) railway. The line was to be built from Vancouver, 460 miles northeast to Prince George, passing through Squamish, Lillooet, Williams Lake, and Quesnel. McBride committed government guaranteed bonds of \$35,000 per mile or \$16,100,000 for construction. The construction contract was awarded, without contest, to Foley, Welch and Stewart (FW&S) with a contractual completion date of July 1, 1915. By November 30, 1915, however, FW&S had exhausted all the bond money but had only completed 164 miles of track between Squamish and Clinton. On February 22, 1918 the BC government assumed control of an insolvent PGE project and immediately became liable for interest charges of more than \$900,000 annually plus repayment of the principal.

This study examines a wide range of primary documents, including a Legislative Select Committee report, British Columbia statutes, Royal Commissions, financial audits, mortgage documents, reports commissioned by the Legislative Assembly, legal records, political debates and newspapers. Comparative, statistical, deductive and economic methodologies are used to support synthesized analysis establishing the culpability of Premier McBride in the mismanagement of the PGE. Statistical analysis of the private and social values of the railway

demonstrate that it was not feasible as a private venture and the amount of necessary investment to realize its social value made it an irresponsible project for McBride to initiate given the limited financial capacities of BC in 1912.

This study concludes that the failure and ultimate insolvency of the Pacific Great Eastern Railway by 1918 was the result of mismanagement by Premier McBride in letting contracts which were incentive-incompatible with public interests and acted in violation of sections of the Railway Act; opportunistic contractors who, in the interests of maximizing profit, exploited poorly-crafted contracts and provincial government ineptitude; and economic conditions which, prior to 1912, created optimism about the PGE but after 1912 indicated that the project was not viable.

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Abbreviations

A&GW	Alberta and Great Waterways Railway
BC	British Columbia
CCR	Central Canada Railway
CMA	Canadian Manufacturers' Association
CNoR	Canadian Northern Railway
CNPR	Canadian Northern Pacific Railway (legal name of CNoR in BC)
CNP	Crow's Nest Pass Railway
CNR	Canadian National Railways
CPR	Canadian Pacific Railway
C&W	Columbia and Western
ED&BC	Edmonton, Dunvegan & British Columbia Railway
E&N	Esquimalt and Nanaimo Railway
FW&S	Foley, Welch & Stewart
GDP	Gross Domestic Product
GN	Great Northern Railway
GPT	General Purpose Technology
GTR	Grand Trunk Railway
GTP	Grand Trunk Pacific Railway
GWR	Great Western Railway
ICR	Intercolonial Railway
KVR	Kettle Valley Railway
NAR	Northern Alberta Railways
NP	Northern Pacific Railway
NTR	National Transcontinental Railway
PGE	Pacific Great Eastern Railway
PVR	Pembina Valley Railway
T&NO	Temiskaming & Northern Ontario Railway
UP	Union Pacific Railway
US	United States
VV&E	Vancouver, Victoria and Eastern
VW&Y	Vancouver, Westminster & Yukon Railway

Chronology

June 1, 1903	Premier E.G. Prior relieved of his duties by Lieutenant Governor Henri Joly de Lotbiniere for conflict of interest infractions
June 1, 1903	Lieutenant Governor Henri Joly de Lotbiniere invited Richard McBride to form a government
October 3, 1903	Premier McBride won the first of four majority Conservative Governments
February 2, 1907	Premier McBride won his second election
January 1909	Premier McBride announced the first part of his railway plan which included subsidies to the CNOR and KVR
November 25, 1909	Premier McBride won his third election
February 10, 1912	Preliminary Agreement reached between the Province of BC and contractors Foley, Welch & Stewart (F,W&S) regarding the building of the PGE Railway
January 23, 1912	Traffic Agreement signed by Grand Trunk Pacific Railway and F,W&S
February 20, 1912	Premier McBride announced the second part of his railway policy with the introduction of the PGE Act for first reading in the BC Legislative Assembly
February 27, 1912	PGE Act passed in the BC Legislative Assembly
March 28, 1912	Premier McBride won his fourth election.
April 1, 1912	The PGE Company incorporated by the BC Legislature
July 10, 1912	PGE Company elected directors T. Foley, P. Welch, J.W. Stewart & D. Tate; Stewart elected as President and Welch as Vice-President and General Manager

July 10, 1912	Mortgage for the PGE Railway arranged with Dominion Trust Company @ 4%
September 23, 1912	P. Welch resigned as a Director, Vice-President and General Manager of PGE; uncontested contract to build the PGE Railway awarded to P. Welch (F.W&S) on the same day
October 1912	Construction of the PGE Railway began
February 20, 1914	Premier McBride announced the PGE extension to Peace River
April 7, 1914	Last spike of the GTP driven near Fort Fraser, BC
July 28, 1914	World War I - Austria declared war on Serbia
August 4, 1914	World War I - Germany invaded Belgium
October 12, 1914	The Dominion Trust Company declared bankruptcy
November 30, 1914	A new PGE Mortgage arranged with the Northern Trusts Company @ 4½%
December 14, 1914	The Bank of Vancouver fails
January 23, 1915	The last spike of the CNoR driven at Basque, BC
July 1, 1915	Contractual date for completion of the PGE
November 30, 1915	Proceeds of the PGE Company's debentures exhausted
December 15, 1915	Premier Richard McBride resigned; William J. Bowser became interim premier
November 23, 1916	Harlan Brewster (Liberal) elected Premier of BC
March 14, 1917	Select Committee on the PGE began its hearings
May 1, 1917	Final Report of the Select Committee tabled
August 6, 1917	Sir Richard McBride died in London, England

February 22, 1918	The Government of BC took control of the PGE Company
March 6, 1918	John Oliver (Liberal) became Premier of BC
September 12, 1952	First PGE train entered Prince George from Squamish.
October 1953	Premier W.A.C. Bennett wrote off more than \$90 million of PGE capital debt
August 29, 1956	First PGE train completed route of original PGE charter from North Vancouver to Prince George (44 years after construction began in 1912)
October 2, 1958	First PGE train reached the Peace River area at Dawson Creek to complete the PGE extension announced by Premier Richard McBride in 1914
September 1972	Premier W.A.C. Bennett changed the name of the PGE Railway to British Columbia Railway
July 1984	Premier W.R. Bennett shortened the name to BC Rail
July 15, 2004	Premier G.M. Campbell sold BC Rail to Canadian National Railways but the government retained ownership of the rail bed

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I also want to acknowledge my appreciation to the staff at the British Columbia Archives in Victoria for their important assistance in locating materials for my research and the librarians at UBCO, UBC Vancouver and Okanagan College (especially Faith Peyton and Claudia Valencia) for helping me to access rare and difficult to find items.

Dedication

I gratefully credit my parents, Eileen and Emlyn Stephenson, for my interest in education, knowledge and learning. You were a constant source of motivation and support for me as I went through my elementary, high school and undergraduate years. Your unqualified love gave me the self-confidence to achieve the success I have experienced. I dedicate this dissertation, with love, to you.

I want to express my feelings to my wife Jennifer and children, Sarah and Brian. You have patiently stood by me through these past years as I worked towards reaching this goal. Your love, commitment to me and encouragement allowed me to dedicate the time and effort needed to be successful. Thank you for your enduring support. I dedicate this dissertation, with love, to you.

My high school history teacher, Mrs. Roseanne Gatlin, first awakened my fascination and interest in Canadian history. Teachers only too infrequently hear about the positive effect they have had on their students. Thank you for being a teacher who made a difference for me.

Finally, I would like to dedicate this dissertation to Canadian students of all ages, in the hope that they will pay greater attention to recognizing, acknowledging and celebrating the important value of our Canadian heritage.

Chapter 1: Introduction

"Deafening Fanfare to Mark PGE Arrival" was the headline attached to a front page story in *The Prince George Citizen* in late August 1956, heralding the arrival of the inaugural train of the Pacific Great Eastern railway (PGE). The paper announced that "Tomorrow night is the night Prince George explodes with joy. Final plans have been completed for the rocket-bursting, whistle-screeching welcome that awaits the first Vancouver to Prince George PGE train due to arrive at about 10 pm. The close to 300 hundred special guests...will see the city in a burst of hundreds of rockets and flares that will be fired from the island in the middle of the Fraser River". A late insertion then announced that "The Inaugural train...barely got out of the station [North Vancouver] this morning before their way was blocked by a rock slide. Heavy equipment is being rushed to the scene".¹

After forty-four years of waiting, and the popularity of such mocking acronyms as PGE - 'Past God's Endurance', 'Promoters Get Everything' and 'Province's Greatest Expense', the people of Prince George did not seem unduly inconvenienced by an additional day of enforced anticipation. Moreover, though the planned night entry of the Pacific Great Eastern train accompanied by detonations was properly reflective

¹ *Prince George Citizen*, August 27, 1956, 1, 3.

of the calamitous effect of two generations of disappointment, crushing interest debt and almost continuous operational losses, it seemed somewhat appropriate that a railway with such a convoluted and tortuous history would face a final complication on its inaugural trip. The delayed first train from North Vancouver to Prince George finally entered the city on August 29, 1956.

In the early 1900s, British Columbia (BC) was eager to develop the economic potential of its natural resources. Given BC's rugged terrain and large distances, British Columbians soon realized the critical importance railways would play in developing their prosperity. The excitement over railways reached a fever pitch as more and more people throughout the province demanded access to railways with their sublime promise of increased affluence. The economic development which American railways brought to previously isolated areas of the US was a model which BC wished to emulate.

Thesis

My thesis argues that mismanagement by Premier Richard McBride and his government allowed opportunistic contractors to take advantage of an incestuous corporate command structure which, with the onset of disastrous economic conditions, led to the insolvency of the Pacific Great Eastern Company by 1918.

Previous analysis blames the economic downturn beginning in 1912, corruption allegations, and World War I as the major reasons for the financial problems of the PGE railway. While these are necessary factors for assessing the PGE dilemma, they are not sufficient. In the past, Premier McBride has to a large degree escaped the rigours of accountability. This study is different from previous assessments because it holds McBride responsible for decisions he made when creating the PGE and those he chose to avoid when dealing with the crisis which emerged.

This dissertation is original in its examination of McBride's flawed legislative basis for the PGE and his irresponsible determination to proceed no matter what the cost. No other investigation has questioned McBride's plan for British Columbia to build a railway through hundreds of miles of very sparsely populated, rugged terrain with a provincial treasury which was completely unequal to the task. Only this study has calculated the private and social values of the PGE to show that it was not a privately feasible project and that McBride was taking very large risks with the financial stability of BC in pursuing construction for a social value he could not underwrite. While other authors have made generalized historical comments about the PGE, this is the first investigation to present a combined historical and economic analysis of the financial failure of the PGE.

The interdisciplinary focus of this dissertation is unlike any previous evaluation of the PGE and provides a critical original contribution to the study of the PGE. The purpose of this paper is to find out what happened to the PGE between inception in 1912 and financial failure in 1918. The historical assessment of McBride's mismanagement is supported by economic calculations and the economic analysis is reinforced by historical explanations. With each area informing and strengthening the other, the result is a more comprehensive analysis which offers new perspectives about a railway blunder which had a debilitating effect on BC finances for many years.

This is the first study in the body of PGE literature to hold Richard McBride responsible for the decisions he made in determining that a railway far 'in advance of demand' should be built through an isolated interior region, by a province which in 1912 had already returned to deficits and whose economy relied on the vagaries of world resource markets. The actions of Richard McBride are not even mentioned in the conclusions of the seven hundred page PGE Select Committee report as a factor in the PGE debacle. McBride was not recalled to testify during the committee's deliberations, nor was he asked to provide a written statement. The critical 1917 Audit of the PGE affair concluded that the government overpaid the contractors by \$5.7 million but refrains from identifying anyone by name and the Royal Commission of 1924 offered no

opinion on McBride's conduct. Studies of the PGE to this point have been primarily reactive, focusing almost entirely on the negative outcomes of the venture. None have gone back to the beginning and questioned his decision to build a railway through the interior and no one has systematically examined the choices he made and those he avoided as problems arose.

The individual methodologies used to arrive at the conclusions expressed in this dissertation include comparative studies of the PGE and provincial railways in other parts of Canada; statistical examination of the financial problems of the PGE; deductive assessment of the statutory basis of the PGE and options available to McBride; and economic analysis of the private and social value of the PGE. The overall method of this study is to use the strengths of historical analysis and the power of economic inquiry to create an original assessment which accesses the capacity of an interdisciplinary approach in presenting a new perspective on the PGE dilemma.

PGE to BC Rail

Premier Richard McBride responded to growing demands for more railways in BC by announcing in 1909 part one of a large new railway infrastructure in BC which included the Canadian Northern Railway (CNoR) and the Kettle Valley Railway (KVR). In 1912, McBride revealed the second part of his railway policy with legislation to create the Pacific

Great Eastern Railway and provide a government bond guarantee of \$35,000 per mile for 460 miles, a total amount of \$16.1 million of government bonds for which the government would guarantee both the principal and interest. The PGE was planned to connect North Vancouver with Prince George by way of Squamish, Lillooet, Clinton, Williams Lake, and Quesnel.²

By the time construction of the PGE began in 1912, the economy had already started to stagnate. The number of building permits issued dropped dramatically as people, fearful that a continued increase in real estate prices could not be sustained, became more conservative in their investments. With the economy slowing, layoffs soon followed and by the spring of 1914 long lines of unemployed workers appeared in urban areas of BC. At the same time political instability had increased in Europe with the Balkan Wars of 1912/1913, followed in August 1914 by the First World War which ended the flow of immigrants and European capital to British Columbia. The agenda of the government of British Columbia, however, seemed to focus on completion of the line at virtually any cost even when changing circumstances demanded a modified approach.

² While the original PGE contract stipulated completion of the whole line to Prince George by July 1915, in fact by that date steel only existed between Squamish and Lillooet. The PGE reached Clinton in 1916, Williams Lake in 1919, Quesnel in 1921 and Prince George in 1952. The final connection south from Squamish to North Vancouver was not finished until 1956.

In giving control of the PGE Company to its contracting firm, Foley, Welch and Stewart (F,W&S), McBride's government allowed F,W&S to decide what they would pay themselves to build the railway and removed the checks and balances which normally result from two independent companies acting in their own self-interest. This also opened the door to the possibility of collusion in setting prices and negligence in the area of cost efficiency. The administrative structure of the project also enabled F,W&S to influence the construction situation in order to ensure its profits were protected in advance of the welfare of the PGE Company.

An economic downturn, the outbreak of a world war and the suspension of immigration were major impediments to the creation of a new railway. Successful construction of the PGE required access to large amounts of investment capital and a continuous supply of labourers. Lucrative operation of the PGE necessitated a steady stream of immigrants using the new railway to develop the central areas of the province. None of these conditions existed after the autumn of 1914. Work on the PGE proceeded but by the end of November 1915, the railway bond money had been exhausted and construction stopped with approximately one-third of the track completed from Squamish to Clinton.

With the PGE insolvent, the government of BC took over the project in 1918 and proceeded with limited construction contracts during the next few years based on the availability of government revenue. Building was

abandoned in 1922 for lack of funds, soon after the track reached Quesnel. Construction did not begin again until government finances allowed for a resumption of the project in 1949. By 1952 the track between Quesnel and Prince George had been completed and work began on the section between Squamish and North Vancouver. In August 1956 the original PGE route was finally completed, forty-four years after construction began.

Thereafter the PGE continued to expand northeast to Fort Nelson and northwest towards Dease Lake until it reached a total of 1,441 miles or 2,320 km in 1984³ (see Figure 1.1 Full Extent of the Pacific Great Eastern (PGE) 1984, following). In 1954 Premier W.A.C. Bennett improved the financial state of the PGE by writing off more than \$90 million of its capital debts and in 1972 changed the name to British Columbia Railway to better describe its geographic location. His son, Premier Bill Bennett wrote off the balance of the railway's capital debt in 1979 and in 1984 shortened its name to BC Rail. In 2004 Premier Gordon Campbell sold BC Rail and its assets to Canadian National Railway but BC retained ownership of the rail bed.

³ Premier W.A.C. Bennett and his son Premier Bill Bennett initiated these further extensions to expand economic development in northern British Columbia.

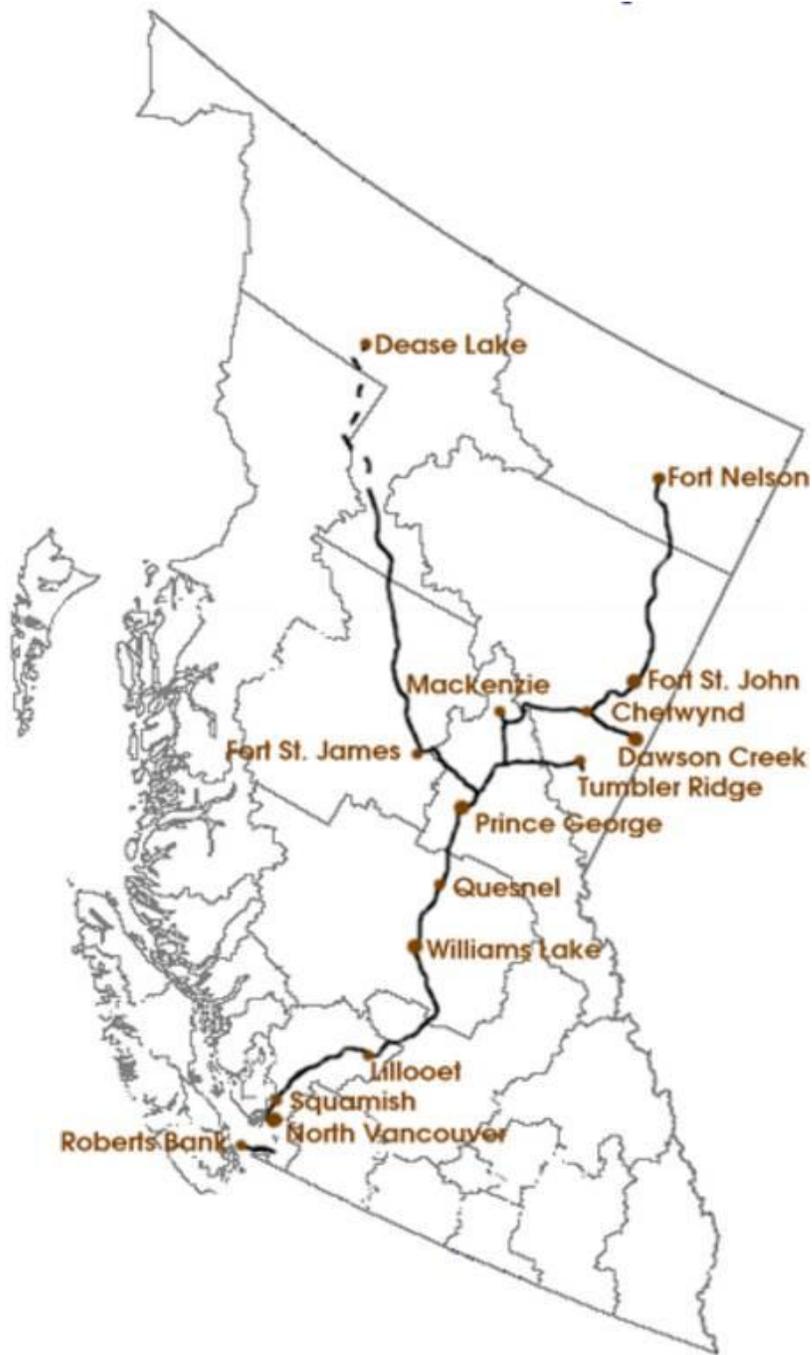


Figure 1.1 Full Extent of the Pacific Great Eastern (PGE), 1984
(2,320 km or 1,441 miles)⁴

⁴ C. Andreae, *Lines of Country: An Atlas of Railway and Waterway History in Canada* (Erin, Ontario: Boston Mills Press, 1996), 187.

Organization of the Study

The dissertation begins with the Introduction in Chapter 1, followed by the Critical Literature Review in Chapter 2. Chapter 3, Canadian Economic Development, gives a contextual background into the market and trading relationships in BC from the time of the first European settlements. As the Fur Trade opened up BC, rivers and lakes provided the first commercial transportation routes with the 'staples theory' of economic development for many years using resource exploitation as the main reason for Canada's increasing prosperity. The advent of early Canadian railways fostered the development of agricultural potential of eastern and then western Canada and also facilitated the growth of industrial capitalism.

Chapter 4, Railways and British Columbia, starts with a brief survey of the place and importance of railways in British Columbia. Railways were the solution to overcoming the challenge of transporting staple products in sufficient quantities to produce wealth. The underlying problem, however, was the fact that BC did not have the population necessary to support the railway infrastructure needed to take advantage of the available resources in the province. The parliamentary debates of 1903 in Ottawa help to explain the reasons for the establishment of the Grand Trunk Pacific Railway (GTP) and the Canadian Northern Railway (CNoR) and their contribution to unrealistic provincial expectations of a railway

grid within BC which was justified neither demographically nor economically. A 'Railway Problem' emerged in the 1910s as a result of the construction in Canada of thousands of miles of railway that could not be commercially supported, exacerbated by an economic downturn.

Chapter 5, Premier Sir Richard McBride, begins with an assessment of the relatively speedy evolution of political power in BC from Imperial autocratic governorships before BC joined Confederation in 1871, to responsible democracy led by Premier John Foster McCreight, to the discipline of party politics introduced by Premier Richard McBride, in little more than thirty years. Next is an investigation of the political goals of Richard McBride including, with his first election to the BC Legislative Assembly in 1898, entry into Premier James Dunsmuir's cabinet in 1900, becoming premier in 1903 and his use of party politics to further his agenda. By 1906 McBride was in Ottawa demanding 'better terms' for BC while an economic boom assisted him in rejuvenating the province's finances. Part one of his extensive railway plans became public knowledge in 1909 at a high-point of financial prosperity when McBride announced government subsidies for the Canadian Northern Railway (CNoR) and the Kettle Valley Railway (KVR) (see Figure 1.2 PGE, CNoR, KVR, GTP, E&N and CNP Railways following). He negotiated an agreement with the transcontinental CNoR to create competition for the Canadian Pacific Railway (CPR) and supported the KVR project to establish a rail link

from the Kootenay area of south-eastern BC to Vancouver in order to discourage the mineral wealth of BC from being drawn south to the United States. Part two of McBride's railway policy came in 1912 with the announcement of the creation of the PGE, just as credit in BC tightened, construction slowed and a downturn began.

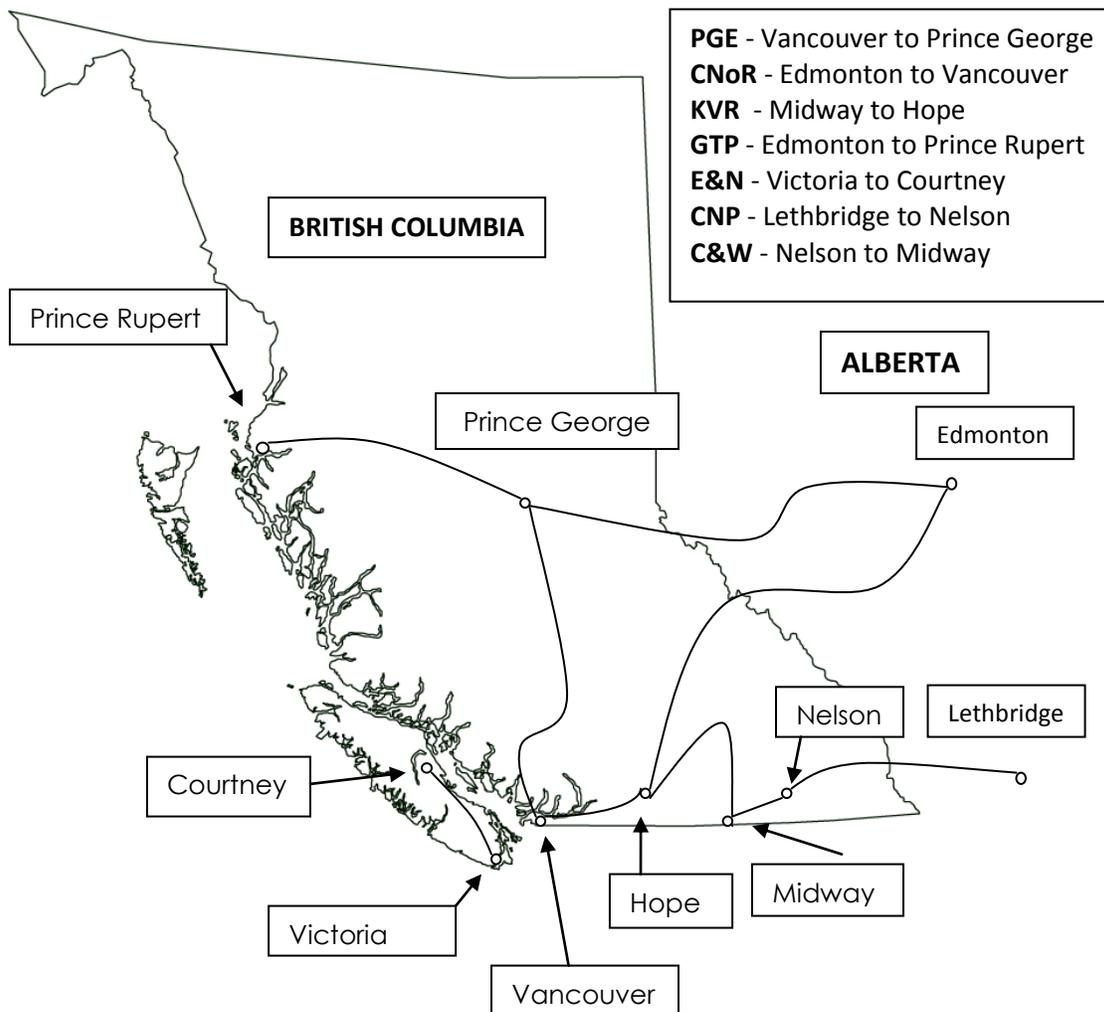


Figure 1.2 PGE, CNoR, KVR, GTP, E&N and CNP Railways

Chapter 6, Birth of the PGE Railway, creates the context for the beginning of the PGE in 1912. With restrictions increasing on the availability

of investment money and the value of building permits issued in BC dropping precipitously in 1912-1913, some began to question the massive railway liability of the provincial government. The chapter also looks at predecessors to the PGE plan and the traffic agreement between the PGE and the Grand Trunk Pacific (GTP). The comments of leading newspapers and trade journals of the day help to identify the general reaction of society to the plan for the PGE Railway.

Chapter 7, *The Economics of Railway Building*, starts with an explanation of the reasons for and dangers implicit in the idea of 'constructing ahead of demand' and examines the question of government-guaranteed railway bonds in Canada. Robert Fogel's ideas about private and social values help in understanding the considerations facing the McBride government in the PGE project. Equations for calculating the private and social value of railway construction present an illuminating picture of the contrasts between the point of view of a private investor and that of a government when deciding on the feasibility of building a railway.

Chapter 8, *Failure of the PGE as a Private Venture*, questions the economic wisdom of the approach taken by McBride in the PGE project, chronicles the failure of the PGE as a private venture, and considers whether the demise was inevitable. The chapter begins with a discussion of the financial arrangements of the PGE as contained in the Mortgage

and Deed of Trust. There follows an examination of Liberal leader Harlan Brewster's Writ which sought to recover, through the courts, PGE share capital and bond money which he felt was misappropriated. Next is a presentation of the main points of the Price, Waterhouse Audit of January 1917. Subsequently there is an analysis of the deliberations of the Select Committee of the Legislature investigating the Pacific Great Eastern Railway Company in the spring of 1917.

Chapter 9, *Aftermath and Conclusions*, begins with a summation of the salient aspects of the Hinton Report and the Sullivan Report which were commissioned by the government of John Oliver in 1922 to examine the PGE situation and offer recommendations. Both reports noted the intolerable interest burdens which the PGE placed on the province of BC. Recommendations ranged from building a branch line from the PGE line near Clinton to the Canadian Pacific Railway (CPR) trunk line at Ashcroft in order to create a more commercially attractive route, to the complete abandonment of large sections or even the whole of the PGE line. The general conclusions of these reports found that the PGE Railway as designed and built was flawed in many aspects and not likely to ever be commercially viable. In 1924, Premier John Oliver appointed a Royal Commission to Investigate the PGE in order to examine a list of irregularities concerning the building of the PGE from its inception to the abandonment of construction in 1922. Suggestions for further study

propose ways to enable historians and others to advance more informed judgments in explaining the nature of BC in the twenty-first century.

Chapter 2: Critical Literature Review

The Critical Literature Review is divided into two parts. The first section examines previous books and articles which discuss the Pacific Great Eastern Railway. The second section reviews other secondary sources which have a significant connection to the PGE story.

Previous Studies of the PGE

Despite the size of the PGE construction project and the breadth of government resources and attention it consumed, very little scholarly research has been done on the PGE saga. This may be partially explained by the length of time (forty-four years) that elapsed between the creation of the PGE in 1912 and the first train steaming into Prince George from North Vancouver in August 1956. To sensibly assess what happened throughout that period of time would involve an investigation into the records of the administrations of ten Premiers of British Columbia. In addition, researchers may have been discouraged by the tangled nature of the story with whiffs of scandals which have never been satisfactorily confirmed or dismissed, an incomplete BC government Select Committee report which suffered from witnesses disappearing, records vanishing as well as government and company personnel refusing to answer questions and, therefore, a seeming lack of possibly redemptive conclusions.

There are only two significant published books dedicated to telling the story of the Pacific Great Eastern Railway. One is *British Columbia Railway: From PGE to BC Rail* by J.F. Garden, a locomotive engineer by trade who has an ongoing interest in the cultural history of BC. Designed primarily as a pictorial presentation, it is a superb visual compilation of the physical presence of the PGE in BC. This book expresses through pictures the contribution which the railway made in offering a unifying connection between the rugged and extremely diverse landscapes found in the province. Before the age of highways and widespread air travel, the PGE provided many citizens with their first and, in some places, their only tangible link to the services and opportunities found in a large urban centre such as Vancouver. Text in the book is descriptive in nature and offers no substantiated discussion of the failure of the PGE as a private enterprise.

PGE: Railway to the North was published in 1962 by Bruce Ramsey, a Vancouver journalist and popular historian. Ramsey describes the progression of the PGE from inception to finally reaching Prince George in 1956. His presentation, however, is done in a rambling journalistic style which often delves into irrelevant detail, avoiding any systematic or comprehensive examination. Ramsey provides neither footnotes, endnotes nor even a complete bibliography which considerably reduces its usefulness to an academic researcher. As a former journalist, interviewer and President of the Vancouver section of the British Columbia Historical Association in the 1950s, Ramsey had both the experience

and background to do an analytical assessment of the PGE saga. He would also have had the good fortune of being able to speak to people who had intimate, first-hand insights into what happened. The fact that he chose to present his findings as a factual reporter, rather than assume an editorial stance and seek to prove an argument, is an unfortunate missed opportunity.

Several professional historians have dealt briefly with the PGE in their writings about the general history of British Columbia. Margaret Ormsby, in *British Columbia: a History*, questions McBride's realism in persisting with the construction of the PGE during an economic downturn. She seems satisfied with identifying McBride's relentless optimism as verging on recklessness and does not pursue any systematic analysis of how his seemingly carefree approach was directly related to the problems of the PGE. Ormsby focuses on isolated actions of McBride in the PGE drama and chooses not to attempt the more significant discussion of the wisdom of constructing the PGE in the first place. She offers no critical appraisal of McBride's overall responsibility for the mismanagement of the PGE.

Jean Barman similarly, in *The West Beyond the West*, follows Ormsby's path in merely reacting to the procession of dismal events in the downfall of the PGE. She evades any proactive questioning of why McBride continued to prosecute the construction of the PGE, given the political and economic context of 1912 to 1918, which would have served to increase the historical understanding of British Columbia during that period.

Patricia Roy, in her article “Progress, Prosperity and Politics: the Railway Policies of Richard McBride”, examines the PGE as part of her analysis of Richard McBride’s political tenure. She frames his railway policies and the PGE initiative as the turning point in his downward spiral. As early as 1913 McBride was worried about his bond guarantees to the PGE and was trying to interest the American government in participating in the PGE project as part of a rail link with Alaska. Roy critically views this action as an example of McBride persistently ignoring the dangers of the economic downturn. Her examination of the PGE issue, however, is limited and only looks at the effect which it had on the career of Richard McBride. There is no discussion of the justifications under which the project was launched or of McBride’s management of the ensuing problems. As the ultimate authority under which the PGE initiative proceeded, Richard McBride was empowered, indeed required, to make numerous determinations as the venture unfolded. Examining those decisions would give greater insight into both the character of McBride and the nature of the PGE dilemma.

Political scientist Martin Robin’s book, *The Rush for Spoils*, presents a generalized criticism of the PGE scheme, referring disparagingly to McBride and his Attorney-General William J. Bowser as the ‘Gold Brick Twins’. Robin does not examine the private or social value of the PGE which could dispassionately demonstrate the large financial risks that McBride was engaged in, nor does he satisfactorily investigate the flawed statutory basis for the PGE which could lead to a logical explanation for the PGE’s problems. Instead he focuses on

sensational negative results, often implying that corruption played a large part in the PGE predicament but without providing adequate proof. While Robin's colourful style may make for interesting reading, he does not offer a methodical analysis of the PGE which could serve to increase our understanding of what happened. His wholly critical approach does not allow for consideration of any altruistic motivations on the part of McBride which could bring more balance to his discussion and therefore increased its value to the discerning reader.

Historical geographer Cole Harris, in his article "Moving Amid the Mountains, 1870-1930", considers the PGE to be a branch line of the GTP that was built ahead of demand on the assumption that future traffic would justify its existence. Harris does not address the fundamental question of the initiation of the PGE in 1912 or its financial insolvency by 1918. Although Harris's main thrust is discussing the importance of a connection between railway penetration and the economic development of the interior of BC, he fails to acknowledge the financial impediments to creating an adequate BC rail network. Harris does not seem to realize the attendant economic vulnerability of BC's situation. Local population and local traffic were critical to long-term rail viability and Harris does not appear to consider that their absence might economically and sensibly preclude rail development until a sufficient demand existed.

There is no previous discussion of the PGE which offers a comprehensive, analytical evaluation of what happened between 1912 and 1918. None even suggest an economic analysis of the private and social value of the PGE. No

one has examined the primary legislative documents which created the PGE in order to assess the statutory basis upon which contractors Foley, Welch and Stewart (F,W&S) were able to take advantage of the situation for their own benefit. Most importantly, the literature is completely silent on the critical issue of Richard McBride's mismanagement of the conception and implementation of the PGE project.

Other Secondary Sources

In his book, *The Union Pacific Railroad: A Case in Premature Enterprise*, Robert Fogel explores the dilemma of a railway built ahead of demand. The Union Pacific Railroad (UP), like the PGE, was built before there were adequate sources of local traffic to provide enough income to cover operational costs, repay capital investment and create a profit. Fogel describes the political problems, false starts and financial challenges to completing the line. He also identifies the two values, private and social, which can be calculated for a railway. Fogel determines a social value by comparing land values along the UP to the value of equivalent land which was not in close proximity to the railway. In suggesting a method to quantify the social value of a railway, he enables researchers to access a similar 'force of argument' for social values to that which is available for private values. While private values are all that is needed for businesses to make an investment decision, social metrics are particularly valuable for governments, who also seek to identify benefits to society.

Robert Fogel, in *Railroads and American Economic Growth*, challenges the axiom of indispensability often assigned to railways in reference to the growth of the American economy. He suggests that rivers, canals and other waterways could have provided enough transportation capacity to allow for similar economic growth. The claim of the substitutability of existing and planned canals by Fogel, however, suffers from false assumptions and comparisons. His information indicates that in 1890 only one canal extended for a short distance west of Chicago and that navigable rivers provided the vast majority of water transport. There is no way to assess the potential usefulness of canals in the far west. Fogel's map shows a large blank space in the eastern US where the Appalachian Mountains precluded the building of canals or river navigation. There would most likely have been a much larger gap covering the mountainous regions of the American west which would result in restricted economic development. As such, a canal system could never serve to unify the US either economically or politically, which would have an unquantifiable, but nevertheless real, negative effect on the country. Unlike railways, water transport is subject to ice closures in the winter and drought in the summer. Canals are not possible in mountainous areas, nor do they have the same flexibility in routing for passengers or freight. While it may have been possible to approximate a measure of comparable economic growth, it would be difficult to allow for many of the unique features of railways which cannot be replicated by canals and waterways. Linkages and opportunities for business development would

also be constrained by the limitations of a canal system compared to a railway network. Fogel's work, however, is valuable to railway researchers because of the metrics which he supplies in his railway/canal comparisons which are useful in themselves, and also suggest other avenues of investigation.

In the book *Philosophy of Railroads*, historian H.V. Nelles presents two essays on railways in Canada written by T.C. Keefer, a prominent civil engineer active in the middle of the nineteenth century. In his first essay written in 1849, Keefer extols the virtues of railways and encourages Canadians to eagerly embrace the benefits of railway technology. In his discussion Keefer mirrors the feelings of the general populace that railways were the key to economic prosperity. Not being an economist, Keefer sees no financial danger in governments guaranteeing large amounts of bonds for railway construction. He focuses on the passenger and freight receipts of American railways built in areas of large population with abundant local traffic able to provide continuous income to cover both operational costs and capital repayment.

In 1863, a somewhat disillusioned Keefer wrote another essay which bemoaned the greed and corruption which he believed had created intractable financial problems for the Grand Trunk Railway (GTR). No longer unconditionally promoting railways as the panacea for Canada's ills, Keefer now considers the GTR, heretofore the largest Canadian railway, as a doubtful project from inception. While Keefer notes the use of government guaranteed bonds in the construction of the GTR, he does not seem to realize their role in

ensuring premature construction before there was sufficient demand to provide an adequate source of income. Ultimately, Keefer's analysis of the railway situation in Canada suffers from the same lack of foresight and understanding which he shared with many politicians of his day. As an outside observer, however, he had the luxury of offering opinions which had no direct effect on the financial well-being of Canadians whereas politicians were elected to responsibly protect the same.

The Canadian Northern Railway by historian T.D. Regehr investigates this railway from its beginnings as a collaborative effort between partners William Mackenzie and Donald Mann to nationalization and the resignation of Mackenzie and Mann from the board of directors in 1918. Regehr emphasizes the positive service which the Canadian Northern (CNoR) provided to the farmers of the west in building a railway network to serve their needs. He notes the optimism and sense of mission which Mackenzie and Mann brought to their work. Regehr, however, offers no balancing critique of CNoR as Mackenzie and Mann, after all, were not a government agency but rather a business whose bottom line was to make a profit for their investors and themselves. Private feasibility and profitability would of necessity inform the decision-making of Mackenzie and Mann. Regehr does not comment on or attempt to calculate the private or social values of the CNoR which would help the reader to better understand the levels of support extended to the CNoR by various levels of government.

Peter J. George, in his article "Rates of Return in Railway Investment and Implications for Government Subsidization of the Canadian Pacific Railway: Some Preliminary Results", discusses the need for the government to convince private investors to build the Canadian Pacific Railway (CPR) by offering a subsidy which would be sufficient to raise the private return on their investment to at least the normal rate of return they would receive from other projects. George concludes that an excessive subsidy was given to the CPR but this was done from an ex post perspective. While George acknowledges that a complete answer to the 'excessive subsidy' question would also require examining the ex ante circumstances, he does not enlighten the reader as to why it would be important. The advantage of hindsight allows the luxury of much greater quantification of variables than is possible from an ex ante position on the part of both the government and the investors. It is therefore reasonable to argue that the government would have to offer an 'excessive subsidy' to sufficiently reassure investors who would otherwise have no motivation to ignore the opportunity of a normal rate of return on a safer investment. Also, George talks of the CPR's private rate of return but does not use the label social rate of return. Instead he rather euphemistically refers to the imprecise 1860s phrase 'politically indispensable and economically desirable'. This is rather surprising as Fogel's discussion of a social rate of return had been published several years earlier and a clear label would promote an enhanced understanding of the two distinct values which can be applied to railways.

William Marr and Donald Paterson, in their well-known book *Canada: An Economic History*, examine Canadian transportation development. Efficient, low cost transportation has always been an important input for economic growth given Canada's large and rugged geography. Because of Canada's sparse population and meagre capital availability, governments have long played a larger role in infrastructure creation than is found in other countries. In discussing the problems facing the building of the first Canadian transcontinental, Marr and Paterson categorize a distinction between the private and social returns on investment. They include formulas which can be used to calculate the private and social values of railways. The Marr and Paterson study is useful for the interdisciplinary researcher because of their blended presentation which combines historical assessments with economic discussions, thus accessing the analytical power of two academic perspectives.

Paul Craven and Tom Traves, in their article "Canadian Railways as Manufacturers, 1850-1880", dispel the mistaken assumption that railway companies were only transportation organizations. They systematically explain how an interest in cost-savings led large railway companies to expand their shops from a purely maintenance function to include a sophisticated manufacturing capacity. Research and development functions followed as technological innovation and systematic experimentation emerged out of the necessity to meet the needs of an expanding industrial operation. Craven and Traves' identification of railways as large industrial operations suggests a more

comprehensive view of their function and gives researchers the tools to expand their understanding of the influence of railways on society.

Historian Phyllis Veazey, in her article "John Hendry and the Vancouver, Westminster and Yukon [VW&Y] Railway: "It Would Put Us on Easy Street", discusses the minutiae of Hendry's attempts to promote the VW&Y railway. It details the difficulties facing a businessman as he attempts to convince fellow business associates of the feasibility of the VW&Y while also securing the support of politicians. Veazey offers no direct insight into the PGE situation. She focuses on the entrepreneurial behaviour of a single Vancouver businessman in attempting to get a railway built, which is quite different to the affairs of a premier of the province, although both had the same goal. Indirectly, her observation of Hendry's anger towards McBride for initiating the PGE in preference to Hendry's VW&Y project is interesting. While a businessman may fail to secure the support of investors because of an inability to demonstrate the practical possibilities of a railway through the interior, the Premier had the ability to bypass any such barriers, for although the former was required to obey economic indicators which demanded retrenchment, the latter could apparently ignore them. Also, Hendry's subsequent anxious desire to sell all his railway assets in 1912 given the changing economic signals, illustrates the healthy business pragmatism of an experienced private investor.

In his article, "Grand Trunk Pacific and the Establishment of the City of Prince George, 1911-1915", Frank Leonard disagrees with the contention of Alan

Artibise that the activities of local elites were the key element in the growth of urban centres. Leonard feels that Artibise is downplaying the role of external forces, specifically the Grand Trunk Pacific (GTP) railway. While initially it seems that Leonard wants to insert the GTP as the main factor in the development of Prince George, he then reveals that he only wishes to include the importance of company officials in addition to local leaders. Leonard uses legal records of the GTP to chronicle the influence of its employees in the establishment of Prince George but also records numerous occasions when local leaders and city councils prevented the GTP from achieving their goals. In the conclusion, however, Leonard strongly denounces any significant role for local leaders in the development of Prince George. While his discussion of the conflict between the GTP and community leaders is beneficial in understanding the history of Prince George, a more consistent thesis throughout the article would increase its credibility.

Frank Lewis and Mary McKinnon, in their article "Government Loans and the Failure of the Canadian Northern Railway", investigate the relationship between government loan guarantees and the probability of bankruptcy of companies which agreed to build railways based on them. While it is logical to assume that a railway project with large anticipated returns would be undertaken by promoters visualizing success, without any need of government guarantees, we cannot similarly assume the motives of a company willing to construct a railway of dubious prospects based on government assistance.

Lewis and McKinnon examine the altered state of ex ante bankruptcy probabilities based on the addition of government loan guarantees and the effect this had on the promoters' decision-making. They point out that guarantees can induce the creation of debt with a face value greater than the liquidation value of the firm, thereby establishing a positive bankruptcy probability, while at the same time convincing investors to initiate projects which they would normally reject as unfeasible. Because a direct connection can be established between the existence of guarantees, the agreement of promoters to begin construction and the presence of a positive bankruptcy probability, in the absence of guarantees a positive bankruptcy probability would have been eliminated as the investors would never have started building. Lewis and McKinnon also postulate that the guarantees encouraged promoters Mackenzie and Mann to increase the debt-equity ratio of the Canadian Northern Railway, increasing the chance of bankruptcy, because the government would be responsible in the event of a financial disaster. The Lewis and McKinnon study is instructive when examining the actions of Foley, Welch & Stewart in ensuring that they fully consumed all PGE credit before leaving the project.

In his article, "To Injure Its Own Interests: The Grand Trunk Pacific Railway Company and the Blighting of Hazelton District, 1910-1918", Leonard alludes to the private value of railways but makes no mention of the social value nor does he consider the calculation of either. While commenting on the need to create

local traffic to ensure a private return on investment, Leonard does not discuss the existence or importance of social value in attracting investment from governments. His study then concentrates on the experience of the Hazelton area which, he concludes, suffered from a series of mistakes made by company officers which antagonized local residents and negatively affected the development of local business for the railway. Although missteps by company officials undoubtedly caused problems in Hazelton and other interior towns, Leonard does not address the larger issue of the rationalization for building expensive railways in advance of demand and the financial instability which was thus created.

Ann Carlos and Frank Lewis, in their article "The Profitability of Early Canadian Railroads: Evidence from the Grand Trunk and Great Western Railway Companies", discuss the motivation of social benefits which convinced governments to extend large guarantees to the Grand Trunk Railway (GTR). Their investigations demonstrate that while both the ex post aided and unaided private rates of return failed to meet market expectations, the ex post social rate of return was below the market rate for the GTR but above for the Great Western Railway (GWR). This suggests that the large government subsidies given to the GTR would have been better spent supporting the GWR. Although railway charters emerged in the United States and Canada at approximately the same time, a lack of sufficient capital delayed construction in Canada. Government guarantees were designed to address these barriers. Carlos and Lewis discuss

the problem of financing railways which are built ahead of demand and the potential for fiscal instability caused by guarantees. In the case of the GTR the bonded debt led to serious financial problems as both its private and social rates of return were below acceptable market minimums. In measuring the extent of the private and social profitability of the GTR and GWR, Carlos and Lewis lend interdisciplinary support to the historical assessments of the financial problems of these railways.

“The Creative Financing of an Unprofitable Enterprise: The Grand Trunk Railway of Canada, 1853-1881” by Ann Carlos and Frank Lewis examines the role which government guarantees played in allowing the GTR to continue operations even though it was close to bankruptcy for most of its financial life. The fact that the GTR continued to successfully access capital on the London markets was not related to profitable operations but rather to government guarantees which enabled investors to ignore revenue signals, secure in the belief that if the company failed the Canadian government would pay the interest and principal owing. During the stages through which governments passed in arriving at the creation of guarantee legislation, political leaders alternated between eager anticipation of railways and sober concern for the open-ended nature of the debt loads being created. Carlos and Lewis outline creative steps (such as changing the order of those who had first lien on company assets) which both the government and GTR used to avoid the threat

of bankruptcy. The examination by Carlos and Lewis lends useful economic quantification to previous historical evaluations of the GTR.

J.C Emery and Kenneth McKenzie, in their article “Damned If You Do, Damned If You Don’t: An Option Value Approach to Evaluating the Subsidy of the CPR Mainline”, examine the subsidy that was necessary to convince the CPR company to build the railway and determine that it was most likely not excessive. Unlike previous studies, they conduct this examination from an *ex ante* rather than *ex post* perspective. Although Emery and McKenzie consider the ‘fundamental uncertainty at the time’ to be unquantifiable from an *ex post* point of view, it could nevertheless trigger a negative decision during the actual time period. Using the logic of an option value approach, they argue that building at a given time precludes building at another time when market conditions and interest rates may be more amenable to commercial success. Emery and McKenzie refer to the additional opportunity cost of not building in the future as there may be benefits to waiting. The Canadian government would need to additionally compensate the CPR company for not being able to choose the time to build and therefore the subsidy was probably not excessive.

Frank Leonard, in his book *A Thousand Blunders*, argues that many of the problems of the Grand Trunk Pacific (GTP) railway were the result of a large number of small mistakes, made by company officials in creating business losses. He dismisses the ‘great man thesis’ which would view the questionable decisions

and death of Charles Melville Hays as a critical factor in the demise of the GTP and replaces it with his contention it was 'a thousand blunders' made by senior and junior managers, which to a great degree explain the collapse of the company. In investigating the records of the GTP legal departments, Leonard identifies mistakes, concentrating on what 'might have been' as opposed to evaluating the larger issue of 'building in advance of demand' and thereby critically assessing what 'could never have been'. He does not adequately consider the high construction costs, lack of population and local traffic as controlling factors in the lack of profitability apparent in the GTP venture. Leonard appears to ignore the fact that no matter what decisions GTP staff made with regard to railway construction and town site development, premature construction meant that there would not be sufficient income to support the railway. Hays insistence on pursuing potential profits from land sales and his agreement with McBride to initiate Pacific construction in return for a bargain price on terminal land in Prince Rupert is indicative of his understanding of the risks he was undertaking and was his attempt to secure alternative ways of balancing his books. Leonard's focus on a host of minor details loses sight of the financial dangers inherent in the grand GTP plan to build a railway through nearly seven hundred miles of isolated, northern BC wilderness and mistakenly discounts the important influence of a determined, visionary leader.

In his article, "Railroading A Renegade" Great Northern Ousts John Hendry in Vancouver", Frank Leonard examines the details of the in-fighting between

John Hendry and the Hills (father J.J. Hill and son L.W. Hill) of the Great Northern (GN) railway as GN sought to end its relationship with Hendry because of his lack of success in garnering government subsidies for the construction of the Vancouver, Westminster & Yukon (VW&Y) or the Vancouver, Victoria and Eastern (VV&E) railways. Leonard dismisses Veasey's study of Hendry and the GN as merely representative of the 'American domination thesis' with no explanation of his reasoning. Leonard's stated purpose is to challenge the implied business cunning of GN in eliminating the influence of Hendry. After chronicling the sequence of events between Hendry and the GN, Leonard concludes that both sides suffered from a careless management style which caused problems for all parties involved. Leonard prefers to focus on minutiae and reprises his argument in *A Thousand Blunders* that small mistakes such as inattention to detail and tardy reporting were the root cause of Hendry's downfall. Leonard chooses not to address more significant issues such as failing to assess the private and social value of the VW&Y or VV&E railway proposals, which could have been critical to success in attaining both private and government support for the projects.

Chapter 3: Canadian Economic Development

Railway technology played a critical role in Canadian economic development throughout the second half of the nineteenth century and into the twentieth century. Astute contemporaries, be they the philosophical promoter T.C. Keefer or small town boosters, were well convinced of the transformative nature of railways and prepared to act on their convictions. Historians, while sometimes judging particular projects as follies in their conception or illusory in their promises, have remained solidly convinced of this understanding of the significance of railways.

As European settlement spread across Canada from the Atlantic Ocean, explorers and missionaries founded the first settlements in the Maritimes and Quebec. They were followed by fur traders who used rivers and lakes as transportation routes that allowed the fur trade to become a viable business. The 'company of adventurers of England trading into Hudson's Bay' began their firm in 1670. Their business plan was straight forward and their needs relatively simple - travel into the interior of the Canadian wilderness, trade European products to aboriginal peoples for furs, transport the furs to Europe and sell them at a profit. Eventually the large profits realized by the men of the Hudson's Bay Company drew the attention of others. In the tradition of capitalism, competition emerged in the 1770s in the form of the Northwest Fur Trading Company with headquarters in Montreal and where again, the basic business

requirements of efficient transportation routes for supply lines and movement of product to markets had to be established.

Staples

Europeans migrating to Canada wanted to establish communities which maintained cultural traits and a standard of living similar to that which they experienced in their homelands. In order to achieve this goal, settlers needed to import goods from Europe for which they needed products to trade. In the early economic development of Canada, fish, furs, lumber, wheat and minerals were the natural resources which Canada used as the basis for trade with other countries. These trade goods were referred to as 'staples' meaning they were primary commodities which Canadians caught, cut, grew or excavated and sent to Europe in exchange for manufactured products.⁵

Efficient, dependable, inexpensive transportation was a critical factor in the prosperity equation offered by staples. If the staples could not be delivered quickly and smoothly or, if delivery was in doubt, or if it cost too much, Canadian profits would decline dramatically. The situation with fish was simple, with catching apparatus also providing the transport capability. The fur trade made good use of inland waterways and canoes to accommodate the necessary conveyance. The lumber staple, however, presented a more complex challenge. Trees which have been cut down become an awkward,

⁵ Harold Innis, *The Fur Trade in Canada* (Toronto: University of Toronto Press, 1956), 384

heavy staple product and adequate rivers and lakes may not always be present within usable proximity. The potential value of the 'lumber staple' encouraged settlers to pressure governments into assisting them in constructing railways to address this issue. Canadians have always expected their governments to be involved in creating the infrastructure to support economic development. Staples were the vehicle by which Canada was able to stimulate its own economic growth and without such a relatively quick access to financial resources the development of an independent Canadian culture would have taken much longer. Staples also focused the generalized demand for railways which were a vital factor in the eventual emergence of a unified political entity called Canada and railways, in turn, enabled Canada to enter the industrial age.

One of the dangers of a staple economy, however, is the 'staple trap', in which the trade in natural resources becomes an end in itself, blocking the growth of a mature, diversified economy. The encouragement of linkages between staples and other areas of the economy reduces the effect of a staple trap by promoting the creation of a diversified economy which is better able to withstand changes in market values and recessions. An example of forward linkages is staples used to create another product such as the grist milling of wheat into flour which was then used for baking a wide variety of saleable items. Examples of backward linkages include commodities purpose-built as inputs for the staple sector such as the manufacturing of agricultural implements

for use in growing wheat. 'Final demand' linkages involved the production of consumer goods for those employed in the staple sector. Examples included the production of stoves, pots, pans and clothing for the farming families who grew wheat.⁶

The construction of railways, to expedite the expansion of the wheat economy, created positive externalities for the economy of Canada. The presence of a railway brought down the cost of transportation for the products of all businesses. It also reduced the expense of passage and greatly increased the convenience for travelers. The early period of European exploration and commercial development of Canada had been adequately served by the natural transportation afforded by rivers and lakes. A combination of light craft such as canoes enabled explorers and fur traders to travel to the far west and the far north. The introduction of large-scale agricultural operations, however, necessitated the development of an enlarged and more complex transportation infrastructure. By the 1770s, Montreal was attempting to establish itself as an important outlet for agricultural products from the Province of Quebec and the American Midwest. Montreal saw its position at the outlet of the St. Lawrence River and Great Lakes as pivotal in the development of a commercial empire. The seigneurial farms which had been established on the shores of the St. Lawrence River sent wheat to Montreal for shipment overseas. Similarly, in the era before railways, Midwestern American farmers could more

⁶ W.L. Marr and D.G. Paterson, *Canada: An Economic History* (Toronto: Macmillan, 1980), 12, 13.

easily export large amounts of farm produce through the Great Lakes and St. Lawrence River to Montreal and beyond.

In 1791, the Province of Quebec was divided into Upper Canada (present day Ontario) and Lower Canada (present day Quebec). Quebec was the economic engine of the British North American colonies with the greatest population and the largest number of acres of land under agricultural cultivation. It was the undisputed leading producer of the valuable export of wheat. Between 1800 and 1815, however, Quebec agriculture suffered a serious decline. This has been variously attributed to a number of factors including: backward agricultural techniques, poor weather and a shift of labourers to employment opportunities in forestry. It became clear by the middle of the nineteenth century that the centre of population and focus of Canadian wheat production was shifting west. Ontario had managed to avoid a 'staple trap' related to wheat. By expanding production to include other crops, Ontario farmers were able to protect themselves financially against a failure of the wheat crop or a disastrous drop in wheat prices. Having other successful products also meant that they had more capital with which to invest in their farming operations or in new industrial and railway opportunities which were beginning to emerge.⁷

⁷ J. McCallum, *Unequal Beginnings* (Toronto: University of Toronto Press, 1980), 26, 52.

Early Canadian Railways

Given Canada's rugged topography and winter climate for many months of each year, the indispensable nature of railways was rapidly becoming apparent to politicians and commercial interests throughout Canada.

Inveterate promoters such as engineer T.C. Keefer emphasized the importance of developing railway infrastructure while at the same time insisting that it be done using a viable business plan. In 1849 a group of Montreal merchants commissioned Keefer to write an essay to encourage railway development. Keefer points to the economic prosperity which railroads have brought to the United States and urges Canada to stop talking about railway plans and start building railways.

Though an unabashed railways enthusiast, Keefer's pragmatic training as an engineer does require him to maintain a somewhat balanced discussion. He warns of the financial danger of relying on 'through traffic', declaring that local business is essential to ensure financial security for a railway. Keefer is also critical of railways which were solely reliant on resource extraction and of the nepotism involved in the construction of railways such as the Grand Trunk Railway - mistakes which were later repeated in the building of the Pacific Great Eastern Railway. He discourages 'building ahead of demand' because of the potential financial threats involved.⁸ Such forward thinking becomes especially prescient when viewed from the standpoint of Canada in 1915, the year of T.C. Keefer's

⁸ T.C. Keefer, *Philosophy of Railroads* (Toronto: University of Toronto Press, 1972), 11,12.

death, with three transcontinental railways and more miles of railroad per capita than any other country in the world, resulting in a disastrous over-capacity.

Releasing the human mind as well as the human body from the bondage of a finite speed opens the intellect to imagining new possibilities. Surmounting ancient physical barriers suggests the hope of novel practical applications. Such revolutionary attributes certainly seem to warrant the creation of a 'philosophy' in order to collect in one place the significant ideas about railways and to thereby validate the importance of this radical new technology. A by-product of the new way of thinking, however, was the growing mania surrounding railways and burgeoning demand for railway service to all areas of an expanding British North America. Ironically, the end result was the attempted satisfaction of unrealistic expectations that would too often transform the economic anticipation of a railway project into a crushing weight of burdensome debt.

Fourteen years after his first railway essay, Keefer wrote another paper in 1863 which reveals a changed picture. In the intervening time period, unconditional enthusiasm for railways led to building lines in sparsely populated areas which then could not be supported by regular traffic, causing disappointment and regret rather than hope and prosperity. Some railways employed dubious business practices to achieve their goals. Grand Trunk contractors invested in company shares and bonds and in return gained control of the board of directors and were thus able to write a contract in their own

favour. Having the builder and owner as one and the same entity removed the checks and balances which are critical for financial integrity in the presence of large amounts of discretionary money. The Grand Trunk Railway suffered from the same debilitating situation which inevitably, led to similarly confused priorities for the leaders of the PGE project. The fact that the lessons offered by the GTR's difficulties in the 1860s were so cavalierly ignored by the government of British Columbia in 1912 calls into question the management judgement of the McBride regime.

Railways came to Ontario in the 1850s. The Great Western Railway (GWR) began operations in 1853 and eventually stretched to over 800 miles through south-western Ontario, Niagara Falls, Toronto and the Bruce Peninsula. In 1856 the Grand Trunk Railway (GTR) opened a track from Montreal through Toronto to Sarnia. Building railways required very large amounts of capital which was beyond the financial resources of Canada at the time. Foreign capital was available if overseas investors could be convinced that they would make a profit and the Ontario wheat economy produced the necessary assurances.

The transference of economic power from Montreal and Quebec to Ontario was caused not only by railway construction in Ontario but was also a reflection of how railways were used. Ontario railways were employed to capture benefits from 'through' American traffic while also servicing local Ontario agriculture. Linkages created by the advent of railways in Ontario enabled agriculture and industry to work in tandem to further the development

of industrial capitalism. Whereas a single city, Montreal, attempted to maintain control of most of the commerce in Quebec, a diverse number of towns and cities in Ontario helped to create integrated local linkages that were more open to new opportunities to create wealth.

Railways were instrumental in the development of a dominant wheat economy in Canada. Wheat grown on seigneurial farms in Quebec had relatively easy access to shipping on the St. Lawrence River but it was railways in Ontario which offered the flexibility to move a large, interior wheat crop to tidewater. On an even greater scale, the shift to the prairies as the dominant centre of wheat production in Canada was made feasible by the completion of the transcontinental Canadian Pacific Railway (CPR) in 1885. Prime Minister John A. Macdonald had envisioned Canada's first transcontinental railway in the 1870s as a way to unify the country and to promote western economic development. In contrast to the Liverpool and Manchester Railway in England which serviced an existing need, the CPR was built 'ahead of demand' as it was not initially justifiable based on the amount of revenue which could be generated from local traffic. Consequently the Federal government had to offer generous incentives to convince a private company to agree to accept a construction contract including \$25 million in cash; 25 million acres of land; a free gift of existing government-built portions of the route; and a monopoly guarantee which stated that no railway lines could be built south of the CPR route for a period of twenty years. The CPR was also part of an emerging

national railway infrastructure which allowed Canada to develop an industrial base out of proportion and again 'ahead of demand' considering the size of its population at that time. Canada's location beside a large American population with a robust industrial economy, in combination with easily exportable staple resources and a railway system were instrumental in promoting premature industrial development in Canada.

Industrial Capitalism

While staples are a relatively quick source of money for new national economies with small populations struggling to become established, their use to facilitate industrial growth varied in different regions of Canada. Ontario focused on province-based agriculture whereas Montreal exploited its position on the St. Lawrence River and the Prairies utilized wheat profits to access the benefits of industrial capitalism. The common denominator in all of this economic progress, however, was the building of railways. In the late nineteenth century, only railways had the capability to provide dependable, efficient, and cheap, all-weather transport. Canada was able to buy its way into industrialization through the prosperity created by a favourable balance of payments and it was railways that made an advantageous trade balance possible.

As Quebec lost its lucrative wheat economy first to Ontario and then to the Prairies, Montreal businessmen sought to strengthen its economy in other ways. Montreal placed great emphasis on the value of the St. Lawrence River in

promoting its commercial empire. Consequently, Montreal focused on improving ease of travel with canal systems to avoid rapids. Montreal merchants were wary of the competitive threat from commercial traffic in New England controlled by Boston. Although railway technology had the potential to strengthen the commercial influence of Montreal, in the early 1830s, Montreal businessmen were still unsure of its commercial value. The potential for additional American business, however, soon became an irresistible temptation. The result was Canada's first railway.

The purpose of the fourteen mile Champlain and St. Lawrence railway was to improve transportation connections between the St. Lawrence River, Lake Champlain and the Hudson River. The great success of the Champlain and St. Lawrence railway encouraged calls for more railways including the St. Lawrence and Atlantic railway which was to run from Montreal to Portland, Maine. The 120-mile Canadian section from Montreal to the American border was an expensive project but would give Canada access to an Atlantic seaport without needing to give business to its rival, Boston. Construction on the St. Lawrence and Atlantic was, however, suspended during a period of financial problems and building did not resume until a secure source of funds was put in place.⁹ There were also other examples of the delay or cancellation of railway building as Montreal railways of this era were built on their own business merit. Between 1837 and 1853 Montreal businessmen embraced the opportunities

⁹ Gerald Tulchinsky, *The River Barons* (Toronto: University of Toronto Press, 1977), 107.

provided by railway technology. They did so, however, based on sound business plans. In the era before virtually unlimited railway funds were available, Montreal railway construction was based on convincing investors of the existence of sufficient potential revenue to support the building of a railway.

Ontario businessmen were also striving to increase their economic power. The Great Western Railway (GWR), built primarily with American money, began operations in 1853. The Buchanan brothers, dry goods merchants based in Hamilton, played an important role in the development of the Great Western Railway (GWR). Through the GWR, the Buchanans hoped to dominate business in south-western Ontario by exploiting the critical role which credit plays in the relationship between metropolis and hinterland. They offered credit to those wishing to purchase goods from them while the GWR delivered the goods and provided the means to continually extend their reach to additional areas which then became indebted to the Buchanan credit system.¹⁰ The Buchanans' brand of metropolitanism represented the end of an era in which import-export merchants had dominated the Ontario economy. Their success had founded banks and insurance companies but it was Ontario wheat transported by railways that provided the profits upon which the provincial economy had prospered. Although as middlemen, merchants such as the Buchanans were an important link in the extension of credit which joined the metropolis and the hinterland, the development of Canada's financial system began to eliminate

¹⁰ Douglas McCalla, *Upper Canada Trade 1834-1872* (Toronto: University of Toronto Press, 1980)

the need for credit from merchants. In any case, further economic growth would need the skills of more specialized firms.

Economies based on staple products such as wheat, lumber, fish, fur and minerals exhibit certain initial advantages. Staple products can provide an almost immediate source of revenue for relatively small investments. Grain is grown, trees cut, fish and fur caught and minerals extracted without the need for the large investments in time and money required to nurture a complex industrial economy. The disadvantages are the dependence on the needs of foreign markets and the fluctuations in world prices. More serious, however, are the long-term effects of a constant state of 'boom and bust' on the development of a strong diversified economy.

Canadians understand their economic development through the lens of resource exploitation. Fish, fur, lumber, wheat and minerals have created the wealth on which to develop a country. Canada's ongoing connections to the British mother country and close proximity to a large American economy have also provided the stimulus to move to a more mature stage of economic development. The critical component in the success of both a staples-based and a mature diversified economy, however, is the development of an efficient, dependable transportation infrastructure. Railways satisfied this requirement.

Although railways arrived in Lower Canada in 1836 with the building of the Champlain and St. Lawrence line to connect Montreal to Lake Champlain, entrepreneurs in Upper Canada resisted investment in this capital-intensive

technology. As governments began to realize the social benefits which railways could provide to society, they could also see the necessary support which governments would have to provide to private ventures in order to access those advantages. Through the 1849 Guarantee Act, the 1851 Main Trunk Act and the 1852 Municipal Loan Fund legislation, governments committed to the long-term investment necessary to initiate a railway infrastructure.¹¹ They seemed unconcerned, however, about the possibility that private investors might have sensibly shied away from railway investment because the railway companies did not have a feasible business plan. In fact, the Grand Trunk Railway (GTR) was only made possible because of the government support offered by these Acts and was in financial trouble for most of its business life. Ontario now became committed to a growing railway network based on the strength of its wheat crop. Additions to railway trackage were justified by the call for an expanded transportation infrastructure to meet the growing needs of wheat production. Vast expenditures on railway expansion were approved in support of a single staple, wheat, which was subject to the uncontrollable vicissitudes of world markets and world prices. Servicing the debts resulting from such questionable decisions could and did lead to great financial hardship for Ontario in the 1860s - mistakes which were repeated with more devastating effect by Richard McBride fifty years later.

¹¹ Douglas McCalla, *Planting the Province: The Economic History of Upper Canada 1784-1870* (Toronto: University of Toronto Press, 1993), 199.

Canada as a nation remained without a fundamental factor needed for significant industrial development - a large absolute population with significant densities in key urban areas. Consequently, a number of steps in the logical sequence of progress were circumvented because having the United States as a neighbour allowed Canada to access the advantages of American industrial expansion. For example, while Canada's small (relative to the US) and sparsely located population did not require large production runs, having the U.S. close-by meant extra units could most often be easily sold. In addition, although the number of people in Canada did not justify the extent of its railway system, Canada could borrow money from the U.S. to invest in railways and then buy steel rails from the U.S. to build the railway, which then could be used to transport commodities to sell in the United States. A large part of the expanding railway network in Canada was built before experienced business people felt there was a reasonable chance of adequate revenue to pay for the costs incurred. While the existence of the tracks satisfied commercial expectations, the speculative nature of this form of economic expansion often caused business failure with serious financial implications for dependent companies and individuals.

The second half of the nineteenth century was the period in which industrial capitalism began to have a lasting effect on Canadian society. Canadian business interests played an increasing role in influencing the State to assist in capital accumulation. In the era of railway mania, Canadian society

demanded railway expansion as the key to prosperity. Toronto capitalists were promoting John A. Macdonald's National Policy and encouraging the expansion of industrial capacity for the benefit of Canada's economic development. Toronto's population was increasing very quickly and it was the industrial jobs that were attracting workers and their families. Toronto had eclipsed Montreal by 1891 with almost three times its population and had become the largest centre of industry in Canada.

By the early 1900s governments in BC were under tremendous pressure to guarantee railway bonds to hasten construction. McBride, first elected in 1903, resisted railway expansion until after his 1909 election when his 39 Conservatives faced a weak opposition of two Liberals and two independents. With the public clamouring for railways and party discipline at his disposal, McBride felt quite confident in extending generous bond guarantees to the Canadian Northern railway (CNoR) which would amount to more than \$47 million by 1913. An opposition party of only two members was unable to mount an effective criticism of the very large risks that McBride was taking with the security of the BC treasury.¹²

¹² Legislative opposition to McBride's plans was weak because it was almost non-existent. The metrics of public railway mania and continuously increasing election majorities meant that the natural democratic check on McBride's dangerous risk-taking was reduced to almost nothing. Landslide election wins resulted in McBride facing only four opposing members in 1909 and his victory in 1912 eliminated any opposition party at all, leaving two lone independents as critics. While this study does not suggest that a nascent BC parliamentary system explains McBride's mismanagement of the PGE project, future research focusing on BC parliamentary development would be a useful addition to the body of BC historical literature.

While Stephenson's Liverpool and Manchester Railway satisfied an acknowledged need for increased transport capacity in the British Industrial Revolution, railways in Canada fulfilled a different purpose. In the late nineteenth century Canada lacked the requisite factors for sparking an industrial revolution spontaneously but had achieved an industrial base mostly, though not exclusively, as a result of the manufacturing capacity present in the shops of the railways and their many suppliers. In the identification of industrial growth, railway companies were often overlooked as a source of industrial capacity. By 1860, large railways such as the Grand Trunk or Great Western railways were able, not only to repair their tracks and build locomotives, they could also manufacture many of the machines required for these processes.¹³ Because railways were overwhelmingly recognized for their conveyance function, their manufacturing competence was often forgotten. What began as just maintenance facilities were soon expanded to include a manufacturing capacity. Although often done to effect cost savings, these new services gradually transformed into large-scale operations which assumed all of the characteristics of industrial operations. Railways therefore, in addition to providing the critical transportation function necessary for Canadian industrial development had, in order to service its maintenance and rolling stock needs, also contributed to the creation of significant industrial capacity.

¹³ P. Craven and T. Traves, "Canadian Railways as Manufacturers, 1850-1880", *Historical Papers*, 18, No.1, (1983): 254.

While the advent of World War I significantly expanded manufacturing capacity in Canada, its influence on industrial development was more illusory than real. Although popular belief held that the war forced great advances in industrial technique, the long-term effects were more modest. While the size and fearsome fire power of naval dreadnoughts, tanks, and artillery and the incredible number of mortar shells, rifles and bullets manufactured seemed to indicate that Canada's industry had fully matured, the war matériel produced had little usefulness after hostilities ended. The market for most of the military industrial capacity also disappeared. While it is true that some inventions and industrial techniques could be adapted for the needs of peacetime, and some expansion could be used for consumer products, most could not. Expenditures and facilities for the most part returned to pre-war levels.

World War I did not really change the development route of Canada's industry because the war was not a long enough period of time to cause significant changes and many of the long-run effects of the war were in reality trends that were already well established before 1914. A number of war-time tendencies that can be identified as existing before the war and changes that mostly returned to pre-war levels afterwards included: industrial capacity for precision work that existed before the war and could have been further developed without munitions work; women's involvement in paid work that continued a trend begun before the war; the GNP during the war years which showed no real difference from the growth in the previous decade; steel

production which increased during the war years but returned to pre-war levels after the war; and the federal government's spending that rose dramatically during the war but was mostly cut back to pre-war levels soon after the end of the war. One permanent and enduring change of the war which did have an effect on Canada was the shift of the world financial centre from London to New York. Canada could now finance most of its borrowing needs much closer to home.¹⁴

Canada at the beginning of the twentieth century was in a position of great potential. Located beside an industrial giant, fledgling Canadian industry was able to grow more rapidly than could be supported by the needs of the country. As the supply of free land in the American west decreased, immigrants began to look more favourably at the Canadian West. Understandably, railroading interests were eager to exploit the economic opportunities. The difficulty was in judging how fast expansion could be justified and the danger lay in over-extended financial investments which became unsustainable.

¹⁴ Douglas McCalla, "The Economic Impact of the Great War," in *Perspectives on Canadian Economic History*, Douglas McCalla (ed.) (Toronto: Copp Clark Pitman, 1987), 139, 140.

Chapter 4: Railways and British Columbia

The purpose of this chapter is to locate the chronicle of the PGE within the context of the presence of other railways in British Columbia. Beginning with an overview of the topographical challenges of the province, the importance of railways for BC is described both physically and intellectually. Following this, Robert Fogel's challenge to the indispensability of railways in America is discounted when applied to the mountainous reality of BC. Subsequently, the narrative of the Grand Trunk Pacific railway shows the differences of opinion in Ottawa regarding government support for yet another railway. The Canadian Northern Railway (CNoR) story then highlights the challenges facing a privately-driven railway enterprise and finally, the Royal Commission to inquire into Railways and Transportation in Canada, 1917 and the CNoR Arbitration, 1918 speak to the depths of the 'railway problem' and the divisions within Canada over possible solutions.

The PGE was both a part and a victim of the railway issue in Canada. As Canada struggled nationally with competing ideas of private versus public railway ownership, Premier McBride sought to create a railway for BC without having to build it or own it. McBride's knowledge of BC finances would have indicated to him that the province did not have the financial resources to do either. Also, by financially supporting the

construction of the PGE yet avoiding public ownership, McBride could provide the opportunity for the PGE Company to realize a windfall of profits from land sales which he hoped would provide the extra money, in excess of the provincial subsidy, needed to complete the line.

The Importance of Railways to British Columbia

In attempting to describe the identity of British Columbia, George Woodcock speaks of 'chains of mountains repeating each other time and again from the Rockies to the sea'.¹⁵ Margaret Ormsby sees a land "Distant from the traveled sea-lanes and girdled by mountains... [standing] apart from the civilized world until late in the eighteenth century".¹⁶ Both views incorporate the ideas of isolation and difficulty in making physical connections. Indeed, Jean Barman notes, that "Any search to understand British Columbia and its past must begin with geography".¹⁷

The mountains of British Columbia have always presented a great challenge to its peoples. Transportation difficulties have spillover effects to other areas such as communication, as demonstrated by the presence in BC of eight out of the eleven aboriginal linguistic families found in

¹⁵ George Woodcock, *Ravens and Prophets* (London: Allan Wingate, 1952), 9.

¹⁶ Ormsby, 3.

¹⁷ Barman, 4.

Canada.¹⁸ This fact suggests that mountains restricted mobility and interaction between tribes which led to the development of separate languages amongst groups of people who lived in relatively close proximity to each other. British Columbia's status as the sole 'mountain province on the Pacific Ocean' within the Canadian confederation is quite different to the presence of several 'mountain' or 'Pacific' states within the American union. While Colorado can coordinate its concerns about the challenges of mountainous highway construction with other mountain states in order to pressure federal authorities in Washington DC for financial assistance, BC is virtually alone in that regard. Similarly California's desire for federal aid in port improvement can find sympathetic ears in Oregon and Washington state whereas BC is unsupported in Western Canada when explaining the particular needs of a major Pacific port to the Canadian government in Ottawa.

Politics and economics have always been integral parts of railway development in Canada as demonstrated by Sir John A. MacDonal'd's promise that Victoria would be the terminal city of the Pacific railway. In pursuit of this pledge, he searched for a way to give his Vancouver Island voters some hope that this would one day occur. His opportunity came when Robert Dunsmuir, who had extensive coal-mining interests in Nanaimo, showed interest in building an Island railway and in this

¹⁸ Michael K. Foster, "Native Peoples, Languages", article found at www.thecanadianencyclopedia.com

enterprise MacDonald saw an opportunity to achieve several goals simultaneously. He gave Dunsmuir a contract to construct the Esquimalt and Nanaimo Railway (E&N) in 1883 which offered Islanders the benefit of additional transportation infrastructure and reassurance as the E&N could easily be extended north to meet the CPR which was proposed to cross from the mainland to somewhere on the upper island.

Similarly, in the 1890s Ottawa became concerned for both political and economic reasons about the increasing presence of Americans in south-western BC. Spur lines of US railroads, especially the Great Northern Railway (GN), were entering BC and siphoning mineral resources back to the US for processing. The government worried about reinforcing Canadian sovereignty and resisting economic losses to the Americans. The CPR was enthusiastic about building a line in order to carry Canadian mineral resources and to develop coal deposits for their locomotives. Accordingly in 1897 the federal government offered the CPR a subsidy to build the Crow's Nest Pass Railway from Lethbridge, Alberta to the Kootenay area of BC. In return the CPR agreed to lower the rates for the eastern shipment of prairie farm products and the western carriage of farm equipment.

BC's special transportation needs, which were based on the uniqueness of the province's physical situation within Canada, also help to explain the development of a different political dynamic in the Pacific

province. The mountains are often blamed for a psychological as well as a physical disconnect between BC and the rest of Canada. While BC has many similar concerns to the rest of the country, unique needs have also led to home-grown solutions. For instance, BC's frustration with the ongoing imbalance of CPR rates to the disadvantage of Vancouver merchants was a continuous theme in the Vancouver Board of Trade meetings in the first decade of the twentieth century. Even though a Board committee which questioned the CPR about unequal freight rates (Winnipeg merchants paid much lower rates than Vancouver merchants) reported in 1903 that rates had been lowered slightly, the minutes stated that "While the reduction is appreciated, it is not sufficient by any means to satisfy the merchants here."¹⁹

The Board's Freight Rate Committee reported in November 1905 that discussions with the CPR continued to be delayed and "the result has been wholly unsatisfactory." A special meeting on December 12, 1905 discussed the ongoing boycott by Vancouver merchants of the CPR. One Board member complained that "We would be better off today if we had not gone into the Union [Confederation], if we had built a railway of our own to serve our own country."²⁰ As businessmen searched for an alternative to the prohibitively high CPR rates, it was becoming clear that

¹⁹ Vancouver Board of Trade Meeting Minutes, 1903, www.vancouverhistory.ca

²⁰ Vancouver Board of Trade, Freight Rate Committee, 1905.

transportation costs presented a barrier to the expansion of commercial interests in BC.

Once advanced industrial technology entered BC, horses and mules became inadequate to service the commercial needs of a developing BC economy.²¹ Large-scale and practical transport was necessary if BC was to compete in a world economy which demanded efficiency. The overriding need in the late nineteenth century was for a transportation network that could move people and bulky goods over land for long distances both cheaply and quickly in order to reduce costs, stimulate the economy and thereby increase prosperity. Though canoe brigades, packhorse trains, stage coaches and ox teams were satisfactory for much of the 1800s, towards the end of the century they became inadequate to address nascent industrial requirements. In the absence of transportation improvements, resources would remain undeveloped and the only economically and technologically viable answer to these concerns was railways.

Railways as the solution to business transportation challenges have their roots in the first successful commercial railway operation in northwest England more than eighty years prior to the building of the Pacific Great Eastern railway. This was a watershed venture which dramatically changed the physical and intellectual understandings of human

²¹ Cole Harris, "Moving Amid the Mountains 1870-1930," *BC Studies*, No. 58 (1983).

transport. When the Stephenson Rocket won the Rainhill Trials in England, organized to select a locomotive for the opening of the Liverpool and Manchester Railway in 1830, it was not the first time steam locomotives had been used to provide motive power for a railway. Nor was the Liverpool and Manchester Railway the first example of a commercial railway. Because of its design features, however, George and Robert Stephenson's Rocket is considered the first modern steam locomotive and the Liverpool and Manchester Railway the first modern railway system as, in addition to hauling freight, it featured a scheduled passenger timetable and used steam locomotives exclusively. The Stephenson Rocket provided the motive power and was, therefore, the visible manifestation of the physical technology which ensured that the Manchester and Liverpool Railway could fulfill its promise of success. This railway became a model for similar operations in other countries. More importantly, though, it provided the stimulus for the promulgation of the idea of railways throughout the world.

After 1830, railways spread rapidly and became a coveted symbol of optimism and hope. The speed of human movement was suddenly and dramatically increased. The science and technology of the Industrial Revolution, which had so dynamically changed the industrial sector, was now being applied to transportation. The success of railways quickly drew the attention of political leaders even as their physical presence, financial

influence and safety needs attracted regulatory and promotional consideration in government policy. Administrative authorities saw a need to exert control over where, when and how railways were built while elected officials focused on encouraging their expansion for the economic and the social benefits which railways afforded to society.

Robert Stephenson was elected to the position of President of the British Civil Engineers Society in January 1856. In his opening address, he noted the vast improvements which railways are bringing to internal communications within his country and points out the inferiority of canals which are "subject to the vicissitudes of dry seasons...and to the frost of severe seasons during which Nature may compel a total cessation of traffic".²² Stephenson eloquently describes the unquestioned superiority of railways and warmly embraces the progress and prosperity which railways have unlocked for England and will do for other countries. His words express not only the technical ideas of one of the foremost railway engineers of his day but also the emotional pride of a country and world allowed to finally break the shackles of the limited velocity of animate motive power.

²² Samuel Smiles, *The Life of George Stephenson: Railway Engineer* (Boston: Ticknor & Fields, 1862), 462.

Axiom of Indispensability

In *Railroads and American Economic Growth*, economic historian Robert Fogel examines the connection between railroads and the economic development of the United States. The first US railroads in the 1830s were considered at first to have limited usefulness for commerce. As the speeds of trains and cargo capacity increased, however, businesses became more interested. By the 1860s improvements made railroads the most important factor in economic expansion and by the early 1870s, railroads were seen by many as being indispensable for future growth. Fogel strongly disputes the indispensability of the railroads in America's economic development. In order to prove his contention, he believes that he only has to disprove "the implicit assertion that the economy of the nineteenth century lacked an effective alternative to the railroad and was incapable of producing one".²³ Fogel asserts there were other options available and suggests that water transport, through rivers and canals was sufficiently developed, enough to be seen as a credible alternative.

In their book *Economic Transformations*, Lipsey, Carlaw and Bekar recognize the value of historically important technologies such as railways in their discussion of long-term economic growth. They define a general purpose technology (GPT) as a technology "that initially has much scope

²³ R.W. Fogel, *Railroads and American Economic Growth* (Baltimore: John Hopkins Press, 1964), 2, 4.

for improvement and eventually comes to be widely used, to have many uses, and to have many spillover effects".²⁴ In addition, technologies such as railways are further identified as 'Transforming GPTs'²⁵ because they bring about large changes to a society's economic, social and political structures. Lipsey et al question Robert Fogel's challenge to the centrality of railways in the industrialization of the US pointing out that "Notionally removing one technology from a technology cluster does not allow us to measure anything like the total impact of that technology, particularly if it is a GPT with a large number of technological complementarities whose effects are widespread over space and time".²⁶

While Fogel's numerical argument fails to take into account many indirect influences that railroads had on other areas of the economy and society in 1890, he also neglects the possible forward linkages. Railroads were not only significant for the quantifiable effect on other economic areas in society, they were also important for the ideas and industries their existence suggested but which had not yet found economic expression. In the American experience, railroads can be linked to the emergence of the Second Industrial Revolution. The standardization movement, driven by lines such as the Pennsylvania Railroad, promoted new efficiencies necessary for large-scale manufacturing operations. The managerial

²⁴ Richard G. Lipsey, Kenneth I. Carlaw and Clifford Bekar, *Economic Transformations* (New York: Oxford University Press, 2005), 133.

²⁵ Lipsey et al, 132.

²⁶ Lipsey et al, 195.

innovations which railroad companies pioneered were made possible by the large staff of full-time managers which were needed to monitor and direct a vast network of geographically isolated components and evaluate the results.²⁷ These ideas were then applied to non-railroad industries in order to create the organizational structures necessary for a greatly expanded US industrial capacity.

Canada's public policy-makers in the 1870s attempted a variant of Fogel's hypothesis but for a different set of reasons. In the middle of the decade, the government of Prime Minister Alexander Mackenzie decided to use waterways as an integral part of developing Canada's first transcontinental railway. The reason, however, was not because he felt that water transportation was just as efficient and useful as railways but rather that Canada could not afford an all-railway route. Mackenzie was less interested in linkage to future opportunities and more concerned about paying for the present obligations. He was harshly critical of the agreement which his predecessor, Sir John A. Macdonald, had made with British Columbia regarding the proposed Canadian Pacific Railway and horrified by the estimated costs for building it.

Mackenzie decided to reduce the cost by building the railway in a piecemeal fashion as government funds allowed and by constructing a 'mixed-medium' route using a combination of railways on land and ships

²⁷ Alfred D. Chandler, *The Visible Hand* (Cambridge, Massachusetts: Harvard University Press, 1977)

on water. In 1873 Mackenzie outlined his plans for a revised transcontinental route which stated that "water stretches would be used between Ontario and the Rockies wherever possible".²⁸ By using ships from Georgian Bay to the Lakehead, that section of the route would be reduced from 1000 miles to less than 600 miles. In addition, the cost of surveying, clearing, tunnelling, filling, laying track, ballasting and building supply depots would be eliminated for that part of the route. While this might solve the problem as far as the Rocky Mountains, nothing could obviate the need for very expensive railway construction through the mountains. More disturbing in Mackenzie's plan, however, was the fact that winter freeze-up would compromise the value of the transcontinental route as the advantage of year-round availability would be lost.

In the United States, Fogel's challenge to the indispensability of railways in the American economy of 1890 is situated in a somewhat more constrained milieu. Although it can be argued hypothetically that canals (existing or planned in 1890) and inland waterways could cover a high percentage of the area serviced by railways, Fogel's model does not adequately address nor statistically allow for the very real operational restrictions of drought and cold weather conditions. For example, year-round food distribution would not be practical using canals. Winter freeze-up, and the impossibility of building canals through mountain ranges,

²⁸ D.C. Thomson, *Alexander Mackenzie: Clear Grit* (Toronto: Macmillan Co., 1960), 197.

would place severe limits on the idea of a national canal system. Similarly, the feasibility of using canals and rivers to build an alternative transportation system for BC would also be severely inhibited by the Province's extremely mountainous topography and, therefore highly impractical.

While canals were never a realistic alternative in BC, roads offered greater potential. In the first part of the twentieth century, however, the road infrastructure was in a very early stage of development. The road grid was limited in size, with the quality of grading and surfacing in many areas not much better than rutted wagon trails. Although the Cariboo Road between Yale and Barkerville was begun by Governor James Douglas in 1860, in the early 1900s it remained a wagon road more suitable for horses than cars. As there were only 200 motor vehicles in BC in 1906, road development was not a high priority for government expenditure with the BC transportation system centred on railways and steamboats. Most roads were gravel or dirt, seasonally impassable and mainly used for short, local trips of a recreational nature.²⁹

Although the number of cars began to increase quickly in the US in the 1910s, the same cannot be said for British Columbia which had only about 2,000 cars by 1911 when the PGE was being planned. This slow increase was largely due to the lack of useable roads outside urban areas

²⁹ C. Harris.

so that by 1914 there were still only 6,688 cars in the whole of BC. With annual American car production of 548,000 units in 1914, a limited road network rather than car-availability appeared to discourage the growth of automobile usage.³⁰ When construction of the PGE began in 1912, therefore, neither canals and navigable waterways nor roads were a challenge to the indispensability of railways.

Though flexibility of access gave roads significant potential for the future, in 1912 it was not at all clear when or if roads would one day dominate Canada's transportation networks. It would be unfair, therefore, to accuse political leaders such as Prime Minister Wilfrid Laurier and BC Premier Richard McBride, in early twentieth century Canada of failing to realize that road and air traffic would eventually eliminate the need for a large portion of rail capacity based on an ex post vantage point. What is more reasonable, however, is to ask why both Laurier and McBride among many others, supported railway construction in 1912 which was obviously far in advance of demand.

The Canadian Pacific Railway (CPR) was a seductive example of a successful railway built 'ahead of demand' but which flourished under a far different set of circumstances than those which faced the Grand Trunk Pacific (GTP), the Canadian Northern (CNoR) or the Pacific Great Eastern

³⁰ G.W. Taylor, *The Automobile Saga of British Columbia 1864-1914* (Victoria: Morriss Publishing, 1984), 72, 82.

(PGE) in the early twentieth century. The CPR was completed in 1885 for the purpose of extending Canadian sovereignty to the Pacific Ocean and hastening the economic development of Canada's west. Given the small population and the vast distances, it was obvious that the CPR was going to be built 'ahead of demand' but the federal government could justify its decision to initiate construction based on the social benefits of an all-weather link to physically unite the whole country. Passenger movement and goods transfer were clear indications of sovereignty, along with innumerable attendant positive externalities. In addition, the federal government had the financial resources and taxing authority to see the project to a successful conclusion.

The situation facing Laurier and McBride was different to that of the CPR. While the two leaders were also building railways 'ahead of demand', sovereignty was not at issue. A Canadian transcontinental connection existed and Laurier was financially supporting two more (the GTP/NTR through Edmonton to Prince Rupert and the CNoR through Edmonton to Vancouver) on a platform of enhanced service. While there would undoubtedly be increased social benefits, the existence of the CPR precluded an argument of necessity. McBride, too, was assuming financial responsibility for a railway which, although providing service to additional areas of the province, could not claim to have a first connection to the rail network of Canada. In considering the

disbursement of scarce resources, investments in all three railways (GTP/NTR, CNoR, and PGE) would most fittingly be placed in the category of discretionary expenditure. In the case of the CPR, protection of Canada's sovereignty and the interests of economic development were compelling reasons for construction to proceed whereas for Laurier and McBride justification on the basis of economic development alone became unsustainable with the advent of a financial downturn. As one considers the fact that McBride forged ahead with the fledgling PGE, even as BC was being enveloped by the twin blows of an economic recession and World War I, his mismanagement of the project becomes more apparent.

Grand Trunk Pacific (GTP)

The reasons for the creation of the GTP/NTR transcontinental railway in 1903 exist in a political answer to an economic complaint. Western farmers had long held that the railway freight rates which they paid were unnecessarily high and in 1896 when Wilfrid Laurier became the seventh Prime Minister of Canada he determined to address their criticisms. His political response serves to explain some of the reasoning behind McBride's decisions almost a decade later. Western Canadian farming was expanding rapidly with wheat as the major crop. Farmers, however, strongly resented the virtual monopoly on transportation of their products which the Canadian Pacific Railway (CPR) held in Western Canada. They

believed that the CPR freight rates were unfair and discriminatory against farmers trying to move their grain to market. Their complaints became a recurring theme throughout this period.

Laurier decided that the best way to alleviate Western complaints about the CPR was to provide some competition in the form of a second transcontinental railway. The two contenders for the task of providing it were the Grand Trunk Railway (GTR) and the Canadian Northern Railway (CNoR). In 1903 the GTR already had a significant rail infrastructure in Eastern Canada and the CNoR was developing an extensive rail system in Manitoba. Laurier hoped to convince the two railways to agree to a joint project in which the GTR would provide the eastern portion of a new transcontinental line up to Winnipeg and the CNoR would continue its Prairie trackage to Vancouver, thus completing Canada's second transcontinental railway.

It soon became obvious to Laurier, however, that the two companies would not be able to come to an agreement. GTR General Manager Charles Melville Hays led a subsidiary company, the Grand Trunk Pacific (GTP) which was created to complete the western portion of their new transcontinental. Charles Melville Hays and CNoR owners William Mackenzie and Donald Mann were all very determined to have their own railway dominate the Canadian West which forced Laurier to make a

choice and he ultimately decided he had more confidence in the financial capabilities of the GTR/GTP railway.

Laurier faced significant opposition to his choice from members of his Cabinet. Clifford Sifton was the spokesman for the West in the Cabinet and did not want the GTR to get the sole financial support of the government to the detriment of the CNoR. Sifton was also frustrated, however, by the rail situation between Winnipeg and Ontario and wanted another line to be built to offer competition to the CPR. At times he was willing to have the GTR build it as long as CNoR got a perpetual right to use it. At other times he urged Laurier to abandon negotiations with the GTR and have the government build a rail link between Winnipeg and Sudbury, over which both railways would have running rights. He was torn between government control of the line to ensure fair access to both railways and the problems associated with a government-run railway. Sifton's preference for split support was ultimately successful as Laurier provided subsidies for both the CNoR and the GTR. Laurier seemed to have lost sight of the fact, however, that his goal of constructing one new transcontinental railway had in the meantime been usurped by others resulting in the creation of two new national railroads.

Andrew G. Blair, as Laurier's Minister of Railways and Canals in 1903, proved to be even more determined than Sifton in his opposition to support for the GTR. It became obvious that Laurier and Blair had serious

differences of opinion concerning a new transcontinental railway. While not opposed to the idea of a new line, Blair had strong objections to Laurier's particular plan and adamantly refused to change his position. Consequently, when the GTR submitted proposals for a Western railway, Laurier by-passed his Minister of Railways and decided to conduct the negotiations himself. In July 1903 Blair resigned from Laurier's Cabinet.

On July 16, 1903 Blair addressed the House of Commons to explain the reasons for his resignation from his cabinet post as Minister of Railways and Canals. Blair could see no need for a new government-built railway which virtually paralleled the Intercolonial Railway from Moncton, New Brunswick to Levis near Quebec City. In addition, Blair felt that if a need for a railway from Quebec to the Pacific coast were determined to exist, it "should be built by the government" with ownership retained therein.³¹ He labelled the proposed plan of the government building the line from Quebec to Winnipeg and then leasing it to the GTP, who would then receive subsidies to build to the Pacific, a hybrid scheme that would satisfy neither viewpoint. Blair also felt that "It will be difficult to explain why government should build and own the lean section of this railway [northern Quebec and northern Ontario], and provide a company with

³¹ 1903 *Hansard Debates*, 6739, 6743.

government credit to enable them to build and operate the fat section [the grain traffic of the prairies]."³²

On July 30 1903 Laurier introduced the Bill to provide for the construction of a new transcontinental railway which would consist of two parts: the government-built section from Moncton to Winnipeg which was to be called the National Transcontinental Railway (NTR) and the GTP from Winnipeg to Prince Rupert. The Prime Minister asserted that this new policy addressed the desire of every Canadian "that a railway to extend from the shores of the Atlantic Ocean to the shores of the Pacific Ocean, and to be, every inch of it, on Canadian soil, is a national as well as commercial necessity."³³ The words which Laurier chose seemed to ignore Canada's existing railroads which already fulfilled all his stated requirements. While Laurier was technically correct in that the existing all-Canadian route from the Pacific ports to the Atlantic ports consisted of not one but two Canadian railways, the CPR and the ICR, a simple abstract desire for a single transcontinental railway company was insufficient reason to justify the outlay of hundreds of millions of taxpayer dollars. The ICR already had running rights on the GTR line on the south shore of the St. Lawrence which meant that the ICR could deliver goods from Canada's Atlantic ports to Montreal without transshipment. If Laurier felt it was a matter of national importance that goods not have to be

³² 1903 *Hansard Debates*, 6744, 6745.

³³ 1903 *Hansard Debates*, 7659.

transhipped in Montreal in order to be moved to the Pacific coast, and if the CPR refused to accommodate the ICR, then he could have used legislative and regulatory powers available to him to accomplish this purpose.

Laurier then addressed the concern that the government was rushing into building a second transcontinental line. He responded, "To those who urge upon us the policy of tomorrow, and tomorrow, and tomorrow; to those who advise us to pause, to consider, to reflect, to calculate and to inquire, our answer is: No, this is not a time for deliberation, this is a time for action...If we let it pass, the voyage of our national life, bright as it is today, will be bound in shallows."³⁴ While this was engaging rhetoric to those businessmen in favour of increasing the transportation infrastructure and farmers anxious for competition for the CPR in the hopes of forcing a reduction in rates, a new transcontinental railway would be an enormous commitment of resources with a monumental cost. Laurier was unable to provide any compelling reason such as national security (which preceded the building of the ICR) or national unity (which preceded the building of the CPR) to rationalize the immediate need for a new railway.

With many new immigrants entering the west, Laurier proclaimed that "it is the duty of all those who have a mandate from the people to

³⁴ 1903 *Hansard Debates*, 7659.

attend to the needs and requirements of this fast growing country...it is immediate and imperative...Heaven grant that it not be already too late".³⁵ Laurier's emotional appeal seems to ignore the duty of the elected leader of a country to pursue policies which protect its financial stability. While most elected members of parliament would support the need to provide infrastructure to newly settled areas, many would quite rightly question a policy which duplicated services to areas which would not create enough revenue in the foreseeable future to meet operational expenses.

In order to justify a new line from Quebec to Moncton, Laurier asserted that it was the duty of the Canadian parliament to build a shorter route of communication between the west and the east. In fact, if Laurier's main concern was connecting the west coast to the east in the shortest distance, then his plan for a new line from Quebec to Moncton would not help. From Halifax to Prince Rupert via the National Transcontinental and Grand Trunk Pacific route was 3,935 miles whereas from Halifax to Vancouver via the Intercolonial Railway and the CPR route was 3,623 miles. The Prime Minister also raised the issue of 'bonding privilege'. When Canadian goods were shipped through the US, the American government "granted us the privilege of using their harbours for

³⁵1903 *Hansard Debates*, 7660.

our imports and exports without paying them tolls and customs dues."³⁶ Avoiding these taxes made transit through the US more attractive to Canadian companies and gave American shippers more business. Laurier said that this privilege could be removed at any time with ruinous consequences.

On August 11, 1903 A.G. Blair presented his critique of Laurier's National Transcontinental Railway Act to the House of Commons. He said he remained personally unconvinced that "to wait would be to destroy our future national life" and asked "Why is it...that we must not pause a moment to deliberate?...I cannot help feeling that it is rather a condition of hysteria than a condition of calm reason and judgment".³⁷ Blair dismissed the 'bonding privilege' argument as spurious almost to the point of dishonesty when he considered that during his seven years as a Laurier cabinet minister there was never a fear that "we are in deadly peril and in the utmost danger of having our commerce destroyed by the action of a friendly government".³⁸ In seeking an explanation for the sudden decision to build another transcontinental, Blair suggested that the "Grand Trunk Railway Company conceived that it would be in their own interest to have the railway project liberally aided by the parliament of

³⁶ 1903 *Hansard Debates*, 7667.

³⁷ 1903 *Hansard Debates*, 8410.

³⁸ 1903 *Hansard Debates*, 8412.

Canada...That is the secret of the whole business; that is where it originated."³⁹

Blair noted that the west was already well provided for with the CNoR receiving a guarantee in 1903 of \$9 million towards 600 miles of construction after two years of parliamentary deliberation (as opposed to six months for approval of the GTP/NTR estimate of \$60 million). With the West taken care of, he suggested extending "the Intercolonial to Georgian Bay by acquiring the Canada Atlantic [railway]. Of course Mr. Speaker that involves a continuation of the principle of government ownership, a principle to which I know a great many people are hostile." Blair was aware that Laurier was very much opposed to governments owning railways. The cost overruns and operating deficits of the Intercolonial convinced many people that private enterprise continued to be the best avenue for railway ownership. Blair, however, strongly favoured government ownership of key railroads as "a means of realizing the national idea of using our own ports winter and summer for the carriage of the products of our own country".

With seven years' experience as the Minister of Railways, Blair was well-versed in the portfolio and estimated a cost of \$139 million for the GTP/NTR construction. Blair was, therefore, shocked when Laurier announced that the cost would be \$13 million and "The surplus for this

³⁹ 1903 Hansard *Debates*, 8417.

year will pay for the construction of this road."⁴⁰ Blair subsequently asked the pointed question "Is it possible that because they have a surplus of twenty million dollars this year, they assume that they can spend 120 million?"⁴¹ Laurier's questionable calculations were based on the GTP paying a rent of 3% of the construction cost per year. Laurier therefore determined that the GTP would have paid for the construction costs in 33 1/3 years. As the GTP was to be granted exemption of rent payments for the first seven years of operation, Laurier was arguing that the only cost to the government of Canada for the building of the GTP would be the interest on the debt for the first seven years which he estimated would be thirteen million dollars. Apart from the financial charges relating to the government-guarantee if the GTP defaulted, Laurier was also ignoring the cost of the interest on the declining balance of the debt for thirty-three years.

There is a striking parallel with BC Premier McBride's decision in 1912 to build the Pacific Great Eastern railway. Blair was shocked that Laurier would find security in a \$20 million surplus when contemplating the expenditure of more than six times that amount. How much more irresponsible was it, therefore, that in 1912 McBride would commit to a debt obligation of more than \$20 million which represented forty times BC's deficit of the previous year? McBride was also rejecting the possibility

⁴⁰ 1903 *Hansard Debates*, 7691.

⁴¹ 1903 *Hansard Debates*, 8463.

(as Laurier did) that railway assets could become liabilities if the plans encountered difficulties. An incomplete railway (as the PGE was for 44 years) becomes a serious liability inasmuch as its value can never outweigh its construction costs because it is not able to do the job for which it was designed and therefore it cannot realize its anticipated commercial or social potential.

Conservative Opposition Leader Robert Borden offered his critique of the NTR Act and his counter-proposal on August 18, 1903. With regard to keeping unrouted Canadian trade in Canadian channels, Borden felt that "the only way to send Canadian traffic through Canadian channels and through Canadian ocean ports is to make transportation by that means at least as economical, as expeditious and as advantageous to the shippers of Canada as any other means of communication".⁴² Borden was pointing out that if building a new transcontinental was justified on the basis of putting Canada on an equal competitive footing with the US, the plan was already a failure if the government needed to legislate the routing of Canadian goods across Canadian soil and through Canadian ports. If Canada was going to be truly competitive as a result of the new railway, then there would be no need for enforcement legislation as shippers would logically choose a Canadian route voluntarily. Borden also recommended a mixed-medium journey of ship to Depot Harbour on

⁴² 1903 *Hansard Debates*, 8978.

Georgian Bay and then rail to Montreal as a low cost alternative to an all-rail route.

The National Transcontinental Railway Act, (Chapter 71, Statutes of 1903) clearly stated the requirements placed upon the GTP. Subsection 6 of the attached Schedule said “The Company [GTP] agrees to construct, maintain and operate the said Western Division, and to take a lease of, maintain and operate the said Eastern Division.” Related terms and conditions included subsection 7 of the Schedule to the NTR Act which stated that “In order to insure, for the protection of the Company as lessees of the Eastern Division of the said railway, the economical construction thereof...it is hereby agreed that the specifications for the construction of the Eastern Division shall be submitted to, and approved of by, the Company before the commencement of the work”.⁴³ During the course of subsequent events, the GTP used this clause as part of its justification for refusing to assume its obligation to lease the eastern portion of the NTR. The GTP maintained that it did not approve the increase in charges and that the government promise of ‘economical construction’ was broken as costs for the NTR ballooned from an estimate of approximately \$60 million to almost \$160 million.

Laurier, like McBride, was aware of the need to ensure economic feasibility for railway operation but ultimately allowed political

⁴³ *National Transcontinental Railway Act Chapter 71* Statutes of Canada, 3 Edward VII (Ottawa: Government of Canada, 1903), 465.

considerations to override practical restraint. Laurier chose the GTR to build a new transcontinental but he was also a great believer in compromise. In addition to selecting the GTR, Laurier also acknowledged Sifton's concerns for the CNoR and offered financial support for CNoR expansion to the West. In essence, Laurier was committing his government to supporting the construction of two additional transcontinental lines. While compromise is a necessary quality in a successful politician, there are limits to its intrinsic value. Prime Ministers are elected for their ability to lead, in addition to being able to compromise. Political astuteness lies in the capacity to identify which is most appropriate in a given situation.

In 1903 Canada was not facing any immediate crisis or threat to its continuance as a nation which might justify such a questionable compromise. Western complaints and dissatisfaction were not new and would continue no matter what decisions Laurier made or avoided. He could, however, have used the leadership power invested in him by the people of Canada to pursue another solution which would have been in the best interests of Canada. It was within Laurier's legislative authority to demand that the GTP and CNoR accept the idea of a joint project. This would have avoided the eventual fate of three transcontinental railways in a nation whose population could not even justify two.

Having made his decision Laurier then found that the GTR was hesitant to take on such a mammoth task. Nevertheless, he convinced

them to accept the responsibility of a transcontinental enterprise with the promise of generous financial support. In addition to subsidizing GTR construction of a subsidiary line from Winnipeg west to Prince Rupert on the Pacific coast, to be known as the GTP, Laurier committed the federal government to building the National Transcontinental Railway (NTR) from Moncton to Winnipeg which would then be leased by the GTP on behalf of its parent company, the GTR.

Neither the GTP nor the CNoR was in favour of the NTR. It was Laurier who determined that the NTR project was necessary, including a major transcontinental terminal in his home riding. The voters in Quebec City would no doubt be grateful to Laurier for arranging for the NTR to service Quebec City but there was no commercial reason to justify its construction. Laurier decided to build the NTR under the assumption that the GTP would honour its agreement to operate it. The Grand Trunk Railway accepted the government's subsidies to build the Grand Trunk Pacific (GTP) railway from Winnipeg to the Pacific Ocean but when the financial situation became desperate due to cost overruns, the GTR refused to honour its commitment to operate the NTR. Although the last spike in GTP construction was driven on April 7, 1914 near Fort Fraser, British Columbia, large fixed costs soon led to loan defaults.

In 1917 Prime Minister Robert Borden decided to appoint a Royal Commission to inquire into Railways and Transportation in Canada in order

to examine the 'railway problem' in Canada; to assess the status of the CPR, the GTR (including the GTP) and the CNoR; and to make recommendations for reorganization and/or government assumption of control. When examining the NTR contract the Commissioners noted that when "the cost of construction of the National Transcontinental, which had been estimated at \$61,415,000 was permitted to reach \$159,881,197, the company objected to carrying out their bargain. And the government, by accepting the company's refusal and commencing to work the line themselves, have in effect released the company unconditionally."⁴⁴ The Commissioners reasoned that problems arose in the case of the GTP because the Offices of its parent company (GTR) were so far away in London, England and concluded in 1917 that the only solution to the insolvency problems of the GTP was nationalization. Accordingly, the Commission recommended that "control, not only of the Grand Trunk Pacific Company but also of the Grand Trunk Company of Canada should be surrendered into the hands of the people of Canada. We recommend that the chairman of the Grand Trunk Company be informed, that it is only on this condition that the Government is prepared to relieve his company of its obligations".⁴⁵ In March of 1919 the federal

⁴⁴ *Royal Commission to inquire into Railways and Transportation in Canada*. (Ottawa: Government of Canada, 1917), xxiii.

⁴⁵ *Royal Commission 1917*, xxxv.

government followed the recommendations of the 1917 Royal Commission and took control of the GTR.

Canadian Northern Railway (CNoR)

In order to convince a private company to build the first Canadian transcontinental railway in advance of demand, the federal government was required to offer generous incentives including a monopoly clause⁴⁶ and the ability for the Canadian Pacific Railway (CPR) to set rates which would allow it to receive a return on investment comparable to other business situations. Western farmers complained that the CPR rates prevented them from covering their own costs and sought help from the Manitoba government. After several attempts to address farmers' needs by Premiers John Norquay (premier 1878-1887), Thomas Greenway (premier 1888-1900) and Rodmond Roblin (premier 1900-1915), an arrangement was reached in 1901 between the Manitoba government and William Mackenzie and Donald Mann of the CNoR. Under the agreement Mackenzie and Mann undertook to build a second line from Winnipeg to the Lakehead which would provide additional capacity, competition for the CPR and give the Manitoba government control over freight rates to the satisfaction of the farming community.

⁴⁶ Facing mounting pressure from farmers and politicians, the CPR surrendered the monopoly clause in 1887.

With the completion of the rail line from Winnipeg to Port Arthur, Ontario in 1902, the CNoR began to consider building from coast to coast. Mann, however, “maintained that we should not build east or west until we had about five thousand miles in operation in the prairies, which would feed the lines east and west; and my judgement was that that was sufficient to make the road pay”.⁴⁷ The 1903 decision by the Grand Trunk Railway to pursue a transcontinental strategy, however, caused the CNoR to change its long-term plans into short-term requirements. GTP General Manager Charles Melville Hays believed that he could starve the CNoR management into abandoning their transcontinental ambitions by attempting to close their access to corporate bank credit but by this time the CNoR was receiving significant financial support from the Manitoba government because of its agreement to allow the government to control the freight rates. In addition, Clifford Sifton as the spokesman for the West in Laurier’s cabinet, insisted on some level of continued support for the CNoR.

In 1903 when Laurier made the choice to pursue a transcontinental accord with the GTR, the resulting agreement placed the CNoR in a difficult position. Before the advent of the GTP, the CNoR would transport GTR freight in the West and the GTR would carry CNoR goods in the East. The completion of the GTP/NTR would give the GTR full access to the West

⁴⁷ CNoR Arbitration, 2510-12.

and they would no longer have any incentive to cooperate in transporting CNoR freight. Once the GTR had control of a transcontinental route CNoR's Mackenzie and Mann, as experienced railwaymen, realized that they would themselves be forced to build a transcontinental system if the CNoR were to continue as a viable business. Laurier, therefore, had unwittingly laid the basis for the creation of a third transcontinental enterprise. His lack of experience in railway negotiations and unwillingness to demand restraint in expensive duplication of railway capacity led to many unwise decisions by himself and others. By 1909 progress on the GTP/NTR convinced Mackenzie and Mann that the CNoR had no choice but to create its own transcontinental system. Donald Mann later commented that "We were in the West and we were bottled up; anything we had to send or get from the east had to go over our rival's railway."⁴⁸

The subsequent competitive behaviour of the GTP and CNoR as they duplicated trackage from Edmonton to the Yellowhead Pass was extremely wasteful and irresponsible. The area through which the GTP and CNoR were duplicating track did not offer enough traffic to make such investments worthwhile. These two railways were, therefore, wasting financial resources entrusted to them by the federal government. The greater part of the blame, however, must be laid at the doorstep of the one who actually had the power to alter the situation but chose not to.

⁴⁸ CNoR Arbitration, 2683.

Even though Laurier controlled the purse strings which were funding both railways in their wilful acts of improvidence, he seemed unable to steel himself for the confrontation necessary to end the reckless use of scarce resources.

By 1916 the current Prime Minister, Robert Borden was faced with serious financial instability regarding both the GTP and the CNoR. It became necessary to support them both in meeting their operational costs and in paying interest on their debts. He began to search for a long-term solution to the 'railway problem' while attempting to provide them with short-term support. The alternatives of state ownership of the railways or continued private ownership both presented risks and difficulties. The overcapacity which had been created in the Canadian system can be demonstrated statistically. In 1916, Canada had 40,000 miles of railway supported by a population of 7.5 million while Germany had about the same mileage supported by 67 million people. In the same year, Canada's population represented 185 people per mile of Canadian railway while that of the US represented 400 people per mile of American railway.⁴⁹

The final report of the Royal Commission of 1917 offered a split decision. The majority report was written by H.L. Drayton and W.M. Acworth in which they criticized the federal and provincial governments

⁴⁹ *Royal Commission 1917*, ix, x.

for their indiscriminate use of railway bond guarantees. Their report stated “we do feel that a policy of guarantees on a large scale is a dangerous policy...We recommend that in future no guarantees be given without being taken up into the books of the guarantor as a continuing liability, and without some financial provision being made against the possibility of their falling due.”⁵⁰ The use of guaranteed railway bonds was the technique which allowed questionable business propositions to proceed. Although Mackenzie and Mann had used a variety of methods for financing railway construction in their early years including selling capital stock, obtaining cash subsidies from governments and selling ‘unguaranteed’ railway bonds, money was an ongoing concern until the Manitoba provincial government eliminated that anxiety. Determined to build new branch lines within the province and a line to the Lakehead that would compete with the CPR, Manitoba offered to support the CNoR with government-guaranteed railway bonds.

The Royal Commission used three methods in its deliberations to determine the value of the railways: the cash investments made in the railway versus cash value of the assets; the current cost of reproducing the railway versus the value of the outstanding liabilities; and the amount a purchaser might offer based on present and potential earning power. All three calculations of value led to negative results for the CNoR. The

⁵⁰ *Royal Commission 1917*, xxi.

majority report concluded that as the Canadian government had assumed responsibility for the bulk of the capital and will be continuing to cover CNoR deficits for years to come, “it seems logically to follow that the people of Canada should assume control of the property”.⁵¹ The Commission felt, however, that there was significant value in the CNoR and arbitration should determine a cash amount to be distributed amongst the shareholders.

Drayton and Acworth concluded that the GTR was in even worse financial shape than the CNoR with liabilities being greatly in excess of assets. In addition to the government assuming ownership of the GTR, they felt that an appropriate compensation was “an annuity based on a moderate but substantial proportion of \$3.6 million [which was an average of the last ten years of GTR dividends]” to be divided amongst the GTR shareholders.⁵² Other recommendations of the majority report included: the CPR was a successful enterprise and should continue to operate independently; a new Public Board be established to create the Dominion Railway Company to oversee and operate the GTR/GTP and the CNoR; the Intercolonial and National Transcontinental should be transferred to the Dominion Railway Company; and the government

⁵¹ *Royal Commission 1917*, xliii, xliv.

⁵² *Royal Commission 1917*, lxxv, lxxxviii.

should assume the responsibility for the interest payments of the Dominion Railway Company.⁵³

A.H. Smith submitted his minority report which offered a different point of view regarding solutions for the 'railway problem' in Canada. Smith noted that "as far as I know, Canada's policy for years appears to have been to promote the public welfare by means of building or aiding in the building of transportation lines throughout the Dominion." He criticized the lack of regulation which resulted in needless duplication of lines. Smith attributed a large part of the blame for the 'railway problem' to governments whose indiscriminate use of bond guarantees removed the natural check which required business proposals to demonstrate commercial viability before financial investments were approved. Smith favoured the government's forgiveness of the GTR/GTP debts, allowing them to withdraw from their contracts and seek out a new business model. He was clear in his minority position asserting that "I am unable to join my colleagues in their recommendations...My friends seem to avoid government ownership and operation...but propose a plan which contains so many elements of danger in the direction which is sought to be avoided that I am unable to join them."⁵⁴ Commissioner Smith's recommendation was for the GTR to operate the eastern lines and for the

⁵³ *Royal Commission 1917*, lxxxvii.

⁵⁴ *Royal Commission 1917*, xcvi, ci.

Canadian Northern to run the western lines, with the government leasing the section from North Bay to Winnipeg to either company.

The split decision offered by the Commission was indicative of the public mood and in fact, reflective of the attitudes which caused the 'railway problem' to begin with. An open democracy tries to avoid authoritarian styles of government. Governments want to give the electorate what they desire and in the early twentieth century they yearned for more and more railways. At some point, however, governments must also embrace the responsibilities of prudent management of the economy. Canadians were experiencing the difficulties resultant from an unrestrained approach to railway development. The majority report correctly identified the need for the federal government to temporarily, at least, nationalize the financially unstable railway companies and impose a control framework which would work towards their future financial independence while protecting railway services for Canadians.

The majority report supported the government-ownership inclination in the tradition of the Borden-Maritimes where railways were seen as government projects 'in the public interest'. The minority report, however, represented the modern post-Industrial Revolution world, in which the business sense of individual capitalist firms could and should be trusted as Adam Smith's 'invisible hand', to ensure that competition and the profit

incentive dictate that only economically viable businesses survive. While Borden believed that if the government was going to substantially finance a railway project, it might as well own the project, Laurier favoured public support of private enterprise without ownership. McBride also had no interest in provincial ownership of the large railway projects which his government supported financially. Both Laurier and McBride believed in the ability of private firms to do a more efficient job than government of building, owning and operating railways.

The CNoR transcontinental was finished on January 23, 1915. Completion had only been possible, however, by the CNoR in 1914 giving the federal government control of forty percent of the CNoR shares, in return for financial aid. Even with this assistance, by the end of 1914 the CNoR had defaulted on its interest payments and was unable to cover its operating expenses. Full government ownership of the CNoR appeared to be inevitable. The continuing losses of the Intercolonial Railway in the Maritimes were but one example of the inability of governments to build and operate railways efficiently. Because of the multiple and competing demands which exerted pressure on government decisions, private companies were best placed to apply a single-minded determination to exact profits from railways. While there is a social value to society in railways which private companies cannot capture and therefore cannot acknowledge when deciding whether to proceed with a railway project,

the best role for governments is to financially support private companies so that the social value can be obtained without it presenting a barrier to private construction. Richard McBride was not able to provide the necessary funding to make the PGE cost neutral from a social point of view. As early as 1911, McBride suspected that the bonds would be insufficient to pay for construction and told F,W&S, if that were the case, he would try to help out. McBride, therefore, was taking large inappropriate risks in initiating the PGE with inadequate funding.

In 1918 BC was confronted by the same issue of government ownership of a railway which faced the federal government. The PGE Company was insolvent but the BC government was legally responsible for the PGE railway bonds. BC had the option to allow the PGE to close down its operations or for BC to assume ownership and operation of the railway. To let the PGE disappear would not remove BC's financial obligations but to continue operations would involve the accumulation by the PGE of further debt. For a private company the route would be clear and choices non-existent. For the BC government alternatives existed but were onerous. Ultimately, BC chose to allow the PGE to continue operating for the social benefits accruing to the citizens of the province and possible future growth in commercial traffic.

The Canadian Northern Arbitration

As recommended in the majority report of the 1917 Royal Commission on Railways and Transportation, the Canadian government determined that it would acquire a controlling interest in the Canadian Northern Railway (CNoR) with the purchase of 600,000 shares. The price for the transaction was to be determined by arbitration but a maximum value of \$10 million was placed on the arbitration award. The Canadian Northern Arbitration Board began deliberations on January 28, 1918 with a membership consisting of Sir William Ralph Meredith, Chief Justice of Ontario, Robert E. Harris, Justice of the Supreme Court of Nova Scotia, and Wallace Nesbit, former Supreme Court of Canada judge.⁵⁵

The question of misappropriation of railway funds by CNoR's Mackenzie and Mann for their own personal use was dealt with early in the proceedings. Lawyers for the CNoR pointed out that when the CNoR asked the Government for \$45 million in aid in 1914, a full audit of the company was carried out and it confirmed that "no construction profits had been made by Mackenzie & Mann."⁵⁶ After further discussion and examination of witnesses, the Board of Arbitration concluded that the charges of improper use of construction money by Sir William Mackenzie or Sir Donald Mann were unfounded.

⁵⁵ *Canadian Northern Railway Arbitration 1918* (Ottawa: Government of Canada, 1918), 4.

⁵⁶ CNoR Arbitration, 105.

Mackenzie and Mann were portrayed as economical in their running the CNoR. They did not take managerial fees or salaries from the company but looked to the common stock they owned for their compensation. CNoR construction costs from the BC border to Vancouver were \$88,629 per mile while the Grand Trunk Pacific from the same spot to Prince Rupert cost \$112,000 per mile. In the east, CNoR per mile costs from Port Arthur to Montreal were \$52,602 while those of the National Transcontinental were \$93,735.⁵⁷ CNoR, like the PGE could not, however, avoid the enormous burden of fixed costs. Interest charges increased by more than 50% from 1912 to 1917 going from \$1,068 to \$1,571 per mile in that period or from \$7 million to a projected \$15.5 million in 1918. Nonetheless, Chief Justice Meredith felt that the CNoR “had been well laid out, [and] well built...[and] that it is to a large extent serving at present a country that needs it” and felt that it would be “extremely difficult to imagine that such a system is going to prove to be worth nothing?”⁵⁸

One of the factors which the Board of Arbitration would use in determining the shareholders' compensation was the 'reproduction valuation' of the CNoR. Professor G.F. Swain of Harvard University completed a valuation minus depreciation assessment for the Royal Commission in 1917. The Arbitration Board discussed whether an amount for depreciation should be subtracted in the valuation as this would

⁵⁷ CNoR Arbitration, 5686, 5688.

⁵⁸ CNoR Arbitration, 6319, 6320.

negatively affect the arbitration award. Professor Swain explained to the Board that a trunk line railway can never be in a new condition as it takes years to build and by the time it is complete the first sections have lost some of their value because of the accumulation of several years of depreciation. A depreciated value could not cover the cost of reproducing the railway because of the greater expense of new materials but there was no equivalent reduction included in Swain's assessment in the dollar cost of new materials for construction.

To be financially successful at the Arbitration hearings, the CNoR would have to demonstrate that its value was greater than its liabilities. CNoR lawyers challenged the government's depreciation figure of \$54 million and argued that it should be reduced to \$13 million.⁵⁹ A smaller depreciation figure would significantly increase the consolidated value of the CNoR and thereby augment the likely amount of the arbitration award. CNoR's lawyers also noted that in determining the value of CNoR assets, Sir Henry Drayton (Royal Commission on Railways 1917) "erroneously omitted \$52 million that was found by the government's own experts". Even though Professor Swain and government experts established that the Drayton-Acworth report had made serious calculation errors in determining the value of the CNoR⁶⁰, many Canadians had the impression that Mackenzie and Mann had made

⁵⁹ CNoR Arbitration, 5374, 5388.

⁶⁰ This point was not disputed by government representatives at the Arbitration hearings.

large personal fortunes from the construction of the CNoR and that its stock was worthless.⁶¹ The most contentious aspect of the Arbitration hearings remained the method used to ascertain the value of the CNoR stock. While Drayton-Acworth had used replacement cost of the railway minus depreciation, Mackenzie and Mann and A.H. Smith (the author of the minority report of the Royal Commission 1917) favoured an estimation of potential future earnings and profits.⁶²

The conclusion of the panel of Arbitration was that the privately held CNoR stock had a value of \$10.8 million. In addition it determined that the railway's assets were at least \$25 million greater than its liabilities even after \$40 million was deducted for depreciation. The arbitrators offered no explanation as to how they arrived at their figures.⁶³ The federal government distributed \$10 million among the shareholders and in September 1918 nationalized the CNoR.

The financial failure of both the Grand Trunk Pacific and Canadian Northern railways was a painful lesson for Canada to learn. For a country so reliant on transportation to surmount its physical barriers, the advent of railway technology seemed like a magical solution to an age-old problem. It is not surprising then, that so many people believed a continuous increase in railway mileage could only be better for the

⁶¹ CNoR Arbitration, 2708.

⁶² CNoR Arbitration, 1809.

⁶³ CNoR Arbitration, 532.

country. Through all the struggles of the 1910s in attempts to come to terms with the reality of massive over-capacity, the social value of railways was often alluded to but never clearly defined and certainly not quantified. Social value was the object of government interest in railways but was an impediment to private participation. Governments wanted to build railways for the benefits to society, whereas private companies, understandably, only considered profit margins. While governments realized that they needed to financially support private companies in order to convince them to become involved in a large proportion of railway construction, governments were not able to apply the sort of realistic cost-benefit analysis to a given project which a private concern would bring to bear. The unfortunate result was thousands of miles of railway built ahead of demand with no possibility of generating an income which could even cover expenses.

Chapter 5: Premier Sir Richard McBride

Richard McBride was the Premier of British Columbia for twelve years from 1903 to 1915. During that time he was the dominant political force in the province, winning an increased majority in each of four successive elections. McBride made the best of opportunities offered to him, but sometimes had difficulty distinguishing opportunity from mere possibility. His greatest strength was his unrelenting optimism and boundless confidence in the future of British Columbia. Paradoxically, this attribute was also a fatal flaw.

In times of prosperity, McBride moved forward easily with plans for promoting prosperity in British Columbia and even when promoting questionable decisions, his sunny attitude often carried the day and objectives were accomplished. When 1912 brought a major negative change in investment conditions, however, this should have triggered realistic re-assessment of what was now possible and an appraisal of what plans might need to be modified or abandoned but this did not occur. During an economic downturn there quickly emerges a juncture at which the law of diminishing returns demands a determination to suspend some activities, postpone new initiatives and husband resources for a future

day. McBride seemed unable to recognize the point at which retreat was the best course of action.⁶⁴

Prior to joining the Canadian Confederation in 1871, British Columbia was a colony of Great Britain, administered by a British Governor and without full responsible government as had been achieved a generation earlier in eastern Canada. In the early twentieth century, therefore, BC was still a very young province which, on achieving provincial status and electing a premier and representative assembly, was expected to exhibit the same sort of fully democratic society which had taken other parts of Canada decades and Britain hundreds of years to develop. While both Canada and BC had the advantage of looking to the democratic achievements of the mother country and thereby avoiding some growing pains, each expression of democracy has unique features which are appropriate and necessary for its functioning and development based on its people, culture and land. The BC Legislative Assembly brought together representatives from regions with huge topographic, demographic and climatic differences and, therefore, large variations in needs and demands. Consequently, political relationships were tenuous and fragmented leading to a revolving door of short-lived governments.

⁶⁴ An example of McBride's questionable optimism was his reaction to the PGE's ongoing financial difficulties in the spring of 1914. Rather than retrench, McBride decided to announce an extension of the PGE to the Peace River country.

Concurrent with the desire to initiate industrial growth, new provinces in Canada wanted to develop modern political structures as quickly as possible, often at the expense of a maturation period during which procedures would normally be established to handle problematic situations. BC moved from colonial control to party politics in less than thirty-two years. Similar developments required much longer periods of incubation in the creation of other democracies. Such headlong progress in BC would be hailed by the electorate as efficient, for it bypassed a lengthy nurturing process which, in an age of industrial obsession, an impatient citizenry would see as an unnecessary wastage.

After Richard McBride won his first election in 1903 he governed with the advantage of a new political weapon, as yet untested in BC politics. The introduction of party politics meant that the premier of British Columbia could now rely on members of the governing party in the Legislative Assembly to vote as a block in support of legislation approved by the Premier. The power of party politics gave McBride a new resource unknown to the previous fifteen premiers. He now had the power to create an agenda, secure in the knowledge that party discipline would ensure the members of his caucus would support his legislative proposals.

The yet to be developed procedures with the emergence of party politics in BC were appropriate checks and balances, as contextual situations revealed the need to control aspects of new powers. Certainly,

a Premier should be elected as the leader of a province with the authority to provide vision and leadership. Democracy, however, demands that such power be circumscribed to neutralize the danger of human fallibilities. Only the passage of time can distil appropriate measures to constrain the power of governments. Although ideological arguments may point to Executive Councils and other advisory groups, both elected and appointed, State power in BC was invested in individuals such as Colonial Governors and Provincial Premiers. In theory the powers of such individuals was intended to be considerably limited but in practice that was much less the case. The constraints offered by the Colonial Office and the Crown were far away in space and time from BC Governor James Douglas (serving from 1858-1864), and by the twentieth century, the theoretical powers of Lieutenant Governors to disallow provincial legislation had relatively little influence on the predominance of Richard McBride's agenda.

The real check on government decisions was fiscal and although the temptation was always there to try, in the short run, to ignore that limitation, ultimately debts must be addressed. The McBride era was the beginning of the development of a new system of constraints on executive power accruing from party politics. In the meantime, McBride would have a virtual free rein to make whatever decisions and commitments he wanted to support his agenda. McBride's boldness

increased as the strength of his opposition decreased. While in early 1909 he introduced a major plan to commit tens of millions of dollars' worth of guaranteed bonds to the Canadian Northern railway, he did not launch his scheme until he received a mandate from the people in the subsequent election, which provided him with a huge victory and an emasculated opposition of 4 members. By 1912, however, McBride felt no need for permission and legislated his flawed plan for the PGE before consulting the people in what would be his fourth straight majority election win, which gave him more than twice as many votes as his opposition and saw his critics dwindle even further to only two independents.

The Politics of Richard McBride

Sir Richard McBride was both the first BC-born premier and, having achieved this office at the age of thirty-two, remains the youngest person ever to become Premier of British Columbia. He was born on December 15, 1870 in New Westminster, British Columbia, trained as a lawyer in the Maritimes and was first elected to the Legislative Assembly of BC in 1898 when Charles Semlin became Premier of the Province. McBride represented the riding of Westminster-Dewdney which was created in 1894, extending from the Maple Ridge area in the west to Chilliwack in the east, north to Harrison Hot Springs and south to the US border. Though the

constituency name was shortened to Dewdney in 1903, its boundaries remained unchanged until after the 1986 provincial election.

McBride quickly gained a reputation for cheerful determination in Legislative Assembly but, as with most administrations since BC joined the Canadian Confederation in 1871, the government of Charles Semlin was soon defeated. After McBride's re-election in 1900, Premier James Dunsmuir invited McBride to enter his Cabinet as Minister of Mines. Although his affable nature enabled McBride to interact easily with the rich or the working class, some questioned the appropriateness of his appointment as Minister of Mines. Both McBride's friends and enemies were critical of his lack of knowledge about the mining industry and McBride himself may have sensed his lack of affinity for the mines portfolio, or perhaps a gathering political storm. Either way, McBride, a ready opportunist, resigned within months saying that Dunsmuir had betrayed him by joining forces with Joseph Turner, a member of the Opposition. McBride became a leading member of the Opposition until another crisis toppled Dunsmuir's government in June 1903 and McBride was asked to form a new government. British Columbia was ready for a Premier with a grand vision for developing the immense resources of the province, not realizing the dangers inherent in McBride's frequent inability to temper optimism with pragmatism.

McBride successfully led the Conservative Party of British Columbia to power in October 1903 and while the discipline of party politics allowed McBride to assert his legislative vision in a way no former premier of BC had been able to accomplish, it also brought stability to the development of government structures in BC. Before Richard McBride became premier, BC had experienced fifteen premiers in twenty-one years but with McBride the province had one premier for the following twelve years. While change is a necessary and valuable part of the strength of democratic structures, the replacement of a provincial government and its leader every seventeen months, on average, was not good for continuity or systematic maturation. By 1903, fully democratic government in British Columbia had only been in existence for twenty-one years and the province was still developing the policies and procedures appropriate for its people, its cultures and its geography. Constant changes in government only retarded that process.

McBride determined that his first goal as Premier would be to put British Columbia's finances on a solid footing. After the election he discovered that the province was close to bankruptcy and was experiencing difficulty in acquiring credit from the financial sector. He selected R.G. Tatlow as his Finance Minister who immediately set about reorganizing provincial finances in order to eliminate continuous deficits and create a sustainable economic basis for BC's future. He increased

taxation levels for companies that were profiting from the resource sector and reduced spending by government ministries. Municipalities were required to contribute a larger share towards the cost of local schools and road infrastructure, and licensing fees in the mining and lumber industries were increased. All of these measures, in addition to a booming economy, enabled the government to greatly improve BC's finances. In fact by 1910 the province had an accumulated total surplus of over \$8 million and could have written a cheque to completely pay off all its prior accumulated debt, if it so desired (see Table 5.1 BC Revenues and Expenditures 1902-1918 following).

McBride had the good fortune to begin his tenure during a time of increasing prosperity. The fishing and lumber industries were expanding, mining and smelting operations were growing in the Kootenays and property values were soaring in Vancouver. In 1905 McBride visited the likely route of the Grand Trunk Pacific railway through the Skeena River area, Okanagan Valley communities and the Kootenays where commerce only seemed limited by transportation parameters. McBride was convinced that railways were the key to developing the vast resources of the province. While not yet ready to make any large promises for railway construction, McBride kept in contact with railway projects.

Table 5.1 BC Revenues and Expenditures, 1902-1918

(from Annual Reports, Legislative Library, Victoria, BC)⁶⁵

Fiscal Year	Net Revenue	Net Expenditure	Deficit	Surplus
1902/1903 July1- June 30	\$2,044,630.35	\$3,393,182.25	\$1,348,552.10	
1903/1904	\$2,638,260.68	\$2,862,794.00	\$224,534.68	
1904/1905	\$2,920,461.71	\$2,302,416.84		\$618,044.87
1905/1906	\$3,044,442.49	\$2,328,126.27		\$716,316.22
1906/1907	\$4,444,593.81	\$2,849,479.97		\$1,595,113.84
1907/1908	\$5,979,054.96	\$3,686,708.76		\$2,292,346.20
1908/1909 July1-March 31	\$4,664,500.99	\$3,741,143.44		\$923,357.55
1909/1910 Apr1- March 31	\$8,874,741.94	\$6,382,963.27		\$2,491,778.67
1910/1911	\$10,492,892.27	\$8,194,802.95		\$2,298,089.32
1911/1912	\$10,745,768.82	\$11,189,024.35	\$443,255.53	
1912/1913	\$12,510,213.08	\$15,412,322.48	\$2,902,109.40	
1913/1914	\$10,479,258.74	\$15,762,912.48	\$5,283,653.74	
1914/1915	\$7,974,496.46	\$11,943,267.00	\$3,968,770.54	
1915/1916	\$6,291,693.60	\$9,880,062.37	\$3,588,368.77	
1916/1917	\$6,906,783.63	\$9,079,217.70	\$2,172,434.07	
1917/1918	\$8,882,846.02	\$8,073,565.17		\$809,280.85

In the late 1890s, further development of the mineral deposits in the Kootenays had been predicated on the expansion of the railway infrastructure. J.J. Hill, President of the Great Northern Railway (GN) of the United States, sought to take advantage of the mineral wealth by building branch lines into southern BC while the CPR, the federal government and

⁶⁵ All tables are in current dollars/pounds unless otherwise noted.

the BC government were anxious to prevent the diversion of the mineral wealth of the Kootenays to smelters in the northern US. The CPR which already operated a trunk line from Calgary to Vancouver offered to build a more southern railway through the Kootenays if Ottawa would provide a subsidy. Laurier was interested as he could visualise using a new railway to gain favour with both Kootenay miners and prairie farmers.

Also, in 1897 Laurier entered into a contract with the CPR for the construction of the Crow's Nest Pass railway. He agreed to a subsidy of \$3.4 million to assist the CPR in building a line from Lethbridge to Nelson in order to capture the lucrative mineral trade through the area and prevent the American railway company from receiving the benefits of the freight traffic. The CPR in turn, agreed to reduce rates on the transportation of two commodities which were of significant importance to voters living in the prairie provinces. The first commodity was grain which was being transported east to the Lakehead for export and the second consisted of settlers' effects including agricultural implements, farm supplies and household furniture, shipped to the west from Ontario. McBride saw the CPR as a potential partner in his vision for southeastern BC which included a new rail link between the Kootenays and Vancouver.

By 1906 McBride felt ready to go to Ottawa to demand that Prime Minister Wilfrid Laurier agree to 'better terms' with regard to the

agreement made between BC and the federal government on the province's entry into Confederation in 1871. BC had agreed to join Canada based on an offer of economic and political support, including John A. Macdonald's promise to build a transcontinental railway within ten years. McBride made the argument that the rugged geography of British Columbia made vast areas disproportionately more expensive to develop than was the case in other provinces. Laurier agreed but McBride, unhappy with the level of compensation that was being offered to address the issue, walked out of the talks and returned to BC.

While McBride was seeking an increase in the financial payments to BC, he was also exploiting the Ottawa negotiations as a national stage to highlight BC. In this he sought to use the years before BC was ready to begin large-scale railway building to raise the profile of BC as Canada's vibrant and vital portal to the Pacific. He wanted recognition for the role that his province played in Canada and was thereby promoting a greater influence for BC in Canada's national development.

Soon after he returned, frustrated by his experience in Ottawa and eager to move forward with railway development, McBride considered the possibilities for rail lines in southern BC. The CPR was already involved in a number of rail lines including the Crow's Nest Pass railway. Despite the objections of his Attorney General, Charles Wilson, McBride rather impulsively decided to grant a long-standing controversial claim by the

CPR for title to two blocks of land to complete the land subsidy for one of its Kootenay lines. The CPR had been applying pressure to Ottawa to gain the rights to valuable pieces of land but the federal government felt that the CPR was asking for more than its entitlement. With this action McBride wanted to remind the national government of BC's provincial authority and also wanted to nurture a relationship with the CPR which was vital to his railway plans.

Also in 1906 McBride fell subject to corruption charges in relation to the land grant of Kaien Island to the GTP in 1904. The GTP had asked the provincial government for a land grant for its Pacific terminus and McBride decided to require that the company begin construction at the Pacific seaboard in return for the land. The irregular and secretive manner in which McBride had conducted the transfer of Kaien Island to the GTP, however, had exposed him to charges of corruption. While an investigation by the Legislative Assembly cleared the government and McBride of personal wrongdoing, his association with speculators in this process brought into question his judgement and his ability to make the responsible managerial decisions required of a premier.

After a second successful election for his Conservative Party in 1907, McBride saw his strengthened mandate as support for his continued dispute with Laurier (see Table 5.2 BC Election Results 1871-1920 following). In order to realize some satisfaction in his quest to obtain 'better terms',

McBride decided to travel to London to appeal directly to the Imperial authorities. Working with Winston Churchill, who at the time was Under Secretary of State for the Colonies, McBride was vindicated in his belief that subsidies to BC from Ottawa could be re-negotiated.

McBride made numerous trips to England and got on extremely well with British royalty and the upper echelons of English society. After working with Churchill on the 'better terms' issue, McBride continued to cultivate their friendship each time he visited England. In a personal letter to McBride dated December 26, 1911, Churchill expressed his appreciation for the gift of a grizzly bear skin but "still more for the friendship of which it is a token, which I highly value". Churchill, now First Lord of the Admiralty, also noted in his letter that "it is only by the strength of our fleet...that the peaceful and free development of the component parts of the British Empire will be secured" and asked McBride to tell his political contacts in Canada's national government that despite the difficulties and limitations" of Ottawa's naval position, Churchill would work to make Canada's "naval policy a brilliant success". Another letter dated December 7, 1913 further increased the pressure on McBride to try to influence his Conservative friends in the federal government of Robert Borden to hasten the arrival of Canadian naval support for England.

Table 5.2 BC Election Results, 1871-1920

(www.elections.bc.ca)

Election Year	Electoral Districts	Members Elected	Votes Polled
1871	12	25	3,804
1875	12	25	5,656
1878	12	25	6,377
1882	13	25	7,358
1886	13	25	10,941
1890	18	33	19,517
1894	25	33	31,085
1898	29	38	34,996
1900	29	38	47,184
1903	34	42 Conserv 22 Lib 17 Other 3	60,120
1907	34	42 Conserv 26 Lib 13 Other 3	63,205
1909	34	42 Conserv 38 Lib 2 Other 2	101,415
1912	34	42 Conserv 39 Lib 0 Other 3	84,529
1916	39	47 Conserv 9 Lib 36 Other 2	179,774
1920	39	47 Conserv 15 Lib 25 Other 7	354,088

“Churchill stated that “Admiralty interests have suffered very much by the delay and uncertainty of the Canadian ships” but he also seemed to refer to solutions that McBride may have offered when he said “I trust that

action may proceed along the lines you indicate." In addition, Churchill's First Civil Lord of the Admiralty, Sir Francis J.S. Hopwood, wrote to McBride on January 3, 1914 asking about the Canadian battleships and warning that the British government could be defeated over naval funding.⁶⁶

McBride appeared to derive great satisfaction from helping people to achieve their goals, ranging from settlers in the interior desiring a rail link to Vancouver to senior British government officials seeking to influence Canadian federal government policy. Whether it was appropriate for McBride to involve himself as an intermediary in naval policy issues between the British and Canadian governments does not seem to have concerned him. This experience may have encouraged him in other questionable decisions, one being the purchase of two submarines for Canada, using provincial money without the approval of the BC Legislative Assembly and without federal authority. These actions also presage later concerns about his judgement and willingness to circumvent rules when, under pressure from others, he ignored a BC statutory law in releasing the balance of the PGE bond money before the required work had been done.

McBride's instincts led him to exploit his British connections for their political value but at the same time his sensitivity to the prejudices of his

⁶⁶ BC Provincial Archives, 91-3433-471 McBride's Personal Letters: from Winston Churchill December 26, 1911 & December 7, 1913; and from Sir Francis J.S. Hopwood January 3, 1914.

electorate led him to introduce legislation such as the racially discriminatory Natal legislation which was repeatedly disallowed by Ottawa at the behest of the British Foreign Office. McBride had always been in favour of laws which restricted the freedom of Asian immigrants and forbade their employment in the public sector but this was difficult to reconcile with his allegiance to the British government which wanted to avoid racial tensions because of its political and economic ties to the Far East. In 1906 another provincial Natal Act was disallowed leading to the formation of an Asiatic Exclusion League in Vancouver in angry response. McBride was also faced with conflicting paths during the building of the PGE when he was determined to extend the system of railways in BC in order to satisfy the wishes of BC voters, even in the midst of a recession and a world war when BC's financial position was becoming imprudently over-extended.

In 1909, after years of surpluses during which he consistently responded negatively to the railway schemes of others, McBride was ready to initiate his own railway plans for the province. He had spent much of 1908 touring the province looking, listening, and talking while observing BC's huge store of resources which if exploited could provide the wealth needed to create a prosperous province. During these journeys McBride became convinced that the time to act on his plan for transportation development was quickly approaching. Richard McBride

was a consummate politician acknowledging equally both the desires of northern settlers and the aspirations of city dwellers. His oratory was a perfect complement to railway mania, offering the promise of railways and assuring the electorate that his government would help them to realize their dreams for the future.

The Railway Plans of Richard McBride

In 1909 McBride announced that the government was going to assist a third transcontinental railway company in completing its line through BC. The final 600 miles of the Canadian Northern Railway (CNoR) would be built from the Yellowhead Pass in north-eastern BC to Kamloops and then to Vancouver. McBride offered a government guarantee of \$35,000 per mile to the CNoR. His new railway policy also included the government's contract with the proposed Kettle Valley Railway (KVR) which provided a subsidy of \$5,000 per mile for 150 miles between Penticton and Nicola. No Asiatics were to be employed in construction. This stipulation, however, was not in the contract because it would have been immediately disallowed by the federal government so separate agreements on the subject of Asiatic exclusion were signed by all parties. McBride secured acceptance by the CNoR of provincial control of its rates and also insisted that the CNoR line in BC be incorporated provincially as the Canadian Northern Pacific Railway. He also obtained their agreement to "not at any time apply to be declared 'a work for the

general advantage of Canada', thus avoiding the jurisdiction of the federal Board of Railway Commissioners."⁶⁷

R.G. Tatlow, Minister of Finance and F.J. Fulton, Minister of Lands and Works, disagreed completely with the commitments of money to McBride's railway policy and resigned from his Cabinet. The *Vancouver Sun* reported the resignations on October 22, 1909 saying Tatlow "was in perfect accord with Premier McBride with the single exception of the railway policy...[as Tatlow] thought that the assistance proposed to be granted to the Canadian Northern [CNoR] was too great".⁶⁸ Fulton believed that "railways will be built in the province without government assistance wherever conditions warrant". He maintained that the prevailing economic conditions were advantageous for the CNoR to build a line to the coast and "in consequence, in this case, government assistance is not required."⁶⁹

Tatlow was pursued by reporters for further explanation of his resignation but he avoided additional comment. An editorial in the *Victoria Daily Times* on November 8, 1909 criticized the ex-Finance Minister's assertion that "his resignation from office does not carry with it the obligation to expose and oppose his late colleagues". The editorial scolded Tatlow saying that "the matter is a choice between performing

⁶⁷ *Statutes of British Columbia Chapter 34, 1912, 196.*

⁶⁸ *Vancouver Sun, (October 22, 1909), 1.*

⁶⁹ *Vancouver Province, (October 22, 1909), 1.*

what he knows to be his duty to the province at large and shielding by silence the government which he believes is going to take a false step."⁷⁰

Finally on November 18, 1909, Tatlow explained the circumstances causing his resignation. The *Victoria Daily Times* reported that "the McBride-Bowser-Mann railway policy was never considered at a meeting of the Executive Council". Tatlow told the story of what transpired to a colleague, W.H. Langley, and gave him permission to make it public. The Premier had approached Tatlow on October 19, 1909 and said "I hold in my hand a contract I have made with Mackenzie and Mann; you can take it or leave it". Tatlow felt that "the contract was an outrageous one; that it was absolutely unnecessary; that it would involve the province in financial disaster; that he could not swallow it".⁷¹ The resignation of two senior members of Cabinet gives one pause to wonder about the wisdom of the leader of a province with modest financial means, using the illusory power of bond guarantees to gain a large railway infrastructure which, if the province were to be called upon to meet its underwriting responsibilities, could result in several generations of repayments.

In answering criticisms about the financial risk of the government's guarantee of the railway bonds, McBride pointed to Manitoba where the government had used bond guarantees for several years without having to honour its promise in the case of default. In addition, he explained the

⁷⁰ *Victoria Daily Times* (November 8, 1909), 4.

⁷¹ *Victoria Daily Times* (November 18, 1909), 1.

safeguards the government had put into the agreement including holding the mortgage on the CNoR as well as receiving from CNoR “securities to the extent of a million dollars”. McBride concluded the BC government would ensure that the CNoR would be able “to complete the line and place it in operation without the sacrifice of a single dollar of public funds.”⁷²

In October 1909, McBride called an election to gain the approval of the electorate for his railway policy of supporting the CNoR and KVR construction. John Oliver was the new leader of the Liberal party and campaigned vigorously against McBride, seeking to outdo the Premier's obvious political success with railways by promising an even greater mileage of new railways to more parts of BC than that which had already been pledged by the Premier. McBride won an increased majority in the 1909 election with thirty-eight seats against two Liberals and two Independents.⁷³ Ironically, Oliver later became Minister of Railways in the government of Premier Harlan Brewster and an outspoken critic of the failure of the Pacific Great Eastern Railway (PGE) which led to the establishment of a Select Committee investigation into the PGE Railway in March of 1917.

The seemingly unending optimism of the boom years since McBride became Premier had taken a negative turn by late 1911. In December of

⁷² Richard McBride, Speech by McBride on the Second Reading of CNoR Bill, 1913, 1,8.

⁷³ www.elections.bc.ca

that year William Mackenzie, a partner in the Canadian Northern Railway (CNoR) was reprimanded by the *Financial News* of London for glutting the stock market with his sale of \$35,000,000 of federally-guaranteed debentures for railway construction. "Mackenzie has quite inadvertently, we feel sure, done Canadian interests a distinctly bad turn". He was urged to consider that "the loyal Canadian puts Canada first and the other interests...in second place".⁷⁴ Then in 1912, the CNoR, GTP and CPR sold more than \$300 million of guaranteed bonds and debentures which drew the rebuke that "Canadian railway promoters were borrowing too much".⁷⁵ There was a general feeling on the London financial markets that Canadian governments were dangerously over-extending their credit for railway construction.

Normally, financial markets can rely on the self-interested behaviour of investors to regulate supply and demand so that a bond will only be purchased if its price is judged a worthy reflection of its value. The fact that Canadians were scolded for 'borrowing too much' would seem to be an indication of a more serious unspoken concern with the nature of government-guaranteed bonds. The railway paper being sold did not consist of ordinary bonds. The sale was of bonds guaranteed by provincial and federal governments and as the markets began to soften, there emerged a growing worry that these railway bonds may not be based

⁷⁴ *Financial News* of London, England, December 29, 1911.

⁷⁵ *Financial News* of London, England, December 15, 1912.

upon sound investments. During prosperous times, it was not a concern, for government credit was the strongest possible guarantee. It was unthinkable that one of the governments in Canada could fail. During desperate economic times, however, the impossible became a possibility.

Historian Patricia Roy asserts that by focusing on balancing the budget and putting aside surpluses between 1903 and 1909, McBride had established himself as a careful administrator. During that time he also demonstrated internal strength by rebuffing the temptation of railway plans suggested by others. By 1909 however, McBride had become a victim to the railway mania prevalent throughout the province. Roy comments that "By allowing himself to get caught up in the railway building mania of 1909 to 1912, McBride revealed that he was, after all, a very ordinary politician".⁷⁶

Although acknowledging McBride's careful stewardship of BC's return to surplus budgets and his significant railway initiatives, Roy labels him an 'ordinary politician'. These observations seem to lack consistency. Before the premiership of Richard McBride, BC had endured more than twenty years of ordinary politicians who managed to achieve very little of note, although the true potential of many of them was probably constrained by the lack of a political party structure. The presence of party discipline gave McBride the confidence to define a vision for the

⁷⁶ Patricia Roy, "Progress, Prosperity and Politics: The Railway Policies of Richard McBride" *BC Studies*, 47, (1980): 9, 28.

province and take action to achieve the necessary goals, secure in the support of the caucus. After initiating and directing the successful implementation of party politics in BC in 1903, McBride then made predictable use of party discipline to inscribe his vision of the future of BC upon the administration of the provincial government. As an elected politician, he was a visible manifestation of the wants and needs of the people of BC. Railway mania was a feature of the time in which he lived with governments all over North America and Europe feverishly planning and building railways. While it is true that he was assisted by a prosperous world economy at the height of his surpluses, he should not be additionally criticized for taking advantage of every tool available to him in attempting to improve the welfare of the people of BC. 'Ordinary politicians' do not have the drive, optimism or the leadership skills which McBride displayed while attempting to actualize his plan for the economic development of British Columbia. His flaw was his over-optimistic refusal to accept the reality of an economic downturn and modify his railway plans to reflect reduced possibilities.

BC business and community organizations, as well as the general public, were in favour of increasing the railway infrastructure as soon as possible. Entities such as the Vancouver Board of Trade supported both commercial and community pressure groups. An example is the Board meeting on February 6, 1906 during which they met with residents of the

Trout Lake area, just outside Vancouver. The CPR was delaying on a promise to build a line from Trout Lake to Vancouver, saying it planned to ask Ottawa for an extension to the CPR charter in order to build the line. Trout Lake residents wanted the line to be built immediately and the Board of Trade agreed to support them. In 1906 the Board retained the services of former BC Premier, Joseph Martin to present the case at the Railway Commission "with regard to the demand of the merchants of Vancouver for an equalization of the freight rates into the Northwest as between Vancouver and Winnipeg." On March 1, 1906 the Board decided to increase the pressure on the CPR by asking the provincial government to "refrain from permitting the Columbia & Western Railway Company, subsidiary to the CPR, to make a selection of lands along its line until the CPR gives Vancouver fair freight rates into the Northwest".⁷⁷ This request was ignored as McBride wanted the CPR's cooperation in a rail connection between Vancouver and south-eastern BC.

The PGE and the CNoR

The Pacific Great Eastern (PGE) railway was announced as prices had begun to soften and sources of credit harden. On February 22, 1912 McBride moved the first reading of the PGE Act to create a new 460-mile railway (later corrected to 480) from Vancouver to Prince George. The passing of the PGE legislation empowered McBride to create the PGE

⁷⁷ Vancouver Board of Trade, 1906.

Company on July 10, 1912 with John W. Stewart as President and Patrick Welch as Vice-President. The construction contract was granted to Foley, Welch & Stewart (F,W&S) on September 23, 1912 without any competitive selection process. John W. Stewart and Patrick Welch were both successful and experienced railway contractors, having built sections of the Canadian Northern Pacific Railway and the Grand Trunk Pacific (GTP). Construction of the PGE began in October 1912. The PGE Company was authorized to issue thirty-year 4 percent debentures secured by a mortgage against the Company's property. Schedule A to Chapter 34 of the BC Statutes of 1912, provided the promise by the province of BC to guarantee the principal and interest of the railway bonds. Schedule A Section 9, Subsections (c) and (d) also specified that proceeds from the sale of these bonds would be paid into a special bank account in the name of the Minister of Finance, to be paid out by the government in monthly instalments as the construction of the road proceeded in "such sums as are justifiable, having regard to the proportion of work done...as compared with the whole work done and to be done thereon pending completion of the road".⁷⁸

In his February 22, 1912 speech to the Legislative Assembly about the PGE, published in *British Columbia Magazine*, McBride gave three reasons for the constructing of the PGE: "the very great development that

⁷⁸ BC Statutes of 1912, Schedule A Section 9, subsections (c) and (d), 193, 194.

is to be noted in almost every section of the province...the very obvious necessity for the provision of additional transportation facilities to assist and strengthen that development and...because of the near approaching completion of the Panama Canal [completed August 1914]". The premier then assured the Legislative Assembly that while "the growth of British Columbia during recent years has been little short of phenomenal...there is in this province nothing that may be regarded as in the nature of a boom. There is nothing in British Columbia's present growth that is of a speculative character."⁷⁹ Three years earlier in 1909, however, McBride had proclaimed that the advent of railways would double the price of real estate and urged investors "get in boys, on the city lots and acreage adjoining the projected railways".⁸⁰ McBride was counselling a fast purchase because he believed the value of the lots was going to greatly increase very soon, creating the opportunity to sell quickly and make a large profit. Therefore in 1912 it would be difficult for McBride to honestly argue that there had been no boom or speculation considering his real estate advice of 1909. The value of building permits in Vancouver reaching a new high of \$19 million in 1912, capital entering Canada increasing from \$1.2 billion in 1900 to \$3.7 billion in 1913 with building

⁷⁹ "McBride's Speech on His Railway Policy" in *British Columbia Magazine* Vancouver (February 22, 1912), 219.

⁸⁰ *Vancouver News-Advertiser* Nov 27, 1909.

values increasing 316% and land values 448% from 1904 to 1913, all lend credence to the presence of a speculative boom.⁸¹

Furthermore, while supporting the second reading of the Canadian Northern Bill in 1913, McBride announced that 'a shrinkage' in real estate values "had in fact been anticipated in 1911 and 1912 on account of the rash speculation that was going on".⁸² In essence McBride was admitting that in 1912 he was aware that inflationary land purchases were a large part of the reason for the increase in property values. The premier reversed his assessment of the economic situation as it suited his political circumstances for, although in 1909 he encouraged high-risk land purchases to increase investment, in 1912 McBride needed to calm nervousness by denying that any speculative aspect was attached to this additional new railway (PGE) but then, in 1913 he wanted to assure the voters that he had known that speculation was inflating true values by implying that he had taken this into account before committing the province to millions of dollars of new debt.

In speaking about the PGE Charter of 1912, the premier assured the Legislative Assembly that the agreement with the PGE "shall give to the province of British Columbia precisely the same securities as we received

⁸¹ J. Viner, *Canada's Balance of International Indebtedness 1900-1913* (Toronto: McClelland and Stewart, 1975), 29, 300.

⁸² Richard McBride, *Speech by Sir Richard McBride in Moving the Second Reading of the Canadian Northern Pacific Railway Bill* (Victoria: King's Printer, 1913), 4.

from the Canadian Northern".⁸³ This was not possible. Although Mackenzie and Mann of the CNoR had an interest in The Northern Construction Company (CNoR's contractors in BC) and Mann's brother was a partner,⁸⁴ the situation between the PGE Company and its contractors (F,W&S) was different. In the case of the PGE, the contractors (F,W&S) and the owners (PGE Company) proved to be one and the same group of men resulting in F,W&S being in control of both construction and ownership of the PGE Railway. Unlike the CNoR owners having some interest in the CNoR's construction firm, the contractors for the PGE Railway owned one hundred percent of the company to which they were contracted. Moreover, for a large part of the construction period, the President of the PGE, J.W. Stewart, was personally in charge of directing the building operation. This included hiring sub-contractors and the increasing of rates to be paid to F,W&S, of which he was a senior partner.

F,W&S was a construction business and this was the first time they had built a railway which they would also own. The presence of any incentive for them to build as quickly and economically as possible was, therefore, questionable. Since the owners and the builders of the PGE were one and the same, they could decide what price to pay themselves to build the line, making their profit from the construction of the line,

⁸³ "McBride's Speech on His Railway Policy" in *British Columbia Magazine*, 222.

⁸⁴ G.R. Stevens, *Canadian National Railways Volume 2 1896-1922* (Toronto: Clarke, Irwin & Co., 1962), 90, 91.

whether it was timely or slow, well done or substandard. By the time the bond money ran out in November 1915, F,W&S had made a large profit on the construction of the one-third of the line they had completed, and there was little or no incentive for them to do anything to avoid the PGE's slide into insolvency. If the PGE did become bankrupt, given the nature of government-guaranteed railway bonds, it would no longer be the PGE Company's responsibility to make the interest and principal payment due on them but that of the BC Government.

By 1913 McBride was already faced with the dilemma of companies who secure a contract with a low bid and then later request an increase in subsidy in order to complete the work. In the second reading of the Canadian Northern Pacific Railway Bill (which was the legal name of the CNoR in BC) McBride used a rather circumspect reasoning to claim that it was necessary to increase the subsidy by the BC government for the CNoR from \$35,000 per mile to \$45,000 per mile. McBride said the CNoR "had found that not only was the general cost greatly in excess of the estimates, but so excessive was the expenditure that it would be deemed a good economy to change the standardization of the line and make a road of as high, if not higher, an order as that of the Grand Trunk Pacific". McBride claimed that the CNoR now needed to match the GTP's high standard of construction as it was necessary for mountainous terrain. He rationalized further that if the province paid more to get a better road, it

could be operated more efficiently and that “having a first mortgage against a system of this kind would have far more security than was possible under the original bargain”.⁸⁵

McBride was attempting to soften the harsh reality of the enormous cost of building a dependable railroad through the mountains. He was revealing that the CNoR underestimated the cost in order to get the government subsidy but was now admitting that the line, as originally designed, would not withstand the rigours of mountainous railway operations. More money would, therefore, be needed to meet the higher standard of construction required. At first glance concerned citizens might be convinced by McBride's words that the new scenario may be to their advantage. If cost was not considered an important factor in the equation, then it could be argued that it made sense to build the line to a higher standard. If, however, a lower cost was significant in approving the original estimate, citizens were rendered an injustice as their initial support was given believing that the original cost estimate was an appropriate one for building the line.

Premier McBride's optimistic personality led him to believe that in the long-run the PGE would be successful. His main focus, then, was to do whatever was necessary to ensure that initiation of the project was accomplished. In the second reading of the Bill to support CNoR

⁸⁵ *Richard McBride's Speech, Canadian Northern Pacific Railway Bill, 2.*

construction in BC, the premier acknowledged the real financial problems facing BC in 1912 and 1913. McBride would also have been aware of the continuing economic downturn in Canada and through his close connections with Ottawa and Britain would also have been aware of the economic impact of the Balkan Wars of 1912/1913 but, even with this information he maintained that “We are approaching good times, and in this wonderful march of prosperity we shall be able to say that the Canadian Northern Pacific [CNoR] plays a prominent part”.⁸⁶ While it is understandable that McBride would not want to reduce public confidence to a lower level than it may already have been, his overly-optimistic words might have led some to make unwise investments.

Premier McBride addressed the Progress Club of Vancouver on June 25, 1913. He acknowledged that some newspapers had mentioned a ‘general depression’ but hastened to add that “I never for one moment would subscribe myself to a statement of that kind, nor would I lend any testimony that would strengthen it...this is by no means evidence that there is any distressing condition in this country”. He then assured Vancouver residents that “I am in a position to state with more assurance than ever before that the future that lies before your centre cannot be questioned”.⁸⁷ In 1914 McBride wrote an introduction for Volume 22, *The Pacific Province*, of a twenty-three volume work titled *Canada and Its*

⁸⁶ *Richard McBride's Speech, Canadian Northern Pacific Railway Bill*, 4.

⁸⁷ *Richard McBride, Speech to the Progress Club of Vancouver* (Vancouver, 1913), 2.

Provinces edited by Adam Shortt and Arthur G. Doughty. In it he prophesied that "It is no mere dream of an enthusiast to see, in the not too distant future, a province on the Pacific equal in population to the provinces of Ontario and Quebec".⁸⁸

On February 27, 1914, Premier McBride made a speech to the legislature in favour of second reading of the PGE Aid Bill 1914 which was requesting more money for the PGE and an extension of it to the Peace River area. He first excused his underestimate in the PGE Act of 1912 saying "Had I been in a position two years ago to anticipate the increased cost of construction as well as the money stringency, I might have been able to advise Parliament better". McBride assured the citizens of BC that construction was proceeding in a timely fashion and by "February 1915, the gradient between the cities of North Vancouver and Fort George will be completed, and most of it will be covered with trackage." He admitted that cost estimates for construction of the PGE had increased by more than 22% while the standard of construction had been downgraded from trunk line status to a pioneer/colonization line. Given the heavy commitments already in place to the CNoR, KVR and PGE, and the Balkan Wars of 1912 and 1913 continuing to affect investment availability, prudence should have suggested financial

⁸⁸ Richard McBride, "British Columbia in the Dominion: An Introduction" in Adam Shortt and Arthur G. Doughty, eds. *Canada and its Provinces* Volume 22. (Toronto: Glasgow, Brook & Company, 1914), 9.

caution. Instead the premier raised the guaranteed bond amounts for the PGE from \$35,000 to \$42,000 per mile.⁸⁹

McBride noted that with the new Grand Trunk Pacific transcontinental being built from the Yellowhead Pass to Prince Rupert “There was the absolute necessity imposed upon us to provide contact between the Southern zone of country and the new national transcontinental, if we proposed to extend to the people of British Columbia all the advantages that they were entitled to expect from the operation of the railroad systems of the country.” The premier also said that “If there was nothing else to justify the building of this road [PGE] to Vancouver than the construction of the national transcontinental, I think that circumstance in itself would be ample”.⁹⁰ McBride saw the PGE from as a critical link connecting the GTR/NTR to Vancouver.

While attempting to fulfill this ‘absolute necessity’ of building the PGE from Vancouver to Prince George, McBride was also supporting the creation of a third transcontinental (CNoR) and the completion of a southern trunk line from the Kootenays to Vancouver (KVR). McBride believed that he could justify all of the massive financial outlay that this activity entailed on the basis of his latest mandate, the 1912 election, which reflected the desires of 50,423 voters (of 84,529 votes polled) out of

⁸⁹ Richard McBride's *Speech in Moving the Second Reading of The Pacific Great Eastern Aid Bill* (Victoria: Government of BC, 1914), 1, 2.

⁹⁰ McBride, *PGE Aid*, 3.

a total BC population of 392,480.⁹¹ McBride was very enthusiastic about “the wonderful possibilities for agricultural development and mineral extraction” in the area through which the PGE would pass. He also noted that with the subsidy increase to \$42,000 per mile (as granted in the PGE Aid Bill of 1914) the PGE Company would now need to find \$16,000 per mile to bridge the gap between the subsidy and the new estimated cost of \$58,000 per mile for construction. McBride was convinced that when coupled with the aforementioned opportunities “it would be difficult indeed for any person interested in the Province to refrain from going into ecstasies over the possibilities of development”.⁹²

These words illustrate McBride’s optimism but also belie the seriousness of BC’s financial situation. With the province in the midst of a major economic downturn and with continued unrest in Europe affecting the flow of capital from London, it would seem that retrenchment would be the responsible course of action. McBride, however, after pointing out the Peace River Country’s ability to “give to the world the greatest producing coal mines extant” also announced in the PGE Aid Bill of 1914 that “I believe the time has now come for the building of a railroad through northern British Columbia to the Yukon and Alaska”. McBride even claimed that “the building of this line is not a difficult task, nor a very

⁹¹ www.elections.bc.ca

⁹² McBride, *PGE Aid*, 3,4.

expensive one."⁹³ He observed that through a fortunate turn of events there were 5,000 men, locally placed, who will shortly be out of work with the completion of the GTP who might thus be gainfully employed with extension of the PGE to the Peace River District. In suggesting significant extensions (to Peace River and possibly Alaska) of the already financially troubled PGE, which would expose the BC treasury to an ever greater debt load, McBride further demonstrated a potentially dangerous mismanagement of his province's affairs.⁹⁴

While Premier McBride's address to the Canadian Manufacturers' Association (CMA) in Vancouver in 1910 had heralded the progress of BC and noted that "While our population is still small, our accomplishments are large"⁹⁵, by 1914 British Columbia still had a meagre population but quite extensive aspirations. The tens of millions of dollars' worth of bond debt which it had assumed, would have given much more populous jurisdictions pause, even during times of prosperity. McBride refused to entertain any deviation in the course laid out even though BC was in the throes of an economic downturn and participating in a world war.

The missing step in McBride's logic seems to be the absence of a pragmatic assessment of the realities of the situation in 1914 in British

⁹³ McBride, *PGE Aid*, 5, 7.

⁹⁴ McBride failed to interest Borden or the Americans in financing a line to Alaska. Although McBride did convince Borden to assist with the CNoR, the price was McBride's loss of rate control, a demand he would not countenance for the PGE.

⁹⁵ *Vancouver News-Advertiser*, September 22, 1910, 6.

Columbia. Even if the majority of the 84,529 votes cast were in favour of McBride's railway program, the voters were not entitled to a railway infrastructure which the province could not afford. Moreover, the small BC population of approximately 400,000 in 1914 (when compared to Ontario which initiated a provincial railway in 1901 with more than 2 million people) was not even large enough to properly actualize any business opportunities which might arise as a result of McBride's railway plans. The large railroad grid that McBride envisioned could only be justified by the presence of millions of people with hundreds of millions of dollars to invest in railways and business, none of which existed in BC in 1914.

McBride had pledged to voters in 1912 that the PGE and GTP were totally separate and independent companies in order to reassure them that the province could maintain control of freight rates and that the PGE would not be taken advantage of by the GTP. In the PGE Aid Bill of 1914, however, McBride changed his position and sought to impress upon the members of the Legislative Assembly that the government had examined the PGE promoters and their business plan to confirm "that there was no uncertainty as to its backing and traffic arrangements with the Grand Trunk Pacific". In the changed economic and political atmosphere of 1914, McBride now wanted to convince the electorate of the existence of traffic arrangements between the GTP and PGE to help allay any fears of financial problems. It appeared that the GTP would be making use of the

PGE after all, as GTP traffic destined for Vancouver would use the PGE exclusively. McBride insisted that there would be no danger whatever for the BC treasury. Succeeding events would prove otherwise.

Between the creation of the PGE in 1912 and the premature exhaustion of the guaranteed funds by November 30, 1915, the premier had choices to make and options to pursue. By allowing baseless optimism to inform his decision-making, Premier McBride did not exhibit the cautious prudence which the voters of British Columbia anticipated would be present in the person to whom they extended their sovereign authority.

Chapter 6: Birth of the PGE Railway

This chapter begins with an overview of provincial railways built in Ontario and Alberta. Next is a discussion of the economic downturn, bank failures and termination of access to British capital that challenged the start of the PGE. The importance of the traffic agreement between the government of British Columbia and the GTP is viewed from the differing perspectives of both signatories. Newspapers and trade journals are examined for their reaction to the announcement of the PGE, indicating high levels of anticipation and expectation for the creation of the new railway. Finally, a brief review of Foley, Welch and Stewart demonstrates the breadth and focus of its dealings as a construction company. This contextual information presents a fuller understanding of why McBride's judgment can be questioned in his choice to continue with the PGE project when faced with a dramatically changing economic situation.

Other Canadian Provincial Railways

Provincial railways were also being developed in other parts of Canada in the early twentieth century. The experience of two other provinces, Ontario and Alberta, in the challenges and problems they faced in the creation of provincial railways, provides a framework with which we can assess McBride's decisions. These railways were also created to address a need and carry out a function. The differences

between them and the PGE, however, are instructive in judging the dilemma of insolvency before completion, which befell the PGE by 1918. For a comparison of mileage per capita see Table 6.1 following, Estimated Railway Mileage Per Capita 1907-1921.

Table 6.1 Estimated Railway Mileage Per Capita, 1907-1921
(Statistics Canada and BC Government Statistics)

Year	British Columbia	Alberta	Ontario
1907	309,000/1686= 183	253,784/1323= 192	2,389,551/7638= 313
1908	330,000/1733= 190	283,911/1323= 216	2,423,985/7933= 306
1909	350,000/1796= 195	314,038/1321= 238	2,458,419/8229= 299
1910	370,000/1832= 202	344,165/1488= 231	2,492,853/9230= 270
1911	392,480/1842= 213	374,295/1494= 251	2,527,292/8322= 304
1912	407,000/1855= 219	395,710/1897= 209	2,567,929/8546= 300
1913	424,000/1951= 217	417,125/2212= 189	2,608,566/9000= 290
1914	442,000/1978= 223	438,540/2545= 172	2,649,203/9255= 286
1915	450,000/3100= 145	459,955/3174= 145	2,689,840/10,702= 251
1916	456,000/3604= 127	481,370/3894= 124	2,730,477/11,320= 243
1917	464,000/3885= 119	502,785/4444= 113	2,771,114/11,049= 251
1918	474,000/4247= 112	524,200/4273= 123	2,811,751/11,057= 254
1919	488,000/4238= 115	545,615/4354= 125	2,852,388/10,988= 260
1920	507,000/4325= 117	567,030/4474= 127	2,893,025/11,001= 263
1921	524,582/4376= 120	588,454/4557= 129	2,933,662/10,976= 267

The Temiskaming and Northern Ontario Railway (T&NO) was owned and operated by the government of Ontario. It was built in stages as funds were available for and traffic justified enlargement. The Northern Alberta Railways (NAR) were privately-driven ventures reluctantly taken over by the provincial government upon insolvency. They were supported

by the government in the public interest and re-sold to private concerns as soon as possible.

In 1884 the Judicial Committee of the Privy Council extended the northern limits of Ontario to James Bay and Hudson Bay. By the end of the 1890s groups of settlers from the Lake Temiskaming area began making annual pilgrimages to Toronto to petition the provincial government for a railway that would give them year-round access to and from the Ontario north (see Figure 6.1 Temiskaming and Northern Ontario Railway (T&NO) following). Private capital, however, was more interested in the east-west transcontinental routes of the Canadian Northern Railway and could not be convinced to commit the large investments that would be needed to construct a north-south rail line.

A decade and a half later, BC Premier Richard McBride was also attempting to link BC's resource hinterland with a major urban centre. In his address to members of the Progress Club in Vancouver on June 25, 1913, he acknowledged the work that the Progress Club was doing in engendering industrial and commercial connections between Vancouver and its hinterland areas. McBride asserted that with the "railways that are building, and the enormous national harbour works under construction it seems to be that the coping stone on this entire commercial structure will be the Panama Canal." He assured his audience that to take advantage

of anticipated opportunities, “We have so arranged our Provincial plans as to have them synchronize with the opening of the Panama Canal.”⁹⁶

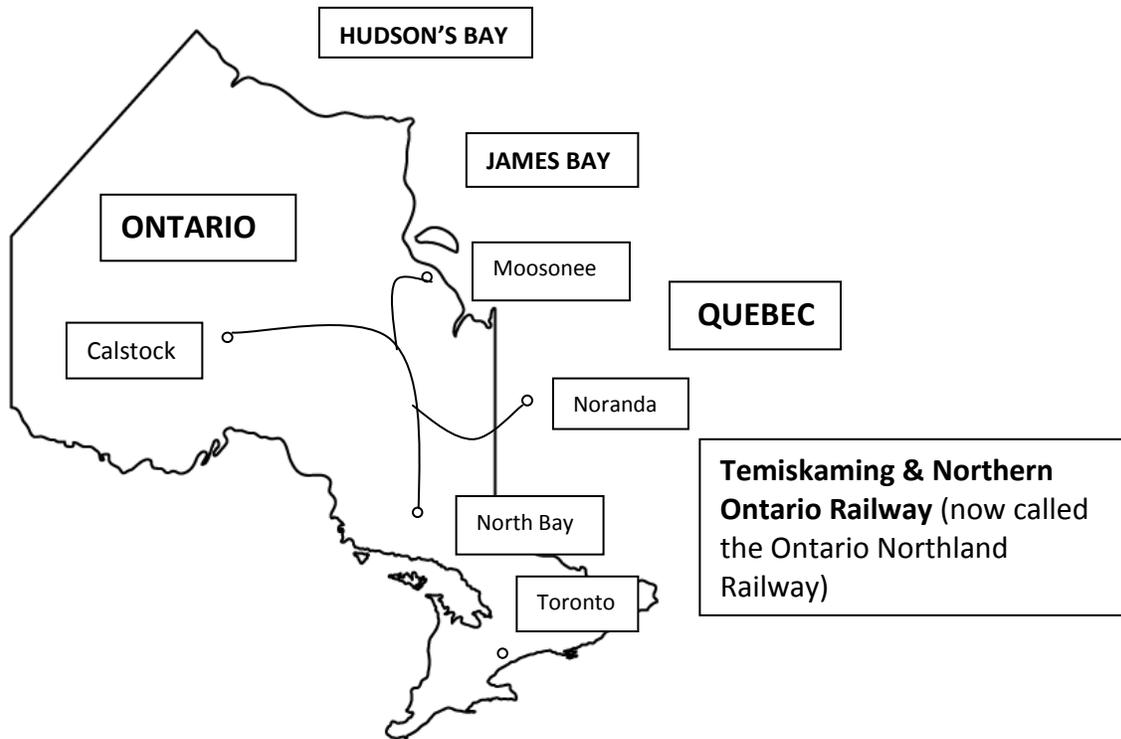


Figure 6.1 Temiskaming and Northern Ontario Railway (T&NO)

The Vancouver Board of Trade was also invested in McBride's railway policies which sought to connect Vancouver directly to its interior hinterland by means of the PGE trains which would leave Vancouver and be in the Squamish to Prince George resource belt on the same day. The *Victoria Colonist* reported on April 28, 1916 that the President of the Vancouver Board of Trade led a delegation which met with BC government officials and urged that “there should be no delay in

⁹⁶ *British Columbia Today*, “Sir Richard McBride's Speech to the Progress Club of Vancouver” (Vancouver, June 25, 1913), 7.

completing the line to the Coast and...pointing out the advantages of opening up a new route through the Peace River country".⁹⁷

The T&NO was initiated by George W. Ross who became the new Liberal Premier of Ontario in 1899. He was anxious to find some projects that would convince the public that their vision for the future of Ontario was worthy of support. Ross authorized ten survey parties, at a total cost of \$40,000 to find feasible rail routes to the north and by 1901 had finalized plans for the T&NO. Ross entertained three options for creating the new railway: offer a large enough subsidy to attract private companies to build the railway; have the government build the railway and then lease it to the Grand Trunk; or build a government owned and operated railway. Private companies had very little interest in a railway proposal for an area with no large, confirmed mineral discoveries, poor agricultural prospects and no significant population. Any railway built in the area would be significantly ahead of demand and would face years of operation with insufficient traffic to even cover operational expenses. Also, the public memory of the massive cost and difficulty of building the CPR through northern Ontario discouraged private enterprise from taking on the challenge of a new rail line.

The government soon realized that subsidies to encourage any interest at all on the part of private companies would be of such a

⁹⁷ *Victoria Colonist*, April 28, 1916, 7.

magnitude that it would be cheaper to build the railway itself. In addition, the Grand Trunk was involved in negotiations with the federal government to gain subsidy support for a transcontinental line with the building of the Grand Trunk Pacific railway, and was not interested in leasing a developmental line in northern Ontario. Premier Ross was concerned that if a rail line was not built soon, the CPR would divert the resources of Northern Ontario to Montreal. Consequently, Ross convinced his Cabinet that the Ontario government must assume the task. He initiated enabling legislation and the ceremonial sod-turning took place two months later during a provincial election campaign. As was the case with Premier McBride and the PGE, Premier Ross interpreted his re-election with a majority as a mandate from the people to initiate a new railway.

There are significant similarities between the T&NO and the Pacific Great Eastern railway (PGE). In each case, the provincial premier was personally convinced that the railway to the northern part of his province was the key to unlocking mineral and timber resources which would significantly increase its prosperity. Each province had major metropolitan cities which were eager to benefit from a resource-rich hinterland area. Both premiers also saw a provincial railway as instrumental in opening up their northern regions to capture the large flow of immigrants entering Canada annually and in creating settlements that had year-round access to southern urban areas. The preferred choice for both premiers was to

offer a subsidy to convince a private company to assume the responsibility for building the railway. Each premier was concerned that time was of the essence and neither was willing to wait until private companies could be persuaded of the presence of a business opportunity. The major difference between the two provinces, however, was the size of their population and stage of development.

In 1902 Ontario began construction of the T&NO railway with a population of 2.1 million and annual tax revenue of \$6.2 million.⁹⁸ The purpose was to open up a modest 112 miles of northern Ontario to development at a cost of \$2.25 million (representing approximately 36% of yearly revenue).⁹⁹ A decade later, BC began construction of a 480-mile rail line to open up northern parts of BC at a cost of over \$20 million in railway bonds (representing approximately 180% of yearly revenue), on the strength of a population of approximately 390,000 people and tax revenue of \$11 million. While there were more than 21,000 people to support each mile of T&NO railway in Ontario, there were only about 850 people per mile of the PGE railway in BC.

Ontario approved the T&NO Railway in 1902 with an estimated Gross Domestic Product (GDP) of \$429 million and the McBride government initiated the PGE in 1912 when BC had an estimated GDP of

⁹⁸ See Reference Table in Appendix 2; *Ontario Public Accounts 1902* (Toronto: Legislative Assembly of Ontario, 1903), xxxii.

⁹⁹ Charles Berkeley Powell, *Temiskaming Railway Speech* (Toronto: Legislative Assembly of Ontario), 5, 6.

approximately \$161 million. Although both railways were built ahead of demand, McBride was taking a much greater gamble than Ontario because BC was building more than four times as many miles of railway as Ontario with less than one-fifth of the population and less than 40% of Ontario's GDP. Moreover, eighteen years after the T&NO began construction, its debt load of \$30 million represented 1.6% of Ontario's GDP whereas eighteen years after the PGE was begun, its debt load of \$72 million represented 18% of BC's GNP.¹⁰⁰

Although having decided on the necessity of a railway, the Premier of Ontario moved incrementally. At first, he only committed his province to building 112 miles of track and would only add more line as demand increased and Ontario's finances allowed.¹⁰¹ Premier McBride of BC, however, as leader of a province with a much smaller population, less diversified economy and in the presence of increasingly negative economic indicators, embraced a proportionately much larger debt and committed BC to the construction of 480 miles of railway.

There were also some major differences between the T&NO and the PGE. From the beginning the T&NO was owned and operated by the government of Ontario. The government accepted the fact that private investors were not interested in the venture because they saw no business

¹⁰⁰ See Reference Tables in Appendix B.

¹⁰¹ *Temiskaming and Northern Ontario Railway: Third Annual Report* (Toronto: Legislative Assembly of Ontario, 1904), 100.

opportunity with a reasonable chance for profitable return on investment. In the early 1900s, Ontario already had a large population and industrial base from which to draw a dependable tax flow. It was reasonable for the government to pursue building a railway as it had the financial resources to withstand setbacks and service the debt created by the T&NO.

British Columbia was in a different situation. In contrast to Ontario, it had a much smaller population and an economy that was more vulnerable to the vagaries of world resource markets. It did not have the tax base or the financial reserves to weather the misfortunes of economic reversal. Moreover, the government of Richard McBride exposed itself to greater complications by beginning the PGE project as a private enterprise supported by the government. This offered the added disadvantage for the BC government of financial responsibility with very limited control. The president of the PGE Company, John W. Stewart, was also the senior operations partner in the railway construction firm of Foley, Welch and Stewart (F,W&S) which was given the contract, without competition, to build the PGE. Rejecting the idea of a government-built railway, McBride was seeking the false security of having a private company build, own and operate the PGE while at the same time agreeing to the use of government-guaranteed railway bonds which

meant that in reality the government retained ultimate financial responsibility for the PGE even if it did not legally own the railway.

Legislation creating the T&NO was passed in 1902 and construction began in 1903 from North Bay to New Liskeard. With extensions it arrived in Cochrane in 1909 where silver was found in the Cobalt area triggering the largest Silver Rush in Canadian history. Construction to James Bay began in 1921 and the line reached Moosonee on James Bay in 1932. In 1946 the name was changed to Ontario Northland Railway which better represented its geographical extent. Today the full length of the Ontario Northland Railway is 700 miles or 1 125 kilometres. Blasting for the railway through the Canadian Shield also revealed commercial deposits of gold, copper and nickel. In addition, the railway made large-scale timber extraction possible. In 2000 the Ontario government announced its intention to privatise the railway but negotiations with Canadian National collapsed in 2003 and the Ontario Northland remains a wholly-owned asset of the Ontario government.

The T&NO was, like the PGE another example of a provincial railway with a mandate to develop northern parts of the province. They differed in the depth of their financial backing and in their approach to debt obligation. Ontario's incremental approach was in stark contrast to BC which embraced a total financial commitment from the beginning. Also,

while both provinces subsidized construction, only BC allowed the construction contractor to retain ownership.

John Duncan McArthur was a railway builder and industrialist in western Canada. His railway construction included contracts with the CPR, GTP and Great Northern (GN) of the US. In 1912 J.D. McArthur began building his own railways with the construction of the Edmonton, Dunvegan and British Columbia Railway (E,D&BC) from Edmonton, Alberta to Dawson Creek, BC (see Map 6.2 Northern Alberta Railways (NAR) following). He secured railway bond guarantees from the government of Alberta of \$20,000 per mile to complete the rail line. Building proceeded quickly but the quality of the line was questionable. By the end of 1914, opposition criticism in the Alberta Legislature was growing and balancing the books became a problem for McArthur as the economic downturn combined with World War One critically reduced the flow of immigrants and capital investment into Canada. Operating officers of the CPR concluded that the difficulties of the E,D&BC line stemmed from the fact that the contractor employed an extremely low standard of construction with the obvious intent of immediate sale.¹⁰²

¹⁰² Ena Schneider, *Ribbons of Steel* (Calgary: Detselig Enterprises Limited, 1989), 53.

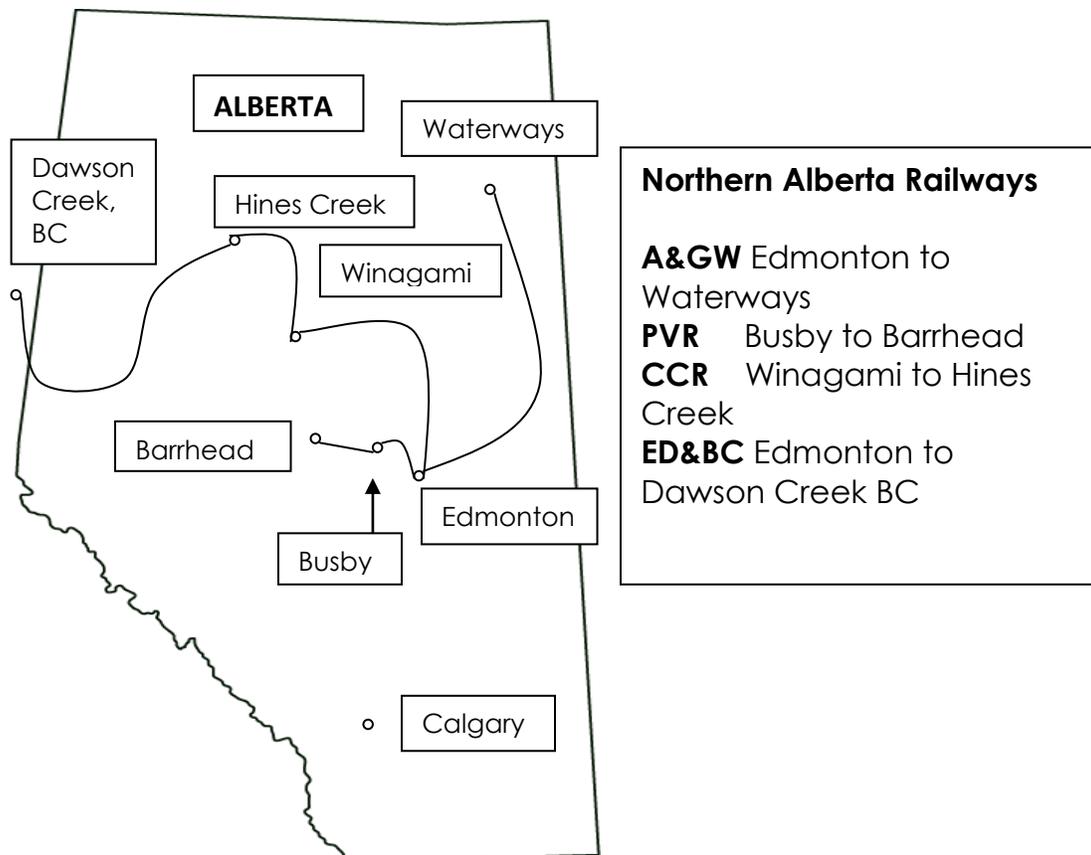


Figure 6.2 Northern Alberta Railways (NAR)

Similar to the PGE contractors, McArthur's goal was to exact his profit from the construction of the line as he realized that he could not make any money from operation of the railway. The situation soon became untenable for McArthur. With the loss of any further investment capital, he defaulted on his interest payments, resulting in the government of Alberta taking control of the E,D&BC.

In 1913 McArthur became the president of the Central Canada Railway (CCR) which built a branch line from the E,D&BC line north to Peace River Crossing and constructed 100 miles of railway from

McLennan to Waterhole in northern Alberta but by 1915 McArthur did not have the funds to continue construction. In 1914 McArthur had taken over the charter of the scandal-ridden Alberta and Great Waterways railway (A&GW). He began construction of the 270-mile line from the town of Carbondale, just north of Edmonton, to Waterways, Alberta. As McArthur completed sections of his various railways, however, he found that the freight rates, amount of traffic and cost of maintenance did not allow for profitable operation. Beset by intractable economic difficulties, McArthur could no longer avoid financial ruin. By 1920 the Alberta government had acquired control of all of McArthur's railways. The Canadian Pacific Railway leased the Edmonton, Dunvegan & British Columbia and the Central Canada railways for five years but had no interest in the revenue-negative Alberta & Great Waterways railway which the government of Alberta was therefore forced to operate directly. In 1928 the province amalgamated all four railways under the name Northern Alberta Railways (NAR) and in 1929 the CPR and CNR jointly purchased them.

In contrast to the Ontario government, Alberta had no interest in owning railways. It provided railway bond guarantees and expected each company to then operate independently. Alberta had only unwillingly taken over the bankrupt NAR in order to maintain transportation services to the citizens of its northern regions and, as soon as possible, Alberta leased or sold the insolvent railways. The philosophy of

BC, with regard to railway development, was closer to the Alberta model than that of Ontario. Like Alberta, BC was not in favour of government ownership. BC supported the construction and ownership of railways by private companies with subsidies and bond guarantees and only took control of insolvent railways (e.g. the PGE) when there was no other alternative.

While the provincial railway experiences of BC, Ontario and Alberta have some commonalities, there are also clear distinctions. Each province progressed towards the goal of providing transportation and development services to its citizens in a different way. Ontario identified an unmet transportation need, which private enterprise was not willing to address because of the unlikelihood of profits, and had the financial resources to construct and operate a government railway, built in stages. Alberta believed that private capital should be left to seek out transport projects that made business sense. Alberta was only reluctantly willing to operate railways in the public interest until private interests could be convinced of a state of economic viability. British Columbia's McBride government, however, was alone in its belief that it was justified in creating the PGE and financially supporting but not owning a railway for which private investors could see no business purpose.

Economic Downturn

By 1912, economic expansion in BC was beginning to stagnate. The political situation in Eastern Europe was uncertain and there was a realization in the province that a continued booming economy might not be sustainable. The promise that railways could provide access to guaranteed economic expansion seemed less assured. In 1913 the value of building permits in the city of Vancouver dropped to \$10 million which was about half the amount of the previous year and in 1914 by more than half again to \$4.5 million. *Henderson's City of Vancouver Directories* reported that the low point in the total value of building permits in Vancouver came in 1915 at \$1.5 million as shown in Table 6.2 following, Value of Vancouver Building Permits, 1910 to 1916, which is then

Table 6.2 Value of Vancouver Building Permits, 1910-1916

(*Henderson's Directories* 1910 to 1915; * *Monetary Times* 1916)

1910	\$13,150,365
1911	\$17,652,642
1912	\$19,388,322
1913	\$10,423,197
1914	\$4,484,476
1915	\$1,593,379
*1916	\$2,412,889

compared to other Canadian urban areas in Table 6.3 Value of Building Permits in Other Major Cities, 1914-1916.

Table 6.3 Value of Building Permits in Other Major Cities, 1914-1916
(*Monetary Times* Jan 7, 1916, 165; Jan 5, 1917, 119)

	1914	1915	1916
Victoria	\$2,243,660	\$292,450	\$170,265
Edmonton	\$4,913,277	\$301,725	\$228,040
Toronto	\$20,684,288	\$6,651,889	\$9,882,467
Montreal	\$17,394,244	\$8,511,221	\$5,334,184

In 1914 the provincial government attempted to market the merits of the PGE to citizens throughout Canada and potential immigrants abroad by publishing a pamphlet entitled: Pacific Great Eastern Railway – Lands, Facts and Figures. In setting forth the great advantages to be created by the PGE, the government pamphlet made reference to the line traversing “a vast area of excellent land suitable for mixed farming, stock-raising, dairying, grazing, fruit and vegetable culture and poultry-raising... It [the PGE] has rendered available thousands of acres of fertile soil which heretofore have remained vacant for lack of transportation facilities...It [the PGE] is one of the great steel girders on which the future

of British Columbia will solidly and safely rest."¹⁰³ Large numbers, liberally sprinkled throughout the publication, were meant to impress and entice prospective settlers to the PGE route through the hinterland, including: the Chilcotin being able to raise 150,000 sheep annually; valleys opened up by the PGE holding 24,000,000 acres of forest including 5,000,000,000 board feet of marketable timber; and conservative estimates of water-power potential within the PGE area of 312,000 horsepower.¹⁰⁴

No doubt such publications did, and would have continued to convince immigrants to head to the distant destinations of the BC interior. The beginning of hostilities in 1914, however, cut off the flow of immigration as resources and transport ships were directed to assist in the war effort. In addition, the British government passed legislation which prevented almost all capital from leaving England for investment overseas.

In January 1916, *The Monetary Times of Canada* noted that few foresaw "the rapid transfer of Canada's borrowing field from Britain to the United States". Table 6.4 following, Canadian Bonds Purchased by US, 1909 to 1915, shows that while the US was responsible for purchasing 3.90% of Canada's bonds in 1909, the proportion soared to approximately 60% in 1915. This indicated a dramatic shift from London's financial institutions providing the majority of investment money in Canada to the US

¹⁰³ PGE – *Lands, Facts and Figures* (Victoria: Government of BC, 1914), panel 1.

¹⁰⁴ PGE – *Lands, Facts and Figures* (Victoria: Government of BC, 1914), panel 5.

becoming the primary source of capital for Canadian economic expansion which introduced another uncertainty into the PGE project. The nature of investment in Canada also changed as Americans

Table 6.4 Canadian Bonds Purchased by US, 1909-1915
(*Monetary Times* January 7, 1916, 9)

Year	Percentage
1909	3.90
1910	1.50
1911	6.58
1912	11.35
1913	13.65
1914	19.77
1915	approx. 60.00

were much more interested than the British in buying stock in Canadian companies which gave them a degree of direct ownership control and, with increased American investment, Canadian companies were more likely to be subject to American influence in operational and strategic decision-making.

The BC Premier's report in the January 7, 1916 edition of *The Monetary Times* was co-authored by Premier W.J. Bowser and former Premier Richard McBride. Bowser spoke of the need for "careful,

conservative administration, economy and watchfulness" as BC was "now laying the foundations for an era of great expansion and progress".

McBride, however, optimistically announced that "the first effects [of war] have passed away and absolute confidence has been restored". The outcome at that point was by no means certain but McBride asserted that "We are looking with great confidence to the close of the war for not only a great revival of trade but an increased production". He also concluded that "Another pleasing feature of the situation is that the big railway-building programme of the province has been practically completed [CNoR and GTP]...[however] the Pacific Great Eastern has been delayed on account of the financial situation, but is still progressing towards Fort George." In fact, both the Canadian Northern and Grand Trunk Pacific were in serious financial difficulties which they would not survive, while the PGE contractors had used up all of the bond funds but had only completed one-third of the railway.

The Monetary Times commented on January 5, 1917 that "The real estate boom which took place in Canada...was more pronounced in the western provinces, and reached its height in 1911 and 1912 and completely collapsed in 1913...Prior to 1914 there had been several years of poor or ordinary crops, and this, with the collapse of the boom, brought about conditions that resulted in acute commercial depression."

Speculators suddenly found that they could not resell their real estate for

a quick profit. They were faced with making continuous mortgage payments for which they had not planned and which in many instances, could not afford. The BC government also found itself financially overextended to the PGE and other railway ventures they had entered into, based on anticipated future business, the hope of which was receding ever further out of sight. An editorial in *Industrial Canada* in December 1918, however, continued to encourage settling and farming the interior of BC. The trade journal reported that "a canvass of soldiers overseas shows that 100,000 men have expressed their desire to take up agricultural pursuits if this is followed up by some form of Government assistance".¹⁰⁵

In addition to signs of danger in farming and real estate, McBride was faced with disturbing news in the banking sector. The failure of the Dominion Trust Company in Vancouver on October 12, 1914 was another example of the extent of the economic downturn. The fact that Dominion Trust failed only a few months after the provincial government had examined the company books was a cause for concern. Depositors who had lost money in the collapse had assumed that the provincial government was guaranteeing their deposits and also accused Victoria of inadequate supervision of trust companies. On January 5, 1917, *The Monetary Times* commented that "The Company's fall [was] due to the

¹⁰⁵ *Industrial Canada*, December 1918, 5.

rash and unbridled speculation of those entrusted with its funds". Attorney-General William J. Bowser, whose law firm did work for the Dominion Trust Company, addressed the BC legislature on February 4, 1915 on this matter. He denied any wrongdoing on the part of himself or his company, blaming instead the recognized period of "great financial stringency" in 1913.¹⁰⁶ The combination of speculative investment followed by a contraction of the economy quickly became a cause for concern in all sectors.

Only two months later on December 14, 1914, the Bank of Vancouver also failed. It had been established "in the midst of a real estate and industrial boom in 1910 by some of B.C.'s most prominent capitalists, including the Lieutenant-Governor, Thomas Paterson".¹⁰⁷ The failure of a second financial institution only served to further depress the confidence of those who may have been interested in investing in BC. The failure of two BC banking institutions also underlined the fragility of the BC economy. The province had a small population, little industrial manufacturing capacity and was dependent on the world market for the sale of resources to maintain its prosperity. Committing to tens of millions of dollars' worth of railways through uninhabited and sparsely inhabited areas would have been a questionable goal for a venture capital

¹⁰⁶ W.J. Bowser, W.J., *Speech on The Dominion Trust Company, February 4, 1915* (Victoria: Government of British Columbia, 1915), 7.

¹⁰⁷ *Vancouver Sun*, December 28, 1914.

company and was therefore, a highly improbable avenue for a government leader to pursue.

The demands made on banks during World War One by the Canadian and British governments, because of the war needs, resulted in the banks extending greatly increased amounts of credit. Soon after the outbreak of World War I, the government of Britain eliminated the export of almost all capital from Britain in order to protect money supplies for the war effort. Exceptions were made for overseas projects directly related to the war. Table 6.5 following, Canada's Public Borrowings in London 1907-1916, shows a maximum of £47,363,425 in 1913 dropping precipitously to £1,000,000 in 1916. Canadian banks feared they would not have enough gold to redeem Dominion notes so the government allowed banks to use bank notes to pay off liabilities. While these measures appear to have had no legal validity, they were accepted throughout the country because of

Table 6.5 Canada's Public Borrowings in London, 1907-1916

(Monetary Times of Canada January 5, 1917)

Year	Amount	Year	Amount
1907	£11,203,711	1912	£32,456,603
1908	£29,354,721	1913	£47,363,425
1909	£37,411,723	1914	£37,777,271
1910	£38,453,808	1915	£8,235,000
1911	£39,855,517	1916	£1,000,000

the needs of the war effort. It was clear that even financial institutions felt insecure about their liabilities and their future viability.

Combining the information from Table 6.4 Percentage of Canadian Bonds Purchased by the US 1909-1915 and Table 6.5 Canada's Public Borrowings in London 1907-1916, Table 6.6 following, US and British Purchases of Canadian Bonds 1909-1915, indicates the dramatic change in the nature of support for Canadian bonds. While British investment in Canada decreased significantly and US investment expanded both proportionately and absolutely, Table 6.6 also demonstrates that the

Table 6.6 US and British Purchases of Canadian Bonds, 1909-1915
(Monetary Times of Canada January 5, 1917)

Year	US Amount	US Percentage	Britain Amount	Britain Percentage	Total Amount
1909	£1.5 ¹⁰⁸	3.9	£37.4	96.1	£38.9
1910	£0.5	1.5	£38.5	98.5	£39
1911	£2.8	6.6	£39.9	93.4	£42.7
1912	£4.2	11.4	£32.5	88.6	£36.7
1913	£7.5	13.7	£47.4	86.3	£54.9
1914	£ 9.3	19.8	£37.8	80.2	£47.1
1915	£12.3	60%	£8.2	40%	£20.5

¹⁰⁸ Value in millions of British pounds.

overall total amount of investment in Canada dropped by more than fifty percent.

The *Monetary Times* noted on January 5, 1917 that “Only one Canadian public flotation was made in London last year. This was an issue in August of £1,000,000 [at] 6 percent 20-year debentures of Canadian Vickers Limited. This company is engaged in important work for the British Admiralty.” In 1916 Canada was unable to secure any loans for railway development. Table 6.7 following, Canadian Railway Loans in London 1911-1916, shows how bond funds declined after 1913. With the value of Canadian railway loans in London dropping more than 80% from 1911 to 1915, McBride should have realized the impracticality of continuing with the same railway plans and construction timetable. The foremost responsibility of elected leaders is to ensure the security of their people including the economic health of their society. Richard McBride mismanaged the PGE dilemma by avoiding making difficult decisions at a time when they could have mitigated the depth of the ensuing problems.

Table 6.7 Canadian Railway Loans in London, 1911-1916
(*Monetary Times* of Canada January 5, 1917)

1911	£17,122,253	1914	£11,943,800
1912	£9,002,585	1915	£3,235,000
1913	£13,179,170	1916	£0

Traffic Agreement with GTP

A number of railway schemes received charters using the Vancouver, Howe Sound to Prince George route before the PGE, beginning with the Vancouver, Northern, Peace River & Alaska Railway in 1891 initiated by the Great Northern Railway (GN). The first charter to actually build some track and begin a commercial operation, however, was the Vancouver, Westminster & Yukon Railway (VW&Y) which ran a freight train with twelve cars from New Westminster to Vancouver in 1903. Two years later the VW&Y reached a traffic agreement with the GTP for a line between Vancouver and Hazelton. *The Vancouver Province* reported on January 6, 1905 that "the GN will be behind the building of the line and that J.J. Hill has reached an understanding with the GTP regarding the traffic arrangements with respect to business for both roads centering at the junction town of Hazelton." The line was never built.

During the first six years of his tenure, Richard McBride avoided having his government engage in sponsoring any major railway development while he focused on cutting costs, increasing taxes, eliminating the provincial deficits and building up the treasury of BC. Even more significant for McBride's plans, however, was the booming economic prosperity experienced throughout the country during that period. McBride spent a considerable amount of time touring the province and speaking to voters who worked in many different

occupations. The message he received from most towns and rural areas across the province was very similar. Settlers needed a transportation network to make new farming areas accessible and to move their crops to market. Commercial interests required dependable, all-weather transport for people and freight to enable the extraction of natural resources and facilitate the movement of large amounts of product over long distances. The BC government sought to satisfy these needs so that the provincial economy could prosper and become a more powerful part of Canadian economic development. McBride concluded that a large infrastructure of railways would be the key element in opening up the enormous resource potential of the province and thereby also satisfying the wishes of many voters.

With the economy booming, McBride determined that the time was now right to begin building railways to facilitate increased prosperity for BC. He entered into several railway agreements including a guarantee of the bonds his government would provide for the Canadian Northern Railway (CNoR) to build a new trunk line through British Columbia and for a subsidy to assist in the building of the Kettle Valley Railway (KVR) from Midway to Hope. McBride also sought to create a rail connection between Vancouver and Prince George with a future goal of extension to the Peace River area in north-eastern BC. In testimony given to the 1917 BC Select Committee inquiring into the PGE, D'Arcy Tate, Vice-President

of the PGE and former GTP solicitor, outlined the inception of the PGE project. He noted that “it was the intention of the late Prime Minister [the title used in BC in 1917 for the Premier of BC] to have the Grand Trunk Pacific come into Vancouver, so as to make competition with the Canadian Pacific and the Northern.”¹⁰⁹ At the time GTP President Charles Melville Hays was in the midst of completing a new trunk line from Winnipeg through Prince George to a terminus at Prince Rupert. In September 1911 Hays indicated that he would consider building a branch line from Prince George to Vancouver if he was able to secure a provincial subsidy but negotiations with the McBride government failed over the issue of who would control the freight rates.

Subsequently, GTP solicitor D'Arcy Tate, presented an alternative proposal which suggested using Foley, Welch and Stewart (F,W&S) to build a line from Prince George to Vancouver, giving the province control of the freight rates but allowing the GTP to retain effective control through a restrictive traffic agreement. Chapter 34, BC Statutes 1912, Schedule B, Section 3 records that “All passenger, freight, express and mail traffic originating on the line of the Pacific Great Eastern Railway Company...shall be routed over the Grand Trunk Pacific Railway: the traffic rates...for such routing to be agreed upon between the Grand Trunk Pacific Railway Company and the Pacific Great Eastern Railway

¹⁰⁹ Select Committee of the Legislature, *Proceedings and Evidence in re Pacific Great Eastern Railway Company* (Victoria: Government of BC, 1917), J94.

Company...subject to the approval of the government of British Columbia". The branch line that the GTP had failed to achieve in 1911 because of a disagreement over control of rates, was now being achieved at zero cost as the traffic agreement which the GTP eventually negotiated with McBride secured passage of GTP goods on the PGE and ensured that all PGE passengers and freight would be routed over the GTP system.

In addition, the GTP was given a monopoly over transportation relating to construction. Section 7 states that "to the extent that such routing is controlled by the Firm [F,W&S] or by the Pacific Great Eastern Railway Company, all construction materials and supplies (and labourers so far as practicable) used in the construction of the said line of railway shall be routed over the Grand Trunk Pacific Railway". Both signatories to this agreement concluded that their own needs were adequately served by the nature of the accord. Each company achieved additional connections for their railway. The GTP would be substantially enriched by a connection to Vancouver, while for the PGE a link to a transcontinental rail line might enable it to remain solvent until hoped-for immigration brought people to the isolated interior of BC.

Both Hays and McBride believed that the agreement was in their best interests. Though this perspective may be a necessity for any set of negotiations to be successful, it does bear further scrutiny for present

purposes. In judging who acquired the true advantage, one must assess the skills of the principals involved. Hays began a long career in railways at the age of 17 and had extensive experience in building and managing lines in the United States and Canada. McBride, on the other hand was a very successful and shrewd politician who had wide-ranging experience in understanding what voters wanted from their elected representatives and in addressing these issues in order to get re-elected. Railways were familiar territory for Charles Melville Hays while for Richard McBride they were merely a means, albeit visionary, to a political end. Hays, therefore, would have had a firmer grasp on the long-term consequences of their agreement and consequently would have been more likely to secure the greater advantages.

Reaction to the Announcement of the PGE

Richard McBride established the Pacific Great Eastern railway with the introduction of Bill 23 to the BC Legislature in February 1912. The *Vancouver Daily News-Advertiser* asserted that McBride's announcement of the PGE route from Vancouver to Prince George "is a generous and prompt response to representations made by the Vancouver Board of Trade and by many other business organizations throughout the country asking the government to open the most direct road possible...to Peace River Country." While the *News-Advertiser* noted that the government debt loads for the plan were large, it immediately justified them as being

necessary. The paper saw no danger in the government-guaranteed bonds and asserted that “if railways so assisted are really essential and valuable, the endorser will not be called upon to pay. The merits of the proposition and its prospects of success are a test of the wisdom and prudence of the endorsement”.¹¹⁰ Similar to McBride's approach, the paper revealed its naive optimism and cavalier attitude to the economic stability of the province by suggesting that it would be appropriate for BC to test the ‘prudence of the endorsement’ of the PGE by building it and then seeing whether it could avoid bankruptcy.

Vancouver and Victoria businesses were eager to acquire new access to interior resources and commercial opportunities. Businesses by nature need to be optimistic in their assessment of future potential. The cautious side of enterprise, however, does not emerge until the time comes to commit to a business plan which must be feasible to gain credit approval. McBride and the business organizations would find much common ground in the optimism preceding the stage of debt negotiations. It was, however, the government alone that had to pay for implementation of the railway plan and assume tremendous debt obligations in its realization.

In the early twentieth century there were virtually no restraints on borrowing by provincial governments. Provinces could tax and borrow as

¹¹⁰ *Vancouver Daily News-Advertiser* Feb 20, 1912, 4.

much as their electorate would accept and the banks would allow. With railways, governments were particularly prone to overextending their commitments. The difficulty with provincial borrowing through railway bonds during McBride's administration was that it existed to a great extent outside the purview of market controls. In guaranteeing railway bonds, BC was not asking to immediately borrow money for which a bank would review the government's revenues and debts before approving a loan. A provincial government guarantee of bonds, if the PGE railway defaulted, circumvented normal borrowing rules and limits. It also placed any possible repayments to some indeterminate time in the future.

In 1912 *The Canadian Engineer* was enthusiastic about continued economic expansion. It proclaimed that "Never before in the history of Canada has there been so much money spent in one year on the extension of railways, installation of water plants, construction of sewerage systems...as was expended during 1911." It predicted that "The business activity and expansion have not yet reached in Canada their greatest activities, and, as 1911 exceeded 1910 in this regard, so will 1912 exceed 1911."¹¹¹

On February 21, 1912, the *Victoria Daily Colonist* interpreted the announcement of the PGE as "the inception of a fourth transcontinental railway differing from its predecessors in having its beginning on the

¹¹¹ *The Canadian Engineer* January 4, 1912, 1.

Pacific coast...[and soon] that line will be extended to the Peace River and later into Prairie country". The danger in this type of article was that readers would assume that it was possible for a small province (1911 population of approximately 390,000; the 1912 election recorded approximately 84,000 ballots) to consider such a massive project and this would influence their railway expectations. The *Vancouver Sun* on February 22, 1912 claimed that the entire BC public was demanding an immediate railway connection with Peace River. It emphasized that "we express both surprise and regret that this is not provided for in the line to Prince George which now takes up the very ground advocated by Mr. Oliver and the Liberal opposition". Risky as McBride's plan was, in the 1912 provincial election John Oliver campaigned with an even more extensive railway plan, the major difference being that McBride was signing commitments whereas in 1912 Oliver did not have to worry about doing the same. Although the *Vancouver Province* was the least partisan of the newspapers, it unconditionally joined in the general railway mania of the time while avoiding its responsibility to provide a balanced critique of the wisdom of government policy. The newspaper felt that simply building railways lines would continue and increase the prosperity of the province. With apparently no concern for the potential cost of bond guarantees, the paper stated on February 21, 1912, that these "transport facilities [were] long needed and long waited for".

The existence of a new BC railway reached the business section of the *London Times* on February 29, 1912 with the announcement, "The Agent-General [of BC] received yesterday the following cablegram from the Premier of the Province: Province guarantees 4 percent, \$35,000 mile, 460 miles, Pacific Great Eastern railway...agreement with Foley, Welch and Stewart, independent company". In the article, the placement of the words 'Province guarantees 4 percent' at the very beginning seems to indicate the importance of this piece of information above all others in the minds of potential investors. Indeed it was critical because it meant that no matter how poor a business investment the PGE might be, investors were guaranteed an interest rate of 4% on their investment in addition to their principal by the government of the province of British Columbia. Also, the identification of Foley, Welch and Stewart (F, W&S) as an 'independent company' may have been done to mitigate readers' concerns about possible collusion between the principals involved in this project which could affect economic performance. Such apprehension was shown to be justified when it was eventually revealed that the PGE and F,W&S were one and the same entity. The construction contract was given to F,W&S without any competitive tender process being utilised which created little incentive for the careful use of bond funds.

Soon after McBride's February 1912 speech about the PGE, the availability of money and credit in London began to tighten and indeed

by April 1912, the more well-known name of 'Grand Trunk Pacific' was being prominently used in place of the name PGE to market the bonds. On April 10, 1912 the *London Times* carried an article which referred to "A guarantee of bonds to the extent of £3,150,000 for Grand Trunk Pacific branch from Fort George to Vancouver, to be operated by a company to be called the Pacific Great Eastern." In actual fact the GTP and the PGE were independent companies, sharing only a traffic agreement. With the continued downturn in world economies and the political unrest in Europe, however, it became increasingly difficult to sell the PGE railway bonds even with a rate of 4% of interest and a government guarantee so the inclusion of a recognizable name such as the Grand Trunk Pacific was another method to attract investors. Just over a year after McBride announced the PGE, it became necessary in 1913 to increase the interest rate on its bonds to 4½% to achieve any sales.

On March 10, 1913 the *London Financial Times* announced the new issue with the increased interest rate and government guarantee prominently displayed in large, bold letters. It clearly stated that both principal and interest were unconditionally guaranteed by the government of British Columbia and was also secured by a first mortgage upon the railway line, rolling stock, equipment and property of the PGE. It also emphasized that the traffic agreement with the GTP should ensure profitable operation from the outset. Finally it noted that the PGE, its

property and income were exempt from all taxation until 1926. The amount of detail and assurances accompanying this new issue of PGE bonds, when compared to previous advertisements, indicated the difficulties being experienced in securing investment.

The *London Times* carried a further announcement on March 14, 1913, entitled "Pacific Great Eastern Issue Result" which stated that "Underwriters of the recent issue of £1,000,000 Pacific Great Eastern Railway First Mortgage Four-and-a-half per cent Guaranteed Debenture stock have been left with 60 per cent of the amount offered". This was disturbing news given the reliance of the PGE on capital from London and given the need for the PGE to realize bond amounts close to face value in order to complete the railway within the original construction estimates. It would have been prudent at this juncture for Richard McBride to have begun consideration of alternatives, such as a suspension of borrowing and construction, to limit the financial damage to the province. Halting the sale of bonds would have eliminated provincial responsibility for any further guarantee of principal and interest. McBride took no action.

The south-eastern BC town of Nelson was a bustling resource town in the early 1900s. The *Nelson Daily News* was eight pages long while the *Prince George Citizen* and *Kelowna Courier* newspapers were four pages. On January 1, 1914 the *Nelson Daily News* carried a front page story describing Premier McBride's rosy predictions for the New Year which

“struck the chord of optimism and dominant faith in the future greatness of the province”. The *Daily News* quoted McBride as saying that “the year that has just past should be a milestone of splendid encouragement in our forward march. The need of the day in this province is...for an outward expression of our faith. The policy of railway development inaugurated two years ago...has been pushed forward vigorously during the [past] year.” Unfortunately in the dispassionate world of business, enterprises need to focus their energies on the expression of a healthy bottom line and companies founded on faith rather than viable business models often find the anticipated success to be non-existent.

On January 1, 1914 The Nelson *Daily News* editorial talked of the prosperity experienced in Nelson saying “Probably in no part of Canada, at least in no part of the west, have these conditions [financial stringency] had so little effect as in Kootenay and the Boundary. Mining has made great strides during the year and fruit growing has proved more profitable than ever before...The people of Kootenay and the Boundary can on the whole, therefore, look back to 1913 with a good deal of satisfaction.”

Although the Nelson *Daily News* carried articles on major milestones in the PGE's progress, its primary focus was the flourishing railway developments in the Kootenays and connections to eastern Canada by means of the Crow's Nest Pass railway and to Vancouver through the Kettle Valley Railway.

McBride glowingly described the progress being made on CNoR tracks both on the mainland and Vancouver Island; the KVR through the Nicola, Boundary and Okanagan districts; the GTP from Prince Rupert to the Alberta border; new CPR terminal facilities in Vancouver; and 5,000 men working on 170 miles of PGE track. With regard to the PGE, he noted that "I believe that next year [1915] will see a train running from Howe Sound to Lillooet." McBride was anticipating a celebration for approximately 117 miles of line being completed between Squamish and Lillooet in early 1915 while ignoring an unfulfilled stipulation of the PGE construction contract that 480 miles of railway be completed by July 1, 1915. Rather than praise for completing the track to Lillooet, questions should have been raised as to why only 25% of the line would be finished in 85% of the contract time allotted. Moreover, with 5000 men employed in construction the problem would not appear to be a lack of available labour or materials. Therefore the difficulty must have been related to either a lack of money or an unworkable plan.

McBride also stated that "Never in the history of British Columbia has this province stood so high in the financial markets of the world as it does today. Our policy of conservative development has been carefully studied".¹¹² It is difficult to reconcile the issuance of more than \$80 million of railway bonds, guaranteed by the BC government in an era of financial

¹¹² Nelson *Daily News* (January 1, 1914), 1, 3.

stringency and the fact of McBride's personal knowledge of looming financial problems in the PGE project (the railway bond money was being depleted at an alarming rate) with McBride's claim to have a 'policy of conservative development'.

The legal requirement to dispense the railway bond money once a month, in amounts proportionate to work completed, was in fact abused to such an extent that after less than sixteen months of construction, the PGE was running short of money. The situation became so critical that in February 1914 the government had to go back to the Legislative Assembly to increase the subsidy from \$35,000 to \$42,000 per mile in aid of the PGE project. Table 6.8 following, Railway Construction in BC, 1908-1915, indicates the cost of railway construction taking place in BC.

Table 6.8 Railway Construction in BC, 1908-1915

(Royal Commission, 1917)

Railway	Length (miles)	Actual Cost per mile	Start Date
PGE	480	\$84,000	1912
GTP	830	\$112,000	1908
CNoR	500	\$70,000	1909
KVR	300	\$66,000	1910

While Vancouver business interests were pressing for completion of a rail link to Prince George as soon as possible, as they saw the potential

for profits from the natural resources of the interior, they were also advocating further connections to the Peace River area of north-eastern BC. The *Victoria Daily Colonist* was articulating and supporting the broader themes of increasing general provincial prosperity by means of a comprehensive railway infrastructure. An editorial on February 22, 1912 concerning McBride's announcement of his new railway policy noted that "His speech breathed throughout a splendid spirit of optimism...in every respect worthy of the man, the place and the subject". The *Victoria Daily Colonist*, however, pointed out that "the scope of the government policy is far wider than the measures heretofore ratified by the House...[and] Mr. McBride has led his ministry and the legislature out upon a field of effort that is almost limitless."¹¹³ In contrast, the *Prince George Citizen* was just eager to have any kind of direct connection with Vancouver because of the business and social benefits which would accrue to its citizens. Newspapers throughout the province reflected the general belief that construction of railways was the key to economic growth.

Foley, Welch and Stewart (F,W&S)

The Foley brothers, Timothy, Michael, Thomas and John, were born and raised in Lanark County, Ontario to which their father had emigrated from Ireland in the 1830s. They moved to Minnesota as adults in the 1870s to find work as lumbermen during the winter and in the summer they used

¹¹³ *The Victoria Daily Colonist* (February 22, 1912), 4,5.

their horse teams for grading contracts with the Northern Pacific, Canadian Pacific and Great Northern railroads. Eventually, construction became their full-time occupation, building in total 25,000 miles of railway lines worth over \$1 billion.¹¹⁴

The four brothers operated their company as an equal partnership until the early 1900s when they incorporated and took on additional partners. At this point Patrick Welch and John W. Stewart joined the company and it became known as Foley, Welch and Stewart (FW&S). Soon afterwards, Canada embraced a period of great railway growth with the building of two new transcontinentals, the Grand Trunk Pacific and the Canadian Northern which were meant to create competition for the CPR and provide rail service to new areas. FW&S played a major role becoming at one point in time the biggest railway contracting firm in the west with 50,000 workers and 2,000 miles of railway under construction.¹¹⁵

Foley, Welch and Stewart reached the high point of its railway accomplishments in the 1910s with several projects including the Connaught Tunnel through Rogers Pass; 550 miles of CNoR line from Port Arthur to Sudbury; 1,300 miles of the GTP line from Saskatoon to tidewater at Prince Rupert BC; 179 miles of the CNoR line from Hope to Kamloops in BC; federal government dockage facilities in Halifax; and the PGE line. The advent of World War I, however, brought soaring prices, scarcities of

¹¹⁴ E.T. Foley, *Seventy Years: The Foley Saga* (Los Angeles: Ward Ritchie Press, 1945), 3.

¹¹⁵ G.W. Taylor, *Builders of British Columbia* (Victoria: Morriss Publishing, 1982), 43.

materials and a dwindling supply of labour. Soon “it became evident that the project [PGE] could not be completed within the meagre limits of the bond moneys available. The melancholy days of Canada’s overbuilt railroads were setting in, and the old firm was content to relinquish this line to the Province. It proved a good quittance.”¹¹⁶

In the Select Committee hearings of 1917, D’Arcy Tate explained that the reason F,W&S held all the capital stock of the PGE Company was because GTP President Charles Melville Hays “insisted that they [FW&S] must retain a controlling interest” in order to prevent the BC government from attaining control of the company. For his part, McBride was determined that his government would not be saddled with the responsibility of either building or owning a railway. Consequently, he “insisted that the firm [FW&S] should be given the covenant for the construction and operation of the railway”.¹¹⁷

Both Richard McBride and GTP President Melville Hays used FW&S to achieve their own goals. McBride wanted rate but not operational control of the PGE while Hays wanted rate control and a provincial subsidy in return for building a line from Prince George to Vancouver. In supporting FW&S as builders and owners of the PGE, McBride believed he had secured rate control without ownership responsibilities while Hays through

¹¹⁶ Foley, 49.

¹¹⁷ Select Committee of the Legislature, 1917, J94.

his Traffic Agreement was convinced that he had acquired a cost-free branch line controlled by an independent railway company.

The terms of the agreement which McBride made with FW&S entailed the possibility of significant financial risks in the investment made by the province. Either, McBride and his government were very naïve about railway construction or purposely ignored these issues in order to get the railroad built and keep the electorate happy. Neither scenario escapes the charge of mismanagement by the provincial government of the public trust extended to them by the electorate on the understanding that they would wisely protect the economic health of British Columbia.

Chapter 7: The Economics of Railway Building

This chapter is divided into three sections which describe the challenges, both physical and financial, and the creative justifications put forward to promote the building of railways, such as the PGE, before there was sufficient passenger and freight traffic to warrant or support their existence. The first section, *Constructing In Advance of Demand and Social Value*, examines the idea of premature railway construction and its relation to social value. Rationalizing railways from an *ex post* position is fairly easy to do. In general, people are in favour of any technology which makes their lives simpler, easier or more prosperous. Technology which allows them to travel faster and move products more reliably is considered to be socially valuable. It is not possible, however, to guarantee or accurately quantify such social value *ex ante*.

Section two, *Government-Guaranteed Bonds*, looks at their purpose and value from the differing perspectives of governments and those involved in the creation of the railway. Government guarantees of the principal and interest of railway bonds was a short-sighted and fiscally hazardous method of gathering capital to finance the building of railways. Politicians were able to make promises of railways to the electorate based on the apparent security of the bonds. If the railways were successful, the politicians would receive the credit. If not, it would

probably be a future administration which would have to deal with the insolvency. Contractors, however, were only interested in the security provided by the bonds.

Section three, Calculation of the Private and Social Value of the PGE, demonstrates statistically why private companies would consider the PGE Railway venture to be unfeasible based on the cost of investment and projected return. The PGE debt obligations created by the government guaranteed railway bonds, in addition to continuous operational deficits twenty years after construction began, are used to calculate the private and social values attached to the building of the railway.

Constructing in Advance of Demand and Social Value

A business opportunity can be identified when demand sufficient to at least cover investment and operating costs is expected to exist, and is judged to have the potential to return a profit. Entrepreneurs seeking to exploit such an opportunity will then endeavour to secure the necessary capital from their own resources or outside funds to establish the business. Having convinced investors of the feasibility of the venture, a private business plan is initiated.

The history of railway building and operations typically stands in stark contrast to the usual business model for investment since their construction and operation was often justified 'in advance of demand'

on grounds other than private returns on investment.¹¹⁸ Railway investment was typically motivated by speculation¹¹⁹ and an argument for public support because of positive externalities¹²⁰ which could generate social returns, significantly increasing the total value of the line. The PGE was an example of a railway that was built based on the argument that anticipated social returns would justify building 'in advance of demand'.

When Richard McBride explained his railway policy to the Legislative Assembly in 1912 he made reference to the need for government foresight in determining which areas would benefit most from premature construction. He remarked that "as a government, we feel that it is our duty to try to see a little in advance. So it is with that determination

¹¹⁸ A notable exception to this general rule was the Liverpool and Manchester Railway which was built in 1830 in an area with more than 560 cotton mills employing over 110,000 people in the Manchester area. The thirty-mile railway was built to relieve severe overcrowding on the Manchester Ship Canal. Raw cotton imported from the United States would often take longer to travel 30 miles through the Ship Canal to Manchester than it took to transport the cotton from the US to Liverpool. The investors in the Liverpool and Manchester Railway were building to satisfy an existing demand and were not facing the extraordinary financial risks taken in many North American railway construction projects which were constructed ahead of demand.

¹¹⁹ Lipsey et al argue the case that many emerging general purpose technologies are accompanied by waves of speculative investment. For a recent example consider the "dot com" boom and bust which accompanied the emergence of the Internet and the World Wide Web. Also, A.W. Currie points out that money was cheap during the prosperity of the first decade of the twentieth century and "Canadians could borrow on easy terms for investment in railways...The flow of money into the country continued throughout the period [leading up to World War I]...[thus] the inevitable time of reckoning when interest and principal had to be paid abroad was postponed". Widespread speculation based on foreign credit was common. A.W. Currie, *Economics of Canadian Transportation* (Toronto: University of Toronto Press, 1954), 50.

¹²⁰ Positive externalities: benefits occurring to third parties at no cost to the third parties.

to be a little in advance that we are at this present time making provision for the opening-up of the country."¹²¹

British Columbians believed that railways would bring social benefits as well as economic success and were, consequently, exerting great pressure on the government to provide a comprehensive rail network throughout the province. Most of the social benefit from these railroads could not be captured by private firms who, therefore, would not consider investing based only on the anticipated private returns. Governments concluded that some kind of public intervention would be required to spur sufficient investment to serve the social interest. Although construction which is 'in advance of demand', based on calculated social returns can be a worthwhile railway project, it nevertheless entails many financial risks. Historically, many governments have played a central role in inducing and coordinating investment in railways and in some cases taking ownership positions themselves. Implicit in the supposition of 'constructing in advance of demand' is the confidence that at some point in the future there will be a demand for the railway under consideration. Private companies would usually delay any investment decisions until a commercially profitable demand for the service could be demonstrated. For governments, however, a different logic obtains.

¹²¹ "McBride's Speech" in *British Columbia Magazine*, 225.

Universal benefits for society become a compelling argument and a 'social rate of return' an important part of their deliberations.

Compared with private companies, governments are charged by the electorate with an expanded set of responsibilities. Society expects them to look beyond the bottom line when running the province or country. Major infrastructure projects which benefit large sections of society are seen as desirable and necessary even if they do not immediately (or in some cases ever) yield a private profit. Such undertakings are seen as having a 'social value' beyond their private return. Education, health care, national defense and transportation are examples of areas which society values beyond considerations of private profit. If a social rate of return exceeded the prevailing interest rate then it was logical for the government to extend some form of subsidy to railway construction firms in order to convince them to build railway lines.

The difference between social and private return is challenging to assess because of the absence of objective quantifiable values. An example of a social benefit of the PGE would be the value to a person living in the BC interior of a one day train trip to Vancouver rather than one week wagon trip. Having much faster access to an urban area for family, medical, educational or other purposes also reduces costs to citizens living in the interior as they experience less income loss. The

difficulty arises when trying to attach a dollar value to the increased social benefit of having a railway connection.¹²²

Richard McBride could have mitigated the financial drain of the PGE by postponing construction until the end of World War I. With a resumption of immigration, a number of returning soldiers being interested in farming¹²³ and, therefore, demand for the PGE railway increasing, McBride would have emerged from the war with funds already in place to re-activate completion of the PGE. The flawed optimism of Canadian governments of the 1850s, however, which guaranteed bonds for the premature construction of the Grand Trunk Railway (GTR) and then became saddled with enormous debt payments, was also very much in evidence in the person of BC Premier Richard McBride in the 1910s. While great optimism can be an attractive asset in a politician running for office, it can become a liability in an elected leader who is responsible for the financial stability of a province. If in 1914 or even in 1915, McBride had acknowledged the depressed economic atmosphere which had emerged in Canada, he could have limited the damage to the PGE

¹²² Marr and Paterson note the social benefits, such as greater national income, lower transport prices, opening up new regions to settlement, by which a government could justify providing subsidy and support for the building of a premature railway. W.L. Marr and Donald G. Paterson, *Canada: An Economic History* (Toronto: Gage Publishing, 1980).

¹²³ *Industrial Canada Trade Journal*, December 1918, reported that "a canvas of soldiers overseas shows that 100,000 men have expressed their desire to take up agricultural pursuits if this is followed up by some form of Government assistance."

project by delaying construction until there was a return of economic stability, but he did not.¹²⁴

A prime example of using social value to justify the premature building of a railway in Canada occurred not long after Confederation. When the government of Canada decided in 1870 that a large social benefit (e.g. unifying the country and facilitating economic development of the West) would accrue to Canada if a transcontinental railway were built from the existing rail network in eastern Canada to tidewater on the Pacific Ocean, no private investors could be convinced that it would be an economically profitable venture. The federal government realized that it would have to provide an incentive to convince private enterprise to build the line. After the GTR experience of the 1850s, governments were strongly averse to using guaranteed bonds so a subsidy combination including money, land and free acquisition of already completed sections of the railway was used to convince a syndicate led by George Stephen that they would receive a return on their investment equal to alternative business opportunities if they built the Canadian Pacific Railway (CPR). This subsidy, then, can be interpreted as the social value of the CPR as it

¹²⁴ Carlos and Lewis suggest that a low social value for the GTR during construction in the 1850s was related to bad timing and if it had been delayed the social value would have been within normal parameters. A.M. Carlos and F.D. Lewis, "The Profitability of Early Canadian Railroads: Evidence from the Grand Trunk and Great Western Railway Companies" in C. Goldin and H. Rockoff, eds., *National Bureau of Economic Research, Strategic Factors in Nineteenth Century American Economic History* (Chicago: University of Chicago Press, 1992).

represents the amount of money required to provide private investors with a level of return which would induce them to agree to the project.¹²⁵

When governments become financially involved in construction projects the result is a 'mixed enterprise' in which control is shared between private and public interests. This combined effort changes the parameters of the venture by significantly reducing the risk factors. Private companies could be induced to take on a mixed enterprise because of the presence of government-guaranteed funds which ensure the safety of private investments whereas normal market conditions would not. As a private scheme, prospective promoters would have spurned the business opportunity offered by the PGE because it was to be built through hundreds of miles of unsettled areas with no centres of significant population and hence no way of creating revenue for the foreseeable future. The PGE was being built prematurely and as such was an illogical private business proposition but, as a mixed enterprise, the risk to the private investors was substantially mitigated by virtue of their government partners' extensive powers of taxation, affording them the ability to raise money necessary to cover unforeseen costs in a way that individuals or private companies could not.

¹²⁵ George calculates that a subsidy of between \$59 million and \$73 million was needed to give CPR investors a return on investment of between 6% and 10%. Peter J. George, "Rates of Return in Railway Investment and implications For Government Subsidization of the CPR: Some Preliminary Results", *The Canadian Journal of Economics*, 1, No.4 (1968): 742.

Many railroads in the United States were also built 'in advance of demand'. A comparison between the Union Pacific railroad (UP) and the PGE reveals two major similarities. First, the fact that the governments of the United States and of British Columbia found it necessary to provide subsidies and bond guarantees in order to convince contractors to build the Union Pacific and PGE railways indicates that both roads were premature. No private company felt that there would be sufficient revenue created by the project to justify the investment. The US Congress recognized the social value of the UP railroad and guaranteed many millions of dollars of bonds to ensure that it would be built.¹²⁶

The second similarity was the organizational structure of the projects. A number of men who were directors of the Union Pacific railroad were also contractors and shareholders of the Credit Mobilier company which financed construction, using government bonds as collateral for borrowing. These men built the railway and decided how much to pay themselves to do so. In the same way, the "contract which was let by the [PGE] Company for the construction of the road to Patrick Welch was in reality a contract to the firm of Foley, Welch & Stewart [F,W&S], the promoters and owners of the [PGE] Company".¹²⁷ With both

¹²⁶ Fogel determines a social value for the UP by calculating the increase in national income attributable to the Union Pacific. He focuses on the increase in income due to the opening up of new land and concludes the UP had a significant social return. R.W. Fogel, *The Union Pacific Railroad: A Case of Premature Enterprise* (Baltimore: Johns Hopkins Press, 1960).

¹²⁷ *Select Committee of the Legislature*, J 646.

the Union Pacific and PGE, the majority of the owners, promoters and contractors were one and the same group of people which allowed those doing the work to decide what they would pay to themselves for their services.

Similar to the PGE situation, opportunistic UP contractors took advantage of their position of strength. With guaranteed bond money at their disposal, the contractors (who were also the owners) were assured that construction funds would be provided but they had no certainty that the completed railway would actually make money. Understandably looking out for their own interests, they sought to maximize their profits during the period of construction when there was a steady source of accessible money from the US government. In addition, the lack of a transparent tendering process in the case of both the UP and PGE circumvented any motivation to estimate realistic construction costing, clearing the way for outright profiteering. The builders of the Union Pacific railroad were estimated to have realized a profit of between \$13 million and \$16.5 million or 22% to 27% on an invoice of \$59,000,000.¹²⁸

The ex ante potential profit on construction would also seem to have been the primary attraction for FW&S in the building of the PGE. Vice-President of the PGE, D'Arcy Tate, said that "We never thought that \$35,000 per mile was going to produce the road...the estimated cost of

¹²⁸ Fogel, *Union Pacific*, 70, 71.

this road exceeded \$27 million and the proceeds of the bonds were only \$18 million so there would be a deficit right from the beginning".¹²⁹ If FW&S extracted their profit as construction proceeded, they knew that the government guarantee would meet the interest obligations of the railway bonds if the line were not completed and became bankrupt due to a later shortage of funds. The security thus provided by the government neutralized any anxiety they may have had about completing the railway. In his testimony before the Select Committee on the PGE in 1917, Patrick Welch as contractor freely admitted to a profit of \$6,345,632 on earnings of \$16,475,630 which represented a yield of 38%.¹³⁰

While some observers of the financial arrangements of the PGE project may have thought that FW&S would be looking to land sales for the bulk of the profit they would realize from the enterprise, Tate maintained that this was incorrect. He testified that "in town site land we expended about \$2 million and in the ordinary course of things...we would probably have got anywhere from \$8 million to \$10 million for that expenditure" and that "the profit made by the PGE Development Company on the sale of town site lots would be put towards construction of the PGE".¹³¹ The first cost estimate for the PGE of \$27.8 million minus bond proceeds of \$18.2 million leaves a starting deficit of \$9.6 million. Even

¹²⁹ Select Committee of the Legislature, J105.

¹³⁰ Select Committee of the Legislature, J705.

¹³¹ Select Committee of the Legislature, J64, J90.

if the PGE Land Development Company had been successful in realizing a profit of \$10 million on land sales, FW&S would not have made a business judgment to proceed with a questionable venture on the possibility of an indirect \$400,000 profit.

FW&S were seasoned contractors who would assess the opportunity cost of agreeing to a project with a relatively small estimated profit which was not even based on efficient internal construction techniques but controlled by external market forces. In economic terms, by proceeding with the PGE for low profit margins, FW&S was committing scarce resources for relatively little return but significant opportunity costs of sacrificing involvement in other projects. FW&S may, therefore, have been convinced that they would be able to get more money from the BC government when they needed it once the PGE project was underway. With the PGE and Union Pacific initiatives, governments were successful in convincing private companies to build railroads which were premature enterprises. Society could hardly be surprised then, if companies who were committed to these uncertain projects sought to gather their promised rewards sooner rather than later.

The major difference between the Union Pacific and the PGE was related to the issue of population size. The brutal reality was that Canada, unlike the US, did not have a large eastern population to help settle its western regions or a mighty industrial base to provide the volume of

manufactured products and increasing levels of national wealth which would continually attract large numbers of immigrants. In addition, when building 'in advance of demand', the US had much greater financial resources (both relatively and absolutely) than Canada with which to ensure continued solvency during recessionary periods. For BC, building in advance of demand was a risky venture in times of prosperity but presented extreme financial risks during an economic downturn.

While private companies focus on simple profitability when contemplating a new venture, governments are also required to examine potential benefits to society. In undertaking exposure to risky investments governments must, however, consider their ability to pay for them regardless of the expected social rate of return. The size of the existing population is an important consideration for governments thinking about assuming the significant financial obligations entailed in building a new railway meant to open up an area in advance of a sufficient population base to justify it. A simple way to relate tax base to population base is by assuming that they are linearly proportional. This then allows one to demonstrate how a tax base increases when the population increases. For example, an $x\%$ increase in population means a $\beta \cdot x\%$ increase in tax revenue. Therefore, for a given cost per mile of railway, a country or province with a greater population has more money available to pay for such construction and to deal with unforeseen circumstances. Banks are

willing to extend ever larger amounts of credit to governments based on the size of the population, secure in the knowledge that governments are able to collect more tax revenue as the population increases. When the United States completed its first transcontinental railroad in 1869 'in advance of demand', it had a population of approximately 38 million people from whom the government received tax revenue of approximately \$289 million.¹³² The extensive tax base enabled the US to raise large amounts of money both through increasing taxes and accessing credit based on its taxing ability, in order to fund the project and protect its financial stability in unexpected situations.

Although inclusion of existing population size would normally be a factor in a decision to build a railway ahead of demand, McBride seemed to ignore the dangers inherent in BC's comparatively small 1912 population of 390,000. He apparently discounted the possibility of BC actually having to pay the interest charges and/or repay principal if the PGE defaulted on its railway bonds.¹³³ McBride used his 1912 election victory, where he garnered 50,423 of 84,529 available votes, as a

¹³² Office of Management and Budget, *Historical Tables, Budget of the U.S. Government*, www.budget.gov

¹³³ Between 1911 and 1921 Alberta's population increased by 214,159 and that of BC by 132,102. During this time Alberta avoided any large-scale government railway-building. Only in the 1920s did Alberta reluctantly take possession of several railways which were bankrupt. BC, however, although growing at a slower rate than Alberta, chose to commit to guaranteeing \$20.1 million of railway bonds for a 480 mile rail line through difficult and isolated terrain from Vancouver to Prince George. Ten years before, Ontario with more than five times BC's population had considered very carefully before becoming involved in 112 miles of pioneer railway. See reference tables in Appendix B: Estimated Population of Canada 1900-1925; and Population of Canada, census dates 1851-1961.

mandate to justify his decision to build the PGE.¹³⁴ In addition, Premier McBride knew in March 1912 that BC had a half-million dollar deficit more than four months before he signed the bond mortgage for construction of the PGE, committing the province to millions of dollars in government-guaranteed railway bonds and six months before those bonds were irredeemably pledged to the construction contract with FW&S in the fall of 1912.¹³⁵

McBride most likely understood that in building the PGE he was operating outside the boundary of business logic. As such, he was embracing significant risks above and beyond those inherent in committing to any normal private business initiative. BC posted surpluses from 1905 to 1911 but returned to six years of deficits beginning with \$443,255.53 in 1912 (\$2,902,109.40 in 1913 and \$5,283,653.74 in 1914). The surpluses were based on income from timber and mining licenses in a buoyant world economy. While McBride could point to some factual increase in prosperity which BC had experienced in recent years, mortgaging BC's future as the economic climate changed, on the basis

¹³⁴ During this time period, children, most women and First Nations people were neither considered independent contributors to taxes, nor did they have the right to vote. The total number of electors, however, gives some indication of the true size of the BC tax base and reveals an even riskier basis for the assumption of a large debt. See Table 4.1 Election Results 1871-1921.

¹³⁵ Table 4.2 Revenues and Expenditures, 1902-1918 shows that for the fiscal year 1911/1912 ending March 31, 1912, BC's tax revenue was \$10.7 million but its expenditure was \$11.2 million yielding a deficit of \$443,255.

of optimism, brings into question his ability to manage BC's finances responsibly.

McBride's rationalization for the construction of the PGE was to open up new areas of the province for immigrants to settle, to give farmers a way to move their products to market and to create the transport links necessary to allow resource extraction on a commercial level, thereby improving the mobility options of people and freight. When speaking to the Progress Club on June 25, 1913 in Vancouver, McBride connected the issue of building 'in advance of demand' with population growth. He asserted that "We have never attempted to bring people here in wholesale quantities, because I have always held it would be a crime to attract thousands here on large expeditions and plant them on the hinterland before you have trunk roads and markets. Let us build our roads, finish our railroads, and then promote a wholesale influx."¹³⁶ McBride was describing the social value connected with building railways ahead of the arrival of immigrants to BC.

The flow of immigrants to Canada had been strong throughout most of the first decade of the 1900s and McBride saw no reason to doubt that the same would be true of the 1910s. The table, Immigrant Arrivals to Canada, 1900 to 1956, (see Appendix B) shows the largest number of immigrants to Canada in this time period occurred in 1913 (with 400,870)

¹³⁶ *British Columbia Today*, "Sir Richard McBride's Speech to the Progress Club of Vancouver" (Vancouver. June 25, 1913), 7.

and dropped with the advent of World War I to a low point of 36,665 in 1915. While an immigrant influx to Canada of 400,870 in 1913 might seem to support McBride's rush to build the PGE railway and open up the interior of BC, a comparison with another population table reveals a different viewpoint. The table, Estimated Population of Canada 1900-1925 (see Appendix B) shows a change in Canada's population from 7,389,000 in 1912 to 7,632,000 in 1913 or an increase of only 243,000. With the table, Immigrant Arrivals to Canada indicating the arrival of 400,870 immigrants in 1913, the inescapable conclusion is that 157,000 people left the country in 1913.¹³⁷

There was also no guarantee as to how many immigrants to Canada would choose to settle in BC. Ontario offered a much larger population with more opportunities for employment. It had a more diversified and therefore more stable economy with strong resource and industrial sectors. Another alternative for immigrants was the prairies which offered large established farming areas with transport access and an easier landmass than BC to homestead. The isolation of BC's sparse

¹³⁷ Additionally, the table, Population Density per Square Mile, Canada 1871 to 1956, offers a comparison of provincial population densities. In 1911 BC had a population density of 1.09 people per square mile compared to 1.50 for Alberta, 6.96 for Ontario and 2.08 for Canada; the table, BC Municipal Census Populations, 1921 to 1956, shows the earliest figures available for municipal populations in BC and indicates how few people lived in the interior of BC in the first half of the twentieth century; the table, Population of Canada, Rural and Urban, indicates that Canadian society was continuing to shift from rural to urban settings during the period of the building of the PGE (Tables found in Appendix B).

population, its rugged topography, and limited infrastructure could well have encouraged many immigrants to choose other parts of Canada. Some immigrants would have left BC and Canada for more temperate climatic regions and much greater economic opportunities offered by the United States which in 1911 already had a population of over 92 million people.

Government-Guaranteed Bonds

Building railways absorbed tremendous amounts of capital. They were the largest infrastructure projects ever undertaken in Canada up to that time and the capital resources available in Canada were insufficient to meet their enormous cost. The success of the British industrial revolution had created large amounts of investment capital. By the 1850s new, large-scale investment opportunities in Britain were becoming infrequent and investors began to look overseas to place their profits but felt insecure about committing their funds to Canadian railways. They were unfamiliar with the climate and geography and so had very little information upon which to base a favourable decision. The Canadian government decided that to acquire needed capital for railway construction, British investors needed some form of security for their investment. To address this problem, Canadian politician Francis Hincks initiated the Guarantee Act of 1849 to secure financial backing for the construction of the Grand Trunk Railway (GTR) which marked the beginning of Canadian governments

guaranteeing railway bonds. The GTR had financial problems almost from inception but the bond guarantee permitted construction to begin and only the certitude of the guarantee convinced banks to continue money advances.¹³⁸

In guaranteeing railway bonds, governments assumed that the receiving companies would be successful and therefore did not allow for the potential risk involved. The resultant indebtedness related to the GTR guarantees led governments to renounce future use of railway bonds. By the early 1900s, however, guaranteed bonds were once again an accepted feature of railway development. The recession of much of the last part of the nineteenth century was over and most of Canada was experiencing expanding prosperity. Memories of the government debt created by the GTR bonds had faded and been replaced by the unequivocal success of the Canadian Pacific Railway. With the federal government guaranteeing the bonds of both the Canadian Northern and the Grand Trunk Pacific railways, it was not surprising for Premier Richard McBride to want to enter into similar financial agreements with the Pacific Great Eastern railway. The attraction of guaranteed bonds had captivated a new generation of politicians. It seemed like a remarkable bargain. Politicians could win votes by guaranteeing bonds to enable

¹³⁸ Carlos and Lewis conclude that governments were convinced that guarantees would have little financial cost. A.M. Carlos, and F.D. Lewis, "The Creative Financing of an Unprofitable Enterprise: The Grand Trunk Railway of Canada, 1853-1881", *Explorations in Economic History*, 32 (1995).

railway construction to begin, there was no immediate cost and there was no obligation, with the exception of the possibility of having to pay interest charges at some indeterminate time in the future in the unlikely event that the railway defaulted on its interest payments. With prosperity increasing year over year, it was thought that the latent danger could be safely ignored.¹³⁹

Railway contractors, promoters and investors however, had a significantly different view of the value of railway bonds. Government guarantees changed the way that they determined the feasibility of a railway project.¹⁴⁰ The risk involved for the contractor was greatly mitigated by a guarantee which ensured a continuous cash flow. The contractor did not have to consider whether the debt the railway incurred in building would restrict future profit to such an extent that investors would withdraw before construction was complete. Government guarantees increased the possibility of bankruptcy because they removed much of the incentive for contractors to build as economically as possible and also encouraged promoters and investors to take large financial risks as, even in failure, their payment was guaranteed. In the absence of guarantees, there was less chance of bankruptcy because

¹³⁹ A similar undiscerning optimism can be identified in the 2008 financial crisis precipitated by the failure of sub-prime mortgages which were justified in the faulty belief that 'house prices can only rise'.

¹⁴⁰ Lewis and MacKinnon determine that guarantees encourage investors to participate in ventures which they would normally consider to be unprofitable. Frank Lewis and Mary MacKinnon, "Government Loan Guarantees and the Failure of the Canadian Northern Railway", *The Journal of Economic History*, 47, No.1 (March, 1987): 175.

there would not be a sufficient potential of profit to attract enough investment to begin the project. When the economy stagnated guarantees allowed contractors, promoters and investors to continue with their plans and as rational businessmen faced with limited alternatives, they would have chosen to increase debt to dangerous levels for three reasons. First, doing so would maintain a constant flow of cash to continue building; secondly, the history of the CPR demonstrated that even the most desperate economic situations can have the potential for greatly profitable conclusions; finally, to capitulate was the one certain guarantee of failure.

The PGE promoters agreed to the BC government's offer of a guaranteed bond amount of \$35,000 per mile, even though they suspected that it would be an inadequate amount to build the railway, because they were hoping to reap great profits from land sales and failing that through construction. Either way, the promoters knew that they did not need to worry about the consequences of insolvency as the government was committed to ultimate responsibility through the bond guarantees.

McBride, with his 1909 Canada Northern agreement, entered into the arena of guaranteed railway bonds with a similar equanimity to that which the Government of Canada portrayed in the 1850s. His optimistic outlook could see no danger. In 1912 McBride approved over \$16 million

of PGE bonds at an interest rate of 4% and in 1914 increased the bond amount to more than \$20 million at 4.5% which committed the people of BC to compounding yearly interest payments of \$907,000 ($\$20,160,000 \times 4.5\%$) per year plus the cost of repaying the principal amount if the PGE defaulted. McBride also decided to extend the PGE 275 miles to the Peace River district and pledged the government to the issuance of a further \$11,550,000 of guaranteed bonds. The province of British Columbia, in the midst of a severe economic downturn was now obligated to the PGE project for more than \$30 million of bonds. McBride had also endorsed bonds in the amount of \$47,975,000 for the CNoR and \$647,072 for the Nakusp and Slocan Railway. By 1914, therefore, McBride had obligated BC to honour guaranteed railway bonds of more than \$80 million.¹⁴¹

The PGE's 1918 insolvency forced the government of BC to assume ownership of the railway and its attendant debts. The 1918 tax revenue of British Columbia was \$8.9 million. The precipitate risk which Premier McBride took in 1912 determined that in 1918 more than 10% (\$907,000) of the yearly net revenue of the province was committed to a single debt (consisting of an incomplete railway) as the PGE had defaulted on its interest payments and the government was forced to pay the interest on \$20,160,000 of railway bonds. By 1932 the amount of unpaid interest for

¹⁴¹ British Columbia Legislative Assembly, *Public Accounts 1914-1915, Railway Guarantees* (Victoria: King's Printer, 1915), Railway Guarantees C29.

which the government was responsible had reached \$19,988,432 in addition to government advances of more than \$30 million to the PGE Company for construction and operational losses¹⁴² (see Table 7.1 *Net Operating Revenue of the PGE 1917-1932*, following). With the unpaid interest, advances and the initial bonded debt of \$20.1 million, by 1932

Table 7.1 Net Operating Revenue of the PGE, 1917-1932

(Annual Report of the Statistics of Railways of Canada)

Year Ending	Gross Operating Revenue	Operating Expenses	Net Operating Revenue
June 30, 1917	\$179,671	\$287,880	-\$108,209
June 30, 1918	Did not report	Did not report	Did not report
June 30, 1919	Did not report	Did not report	-\$175,503
Dec 31, 1919	\$ 481,248	\$838,837	-\$357,588
Dec 31, 1920	\$522,282	\$878,047	-\$355,765
Dec 31, 1921	\$383,389	\$751,931	-\$368,542
Dec 31, 1922	\$432,071	\$821,105	-\$389,033
Dec 31, 1923	\$436,049	\$660,514	-\$224,464
Dec 31, 1924	\$410,012	\$680,855	-\$270,843
Dec 31, 1925	\$436,833	\$721,351	-\$284,518
Dec 31, 1926	\$473,918	\$747,420	-\$273,501
Dec 31, 1927	\$474,395	\$664,635	-\$190,229
Dec 31, 1928	\$531,331	\$663,441	-\$132,109
Dec 31, 1929	\$561,274	\$617,119	-\$ 55,844
Dec 31, 1930	\$480,070	\$535,887	-\$ 55,816
Dec 31, 1931	\$423,144	\$488,924	-\$ 65,779
Dec 31, 1932	\$374,563	\$442,632	-\$ 68,068

¹⁴² The PGE posted an operating deficit for its first sixteen years of operation ranging from a high of \$389,033 in 1922 to a low of \$55,816 in 1930.

the PGE had become a debt load of \$72,750,892 upon the taxpayers of BC.¹⁴³

Calculation of the Private and Social Value of the PGE

Table 7.2, Private and Social Valuation of the PGE 1912-1932 following, and the private and social value equations below were created based on figures from annual railway reports issued by the federal government, Table 7.1 Net Operating Revenue of the PGE 1917 to 1932 preceding, and Marr and Paterson's discussion of railway values.¹⁴⁴ Referring to Table 7.2, the private present value of the PGE in 1912 was -\$4,846,153 as calculated using equation (1).

$$(1) \quad PV = \sum_{t=0}^T \frac{(GR_t - OE_t - GI_t)}{(1+r)^t}$$

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¹⁴³ Dominion Bureau of Statistics, *Annual Report of the Statistics of Railways of Canada*, 1932.

¹⁴⁴ Carlos and Lewis, in "The Profitability of Early Canadian Railroads", suggest a calculation of the private value of railways which is similar to that of Marr and Paterson. Their determination of social value, however, is based on the addition of consumer surplus alone and does not include an amount for externalities. The addition of a value for positive externalities which citizens of BC would receive as benefits from the building of the PGE makes the Marr and Paterson calculation more comprehensive in its application.

¹⁴⁵ where $t \in [0, T]$; GR_t is the gross operating receipts of the railway per period; OE_t is the operating expenses of the railway per period; and GI_t is gross investment in the railway per period. Marr and Paterson, 323.

If the present values for each year 1912 to 1932 are calculated and the results totalled, we can conclude the private present value for the PGE was -\$24,627,945 in 1932.

Similarly, we can calculate the social present value of the PGE using equation (2) following, which adds a value for consumer surplus (CS), social savings created because of lower transport costs, and a value for externalities (Y_t), the sum of indirect benefits from building the railway (listed in Appendix B). Dollar amounts for CS and Y could be derived from increases in land value along the route of the PGE between 1912 and 1922 but attempts to examine the necessary records have been unsuccessful. There is, however, another way to represent the result of the calculation in equation (1). As the only difference between equation (1) and (2) is the addition of CS and Y, and as it would take \$24,627,945 to bring the PGE to a position of cost neutrality (where from a private perspective, neither a profit nor loss was registered), we can say that the value of CS and Y was \$24,627,945. Therefore we can interpret the social value of the PGE as \$24,627,945 in 1932.

$$(2) \quad PV = \sum_{t=0}^T \frac{(CS_t + GR_t - OE_t - GI_t + Y_t)}{(1 + s)^t}$$

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¹⁴⁶ where GR_t , OE_t and GI_t are the same as equation (1); CS_t is the additional consumer surplus or social savings; Y_t is the sum of all externalities (listed in Appendix B) or indirect benefits from building the railway. Marr and Paterson, 323.

Referring to Table 7.2, the future value of -\$11,484,991 of the PGE in 1912 was calculated using equation (3) below.

$$(3) \quad PV = \sum_{t=0}^T (GR_t - OE_t - GI_t) \times (1+r)^t$$

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If the future values for each year 1912 to 1932 are calculated and the results totalled, we can conclude the current value for the PGE was -\$62,354,411 in 1932.

The total private present value for 1912 to 1932 of -\$24,627,945 indicates the extent of the losses incurred in building the PGE but McBride's offer of government-guaranteed bonds removed the normal feasibility concerns of commercial enterprises and convinced F,W&S to begin construction. With disappointing land sales and McBride's reluctance to increase the bond guarantee any further, the contractors' only option in the pursuit of their own interests was to ensure that they received all of the available remaining funds even though they would have only completed one-third of the railway.

¹⁴⁷ where GR_t , OE_t and GI_t are the same as equation (1).

Table 7.2 Private and Social Valuation of the PGE, 1912-1932

(Annual Railway Reports 1912-1932; Marr and Paterson)

Yr	GR	OE	GI millions	PVGI	I	Annual Op. PV	FV to 32	r
12	0	0	5.04	3,412,784	20,160,000	-4,846,153	-11,484,991	.04
13	0	0	5.04	3,281,523		-4,659,763	-11,043,260	.04
14	0	0	5.04	3,110,235		-4,416,534	-11,631,615	.045
15	0	0	5.04	2,976,302		-4,226,349	-11,130,732	.045
16	0	0	0	0		0	0	.045
17	179,671	287,880	3.0	1,622,314	2,303,687	-2,386,780	-6,285,949	.045
18	179,671	287,880	3.0	1,552,454	2,204,485	-2,284,000	-6,015,262	.045
19	481,248	838,837	0	0		-251,451	-662,235	.045
20	522,282	878,047	0	0		-239,395	-630,485	.045
21	383,389	751,931	0	0		-237,314	-625,003	.045
22	432,071	821,105	0	0		-239,722	-631,345	.045
23	436,049	660,514	0	0		-132,358	-348,587	.045
24	410,012	680,855	0	0		-152,829	-402,498	.045
25	436,833	721,351	0	0		-153,632	-404,613	.045
26	473,918	747,420	0	0		-141,324	-372,198	.045
27	474,395	664,635	0	0		-94,067	-247,741	.045
28	531,331	663,441	0	0		-62,511	-164,633	.045
29	561,274	617,119	0	0		-25,286	-66,596	.045
30	480,070	535,887	0	0		-24,185	-63,696	.045
31	423,144	488,924	0	0		-27,275	-71,833	.045
32	374,563	442,632	0	0		-27,008	-71,132	.045

Yr= year

t= time period

GR= Gross Revenue

OE= Operating Expenses

GI= Gross Investment

PVGI= Present Value of Gross Investment

I=Investment

Annual Op. PV= Ann. Operating Present Value

FV to 32= Future Value to 1932

r= interest rate

Private Value of the PGE: -\$24,627,945 (1912 to 1932 PV in 1912 dollars)

Social Value of the PGE: \$24,627,945 (CS +Y = \$24,627,945)

Current value in 1932: -\$62,354,411

The PGE did not operate commercially until 1917. During the time period covered by this study there existed zero miles of track at the beginning of construction in 1912 and only 164 miles between Squamish and Clinton during its first two years of commercial operation. Premier John Oliver inherited an insolvent PGE railway in 1918. He continued

Table 7.3 PGE Interest Payments, 1921-1932
(Annual Railway Reports)

Year	Interest Payments
June 30, 1921	\$1,742,875
June 30, 1922	\$1,999,084
June 30, 1923	\$2,149,845
June 30, 1924	\$2,248,465
June 30, 1925	\$2,375,916
June 30, 1926	\$2,404,694
December 31, 1926	\$1,205,106
December 31, 1927	\$2,480,698
December 31, 1928	\$2,594,390
December 31, 1929	\$2,707,328
December 31, 1930	\$2,783,301
December 31, 1931	\$2,913,316
December 31, 1932	\$2,964,082

building sections until construction was abandoned in 1922 at Quesnel with 345 miles completed, because BC could not afford to finish the line. By this time interest payments were approaching \$2 million per year and steadily increasing as shown in Table 7.3, PGE Interest Payments 1921-1932, preceding.

When the original PGE railway plan was finally completed in 1956, the cost to ship one ton of freight from Vancouver to Prince George by the PGE was approximately \$6 whereas by water to Prince Rupert and then rail to Prince George cost about \$8.¹⁴⁸ Because of the enormous debt load carried by the PGE, however, it was not possible to operate railway as a money-making enterprise. Although the new route appeared to represent a cost saving of 25%, the freight charge as a function of the total cost of operating the railway was not an appropriately large enough amount (nor did it need to be) because the BC government was subsidizing the PGE by paying the interest on its capital debt.¹⁴⁹ If the PGE had met its contractual completion date of July 1915 it would have cost approximately \$2.50 to ship a ton of freight from Vancouver to Prince George. The cost by water to Prince Rupert and then by train to Prince

¹⁴⁸ A major Vancouver marine shipping company, Canadian National Railways, www.bankofcanada.ca

¹⁴⁹ To address this situation, Premier W.A.C. Bennett attempted to create some profitability by partially eliminating the PGE interest costs with a write-off of more than \$90 million of its capital debt.

George was about \$3.50 per ton.¹⁵⁰ With the BC government financially unable to complete the PGE until 1956, the citizens of BC were faced with upwards of 30% higher freight rates for 41 years. McBride's mismanagement of the PGE project and his insistence on continuing until all the capital had been spent with only one-third of the line completed, laid the basis for crushing interest payments and the accumulation of enormous capital debt.

The railway which was meant to open up the interior of BC now found itself in the unenviable position of being unable to move forward or backwards. The PGE could not move forward and be completed to Prince George because BC did not have the money to finish construction; and even if it did, forecasts indicated that the revenue generated would not even cover expenses. At the same time, the PGE could not reverse the massive amounts of money already invested. The railway, said to begin nowhere and end nowhere, had nowhere to go.

¹⁵⁰ A major Vancouver marine shipping company, Canadian National Railways, www.bankofcanada.ca

Chapter 8: Failure of the PGE as a Private Venture

The purpose of this chapter is to examine material which assists in understanding the failure of the PGE as a private venture in less than six years between incorporation on April 1, 1912 and the assumption of control by the BC government in early 1918. The chapter is divided into four sections: Mortgage and Deed of Trust, 1914; Harlan Brewster's Writ, 1916; Auditors' Report, 1917; and the Select Committee of the Legislature on the PGE, 1917.

Section one discusses the Mortgage and Deed of Trust, 1914 and three source documents which provided the basis for its most important provisions - the Railway Act of 1911, the FW&S Agreement of 1912 and the PGE Act of 1912. The Mortgage and Deed of Trust and the previous legislation to which it referred were meant to provide a framework to protect the PGE project from legal peradventure. The fact that they did not demands closer investigation which reveals flaws in their design and in the way they interacted with each other. This section provides a basis for understanding loopholes in the chain of authority which allowed for repeated acts of opportunism.

Section two presents the essence of Harlan Brewster's Writ, 1916. As Leader of the Opposition, Brewster sought to achieve legal satisfaction for the taxpayers of BC by accomplishing the recovery of interest payments

made by the government in lieu of the defaulting PGE Company. This information clearly expresses the monetary angst caused in BC by the PGE project.

Section three, the Auditors' Report, 1917 offers four exhibits which question the methods used in disbursing the proceeds of the bond sales and calculates an overpayment of close to \$6 million to the contracting firm of FW&S. These numbers are beneficial to understanding the mathematical arguments for apportioning responsibility in the premature exhaustion of the bond fund.

Section four, the 700-page Select Committee of the Legislature on the PGE, 1917 delineates important background information, includes testimony of principals involved and presents contextual facts which are essential in building an understanding of what happened to the PGE. The story of the PGE is complex, convoluted and murky but the information elicited by this Committee provides the detail to clarify the overall picture. What began with such optimism in 1912, ended with disappointment frustration and enormous debt in 1918.

Mortgage and Deed of Trust

A mortgage and deed of trust is a legal document in which a borrower signs a contract with a lender agreeing to meet specific requirements for a loan secured by the deed of a property. During the loan period, a third party or trustee holds the deed to the property until

the conditions of the loan have been fulfilled. In order to build a railway the PGE Company signed an indenture to borrow money from the BC government with a trustee holding the deed of ownership until the conditions of the contract were accomplished. The Mortgage and Deed of Trust documents the expectations placed on the PGE Company by referencing three previous sources of legislative authority: the Railway Act of 1911, the FW&S Agreement of 1912 and the PGE Act of 1912.

The PGE Company arranged its initial financing through a Mortgage and Deed of Trust with the Dominion Trust Company on July 10, 1912. Through this financial instrument the PGE was "authorized to issue thirty-year 4-percent [per annum] debentures, secured by a mortgage against the Company's property to a total amount of \$35,000 a mile for a mileage of 460 miles". The debenture bonds were guaranteed by the government of the province of British Columbia and offered for sale on the British bond market through their fiscal agents, Messrs. Brown, Shipley and Company in London England.

Less than two years later the financial arrangements were found to be inadequate to satisfy the cost of completing the construction. The railway bond money was being spent at a rate which would exhaust the fund long before the track reached Prince George. Also, when the survey of the proposed route from North Vancouver to Prince George was finally completed, a year after construction began, the distance was found to

be 480 miles which created a need for the existing PGE mortgage to be updated. Then on October 12, 1914 the Dominion Trust Company entered insolvency as a result of the economic downturn and a mortgage with a new financial institution was needed. Accordingly, on November 30, 1914, a Mortgage and Deed of Trust was established between the Northern Trusts Company and the Pacific Great Eastern Railway Company with bonds of \$42,000 a mile for a mileage of 480 miles and an interest rate of four and one-half percent per year for thirty years.¹⁵¹

Clause 2 in the Mortgage and Deed of Trust states that the Company [the PGE in the persons of Foley, Welch & Stewart] “should and would, well truly and faithfully acquire, lay out, make, build, construct, complete, equip, maintain and operate...continuously...from the City of Vancouver to...Fort George” (the name was changed to Prince George in 1915).¹⁵² Within four years, however, FW&S had abandoned its promise and reneged on its agreement to build and operate a railway from Vancouver to Prince George.

Clause 5, Subsection c, of the Mortgage and Deed of Trust, 1914 binds the PGE Company to ensuring “the moneys realized by sale of securities [are] paid directly...into the said bank in the name of the

¹⁵¹ Select Committee of the Legislature on the PGE 1917, J645, J691.

¹⁵² PGE to The Northern Trusts Company and His Majesty the King, *Mortgage and Deed of Trust* (Victoria: Colonist Presses, 1914), 3.

Minister of Finance of the Province of British Columbia".¹⁵³ Accordingly, the proceeds from the sale of the government-guaranteed railway bonds were placed in a bank account in the name of the Finance Minister. Unfortunately, the same stipulation was not made regarding the share capital of the PGE.

The government fixed the share capital of the PGE at \$25,000,000 and issued this amount to the PGE Company on the following understanding: "The basis of the arrangement was that the [PGE] Company from the sale of its shares...would provide the additional amount above the Provincial guarantee necessary for the completion of the road." The PGE, however, did not sell the shares to raise money. Instead, "Shares to the amount of \$40,000 were fully paid up, and the balance, \$24,960,000, was issued to the promoters as fully paid up without cash consideration."¹⁵⁴ Therefore the promoters paid \$40,000 but in return received \$25 million in PGE shares. This was in direct contravention of Section 21 of the PGE Act, Chapter 36 which clearly states that "The money raised upon the capital stock of the [PGE] Company shall be applied...to the making, equipping, and maintaining of the said railway".¹⁵⁵

¹⁵³ *Mortgage and Deed of Trust*, 4.

¹⁵⁴ Select Committee of the Legislature, J645, J646.

¹⁵⁵ BC Statutes 1912 Chapter 36 Section 21 PGE Act.

FW&S paid D'Arcy Tate, who was the Vice-President of the PGE Company, "a commission of one-quarter of the capital stock of the Company amounting to \$6.2 million and \$500,000 in cash [from FW&S]...[and] out of this sum he was to provide incidental expenses, including campaign funds for the Conservative party".¹⁵⁶ These amounts were for his services in securing the PGE charter, the railway bond guarantees from the provincial government, and a traffic agreement with the Grand Trunk Pacific railway. Thus, 25% of the PGE share capital proceeds which were legislated to be used as construction funds, were dispersed in this manner by FW&S in another clear violation of Section 21 of the PGE Act.

Clause 5, Subsection d, of the Mortgage and Deed of Trust, 1914 states that the Government shall transfer to the Company, from the bond-in-trust account, 'proportional sums' of money for work done.¹⁵⁷ This clause was based on the BC statutes Chapter 34, Agreement between FW& S and the BC government, Schedule A section 8 Subsection d which states that the government shall release to the PGE Company "sums as are justifiable, having regard to the proportion of work done...compared with the whole work done and to be done". Here again the PGE Company was in violation of their agreement by accepting payments out of proportion to the work done such that the balance of the bond funds

¹⁵⁶ Select Committee of the Legislature, J646.

¹⁵⁷ *Mortgage and Deed of Trust*, 5.

was exhausted when only 35% of the railway had been completed. The government of BC also stood in contravention of the terms of the Mortgage and Deed of Trust, 1914 for releasing money for work which was not completed.

William J. Bowser, as BC's Deputy Premier, was involved in the PGE project. His explanations for why the bond money was not paid out proportionately as directed in the Mortgage and Deed of Trust, 1914 indicate that he found the wording of the PGE legislation allowed him to create his own interpretation. As this was legislation written by his own government, it suggests that the legislation was deliberately written in an open-ended manner which undermined its lawful purpose as an authority to direct and control the development of the PGE. Part of the reason for the government's PGE legislation was to control the use of millions of dollars for which the province was legally responsible. To leave legal loopholes which members of the government and financially-opportunistic companies might use to their own advantage was irresponsible on the part of the leadership of the government and an example of mismanagement.

To be sure, some wordings in the Mortgage and Deed of Trust 1914, as well as other legal instruments pertaining to the PGE, were at times unclear and open to various interpretations. For example, the Railway Act, Chapter 194 Statutes of 1911 Section 110 subsection (2) states that "No

person who holds any appointment for or has a contractual office, place or employment in a [railway] Company or that is concerned or interested in any contract of the Company or is surety for any contractor with the Company shall be capable of being chosen a director or hold the office of director". Section 118 states that "No person who is a director of the Company shall enter into or be directly or indirectly interested in any contract with the Company".¹⁵⁸ John W. Stewart, however, was the President and a director of the PGE Company while at the same time a senior partner of FW&S and highly involved in the construction of the PGE until he left to serve in the armed forces in France in 1916. In addition, Timothy Foley, E.F. White, and F. Wilson were directors of the PGE Company while at the same time exacting financial gain from PGE construction contracts through FW&S.¹⁵⁹ The PGE Company, therefore, in awarding the construction contract to FW&S, was in contravention of sections 110 and 118 of the Railway Act of 1911.

While it is true that the Railway Act did forbid such actions, the Statutes of 1912 record that Chapter 36, An Act to Incorporate the PGE Railway Company, February 10, 1912, allows the PGE to excuse itself from sections of the Railway Act of 1911 which conflict with PGE legislation. Clause 17 of the PGE Act states that "where any conflict arises between

¹⁵⁸ BC Railway Act of 1911.

¹⁵⁹ Select Committee of the Legislature, J646.

the two Acts the terms of this Act shall govern."¹⁶⁰ Part of the PGE legislation then, could be used to supersede the Railway Act, and allow directors of the railway the questionable practice of letting contracts to their own construction company. The Railway Act Sections were legislated in order to avoid the type of problems which could emerge in a relationship such as that which existed between the PGE Company and FW&S but the wording of McBride's legislation usurped the 'checks and balances' written into the Railway Act, reflecting his mismanagement of the project.

Clause 11 of the Mortgage and Deed of Trust, 1914 refers to Section 2 of the FW&S Agreement Chapter 34 saying that, the PGE Company "was authorized and empowered when incorporated to have the power to do whatever should be necessary and expedient to implement the provisions of the said Agreement."¹⁶¹ McBride was very optimistic that the PGE would ultimately be successful in unleashing economic prosperity in BC. He may have realized privately, however, that the economic downturn, which had already begun in 1912, could present a serious obstacle and he may have wanted to give the PGE Company more power to get the railway built quickly. In either case, McBride was guilty of inappropriate risk-taking with both BC taxpayers' money and the financial stability of the province. The purpose of the government legislation

¹⁶⁰ Chapter 36, An Act to Incorporate the PGE Railway Co., Feb 10, 1912, Clause 17.

¹⁶¹ *Chapter 34, F.W&S Agreement 1912, Section 2.*

regarding the PGE Company was to protect the interests of the people of BC. Allowing a private company “to have the power to do whatever should be necessary” amounts to a dangerous delegation of governmental responsibility.

Moreover, the phrase ‘the power to do whatever should be necessary’ gave sweeping controls to a private company which had access to public funds. Those words might be appropriate to reserve for the BC government, as the ultimate authority in the province, conferring the ability to take action on behalf of the sovereign power invested in it by the people of the province but the PGE Company was a private business whose sole reason for existence was to make a profit operating a railway. More dubious was the fact that the PGE Company was controlled by members of FW&S who were constructing the PGE Railway and had an even more short-term goal of making a profit on their three year construction contract in an economic situation which almost everyone, but the premier, admitted was experiencing a downturn.

In addition, the use of the imprecise modal verb ‘should’ opens the wording to subjective application. One must assume that those who framed the PGE legislation were operating under McBride’s direction and did not randomly choose such loose language. In that case, it can be presumed that McBride wanted some flexibility in the interpretation of this section based on the needs of specific situations. Notwithstanding the

political and tactical motivations, if such wording were used, it remained the responsibility of the McBride government to then address and deal appropriately with the crippling circumstances which subsequently arose.

While flexibility may be necessary to meet the demands of critical situations, it remains a moot point as to whether British Columbia in 1912 should have risked the liability and financial exposure of indeterminate legislative wording in order to create a railway which the investment marketplace did not view as being a viable business proposition. Indeed, the subsequently paralysing financial obligations to which McBride committed British Columbia illustrates the need for watertight legislative wording to protect the public's interests in the event of any problems arising and the fact of its absence further demonstrates McBride's poor judgement in the management of the province's affairs.¹⁶²

It must have been clear to McBride in the fall of 1912, if not before, that Foley, Welch and Stewart, as controllers of the PGE Company, had the power to award to themselves the contract to build the railway and fully intended to do so. Consequently, to avoid provincial legislation becoming a mockery, it was incumbent upon McBride, as the responsible

¹⁶² McBride's power to create and enact legislation with questionable wordings was a reflection of the almost non-existent opposition (two independent members) that he faced in 1912. While BC was in the midst of contextually developing restraints on the executive power created by the introduction of party discipline in 1903, a premier's capacity for unilateral action continues to be demonstrated a hundred years later in a supposedly more mature period of BC political development. One example is the 'fast ferries' fiasco in which Premier Glen Clark initiated a grand plan that failed resulting in the recovery of \$40 million of scrap value from a \$460 million dollar investment.

manager of the province, to have ruled on whether 'should' in this Bill meant 'shall', or 'might'. To do less, was to abdicate responsibility to the whims of a private construction company whose understandable first priority was not the benefit of the province but their own best interests.

A comparison of the estimated cost of the PGE with those of other BC railways reveals that initial estimates for all BC railways were significantly lower than actual costs. The approximate estimate for the average cost of the Canadian Northern Pacific Railway (CNPR, which was the legal name of the CNoR in BC¹⁶³) was \$50,000 per mile, with the actual cost being \$70,000 per mile. For the GTP, the government's initial approximate estimated cost was \$70,000 per mile, whereas the actual cost was \$94,000.¹⁶⁴ Oddly, the first government estimate for building the PGE railway was not made until the end of 1913, the year after construction began. This estimate totalled \$27,811,927 or an average cost for the whole line of \$58,014 per mile.¹⁶⁵ After construction, the average cost figure for the PGE was \$84,000 per mile. The cost for individual sections was \$103,536 per mile from Vancouver to Squamish, \$61,104 from Squamish to Clinton and \$48,616 from Clinton to Prince George.¹⁶⁶

¹⁶³ McBride had stipulated that if the BC government was going to extend subsidies to the Canadian Northern line in BC, it must not be declared 'for the benefit of Canada' as that designation would bring it under the purview and rate-rulings of the Board of Railway Commissioners in Ottawa. Using a different legal name in BC allowed McBride's terms to be carried out.

¹⁶⁴ Royal Commission 1917, xii, xiii.

¹⁶⁵ Select Committee of the Legislature, J682.

¹⁶⁶ Select Committee of the Legislature, J684.

F.C. Gamble was the government engineer whose task it was to release bond money based on estimates of costs submitted by FW&S. Gamble wrote to McBride in December 1912 to warn him that “the prices in this contract were very much in excess of those for similar work” in contracts with the CNoR. As early as October 1914, he assessed that the final cost would exceed the first estimate for the building of the PGE and informed McBride accordingly.¹⁶⁷ When giving evidence to the Select Committee on the PGE 1917, Patrick Welch of F,W&S was asked about his meeting with Richard McBride in the summer of 1911, at which McBride had offered a bond guarantee of \$35,000 per mile for FW&S to build the PGE. Welch replied “I was not very familiar with the country...and I didn't know whether \$35,000 per mile would give us money enough to complete the line. He [McBride] said that he knew our position...and if \$35,000 per mile was not enough that he would aid us sufficiently to enable us to do so - to complete it.”¹⁶⁸

Welch noted “when he [Stewart] made the arrangement with Mr. McBride, he [Stewart] thought \$40-50,000 per mile would cover it and he thought at that price and with the way things could be manipulated at that time, that he [Stewart] might be able to pick up money to make up the difference [between his estimate and the bond amounts of \$35,000

¹⁶⁷ Select Committee of the Legislature, J626, J646.

¹⁶⁸ Select Committee of the Legislature, J342, J343.

per mile which the government was offering]".¹⁶⁹ It appeared, therefore, that F,W&S began construction in October 1912 on the assumption they would not have to put any of their own money into the building of the PGE and that the government would provide more money if it turned out that \$35,000 per mile was not enough to build the road. William J. Bowser, McBride's deputy premier asserted, however, that "I always figured that the guarantee would never build the road...I thought they [FW&S] would make up the deficiency."¹⁷⁰

The initial agreement between the BC government and the PGE Company provided for a bond guarantee of \$35,000 per mile for 460 miles or a total of \$16,100,000. Construction began in October of 1912 with no estimate of the cost being completed until late in 1913 at which time an estimate of \$27,811,927.40 was calculated.¹⁷¹ At the time of the first estimate McBride, if he had not realized earlier, could not escape the knowledge that there was going to be a shortfall of more than \$10 million which FW&S assumed would be covered by the government and the government believed would be made up by the PGE Company. By the beginning of 1914 approximately one-third of the bond funds had been spent. At this juncture, a responsible manager of the project would consider all options (including suspension/delay of the project), in the light

¹⁶⁹ Select Committee of the Legislature, J366.

¹⁷⁰ Select Committee of the Legislature, J616.

¹⁷¹ Select Committee of the Legislature, J682.

of an objective calculation of possible outcomes. Holding the highest elected office in the province, the Premier carried the onerous duty of making difficult, unpopular but necessarily responsible decisions not only for this project but the immediate and future financial and social interests of the province. On this charge, Premier Richard McBride was found wanting.

Both McBride and FW&S had much to lose, for different reasons, if the PGE failed. When the stakes are high it seems that the unthinkable suddenly becomes not only possible but actionable. McBride had taken large political and financial risks in the PGE venture and was willing to take further chances in the hope of rescuing the situation. Unfortunately for Richard McBride, British Columbia did not have the financial reserves or the sources of taxation that, for example, the government of Canada possessed. Consequently, the dire financial straits which befell both the CNoR and the GTP, while quite burdensome to Ottawa, were not as overwhelming as the insolvency of the PGE was to Victoria. By the spring of 1914, PGE construction capital was disappearing at an alarming rate, large numbers of men were out of work in BC and political instability was increasing in Europe, which was the source of the investment money to fund the PGE. With the banks reluctant to loan money because of a weakened economy, Welch appealed to McBride for assistance. McBride knew that the balance of the bond money, not to be released until

subsequent sections of the line were completed, was still held by the government. McBride also knew that if “he didn’t release the money he was damned, and if he did he was also damned, so he quietly released the reserve funds to allow construction to proceed”.¹⁷²

The Select Committee found “The justification...that the payments [without any reference to the proportion of the work done] were so made to relieve the bread-line conditions in Vancouver in the winter of 1914 cannot be supported. The practice was indulged in from the first payment in the fall of 1912...it enabled Foley, Welch and Stewart to withdraw from the work some millions which could not have been withdrawn had the Government adhered to the provisions of the Statute”.¹⁷³ To release the balance of the proceeds of the \$20,160,000 of bond money, with no assurance of the work being completed, was an act of desperation and mismanagement which helped to cripple the PGE Company as a viable, independent entity. It ultimately did little to ensure continued employment for those working on the railway and nothing to guarantee the completion of the road but did allow the contractors to exact their profits before the PGE Company became insolvent.

¹⁷² Ramsey, 78.

¹⁷³ Select Committee of the Legislature, J648.

On November 30, 1915, the proceeds of the PGE Company's debenture stock were fully depleted.¹⁷⁴ Soon after, McBride resigned as Premier (on his 45th birthday December 15, 1915) and left BC to become Agent-General for BC in London, England. McBride suffered from a progressive kidney disease for which better treatments existed in England. Attorney General William Bowser became Premier, a job he held onto tenaciously until the election of November 23, 1916 when it became Liberal Harlan Carey Brewster's turn to manage the PGE situation.

Well before the bond money was fully expended, the government was aware that what was left would be insufficient to complete the line. By March 1914, a total of \$6,479,937 of bond money had been spent on construction.¹⁷⁵ If the government had acted to delay or suspend PGE construction, it could have preserved almost 70% of the bond money to pay existing interest payments on its bond guarantees and have money in reserve to resume construction when economic conditions improved.

Harlan Brewster's Writ

On June 30 1916, Liberal Leader Harlan Carey Brewster (who became Premier of BC in November 1916) engaged lawyers to seek legal restitution from FW&S for what he saw as an illegal misappropriation of the PGE Company's share capital and recovery of bond interest paid by the

¹⁷⁴ Price, Waterhouse & Co., *Auditors' Report on Investigation of the Financial Relations of the Government with the PGE* (Victoria, BC: Government of BC, 1917), J696.

¹⁷⁵ Select Committee of the Legislature, J624.

government after the PGE Company defaulted on payments. The resulting writ asserted that clearly stated requirements of the PGE legislation were ignored by FW&S and McBride with the complicity of others in “the giving away of its [the PGE Company] shares [and] the misapplication of the monies raised on the Government Guaranteed Securities”.¹⁷⁶

Brewster applied to have the Supreme Court rule on “the broad, general principle [of] whether Statutory Provisions enacted for the protection of the public interests, can be overridden by secret Orders-in-Council passed at the wish of promoters and others having projects inimical to public interest”. Brewster was referring to the request by FW&S for McBride to release the balance of the bond funds before the required construction was complete.

Brewster’s writ was divided into four sections:

- \$25,000,000 in share capital “instead of being sold to raise money for the construction of the railway, had been given to the firm of Foley, Welch & Stewart” and “this unlawful gift of shares” should be reversed;
- “the monies realized from the sale of securities guaranteed by the government was to be paid out for the building of the railway in proportion to the work done as compared with the entire work to be accomplished” and as it has been determined that all the securities have been sold, the money

¹⁷⁶ Brewster, Harlan Carey, *Facts About the Writ*, (Victoria: Government of British Columbia, June 30, 1916), 6.

paid out yet the road far from complete, the misappropriated funds should be replaced;

- the government in 1916 has paid \$316,016.80 in bond interest yet the railway company is in default because the proceeds of the majority of PGE shares were not given to the government in trust (as set out in the legislation) and money that was raised and transferred to the government in trust was used in contravention of legislation and so the interest money should be replaced;
- The PGE contract was let without competition, to a member of Foley, Welch & Stewart and at “prices greatly in excess of the prices paid for similar work on railways in adjoining territory and under like conditions”, the Supreme Court should require “an account so as to fix the proper cost of the railway and relieve the province from the necessity of paying to the promoters the prices they have fixed for their own profit”.¹⁷⁷

These charges had the potential to create havoc in an already chaotic situation. McBride had called an election in the fall of 1915 but then, facing serious divisions in his Cabinet over a proposed loan for the PGE, ‘postponed’ it, resigned and left the country. Attorney General William Bowser became interim Premier and delayed the election as long as possible. Moreover, with the political wrangling regarding the PGE still unresolved, the future solvency of the PGE still in question and BC facing a critical financial crisis, the Supreme Court judge delayed judgment to allow for a political resolution of the matter.

¹⁷⁷ Brewster 2-7.

Auditors' Report

Harlan Brewster defeated Bowser in the BC election of November 1916 and immediately appointed Price, Waterhouse & Company to write an Auditors' Report on an investigation into the financial relations of the government with the PGE Railway Company up to the date when the proceeds of its debenture stock (guaranteed-bonds) were exhausted. The Auditors' Report, submitted on January 22, 1917, included four exhibits.

Exhibit I is a Statement of Moneys deposited to the credit of the Minister of Finance in connection with the government's guarantee of the PGE Company's securities. The record shows that after various deductions for underwriters' commission, brokerage fees and other expenses, and the addition of interest on bank balances of \$215,738.42 a total balance of \$18,246,979.44 was deposited to the credit of the Minister of Finance by Brown, Shipley and Company (London fiscal agents of the PGE Company) in respect of securities sold and pledged.

Exhibit II is an Analysis of Estimates submitted to the government by the PGE Company upon which moneys were released by Orders in Council. The ledger indicates a total estimate of \$18,246,979.44 was submitted.

Exhibit III consists of a Statement showing the Disposition of Moneys received by the PGE Company from the government on Estimates

numbers 1 to 41. The estimates were created by Patrick Welch as contractor, approved by John Callaghan as the PGE Company chief engineer and accepted by F.C. Gamble, the government engineer who released a total of \$18,246,979.44 on behalf of the government.

Exhibit IV is a Statement showing the amount which should have been paid out to the PGE Company for construction work completed in respect of Estimates submitted (invoices from FW&S) up to November 30, 1915. The auditors calculated the total amount of money which they believed should have been paid if the payments were determined according to the proportionality of work done, as mandated by BC Statutes 1912 Chapter 34, FW&S Agreement, Schedule A Section 8 Subsection d. The following formula was used:

$$\text{bond proceeds} \times \frac{\text{cost of work done}}{\text{total est. cost}} = \text{proportionate value of work done}$$

Inserting the appropriate amounts results in the following calculation:

$$\$18,031,241.02^{178} \times \frac{\$18,888,599.78^{179}}{\$27,620,481.19} = \$12,330,882.03 \text{ million}$$

¹⁷⁸ *Auditors' Report 1917*, 36,38. In their final summation, rather than using the "total deposited to credit of Minister of Finance of \$18,246,979.44" the auditors inserted an amount of \$18,031,241.02 (reflecting deduction of \$215,738.42 of interest on bank balances).

¹⁷⁹ *Auditors' Report 1917*, 37,38. In their final summation, the auditors used the total of Estimates Nos. 1 to 40 (\$18,246,979.44 plus the balance of Estimate 41) to arrive at a figure of \$18,888,599.78

Rather than paying the proportional amount of \$12.3 million required by the statute, however, the government paid out \$18.03 million which the auditors concluded constituted an overpayment of more than \$5.7 million.¹⁸⁰ It was clear that the contractor's total invoices of \$18.8 million immediately exhausted the \$18.03 million fund realized by the sales of the railway bonds. The statutory provisions attached to the disbursement of the bond fund, however, requiring that the money be paid out in proportion to the work done created a difficulty from the outset because construction was well underway and amounts to be paid for various items of construction had been agreed upon before the first cost-estimate for the building of the PGE was provided for the government by FW&S. Following the statutory requirements the auditors multiplied the bond proceeds of \$18.03 million by a proportion of the cost of work done divided by the estimated total cost (\$18.88 million /\$27.6 million) to arrive at a proportionate pay-out due for work done of \$12.3 million and, therefore, an overpayment to FW&S of \$5.7 million.

Two problems surround this issue. The first is that McBride had not clearly addressed the matter of how cost overruns would be dealt with. McBride and FW&S both believed that the PGE Company would make significant profits from land sales which it was assumed would be able to cover any extra costs. As the elected guardian of the purse, it was

¹⁸⁰ *Auditors' Report 1917*, 34-38.

McBride's responsibility to ensure the integrity of BC's finances. With such large amounts of money involved, McBride, as the administrator of the province, should have included wording in the PGE legislation which clearly articulated the manner in which this type of situation would be handled.

The second problem arises from the fact that the estimate of the cost for building the PGE was calculated well after construction had begun. The proportionality formula was based on the amount of railway bonds which McBride was willing to guarantee per mile of railway. With no estimate prepared prior to construction beginning there was no way of knowing if McBride's amounts would be a realistic reflection of the cost of building the PGE. In addition, the amount realized from the sale of the bonds was less than the amount guaranteed by McBride. Commission fees, brokerage fees and the need to discount the bonds in a softening money market meant that almost \$2 million dollars was lost before construction even began. With \$18 million available and a construction estimate of \$27 million on which proportionality payments were to be based, it was inevitable that there would be cost overruns.

Though the money was paid out by the government in contravention of its own legislation directing the financial arrangements between the themselves and the PGE Company, the responsibility must be shared between an opportunistic contractor who submitted estimates

in excess of the agreed-upon cost formulas and a government who mismanaged their financial relationship with the PGE Company by not meeting their fiduciary responsibility of adequate supervision and control of the amounts to be dispersed.

Select Committee of the Legislature on the PGE 1917

On March 9, 1917 John Oliver, the new Liberal Minister of Railways in the Brewster government, appointed a Select Committee of the Legislature to investigate what happened during the construction of the PGE railway and the relationship between the PGE Company and the contracting firm of Foley, Welch and Stewart. The committee began its hearings on March 14, 1917 and submitted its final report on May 1, 1917.

The committee first examined the awarding of the construction contract. The PGE Company was incorporated on April 1, 1912 and held its first official meeting on July 10, 1912 at which Timothy Foley, Patrick Welch, John W. Stewart (the three partners of FW&S) and D'Arcy Tate were elected directors, with Stewart elected President and Welch Vice-President. On September 23, 1912 Patrick Welch resigned as a Director, Vice-President and General Manager of the PGE Company and on the same day was awarded the contract to build the PGE. D'Arcy Tate was elected as the new Vice-President of the PGE Company.¹⁸¹ Welch's last-minute resignation as an officer of the PGE Company did not, however,

¹⁸¹ *Select Committee of the Legislature*, J8, J10.

obviate the fact that FW&S, were building the railway at the same time as two of its partners were directly controlling the PGE Company. Moreover, John W. Stewart, as President of the PGE, wrote a letter on behalf of FW&S to Welch on November 25, 1912 stating "It is understood and agreed by the firm FW&S that the said contract [the building of the PGE] is entered into by you on behalf of the said firm [FW&S] and that all loss or profit on the said contract is to be adjusted accordingly".¹⁸² When Tate explained that Welch resigned "to prevent any formal questions being raised", the Committee asked "Why didn't Stewart and Foley also resign as directors to prevent the same formal kind of questions being raised?" Tate responded that "Well they were not ostensibly directors [of the PGE Company], it was purely a matter of form".¹⁸³

The apparent 'form' of a railway company employing and supervising a firm (FW&S) to construct rail line seems to have been an imaginary chain of command created to satisfy outward appearances. The government of BC, in sanctioning such a state of affairs in the belief that it would facilitate a more rapid completion of the line, was in actual fact creating impediments. The rules governing the separation of organizations engaged in prolonged, complex activities, involving large amounts of money, such as in the building of a railway, were established to create the necessary checks and balances which were needed to

¹⁸² *Select Committee of the Legislature*, J134.

¹⁸³ *Select Committee of the Legislature*, J93.

ensure the integrity of all parties and of the process. By short-circuiting these conventions, the government was excluding necessary safeguards and making the project vulnerable to opportunism regarding the lax terms of the contract.

The hierarchy of authority thus created meant that FW&S had the power to award the construction contract to themselves, set the construction prices they would receive for doing the work, and write the cheques in payment to themselves. While such a situation does occasion the opportunity for blatant fraud, a much more likely and less traceable consequence is the possibility for making construction and other financial decisions which, in the absence of competitive alternatives and sufficient checks and balances, are all in one's own self-interest.

In October 1913, E. White became a PGE director while at the same time working for Welch at FW&S as his office manager, exercising Welch's power of attorney, representing Welch as an attorney, signing all Welch's cheques, and receiving \$24,000 as a subcontractor for the PGE Company, in addition to continuing in his paid role as Treasurer for the PGE Company.¹⁸⁴ When the Select Committee asked Welch whether "some of the directors of the PGE were involved with the subcontractors in their contracts and [if] E. White was the man who signed a cheque to

¹⁸⁴ *Select Committee of the Legislature*, J39, J481.

himself and these other parties, he responded, "Yes".¹⁸⁵ Separate ownership of the railway company and construction firm would have reduced the likelihood of such situations which offered the opportunity for collusion.

The PGE Land Development Company was supposed to be a company independent of the PGE Railway Company. The 1918 agreement for the transference of the PGE to the BC government in return for releasing FW&S from all their obligations and dropping all litigation against them, included the handing over of all assets with the exception of the resources of the PGE Land Development Company. It is interesting to note, therefore, that the administrative control function of the PGE Land Development Company was located in Welch's Vancouver office where E. White was considered to be a general factotum. As the fortunes of the PGE initiative declined, there were certainly motives, and may have been opportunities, for assets to be shifted to the Land Development Company. As a result of the negotiating posture of FW&S, the PGE Land Development Company was retained by them in the final conveyance to the government in 1918 which meant that any financial assets which had been transferred to the Land Development Company since 1912 would remain in the control of FW&S.

¹⁸⁵ *Select Committee of the Legislature*, J361.

The lack of legal, procedural and even physical separation of various elements in the administration of the PGE project opened the door to decisions based on individual self-interest. The people of BC were investing over \$20 million in a railway meant for the benefit of the citizens of BC. The PGE was a large and expensive infrastructure project and the government was entrusted by the people, through an election, with ensuring the needs and interests of BC were best served by the development of the railway. By not insisting on a separation of the interests of the PGE and FW&S, the normal checks and balances found in public and private contracts were absent and by allowing Foley, Welch and Stewart to control the PGE Company and the construction contract, the government seriously mismanaged the project.

When White was testifying before the Select Committee he was asked: "As a director of the Company did you know that a director under the Railway Act could not be interested in a contract either directly or indirectly?" White responded, "No I did not", yet as Treasurer of the PGE Company since its inception in July 1912, he would have been aware of Welch's resignation as a director in September 1912 for that very reason. Under examination, Patrick Welch also admitted that his nephew had been awarded a subcontract near Clinton and in October of 1913, Welch's son-in-law, F. Wilson, was appointed a director of the PGE Company while operating simultaneously as a subcontractor on the

construction of the line and “drawing \$500 a month from the PGE...as a right-of-way man”.¹⁸⁶ Nepotism, by its very nature, always raises suspicions about the motives of those involved. In a private business, where risk is limited to the financial welfare of employees, the potential for profit can often justify the decision to hire relatives. In a mixed public/private enterprise such as the PGE Company, where taxpayers’ money is at risk, however, a higher standard of transparency is required. The government should have acted to ensure that this standard was adhered to and this was another example of the opportunity for collusion existing within the organizational structures of the PGE project.

In taking the testimony of D’Arcy Tate, Vice-President of the PGE Company, the Select Committee asked about Sections 110 and 118 of the Railway Act which forbade directors of a railway company from entering into other contracts with that railway company. Tate said “We concluded that the special arrangement with the government whereby Foley, Welch and Stewart were personally liable to see that this railroad was constructed and operated, took the Company out of the general provisions of the Railway Act as far as those sections are concerned; they [Foley, Welch & Stewart] were personally concerned, you see, to produce this road”.¹⁸⁷ The ‘special arrangement’ to which Tate was referring was contained in Clause 17 of the PGE Act, Chapter 36, which granted special

¹⁸⁶ *Select Committee of the Legislature*, J366, J368.

¹⁸⁷ *Select Committee of the Legislature*, J18

dispensation to override the Railway Act if it conflicted with the PGE Act as well as Section 2 of the PGE Act, Chapter 34 which granted the directors of the PGE Company permission to do whatever may be necessary in order to make the PGE successful.

Tate's admission that the PGE Company had concluded that it was excused from the general provisions of the Railway Act by virtue of the 'special arrangement' between the government and Foley, Welch and Stewart was a somewhat presumptuous yet calculated claim. Such an arrangement appears to place a private company above the statutory law of the province which weakens the authority of the government. Moreover, it merely confirms that in the face of the unwillingness of the government to meet its management obligations, the wishes of a private company did indeed seem to take priority.

In his testimony, D'Arcy Tate, as vice-president of the PGE Company, attempted to justify the actions of both the McBride government and the PGE Company. Tate indicated that "the development of the province was what he [McBride] was after...and if they [FW&S] would undertake the task, he [McBride] said of course, that if this [bond] guarantee was not sufficient, 'Well, I will try and help you out'; and of course the contractors relied on it to a certain extent". Tate's statement was thus meant to explain his affirmative answer when Chairman J.W. de B. Farris asked if he [Tate] had "...intimated to Bowser

and McBride that if they did not let the estimates go through [in the spring of 1914], that you [FW&S] would not go on and complete the road under the terms of the contract?"¹⁸⁸ Tate was indicating that FW& S had agreed to build the PGE based on McBride's promise to provide more money if it was needed and therefore felt justified in stopping work if the promise was not honoured.

Patrick Welch, in his testimony to the Select Committee, pointed out that if F,W&S had been outside contractors they would have left the site with their profit but because they were part of the group who controlled the PGE Company, the money was re-invested in the PGE Land Development Company and the PGE Equipment Company.¹⁸⁹ The Land Development Company was involved in town site acquisitions from which Tate stated they expected to make \$10,000,000 on a \$2,000,000 investment. The Report of the Committee, however, pointed out that even if the profits were re-invested, "this in no sense is properly chargeable against the construction of the road". Welch had promised to open his personal financial record books to the Committee but then he fled to Seattle in the middle of the hearings. Consequently no evidence was available to the Committee regarding the level of success in land sales which the PGE Company may have experienced.

¹⁸⁸ *Select Committee of the Legislature*, J100.

¹⁸⁹ *Select Committee of the Legislature*, J358.

When Welch was asked why FW&S were given the contract rather than it being put out “to tender and given to the lowest tenderer?” His response was that “We had a large experience as practical men in construction, and it never struck me that we would invite anybody to bid on that work...the whole object was to make all the money that we could out of it by doing the work ourselves”.¹⁹⁰ Indeed, when Welch was asked “how much could you have made if they [subcontractors] could make \$100,000 at these unit prices?” he admitted “I have told you already, or have tried to, that we have made a big profit on this work”.¹⁹¹ Welch’s testimony confirms the understandable motivation of a private company to make as big a profit as possible for itself in the shortest period of time which is quite the opposite of a government’s mandate to look after the collective needs of society.

With regard to setting prices for construction, the Committee asked Welch “Why was it [the contract between PGE and FW&S] made on the prices [being] fixed without the usual surveys being made and profiles obtained?” He answered that “I didn’t have sufficient knowledge of the country...Mr. Stewart had been up and down over the road and GTP runs some kind of line location, a preliminary line...and then the Howe Sound people furnished up some data...anyway he [John W. Stewart] was satisfied with it and we carried it through”. Sensing other reasons, the

¹⁹⁰ *Select Committee of the Legislature*, J343.

¹⁹¹ *Select Committee of the Legislature*, J358.

Committee asked “Was the government anxious to have the contract entered into at once?” to which Welch answered “Yes, Sir Richard McBride seemed to be in a hurry with it”.¹⁹²

It would seem that haste seemed to be important to both sides in the PGE agreement. McBride may have been concerned about the economic slowdown which was already apparent in 1912 and therefore wanted completion as soon as possible. For different reasons the signs of economic downturn would have encouraged Stewart to agree quickly in order to obtain the government guarantees which would secure a cash flow for FW&S for several years. While such attitudes may have seemed hazardous for both sides in this agreement, the greater vulnerability must be assigned to the government. While FW&S risked the road not being completed for the bond amounts offered, the government guarantee of the bonds meant that FW&S could exact their profit and then allow the PGE Company to enter insolvency with relative impunity. The McBride government was unwittingly encouraging railway companies to ignore any necessity for stewardship of government funds. FW&S were safe in the knowledge that they could make their profit on construction and if the PGE Company became bankrupt the BC government, and not FW&S, would be responsible for paying the interest and principal on the railway bonds.

¹⁹² *Select Committee of the Legislature*, J344.

The government, on the other hand, was faced with two threats. If the PGE Company defaulted, the government would be responsible for interest payments and repayment of principal on the bonds but they would also be saddled with an incomplete railway. It is somewhat counter-intuitive to build anything less than a complete railway. Unless there is a complete connection between two useful endpoints, the railway loses most of its practical functionality. In fact, although originally planned in 1912 to be built from Vancouver to Prince George and completed by July 1915, the PGE did not achieve this objective for forty-four years. For most of that time it merely wandered from Quesnel to Squamish with a barge transfer through Howe Sound to Vancouver.

In their rush, the government was ignoring, or seemed unaware of, the irreversibility of choosing to force construction of the railway immediately, incurring a significant opportunity cost for not delaying construction to a more opportune time period after the recession. For contractors the offer of a subsidy was irreversible in that it removed any option to build at a more economically appropriate time in the future. However, by not considering suspension of construction during an economic downturn, the government denied the people of BC the

financial benefit of resuming building at some point in the future during more supportive economic conditions.¹⁹³

In 1913, FW&S had the location of the road, as laid out in the original charter of the PGE dated February 10, 1912, changed to a route which was less expensive. The question then posed to Welch was, “Why didn’t you change [i.e. reduce] your prices with the Railway Company when you got this new location?” to which Welch answered, “I don’t know”.¹⁹⁴ It would seem to be a rather dubious business practice to set a construction price based on an expensive route and then have it changed to a cheaper one but keep the difference in funding. One may wonder why the railway company would not question such a procedure until one is reminded that the railway company and the contractor, FW&S, were one and the same. In their previous contracts with the CPR, Grand Trunk Pacific and the Canadian Northern railway, FW&S were in a situation where the railway company and the contractor were separate entities which would make taking such liberties much less likely. With their PGE contract, FW&S had, in legal parlance, both motive and opportunity to take advantage of the relationship between the company and the

¹⁹³ Emery and McKenzie investigate the subsidy used to encourage the building of the CPR from an ex ante perspective. J.C. Herbert Emery and Kenneth J. McKenzie, “Damned if you do, damned if you don’t: an option value approach to evaluating the subsidy of the CPR mainline”, *The Canadian Journal of Economics*, 29, No.2 (1996).

¹⁹⁴ *Select Committee of the Legislature*, J357.

contractor and the proceedings of the Committee showed the contractor to be as opportunistic as the circumstances allowed.

Welch, in a similar fashion to Tate, appeared to be somewhat baffled by the Committee's line of questioning which seemed to assume a premeditated plan to violate agreements, statutes and legislation and defraud the government and people of British Columbia. Even in the absence of an intentional plan to defraud the government, it cannot be denied that the purpose of a private company is to maximize yield, for which the PGE Company contract defined no upper limit. The construction of the PGE was an enterprise which would not have been attempted by a private company in the absence of government subsidies and guarantees. The PGE Company, and therefore FW&S, were not working with a business plan which suggested a 'more than likely' successful conclusion to the venture. With failure a reasonable possibility, therefore, the natural survival instincts of Foley, Welch and Stewart would dictate obtaining their profit from the construction as soon as possible.

FW&S were practiced contractors accustomed to following direction but had never before experienced the decision making required when controlling a railway which they were constructing. While building the PGE, FW&S were also working on the GTP and CNoR in British Columbia, CPR branch lines in Alberta, the Connaught Tunnel through Roger's Pass and an extensive redevelopment of terminals in Halifax

harbour. With the amount of work to supervise and Welch and Stewart each being absent on extended sick leaves (Stewart one year, Welch two years) during construction of the PGE, the possibility of questionable decisions increased. FW&S were entangled in significant contractual lawsuits on several projects including the GTP mainline and an adverse judgment of more than \$600,000 on the Connaught Tunnel, which was affecting their credit.¹⁹⁵ Being involved in a number of ventures during an economic downturn exposed FW&S to the possibility of significant economic reversals if the financial problems deepened. The natural survival instincts of a private corporation would understandably encourage FW&S to place their own monetary well-being ahead of all others.

Although in July 1912 John W. Stewart was made President and a director of the PGE Company he continued as a partner of FW&S in the PGE initiative. In August 1912, one month after the creation of the PGE Company, Stewart left his duties for an extended medical leave until August 1913. During that time, Welch divided his supervisory time between the PGE project and FW&S's ongoing contract with Grand Trunk Pacific to complete the building of the trunk line to Prince Rupert. Stewart and Welch shared managerial duties from August to November 1913, at which time Welch had a major operation and was on sick leave for two years

¹⁹⁵ G.W. Taylor, *The Railway Contractors* (Victoria: Morriss Publishing, 1988), 102.

until November 1915. During this time Welch records that “Mr. Stewart handled the whole field”. Welch returned to work in November 1915 but he emphasized that “Mr. Stewart practically handled it [PGE construction] until such time as he went to the front [France in August 1916]”.¹⁹⁶

In their investigations, the Select Committee asked many pointed questions about Welch being a PGE director and becoming the PGE contractor on the same day that he resigned his directorship. The Committee also focused on E. White continuing to be a PGE director and treasurer while at the same time managing Welch's operations office and holding his power of attorney. Collusion was also suspected when Welch's son-in-law, F. Wilson, became a PGE director. Most surprising, then, is the Committee's treatment of John W. Stewart.

In the summer of 1911, Stewart as a partner in FW&S told Welch that he “was trying to get a contract to build a railroad from Vancouver to Fort George [renamed Prince George in 1915]”. Later in 1911 Welch met with Premier McBride at which time “he [McBride] gave me a short outline of his understanding with Mr. Stewart...he [McBride] said that he didn't expect any firm of contractors to get in and develop the province with their own money...he said: ‘We naturally expect you to carry this thing along for us for a few months until such time as we can get to the sale of

¹⁹⁶ *Select Committee of the Legislature*, J44.

our securities so that we can furnish money enough to keep the work going' ".¹⁹⁷

Stewart appeared to be satisfied by the arrangements for construction and although he realized that the bond amounts would not be enough to build the road, his eagerness to reach an agreement indicates his confidence that there were other ways for FW&S to exact a worthwhile profit from the project. One must acknowledge that a private for-profit company would reasonably consider all sources of revenue when deciding whether or not a venture is feasible, including not only income streams originating from land sales but also from government guarantees in the case of bankruptcy of the railway.

When Welch was asked about agreeing to a difficult route up the Fraser River valley for the PGE, he said "Well I think J.W. Stewart had an idea that that thing [the Fraser route] could be changed if necessary. As a matter of fact, Stewart had a view that getting up that Fraser River was almost an impossible venture".¹⁹⁸ Stewart continued to hold the presidency and a directorship of the PGE Company as well as maintaining full partnership (indeed, lead partnership on the PGE project) in FW&S while also, as Welch's testimony indicates, being in complete control of the construction of the PGE for the three critical years of 1913 to 1916.

¹⁹⁷ *Select Committee of the Legislature*, J342, J343.

¹⁹⁸ *Select Committee of the Legislature*, J367.

In 1913, when FW&S had the PGE route changed to one which was less expensive, Stewart was supervising the construction firm which requested the change (with no offer to reduce contractor prices) and was President of the railway company which accepted the change (with no request for a reduction in contractor prices). A letter of February 1, 1913 from Stewart as President of the PGE Company to FW&S, advising them of an increase in prices to be paid for work done, was written amid the same incestuous circumstances.¹⁹⁹ He also wrote a letter on November 20, 1915 to John Callaghan (PGE Company's Chief Engineer) stating "Referring to the contract for surfacing and ballasting, in order that there will be no misunderstanding or inconsistency with respect to the schedule of prices and the specifications governing the work, I J.W. Stewart have decided to amend [increase] the contract as follows..."²⁰⁰

It appeared that Stewart, as President of the PGE and lead partner of FW&S for most of the PGE contract, was able to circumvent the normal chain of command in the contractor/engineer relationship. He increased prices for work to be done, thereby raising the amount of the estimates (payment invoices) submitted to the government, while at the same time changing to a less expensive route, all of which was of direct financial benefit to his company, FW&S. Stewart was at the helm of the PGE Company and in charge of construction operations at FW&S during the

¹⁹⁹ *Select Committee of the Legislature*, J18.

²⁰⁰ *Select Committee of the Legislature*, J19.

period when the proceeds of the debenture bonds were exhausted (November 30, 1915) and also when (in the spring of 1916) the government was successfully lobbied for a \$6 million loan to continue building the line. The Committee noted that land holdings of the PGE Land Development Company (which was not transferred to the government as part of the insolvency agreement in 1918) in Squamish, Pemberton, Anderson Lake, Lillooet, William's Lake and Peace River were bought in 1916 with \$1 million of the \$6 million loan.²⁰¹

From November 1913 until August 1916, Stewart was in charge of construction when more than \$13,000,000 (i.e. >70%) of the total amount of bond and loan money was paid out to F,W&S.²⁰² At the time of the Select Committee investigation, he was involved in building a railway in France to supply the warfront. Because of his military obligations and the time constraints placed on the Committee, he could not be summoned to testify. It is unclear, however, why the committee did not ask for a written submission as his testimony would have been particularly useful for a fuller understanding of the financial failure of the PGE Company.

William J. Bowser, former Deputy Premier and McBride's principal assistant was closely questioned by the Committee about the bonds-in-trust money being paid out in full to the PGE Company before all the work was complete. Chairman J.W. de B. Farris asked Bowser about the bond

²⁰¹ *Select Committee of the Legislature*, J70.

²⁰² *Select Committee of the Legislature*, J348, J634.

amounts payable to the PGE Company. He responded by pointing out that the PGE Act allows “for paying monthly payments as far as practicable...to the satisfaction of the Government...which would leave a certain discretion, I suppose”. When pressed about the bond account being exhausted, Bowser asserted that “There is an authority to pay the money out as far as my opinion is concerned”. He seemed to interpret the wording of the agreement to mean that, as all the money was ultimately designated to be transferred to the PGE Company, the government did no more than fulfill that mandate. The Chairman then read the section which states that the bond money was to be paid out “...having regard to the proportion of work done” to which Bowser re-iterated “I say that it gives a discretion; and that discretion was exercised in the spring of 1914”.²⁰³

In essence, Bowser was defending himself with a semantic argument and hiding behind his own interpretation of the agreement which conveniently ignored the legislated time-control of proportionality when issuing the bond money. He explained that “The policy was to be as liberal as possible with the payments under this Act; and owing to the break in the financial affairs in the province at that time, we wanted to keep the road going...we wanted to get it finished to go through

²⁰³ *Select Committee of the Legislature*, J632.

somewhere where it would start to earn money".²⁰⁴ This line of reasoning begs the question of the purpose of laws, statutory requirements and agreed-upon procedures if Bowser is arguing that governments have the power to change, ignore or circumvent any rule if they arbitrarily see fit to do so.

Bowser's admittance that "the situation in the Province caused us to release more moneys than we would otherwise have done" was one of the few instances of genuine honesty amongst a plethora of obfuscations. It was the closest that Bowser came to a plea for understanding of the difficult position in which the government had been placed by disastrous economic conditions. In reality, however, it was the addition of government mismanagement and opportunistic contractors which ruined the chances of financial success for the PGE project.

Lastly, Bowser was asked about "payments to the Conservative Party in regard to campaign funds". Tate was expected to arrange for this from his \$500,000 commission from Stewart for his work on the PGE project. On August 22, 1914, Welch drew eight cheques of \$50,000 each for Tate. Then on January 6, 1915 Welch issued two additional cheques of \$50,000 each to Tate, drawn on Stewart's account from the proceeds of bond sales which Tate says was part of his \$500,000 commission. Tate admitted that this money was used as a contribution to campaign funds but

²⁰⁴ *Select Committee of the Legislature*, J618.

declined to say how much and to which party he made the payments.²⁰⁵ Even after repeated questions from the Committee, Tate and Bowser refused to name the recipients of these funds.²⁰⁶ In addition, Bowser threatened that “if any evidence is given before this committee more direct than what Mr. Tate has given, I then propose to tell what I know and it may be a very interesting story to the Liberals of the Province”.²⁰⁷

It became quite apparent as the Select Committee continued its deliberations that the construction of the PGE was flawed with irregularities and self-interest. Moreover, there existed outright contravention of agreements, contracts, statutes and legislation by both the PGE Company and the Government. Soon thereafter, Tate and Welch fled to Seattle and Bowser refused to furnish any further useful information to the Committee. On April 20 1917, PGE Company officials (which was in reality FW&S) stated that if released from any damage claims, they would be prepared to turn over to the Government all of their holdings in the PGE and offered to complete the construction of the Railway line at actual cost, under Government management and supervision.

Clearly, Foley, Welch & Stewart had assessed the direction of the Committee questioning and not wanting to further commit their time, energy and attention to a political investigation, had decided to

²⁰⁵ *Select Committee of the Legislature*, J619.

²⁰⁶ *Select Committee of the Legislature*, J646.

²⁰⁷ *Select Committee of the Legislature*, J634.

abandon their interest in the project. Given their past involvement in the affair, they could be certain that the government would not accept their offer to continue construction, but the general citizenry might have been somewhat mollified by a public show of good faith.

On May 1, 1917, the Select Committee released its report. Specific findings included: the share issue of \$24,960,000 having been given to FW&S “without any cash consideration” (meaning that no money was realized for the construction of the PGE) was illegal and improper; granting the construction contract to FW&S, the owners and promoters of the PGE, “was in direct contravention of sections 110 and 118 of the Railway Act forbidding directors entering into a contract with their own company”; the construction contract therefore was illegal and moreover, it allowed FW&S “to fix for themselves without competition, the prices they were to pay themselves...[and] the prices fixed...were excessive”; “the government has paid out the full amount of its trust funds without proper supervision or inspection of the work”; “the Government overpaid the Company \$5,705,316.50 in contravention of Statute; and “Foley, Welch & Stewart defaulted in their covenant to complete the road and to pay the interest on the bonds.”²⁰⁸

The Select Committee completed its work in an atmosphere of frustration. While it had produced some results, collected a useful body of

²⁰⁸ Select Committee of the Legislature , J646-J648.

evidence and reached some specific conclusions, it was not able to complete the factual story. The sudden disappearance of D'Arcy Tate, Vice President of the PGE Company and Patrick Welch, building contractor of the PGE, the absence of General J.W. Stewart on military duty and the withdrawal of Opposition Leader William Bowser's cooperation meant that the investigation could not reach a satisfactory conclusion.

The absence of the personal accounting ledgers which Welch had promised to provide before absconding to Seattle eliminated any further possibility of exacting personal accountability from the principals of the affair. In fact, however, the Committee had achieved its purpose insofar as informing the public of the complexities and murkiness of the whole project and alerting public opinion to the dangers of allowing too much power to reside in the hands of too few individuals. Moreover, the Committee's Report provided a scathing indictment of the mismanagement of the project by the government of BC. The numerous instances of statutes, laws, agreements and procedures which the government allowed the PGE Company and FW&S to ignore or opportunistically interpret was an unacceptable abuse of power by the government of the day.

There is no evidence that Richard McBride benefited personally from the financial troubles of the PGE project. In fact, he had to ask the

BC government for assistance with travel costs to get his family back to Victoria from London after he became desperately ill in 1917. The apparent absence of fraudulent activity, however, does not absolve him from the charge of mismanagement. McBride's renowned confidence and unshakeable optimism, was also most likely his greatest fault. After years of short-term, visionless, petty, nondescript premiers, the electorate were mesmerized by McBride's exciting, expansive view of a prosperous future for BC. If politics is the art of the possible, optimism is the spark to make what seems impossible, achievable. McBride's optimism was inspirational and infectious. It worked exceedingly well in prosperous times but was a liability during an economic downturn.

While it is indisputable that World War I and an economic downturn, with its concomitant disappearance of investment capital, had a disastrous and unavoidable effect on the PGE construction, there were alternatives and options along the way which could have been pursued to control its impact on the PGE project. Given that the original agreement with the PGE was made in the apparently prosperous times of 1912, when the economic downturn became obvious, McBride and his Cabinet could have found legal or legislative means to postpone the PGE project, halt any further release of bond moneys and avoid the questionable, exclusive acquisition by Foley, Welch & Stewart of 100% of PGE share capital with a face value of \$25 million for a payment of

\$40,000. That this was not done speaks to a dubious optimism on the part of McBride and opportunistic self-interest on the part of Foley, Welch & Stewart. It seems the contractor's vision was not province-building but profit-making. FW&S had men and materials in the field and were determined to continue the job. Suspension of operations would remove their means of cash flow which is the life-blood of any business and while this may be understandable from a business point of view, it is undeniable that FW&S took advantage of their operational control, a lack of adequate government supervision of financial releases and of their sense that the government wanted to continue at any cost.

A counterfactual vision of profitability for the PGE would entail a different conceptual plan. Starting with a simple colonization-grade railway of 117 miles between the existing population centres of Squamish and Lillooet would have dramatically reduced building costs. Deciding to build additional sections incrementally, at some future point in time, only as traffic and revenue justified, would have placed the PGE on a much more secure financial footing at the outset. A precedent for this approach existed with the T&NO railway in Ontario. It began with the construction of a 100-mile railway with no intention to expand until traffic and returns reached a point that could rationalize more construction based on a business plan. Had McBride adopted such a vision, large fixed costs for hundreds of miles of isolated railway with no prospect of

significant income in the foreseeable future could have been avoided for BC.

The difficulty with this counterfactual theorizing is that it is based on a consideration of private returns. In initiating the PGE McBride made a decision founded upon both anticipated social and private returns. His political determination that the railway was to be built from Vancouver to Prince George was focused on the immediate social benefits to the electorate of a direct, complete and convenient connection between the interior population centre of Prince George and the services available in Vancouver, the largest urban centre in BC. He hoped that the private returns would evolve in a timely manner to support his envisioned social returns. McBride was taking a large risk in assuming that the potential financial obligations represented by the guarantee of railway bonds would never materialize.

By 1918 with the insolvency of the PGE Company, however, BC was faced with just such an eventuality and its consequent obligation to make fixed interest payments and refund principal to the PGE investors. BC's meagre financial resources of that period rendered it incapable of meeting this considerable debt load in a timely manner, thereby preventing it from completing the PGE to Prince George in the 1920s, 1930s or the 1940s. In 1922 with rail complete from Squamish to Quesnel and no more money available, BC closed down construction on the PGE.

Between Quesnel and Prince George lay the costly challenge of the Cottonwood Valley. Bridging the Cottonwood Valley was an insurmountable monetary barrier for BC more than a physically impossible one because of the drain on the treasury of the interest payments of the railway bonds and loans for the PGE.

The economic disaster which spread throughout Canada after 1912 was unavoidable. The behaviour of the provincial government and railway contractors was, however, the result of conscious choices and its consequences were, therefore, avoidable. A fatal combination of misfortune, mismanagement and opportunism resulted in the exhaustion of the proceeds of the railway bond fund by November 30, 1915, with only 164 miles of rail laid between Squamish and Clinton, and the subsequent insolvency of the Pacific Great Eastern Company in 1918.

In late 1917 with construction halted on the PGE for lack of money, the government of BC decided to accept the FW&S proposal for a government takeover of the PGE Company rather than pursuing lengthy and expensive legal proceedings. Negotiations with Foley, Welch and Stewart reached a conclusion early in 1918. The company agreed to turn over most of the PGE assets to the province together with a cash payment of \$750,000 and in return the government agreed to drop all legal action against Foley, Welch and Stewart and to release company officials from all personal liability for the actions of the PGE Company. In

mid-February 1918, less than six years after the PGE Act was introduced for first reading in the BC Legislative Assembly, the government assumed ownership and total liability for the Pacific Great Eastern railway.

Chapter 9: Aftermath and Conclusions

The insolvency of the PGE Company and its takeover by the provincial government had an immediate impact with echoes which may be heard to this day in British Columbia. The government of Premier John Oliver attempted unsuccessfully to complete the project but severe financial problems ultimately led the government to set aside continued construction indefinitely. This chapter is divided into five sections: the Hinton Report of 1922, the Sullivan Report of 1922, the Royal Commission PGE Report of 1924, Suggestions for Further Study, and Conclusion.

Section one, the Hinton Report of 1922 was commissioned by Premier Oliver to make recommendations for the future of the PGE. Hinton could see a future for the PGE if a connection were made to the CPR line at Ashcroft. The value of his report was his positive evaluation of a successful future for the PGE if modifications were made to the route. In section two, the Sullivan Report of 1922 considered the territory through which the PGE passed and made recommendations to Premier Oliver about the future operation of the PGE. It was considerably more pessimistic than Hinton's Report in its prognosis for the PGE. Sullivan counselled abandoning large sections of the PGE route. He also asserted that if the BC population did not want to face continued annual interest and deficit charges of millions of dollars per year the whole system should

be abandoned. The importance of the first two sections lies in what the recommendations revealed about the breadth of perceptions concerning the PGE. Experts varied from optimism to realism as did the people of BC. It is, therefore, not surprising that politicians, as representatives of the electorate, were also conflicted in their views of the PGE.

Section three considers the Royal Commission on the PGE of 1924. Premier John Oliver was concerned with alleged irregularities connected with the Pacific Great Eastern railway and decided to appoint a Royal Commission to attempt to reach some closure on outstanding issues. Section four, *Suggestions for Further Study*, assesses what needs to be done to further deepen our understanding of the role which the PGE played in both the political and economic development of BC. There remain significant gaps in the historiography of the province and in view of the dominant role which railways played in the early development of British Columbia, more research in this area could have a spill-over benefit to other aspects of BC's history. Section five, *Conclusion*, seeks to put the PGE saga in perspective. Richard McBride was one of the greatest boosters of BC in its history. He believed passionately in the future of BC and wanted it to reach its potential as soon as possible. While his motives were laudable, his methods were flawed. In his haste he could not see any need for caution, for which a high price was exacted.

Hinton Report 1922

The completion of the Select Committee Report on the PGE, 1917 left many unanswered questions and a lack of clarity for future directions. After the Government of BC assumed control of the PGE in 1918, there were large annual interest payments to be made on an enormous debt. Not surprisingly, the issue of the PGE would not go away. Part of the population wanted to complete the PGE to Prince George while many others did not want to invest any more government money in the project.

Premier John Oliver wanted to sell the railway but in the absence of post-war buyers he decided to call for the tendering of limited contracts in order to proceed with construction. Oliver commissioned reports to try to establish a better understanding of what had happened and to offer suggestions for what should be done next. Accordingly, in 1922 Oliver charged W.P. Hinton, former Vice-President of the Canadian Freight Association, with the task of analyzing the PGE and "making recommendations pertaining to the organization, operation, and maintenance of the PGE." Hinton's *Report on the PGE Railway: Organization and Operation* included the following findings:

- The officers and staff were capable and efficient. Reducing the staff would not be advisable.

- Increasing rates was not feasible as they were already prohibitively high. The North Shore Division (North Vancouver) should be made into a tram system or abandoned.
- In the next few years 16 million feet of timber bridges and trestles will need to be replaced.
- Construction to Prince George should continue as “economies of operation can be effected” by a direct rail connection.
- The operating costs of the North Shore Line and Squamish to Clinton line were “so great as to preclude any possibility of net operating revenue”.
- When a connection to Prince George is achieved, consideration should be given to abandoning the Squamish to Clinton section in favour of a connection from Clinton to Ashcroft.²⁰⁹

Hinton felt that there was very little prospect of meeting operating expenses on the passenger service from North Vancouver to Whytecliff (Horseshoe Bay) or from freight shipments from Squamish to Clinton, but he was convinced that there was value in continuing construction from Clinton north to Prince George and south from Clinton to Ashcroft in order to create a direct line from Vancouver to Prince George by using the CPR to connect from Vancouver to Ashcroft and then the PGE line to

²⁰⁹ W.P. Hinton, *Report on the PGE Railway: Organization and Operation* (Victoria: William H. Cullin, 1922), 3.

complete the journey from Ashcroft to Prince George. Hinton believed that this plan would make the PGE more attractive for other railways to lease thereby helping the province to meet heavy interest payments which threatened to soon become “intolerably burdensome”.²¹⁰

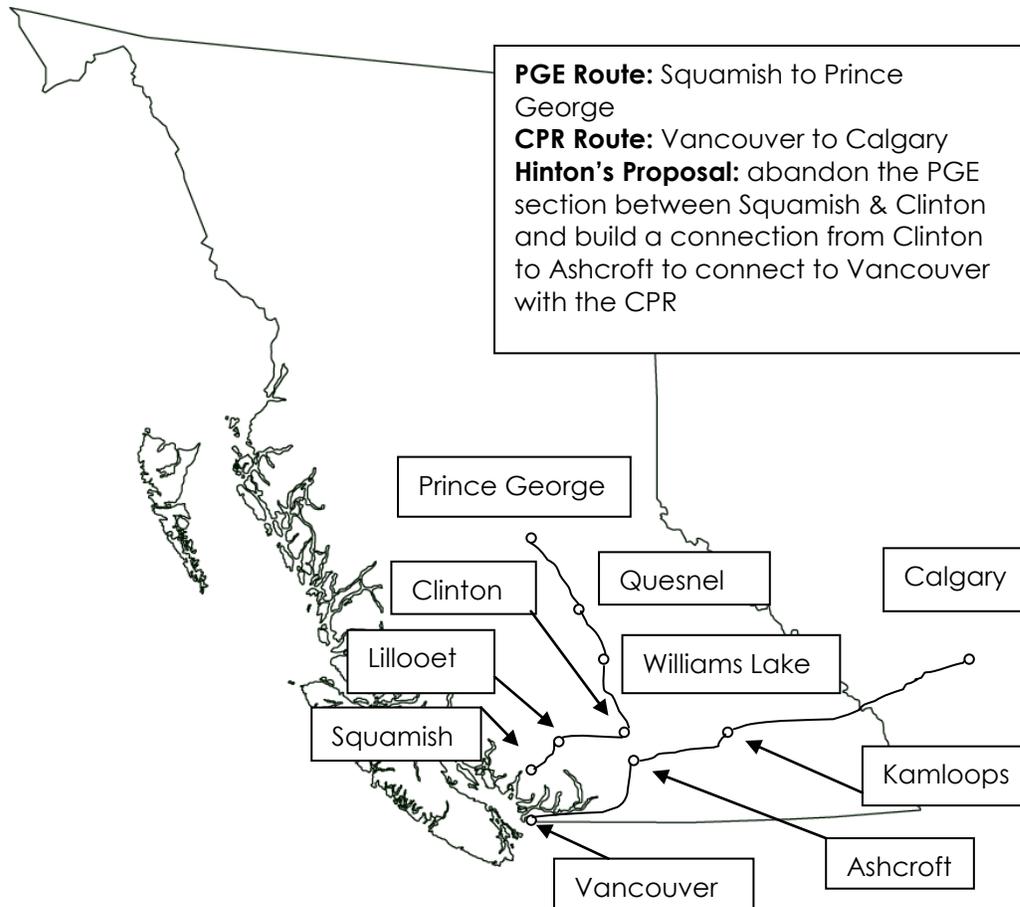


Figure 9.1 Proposed Rail Link between Clinton and Ashcroft

²¹⁰ Hinton, 8.

Sullivan Report 1922

Premier Oliver also commissioned Consulting Engineer J.G. Sullivan in 1922 to examine the territory through which the PGE passes and make recommendations on the continued and future operations of the PGE. Sullivan's career included supervising contractor J.W. Stewart in the building of the Kaslo & Slocan Railway and Columbia & Western Railway in the Kootenay area; planning and overall supervision of the Connaught Tunnel project, also built by FW&S; and employment with the CPR as Chief Engineer of the Western Lines. Because of Hinton's experience in the operational areas of railways and Sullivan's knowledge of the construction and design aspects, the two reports offered differing perspectives yet some similar suggestions concerning the PGE Railway which gave Oliver a more diverse understanding of the situation and potential options for the PGE.

Sullivan's Report on the Engineering and Economic Features of the Pacific Great Eastern Railway included the following findings:

- Construction of the line from North Vancouver to Squamish cannot be justified on any ground so the properties involved should be sold.
- Construction north from Prince George to the Peace River country should not be considered because of the cost compared to the potential returns.

- The PGE should abandon steam trains for passenger service in North Vancouver and replace them with light rail cars powered by gasoline engines.
- The PGE should establish a rail connection from Clinton south to Ashcroft.²¹¹

Sullivan noted that by 1922 the total outstanding financial debt of the PGE had reached \$44 million in construction and interest charges and that another \$6 million would be required to complete the line. The final cost for 480 miles of railway between Vancouver and Prince George, therefore, would be over \$100,000 per mile.²¹²

Sullivan suspected that the stated purpose of building the PGE, to achieve reasonable passenger and freight rates for the benefit of the residential, the farming and the business communities and to open up the province, hid the main reason which was to satisfy selfish business interests in Vancouver and Victoria, coupled with the eagerness of the Grand Trunk Pacific to gain a connection to Vancouver without having to pay for it. Sullivan was very direct in his recommendations to abandon most of the originally-planned PGE as he saw no hope of ever recovering operating expenses via traffic volume and consequently no chance of paying down

²¹¹ J.G. Sullivan, *Report on the Engineering and Economic Features of the Pacific Great Eastern Railway* (Victoria: William H. Cullin, 1922), 19, 20.

²¹² Sullivan, 8, 10.

any of the debt in the foreseeable future. In his opinion any other course of action would merely serve to add more debt to the PGE. Moreover, Sullivan believed that “if the people of BC are not prepared to continue paying from \$2 million to \$2.5 million per year [in interest charges] on the investment already made...the company [PGE] be ordered at once to abandon the whole system”.²¹³

Royal Commission Investigating the PGE 1924

On February 20, 1924, Hon. Mr. Justice W.A. Gallihier was appointed by Premier Oliver to investigate a list of irregularities prepared by his government, with regard to the activities of the PGE Company from its establishment and operation as a private company in 1912, through its insolvency and eventual takeover by the BC government in 1918. The terms of reference for the Royal Commission included examining the government-directed building contracts (awarded by Premier John Oliver's government) up to the termination of construction in 1922.

The first matter Commissioner Gallihier reviewed was the accusation by members of the Legislative Assembly that in 1915 two of their colleagues, Conservative William J. Bowser (former Premier and Attorney-General of BC) and Liberal William Sloan (then Minister of Mines in Premier Oliver's government) had accepted approximately \$50,000 each from the PGE Company or its contractors. It was further alleged that as a result

²¹³ Sullivan, 20.

of the payments “the promoters of the said Railway Company were assured of protection in the ensuing general election [1916] and that as a result of such contribution, protection and favourable treatment have been fully accorded to the promoters of the said Railway Company.”²¹⁴ The Royal Commission also considered several other accusations related to the period of government construction, from 1918 to 1922, including “gross waste of public money and the defrauding of the province in that the contract for the work was not let to the lowest tenderer and no security was received from the Northern Construction Company [the new PGE contractor hired by Oliver's government in 1918]”. Many of the other irregularities scrutinized by the Commission were eerily reminiscent of an earlier time when FW&S was the PGE contractor, involving items such as additional track mileage constructed by the contractor without further tender; contract unit prices which were subsequently increased by the Chief Engineer with the consent of the Minister of Railways but with no revised contract prepared and signed by both parties; and no proper audit provided of the expenditures of the construction company.²¹⁵

Despite the presentation of evidence, the Commission's role was not to pass legal judgment but to reach conclusions and make recommendations. In his report the Hon. Mr. Justice Gallihier concluded

²¹⁴ *Royal Commission to inquire into the PGE Railway* (Victoria: Government of British Columbia, 1924), 9.

²¹⁵ *Royal Commission* 1924, 4.

that “I find nothing in the evidence in this inquiry to warrant the imputation that there was anything dishonest or any dereliction in duty or disregard of the public interests.”²¹⁶ The Commission's findings were inconclusive as it found no evidence of wrong-doing even though specific evidence had been tabled.

Suggestions for Further Study

The history of European settlement in BC is comparatively short. Building on the advances in English and European economic, political and social development, however, it did not take long for BC to exhibit the manifestations of modern Western life. The industrial revolution which took so long to emerge in England and Europe developed quickly in North America because of the inestimable advantage of importing successful inventions and practices, allowing BC to leapfrog in pursuit of the development of a mature expression of industrial competence. The first steam engine which had a practical business purpose (pumping water out of mines) was invented in 1712 by Thomas Newcomen of Dartmouth, England but it would be over a hundred years later before steam engines were sufficiently adapted to successful railway use in the commercial and passenger applications of the Liverpool and Manchester Railway of 1830. By contrast the time lag in Canada between the introduction of steam

²¹⁶ *Royal Commission* 1924, 21.

engines and the appearance of the first completed railway was much shorter.

While railway technology existed in Canada in the early 1830s, economic and political infrastructure to support it was lacking. Historical investigations into the disadvantages of bypassing steps in the industrialization of Canada and BC would be useful in assessing its long-term effects. Did sidestepping important stages prolong the number of years in which BC existed as an economic backwater? Did premature industrialization tempt BC to invest in technology for which there was as yet no logical business justification? Did BC embrace the notion of BC as a rich staples economy and gratuitously invest in resource extraction technology simply with a view to expediting a path to prosperity?

The modern democratic structures in England had developed over hundreds of years during which, philosophies and conventions matured through trial and error in response to the changing needs and desires of society. Representative and responsible government arrived in BC, however, quite suddenly in 1871 after it joined the Confederation of Canada. Studies of the evolution of an appropriate system of checks and balances for BC's political needs would be useful in engendering a better understanding of BC.

British Columbia lacks comprehensive, investigative biographies of such key figures as Richard McBride, William Bowser and John Oliver.

These men, as premiers and ministers of the Crown, all had differing conceptions regarding the scope of their roles. A deeper knowledge of how their administrations influenced the maturing of BC would allow a more complete understanding of the events which formed the unique nature of the province.

Lastly, the importance of railways to the development of BC justifies the investment of time and effort in a comprehensive examination of railways in BC. With three transcontinentals²¹⁷ and the PGE as, at the very least, the longest provincial line in Canada, railways were a very significant aspect of the history of BC. Was the PGE a foundational technology for a resource extraction and staples economy? Enormous amounts of money, labour and resources were expended in building railways in BC. With the business possibilities promoted by the development of railways, and the debt obligations accompanying them, however, came an opportunity cost which prevented BC from participating in many other avenues of advancement. To understand the BC of today, the railway decisions of yesterday need to be interpreted in relation to each other and in the context of the era in which they were made.

²¹⁷ Four transcontinentals in the opinion of the Victoria Times-Colonist, February 21, 1912, as the PGE "will be extended to Peace River and later into Prairie country".

Conclusion

Soon after the 1916 BC election, John Oliver, as the new Minister of Railways, voiced his frustration with the PGE asserting, "I am not going to become the foster-father of this illegitimate offspring of two unnatural parents. It was a waif left on my doorstep...conceived in the sin of political necessity".²¹⁸ The Pacific Great Eastern Railway was indeed the product of Richard McBride's need and wish to be politically responsive to his electorate. People across BC were clamouring for railways to facilitate the speedy development of their province and he felt it was his duty to give them the tools necessary to achieve their goal. McBride had won four majority governments, to a large extent because he knew how to keep his voters satisfied. His optimism and confidence in BC spoke to their need for hope in the future. In 1912 Canada was young and BC even younger. Most non-indigenous people in BC had come from somewhere else having immigrated from another country or moved within Canada to BC to start out, start over, move in or move up. Many saw in McBride's vision a reason to continue working hard and sacrificing.

McBride believed that for the PGE to be successful it needed a traffic agreement with a trunk line railway, so he forged a marriage of

²¹⁸ James Morton, *Honest John Oliver* (Vancouver: J.M. Dent & Sons Ltd., 1933), 117.

convenience with the Grand Trunk Pacific. If the GTP and the government of BC were the unnatural parents of the PGE, it was because of the difficulties which emerge when a profit-based enterprise and a not-for-profit organization try to share common goals. If the PGE was illegitimate, it was to the extent that the relationship was thought to be one-sided with both sides believing that they had received the greater benefit. For the GTP, their agreement with the PGE was, financially, very attractive. With an investment of zero dollars, the GTP considered that they had created a branch line from Prince George to Vancouver. The point of view of the BC government was equally positive. While maintaining control over its provincial line, McBride had ensured a through line to Toronto and Montreal which he could offer to Vancouver and citizens throughout BC. In addition, the PGE would benefit from the GTP traffic coming from the east and heading for Vancouver.

If the PGE became a waif, it was not a result planned by McBride but rather the consequence of his lack of planning. From 1903 to 1909 McBride had spurned all offers of railway development while he focused on rebuilding BC's finances from a state of chronic deficit spending. Aided by a strong economy, McBride had eliminated the deficit debt and embarked upon a new era of surpluses. The financial picture improved to such a degree that by 1910 McBride's Finance Minister, R.G. Tatlow, would

boast that BC could write a cheque to completely eliminate its debt if it so desired.

McBride had a plan for continued prosperity but was at a loss to know how to deal with an economic downturn. When he announced his plans to build the PGE in February of 1912, economic indicators had already begun to change. McBride's optimism saw the financial changes as merely market corrections which would soon become positive again but unfortunately, in 1913 when real estate prices started to plummet, credit began to tighten, and the number of building permits dropped significantly, McBride had no plan for dealing with that situation.

Railway bond guarantees seemed to be an easy answer to a business conundrum. How were speculators to be convinced to invest in railways which did not yet exist and could not yet, therefore, be shown to be profitable? Canada struggled with this question in the 1850s when constructing the Great Western and Grand Trunk railways. If the government guaranteed the interest and principal of railway company bonds then the risk of losing one's money in the event of the railway becoming bankrupt was virtually removed. The financial weakness of the Grand Trunk resulted in the Canadian government having to pay for the onerous obligations it agreed to in financing construction. Consequently, when the next large railway project, the Canadian Pacific Railway was announced in the 1870s, bond guarantees were almost totally avoided

but, during the railway mania which spread throughout Canada in the early 1900s, they had re-emerged, being seen as a quick way for all parts of Canada to join in the rush for railways.

If McBride and his provincial government had managed the PGE more wisely during BC's changed economic circumstances, by delaying or postponing construction, they could have significantly reduced, perhaps avoided much of the damage done to both the project and the province. Initially in 1912, the government had authorized the PGE to sell \$25 million of shares in their Company to finance construction of the proposed railway. When the PGE Company decided to keep the shares but only paid \$40,000 of their \$25 million face value, the government took no action thereby allowing their intended purpose of increasing the amount of construction money available to be evaded.

By the time World War I began in August 1914 \$10,006,000 of the bond money had been spent.²¹⁹ In September, 1914 the British government banned the export of investment capital to other countries so that the money would be available for the British war effort. As a consequence, the PGE would not have access to any more British investment money for the duration of the war. Had McBride immediately suspended construction on this project at the outbreak of the war, at the end of hostilities in 1918, there would have been more than \$8 million in

²¹⁹ *Select Committee of the Legislature*, J61.

unreleased bond funds available to finance resumption of the work. The renewed project could have then employed returning soldiers and saved BC from bearing the financial burden of paying close to a million dollars a year in interest payments beginning in 1918.

As Premier Richard McBride had identified the building of the PGE as a political necessity, he was authorized by the sovereign power of the electorate to pursue that goal. The voters were not, however, empowering him to risk the financial stability of the province. If there was 'a sin' in the 'political necessity' of the PGE, it resided in McBride's response to the changing economic conditions after 1912. Prudent management consists of knowing when to take reasonable risks and when to retrench. Mismanagement emerges when the dangers are patently identifiable, but one chooses to ignore the necessity of retreat.

The PGE was conceived in an era of railway mania. It was the offspring of the desire of BC to quickly come of age and of a Premier whose optimism clouded his judgement. In the end, the PGE fell victim to opportunism, the economics of its time and the mismanagement of Richard McBride and his government.

Bibliography

Primary Sources:

BRITISH COLUMBIA

BC Provincial Archives

GR-0429 Attorney-General William Bowser's Correspondence

GR-0436 Land Settlement

GR- 0441 Premier McBride's Papers

6/1 85/97 McBride's correspondence with a Farmers' Society urging the BC government to build high quality railway grid

24/3 591/04 McBride's correspondence re: requests for a railway connecting the Kootenays to Vancouver Apr – Oct, 1904

35/4 426/09 McBride's correspondence with Premier Roblin of Manitoba re: bond guarantee for CNoR and provincial control of Rates May-Oct 1909

36/1 470/09 McBride's correspondence with BC Opposition Leader John Oliver re: election campaign issues Sept-Dec 1909

36/1 471/09 McBride's correspondence with Thomas Taylor, Minister of Public Works (later became the first BC Minister of Railways) Sept-Dec 1909

36/1 474/09 McBride's correspondence with E.B. McKay, railway Surveyor Sept-Dec 1909

37/3 154/10 McBride's correspondence with Price Ellison, Commissioner of Lands Jan-June 1910

39/1 369/10 McBride's correspondence with Thomas Taylor, Minister of Public Works re: the Prince Rupert public wharf

39/1 369/10 McBride's correspondence with D'Arcy Tate re: meetings with C.M. Hays about GTP building a branch line from

Prince George to Vancouver

Premier McBride's Letterbooks

Volume 392 December 1911-November 1912

Volume 393 November 1912-July 1913

Volume 396 August 1914-December 1914

Volume 397 December 1914-March 1915

Volume 398 March 1915-August 1916

Volume 399 August 1915-November 1915

Boxes 146, 147, 148 - letters received by McBride while in England

Boxes 392, 393 – McBride's official letters outward Dec 1911-July 1913

Box 403 McBride semi-official letters outward 1914

Box 406 McBride Letterbook Private Jun-Oct 1903

Box 407 McBride Letterbook Private Dec 1903-Mar 1904

Box 408 McBride Letterbook Private Mar-Jun 1904

Box 409 McBride Letterbook Personal Jun-Nov 1903

GR- 0684 BC Commission on Labour 1912-1914

GR- 0799 Records of the PGE 1914-1924

Box 1, 2, 3 and PGE Commission 1924

GR- 0817 Railway Department Correspondence Files 1912-1953

Box 14 Minutes of Directors' Meetings

GR- 0818 Railway Department

Incoming/Outgoing 1912-1915 from Premier McBride's Office Concerning PGE

GR-0876 BC Railway Department Files 1919-1951

GR-1222 Premiers' Papers 1917-1952

GR- 1323 Attorney-General Bowser's Outward Correspondence 1909-1915

GR- 1326 Register of Inward Correspondence Attorney-General Bowser 1909-1915

MS-0041 PGE Railway Papers 1912-1917

train operations, inter-departmental forms, train orders, train timetables

MS- 0106 PGE Railway Papers 1917 -1945
Inter-departmental correspondence, reports on construction operations

MS-0044 Lottie Bowron Correspondence (McBride's Secretary)

MS-0112 McBride Correspondence

MS-0347 McBride Private and Official Correspondence 1903-1915

MS-0699 W. Bowser's (Attorney-General) Personal and Official
Correspondence 1909-1916

MS-0996 McBride Correspondence 1912

MS-1135 McBride Correspondence 1914

91-3433-471 (formerly accessioned as 90-009)
McBride's Personal Letters: from Winston Churchill December 26, 1911 &
December 7, 1913; and from Sir Francis J.S. Hopwood January 3, 1914.

Microfilm Newspaper Files

Lillooet Advance January 1911-August 1911

Lillooet Prospector November 1911-April 1917

Quesnel Cariboo Observer 1908-1918

Prince George Citizen 1916-1918

Prince George Post 1914-1915

Fort George Herald 1910-1916

Fort George Tribune 1909-1915

BC Provincial Government Records

Bowser, W.J. *Speech by Attorney General William J. Bowser on
the Matter of The Dominion Trust Company, February 4, 1915.*
Victoria: Government of BC, 1915.

British Columbia Election Results 1871-1920

<http://www.elections.bc.ca/index.php/resource-centre/electoral-history-of-bc>

British Columbia Legislative Assembly. *Annual Reports 1912-1918*.
Victoria: King's Printer.

British Columbia Legislative Assembly. *Public Accounts 1914-1915, Railway Guarantees*.
Victoria: King's Printer.

British Columbia Legislative Assembly. *Railway Act of 1911*.

Buttar & Chiene. *PGE: Statement of Accounts*.
Victoria: King's Printer, 1920-1938.

Dennis, John Stoughton. *Examination of the Natural Resources Tributary to the line of the Pacific Great Eastern Railway*.
Victoria: King's Printer, 1922.

Department of Lands. *Bulletin No. 31: Vicinity of the PGE: Squamish to Clinton*.
Victoria: King's Printer, 1924.

Department of Lands. *Bulletin No. 32: Vicinity of the PGE: Clinton to 52nd Parallel*.
Victoria, BC: King's Printer, 1924.

Department of Railways. *PGE: Proposed Extensions & Potential Resources*.
Victoria, King's Printer, 1949.

Royal Commission of the Province of British Columbia: *Report re the Pacific Great Eastern Railway*.
Victoria: King's Printer, 1924.

Government of British Columbia. *BC Statistics*.
<http://www.bcstats.gov.bc.ca/>

Hinton, W.P. *Report on the PGE Railway: Organization and Operation*
Victoria: William H. Cullin, 1922.

McBride, Richard. *Speech by Premier Sir Richard McBride on His Railway Policy in Moving the Second Reading of Bill 23*.
Vancouver: British Columbia Magazine, 1912.

- McBride, Richard. *Speech by Premier Sir Richard McBride in Moving the Second Reading of the Canadian Northern Pacific Railway Bill.*
Victoria: King's Printer. 1913.
- McBride, Richard. *Speech by Premier Sir Richard McBride in Moving the Second Reading of The Pacific Great Eastern Aid Bill, February 27, 1914.*
Victoria: Government of BC, 1914.
- McBride, Richard. *Speech by Premier Sir Richard McBride on The Kettle Valley Agreement.*
Victoria: King's Printer. 1914.
- Pacific Great Eastern Railway. *The PGE Story.*
Vancouver, BC: PGE Construction Dept., 1956.
- Peat, Marwick & Company. *Auditors' Report on the PGE.*
Victoria BC: Government of BC, 1914.
- PGE to The Northern Trusts Company and His Majesty the King. *Mortgage and Deed of Trust.*
Victoria: Colonist Presses, 1914.
- Pacific Great Eastern Railway Company Statement of Accounts.*
Victoria: Legislative Assembly of British Columbia, 1920-1938.
- Price, Waterhouse & Company. *Auditors' Report on Investigation of the Financial Relations of the Government with the PGE up to the date when the proceeds of the Company's Debenture Stock were exhausted.*
Victoria: Government of BC, 1917.
- Railway Act of 1911. Chapter 194, Statutes of 1911.*
Victoria: Government of British Columbia, 1911.
- Select Committee of the Legislature. *Proceedings and Evidence in re Pacific Great Eastern Railway Company.*
Victoria: Government of BC, 1917.
- Sullivan, J.G. *Report on the Engineering and Economic Features of the Pacific Great Eastern Railway.*
Victoria: William H. Cullin, 1922.

Pamphlets

Brewster, Harlan Carey. *Facts About the Writ.*

Victoria : Government of British Columbia, June 30, 1916.

Government of BC. *Pacific Great Eastern Railway – Lands, Facts and Figures.*

Victoria: Government of British Columbia, 1914.

Cotsworth, Moses B. *Railway Bungling and Worse in British Columbia.*

Vancouver: C. Appleby Printer, 1918.

Clinton, BC Museum and Archives

Pictures and timetables of the Pacific Great Eastern Railway (PGE)

Discussion with the Museum Curator of the importance of the PGE to the development of the Town of Clinton for both freight and passenger service

Kelowna, BC Museum and Archives

Pictures and timetables of the Kettle Valley Railway (KVR)

Discussion with the Museum Curator about the value of the KVR coming close to Kelowna but not descending Okanagan mountain and connecting to city station.

Legislative Library, Victoria

BC Legislature Sessional Papers: 1900, 1903-1930, 1935, 1940.

PGE Annual Reports found in the Annual Reports of the Minister of Railways, 1917-1930

BC Statute Books:

1911 Chapter 194 Railway Act,

1912 Chapter 32 Extension of the Canadian Northern Pacific Railway

1912 Chapter 34 Agreement between BC and Foley, Welch & Stewart

1912 Chapter 36 Act to Incorporate the PGE Railway Company

Statistics: election results
www.elections.bc.ca

Lillooet, BC Museum and Archives

Pictures, timetables and promotional brochures of the Pacific Great Eastern Railway

Discussion with the Museum Curator about the value of the PGE to the Town of Lillooet for passenger and freight service

North Vancouver Archives

PGE pictures; newspaper clippings; letters to the editor about the PGE construction; company letters responding to requests for employment, increased service schedules; bridge construction; right of way disputes; and station construction.

Discussion with the Curator about controversial local issues concerning passenger train service versus ferry service and the value of the PGE in the development of North Vancouver

Okanagan College Microfilm Collection

Kelowna Daily Courier August 1956: Inaugural PGE train from Vancouver to Prince George.

Victoria Daily Colonist 1910 to 1913

Prince George Museum and Archives

Fort George newspaper 1910-1915

Archive Transportation files regarding the need for rail connections from Prince George to Prince Rupert on the Grand Trunk Pacific and to Vancouver on the Pacific Great Eastern Railway

Archive files about leading Prince George citizens who guided early development

Archive files about the history of Fort George (pre-1915)/Prince George (post-1915)

Discussion with the Museum Curator about the value of the PGE in the development of Prince George

University of British Columbia

Special Collections

Census of Canada 1901

Census of Canada 1911

Census of Canada 1921

Industrial Canada Trade Journal 1909-1918

Railway Age Gazette 1910-1918

Microfilms

BC Sessional Papers

#28: 1917-1917

#29: 1917-1918

#30: 1918-1918

#31: 1918-1919

Vancouver City Archives

Archive files about PGE requests for zoning changes and development permits to allow construction of train stations, supply depots, and right of ways

Archive files of PGE administrative employees

Archive employees of Vancouver leading citizens who promoted the development of the PGE

Pictures of PGE rolling stock, bridges, construction crews, stations

Vancouver Public Library

Newspapers, Magazines and Directories

Nelson Daily News 1914-1918

Prince George Citizen 1916-1918, August 27, 1956

Vancouver Daily News-Advertiser.

"British Columbia: Her Vast Resources and Great Possibilities". Address by the Hon. Richard McBride. Vancouver. September 22, 1910: 6-12.

Vancouver Daily Province 1911-17

Vancouver Daily World 1912-1915

Vancouver Sun 1912-1918

Victoria Colonist, 1912-1918

Victoria Daily Times 1912-1918

British Columbia Magazine. "McBride's Speech on His Railway Policy". Vancouver. February 22, 1912: 219-229.

British Columbia Today. "Sir Richard McBride's Speech to the Progress Club of Vancouver". Vancouver, June 25, 1913: 1-11.

Henderson's Greater Vancouver City Directory.
Vancouver, BC: Henderson Directory Co. 1911-1917

Monetary Times: Trade Review and Insurance Chronicle.
Toronto. 1914-1918

West Vancouver Archives

Pictures of PGE trains, terminals, accidents, and construction

Archive files of letters to the PGE Company requesting employment, train schedule changes, right of way disputes, and compensation for damage done to personal property

CANADA

Canada Federal Government Records

Canadian Northern Railway Arbitration 1918.
Ottawa: Government of Canada.

Censuses of Canada 1901, 1911, 1921.
Ottawa: Government of Canada.

Dominion Bureau of Statistics. *Annual Reports of the Statistics of Railways of Canada. 1917-1958.*

Leacy, F.H. (ed.) *Historical Statistics of Canada.*
Ottawa: Canadian Government Publishing Centre, 1983.

National Transcontinental Railway Act Chapter 71 Statutes of Canada, 3
Edward VII
Ottawa: Government of Canada, 1903.

Royal Commission to inquire into Railways and Transportation in Canada.
Ottawa: Government of Canada, 1917.

Statistics Canada.
Government of Canada.
www.statcan.gc.ca

Urquhart, M.C. (ed.) *Historical Statistics of Canada.*
Toronto: Macmillan Company, 1965.

House of Commons' Speeches

Hon. A.G. Blair. *Minister of Railways and Canals:
Resigns and Condemns the Government's Railway Policy.*
Government of Canada: House of Commons Debates,
July 14, 1903.

Right Hon. Sir Wilfrid Laurier. *The Transcontinental Railway.*
Government of Canada: House of Commons Debates,
July 30, 1903.

Hon. Sir William Mulock. *Comparison of Government and Opposition
Scheme Respecting A Transcontinental Railway.*
Government of Canada: House of Commons Debates, August 26, 1903.

National Archives Ottawa

Annual Reports of Railway Statistics for the Dominion of Canada:

June 30, 1917
June 30, 1918

December 31, 1937
December 31, 1938

June 30, 1919	December 31, 1939
December 31, 1919	December 31, 1940
December 31, 1920	December 31, 1941
December 31, 1921	December 31, 1942
December 31, 1922	December 31, 1943
December 31, 1923	December 31, 1944
December 31, 1924	December 31, 1945
December 31, 1925	December 31, 1946
December 31, 1926	December 31, 1947
December 31, 1927	December 31, 1948
December 31, 1928	December 31, 1949
December 31, 1929	December 31, 1950
December 31, 1930	December 31, 1951
December 31, 1931	December 31, 1952
December 31, 1932	December 31, 1953
December 31, 1933	December 31, 1954
December 31, 1934	December 31, 1955
December 31, 1935	December 31, 1956
December 31, 1936	

Microfilm

C-6819- Laurier Papers

C-6821- Laurier Papers

C-6822 Laurier Papers

Canadian Parliamentary Proceedings:

Sessional Papers 1901:

Session 3 Vol. 37 Census Pt. 1-13

Sessional Papers 1903: (Sept) #143: National Transcontinental Railway, Resources of the Country between Winnipeg and Quebec requested by W. Laurier

Hansard Debates

Reel 113, June 22 - July 28, 1903

Reel 114, July 29-August 27, 1903

Reel 115, August 28-September 29, 1903

Reel 116, September 30, 1903- October 26, 1903

Microfiche

#CIHM 80037 Resignation speech by the Hon. A.G. Blair, Minister of Railways and Canals, July 14, 1903.

#CIHM 84696 National Transcontinental Railway speech by the Right Hon. Sir Wilfrid Laurier, July 30, 1903.

#CIHM 869060 National Transcontinental Railway speech by the Hon. Sir William Mulock

ONTARIO

Ontario Provincial Government Records

Ontario Public Accounts 1901.
Toronto: Legislative Assembly of Ontario, 1902.

Ontario Public Accounts 1902.
Toronto: Legislative Assembly of Ontario, 1903.

Ontario Public Accounts 1903.
Toronto: Legislative Assembly of Ontario, 1904.

Ontario Public Accounts 1904.
Toronto: Legislative Assembly of Ontario, 1905.

Temiskaming and Northern Ontario Railway: Second Annual Report.
Toronto: Legislative Assembly of Ontario, 1903.

Temiskaming and Northern Ontario Railway: Third Annual Report.
Toronto: Legislative Assembly of Ontario, 1904.

Speeches

Powell, Charles Berkeley. *Temiskaming Railway Speech.*
Toronto: Legislative Assembly of Ontario, March 11, 1902.

MINNESOTA

Minnesota Historical Society, Saint Paul

James J. Hill's "Letter to the Stockholders on Retiring from the Chairmanship of the Board of Directors", July 1, 1912.

WASHINGTON, D.C.

Library of Congress

Microfilm of Financial News of London, England, December 1911, 1912.

Secondary Sources

Articles

Bird, R.M. and A.T. Tassonyi. "Constraints on Provincial and Municipal Borrowing in Canada." *Canadian Public Administration* 44 No.1 (2001): 84-109.

Bladen, M.L. "Construction of railways in Canada to the Year 1885." *Contributions to Canadian Economics* 5 (1932): 43-60.

Bladen, M.L. "Construction of railways in Canada Part II: From 1885 to 1931." *Contributions to Canadian Economics* 7 (1934): 61-70.

Carlos, A.M. and F.D. Lewis. "The Creative Financing of an Unprofitable Enterprise: The Grand Trunk Railway of Canada, 1853-1881." *Explorations in Economic History* 32 (1995): 273-301.

Craven Paul and Tom Traves. "Canadian railways as Manufacturers, 1850-1880." *Historical Papers* 18, No.1 (1983): 254.

Curtis, C.A., "Canadian Banks and War Finance." *Contributions to Canadian Economics* 3 (1931): 7-40.

David, Paul A. "Innovation and Economic Growth: Professor Fogel On and Off the Rails." *The Economic History Review* 22, No.3 (1969): 506-525.

Di Matteo, Livio. "Fiscal Imbalance and Economic Development in Canadian History: evidence from the economic history of Ontario, 1871-1911." *The American Review of Canadian Studies* 29, No. 2 (1999): 287- 310.

- Emery, J.C. Herbert and Kenneth J. McKenzie. "Damned if you do, damned if you don't: an option value approach to evaluating the subsidy of the CPR mainline." *The Canadian Journal of Economics* 29, No. 2 (1996): 255-270.
- Foster, Michael K. "Native Peoples, Languages." *Canadian Encyclopedia*. <http://www.thecanadianencyclopedia.com>
- George, Peter J. "Rates of Return in Railway Investment and Implications For Government Subsidization of the CPR: Some Preliminary Results." *The Canadian Journal of Economics* 1, No.4 (1968): 740-762.
- George, Peter J. "Rates of Return and Government Subsidization of the CPR: Some Further Remarks." *The Canadian Journal of Economics* 8 No.4 (1975): 591-600.
- Harris, Cole. "Moving Amid the Mountains 1870-1930." *BC Studies*, no. 58 (1983): 3-39.
- Innis, H.A. "Unused Capacity as a Factor in Canadian Economic History." *The Canadian Journal of Economics and Political Science* 2, No.1 (1936): 1-15.
- King, W.L. Mackenzie. "The National Transcontinental Railway of Canada." *The Quarterly Journal of Economics* 19, No. 1 (Nov., 1904):136-148.
- Kohn, E.P. "The Member from Michigan." *The Canadian Historical Review* 82, No.2 (June 2001): 283-306.
- Leonard, Frank. "Grand Trunk Pacific and the Establishment of the City of Prince George, 1911-1915." *BC Studies* 63 (1984): 29-54.
- Leonard, Frank. "To Injure Its Own Interests: The Grand Trunk Pacific Railway Company and the Blighting of Hazelton District, 1910-1918." *BC Studies* 88 (1991): 21-57.
- Leonard, Frank. "Railroading A Renegade: Great Northern Ousts John Hendry in Vancouver." *BC Studies* 155 (2007): 69-92.
- Lewis, Frank and David R. Robinson. "The Timing of Railway Construction on The Canadian Prairies." *The Canadian Journal of Economics* 17 No. 2 (May, 1984): 340-352.

- Lewis, Frank. and Mary MacKinnon. "Government Loan Guarantees and the Failure of the Canadian Northern Railway." *The Journal of Economic History* 47, No. 1 (March, 1987): 175-196.
- Little, J.I. "Advancing the Liberal Order in British Columbia: The Role Played by Lieutenant-Governor Sir Hector-Gustave Joly de Lotbiniere, 1900-1906." *Journal of the Canadian Historical Association* 19, No.1 (2008): 83-113.
- Marr, William and Michael Percy. "The Government and the Rate of Canadian Prairie Settlement." *The Canadian Journal of Economics* 11, No. 4 (Nov., 1978): 757-767.
- Marra, Alessandro. "Mixed Public-Private Enterprises in Europe." *College of Europe: Bruges European Economic Research Papers*, No. 4 (2006): 1-40.
- McBride R. "British Columbia in the Dominion: An Introduction." In *Canada and its Provinces*, edited by Adam Shortt and Arthur G. Doughty. Toronto: Glasgow, Brook & Company, 1914, 9-12.
- McCalla, Douglas. "The Economic Impact of the Great War." In *Perspectives on Canadian Economic History*, edited by Douglas McCalla. Toronto: Copp Clark Pitman, 1987, 138-53.
- McDonald, Robert. "Variants of Liberalism and the Liberal Order Framework in British Columbia." In *Liberalism and Hegemony*, edited by Jean-Francois Constant and Michel Ducharme. Toronto: University of Toronto Press, 2009, 322-346.
- McKay, Ian. "The Liberal Order Framework: A Prospectus for a Reconnaissance of Canadian History." *Canadian Historical Review* 81 (2000): 617-645.
- Roy, P.E. "Progress, Prosperity and Politics: The Railway Policies of Richard McBride." *BC Studies* 47 (1980): 3-28.
- Simon, Matthew. "New British Investment in Canada, 1865-1914." *The Canadian Journal of Economics* 3, No. 2 (May, 1970): 238-254.
- Veazey, Phyllis. "John Hendry and the Vancouver, Westminster and Yukon Railway: "It Would Put Us on Easy Street." *BC Studies* 59: (1983): 44-62.

Books

- Ames, Charles E. *Pioneering the Union Pacific*.
New York: Appleton-Century-Crofts, 1969.
- Andrae, Christopher. *Lines of Country: An Atlas of Railway and Waterway History in Canada*. Erin, Ontario: Boston Mills Press, 1996.
- Bambrough, Renford, ed. *The Philosophy of Aristotle*.
New York: Penguin Books, 1963.
- Barman, Jean. *The West beyond the West*.
Toronto: University of Toronto Press, 1991.
- Barnes, Michael. *Link with a Lonely Land: The Temiskaming and Northern Ontario Railway*. Erin, Ontario: Boston Mills Publishing, 1986.
- Belshaw J.D. "Provincial Politics, 1871-1916." In *The Pacific Province*, edited by Hugh M. Johnston. Vancouver: Douglas and McIntyre, 1996, 134-164.
- Berger, Carl, ed. *Contemporary Approaches to Canadian History*.
Toronto: Copp Clark Pitman Ltd., 1987.
- Berton, Pierre. *The National Dream*.
Toronto: McClelland & Stewart, 1970.
- Berton, Pierre. *The Last Spike*.
Toronto: McClelland & Stewart, 1971.
- Bickle, Ian. *Turmoil and Triumph: The Controversial Railway to Hudson Bay*.
Calgary: Detselig Enterprises, 1995.
- Biggar, E.B. *The Canadian Railway Problem*.
Toronto: Macmillan Company, 1917.
- Birch, A.H. *Representative and Responsible Government*.
Toronto: University of Toronto Press, 1964.
- Bothwell, Robert, Ian Drummond and John English. *Canada, 1900-1945*.
Toronto: University of Toronto Press, 1987.

- Brown, Robert Craig and Ramsay Cook. *Canada 1896-1921: A Nation Transformed*. Toronto: McClelland & Stewart, 1974.
- Brownsey, Keith and M. Howlett, eds. *The Provincial State in Canada*. Peterborough, Ontario: Broadview Press, 2001.
- Cairns, A. and C. Williams. *Constitutionalism, Citizenship and Society in Canada*. Toronto: University of Toronto Press, 1985.
- Careless, J.M.S. and R. Craig Brown, eds. *Part One of the Canadians 1867-1967*. Toronto: Macmillan Co., 1968.
- Carlos, A.M. and F.D. Lewis. "The Profitability of Early Canadian Railroads: Evidence from the Grand Trunk and Great Western Railway Companies." In *National Bureau of Economic Research, Strategic Factors in Nineteenth Century American Economic History*, edited by C. Goldin and H. Rockoff. Chicago: University of Chicago Press, 1992, 401-423.
- Carty, R.K., ed. *Politics, Policy, and Government*. Vancouver: UBC Press, 1996.
- Chandler, Alfred D. *The Visible Hand*. Cambridge, Massachusetts: Harvard University Press, 1977.
- Channon, Geoffrey. *Railways in Britain and United States, 1830-1940*. Burlington, Vermont: Ashgate, 2001.
- Chappell, Vere, ed. *John Locke's Two Treatises*. New York: Cambridge University Press, 1994.
- Constantine Peter, ed. *Machiavelli, The Prince*. New York: Random House, 2007.
- Craven, Paul. *An Impartial Umpire: Industrial Relations and the Canadian State, 1900-1911*. Toronto: University of Toronto Press, 1980.
- Cronon, William. "The Trouble with Wilderness". In *Uncommon Ground*, edited by William Cronon. New York: W.W. Norton & Co., 1996, 69-90.
- Crowley, T.A. *Clio's Craft: a primer of historical methods*. Toronto: Copp Clark Pitman Ltd., 1988.

- Cruikshank, Ken. *Close Ties*.
Montreal: McGill-Queen's Press, 1991,
- Currie, A.W. *Economics of Canadian Transportation*.
Toronto: University of Toronto Press, 1954.
- Curtis, C.A. "The Canadian Banks and War Finance" in *Money and Banking in Canada* by E.P. Neufeld. Toronto: McClelland and Stewart, 1967.
- De Bono, Edward. *Eureka!*
London: Thames and Hudson, 1974.
- Decker, F., Margaret Fougberg and Mary Ronayne. *The History of a Settlement. Pemberton, BC: Pemberton Pioneer Women*, 1977.
- Den Otter, A.A. *The Philosophy of Railways*.
Toronto: University of Toronto Press, 1997.
- Dupuit, Jules, "On the measurement of the utility of public works",
Annales des Ponts et Chaussées, 2d series, Vol. 8, 1844,
in *Readings in Welfare Economics* edited by Kenneth J. Arrow and
Tibor Scitovsky. Homewood, Illinois: Richard D. Irwin, 1969.
- Eagle, John A. *The Canadian Pacific Railway and the Development of Western Canada*. Montreal: McGill University Press, 1989.
- Easterbrook, W.T. and M.H. Watkins. *Approaches to Canadian Economic History*. Toronto: McClelland & Stewart, 1967.
- Easterbrook, W.T. and Hugh G.J. Aitken. *Canadian Economic History*.
Toronto: University of Toronto Press, 1988.
- Ekelund Jr., Robert and Robert F. Hébert. *Secret Origins of Modern Microeconomics: Dupuit and the Engineers*.
Chicago: University of Chicago Press, 1999.
- Faith, Nicholas. *The World the Railways Made*.
London: Random House, 1990.
- Ferneyhough, Frank. *Liverpool & Manchester Railway 1830-1980*.
London: Redwood Burn Ltd., 1980.

- Fogel, R.W. *The Union Pacific Railroad: A Case of Premature Enterprise*.
Baltimore: Johns Hopkins Press, 1960.
- Fogel, R.W. *Railroads and American Economic Growth*.
Baltimore: Johns Hopkins Press, 1964.
- Foley, Edward T. *Seventy Years: The Foley Saga*.
Los Angeles: The Ward Ritchie Press, 1945.
- Foster, M.K. "Native Peoples, Languages- Geographic Distribution of
Canadian Aboriginal Language Families".
The Canadian Encyclopedia.
www.thecanadianencyclopedia.com
- Foucault, Michel. *Society Must Be Defended*.
New York: Picador, 1997.
- Francis, R. Douglas. *The Technological Imperative in Canada*.
Vancouver, BC: UBC Press, 2009.
- Friesen, J. & H.K. Ralston, eds. *Historical Essays on British Columbia*.
Toronto: McClelland & Stewart, 1976.
- Garden, J.F. *British Columbia Railway*.
Revelstoke, BC: Footprint Publishing Co. Ltd., 1995.
- Gingras, Yves. *Physics and the Rise of Scientific Research in Canada*.
Montreal: McGill-Queens University Press, 1991.
- Glazebrook, G.P. de T. *History of Transportation in Canada Vol. 1*.
Toronto: McClelland & Stewart Ltd., 1964.
- Glazebrook, G.P. de T. *History of Transportation in Canada Vol. 2*.
Toronto: McClelland & Stewart Ltd., 1964.
- Greer, Allan and Ian Radforth, eds. *Colonial Leviathan: State Formation
in Mid-Nineteenth-Century Canada*. Toronto: University of Toronto
Press, 1992.
- Griswold, Wesley S. *A Work of Giants*.
Toronto: McGraw-Hill Company, 1962.
- Grodinsky, Julius. *Transcontinental Railway strategy, 1869-1893*.
Philadelphia: University of Pennsylvania Press, 1962.

- Harris, Lorraine. *British Columbia's Own Railroad*.
Surrey, BC: Hancock House Publishers, 1982.
- Harvey, R.G. *Carving the Western Path*.
Vancouver: Heritage House, 1998.
- Hedges, James B. *Building the Western Path*.
New York: Russell & Russell, 1939.
- Heron, Craig. *Working in Steel: The Early Years in Canada, 1883-1935*.
Toronto: McClelland and Stewart, 1988.
- Hill, James J. *Highways of Progress*.
Toronto: William Briggs Publisher, 1910.
- Holbrook, S. H. *The Story of American Railroads*.
New York: Crown Publishers, 1947.
- Holmes, M.C. *Royal Commissions and Commissions of Inquiry in British Columbia*. Victoria: Charles F. Banfield, 1945.
- Holmes, M. C. *Publications of the Government of British Columbia 1871-1947*. Victoria: King's Printer, 1950.
- Hopkins, J. Castell. *The Canadian Annual Review of Public Affairs 1912*.
Toronto: Hunter-Rose Company, 1913.
- Hopkins, J. Castell. *The Canadian Annual Review of Public Affairs 1917*.
Toronto: Hunter-Rose Company, 1918.
- Hudson, Pat. *The Industrial Revolution*.
New York: Hodder & Stoughton, 1992.
- Innis, Harold. *Problems of Staple Production in Canada*.
Toronto: Ryerson Press, 1933.
- Innis, Harold. *The Fur Trade in Canada*.
Toronto: University of Toronto Press, 1956.
- Innis, Harold. *A History of the Canadian Pacific Railway*.
Toronto: University of Toronto Press, 1971.

- Johnston, Hugh J.M. ed. *The Pacific Province*.
Vancouver: Douglas & McIntyre, 1996.
- Kealey, Gregory. *Toronto Workers Respond to Industrial Capitalism 1867-1892*. Toronto: University of Toronto Press, 1980.
- Keefer, T.C. *Philosophy of Railroads* (introduction by H.V. Nelles)
Toronto: University of Toronto Press, 1972.
- Kemp, Tom. *Historical Patterns of Industrialization*.
New York: Longman, 1978.
- Klein, Maury. *Union Pacific: Birth of a Railroad*.
New York: Doubleday & Co., 1987.
- Klein, Maury. *Union Pacific: The Rebirth 1894-1969*.
New York: Doubleday & Co., 1989.
- Klein, Maury. *Unfinished Business*.
Rhode Island: University Press of New England, 1994.
- Knoop, Douglas. *Outlines of Railway Economics*.
London: Macmillan Co., 1923.
- Kohn, Jerome, ed. *Hannah Arendt, Promise of Politics*.
New York: Schocken, 2005.
- Kristofferson, Robert B. *Craft Capitalism: Craftworkers and Early Industrialization in Hamilton 1840-1872*.
Toronto: University of Toronto Press, 2007.
- Kroker, Arthur. *Technology and the Canadian Mind: Innis, McLuhan, Grant*. Montreal: New World Perspectives, 1984.
- Lamb, W. Kaye. *History of the Canadian Pacific Railway*.
New York: Macmillan Publishing, 1992.
- Langstone, R.W. *Responsible Government in Canada*.
London: J.M. Dent and Sons Ltd, 1931.
- Laslett, Peter, ed. *Two Treatises of Government*.
Toronto: New American Library, 1965.

- Leonard, F. *A Thousand Blunders: The Grand Trunk Pacific Railway and Northern British Columbia*. Vancouver: UBC Press, 1996.
- Lipsey, Richard G., Kenneth I. Carlaw and Clifford Bekar. *Economic Transformations*. New York: Oxford University Press, 2005.
- Longley, R.S. *Sir Francis Hincks: A Study of Canadian Politics, Railways, and Finance in the Nineteenth Century*. Toronto: University of Toronto Press, 1943.
- Lugrin C.H. "Economic History". In *Canada and its Provinces* edited by A. Shortt and A.G. Doughty. Toronto: Glasgow, Brook & Company, 1914.
- Mackenzie, David, ed. *Canada and the First World War*. Toronto: University of Toronto Press, 2005.
- Martinich A.P., ed. *Hobbes Leviathan*. New York: Broadview Press, 2005.
- Marr, W.L. and Donald G. Paterson. *Canada: An Economic History*. Toronto: Gage Publishing, 1980.
- Marx, Karl and Friedrich Engels. *Communist Manifesto*. London: Phoenix, 1996.
- May, Todd. *The Philosophy of Foucault*. Montreal: McGill-Queen's University Press, 2006.
- McCalla, Douglas. *Upper Canada Trade, 1834-72: Study of the Buchanans' Business*. Toronto: University of Toronto Press, 1980.
- McCalla, Douglas (ed.) *Perspectives on Canadian Economic History*. Toronto: Copp Clark Pitman, 1987.
- McCalla, Douglas. *Planting the Province: The Economic History of Upper Canada 1784-1870*. Toronto: University of Toronto Press, 1993.
- McCallum, John. *Unequal Beginnings: Agriculture and Economic Development in Quebec and Ontario until 1870*. Toronto: University of Toronto Press, 1980.
- McDonald, Robert A.J. *Making Vancouver 1863-1913*. Vancouver: UBC Press, 1996.

- McDonald, Robert A.J. "Variants of Liberalism and the Liberal Order Framework in British Columbia". In *Liberalism and Hegemony* edited by Jean-Francois Constant and Michel Ducharme. Toronto: University of Toronto Press, 2009.
- McKay, Donald. *The People's Railway*. Toronto: Douglas and McIntyre, 1992.
- Mercer, Lloyd J. *Railroads and Land Grant Policy*. Toronto: Academic Press, 1982.
- Mika, Nick and Helma. *Railways of Canada*. Toronto: McGraw-Hill, 1972.
- Millard, Rod. "The Crusade for Science: Science and Technology on the Home Front 1914-1918". In *Canada and the First World War* edited by David Mackenzie. Toronto: University of Toronto Press, 2005.
- Minter, Roy. *The Whitepass*. Toronto: McClelland and Stewart, 1987.
- Mitchell, D. J. W.A.C. *Bennett and the Rise of British Columbia*. Vancouver: Douglas and McIntyre, 1983.
- Mokyr, Joel. *The Gifts of Athena*. Princeton, NJ: Princeton University Press, 2002.
- Morley, J.T., N.J. Ruff, N.A. Swainson, R.J. Wilson and W.D. Young. *The Reins of Power: Governing British Columbia*. Vancouver: Douglas & McIntyre, 1983.
- Morton, James. *Honest John Oliver*. Vancouver: J.M. Dent & Sons Ltd., 1933.
- Mountfield, David. *The Railway Barons*. London: Osprey Publishing, 1979.
- Murton, James. *Creating a Modern Countryside: Liberalism and Land Resettlement in BC*. Vancouver: UBC Press, 2007.
- Nealon, J.T. *Foucault Beyond Foucault*. Stanford, California: Stanford University Press, 2008.

- Norrie, Kenneth and Douglas Owsram. *A History of the Canadian Economy*. Toronto: Harcourt Brace, 1996.
- North, D.C. and R.P. Thomas. *The Rise of the Western World*. New York: Cambridge University Press, 1973.
- O'Brien, Patrick and Caglar Keyder. *Economic Growth in Britain and France 1780-1914*. London: George Allen & Unwin, 1978.
- Ormsby, M.A. *British Columbia: A History*. Vancouver: Macmillan, 1958.
- Paras, Eric. *Foucault 2.0*. New York: Other Press, 2006.
- Parris, Henry. *Government and the Railways in Nineteenth-Century Britain*. Toronto: University of Toronto Press, 1965.
- Norris, John & Margaret Prang, eds. *Personality & History in British Columbia*. Victoria: Morriss Printing Co. 1977.
- Ramsey, Bruce. *PGE: Railway to the North*. Vancouver: Mitchell Press, 1962.
- Rayner, William. *Premiers in Profile*. Surrey, B.C.: Heritage House, 2000.
- Regehr, T.D. *The Canadian Northern Railway*. Toronto: Macmillan, 1976.
- Resnick, Philip. *The Politics of Resentment*. Vancouver: UBC Press, 2000.
- Robin, Martin. *The Rush for Spoils*. Toronto: McClelland and Stewart Ltd, 1972.
- Rosenburg, Nathan. *Inside the Black Box: Technology and Economics*. New York: Cambridge University Press, 1982.
- Roy, Patricia E. "McBride, Sir Richard." *Dictionary of Canadian Biography Online*. www.biographi.ca
- Roy, Patricia E., ed. *A History of British Columbia: Selected Readings*. Toronto: Copp Clark Pitman, 1989.

- Sanford, Barrie. *McCulloch's Wonder*.
Vancouver: Whitecap Books, 1977.
- Schneider, Ena. *Ribbons of Steel*.
Calgary: Detselig Enterprises Limited, 1989.
- Semmens, P.W.B. *Stockton & Darlington*.
London: New English Library, 1975.
- Shortt, Adam and Arthur G. Doughty, eds. *Canada and its Provinces, Volume 21 & 22: The Pacific Province*.
Toronto: Glasgow, Brook & Company, 1914.
- Smiles, Samuel. *The Life of George Stephenson: Railway Engineer*.
Boston: Ticknor & Fields, 1862.
- Smith, D. N. *The Railway and its Passengers*.
London: David & Charles Publishers, 1988.
- Smith D.N.W. *A Century of Travel on the Ontario Northland Railway*.
Ottawa: Trackage Canada, 2004.
- Ross, I.S., ed. *Adam Smith, On the Wealth of Nations*
Dulles, Virginia: Thoemmes Press, 1998.
- Stearns, Peter N. *The Industrial Revolution in World History*.
Boulder, Colorado: Westview Press, 2007.
- Stevens, G.R. *Canadian National Railways Volume 1 1836-1896*.
Toronto: Clarke, Irwin & Co., 1960.
- Stevens, G.R. *Canadian National Railways Volume 2 1896-1922*.
Toronto: Clarke, Irwin & Co., 1962.
- Stevens, G.R. *History of the Canadian National Railways*.
New York: Macmillan Co., 1973.
- Stevenson, Garth. *Ex Uno Plures: Federal Provincial Relations in Canada, 1867-1896*. Montréal: McGill-Queen's University Press, 1993.
- Surtees, R.J. *The Northern Connection*.
Toronto: Captus Press, 1992.

- Taylor, G.W. *The Automobile Saga of British Columbia 1864-1914*.
Victoria: Morriss Publishing, 1984.
- Taylor, G.W. *The Railway Contractors*.
Victoria: Morriss Publishing, 1988.
- Taylor, G.W. *Builders of British Columbia*.
Victoria: Morriss Publishing, 1982.
- Thomson, Dale C. *Alexander Mackenzie: Clear Grit*.
Toronto: Macmillan Co., 1960.
- Traves, Tom (ed.) *Essays in Canadian Business History*.
Toronto: McClelland and Stewart, 1984.
- Trottman, Nelson. *History of the Union Pacific:
A Financial and Economic Survey*.
New York: Sentry Press, 1923.
- Trout, J.M. & E. *The Railways of Canada 1870-1871*.
Toronto: Coles Publishing Co., 1974.
- Tucker, Albert. *Steam into Wilderness: Ontario Northland Railway
1902-1962*. Toronto: Fitzhenry & Whiteside, 1978.
- Tulchinsky, Gerald. *The River Barons: Montreal Businessmen 1837-1853*.
Toronto: University of Toronto Press, 1977.
- Underwood, Jay. *Built for War: Canada's Intercolonial Railway*.
Montreal: Railfare DC Books, 2005.
- Urquhart, M.C. *Gross National Product, Canada, 1870-1926*.
Montreal: McGill-Queen's University Press, 1993.
- Viner, Jacob. *Canada's Balance of International Indebtedness, 1900-1913*.
Toronto: McClelland & Stewart, 1975.
- Waite, P.B. *Canada 1874-1896: Arduous Destiny*.
Toronto: McClelland & Stewart, 1971.
- Ward, W. P. & R.A.J. McDonald. *British Columbia: Historical Readings*.
Vancouver: Douglas & McIntyre Ltd., 1981.

Wolf, A.H. *Route of the Cariboo: PGE/BC Rail*.
Skookumchuck, B.C: Canadian Caboose Press, 1994.

Woodcock, George. *Ravens and Prophets: An Account of Journeys in British Columbia, Alberta and Southern Alaska*.
London: Allan Wingate, 1952.

Woodcock, George. *British Columbia: A History of the Province*.
Vancouver: Douglas & McIntyre, 1990.

Wright, J.F.C. *Saskatchewan: The History of a Province*.
Toronto: McClelland & Stewart Limited, 1955.

Wynn, Graeme. *Timber Colony: A Historical Geography of Early Nineteenth Century New Brunswick*.
Toronto: University of Toronto Press, 1981.

Unpublished Theses

Hunt, P.R. *The Political Career of Sir Richard McBride*.
M.A. Thesis, University of British Columbia, 1953.

Smith, Brian R.D. *Sir Richard McBride*.
M.A. Thesis, Queen's University, 1959.

Allen, Gene L. *The Origins of the Intercolonial Railway, 1835-1869*.
Ph.D. Thesis, University of Toronto, 1991.

Berkowitz, Christine A. *Railroad Crossings: The Transnational World of North America, 1850-1910*.
Ph.D. Thesis, University of Toronto, 2009.

Orr, Timothy A. *Railroad Nations: International Competition and Environmental Change in the Western US-Canada Borderlands, 1881-1920*.
Ph.D. Thesis, University of California, 2010.

Palermo, Silvana A. *The Nation Building Mission: The State-Owned Railways In Modern Argentina, 1870-1930*.
Ph.D Thesis, State University of New York (Stony Brook), 2001.

Websites

www.bankofcanada.ca/rate/related/inflation-calculator/

Information retrieved February 7, 2012.

www.bcstats.gov.bc.ca

Information retrieved May 1, 2010.

www.biographi.ca

Information retrieved July 30, 2011.

www.budget.gov

Information retrieved October 9, 2010.

www.elections.bc.ca

Information retrieved December 14, 2010.

www.statcan.gc.ca

Information retrieved October 12, 2011.

www.thecanadianencyclopedia.com

Information retrieved August 20, 2010.

Appendices

Appendix A PGE Mileage Markers

Table A.1 PGE Mileage Markers, 1956

Mileage	Station	Altitude	Mileage	Station	Altitude
0	North Vancouver	2 feet	---	Seton Lake Tunnel (1.25 miles)	---
2	Ambleside	1	142	Shalalth	800
5	Caufeild	50	154	Craig Lodge	800
---	Horseshoe Bay Tunnel (2 miles)	---	157	Lillooet	800
11	Horseshoe Bay	100	173	Glen Fraser	1400
26	Porteau	2	176	Pavilion	2100
31	Britannia Beach	2	196	Kelly Lake	3500
39	Squamish	2	203	Clinton	3152
44	Brackendale	40	214	Chasm	3500
46	Cheekeye	200	236	Flying U	3700
59	Garibaldi	1100	246	Lone Butte	3700
74	Alta Lake (Whistler)	2100	252	Canim Lake	3400
79	Parkhurst	2200	273	Lac La Hache	2700
94	Pemberton	700	314	Williams Lake	1900
99	Mount Currie	700	358	Alexandria	2000
104	Spetch	1000	363	Australian	1852
116	Birken	1500	384	Quesnel	1500
120	Devine	900	409	Abhau	2300
123	D'Arcy	800	425	Strathnaver	1862
130	Marne	800	466	Prince George	1400
138	Seton Portage	800			

Appendix B Additional Reference Material

Table B.1 Estimated Population of Canada, 1900-1925

(Historical Statistics of Canada, 1965, Series A1)

Year	Canada	% increase	Year	Canada	% increase
1900	5,301,000	---	1913	7,632,000	3.2
1901	5,371,000	1.3	1914	7,879,000	3.1
1902	5,494,000	2.2	1915	7,981,000	1.3
1903	5,651,000	2.8	1916	8,001,000	0.2
1904	5,827,000	3.0	1917	8,060,000	0.7
1905	6,002,000	2.9	1918	8,148,000	1.1
1906	6,097,000	1.6	1919	8,311,000	2.0
1907	6,411,000	4.9	1920	8,556,000	2.9
1908	6,625,000	3.2	1921	8,788,000	2.6
1909	6,800,000	2.6	1922	8,919,000	1.5
1910	6,988,000	2.7	1923	9,010,000	1.0
1911	7,207,000	3.0	1924	9,143,000	1.5
1912	7,389,000	2.5	1925	9,294,000	1.6

Table B.2 Population of Canada, Census Dates 1851-1961

(Historical Statistics of Canada, 1983, Series A2-14)

Year	Canada	British Columbia	Alberta	Ontario
1851	2,436,297	55,000	---	952,004
1861	3,229,633	51,524	---	1,396,091
1871	3,689,257	36,247	---	1,620,851
1881	4,324,810	49,459	---	1,926,922
1891	4,833,239	98,173	---	2,114,321
1901	5,371,315	178,657	73,022	2,182,947
1911	7,206,643	392,480	374,295	2,527,292
1921	8,787,949	524,582	588,454	2,933,662
1931	10,376,786	694,263	731,605	3,431,683
1941	11,506,655	817,861	796,169	3,787,655
1951	14,009,429	1,165,210	939,501	4,597,542
1956	16,080,791	1,398,464	1,123,116	5,404,933
1961	18,238,247	1,629,082	1,331,944	6,236,092

Table B.3 Estimates of Gross National Product, 1870-1920

(*Historical Statistics of Canada, 1983, Series E214-224*)²²⁰

Year	Gross National Product (millions of dollars) (all tables in nominal amounts)
1870	459
1880	581
1890	803
1900	1,057
1910	2,235
1920	5,529

Table B.4 Gross National Product, 1926-1956

(*Historical Statistics of Canada, 1983, Series F*)

Year	GNP (millions of dollars)	Year	GNP (millions of dollars)
1926	5,146	1942	10,265
1927	5,561	1943	11,053
1928	6,050	1944	11,848
1929	6,139	1945	11,863
1930	5,720	1946	11,885
1931	4,693	1947	13,473
1932	3,814	1948	15,509
1933	3,492	1949	16,800
1934	3,969	1950	18,491
1935	4,301	1951	21,640
1936	4,634	1952	24,588
1937	5,241	1953	25,833
1938	5,272	1954	25,918
1939	5,621	1955	28,528
1940	6,713	1956	32,058
1941	8,282		

²²⁰ Estimates of Gross National Product, 1870-1920 and Gross National Product, 1926-1956 were extrapolated using the data from the modern system of collecting national accounts statistics which Canada only fully developed after World War II. They give an indication of the financial capacity of Canada, the expansion of the economy during the time frames listed, and allow for the calculation of tables of estimated calculations of GDP for BC and Ontario.

Table B.5 Estimate of BC's GDP Based on Population, 1910-1930

Year	National GNP (millions of dollars)	% of Population: BC / Canada	Estimate of BC's GDP (millions of dollars)
1910	\$ 2,235	5.4	\$ 120.69 *
1911		5.45 **	\$ 140.75 ***
1912		5.50	\$ 161.35
1913		5.55	\$ 181.95
1914		5.60	\$ 202.55
1915		5.65	\$ 223.15
1916		5.70	\$ 243.75
1917		5.75	\$ 264.35
1918		5.80	\$ 284.95
1919		5.85	\$ 305.55
1920	\$ 5,529	5.9	\$ 326.21
1930	\$5,720	6.7	\$383.24 (PGE debt of \$72 million was 18% of BC's GDP)

* In 1910 BC population was 5.4% of Canada's population; an estimated BC GDP of \$ 120.69 million is 5.4% of Canada's GDP of \$2,235 in 1910.

** BC population increased from 5.4% of Canada's population in 1910 to 5.9% in 1920 which is an increase of 0.5% or an average of 0.05% per Year.

*** Estimated BC GDP increased from \$120.69 million in 1910 to \$ 326.21 million in 1920 or an average of \$ 20.6 million per year.

Table B.6 Estimate of Ontario's GDP Based on Population, 1900-1920

Year	National GNP (millions of dollars)	% of Population: Ontario / Canada	Estimate of Ontario GDP (millions of dollars)
1900	\$ 1,057	40.6	\$ 429.14
1910	\$ 2,235	35.06	\$783.59
1920	\$ 5,529	33.38	\$ 1845.58 (T&NO debt of \$30 million was 1.6% of Ontario's GDP)

Table B.7 Immigrant Arrivals to Canada, 1900-1956

(*Historical Statistics of Canada, 1983, Series A350*)

Year	Number of Immigrants	Year	Number of Immigrants
1900	41,681	1929	164,993
1901	55,747	1930	104,806
1902	89,102	1931	27,530
1903	138,660	1932	20,591
1904	131,252	1933	14,382
1905	141,465	1934	12,476
1906	211,653	1935	11,277
1907	272,409	1936	11,643
1908	143,326	1937	15,101
1909	173,694	1938	17,244
1910	286,839	1939	16,994
1911	331,288	1940	11,324
1912	375,756	1941	9,329
1913	400,870	1942	7,576
1914	150,484	1943	8,504
1915	36,665	1944	12,801
1916	55,914	1945	22,722
1917	72,910	1946	71,719
1918	41,845	1947	64,127
1919	107,698	1948	125,414
1920	138,824	1949	95,217
1921	91,728	1950	73,912
1922	64,224	1951	194,391
1923	133,729	1952	164,498
1924	124,164	1953	168,868
1925	84,907	1954	154,227
1926	135,982	1955	109,946
1927	158,886	1956	164,857
1928	166,783		

Table B.8 Canada's Population Density Per Sq. Mile, 1871-1956

(*Historical Statistics of Canada*, 1983, Series A54-66)

Year	Canada	British Columbia	Alberta	Ontario
1871	1.06	0.10	---	4.46
1881	1.25	0.14	---	5.30
1891	1.39	0.27	---	5.82
1901	1.55	0.50	0.29	6.01
1911	2.08	1.09	1.50	6.96
1921	2.53	1.46	2.37	8.08
1931	2.99	1.93	2.94	9.45
1941	3.32	2.28	3.20	10.43
1951	3.88	3.24	3.78	12.66
1956	4.53	3.89	4.51	16.19

Table B.9 BC Municipal Census Populations, 1921-1956

(www.bcstats.gov.bc.ca)

Community	1921	1931	1941	1951	1956
Vancouver	117,217	246,593	275,353	344,833	365,844
North Van	7,652	8,510	8,914	15,687	19,951
Squamish	--	--	--	589	1292
Lillooet	--	--	--	469	1083
Clinton	--	--	--	--	--
Williams Lake	--	402	540	913	1,790
Quesnel	--	446	653	1,587	4,384
Prince George	2,053	2,479	2,027	4,703	10,563

Table B.10 Rural and Urban Population of Canada, 1871-1956

(Historical Statistics of Canada, 1965)

Year	1951 definition ²²¹		1941 definition ²²²	
	Urban	Rural	Urban	Rural
1871	---	---	722,343	2,966,914
1881	---	---	1,109,507	3,215,303
1891	---	---	1,537,098	3,296,141
1901	1,990,162	3,381,153	2,014,222	3,357,093
1911	3,147,297	4,059,346	3,272,947	3,933,696
1921	4,257,443	4,530,506	4,352,122	4,435,827
1931	5,574,005	4,802,781	5,572,058	4,804,728
1941	6,548,326	4,958,329	6,252,416	5,254,239
1951	8,817,637	5,191,792	7,941,222	6,068,207
1956	10,714,855	5,365,936	9,286,126	6,794,665

Table B.11 BC Estimated Population, 1867-1922

(www.bcstats.gov.bc.ca)

Year	Population	Year	Population	Year	Population
1871	36000	1910	370000	1917	464000
1881	49000	1911	393000	1918	474000
1891	98000	1912	407000	1919	488000
1901	179000	1913	424000	1920	507000
1907	309000	1914	442000	1921	525000
1908	330000	1915	450000	1922	541000
1909	350000	1916	456000		

²²¹ "In the 1951 census all places of 1,000 population and over, whether incorporated or not were defined as urban". M.C. Urquhart (ed.), *Historical Statistics of Canada* (Toronto: Macmillan Company, 1965), 5.

²²² "In the 1941 census and earlier censuses, the population living in all incorporated cities, towns and villages, of any size, was counted as urban". M.C. Urquhart (ed.), *Historical Statistics of Canada* (Toronto: Macmillan Company, 1965), 5.

Positive Externalities for British Columbia in 1912

1. Connecting communities for :
 - a. business and commerce
 - b. cultural celebrations/study
 - c. family needs/celebrations
 - d. access to medicine/medical treatment
 - e. dissemination of new research/new inventions
 - f. recreation
 - g. provincial unity
 - h. national unity
 - i. lower more efficient transport costs

2. Connecting businesses for:
 - a. resource extraction
 - b. lumber extraction
 - c. selling agricultural products
 - d. banking/loans/legal advice/accounting advice
 - e. purchasing of farm implements/industrial machinery

3. Connecting people for:
 - a. marriage
 - b. friendship
 - c. creating new companies
 - d. new ideas
 - e. political development

4. Creating greater provincial/national income

5. Opening up new regions to settlement/farming/mining/lumber

Selected Annotated Sources

Unsuccessful Primary Research Inquiries

Statistics Canada-

Provincial GDP estimates do not begin until 1981.

Kelowna Assessment Office-

BC Assessment does not have statistics on increase/decrease in land values from 1900 to 1920.

Williams Lake Library-

Do not have local newspapers from the period 1912 to 1918.

Vancouver City Hall-

Records of building permits do not go back to 1912.

City of Vancouver Archives-

Do not have building permits for the period 1900 to 1920.

Vancouver Board of Trade-

Do not have information about Vancouver real estate values for the period 1900 to 1920.

Vancouver Public Library-

There is no list of Vancouver housing prices for 1900-1920.

BC Land Title Office-

Could not help with ascertaining real estate values.

Vancouver City Hall-

The Property Tax records only go back to 1974.

District of Lillooet-

Not aware of any Lillooet newspapers for that period.

Queen's University-

Not aware of any estimates of provincial GDP for the early 1900s.

Vancouver Chamber of Commerce-

Not aware of any minutes/records from meetings from 1910 to 1920.

Prince George Archives-

Do not have copies of Prince George newspapers for important dates in the history of the PGE.

Ministry of Transportation and Infrastructure-

Records of road mileage do not exist for 1910 to 1920.

Office of the Premier, BC-

Statistics regarding road mileage in BC 1900 to 1920 are not available.

Ontario Archives-

Records of the Temiskaming & Northern Ontario railway are not available digitally or on microfilm.

Ontario Archives-

Ontario tax revenue figures are not available digitally or on microfilm for the early 1900s.

Ontario Legislative Assembly Library-

Ontario Public Accounts for 1900-1920 are not available in digital form or on microfilm.

BC Assessment-

Advised that records are not available for the public to view and that hiring a Land Agent would be quite expensive.

Land Title Office-

Advised that the records are not accessible by the public and confirmed that hiring someone to do a search would be cost-prohibitive.

BC Archives-

Lillooet Advance January 1911-August 1911*

Lillooet Prospector November 1911-April 1917*

Quesnel Cariboo Observer 1908-1918*

Prince George Citizen 1916-1918*

Prince George Post 1914-1915*

Fort George Herald 1910-1916*

Fort George Tribune 1909-1915*

*These newspapers were examined to see if information about real estate values between 1912 and 1918 could be extrapolated. This was not possible. The Lillooet and Quesnel papers were 4 to 6 pages long with no

mention of any real estate values. The Prince George papers had very infrequent and limited reference to real estate values.

BC Sessional Papers-

**Useful revenue and expenditure details for 1900-1920

#28: 1917-1917 BC Sessional Papers

#29: 1917-1918 BC Sessional Papers

#30: 1918-1918 BC Sessional Papers

#31: 1918-1919 BC Sessional Papers

Government of British Columbia. *BC Statistics*.

<http://www.bcstats.gov.bc.ca/>

**This site is useful for recent economic indicators but does not have any complete statistics for the early twentieth century. The site does, however, have some historical municipal census population figures but only going back as far as 1921 and with some gaps.

CANADA

National Archives Ottawa

Examined the following materials:

Report- Railway Statistics of the Dominion of Canada
for the Year ended June 30, 1917.

Government of Canada.

(PGE stats incomplete)

Report- Railway Statistics of the Dominion of Canada
for the Year ended June 30, 1918.

Government of Canada.

(PGE stats incomplete)

Report- Railway Statistics of the Dominion of Canada
for the Year ended June 30, 1919.

Government of Canada.

(PGE sometimes listed as 'did not report')

Report- Railway Statistics of the Dominion of Canada
for the Year ended December 31, 1919.

Government of Canada.

(PGE stats inconsistently reported)

Report- Railway Statistics of the Dominion of Canada
for the Year ended December 31, 1920.
Government of Canada.
(PGE stats incomplete)

Report- Railway Statistics of the Dominion of Canada
for the Year ended December 31, 1921.
Government of Canada.
(First year that PGE breaks down freight movements into categories)

Report- Statistics of Steam Railways of Canada
for the Year ended December 31, 1922.
Government of Canada.
(PGE gives more detailed reporting)

Canadian Parliamentary Proceedings: *Hansard Debates*

Reel 113, June 22 - July 28, 1903 (p. 5140-7309)

Reel 114, July-August 1903

Reel 115, August-September 1903

Reel 116, September 1903

**Hon. A.G. Blair's resignation as Minister of Railways and his view of Laurier's railway program; Rt. Hon. Wilfrid Laurier's explanation of his railway program; debate over GTP and the National Transcontinental Railway; Hon. William Mulock's speech about the new Transcontinental railways

Microfiche

#CIHM 80037

Hon. A.G. Blair, Minister of Railways and Canals, resigns and condemns the government's railway policy

#CIHM 84696

Speech of Right Hon. Sir Wilfrid Laurier on the transcontinental railway: a link uniting the provinces on Canadian soil: Thursday, July 30, 1903

#CIHM 869060

Speech of the Hon. Sir William Mulock in the House of Commons, 26th August, 1903, on comparison of government and opposition scheme respecting a transcontinental railway

Federal Government Records

Canadian Northern Railway Arbitration 1918.
Ottawa: Government of Canada.

*This is a verbatim record of the committee hearings. The questions asked give some indication of the issues that were considered important and those not thought to be valuable.

Dominion Bureau of Statistics. Annual Reports of the *Statistics of Railways of Canada. 1917-1958.*

*Very useful factual analysis and comparison of railways.

Leacy, F.H. (ed.) *Historical Statistics of Canada.*
Ottawa: Canadian Government Publishing Centre, 1983.

*These statistics are based on the figures obtained in government of Canada censuses. They are the most accurate historical statistics available. They are, however, focused on figures for Canada as a whole and therefore often do not break down the numbers for individual provinces.

National Transcontinental Railway Act Chapter 71 Statutes of Canada, 3
Edward VII
Ottawa: Government of Canada, 1903.

*The legislative basis created by the Laurier government.

Royal Commission to inquire into Railways and Transportation in Canada.
Ottawa: Government of Canada, 1917.

*Illustrates the dichotomy in public perceptions.

Statistics Canada.
Government of Canada.
<http://www.statcan.gc.ca>

*This website is useful for economic statistics compiled since World War II. The site acknowledges that Canada's system of National Accounts is most useful for the period after World War II. While of National Accounts have been subsequently developed back to 1926, their sophistication is limited.

Urquhart, M.C. (ed.) *Historical Statistics of Canada*.
Toronto: Macmillan Company, 1965.

*These statistics are based on the figures obtained in government of Canada censuses. They are the most accurate historical statistics available. They are, however, focused on figures for Canada as a whole and therefore often do not itemize the numbers for individual provinces.