

A STUDY OF:

**THE ECONOMIC IMPACTS OF THE
PROPOSED ABANDONMENT OF THE KETTLE
FALLS INTERNATIONAL RAILWAY LINE (KFR)
BETWEEN MP34.3 to MP48.8
(A CANADIAN PERSPECTIVE)**

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Executive Summary

On October 31, 2008 pursuant to sections 141 to 146.1 of Division V, Part III of the Canada Transportation Act John Fenton, President of Kettle Falls International Railway advised the Minister of Transport Canada of the intention to abandon the Kettle Falls International Railway Line between MP34.3 at or near Laurier, Washington (US/Canada Border) through Grand Forks, BC at MP47 to and including MP48.8 at or near Danville, Washington (US/Canada Border), including all yard tracks, sidings and spur tracks. Subsequently Lochaven Management Consultants Ltd. was approached by Pacific Abrasives and Supply Inc. to prepare an analysis of the economic impacts of the proposed abandonment from the perspective of the shippers, community and citizens affected by the decision. The result is a report that is comprehensive and thorough; the analyses undertaken and the observations made throughout are germane, realistic and supportable.

The geographic area of the proposed abandonment lies within the confines of the Regional District of Kootenay Boundary (RDKB) and specifically within the southern portion of Boundary Region. Economically this area is in transition. By all measures this region is currently experiencing an economic transition that is deep, far reaching and especially problematic. As a sustainable enclave it is extremely vulnerable to severe dislocation and decline. The impacts of abandonment are especially magnified within this context. Of further concern the abandonment will also adversely and significantly impact enterprises, communities and citizens in the United States. And while these impacts were beyond the immediate scope of this study some of the more significant impacts followed logically from the analysis (though they were not quantitatively assessed) and others were simply impossible to disaggregate geographically.

The framework for assessing the proposed abandonment looked at six critical impacts: (1) Shipper (Firm level) Impacts; (2) Community/Regional Economic Well Being; (3) Social Costs and Safety Considerations; (4) Energy Impacts; (5) Environmental Impacts; and, (6) Infrastructure Impacts. While there were a range of measurable impacts identified, the more significant included the following.

Canada

\$27.7 to \$73.4 Million in Additional Costs to Shippers

Businesses currently using rail service along the proposed abandoned rail corridor reported that their shipping costs would rise by a minimum of \$2,773,200 per year (2008 as a proxy) to \$7,347,600 per year (2006 as a proxy) if they have to divert their freight to another mode of transportation (trucks). The aggregate incremental increase in transportation costs over a ten year time horizon is expected to approximate \$27.7 to \$73.4 million.

26 Immediate Job Losses & More than \$1.25 Million in Annual Payroll Loss

Businesses currently using rail are directly responsible for 100 FTE (full time equivalent) jobs with an estimated annual payroll of \$7.2 million. These businesses support an additional 20-30 full time jobs

in other local businesses within the region. Loss of rail will mean an immediate loss of 20 FTEs and in excess of \$1.0 million in local payroll within shipper enterprises plus the loss of 4 to 6 indirect FTEs within the region including, by implication, the consequent loss of payrolls in other local enterprises. In aggregate this amounts to a loss of 26 FTEs and a loss of \$1.25 million in annual payroll within the region. If the additional costs of alternative transportation cannot be defrayed or absorbed within shipper businesses thereby necessitating wind-downs or closures, the losses to jobs and payroll will be considerably higher, potentially totaling 140 FTE jobs and more than \$7.9 million in annual payrolls (2008).

Immediate Loss of \$3.0 Million In Regional GDP and Sustained Loss Of \$30.2 Million Over Ten Years.

Businesses currently using rail are responsible for \$2.7 million (2008) to \$4.8 million (2006) in expenditures per year with local suppliers. Combined with payrolls to existing staff this contributes to an additional \$3.96 million (2008) to \$9.92 million (2006) to regional GDP. With abandonment there will be an immediate direct and indirect loss of \$3.024 million in regional GDP and a sustained loss of \$30.2 million in regional GDP over ten years.

Loss of \$3.9 million in Local, Provincial and Federal Taxes

On a year over year basis rail line abandonment with its implied costs and disbenefits accruing to existing shippers will result in an immediate loss of near \$300 thousand in land lease and property taxes payable to local governments (\$3.0 million loss over ten years) and in excess of \$90 thousand in taxes/fees payable to the Federal and Provincial governments (more than \$900,000 loss over ten years).

8% to 10% Decrease In Residential Property Values

Increases in truck traffic volume will result in measurable decreases in property values along transportation routes. Heavy truck traffic is said to lower property value at a rate 150 times greater than cars. This is expected to result in an 8 to 10% decrease in residential property values along those urban residential roadways witnessing substantive increases in truck volumes.

Canada and United States

Losses Of Economic Opportunity And Diminished Regional Prosperity

With the loss of the Kettle Falls International Railway Line the region's attractiveness will be significantly eroded. Firms that require railroads for inbound and/or outbound transport (e.g. shippers of food, lumber, paper, chemicals, and steel products)

would not consider locating in a community that has no rail service.

Wasteful Energy Use And Greater Pollution

Aggregate incremental fuel consumption and hence energy inefficiency as a consequence of rail line abandonment would total somewhere in the order of 3.4 million to 6.1 million imperial gallons of unnecessary fuel consumption over the next ten years. Increased truck traffic and fuel consumption resulting from the proposed rail line abandonment, will result in a substantive increase in greenhouse gases and air pollution in the community/region in respect of: carbon dioxide (8,707 million grammes/yr.) and monoxide (9.4 million grammes), nitrogen oxide (245 million grammes), particulate matter (9.44 million grammes), and hydrocarbons (23.7 million grammes). These costs will be borne by the public.

Exorbitant and Unnecessary Transportation and Safety Costs

The impact of the rail abandonment would substantially and more rapidly deteriorate the local road system thereby shortening the useful life of a predominantly secondary route and add an additional pavement cost in excess of \$3.76 million to \$9.88 million over a twenty year period. Further, abandonment would result in an additional 8 to 20 accidents over the next ten years at a human cost of somewhere in the order of \$3.66 million to \$9.62 million.

United States

Threats to Enterprise Profits/Viability and Unnecessary Losses of Indirect Jobs and Incomes

As shippers either pass on the increased transportation costs to U.S. based customers (enterprises and individual citizens) or U.S. customers source elsewhere the viability and profitability of these downstream firms will be severely impacted. By way of example, the product produced and sold by Pacific Abrasives to its customers in the United States (including specific military/defense institutions) is substitutable but only at three times its current price. Clients utilizing this product and/or their end-users will as a consequence of abandonment be subjected to substantially higher costs/prices.

The loss of incomes to retail outlets in Collville and Spokane as a consequence of shipper cutbacks or closures (unemployment) will conservatively result in an annual loss to U.S. based businesses of \$2.0 million per year and \$20.0 million over ten years.

1.0 PROJECT DEFINITION

"Although railroad restructuring has improved the efficiency of the rail system overall, branch line abandonment may adversely affect rural communities that depend on those lines The loss of rail service may increase costs to shippers, can lead to increased truck traffic on local roads, and may diminish current and future employment and economic opportunities."

Dean A. Bangsund, F. Larry Leistritz, and Joel S. Honeyman.
Assessing Economic Impacts Of Railroad Abandonment On Rural Communities

1.1 Problematique

On October 31, 2008 pursuant to sections 141 to 146.1 of Division V, Part III of the Canada Transportation Act John Fenton, President of Kettle Falls International Railway advised the Minister of Transport Canada of the intention to abandon the Kettle Falls International Railway Line between MP34.3 at or near Laurier, Washington (US/Canada Border) through Grand Forks, BC at MP47 to and including MP48.8 at or near Danville, Washington (US/Canada Border), including all yard tracks, sidings and spur tracks¹. This closure is expected to take effect on 31 October 2009 or one year after the initial filing. The decision by Kettle Falls International Railway Line (OmniTRAX) has come at a critical time for the existing shippers using the line and for those communities and regions it serves.²

In late August 2009 Lochaven Management Consultants Ltd. was approached by Pacific Abrasives and Supply Inc.³ to prepare an analysis of the economic impacts of the proposed abandonment of track. This request came after a formal meeting and discussion between the shippers on the Canadian side (Pacific Abrasives and Supply Inc., International Reload Centre, International Forest Products Ltd (Interfor) and Aquilini Investment Group⁴) and senior representatives of OmniTRAX had failed to come to any agreement by which the operation of the line could/would be retained.

¹ The western portion of the Kettle Falls International Railway Line extends roughly between Kettle Falls, Washington and Grand Forks, British Columbia. The Canadian section of this line extends specifically between Laurier (on the Canada-US border near Christina Lake) and Danville (on the Canada-US border just west of Grand Forks).

² There is a very real possibility that this abandonment notice designated only for that portion of the line on the Canadian side is a precursor to an additional/supplementary abandonment request for that portion lying on the US side; the net result being an aggregate abandonment of the entire line between Kettle Falls, Washington and Grand Forks, British Columbia.

³ Pacific Abrasives and Supply Inc. on behalf of a consortium of shippers on the Canadian side including: International Reload Centre and International Forest Products Ltd (Interfor).

⁴ While Aquilini Investment Group was not at the time nor currently is a shipper, they had expressed a sincere interest in confirming the availability of rail access as a precondition to pursuing a development project near Christina Lake. Inasmuch as this interest was more than a casual interest they have been mentioned here and at several other points in the study. That being said, because their interest is prospective the measurement of impacts resulting from the proposed abandonment excludes those contributions that might accrue or might have accrued as a consequence of their proposed development.

1.2 Project Scope/Approach

The methodology chosen by Lochaven Management Consultants Ltd. for preparing this economic impact assessment is premised on the structure of similar assessments utilized in other communities and regions across Canada and North America. It differs in that we have endeavored to extend the identification, investigation and analysis of critical factors as broadly as possible without compromising neither the logic nor the rigour necessary to support our observations.

Key tasks undertaken in preparing this report have included the following:

1. A review of the conditions by which abandonments can be filed in Canada (see Appendix 1) and the history thereof;
2. A review of past studies and reports on the impacts of rail line abandonments in Canada and the United States;
3. A review of the various approaches to decision making in transportation planning as it relates to alternative modalities;
4. A review of documents, statistics and studies on the current socio-economic conditions within the affected region and communities;
5. Attendance at several community meetings (Grand Forks, British Columbia and Colville, Washington) at which the proposed abandonment was discussed by local stakeholders and concerned citizens;
6. Consultation with shippers and key stakeholders in Canada and the United States directly affected by the decision to abandon;
7. Consultation with key transportation authorities, agencies and officials in Canada and the United States;
8. Collection and analysis of a comprehensive array of individual company (shipper) financial and logistical data as it pertains to the proposed impact of abandonment; and,
9. An objective assessment of the direct and indirect economic impacts of the proposed abandonment.

1.3 Methodological and Analytical Considerations

As with any economic impact analysis, certain limitations are inherent from the methodology of investigation and assumptions made. Some of these limitations do not preclude the veracity or value of the observations made nor the conclusions drawn. Others are more serious. It is important that the reader of this report be made aware that some of the more significant limitations incurred in the preparation of this document include the following:

1. As noted this project effort draws extensively from published reports, comparable studies, interviews with key stakeholders and access to shipper financial/economic information. However it does not include an analysis of OmniTRAX Inc.'s financial/economic rationale for abandonment nor does it include comprehensive information respecting the possible economic impact generated by the absence of OmniTRAX from the region, i.e. payroll, job

losses, payments to suppliers in Canada and the like. As such these direct impacts and the induced effects they imply, while real, are excluded from the analysis that follows.

2. Our investigations focus on those actual and potential impacts that may arise on the Canadian side of the border. That being said some impacts (environmental, highway repair/replacement, safety and the like) are difficult to disaggregate from those impacts that might accrue on the US side of the border.
3. Our investigations look at a single point in time and it is not only conceivable that changes will have occurred between the start of the study investigation and the preparation of this report, but quite likely. As such, certain observations and conclusions presented herein may be less/more relevant than when initially posed.

Notwithstanding the collective importance of these limitations we are confident that the analyses undertaken and the observations made throughout this report, are germane, realistic and supportable.

2.0 BACKGROUND - CONCEPTS AND CONTEXT

2.1 The Historical Context

Despite the ubiquitous presence of substantive mineral and resource wealth throughout the country, the historical growth and development of individual regions and communities across Canada owe much of their economic fortunes to the arrival of the railroad. By enhancing geographic access and by enabling shippers to move goods across the country and across international borders in a timely, efficient and reliable manner it was the railroad that provided the foundations for sustainable growth and development.⁵

In the purest sense the development of the railroad and the rail system in Canada was a public-private partnership. The establishment of Canada's railroad network while a risky and adventurous private initiative was also the consequence of a bold political vision and a strong political commitment to promote, enhance and facilitate economic growth and development throughout the country.

⁵ "A new railway brought success on several fronts, among them employment, commercial activity and industry. Many cities and towns owe their very inception to railways." Library and Archives Canada, *Urban Growth*. See : <http://www.collectionscanada.gc.ca/trains>

Certainly today the railroad is not the dominant transportation mode it once was, but it still plays a significant role in freight movement and in many cases is the only practical means of transport for a variety of commodities. According to recent statistics, Canada's rail system moves over 300 million tonnes of cargo each year. Importantly rail service still ranks as a prime site selection criterion for many industries and brings with it the prospect of enhanced economic opportunity, enhanced property values, jobs, incomes and payrolls. . On a local and regional basis for communities such as Grand Forks and its nearby neighbours the rail road represents a principal component of the community's economic development infrastructure.

2.2 Transport Canada and The Canada Transport Act (CTA)

Transport Canada is the Federal department responsible for transport (including railways) in Canada⁶. Its stated mission is to develop and administer policies, regulations and services for the best possible transport system for Canada and Canadians. The Canada Transportation Act, 1996 (CTA) is the central piece of legislation governing general rail freight and passenger transportation in Canada.⁷ The emphasis of the CTA has been on enhancing trade and the viability and competitiveness of the Canadian transport system, reducing regulatory intervention and encouraging more innovative services.

During the 1980s and 90s Parliament initiated a number of efforts to deregulate railway transportation. The premise of these actions was that, by giving greater play to market forces, efficiencies could be achieved and system costs reduced. The primary outcome of these efforts The *Canada Transportation Act* came into effect in 1996 and replaced the *National Transportation Act, 1987*; the *Passenger Ticket Act*; the *Government Railways Act*; and elements of the *Railway Act*. Broadly speaking the *Canada Transportation Act* of 1996 modernized and streamlined rail regulation, promoted the formation of short-line railways, ensured that shippers continued to have access to competitive transportation services, eliminated unnecessary regulation in other modes of transport, and placed greater emphasis on commercial decision-making in the transportation sector. As part of this effort barriers to the discontinuance of rail lines were lowered, and the establishment of short line railways was encouraged.

⁶ When it comes to the broad application of policies, regulations and directives relative to those multiple aspects of railroad operations there is considerable interplay and cooperation between provincial and federal agencies/authorities. This is especially true in the context of issues involving shortline railroads where activities are province specific.

⁷ A substantive number of other provisions/regulations, interpretations and amendments have occurred since 1996 both to protect shippers and to enhance/improve competitiveness within the industry. Most recently, for example, Bill C-8 received Royal Assent on February 28, 2008. The Bill improves the shipper protection provisions of the Canada Transportation Act aimed at addressing the potential abuse of market power by the railways.

2.3 The Legislative Context of Abandonment⁸

"Since the economic liberalization of the rail industry in North America, the industry has sought continually to increase operating efficiency. The selective abandonment of track in a rail network is one of the methods most commonly used to reduce rail costs."

Rail Infrastructure Management Policy, Applying a Real-Options Methodology⁹,
Stephen M. Law, Mount Allison University; Alexandra E. Mackay, University of Toronto; and, James F. Nolan, University of Saskatchewan, 2004

Beginning almost as soon as the last track was laid railroad companies in Canada have been discontinuing/abandoning networks as they respond to changes in government policy, changes in the economy, and changes in the competitive environment. From the railroad's perspective this selective downsizing has enabled them to increase productivity and reduce overhead. Further it has enabled them to focus on the needs of their most potentially profitable markets. According to conventional wisdom, railroad companies are for-profit corporations, and they base abandonment decisions on their ability to profitably perform their services.¹⁰

Since 1933 the railways in Canada have been required to seek regulatory authority to discontinue the operation of a railway line. While in the past Canadian regulations severely limited railroads from eliminating unprofitable lines, since 1998 the branch line abandonment provisions have been consistently relaxed so as to provide for more effective line discontinuance and transfer processes based on the economics of branch lines under consideration. Today when a railway announces their intention to discontinue operation of a designated branch line, they must adhere to a less rigid though still formal abandonment process as laid out in sections 140-146 of the Canada Transportation Act (see Appendix 1).

⁸ "The issue of rail-line abandonment has proven to be more controversial in Canada than in the United States" Rail Infrastructure Management Policy Applying a Real-Options Methodology Stephen M. Law, Mount Allison University, Alexandra E. Mackay, University of Toronto ; and, James F. Nolan University of Saskatchewan, 2004 *Public Works Management & Policy*, Vol. 9, No. 2, 145-153 (2004)..

⁹ Ibid.

¹⁰ That being said it is often contended that railroad companies might pursue rail-line abandonment not strictly for competitive purposes but also for collusive and/or strategic purposes, which though it might serve the firm's best interests doesn't necessarily serve the purpose nor intent of a more relaxed national policy on abandonment. "One tactic that CNR perfected was to demarket a line by providing sufficiently poor service to its few customers such that those customers would turn to trucks for improved service and lower costs. Once customers ceased to exist on a small branch line, the federal government would permit the line's abandonment". See: Private Sector Investment in Railways Tera International Group, Inc. Appendix 11, Canada. "Additionally, the owning railways have, in some instances, let portions of a line deteriorate to point where it may be cost prohibitive for a government or an interested operator to purchase the line and put it back into operation. Another method of reducing traffic on a line is the removal of sidings and access tracks where rail car loading can be facilitated. Whether these actions are taken in order to protect a perceived franchise or to manage the shift of a market to a location preferable to the railway, the result is a de facto abandonment, depriving the shippers on the line of rail service" See: Submission to the Canadian Transportation Act Review Panel, A Proposal and Recommendation for Changes to Division V of the Canada Transportation Act, Submitted by OmniTRAX Canada, Inc 2000

The decision criterion currently used in abandonment cases is standard financial cost-benefit analysis. In practice this means that if the abandoning railway can show that the total discounted value of the specified segment of rail track is negative using CBA¹¹, then the regulator will permit the process of abandonment to proceed.

The issue of abandonment is a politically charged and highly controversial matter. On the one side railroads plead the case for greater efficiencies, greater profit and a more competitive environment. On the other hand communities, shippers and individual citizens argue against the increase in shipping costs, the loss of alternatives, and the longer term threat to jobs, taxes and the community itself. Government has attempted to balance these competing interests. However, the question remains as to whether these efforts have been effective.

3.0 OMNITRAX AND THE KFR

3.1 Short-Line Railroads

A short line railroad is generally defined as one that operates over a relatively short distance. These short lines commonly exist: to link two industries requiring rail freight together; to interchange revenue traffic with other, usually larger, railroads; and/or to operate short haul, usually tourist, passenger train service. Because of their small size and generally low revenues, the great majority of short line railroads in the United States are classified by the American Association of Railroads as Class III. In Canada, Transport Canada classifies short line railroads as Class II.

Short lines have provided continued operation of rail lines for many communities that otherwise would have lost service through rail abandonment. The benefits of short line and regional railways to their customers and communities are significant. They provide the advantages of main carrier services/access with more individualized and flexible approaches. Further, they reduce public expenditure on highways, reduce congestion, increase safety, are more fuel efficient than trucking, are more environmentally friendly than alternative transportation modes, and are more efficient in their use of land.

The formation of short line railways exploded after the Canada Transportation Act 1996 came into force, with 37 new short lines forming between 1996 and 2000. Over 50 short line and regional railways operate in Canada today. In 2006, they accounted for 23.6 per cent of the total kilometers of track and \$642 million in revenues.¹²

¹¹ *Despite its attractiveness as a measurement tool with a strong statistical basis, objectivity and transparency; CBA is nonetheless fraught with numerous deficiencies, not the least of which includes problematic quantification of non-financial impacts and uncertain discounting methodologies.*

¹² *Transportation in Canada, An Overview 2008, Transport Canada*

3.2 OmniTRAX Inc.

"OmniTRAX railroads offer customers the benefit of customized local services combined with extensive competitive reach through their ability to interchange traffic with all North American Class 1 Railroads."

According to the company's website¹³, OmniTRAX, Inc., an American company based in Denver, Colorado and a subsidiary of The Broe Group, is one of the largest privately held operator and managers of regional railroads (shortlines) in North America. Since its initial acquisition of the Great Western Railway of Colorado, LLC (GWR) in 1986, the railroad operations under the company's management have grown to include seventeen railroads throughout North America spanning three Canadian provinces and 10 U.S. states. The company's services include railroad, port, industrial switching operations and intermodal operating services.¹⁴

3.2.1 The Kettle Falls International Railway¹⁵

Managed and operated by OmniTRAX, the Kettle Falls International Railway ("KFR") owns over 160 miles of former Burlington Northern Santa Fe trackage in Northeastern Washington State and Southeastern British Columbia. KFR operates from the BNSF interchange at Chewelah, Washington to Columbia Gardens, British Columbia. A second line operates from Kettle Falls, Washington to Grand Forks, British Columbia, before crossing the border again to reach San Poil, Washington. (See map on page following.)

The proposed area of abandonment runs from between Danville and Laurier on the Canadian side of the border.

According to its website (OmniTRAX) the Kettle Falls International Railway ("KFR") has a very diverse traffic base, including lumber, plywood, wood products, minerals, metals, fertilizer, industrial chemicals, and abrasives. While obviously dated, the Kettle Falls International Railway ("KFR") identifies on its website that its key customers include: *"Teck Cominco, Pope & Talbot¹⁶, Boise Cascade, Canpar¹⁷, Stimson Lumber, Vaagen Brothers Lumber, Pacific Abrasives and International Reload Systems Ltd"* and

¹³ Much of the information included in this section of the report was taken from the company website located at: www.omnitrax.com.

¹⁴ Relevant to the analysis at hand, it should be noted that OmniTRAX was one of the bidders in the controversial sale of the British Columbia Railway in what has come to be regarded as a tainted and rigged bidding process. That legal process is currently ongoing. Further, according to anecdotal evidence some of the key decision makers within the OmniTRAX management team have recently changed. While in no way is this observation intended to imply any relationship between these two significant events, the point is that at the very least these issues/events are distractions to the company and arguably the matter of reconsidering or reviewing a proposed abandonment or providing greater transparency in that decision might be less on the front burner than might ordinarily be the case. See for example: *Kinsella working "both sides of the street" BC Rail deal, MLA charges*, By Neal Hall, Canwest News Service March 26, 2009.

¹⁵ Once again, much of the information included in this section of the report was taken from the OmniTRAX company website located at: www.omnitrax.com.

¹⁶ Grand Forks and Midway facilities are currently owned/operated by International Forest Products Ltd. (Interfor).

¹⁷ No longer in business.

goes on to assert that: "KFR works closely with local economic development agencies on new business opportunities and with five day per week rail connections with BNSF, KFR is an excellent choice for new plant locations."



4.0 COMMUNITY AND REGIONAL CIRCUMSTANCES

As noted above, the proposed OmniTRAX Inc. KVR abandonment runs between Danville and Laurier on the Canadian side of the border. The geographic area of this trackage lies within the confines of the Regional District of Kootenay Boundary (RDKB)¹⁸, and specifically within the Boundary Region portion of the RDKB.

The following narrative provides a brief overview of the impacted area.¹⁹

Located in the southern interior of British Columbia, the Regional District of Kootenay Boundary (RDKB) is one of 27 regional districts in the Province of British Columbia. The RDKB was incorporated on February 22, 1966. It consists of eight incorporated (urban) municipalities and five unincorporated (rural) Electoral Areas. Today, the RDKB has a population of 30,742 and represents 0.7% of the BC population. The City of Trail, the City of Grand Forks, the City of Greenwood and the Village of Midway contribute 7,237 (23.5% of region), 4,036 (13% of region), 625 (2% of region), and 621 (2% of region) to this total, respectively. The regional median age of the RDKB is 47.3 as of 2006.

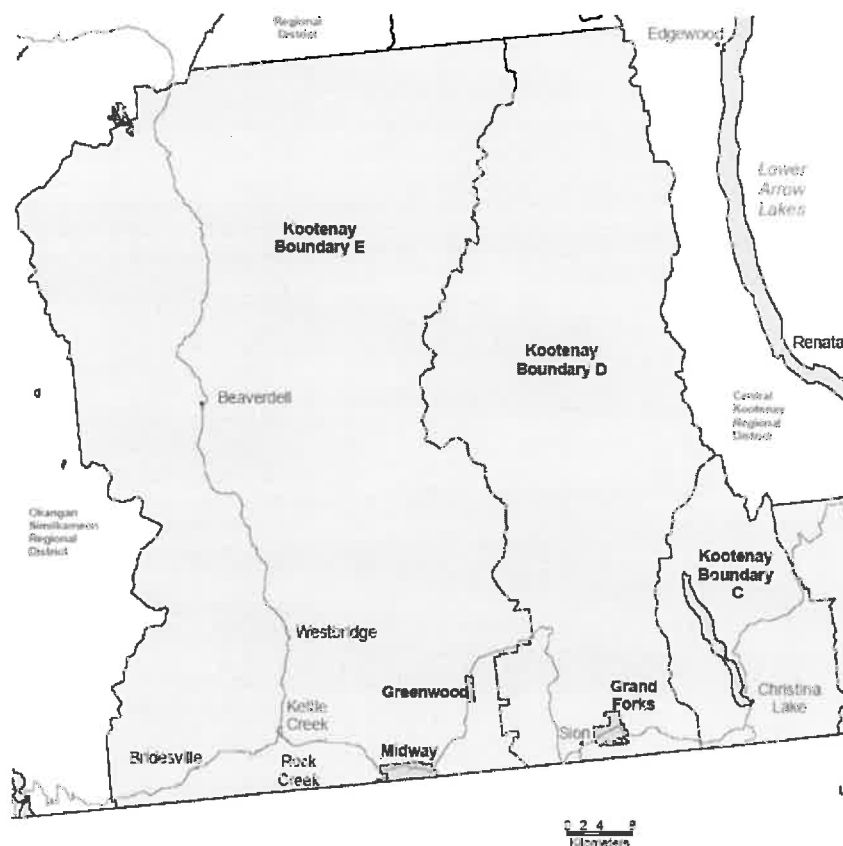
The Boundary Region comprises the eastern portion of the Regional District of Kootenay Boundary (RDKB). Bordered on the south by the US border and on the west by the Central Okanagan and Okanagan-Similkameen Regional Districts, the Boundary Region encompasses the cities of Grand Forks and Greenwood; the Village of Midway; as well as Rural Area C (surrounding Christina Lake); Rural Area D (surrounding Grand Forks); and, Rural Area E (West Boundary including Rock Creek, Beaverdell and Big White Ski Resort).

Despite being an integral part of the Regional District of Kootenay Boundary, the Boundary Region is quite distinct historically, economically, politically, socially and culturally. These unique traits have proven to strengthen the identity and sense of pride and commitment of Boundary residents and represent a significant platform for ongoing growth and development.

¹⁸ Physically the two most significantly impacted areas with the proposed abandonment will be Grand Forks and Christina Lake. Most small area statistical information available from such sources as BC Statistics and Statistics Canada is aggregated in a broader regional context. This is especially true in the instance of Christina Lake and, for some data, is also the case for Grand Forks. However, inasmuch as the potential impacts of abandonment themselves have broader regional implications and the purpose here is to present the context from which the impacts might best be interpreted, the information that is available is sufficient and complete. Simply put, the intent of this section is not to present a comprehensive economic/social and demographic profile of Christina Lake and Grand Forks, but rather to present a broad understanding of the region in which the impacts of the proposed rail line abandonment will reverberate.

¹⁹ Much of the information contained in this section of the report was sourced from: *The Boundary Region Scoping Study*, 2009. CTQ Consultants Ltd And Lochaven Management Consultants Ltd; and from *City Of Grand Forks Transition Study*, 2009. CTQ Consultants Ltd and Lochaven Management Consultants Ltd.

The Boundary Region



The region's early growth and development was tied directly to the arrival of the railroad and its ongoing presence in the region. With an early history premised on copper mining the region evolved and diversified over the years to become one of the Province's significant forestry enclaves. While other industry sectors have evolved over the years the breadth and depth of economic diversification is limited. In fact the region has a diversity index of only 69 and this rate has gone unchanged over the last decade.

For the region defined as Area C, Area D, and Area E, the percent of income dependencies (2006) are as follows: Forestry (23); Mining and Mineral processing (2); Agriculture and Food (4); Tourism (3); Public Sector (17); Construction (7); Other (4); Transfer Payments²⁰ (24); and Other Non-Employment Income (18).

As noted above, Grand Forks is the largest community within the Boundary Region. It is home to a population of approximately 4,036 people, and has a median age of 47.7. The population by gender and age shows a higher than average distribution of people between the ages of 45- 75+ and a lower than average distribution between the ages of 0-44 years. Of the 1,740 people in the labour force, 135

²⁰ The most dramatic changes in dependencies for the GF/Greenwood area from 1991 to 2006 (15 years) has been a major increase in transfer payments (11 to 24%) and a drop in mining (6% to 2 %)

people were unemployed (7.8%) as of 2006. According to anecdotal evidence that number has risen significantly since 2006. The B.C. unemployment average for the same period was 6.0%.

The top ten labour force employment areas in Grand Forks, as of 2006, were: manufacturing (315 people; 18.1% of labour force); retail trade (225; 12.9%); health care & social assistance (195; 11.2%); accommodation & food services (150; 8.6%); construction (130; 7.5%); agriculture, forestry, fishing, hunting (100; 5.7%); public administration (100; 5.7%); administration & support, waste management & remediation (75; 4.3%); other services (excluding public administration) (65; 3.7%); and, educational services (55; 3.2%). It is critical to point out and emphasize that the goods producing sector is an essential mainstay of the community's economic well being and, by implication, a key determinant of future growth and prosperity.²¹

Summary of Major Employers in Grand Forks	
Employer	Approximate Number of Employees
Interior Health Authority	260
Interfor	85 (formerly 206 under Pope & Talbot)
Roxul (west)	150
School District #51 (Grand Forks only)	175 (+15 in Christina Lake)
Canpar Industries	Closed Dec 2007
Extra Foods	50-60
Overwaitea Foods	65-70
Grand Forks & District Savings Credit Union	54
Unifab	30
Boundary electric	85
Corporation of the City of Grand Forks	43
Source: City of Grand Forks, Sustainable Community Plan Discussion Paper, 2008	

Christina Lake is an unincorporated resort community located just to the east of Grand Forks in Area C. Renowned for its spectacular lake and associated tourism, Christina Lake is home to one of British Columbia's most spectacular golf courses. Despite a strong reliance on tourism the community depends heavily on its industrial park that is fully serviced with gas, "rail", highway, and power as a means to promote/foster a more diversified economic base.²²

²¹ Arguably the goods producing sector in the region has a number of critical attributes associated with the prerequisites for successful cluster development, including specific site/facility infrastructure; transportation capabilities/capacities; and work force characteristics to name the most obvious. These foundations provide a logical premise from which further growth and development might best be achieved within the region. As such erosion within the sector and/or erosion/loss of those community/regional facilities/assets that might foster or facilitate further growth within this essential sector is especially troubling; and more so today than at any other time. Simply put, by diminishing the region's capacity to build on its inherent strengths will unquestionably and disproportionately cloud its economic future.

²² Currently there is some interest that has been expressed by the Aquilini Investment Group to locate a facility within the Christina Lake industrial park. The access to rail is a critical pre-requisite to this interest.

During 2007 and 2008, the Boundary Region experienced major losses in jobs related to the closures of a number of the key manufacturing plants that employed workers with significant incomes that supported local economies.

The following is a summary of the major events and contributors to the recent (2007/2008) job losses and economic hardships in the Boundary Region. Numbers indicate closest estimates of permanent or temporary job losses.²³ Other small suppliers would also have been impacted though the exact magnitude of these impacts is not known.

Mill/Area	Company Involved	Impact/Job Losses
Midway	Pope & Talbot declares bankruptcy	Permanent Closure – May 2007 (66)
Midway	Fox Lumber buys P & T Mill	Planer Mill closure (80 more jobs)
Midway	Fox Lumber lays off staff	Office, woods and roads (28 jobs)
Grand Forks	Pope & Talbot bankruptcy	234 employees affected
Grand Forks	Interfor takes over P & T (Nov/07)	180 (Original Seniority List) 85 now out of work at plant alone (Temporary/long term layoffs)
Grand Forks Region	Hauling Contractors	40 that supplied Interfor alone Other forest suppliers unknown
Grand Forks	Canpar (Door Core Mill)	Permanent Closure – Dec 2007 (100)
Greenwood	Merit Mining	Temporary Closure – 2008 (65)
Grand Forks Region	Boundary Electric	Employees on reduced hours (85)
Grand Forks	Roxul	On work share (100 at last report)

In less than a two year period, besides job losses, the impact of the closures have caused municipal tax losses, problematic financial impacts on suppliers and local businesses, school enrollment declines, devaluation of homes, and losses throughout the region. Some other notable concerns include the following observations:²⁴

- There is a concern that the municipal tax base as it currently exists is inadequate to support approximately 12,000 population that has access to City services and infrastructure. As well there is a mounting concern for the potential of unpaid municipal taxes by industry.
- The past few years have seen a dramatic loss in retail and service businesses in Grand Forks.
- the Kootenay Boundary Regional District fares rather poorly in most indices of social well being as evidenced by rising and persistent unemployment, elderly dependency ratios; incidences of low incomes, and dependence on income assistance.

²³ Numbers of job losses and occurrences were provided by the companies to the unions and government officials as of March 2009. Subsequently this information was provided to CTQ Consultants Ltd And Lochaven Management Consultants Ltd. to assist in their preparation of the reports: *The Boundary Region Scoping Study, 2009.* and *City Of Grand Forks Transition Study, 2009.*

²⁴ *City Of Grand Forks Transition Study, 2009.*

The short story for the region is that it is experiencing an economic transition that is deep and far reaching. As a vital and sustainable enclave it is extremely vulnerable today more than at any other time in its history. It is especially vulnerable to severe dislocation and decline brought about by a fragile economic base with little opportunity to readily diversify; lost jobs, lost opportunities and a gathering storm of social issues that will doubtless test the very social fabric of the community itself.

Despite current social/economic challenges within the region there is also cause for some optimism. There is reason to believe that the region can once again reach its full potential by building on its essential strengths and capitalizing on a myriad of opportunities. Without restricting nor limiting the absolute numbers and diversity of inherent strengths and available opportunities, the following regional assets/insights are key:

1. **Community/Regional Commitment:** Difficult times can drive communities apart or pull them together. There is ample evidence that the region and the communities, citizens and businesses located therein are not only pulling together in these difficult times but committing to a common path for future growth and development.
2. **Underutilized Resources/Infrastructure:** The region has a number of locationally attractive infrastructure assets that are underdeveloped and/or underutilized at present. These assets provide an excellent base to build from.
3. **Foreign Direct Investment (FDI):** A number of enterprises located within the region are headquartered outside the province/country. The network of contacts these enterprises represent t can provide a foundation for the region's efforts to attract/build on FDI.
4. **Access to Okanagan/Columbia and US Markets:** The region is strategically located relative to the potential of the Okanagan, Columbia and NW United States marketplaces. With lower cost land, labour and resources; and good transportation networks these markets can be reached easily and competitively by manufacturers or other businesses interested in locating in the region.
5. **Access To Low Cost, Skilled Labour:** As noted previously, the region can boast a significant inventory of talent and skilled labour. This key resource can be a significant incentive to economic growth and development.
6. **Sectoral Opportunities:**
 - **Manufacturing/Light Industry:** Building on the cluster of facilities, infrastructure, transportation modalities, available workforce and market access a number of significant possibilities exist to start/relocate or expand selected manufacturing enterprises.
 - **Tourism:** The region is blessed with a rich history; stunning ecological attributes and natural amenities; recreational facilities; and, significant traffic flow/visibility yet the tourism sector is underdeveloped. Increasingly the spillover from developments in the Columbia and Okanagan Valleys are looking to the possibilities available in the Boundary Region.

- **Agriculture:** There is a substantive base of underdeveloped arable agricultural land especially lands suitable for higher value added market gardens and other crops.

Of course the presence of these inherent strengths and opportunities is not intended to imply that substantive growth and prosperity within the region is inevitable. Rather the point is to illustrate that there is grounds for optimism; that there is grounds for expecting that this downturn is neither permanent nor insurmountable; and that there is grounds to expect that with the assets in place the region is properly poised to move forward. The importance of the rail line to a scenario of moving forward is self-evident. The importance of the issue of rail line abandonment to a scenario of irreversible dislocation and decline is also self-evident. Without rail, sectoral opportunities are muted; access to critical markets is weakened; and efforts to diversify and enhance the economy are severely weakened.

5.0 ANALYTICAL FRAMEWORK

5.1 A Conflicting State of Affairs

Throughout North America and certainly over the past twenty to thirty years there has been a great deal of concern over the loss of rail service, and its potential impacts. Numerous pre- and post-abandonment studies have been undertaken to better identify, quantify and understand the impacts of rail line abandonment. Collectively however these abandonment studies have offered no firm conclusions nor accepted premises. Instead what we find is differing opinions, observations, conclusions and decisions regarding the approach to and impact of rail abandonment on both shippers and communities, despite a diversity of studies and investigations addressing a range of somewhat similar and somewhat dissimilar situations.

On the one side there are a number of studies utilizing a number of alternative methodologies that indicate that from the perspective of shippers and community officials who face the loss of rail service there appears to be a serious disconnect between what the impacts actually are when measured and what they were expected to be pre-abandonment (e.g. contrasting pre-abandonment anecdotal evidence with post abandonment mathematical modeling/assessment). In other words, in some instances the impacts actually experienced were much less than originally expected. These studies have tended to reinforce the perception that “... *there appears to be no evidence of any long-term adverse economic impacts due to rail abandonment...*”²⁵. However, in other studies again utilizing a number of

²⁵ See for example: *A Study Of Long Term Economic Impact Of Rail Line Abandonment*, *Journal of the Academy of Business and Economics*, April, 2008 by John Ozment, H. Barry Spraggins “Government intervention to protect firms from rail abandonment may not be in their best interest or in the best interest of the local economies in which they operate.” And see also: *Life Without The Railroad: Economic Effect Of Rail Abandonment On The Community*, J.P Sammon. 1979 Transportation Research Board, Issue Number: 85. While dated the assertions/observations made still resonate. “While there is no way of determining from this analysis whether individual firms may have experienced adverse economic effects, including bankruptcy, due to the loss of rail

alternative methodologies there is substantive and irrefutable evidence that abandonments do in fact lead to a range of serious and measurable adverse impacts including: higher transportation costs and lower profits for shippers; a reduction of market options; losses of tax revenues and economic opportunities for communities/regions; and increased road damage and environmental degradation.²⁶

The implication of these differing conclusions and opinions they draw is clear. That is: there are no hard and fast rules when it comes to assessing cases of abandonment, i.e. abandonment is not by definition universally good nor by definition universally bad. In fact regardless of the methodology of assessment pursued (assuming that whatever methodology chosen is relevant, thorough and objective), each instance of abandonment is unique as are the impacts accruing there from.

5.2 Approach

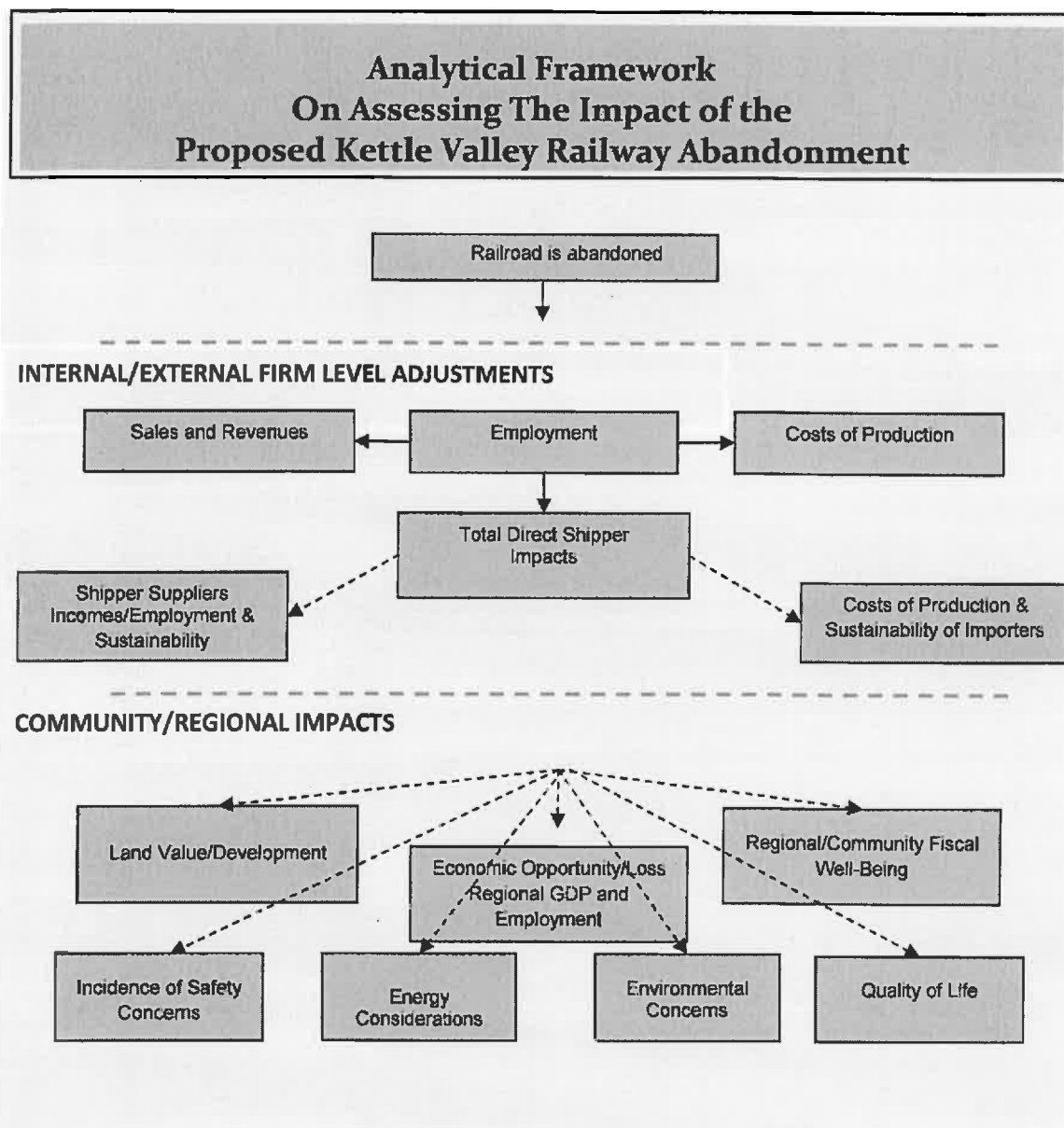
An impact analysis is defined broadly as the assessment of the pros and cons of pursuing a course of action in light of its possible consequences, or the extent and nature of change it may cause. In the case of rail line abandonments generally and the proposed abandonment of the Kettle Falls International Railway Line between MP34.3 at or near Laurier, Washington (US/Canada Border) through Grand Forks, BC at MP47 to and including MP48.8 at or near Danville, Washington (US/Canada Border) specifically, the methodology of the approach is important to the overall assessment. We understand very well that for the assessment to be unassailable the methodology utilized must be impeccable.

For the purposes of this investigation we have utilized an approach that fully captures and objectively defines/articulates the broad spectrum of imminent and induced impacts that will most certainly accrue as a consequence of the proposed abandonment. If there is any shortcoming in our approach it lies in the emphasis and reliance on conservative objectivity. While undoubtedly this tends

service, it seems clear that the local economies in general are not affected" ... "It was concluded that there is little adverse community impact attributable to the loss of rail service. The studies have found many instances in which the post abandonment community impacts were positive. Findings show that branch lines are seldom an important part of community economic activity and that other economic factors are more responsible than rail branch-line service for shaping the future of a local economy. Many branch-line abandonments simply marked the end of a series of unfavorable local economic events. The shock of abandonment often forced local communities into the realization that long-standing adverse economic trends had to be reversed if they were to prosper. Shippers often found that switching to other transportation required a reorganization of their distribution patterns—a change that resulted in reduction in their total operating costs. Local trucking also provided added local employment and purchases of fuel, meals, and supplies that did more to stimulate the local economy than had the former rail branch-line operation."

²⁶ See for example: *County-Level Impacts of Rail Line Abandonments*, Journal of the TRF; Volume 44, Number 3 fall 2005. James Sanderson and Michael W. Babcock. "Rail-using firms alter their production decisions when the price of their output changes. Altered production decisions mean that the communities served by these firms are affected. A community may experience reduced local spending, firm closures and lesser utilization of the production inputs it supplies. The prices of local goods and services may increase, and the rates paid for production inputs may decrease." "Communities are affected by reductions in income through a multiplier effect. Reductions in profits and factor payments lead to less local spending. Less local spending means that the incomes of all local firms may be reduced: not just the incomes of rail-using firms." ... "The wealth and incomes of numerous entities within a community may be affected by an abandonment. Rail is complementary to land, so an abandonment curtails the economic opportunities that the surrounding land can offer. A town or city that loses rail service is no longer an acceptable location alternative for firms that require rail transportation to compete effectively. Firms are pulled away from the area toward other locations, and reduced economic development and speculative opportunities are capitalized into lower land values. In addition, decreases in real and monetary incomes reduce the demand for real estate. Owners of land and other real estate see their wealth eroded by decreases in the value of their assets."

to minimize the overall measure of potential adverse impacts, the outputs of the exercise are fully supportable.



Within the context of this approach we are fundamentally looking at impact from a number of different perspectives.

Direct User Benefits (Firm Level Adjustments)

All modes of transportation provide tangible and intangible direct user benefits associated with such considerations as capability, accessibility, capacity, safety/reliability, timing, and the like. Loss of service or the absence of a critical transportation mode and the benefits attached

thereto normally brings with it certain cost implications. In some cases there might be no direct financial cost impact resulting from a change in transportation mode or service, but rather it is the absence of a critical benefit that threatens enterprise viability/sustainability. By way of example, if rail is the “only” transportation mode capable of transporting a particular product (the benefit of capability) the absence of rail does not necessarily imply higher cost but does threaten enterprise viability. As well a change in shipping schedules might not include an increase in cost but because of customer dissatisfaction may result in lower sales.

Direct Economic Impacts (Firm Level Adjustments)

Changes in the availability of a specific transportation mode will normally result in higher costs for both users and nonusers because of an absence or reduction in competition. By way of example in the instance of rail line abandonment:

- For impacted firms and industries there may be impacts in terms of product cost, product quality, or product availability, stemming from increased costs of sourcing key production inputs, and/or increased costs of supplying finished products to customers in both internal and external markets.

Indirect or Downstream Economic Impacts (Firm Level Adjustments)

The aggregate of costs and/or benefits arising from abandonment may also have indirect impacts on other industries and enterprises, including

- Indirect costs and adverse impacts on suppliers and/or users of outputs from the directly affected businesses either resulting from increased transportation costs passed on.

Induced Economic Impacts (Community/Regional Impacts)

Abandonment may also have broader community and regional impacts beyond the inherent impacts on shipper companies and their immediate suppliers and customers, including

- A decrease in regional incomes and regional employment that results from an increase in unemployment in shipper firms and/or lower payrolls (economic leakage);
- Energy and environmental implications arising from increased usage of alternative transportation modalities; and,
- Other induced costs arising from shifts in broader population and business location patterns, land use and land values, which may also affect local government costs and revenues. These changes may ultimately affect income, wealth, the environment, and quality of life both overall and for particular groups of people in the affected geographic area.

6.0 ECONOMIC IMPACTS OF ABANDONMENT

"If firms cannot survive without rail service, and the impact of the abandonment is truly serious, the entire local economy would be affected, not just a single company, and those effects should be apparent over a long period of time."

A Study Of Long Term Economic Impact Of Rail Line Abandonment
Journal of the Academy of Business and Economics,
April, 2008 by John Ozment, H. Barry Spraggins

As a rule the impacts of railway abandonment vary by community/region and by magnitude and reach. The consequence of the proposed abandonment of the Kettle Falls International Railway Line between MP34.3 at or near Laurier, Washington (US/Canada Border) through Grand Forks, BC at MP47 to and including MP48.8 at or near Danville, Washington has both public and private costs associated with the decision. These costs extend broadly across the region. They are significant and they are severe. The framework for assessing this proposed abandonment looks at six critical impacts:

1. Shipper (Firm level) Impacts
2. Community/Regional Economic Well Being
3. Social Costs and Safety Considerations
4. Energy Impacts
5. Environmental Impacts
6. Infrastructure Impacts

6.1 Shipper (Firm level) Impacts

Collectively and individually Pacific Abrasives and Supply Inc., International Reload Centre, and International Forest Products Ltd (Interfor) are significant players in Grand Forks, Christina Lake and the Boundary Region; and especially so today. By any standard of measurement they are substantial contributors to the region's economic and social well being. Most importantly, their viability and vitality is essential to the future.

By way of direct contributions, despite the global economic crisis these enterprises employ 100 local citizens (2008); have local payrolls in excess of \$7.2 million per year (2008); spend near \$2.7 million on local suppliers per year; pay local property taxes and lease fees in excess of \$320.0 thousand per year (2008); and pay in excess of \$90,000 in federal and provincial taxes per year (2008). Arguably these numbers while impressive are well down from previous years and significantly underestimate the overall contributions that these enterprises would provide in a more balanced economic environment and especially so during a period of recovery and growth.

ECONOMIC/FINANCIAL CONTRIBUTIONS OF LOCAL SHIPPERS 2008

	Aggregate Total ^{Note A}
The incremental increase of costs switching to rail represents	2,773,200.00
Payroll	7,200,413.00
Local Supplier Expense	2,677,277.00
Property Taxes	484,837.00
Income Tax	8,171.00
Mineral Tax	10,837.00
Land Lease (To City of GF)	298,320.00
Revenues	9,857,590.00
PST	74,189.00
Net GST	18,134.00
Employee Count	100.00

Note A Shipper data has been aggregated for the purposes of confidentiality.

Source: Pacific Abrasives and Supply Inc., International Reload Centre, and International Forest Products Ltd (Interfor)

ECONOMIC/FINANCIAL CONTRIBUTIONS OF LOCAL SHIPPERS 2006

	Aggregate Total ^{Note A}
The incremental increase of costs switching to rail represents	7,347,600.00
Payroll	20,666,059.00
Local Supplier Expense	4,838,573.00
Property Taxes	518,114.00
Income Tax	55,942.00
Mineral Tax	20,114.00
Land Lease (To City of GF)	277,511.00
Revenues	76,483,725.00
PST	67,518.00
Net GST	740.00

Note A Shipper data has been aggregated for the purposes of confidentiality.

Source: Pacific Abrasives and Supply Inc., International Reload Centre, and International Forest Products Ltd (Interfor)

Quite clearly the proposed abandonment of the Kettle Falls International Railway Line will have serious and irreversible economic impacts (disbenefits) on those shipper companies currently utilizing the rail line and serious implications to companies who may be considering locating in the area (including but not limited to the Aquilini Investment Group). The range of measurable impacts is broad and deep; the more notable being the following.

6.1.1 Shipper Viability and Sustainability

The incremental additional cost to shippers that will accrue as a consequence of abandonment and the necessity to alter shipping patterns from rail to truck will range from an additional \$2.773 million (2008) to \$7.347 million (2006). Properly adjusted over a ten year period these additional costs will total somewhere well in excess of \$27 million and conceivably as high as \$73.5 million. These additional costs will either need to be passed on to customers or absorbed within the individual shipper businesses themselves. Inasmuch as none of the companies has a significant monopolistic position to fully pass on cost increases to its respective customers it is pretty clear that the additional costs will need to be absorbed within the shipper companies themselves. The drag on profitability of each of the shipper companies will be enormous; so much so that the inability to fully defray these additional costs will likely result in the complete closure of one of the shipping firms and the loss of another prospective business.²⁷

6.1.2 Payroll and Jobs (Shipper Companies)

The threat to enterprise viability as a consequence of rail line abandonment will result at a minimum to the immediate direct loss of 20 existing local jobs (FTEs) in shipper enterprises and in excess of \$1.0 million in annual local payroll. The implied threat given an inability to fully absorb \$2.773 to \$7.347 million in additional transportation costs per year amongst all active shippers would be a direct loss of 100 jobs and a direct loss in excess of \$7.2 million in annual payroll.

6.1.3 Suppliers

The impact of rail line abandonment on shipper viability will lead to an annual reduction of \$1.13 million (2008) in purchases from local suppliers or in excess of \$11.3 million over a ten year period. The maximum implied threat if all shippers were to cease operations is a yearly loss of \$2.7 million or \$27.0 million over ten years. It is difficult to estimate the job losses accruing as a result of decreased incomes within supplier enterprise, but on a proportionate basis the loss could be as high as 4 immediate job losses. Importantly as well if all shippers were required to cease operations, this loss of incomes to local suppliers could result in an aggregate loss of 20 to 30 FTEs. (see 6.2.2, below).

²⁷ These assertions are neither spurious nor fanciful. Each of the existing shippers and other prospective interests have reviewed extensively the implications of pursuing other transportation modes and have calculated very carefully the "actual and measurable" impacts the proposed abandonment will convey on their operations.

6.2 Community/Regional Socio-Economic Well-being

There is substantive empirical research that supports the contention that, over and above those direct impacts expected to accrue to shippers, their suppliers and their clients as a consequence of abandonment, there are a number of other indirect impacts that will ripple throughout the community and region. In the case of the proposed abandonment of the Kettle Falls International Railway Line we would expect a number of critical impacts to result. By way of example, consider the following issues:

6.2.1 Economic Development

The advantages of rail access are well recognized and well documented. Reducing the per-mile cost of product transportation means that any production facility can serve a wider market area, with potential gains from scale efficiencies. It also means a factory can draw supplies from a wider area with potential gains in terms of the cost and/or quality of parts and materials coming to the factory. Abandonment would eliminate this critical community asset and result in a loss of economic development opportunities. With the loss of the Kettle Falls International Railway Line the region's attractiveness will be significantly eroded. Firms that require railroads for inbound and/or outbound transport (e.g. shippers of food, lumber, paper, chemicals, and steel products) would not consider locating in a community that has no rail service. At this critical economic transition juncture, such a loss could prove to be near insurmountable for the community/region.

6.2.2 Indirect Jobs (FTEs) and Incomes

It goes without saying that in addition to the spending by shippers on local goods and services, the employees and staff of existing shipper companies (Pacific Abrasives and Supply Inc., International Reload Centre, and International Forest Products Ltd (Interfor)) spend some amount of their incomes locally, have children attending local schools, buy/rent homes locally, pay some amount of local taxes and fees, and so forth. Collectively these behaviors at the firm and employee level induce the gainful employment of other individuals and foster the sustainability of other local enterprises. These "multiplied"²⁸ effects are significant and real. However, while we know that there is a multiplied impact, the estimation of actual multipliers is uncertain at best.²⁹ Nonetheless from the research available it is possible to defend a regional

²⁸ Four multipliers are commonly used to assess economic impacts. The four are: (1) Output, (2) Employment, (3) Income and (4) Value Added Multipliers. A multiplier summarizes the total impact that can be expected from change in a given economic activity. (Multiplier = total change/initial change). Multipliers arise from the fact that local businesses, households and governmental agencies purchase goods and services from one another. Such interaction ...creates indirect or multiplier effects. The more inputs purchased locally and the more consumer expenditures at local shops, the higher the multiplier.

²⁹ That is, multipliers come from input/output tables. They are developed by identifying, surveying, and evaluating all transactions within different sectors of an economy. The collected data are then modeled so that the spending patterns and relationships are identified and developed. Without a proper survey of all spending these imputed effects cannot be measured exactly.

employment multiplier of 1.2 to 1.3 (a cross sectoral estimate) and an income multiplier (aggregate) of 1.4, both of which are exceedingly conservative.³⁰

We know from the discussion in section 6.1 above that shipper payrolls exceeded \$7.2 million/year in 2008 and more than \$20.0 million in 2006; and shipper purchases from suppliers totalled \$2.7 million in 2008 and \$4.8 million in 2006. Confining our analysis to only these expenditure categories, despite a high degree of leakage the indirect incomes generated by these payrolls and purchases from suppliers (income multiplier) is somewhere in the order of an additional \$3.96 million (2008) to \$9.92 million per year (2006) or \$39.6 million to \$99.2 million over ten years. In terms of indirect and induced employment generated by existing shipper efforts, taking into consideration the structure of the local economic base and utilizing employment multipliers established thereto³¹; using both 2006 and 2008 data the numbers of indirect FTE jobs supported on a yearly basis by the presence of shipper companies is 20 to 30 jobs.

Taken one step further, while of course the rail line abandonment is not expected to result in a complete shutdown of all existing shippers though of course it is not beyond believability, it is nonetheless expected to impact not less than 15% of aggregate 2008 payrolls and 15% of purchases from suppliers. For indirect and induced incomes this implies a loss of not less than \$600 thousand per year or a loss of \$6.0 million over ten years; and a loss of not less than 3 to 5 full time indirect/induced FTEs. In a region already bleeding incomes and jobs this impact is significant.

6.2.3 Property Values

It is well documented that traffic noise can have a significant effect on property value. Some analysts assert that a home located adjacent to a major highway may sell for 8% to 10% less when compared to one located along a quiet neighborhood street. Heavy truck traffic is said to lower property value at a rate 150 times greater than cars.

"One study found that traffic volume increases of a few hundred motor vehicles per day reduced adjacent residential property values by 5-25%. Assuming 150 residences per mile of urban residential street, with average values of \$100,000 per residence, this represents an annualized cost of approximately \$1 million (5% discount rate over 25 years). Assuming 500 additional vehicles per day cause average property values to decline by 10%, and that noise represents one-third of

³⁰ See for example: *Economic Base And Input-Output Multipliers A Comparison For Vancouver, B. C.* H. Craig Davis, University of British Columbia, Canada. March 31, 2005; and 2004 British Columbia Provincial Economic Multipliers, Garry Horne, March 2008 BC Stats; and Davis, H. Craig. *Income and Employment Multipliers for Seven British Columbia Regions*. *Canadian Journal of Regional Science* 9 (Spring 1986)

³¹ 2004 British Columbia Provincial. *Economic Multipliers*

this cost (reduced safety and privacy are other possible costs), such traffic noise costs average 18¢ per vehicle mile.”

Transportation Cost and Benefit Analysis – Noise Costs,
Victoria Transport Policy Institute (www.vtpi.org)

Translated to the situation at hand, with abandonment we would expect an increase of 20 to 50 trucks per day, 7 days per week, 52 weeks per year. While difficult to disaggregate the imputed impact exactly, with this increase in traffic volume we would expect some measurable and not insignificant decrease in property values to accrue as a consequence of the proposed abandonment.³²

6.2.4 Municipal Revenues and Taxes³³

Rail line abandonment with its implied costs and disbenefits accruing to existing shippers and the communities in which they are resident will further result in an immediate loss of near \$300 thousand in land lease and property taxes payable to local governments (\$3.0 million over ten years). Given the extreme case of additional slowdowns or shutdowns of all shippers the impact would result in a loss in local tax revenue exceeding \$780 thousand per year or an aggregate loss of \$7.8 million over ten years. Within the context of Grand Forks and its neighbouring area these losses are monumental. In a best case scenario these losses will seriously and severely erode the capacities and capabilities of the local government to provide essential services to its citizens. Already existing services capacities are stretched beyond the limit.³⁴ This additional loss of revenues will be nothing short of catastrophic.

6.2.5 Schools

Rail line abandonment with its implied impact on existing shippers and job losses will also result in the relocation of some families and school age children. Declining school enrollments will result in fewer teachers, services and programs. Importantly as well, redirecting shipments via established road networks will sustainably increase truck traffic in school zones; a more than significant cause for concern for parents and teachers.

³² Logically it seems that a decrease in property value is probably not a linear function, though some analyses of some suggest that with larger volumes it might be. Rather, most likely it is a threshold amount that then takes on linear characteristics after the threshold volume is met. The difficulty in extrapolating the impact to the case at hand, is that very little information exists as to what might be regarded as a “threshold” volume of traffic sufficient to alter a “residential street with residential ambience” to one that is more akin to a “commercial thoroughfare”.

³³ The abandonment will result in a loss of provincial/federal taxes in excess of \$120 thousand. It is impossible to determine how this impact might trickle back to the community level and thus it is not include in this section of the analysis, though it is most certainly a “cost” of abandonment from a Canadian taxpayer perspective..

³⁴ See : The Boundary Region Scoping Study, 2009. CTQ Consultants Ltd And Lochaven Management Consultants Ltd; and from City Of Grand Forks Transition Study, 2009. CTQ Consultants Ltd and Lochaven Management Consultants Ltd.

6.3 Social Costs and Safety Considerations

There is a dearth of research emphasis and actual investigations respecting the safety impacts that accrue to a community and its citizens when a rail line is abandoned. However there is a logical assumption and considerable research to suggest that the increased traffic on an already over taxed road network will result in increased accidents and increased social and financial costs arising from those accidents.

"The propensity of truck-involved accidents is found to be a decreasing function of the number of lanes and the average annual daily traffic (AADT) per lane, and an increasing function of truck percentages of AADT, all factored by time of day and day of week effects and weather conditions. The likelihood of a truck being involved in an accident is particularly sensitive to the proportion of large (five axle or more) trucks."

Truck-Related Crashes and Traffic Levels on Urban Freeways

Golob, T.F., and A.C. Regan. Washington, D.C., 2004

"High rates of highway-related accidents, fatalities and injuries are caused by present-day increased volumes of traffic on roads that were built decades ago, when traffic levels were lower."

Building the Road Ahead

Reinforcing The Link Between A Modern Highway Infrastructure And A Strong B.C. Economy

The B.C. Road Builders & Heavy Construction Association

The following two tables, premised on relatively recent US research and adjusted for 2005 dollars, present the financial implications of accident impact by injury. Importantly these totals do not include estimates of the collateral impacts on families, communities and the like.

**Comprehensive Costs In Police-Reported Crashes
By Abbreviated Injury Scale Severity
(2005 US Dollars)**

SEVERITY	DESCRIPTOR	COST PER INJURY (DOLLARS) ^A
AIS 1	Minor	6,300
AIS 2	Moderate	50,400
AIS 3	Serious	189,000
AIS 4	Severe	617,400
AIS 5	Critical	2,494,800
AIS 6	Fatal	3,276,000

**Comprehensive Costs In Police-Reported Crashes
By K-B-B-C Scale Severity
(2005 US Dollars)**

SEVERITY	DESCRIPTOR	COST PER INJURY (DOLLARS) ^A
K	Fatal	3,276,000
A	Incapacitating	226,800
B	Evident	45,360
C	Possible	23,940
PDO	Property Damage Only	2,520

Note ^A: original values were in US currency. 1995 values were adjusted using a GDP Deflator (see <http://www.measuringworth.com/uscompare>). to match available accident data for 2005.

Source: Crash Cost Estimates by Maximum Police-Reported Injury Severity Within Selected Crash Geometries, October 2005, FHWA-HRT-05-051

Pursuant to a 2007 research publication prepared by the European Commission³⁵ we know that the probability of an accident in Canada based on miles driven is approximately 0.0000005065; and given an estimate of anticipated truck mileage for the year 2008 of 1,478,952 miles (return) and for the year 2006 of 3,889,056 miles (assuming all shippers were to reroute via truck to Spokane and reload from that point) then we would predict .75 to 1.97 accidents per year would occur along this route or more relevantly an additional 8 (2008) to 20 (2006) accidents over the next ten years. We know as well that accidents involving trucks have an increased risk of producing a severe injury or fatality.³⁶

While we cannot predict with accuracy the aggregate costs these additional accidents will imply; nor specifically attribute the incidence to Canadian versus US road networks though arguably the greatest impact would accrue to US roads; nor fully weigh the cost of lost lives and ruined families, by utilizing the information in the tables above we can conservatively estimate that the “direct” socio-economic impacts might range somewhere in the order of \$3.66 million (2008) to \$9.62 million (2006) in Canadian dollar terms over the next ten years; a troubling concern for sure³⁷

³⁵ Statistics Of Road Traffic Accidents In Europe And North America, Vol. LI 2007 The Working Party On Transport Statistics Economic Commission For Europe, Geneva

³⁶ Modelling Truck Accident Severity On Two-Lane Rural Highways, H. Nassari and A. Edrissi, April 2006. One out of every nine traffic fatalities involves a trucking accident. Truck driver fatalities are all too common. In 2002, large trucks accounted for 4 percent of all registered vehicles and 8 percent of total vehicle miles traveled. In 2003, large trucks accounted for 8 percent of all vehicles involved in fatal truck crashes and 4 percent of all vehicles involved in injury and property damage only crashes

³⁷ As a means of calculating the financial impact we took the statistical evidence as presented in the report Statistics Of Road Traffic Accidents In Europe And North America and developed proxies therefrom: utilizing a conservative 2% of accidents as

6.4 Energy Impacts

"We have plenty of energy, but we're not so rich that we can just throw it away — when you throw energy away, you're throwing money away. Energy efficiency is a no-brainer — and Canadians get that.... The Government of Canada is working with companies across the country to develop and implement ideas to cut energy consumption."

Notes for a speech
Honourable Lisa Raitt, P.C., M.P. Minister of Natural Resources
to the Oakville Chamber of Commerce.,
Oakville Ontario, August 20, 2009

There is today considerable national and provincial concern for sustainable energy management, and evidence of this is the priority political agenda afforded energy conservation programming and the plethora of new energy efficiency initiatives introduced most notably by the Governments of Canada and British Columbia. By definition then, energy efficiency is an important economic consideration in assessing the impact of transportation changes generally, and the impact of the proposed KVR rail line abandonment specifically. Importantly the implications on energy usage extend well beyond the length of the KFR trackage proposed to be abandoned by OmniTRAX

The type and amount of energy consumption through the shift of shipping patterns from rail to truck transportation has significant effects on energy usage. In fact there is substantial empirical evidence that confirms that shipping via rail is the most efficient means of transportation especially when transporting over large distances or when shipping bulk and/or heavy goods such as is the case of the KFR and the line area and shippers under discussion here:

"In terms of fuel efficiency, railroads are three times more fuel-efficient than trucks. If just 10 percent of the freight moved by highway were diverted to rail, the nation (the United States) could save as much as 200 million gallons of fuel each year. And, railroad fuel efficiency has increased by 72 percent since 1980. Prior to 1980, a gallon of diesel fuel moved one ton of freight an average of 235 miles" (approximately 295 miles with one imperial gallon)....."In 2008, one imperial gallon of fuel moved one ton of freight via rail transit an average of 529 miles (or 170 kms per litre; Canadian Statistics). Compared to trucking, rail transit does sport higher efficiency numbers - today's average trucks currently hover around 130 ton-miles per gallon. ³⁸

having a fatality and 142% of accidents having injuries (2005 statistics). In terms of injuries we assumed 60% were AIS1; and the remaining 40% were evenly divided between AIS2, AIS3, AIS4, and AIS5. We added to this total an estimate for property damage in 75% of all cases.

³⁸ Union Pacific Website, "Union Pacific Saves Fuel While Increasing Efficiency", http://www.uprr.com/newsinfo/releases/environment/2006/0428_fuel_economy.shtml and also see "Association Of American Railroads", Circular 2008 <http://newsgroups.derkeiler.com/Archive/Misc/misc.transport.trucking/2008-06/msg00035.html> and also see http://www.railcan.ca/documents/publications/1824/2008_11_25_RAC_Trends_2008_en.pdf pp22.

"Overall, railroads and rail suppliers have reduced the weight and increased the capacity of rail cars to improve fuel efficiency and reduce emissions."³⁹

Or put another way:

"... trucks require on average about 3,400 BTUs per ton-mile of cargo (41 ton-miles per gallon), twice the rail average and 1.7 times that for rail TOFC. ...or...more simply put trucks use more energy"⁴⁰

Given that trucking were a viable option⁴¹ and given aggregate distances (ton miles) travelled in 2008 as 59,158,080 ton miles and 155,585,750 ton miles in 2006 (assuming return and includes shipper data for Pacific Abrasives and Supply Inc., International Reload Centre, and International Forest Products Ltd (Interfor)) fuel consumption for rail in 2008 would approximate 111 thousand imperial gallons (292 thousand imperial gallons in 2006) and fuel consumption for truck in 2008 would approximate 455 thousand imperial gallons (904 thousand imperial gallons in 2006). Aggregate incremental fuel consumption (wastage) as a consequence of rail line abandonment would total somewhere in the order of 344 to 612 thousand gallons/year and over a ten year time horizon would total somewhere in the order of 3.4 million to 6.1 million gallons.

It is quite clear that fuel efficiency in all economic sectors is important to the Canadian economy, not to mention the environment (see 6.5, below). It is also quite clear that the use of rail versus truck is significantly more fuel efficient and thus the proposed abandonment or loss of rail access will unnecessarily result in inefficient and wasteful energy consumption, a cost borne by all Canadians and Americans. At a time when energy conservation is a critical concern, this prospect seems untenable.

6.5 Environmental Impacts^{42,43}

"Railways are far less polluting and more energy-efficient than any other form of surface transportation..."

³⁹ *Ibid*

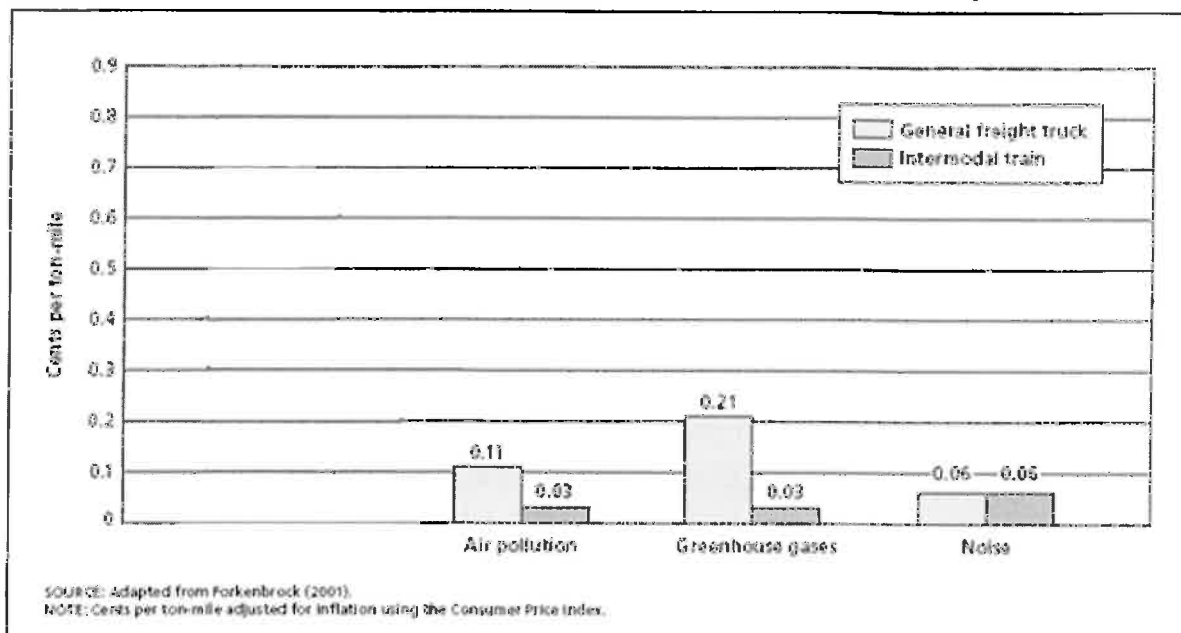
⁴⁰ June 2009, <http://ehsmanager.blogspot.com/2009/06/huge-30-reduction-in-rail-fuel.html>

⁴¹ While at the current time it is quite likely that truck transportation is not a wholly realistic option for Pacific Abrasives and Supply Inc, the comparative information re:energy usage and waste is relevant and noteworthy.

⁴² One major difference for railway works and operations under the Canadian Environmental Assessment Agency regime is the inclusion of railway abandonment's in the environmental assessment process. Under the CEAA, an environmental assessment must consider the total environmental impact of rail line abandonment, examining the effects of abandonment on road and rail traffic congestion and addressing the issue of potential accidents involving dangerous goods. "The federal environmental assessment process is applied whenever a federal authority has a specified decision-making responsibility in relation to a project, also known as a "trigger" for an environmental assessment. Specifically, it is when a federal authority(a) proposes a project; (b) provides financial assistance to a proponent to enable a project to be carried out; (c) sells, leases, or otherwise transfers control or administration of federal land to enable a project to be carried out; and/or (d) provides a license, permit or an approval that is listed in the Law List Regulations that enables a project to be carried out." see: <http://www.ceaa-acee.gc.ca>

⁴³ The discussion within this section is not intended to replace/subsume nor diminish the broader and more comprehensive approach and investigation inherent in a full environmental impact assessment as might be undertaken by the CEAA. Rather it is presented here to illustrate that there are measurable, and arguably serious, environmental impacts arising from the proposed abandonment that should be considered in the overall review of the proposed abandonment.

Comparison Of Environmental Costs Between Rail and Truck Transportation



The redirection of transporting goods via rail to trucking, as would be implied in the specific matter of abandonment referred to herein, has significant impacts beyond those already mentioned. Such traffic shifts result in measurable and significant environmental costs that will be borne by the public, but caused by private industry decisions. The environmental issues of concern include protection of sensitive ecosystems, air quality, traffic congestion, energy consumption (see 6.4, above), land use, community impacts, water resources, land resources and preservation of the quality of life (see 6.3, above).

As noted in the charts above and below and tables below, rail is by far the more environmentally friendly of the two modes.

Environmental Performance Of Various Freight Transportation Alternatives By Emissions

RANK	NOX	VOCS	PM	CO	CO2
1 - Most efficient	Rail	Rail	Air	Rail	Rail
2	Marine	Marine	Rail	Marine	Marine
3	Truck	Air	Marine	Air	Truck
4 - Least efficient	Air	Truck	Truck	Truck	Air

Estimates Of Emission Rates From Rail Freight Transportation, Grammes Per Tonne-Kilometer Of Freight

Source	CO2	CO	HC	NOx	SO2	PM
OECD ⁴⁴ /EU	48	0.15	0.07	0.4	0.18	0.07
EC/RAC 2005 ⁴⁵	17	0.092	0.024	0.3	0.022	0.011

Source: The Environmental Footprint of Surface Freight Transportation, John Lawson, Lawson Economics Research, Inc Ottawa, Canada. 2007

Estimates Of Emission Rates From Truck Freight Transportation Grammes Per Tonne-Kilometer Of Freight

Source	CO2	CO	HC	NOx	SO2	PM
OECD/EU	140	0.25	.32	3	.18	.17
Transport Canada 2000	103	1.52	.14	2.6	.05	.11

Source: The Environmental Footprint of Surface Freight Transportation, John Lawson, Lawson Economics Research, Inc Ottawa, Canada. 2007

It is evident from the information presented that with increased truck traffic and fuel consumption resulting from the proposed rail line abandonment, there will be a substantive increase in greenhouse gases and air pollution in the community/region in respect of:

- carbon dioxide and monoxide (CO₂ and CO) an increase of 8,707 million grammes and 9.4 million grammes respectively or 22,900 million and 24.7 million grammes (2006);
- hydrocarbons (HC) an increase of 23.7 million grammes (62.3 million grammes using 2006 as a proxy);
- nitrogen oxide (NO_x) an increase of 245 million grammes (644 million grammes using 2006 as a proxy); and,
- particulate matter (PM) an increase of 9.44 million grammes (24.8 million grammes using 2006 as a proxy).

On another note, while it has been proven that the means of transportation shippers utilize has a direct impact on several components of the environment through emissions, these operations also encroach upon the environment in terms of land use. Highway construction for trucking and automotive transportation has resulted in the appropriation of large areas of valuable land⁴⁶. Where due to increased traffic volumes, roads are necessarily widened the impacts are also especially significant. While we cannot predict with certainty that the increased traffic volume arising as a consequence of abandonment will require additional road widening and better access points, there is little doubt that some level of improvement will occur at a cost borne by the public.

⁴⁴ Organization for Economic Cooperation and Development, Report for the European Union.

⁴⁵ Environment Canada and Railway Association of Canada.

⁴⁶ In Canada, highways take up approximately twelve times more land than railways.

Especially pertinent to the case at hand (especially in the matter of Aquilini Investment Group's proposed interest in the region), it should be pointed out as well that in terms of the transportation of hazardous materials the record for rail significantly exceeds that of truck transport.

Comparison of Truck-Rail Safety in the Transport of Dangerous Goods

	Truck Mode	Railway Mode
Annual tonnes transported	33 million	16 million
Reportable accidents (5-year average)	225	58
Accident rate estimate per million tonnes	6.8	3.6

Source: Resource Systems Management International Inc., "Profile of Commercial Vehicle Safety in Canada," Report prepared for the Railway Safety Act Review Committee, October 1994, p. 6-5; and interview.

6.6 Infrastructure Impacts

"The abandonment of a short line railroad can impact rural communities and local economies in a variety of ways. The transfer of rail movements to trucks accelerates the deterioration of local roads and highways and adds to traffic congestion ... As short lines primarily serve rural communities, it is the regional and local road network that would handle the additional truck traffic resulting from a rail abandonment."

The Benefits of Rail Freight Service, Parsons
http://www.state.in.us/indot/files/chapter_3.pdf

"Throughout rural British Columbia our service and side road access is in a state of decay and seriously affecting the economy of our resource-based communities."

Building the Road Ahead
Reinforcing The Link Between A Modern Highway Infrastructure And A Strong B.C. Economy
 The B.C. Road Builders & Heavy Construction Association

The most obvious implication arising from a proposed rail line abandonment is the diversion of rail traffic onto local roads and highways. In Grand Forks and the Boundary Region this means the addition of heavy commercial vehicles (trucks) onto light duty, relatively low volume roads not normally designed for high volumes of heavy traffic. While there will be an increase in the volume of traffic it is not expected that this increase will significantly impact on capacity and no significant adverse economic impact is expected to accrue there from.⁴⁷ However, this also means diversion onto aging infrastructure

⁴⁷. "A review of the Highway Capacity worksheets for level of service (LOS) measurement for two segments on US 395 in the vicinity of the border (MP 257.86 to MP 270.3) and in the vicinity of the US 395 section that transitions from a two-lane to a four-lane section (MP 180.44 to MP 182.82). Please note, 2007 border counts were used to analyze the LOS, as the values should be a reasonable representation of 2009 counts (volumes dropped in 2008 due to the economy and gas prices... but are now rebounding). Based on the projected additional truck volumes ... the findings indicated the LOS did not change with closure of the rail line: LOS C maintained near the border and LOS D maintained near the four-lane section." Charlene I. Kay, P.E., Eastern Region Planning Engineer, Washington State Dept. of Transportation.

that is requiring at a minimum some modest upgrading that will likely require major upgrading and rehabilitation given the added heavy traffic volume anticipated with abandonment. The result is that the provincial and federal governments, and by implication individual taxpayers, is burdened with the costs of maintenance and repair on roads that by definition will deteriorate much more quickly. These additional costs are not insignificant, consider for example the following⁴⁸:

- Repaving of a 12 year old road costs \$65,000/km;
- At 20 years, repaving and rehabilitation cost is \$400,000/km; and
- At 24 years, the complete rehabilitation is \$1 million/km.

According to the Federal Highway Administration in the United States, the marginal pavement cost of an 80,000-pound combination truck traveling on a rural interstate highway is 12.7 cents per mile.⁴⁹ Given that trucking were an option, and given aggregate distances travelled return using 2008 totals of 1,478,952 miles and 2006 totals of 3,889,643 miles the impact of the rail abandonment would substantially and more rapidly deteriorate the local road system thereby shortening the useful life of a predominantly secondary route and add an additional pavement cost in excess of \$3.76 million to \$9.88 million over a twenty year period.

7.0 CROSSBORDER ISSUES AND OTHER RIPPLE EFFECTS

While not the central focus of this report we would be remiss in ignoring the broader implications of the proposed abandonment to enterprises, regions and communities located beyond that short stretch of rail from Laurier to Danville, specifically those areas within the United States that will be directly and indirectly impacted by the proposed abandonment.⁵⁰

Quite obviously with abandonment there will be measurable and significant impacts on nearby communities and enterprises within the United States and some of these impacts will ripple further down the line as local shippers either pass on the increased transportation costs to U.S. based customers (enterprises and individual citizens) affecting the viability and profitability of downstream firms; or U.S. customers will be required to source elsewhere acceptable substitutes and in the case where these customers are not end-users once again the viability and profitability of these downstream firms is adversely impacted. By way of example, the product produced and sold by Pacific Abrasives to its customers in the United States (including specific military/defense institutions) is substitutable but

⁴⁸ *Building the Road Ahead Reinforcing The Link Between A Modern Highway Infrastructure And A Strong B.C. Economy*. The B.C. Road Builders & Heavy Construction Association.

⁴⁹ *Potential Impacts of Rail-Line Abandonment on Highways*, UGPTI Department Publication No. 170, *Grain Transportation in the Great Plains Region in a Post-Rationalization Environment*, Denver Tolliver and John Bitzan, December 2005. See: <http://www.ugpti.org/pubs/html/dp-170/pg3.php>.

⁵⁰ As noted previously, there is a very real concern that the proposed abandonment in Canada is a precursor to a further request by OmniTRAX for an entire abandonment of the the western portion of the Kettle Falls International Railway Line between Kettle Falls, Washington and Grand Forks, British Columbia.

only at three times its current price. Clients utilizing this product and/or their end-users will as a consequence of abandonment be subjected to substantially higher costs/prices.

Quite clearly the majority of those broad transportation externalities arising from rail abandonment (safety, road erosion); environmental degradation; inefficient/wasteful energy use will predominantly have their impacts in the United States. Certainly the aggregate of measurable transportation externalities alone (safety/marginal pavement cost) could well total in excess of \$7.0 million to \$8.0 million over the next 5 to 10 years. These issues are not insignificant and, most importantly, they are inevitable if abandonment proceeds.

Given the attraction and prevalence of cross border shopping (Boundary Region residents going to Colville and/or Spokane) another significant disbenefit arising from the proposed abandonment of the line in Canada is the ripple effect on jobs and incomes in the United States. The loss of incomes to retail outlets in Colville and Spokane as a consequence of shipper cutbacks or closures (unemployment) will be significant. We know from the discussion above that direct and indirect incomes generated by shipper payrolls and purchases is somewhere in the order of an additional \$10.0 million (2008) and a portion of this amount trickles to the United States by individuals using their payroll to buy goods and services and by shipper companies sourcing some of their product. Given a very modest 10% to 20% as an allocation of amounts spent in the United States the annual loss to U.S. based businesses would approach \$2.0 million per year and \$20.0 million over ten years

Collectively the ripple effects of abandonment to U.S. citizens, communities and enterprises are concerning. At a time when there are only a few modest signs of economic recovery, impacts of this magnitude are significant.

8.0 CONCLUDING THOUGHTS AND SUMMARY

Rail service is a vital prerequisite to the future economic well-being of numerous communities and regions across Canada. It has an essential place in securing continuing competitiveness and business wealth creation.

There is more than ample evidence that the proposed abandonment of the Kettle Falls International Railway Line between MP34.3 at or near Laurier, Washington (US/Canada Border) through Grand Forks, BC at MP47 to and including MP48.8 at or near Danville, Washington (US/Canada Border), including all yard tracks, sidings and spur tracks is worthy of serious concern. It is very clear from the analysis that the impacts on existing shippers and the communities/region in which the rail line serves are real, significant and severe.

Quite clearly the case can be made that the proposed abandonment is not an acceptable nor an attractive option; not for the shippers who use it, their employees, their suppliers, nor their customers. Further the proposed abandonment represents a significant and severe financial and economic loss for

the communities and region it serves; As a vital and sustainable enclave the community/region is extremely vulnerable today more than at any other time in its history. It is especially vulnerable to severe dislocation and decline brought about by a fragile economic base with little opportunity to readily diversify; lost jobs, lost opportunities and a gathering storm of social issues. These circumstances represent the context in which this abandonment is proposed and they magnify the impacts of the proposed abandonment.

APPENDICES

CANADA TRANSPORTATION ACT
PART III - DIVISION V - TRANSFERRING AND DISCONTINUING THE OPERATION
OF RAIL LINES
SECTION 140 - 146

Definition of "railway line"

140. (1) In this Division, "railway line" includes a portion of a railway line, but does not include

- (a) a yard track, siding or spur; or
- (b) other track auxiliary to a railway line.

Determination

(2) The Agency may determine as a question of fact what constitutes a yard track, siding, spur or other track auxiliary to a railway line.

Three-year plan

141. (1) A railway company shall prepare and keep up to date a plan indicating for each of its railway lines whether it intends to continue to operate the line or whether, within the next three years, it intends to take steps to discontinue operating the line.

Public availability of plan

(2) The railway company shall make the plan available for public inspection in offices of the company that it designates for that purpose.

When sale, etc., permitted

(3) A railway company may sell, lease or otherwise transfer its railway lines, or its operating interest in its lines, for continued operation.

Continued operation of a portion of a line

(4) A railway company that sells, leases or otherwise transfers a portion of a grain-dependent branch line listed in Schedule I, or its operating interest in such a portion, to a person who intends to operate the portion shall continue to operate the remaining portion for three years, unless the Minister determines that it is not in the public interest for the company to do so.

Compliance with steps for discontinuance

142. (1) A railway company shall comply with the steps described in this Division before discontinuing operating a railway line.

Limitation

(2) A railway company shall not take steps to discontinue operating a railway line before the company's intention to discontinue operating the line has been indicated in its plan for at least 12 months.

Community-based groups

(3) Subsection (2) does not apply and a railway company shall without delay take the steps described in section 143 if

(a) the federal government, a provincial, municipal or district government or a community-based group endorsed in writing by such a government has written to the company to express an interest in acquiring all or a portion of a grain-dependent branch line that is listed in Schedule I for the purpose of continuing to operate that line or portion of a line; and

(b) that line or portion of a line is indicated on the company's plan as being a line or a portion of a line that the company intends to take steps to discontinue operating.

Advertisement of availability of railway line for continued rail operations

143. (1) The railway company shall advertise the availability of the railway line, or any operating interest that the company has in it, for sale, lease or other transfer for continued operation and its intention to discontinue operating the line if it is not transferred.

Content of advertisement

(2) The advertisement must include a description of the railway line and how it or the operating interest is to be transferred, whether by sale, lease or otherwise, and an outline of the steps that must be taken before the operation of the line may be discontinued, including

(a) a statement that the advertisement is directed to persons interested in buying, leasing or otherwise acquiring the railway line, or the railway company's operating interest in it, for the purpose of continuing railway operations; and

(b) the date by which interested persons must make their interest known in writing to the company, but that date must be at least sixty days after the first publication of the advertisement.

Agreement with VIA Rail

(3) The advertisement must also disclose the existence of any agreement between the railway company and VIA Rail Canada Inc. in respect of the operation of a rail passenger service on the railway line if VIA Rail advises the railway company that it agrees to the transfer of the company's rights and obligations under the agreement to any person to whom the line, or the company's operating interest in it, is transferred.

Termination of agreement

(4) If VIA Rail has not advised the railway company that it agrees to the transfer, or has advised that it does not agree to the transfer, the agreement terminates in respect of the railway line on the effective date of any transfer of the line, or the company's operating interest, under this Division.

Disclosure of process

144. (1) The railway company shall disclose the process it intends to follow for receiving and evaluating offers to each interested person who makes their interest known in accordance with the advertisement.

Evaluation of offers

(2) If the advertisement has disclosed the existence of an agreement mentioned in subsection 143(3), the railway company shall, in evaluating each offer, consider whether the offeror is willing to assume the company's rights and obligations under the agreement in respect of the railway line.

Negotiation in good faith

(3) The railway company shall negotiate with an interested person in good faith and in accordance with the process it discloses and the interested person shall negotiate with the company in good faith.

Net salvage value

(3.1) The Agency may, on application by a party to a negotiation, determine the net salvage value of the railway line and may, if it is of the opinion that the railway company has removed any of the infrastructure associated with the line in order to reduce traffic on the line, deduct from the net salvage value the amount that the Agency determines is the cost of replacing the removed infrastructure. The party who made the application shall reimburse the Agency its costs associated with the application.

Time limit for agreement

(4) The railway company has six months to reach an agreement after the final date stated in the advertisement for persons to make their interest known.

Decision to continue operating a railway line

(5) If an agreement is not reached within the six months, the railway company may decide to continue operating the railway line, in which case it is not required to comply with section 145, but shall amend its plan to reflect its decision.

Remedy if bad faith by a railway company

(6) If, on complaint in writing by the interested person, the Agency finds that the railway company is not negotiating in good faith and the Agency considers that a sale, lease or other transfer of the railway line, or the company's operating interest in the line, to the interested person for continued operation would be commercially fair and reasonable to the parties, the Agency may order the railway company to enter into an agreement with the interested person to effect the transfer and with respect to operating arrangements for the interchange of traffic, subject to the terms and conditions, including consideration, specified by the Agency.

Remedy if bad faith by an interested person

(7) If, on complaint in writing by the railway company, the Agency finds that the interested person is not negotiating in good faith, the Agency may order that the railway company is no longer required to negotiate with the person.

Offer to governments

145. (1) The railway company shall offer to transfer all of its interest in the railway line to the governments mentioned in this section for not more than its net salvage value to be used for any purpose if

- (a) no person makes their interest known to the railway company, or no agreement with an interested person is reached, within the required time; or
- (b) an agreement is reached within the required time, but the transfer is not completed in accordance with the agreement.

Which governments receive offer

(2) After the requirement to make the offer arises, the railway company shall send it simultaneously

- (a) to the Minister if the railway line passes through
 - (i) more than one province or outside Canada,
 - (ii) land that is or was a reserve, as defined in subsection 2(1) of the Indian Act, or
 - (iii) land that is the subject of an agreement entered into by the railway company and the Minister for the settlement of aboriginal land claims;
- (b) to the minister responsible for transportation matters in the government of each province that the railway line passes through; and
- (c) to the clerk or other senior administrative officer of each municipal or district government through whose territory the railway line passes.

Time limits for acceptance

(3) After the offer is received

- (a) by the Minister, the Government of Canada may accept it within thirty days;
- (b) by a provincial minister, the government of the province may accept it within thirty days, unless the offer is received by the Minister, in which case the government of each province may accept it within an additional thirty days after the end of the period mentioned in paragraph (a) if it is not accepted under that paragraph; and
- (c) by a municipal or district government, it may accept it within an additional thirty days after the end of the period or periods for acceptance under paragraphs (a) and (b), if it is not accepted under those paragraphs.

Communication and notice of acceptance

(4) Once a government communicates its written acceptance of the offer to the railway company, the right of any other government to accept the offer is extinguished and the railway company shall notify the other governments of the acceptance.

Net salvage value

(5) If a government accepts the offer, but cannot agree with the railway company on the net salvage value within ninety days after the acceptance, the Agency may, on the application of the government or the railway company, determine the net salvage value.

Discontinuation

146. (1) Where a railway company has complied with the process set out in sections 143 to 145, but an agreement for the sale, lease or other transfer of the railway line or an interest therein is not entered into through that process, the railway company may discontinue operating the line on providing notice thereof to the Agency. Thereafter, the railway company has no obligations under this Act in respect of the operation of the railway line and has no obligations with respect to any operations by VIA Rail Canada Inc. over the railway line.

No obligation

(2) If the railway line, or any interest of the railway company therein, is sold, leased or otherwise transferred by an agreement entered into through the process prescribed by sections 143 to 145 or otherwise, the railway company that conveyed the railway line has no obligations under this Act in respect of the operation of the railway line as and from the date the sale, lease or other transfer was completed and has no obligations with respect to any operations by VIA Rail Canada Inc. over the railway line as and from that date.

Compensation

146.1 A railway company that discontinues operating a grain-dependent branch line listed in Schedule I, or a portion of one, that is in a municipality or district shall, commencing on the date on which notice was provided under subsection 146(1), make three annual payments to the municipality or district in the amount equal to \$10,000 for each mile of the line or portion in the municipality or district.

References

- Babcock, Michael and W., James L. Bunch, James Sanderson, and Jay Witt (2003a), "Impact of Short Line Railroad Abandonment on Highway Damage Costs: A Kansas Case Study," *Transportation Quarterly*, Vol. 57, No. 4 (Fall).
- Babcock, Michael and W., James L. Bunch, James Sanderson, and Jay Witt (2003b), "Impact of Short Line Railroad Abandonment on Wheat Transportation and Handling Costs: A Kansas Case Study," *Transportation Quarterly*, Vol. 57, No. 4 (Fall).
- Ballou, Ronald H. (2004), *Business Logistics Management*, 5th edition (Upper Saddle River, NJ: Prentice-Hall).
- Census Bureau (2007), "USA Counties," (U.S. Department of Commerce, U.S. Census Bureau), (<http://censtats.census.gov/usa/usa.shtml>).
- Coyle, John J., and Edward J. Bardi, and C. John Langley (2002), *Management of Business Logistics: A Supply Chain Perspective*, 7th edition, (St. Paul, MN: West Publishing Company).
- Farris, Martin T. (1969), "Transportation Regulation and Economic Efficiency," *American Economic Review*, Vol. 59, No. 2 (May).
- Feser J, Edward and Glenn D. Cassidy Rethinking state rail policy: the benefits of rail preservation include more than jobs. <http://www.uprr.com/uprr/she/cts/rvtruck.shtml>
- Gittings, Gary and Evelyn Thomchick (1987), "Some Logistics Implications of Rail Line Abandonment," *Transportation Journal*, Vol. 26, No. 4 (Summer).
- Golob, T.F., and A.C. Regan. "Truck-Related Crashes and Traffic Levels on Urban Freeways". Paper presented at the 83rd Annual Meeting of the Transportation Research Board, Washington, D.C., 2004
- Harper, Donald V. (1969), "Transportation Regulation and Economic Efficiency," *American Economic Review*, Vol. 59, No. 2 (May).
- Hans Vogel song is an assistant professor of recreation and leisure studies at East Carolina University. Alan R. Graefe is an associate professor of recreation and park management at Penn State University.
- John J. Miller, and C. Phillip Baumel, and Thomas P. Drinka "The Impact Of Rail Abandonment Upon Grain Elevator And Rural Community Performance Measures" <http://www.tc.gc.ca/eng/railsafety/publications-ontrack-205.htm>
- Larkin, John, and David Ross, and Matthew Grady (2005), "The Budding Railroad Renaissance," (Baltimore, MD: Legg Mason Wood Walker, Inc., November 18).
- Lawson, John, "The Environmental Footprint of Surface Freight Transportation", Lawson Economics Research, Inc Ottawa, Canada. 2007
- Lerner, George, PhD. "Regulating Competition in Canada's Rail Industry" by George Lerner Consulting August 8, 2000
- McIntosh, R., and Goeldner, C. (1984). *Tourism: Principles, practices, philosophy* (4th ed.). New York: John Wiley & Sons.

- Miller, J., John and C. Phillip Baumel, and Thomas P. Drinka "The Impact Of Rail Abandonment Upon Grain Elevator And Rural Community Performance Measures"
- Moore, R.L., & Barthlow, K. (1998). The economic impacts and uses of long distance trails: A case study of the Overmountain Victory National Historic Trail. USDI National Park Service.
- Moore, R. L., Gitelson, R. J., & Graefe, A. R. (1994). The economic impact of rail-trails. Journal of Park and Recreation Administration 12 (2), 63-72.
- Nelson, J.P. "Highway noise and property value" Journal of Transport Economics & Policy, May 1982.
- Sanderson, James and Michael W. Babcock (2005) "County-Level Impacts of Rail Line Abandonments: A Kansas Case Study," Journal of the Transportation Research Forum, Vol. 44, No. 3 (Fall).
- Ozmen, John t and H. Barry Spraggins, "A study of long term economic impact of rail line abandonment" Journal of the Academy of Business and Economics, April, 2008
- Surface Transportation Board (STB) (2007), "Decisions and Notices," (www.stb.dot.gov/decisions/readingroom.nsf/ByDocketPrefix).
- Taylor, R S, and Casavant, K L, and Lenzi, J C "Rail Line Abandonment and Public Acquisition Impacts on Economic Development Transportation Research Board Publications Office" Publication Date: 1990
- TERA International Group, INC."Private Sector Investment In Railways"
- The B.C. Road Builders and Heavy Construction Association, "Building the Road Ahead - Reinforcing the link between a modern highway infrastructure and a strong B.C. economy". The Railway Association Of Canada, ISBN 0-9734044-7-7 "2008 Railway Trends, Rail Versus Trucking: Who's The Greenest" By Rocky Mountain Institute, Rebecca May 20, 2009
- The Working Party On Transport Statistics Economic Commission For Europe, Geneva "Statistics Of Road Traffic Accidents In Europe And North America" ,Vol. Li 2007
- Tolliver, Denver and John Bitzan, Potential Impacts of Rail-Line Abandonment on Highways, UGPTI Department Publication No. 170, Grain Transportation in the Great Plains Region in a Post-Rationalization Environment, December 2005. See: <http://www.ugpti.org/pubs/html/dp-170/pg3.php>
- U.S. Department of Transportation Federal Highway Administration "Motor Vehicle Accident Costs" T 7570.2 October 31, 1994
- Washington, DC: U.S. Department of Transportation Federal Railroad Administration (FRA) (2005), Intermodal Transportation and Inventory Cost Model: Highway-to-Rail Intermodal User's Manual, (March).
- Weisbrod, Glen (Economic Development Research Group); and Burton Weisbrod, (Northwestern University) "Assessing the Economic Impact of Transportation Projects, Transportation Research Board, Number 477, October 1997.
- Wood, Donald F. and James C. Johnson (1983), Contemporary Transportation, (Tulsa, OK: PennWell Publishing, Co.).