Strategic Options in Canadian Transport Policy: The Interface between Trade Pressures and Domestic Policy

Peter W.B. Phillips\(^1\) and James Nolan\(^2\)
\(^1\) Political Studies and \(^2\) Bioresource Policy, Business and Economics, University of Saskatchewan, Canada

ABSTRACT

Canada is facing inexorable pressures to realign its bulk freight transportation policies, especially in Western Canada. National transportation policies, as one of the three legs of the National Policy (with a common tariff wall and policies in support of immigration from Great Britain), have been used since 1876 as a nation-building tool, to support and to build economic, social and cultural links between the provinces of Canada. This policy dovetailed well with economic flows for more than a century. But since the mid 1980s and the restructuring of national economic policy (particularly the liberalization of trade globally, the development of a stronger continental economic area through the NAFTA and the replacement of European with Asian immigration), economic flows have begun to diverge from the built transport infrastructure in Canada. This paper examines the roots of current transport policy in Western Canada, assesses the pressures for and scope of change and offers some observations on three key transport policy challenges facing Western Canada and the federal system: rate setting; competition and mergers policy; and harmonization.

1. INTRODUCTION

Historically, transportation has been viewed as the foundation of a modern economy and society. It provides the means of moving people and things in, out and around a nation state. Until quite recently, most transportation systems were seen as national assets that were vital to the national security of a nation (Strange 1988). Canada was no exception. For the better part of a hundred years, the operation of the National Policy, with its Canada-first transportation policy that supported and nurtured east-west flows of people, goods and services, was consistent with that orientation.

Times are changing. The accelerating liberalization of trade in goods and services, and the concomitant changes in the flow of people and information, are changing both the direction and scale of transportation flows and, in some very real ways, are changing the nature of transportation itself. For many sectors of the economy, transportation is no longer simply the arms-length conveyance of goods,
but now is inextricably linked into supply chain systems, underpinning the quality standards and performance of leading firms. Many firms have extensive contractual or vertical ownership arrangements that integrate transportation services into just-in-time or quality-assured production and marketing systems. And there is significant evidence that the incremental returns in most industries now are being generated in or by these co-ordinated value chains. Transportation is a critical part of that world, and this has consequences as to how surface transportation policy in North America will evolve. Traditional measures of industrial structure, competition and performance can often imply different policy responses depending on the specific role played by the transportation system. Many of the current regulations maintained by the three national—and in some cases provincial or state—governments are irrelevant to this future; in some instances the presence of disconnected and inconsistent systems may be actually working at cross purposes to the users of transportation services.

This paper contributes to the debate about the nature and reform of Canadian and North American transportation policy by examining the historical roots of Canadian current built capacity and policies (section 2), laying out the underlying economic argument for change (section 3), and evaluating the possible options for reform of our current transport policies, identifying the areas of both congruence and convergence (section 4). Section five discusses the challenge of finding a more effective governance system for transportation policy while section six offers some tentative concluding comments and policy advice about the challenge of reforming the modern freight transport system.

2. TRANSPORTATION AND THE NATIONAL POLICY

In some economies and societies it might be most appropriate to examine the underlying economic and social structures and exchanges to help understand the nature of the transportation system. For instance, the transportation systems that emerged in Europe in the past 500 years tended to grow organically in lock step with the surrounding economy and society (Nolan, 2003). That approach would not be useful in either the US or Canada—transportation policy and infrastructure has been viewed by both states as a “nation building” instrument in support of realizing some form of “manifest destiny” on the North American continent. In most instances, transportation led development, and not the other way around.

In Canada, the Conservative government of John A. Macdonald formally implemented the National Policy in 1879. Macdonald defeated the Liberal Party in 1878, which had run on a policy of free trade with the US. The National Policy was a three-pronged development strategy for the newly founded Dominion of Canada, and vestiges of that policy remained in operation for more than a century. In the first instance, the Policy involved a set of high tariffs to protect the fledgling manufacturing industry in Central Canada. The stated goal was to create a strong manufacturing base in Canada by serving a captive national market, thus making the nation more secure and less reliant on the United States. The policy was not entirely inwardly looking—it had a strong, retaliatory component, as the US had enacted high tariffs against Canadian imports after the end of a brief period of free trade under the Canadian-American Reciprocity Treaty (1855-66).
Two other aspects are generally viewed as part of the National Policy (Eden and Mollot, 1993). Shortly after the tariffs were enacted, the federal government targeted to secure dominion over the west. While Manitoba (1870), Rupert’s Land (1870), and BC (1873) had already been incorporated formally into Canada, there were only limited transportation links to them. There was a real fear that western expansion by the American Republic would overtake and subsume British interests in the west. Hence, by 1881 an effort to build a transcontinental railway was well underway. As the railway neared completion, it became clear that it needed both traffic to move and, at least for some period, extensive subsidies to carry that traffic. Western immigration was the answer. The railway received subsidies to carry settlers and settlers' effects to the west and, after 1898, a succession of agreements and legislation subsidized the movement of grains and other produce from the west to the rest of Canada and ultimately for export to foreign markets. Over time, what eventually became the two current Class I railways in Canada (CP and CN) became the backbone of western transportation. As provinces were carved out of the Northwest Territories, they enacted regulations and built roads, largely to support local access to the national rail network. After 1958 the federal government began to invest in national road infrastructure (initially in the TransCanada Highway and now an array of east-west and a few north-south routes), triggering the expansion of more inter-provincial and cross-border road hauling.

One visible effect of our ebbing and flowing National Policy is the current build-up of transportation infrastructure. In 2005, Western Canada had about 38,000 km of rail track, with CN and CP each having about 40% of the network, with shortlines and regional railways making up the rest. The Western Provincial Transportation Ministers (2005) assert that only about 11,500 km of that is viewed as part of the “strategic rail network.” While we also have about 780,000 km of road network, in the same manner only about 14,100 km of parallel and interconnected roads are viewed as “strategic.” Today, there are six major Canada-US border crossings in Western Canada, where road, rail or both link Canada with southern markets: White Rock, BC/Blaine, Wash; Kingsgate, BC/East Port, ID; Coutts, AB/Sweetgrass, MT; North Portal, Sk/Portal, ND; Emerson, Mb/Pembina, ND; and Middlebro, Mb/Northgate, MN. More than 50% of Canada’s marine exports are generated in the West; about 85% of which goes through Western Canada’s seven major ports and 17 public harbours.

Elements of the National Policy have been slowly dismantled over the past 50 years but little has materially changed in our transportation system. Economic integration between Canada and the US surged during the Second World War, with greater specialization in key defense-related industries and in the 1965 the Auto Pact integrated the automobile industry in the two nations. Meanwhile successive rounds of negotiations at the General Agreement on Tariffs and Trade (GATT) lowered international tariffs on many industrial products. The 1980s marked a watershed, as Canada and the US negotiated in 1988 the Canada-US Trade Agreement (CUSTA). In 1994, Canada and the US, with Mexico, negotiated an extended and broadened agreement entitled the North American Free Trade Agreement (NAFTA). The next year wide-ranging reform was achieved at the GATT level, with the World Trade Organization Agreement, which extended the general principles of free trade to a larger group of countries and related those principles
to 29 special areas of trade (e.g. agriculture, intellectual property, services and textiles).

But more importantly, various treaties designed to open trade now have a real potential to liberalize access to Canada’s transportation system, both to firms seeking to use our capacity and to potential cabotage (Prentice and Wilson, 1998) by foreign-based transportation firms who want to operate on Canadian roads and rails. While such an open access policy has not yet been implemented in North America, there is a valid argument that the NAFTA provisions related to technical barriers to trade (chapter 9), investment (chapter 11) and cross border trade in services (chapter 12) and the WTO General Agreement on Trade in Services (GATS) could have a major impact on the demand for and supply of transportation services in Western Canada in coming years. So far, policy debates have only begun to scratch the surface concerning the implications of such possibilities.

While there has been limited preliminary discussion about western transportation policy, there is a real risk that the Western Transport Ministers have put the cart before the horse. Without a full and comprehensive review of the economic trends facing the transportation infrastructure, they have already identified $15.7 billion of infrastructure investments that they would like to see made (Western Transport Ministers, 2005). Undoubtedly many of these would be valuable and appropriate, but in the absence of consideration of the changed economic circumstances, a significant share of this could be misdirected into low-value uses.

3. THE ECONOMIC IMPERATIVE FOR CHANGE

The rise and then decline of the National Policy has had profound effects on transport interests in Canada. To shed some light on this critical policy debate, it is essential to examine theoretical underpinnings along with empirical evidence. To start, a basic tenet of international economics is that distance and size matter in shaping the volume of bilateral trade between markets. Like the gravitational equation used in physics to determine forces of attraction between bodies, an economic gravity model assumes that trade flows (economic attraction) are largely determined by physical distance and economic size. In this case, size is represented by real gross domestic product (GDP), and distance captures transaction costs, particularly transportation costs.

Using an economic gravity model, McCallum (1995) found that, in addition to the impact of distance, national borders reduce trade by more than what would have been expected on the basis of tariff protection and other formal trade barriers. McCallum examined inter-provincial and province-state trade to calculate the magnitude of the so-called “border” effect with the United States. He concluded that trade between any two provinces was more than 20-times more intense than trade between neighboring provinces and states.

A number of others have replicated this work, using more refined methods and current data (esp., post-CUSTA and post-NAFTA data). These works have identified a rapid decline in the magnitude of this border effect. For instance, Helliwell (1998) estimated that the rapid increase in north-south trade observed after the implementation of the FTA reduced the border effect from 17 in 1981 to about 12 in 1996. Helliwell also estimated the border effect for service industries to
be a lot higher than for goods, with a ratio ranging from 29 to 42 for the 1988-96 period. Anderson and van Wincoop (2001) derived a border effect equation from a theoretical model of multilateral trade, estimating a border effect of only 10.7. For comparison purposes, it is useful to note that the border effect for US inter-state trade and for the internal trade of the European Union are considerably lower (i.e., about 1.6), suggesting that the Canada-US border effect could fall substantially as trade continues to be liberalized. Finally, Coulombe (2002) calculated that eliminating the remaining trade barriers between Canada and the US could increase bi-lateral trade by 25%, while Anderson and van Wincoop (2001) estimated trade could ultimately rise by up 44% (Downs 2004).

This shift can already be seen in statistics on trade and transportation flows in Western Canada. The four Western provinces currently generate about 60% of the total tonnage of goods shipped in Canada. Unlike in Ontario, Quebec and the Maritimes, only a very small portion of the tonnage is destined for markets in the west. Instead, large portions are shipped to the BC coast for export to the Asia Pacific region, or east to central Canada (in many cases for shipment to Europe) or south to the US (and increasingly Mexico) (Table 1).

<table>
<thead>
<tr>
<th>Province</th>
<th>Total tonnage shipped</th>
<th>% within province or region</th>
<th>% to BC</th>
<th>% to rest of Canada</th>
<th>% to US and Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlantic</td>
<td>26,829,556</td>
<td>20.6%</td>
<td>0.3%</td>
<td>67.5%</td>
<td>11.7%</td>
</tr>
<tr>
<td>Quebec</td>
<td>30,531,981</td>
<td>19.2%</td>
<td>5.5%</td>
<td>30.3%</td>
<td>45.1%</td>
</tr>
<tr>
<td>Ontario</td>
<td>39,548,209</td>
<td>20.3%</td>
<td>6.4%</td>
<td>31.0%</td>
<td>42.3%</td>
</tr>
<tr>
<td>Manitoba</td>
<td>9,862,890</td>
<td>5.2%</td>
<td>7.5%</td>
<td>49.7%</td>
<td>37.5%</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>36,789,138</td>
<td>0.5%</td>
<td>34.5%</td>
<td>30.8%</td>
<td>34.1%</td>
</tr>
<tr>
<td>Alberta</td>
<td>46,767,202</td>
<td>6.4%</td>
<td>48.6%</td>
<td>13.8%</td>
<td>31.3%</td>
</tr>
<tr>
<td>British Columbia</td>
<td>53,226,013</td>
<td>63.0%</td>
<td>63.0%</td>
<td>17.8%</td>
<td>19.2%</td>
</tr>
</tbody>
</table>

Source: Transport Canada.

One concern that has been raised in the public policy arena is the possibility that imports from the Asia Pacific Economic Cooperation region, either for consumption in Canada, or for re-export to the US, could push Canadian products out of the Western Canadian transportation system. In fact, there is some evidence that this may already be happening. Canadian trade data shows that imports from the APEC region (less the US and Mexico) grew by 166% over the 1996-2005 period, compared with growth of only 62% of imports from the US, and rapid but still minimal trade with Mexico (Table 2). Overall, the offshore APEC markets contribute more than one-third of Western Canada's incoming trade. And while appropriate data to study the issue are not easily accessed, there is some hint in the data that a portion of that trade moves along a rail corridor to final destinations in the US. We note that Statistics Canada reports all provinces re-exported $27.8 billion, up 68% over the previous decade and equal to 6.4% of total exports in 2005.
Table 2: Imports to Western Canada from the APEC region, 1996-2005

<table>
<thead>
<tr>
<th></th>
<th>1996</th>
<th>% total</th>
<th>2005</th>
<th>% total</th>
<th>% diff 96-05</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL APEC</td>
<td>$32,949</td>
<td></td>
<td>$62,238</td>
<td></td>
<td>89%</td>
</tr>
<tr>
<td>US</td>
<td>$24,812</td>
<td>75%</td>
<td>$40,165</td>
<td>65%</td>
<td>62%</td>
</tr>
<tr>
<td>Mexico</td>
<td>$437</td>
<td>1%</td>
<td>$1,620</td>
<td>3%</td>
<td>270%</td>
</tr>
<tr>
<td>Rest of APEC</td>
<td>$7,700</td>
<td>23%</td>
<td>$20,453</td>
<td>33%</td>
<td>166%</td>
</tr>
</tbody>
</table>

Source: Strategis.

The rise in the North-South trade can be observed in Tables 3 and 4. The US Bureau of Transportation Statistics reports that incoming full container crossings rose from between 7% to 1130% over the 1996-2003 period, depending on location. Total transborder shipments rose by 354%, faster than the overall movements between Canada and the US, which raised the western share of the total to 41% in 2003 from 39% in 1996.

Table 3: Incoming Rail Container (Full) Crossings, US-Canadian Border, 1996-2003

<table>
<thead>
<tr>
<th>State Crossing</th>
<th>1996</th>
<th>2003</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idaho</td>
<td>24,912</td>
<td>68,047</td>
<td>173%</td>
</tr>
<tr>
<td>Minnesota</td>
<td>20,940</td>
<td>257,508</td>
<td>1130%</td>
</tr>
<tr>
<td>Montana</td>
<td>18,195</td>
<td>19,539</td>
<td>7%</td>
</tr>
<tr>
<td>North Dakota</td>
<td>20,087</td>
<td>137,965</td>
<td>587%</td>
</tr>
<tr>
<td>Washington</td>
<td>43,415</td>
<td>96,057</td>
<td>121%</td>
</tr>
<tr>
<td>US - Canada Border Total</td>
<td>329,983</td>
<td>1,402,388</td>
<td>325%</td>
</tr>
</tbody>
</table>

West as % total 39% 41%


Even though Western Canadian shipments into the US transported by truck doubled over the 1996-2003 period, they did not keep up with growth in other parts of our bi-lateral trade, the result being the west’s share fell actually during the period (Table 4).

Table 4: Incoming Loaded Truck Container Crossings, US-Canadian Border, 1996-2003

<table>
<thead>
<tr>
<th>State crossing</th>
<th>1996</th>
<th>2003</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Montana</td>
<td>120,882</td>
<td>141,476</td>
<td>17%</td>
</tr>
<tr>
<td>North Dakota</td>
<td>73,754</td>
<td>294,941</td>
<td>300%</td>
</tr>
<tr>
<td>Washington</td>
<td>235,340</td>
<td>433,468</td>
<td>84%</td>
</tr>
<tr>
<td>Idaho</td>
<td>44,947</td>
<td>46,502</td>
<td>3%</td>
</tr>
<tr>
<td>Minnesota</td>
<td>30,707</td>
<td>88,603</td>
<td>189%</td>
</tr>
<tr>
<td>US - Canada Border Total</td>
<td>1,420,629</td>
<td>5,673,101</td>
<td>299%</td>
</tr>
</tbody>
</table>

West as % total 36% 18%

4. THE CURRENT SURFACE TRANSPORT POLICY LANDSCAPE

The transportation policy landscape is populated with a wide range of issues and debates. Overall, one could characterize the current policy landscape by three key issues—rate regulation, competition and merger policy, and harmonization—which, when paired with the two main freight transportation modes, engages one or more of the three North American national governments and a wide range of provincial or state governments in the policy debate.

4.1. Freight Rate Issues and Regulation

A range of regulatory approaches related to rate setting are currently used in the rail and road transportation sectors in the three NAFTA countries. Road carriage rates tend to be less regulated than rail, but the rail rate structure has been increasingly deregulated in recent years.

The Canadian rail industry is primarily rate deregulated, with most goods moving under freely negotiated rates and confidential contracts between shipper and railway. The notable exception to this is agricultural (grain) movement (which contributes about 20% of total rail revenues in Canada), where freight rates are still regulated, although the regulations have changed significantly in recent years (Nolan and Drew, 2002).

For all rail movements in Canada, a series of pro-competitive and relatively easy to implement regulations are currently in place to handle those situations where carriers are believed to be exploiting substantial market power over shippers (Bonsor, 1995). One of these regulations is intended to provide relief to shippers from “excessive” freight rates by obligating railways (under special circumstances) to give regulated access to their proprietary track to another competing railway. Another rate relief mechanism known as final offer arbitration (FOA) is also available to Canadian shippers. FOA is intended to be used in those cases where none of the other rate relief mechanisms are applicable, and as such, when FOA has been used for rate relief, it has been as a rate relief of last resort (Vercammen et al, 1996).

In contrast, the US industry was de-regulated in 1980 as a response to almost a century of strict economic regulation. While there exist formal regulatory provisions intended to provide rate relief for affected shippers, these have generally proven to be costly and difficult to implement in practice (Massa, 1998). In cases where a shipper seeks a freight rate review, their main recourse would be to construct (at their expense) a stand-alone cost test (SAC test) as a point of comparison to the existing rail movement and the freight rate.¹ The SAC rate test is derived from the theory of contestable markets and has proven to be quite

¹ For a rail movement, the SAC test is defined as the full cost that would be incurred by a "hypothetical" competing railway (which must build its own track) in order to move a pre-determined set of goods between a prescribed origin and destination. Only this movement is permitted in the costing review (i.e. no scope economies are permitted). More details are provided in Ex parte 347 (STB, 1996). Surprisingly, some SAC tests have yielded rate caps even higher than the 180% R/VC cap. The famous McCarty Farms case is an example of this (Massa, 1998).
generous to railways. However, the right to conduct a rate review via the stand-alone cost method is granted only after a revenue/variable cost (R/VC) test on the contested movement has been conducted (Tye, 1991). If the R/VC measure for a particular movement is determined to be greater than 180% (a condition defined by the US regulator as "market dominance"), then under certain additional conditions, a rate review using the SAC test will be permitted. A US rate review also requires calculations of revenue adequacy—a financial performance analysis indicating whether a firm earns the minimum returns necessary to cover their cost of capital requirements (McLure, 1986). This latter measure gained increased importance to the US and Canadian rail industry in recent years, with calls to include explicit revenue adequacy targets in any future Canadian rail regulation (Conference Board of Canada, 2000). Operationally, the financial status of a railway as indicated by this measure would determine whether or not the railway could be subject to a potential rate review under the 180% R/VC rule (Tye, 1991). To many analysts (including Tye), the 180% R/VC cut-off seems somewhat capricious. What is critical here is that if rail regulations between Canada and the US were to be harmonized at some point in the future, the use and merits of revenue adequacy as part of a larger regulatory process would need to be further examined.

In the early 1990s, the Mexican government also liberalized many aspects of its rail industry. Previously, under the Mexican constitution, railways were deemed a national asset and therefore all significant investments and foreign ownership had to be approved by the National Commission on Foreign Investment (Brooks, 2001). This policy significantly hampered Mexico’s efforts to fund upgrades to its outdated rail system, so the Federal government decided to significantly privatize its national railways in order to allow foreign investment and ownership. The passing of NAFTA in 1994 resulted in the further liberalization of transportation industries in Mexico and up to 49% foreign ownership of rail companies was permitted (Brooks, 2001). The latter policy contributed to growth within the industry through the turn of the century.

Rail movements in Mexico are dominated by shorter hauls that are mostly competitive with trucking. While rail rates are virtually unregulated, there are mechanisms for shippers to contest rates (although this seems to occur infrequently) and regulatory cases are conducted in conjunction with the Mexican Federal Competition Commission (Allen, 2001). So unlike in Canada and the US, railways in Mexico are still mostly regional in scope and they only compete with each other on a limited basis. But governing this very different national rail network is a competition policy that appears to be more similar to Canadian than US policy.

The primary impetus for the historical regulation of the trucking industry in both Canada and the US was as a response to political pressure from the regulated rail industry in both countries. The competing rail freight industry was actually heavily regulated in the post “robber baron” era while trucking on roads was initially left unregulated in both countries. Ultimately political pressure for a “level playing field” in freight transportation forced regulation on the road freight

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2 As of this writing, rate relief procedures in the U.S are being reviewed by the STB (STB, 2006). The current review is mostly a response to pressure from shipping organizations representing many smaller shippers who perceived that the test was biased against them (STB, 2004).
industry (Viscusi et. al, 1996). That situation has changed significantly in recent years.

Prolonged debate at both federal and provincial levels in Canada preceded full trucking industry deregulation in the 1980s (Dionne et al. 1998). It took until 1988 for all provincial governments to adopt a "reverse onus test" for entry into the trucking industry. Under this test, new carrier entry was assumed a priori to be in the best interest of the public unless, within five years of entry, it could be shown that this was not the case (Bonsor, 1995). The federal government introduced provisions in the Motor Vehicle Transport Act requiring that a "fitness-only test" for entry be in place in all provinces by 1993 (applying only to inter-provincial trucking). In the years since de-regulation, the Canadian trucking industry has undergone even more changes, with many companies transformed or subsumed at various times through buy-outs or mergers.

While extensive economic regulation related to entry and rate setting were introduced in the US in the 1930s, these have since been wound down and eliminated. The US trucking industry was fully deregulated through the Motor Carrier Act of 1980, a process concurrent with rail de-regulation. Subsequently, entry into the American trucking industry became a more transparent process than in Canada. At the time, a number of Canadian companies sought to take advantage of this and began to set up operations in the US, increasing competition within the large American market (Madar, 2000). As a stark example of what can happen when key transportation policies are misaligned, a ban on permits to Canadian carriers was implemented in 1982 and continued until 1988, when both countries agreed to open borders for international truck movements (Bonsor, 1995). Even though entry policies continue to be very closely aligned in trucking, we note that looming security issues could still throw the industry back to the situation of the early 1980s (Nganje et al., 2004).

In Mexico, trucking is regulated federally by the Secretariat of Communications and Transport (Secretaría de Comunicaciones y Transportes, SCT). The Secretariat performs all regulatory functions: it develops policies and regulations pertaining to highway transportation; grants operating permits to trucking companies; regulates federal roads; and enforces transportation laws. The legislation is a general legal framework on road transportation and is very similar to Canada’s Motor Vehicle Transport Act. However, the specific enforcement of trucking regulation is left largely to the Normas Oficiales Mexicanas (NOMs) or Official Mexican Standards, published in Mexico’s Federal register (North American Commission for Environmental Cooperation, 2002). Similar to rail transport, the Secretariat and related laws generally focus on protecting the safety of the environment and citizens through the implementation of NOMs, as opposed to regulating rates. This leaves Mexican trucking with a basic regulatory framework similar to that of its NAFTA partners.

Taking advantage of the economic opportunities of the NAFTA, WTO and APEC will require much greater policy harmonization within NAFTA. Ultimately, this is likely to require sustained deregulation or, at least, harmonized rate regulation across the systems. Clearly, the building blocks are in place—trucking is almost fully deregulated and rail deregulation has progressed to the point where

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3 The Canadian provinces enforced various forms of their own economic regulation, but Federal de-regulation was seen as a crucial step to increasing competition in the industry.
some harmonization could be envisaged. For instance, an optimal outcome that addresses both efficiency and equity concerns in the rail industry would probably be a mixture of US policy, where rate regulation is virtually non-existent but inflexible to potential market power abuses, and Canadian policy, which possesses much better mechanisms to encourage competition between railways (Grimm and Harris, 1998). Such pro-competitive policies will likely be necessary to ensure that the rail industry operates and competes more effectively against trucking for international traffic.

Shippers tend to favor merger policy harmonization because of the enormous potential for merged, multi-modal transportation firms to reduce costs associated with complicated supply chain logistics in the international movement of goods. In addition, there is the possibility that regional price discrimination could be reduced with the existence of large, multi-national, multi-modal transportation firms. Handled carefully, this situation could eventually standardize freight rates for similar movements between Canadian, American, and Mexican carriers (Lande, 1989).

4.2. Competition and Merger Policy

While rail and road policies in North America have historically focused on the development and use of distinct transportation modes, inter- or multi-modal transportation operators are growing in importance (Inter-modal Transportation Institute, 2001). There are enormous economies of scale and scope available via inter-modal transportation, but these will depend upon both alliances and mergers to conduct trade related business.

Two events in the post-NAFTA era offer a glimpse into the future of NAFTA transportation policy. In 1995 Transportacion Maritima Mexicana (TMM) sold 49% of their rail line to the Kansas City Southern Rail Network (KCSI) to create a strategic “alliance” to serve a vital corridor for NAFTA trade (KCSI, 2002). A North America-wide alliance was completed with a 1998 agreement between KCSI and CN Rail to integrate CN’s network into the alliance. While such a business alliance is closely related to full merger, it is noteworthy that Mexican ownership restrictions prevented this transaction from becoming a full merger/buy-out (Brooks, 2001). From the US perspective, since the US partner in this trans-national company remained relatively small both in size and market share, the STB kept its distance and the alliance (including CN) was allowed to proceed. Conversely, in 2000 the US rail regulator issued an abrupt moratorium on all US rail mergers in response to a large proposed merger. The moratorium followed a series of controversial hearings in Washington over the proposed merger between US-owned and operated Burlington Northern Railroad and Canadian-owned and operated Canadian National Railway (Canadian National, 2000). The proposed international rail merger was never challenged in Canada, but after almost 200 US shippers at the hearings complained about the potential impact of the proposed merger, the merger was disallowed. While that merger moratorium was subsequently lifted by the STB in June 2001, very little merger activity has occurred in the US since. Clearly, government oversight on mergers now limits the ability of firms to engage in optimal cross-border industrial organizations.

As alluded to above, the record shows that each country tends to respond
differently to proposed mergers.

In Canada, the Competition Bureau regulates business mergers at the federal level. The Bureau’s mandate asserts that maintaining strong competition should allow businesses to adapt to and compete in the economy and global markets. The Competition Bureau oversees mergers through Part VIII: Matters Reviewable by Tribunal, sections 91-103 of a federal statute entitled the *Competition Act*, R.S.C. 1985, c. C-34. The Act serves to regulate trade and commerce conspiracies, practices and mergers, which affect competition (Government of Canada, Competition Bureau, 2001a). The Act covers all three traditional classes of mergers, including horizontal (where the seller is a competitor of the buyer), vertical (where the seller is a supplier or client of the buyer) and conglomerate (where firms have no previous record of interaction) mergers (Campbell, 1997). A merger (defined in s. 91 of the Canadian Competition Act) is deemed to have taken place if a "significant interest" is acquired in one company by another company in a particular market. Significant interest is obtained if one party gains the ability to considerably influence the economic behavior of other businesses by the methods described in the definition (Campbell, 1997). If the proposed merger is large enough to qualify as a "notifiable transaction" under s.110 of the *Competition Act*, Part IX, the parties to that merger must notify the Commissioner of Competition at the Competition Bureau. The parties must then provide specific information to the Commissioner, through the Mergers Notification Unit of the Competition Bureau, regarding the details of the merger. They must also wait for a specified period of time after submitting a notification before completing the merger (Government of Canada, Competition Bureau, 2001c).

In order to determine whether or not the merger has a substantial negative effect on competition, the Commissioner has the right to examine whether the merger lessens or is likely to lessen competition in a market (Government of Canada, Competition Bureau, 2001b). But it is important to note that the Tribunal cannot judge that a merger prevents or is likely to prevent competition strictly on the basis of evidence showing an increase in market share (Flavell et al., 1997). Following an evaluation of the merger under these guidelines, if the Commissioner believes that a merger has or is likely to have consequences that work against competition, he or she will submit an application to the Competition Tribunal. Following investigation using the merger evaluation guidelines, the Tribunal may issue an order against a party to the merger if it finds that the merger would negatively impact competition in the relevant market. What is noteworthy is that in Canada, there are no specific merger regulations governing rail and trucking transportation. Mergers by companies involved in the transportation industry are subject to the same scrutiny as all other mergers.

In the United States, competition and mergers are regulated at both the federal and state level, although the federal Acts are the main source of regulation for inter-state mergers. Federally, mergers are regulated by the Federal Trade Commission (FTC) Bureau of Competition (Peritz, 1996). The FTC first enacted competition laws in 1890 with the federal statute known as the *Sherman Antitrust Act* 15 USC. (Sherman Act). These laws applied to all businesses involved in interstate commerce. They prohibited practices such as price-fixing and market monopolization in order to prevent the restraint of trade, protect the interests of
consumers and prevent monopoly activity in business (Peritz, 1996). Since the enactment of the *Sherman Act*, comparable statutes have been passed in most states to regulate anticompetitive acts within a state (Peritz, 1996). Since the Sherman Act, a number of other Acts have been passed in the United States to govern mergers, each addressing specific aspects of the activity. For instance, the *Clayton Act*, s.7 and the *Hart-Scott-Rodino Act* (1976) describe specific requirements regarding notices that must be met prior to beginning the merger process, intended to prevent the phenomenon of "midnight mergers" (Holmes, 1992).

The Department of Justice's Merger Guidelines (1984) outline regulations and procedures that must be followed in order to successfully complete a merger, and also provide guidelines regarding merger review (Roberts, 1992). In 1992, the Horizontal Merger Guidelines were enacted to regulate mergers between competitors, thereby removing horizontal mergers from the control of the 1984 Merger Guidelines (Holmes, 1992). Non-horizontal mergers remain regulated by the Merger Guidelines (1984) under s.4 of that Act (Roberts, 1992).

One other noteworthy difference between Canada and US merger guidelines is the use of a measure of market power. As of 1992, the US no longer uses the simple market share measures that are employed by the Competition Bureau in Canada. Instead, the Herfindahl-Hirschmann Index (HHI) was formally accepted as the measure of market power (Viscusi et al, 1996). Finally, in 2000, the Antitrust Guidelines for Collaborations Among Competitors were passed, providing oversight for joint ventures.

Mergers involving surface transportation industries in the US are overseen by the Department of Transportation, through the Surface Transportation Board (STB). The STB was established in 1996 following the dissolution of the Interstate Commerce Commission (ICC), which had regulated surface transportation since the late 19th century (Surface Transportation Board, 2001). Under federal transportation laws, notice of all rail mergers must be made to the STB prior to any merger being undertaken. The Board allows time for a public commentary and review process and undertakes its own review of any proposed merger, examining environmental, economic, and competitive effects of the merger prior to issuing a formal decision on the merger (Surface Transportation Board, 2001).

Rail merger policy has been controversial. In the wake of the disastrous 1996 Union Pacific-Southern Pacific merger and the aforementioned 2000-2001 moratorium stemming from the blocked Burlington Northern-Canadian National merger, the STB issued new guidelines that are clearly intended to accommodate the real possibility of trans-national rail mergers. In their October 2000 proposed update to existing merger guidelines, the STB specifically noted (Section 1180.1) that “the Board will cooperate with those Canadian and Mexican agencies charged with approval and oversight of a proposed transnational railroad combination... Future mergers are likely to raise novel transnational issues, possibly implicating the North American Free Trade Agreement and requiring substantial cooperation with Canadian or Mexican regulatory authorities” (Surface Transportation Board, 2000).

In Mexico, merger policy is governed federally by the Comision Federal de Competencia (Mexican Competition Federal Commission), established under the *Federal Law of Economic Competition* 24-XII-1992 and its corresponding...
regulations. This legislation was the first thorough set of Mexican provisions enacted to facilitate and protect full and open competition (Trade Commission of Mexico in Los Angeles, 2002). The Mexican Competition Commission enforces this legislation and carries out appropriate investigations necessary to determine if a given economic activity is anticompetitive. The Federal Law of Economic Competition covers two main areas of competition policy: monopolistic market practices; and mergers and acquisitions. It is worthwhile to note that although the law clearly prohibits absolute monopolistic conduct, it also prohibits relative monopolistic conduct including vertical agreements between non-competitors for the purpose of eliminating competition from the market (Trade Commission of Mexico in Los Angeles, 2002). This provision means that there exists the possibility that “alliances” between single mode transportation companies could be rendered anticompetitive under Mexican law if the Commission determines that the agreement would unjustly drive competitors from the market according to the specific criteria outlined in the law.

At present, Mexico does not possess antitrust law specific to mergers between transportation companies. Generally, Mexican law empowers the Commission to dissolve completed mergers or prohibit the completion of a merger when it can be shown to have the effect of damaging competition in a particular market by applying criteria specified under the law (Trade Commission of Mexico in Los Angeles, 2002). In addition, Mexican law requires a pre-merger notification process to be followed for certain types of mergers, in a manner similar to the Canadian Competition Act. The Commission then evaluates the merger and renders a decision as to whether it restricts competition beyond an acceptable level. If the Commission approves the merger, the decision is binding and the merger is no longer open to opposition.

A fully integrated transportation system between NAFTA countries would require NAFTA-level provisions regarding industry mergers. Clearly, as international competition increases, so will the interest in amalgamation and the formation of alliances between companies involved in inter-modal transportation. Given the size of the potential market, mergers might enable transportation companies to become more efficient and powerful competitors for transportation business (Neale et al., 1980). As noted, US laws in this regard are slightly more developed than the equivalent policies in either Canada or Mexico. It would be worth considering whether a US-style policy could be a foundation for any NAFTA-wide transportation merger policy guideline. US transportation merger policy is already similar to that applicable in Canada while Mexico’s merger policy virtually ignores transportation. Ultimately, a seamless transportation legal system with a clear, common set of guidelines on mergers should allow the logistics of international transportation to be greatly simplified (Transport Canada, 1996). If policy harmonization happens it will make it easier for shippers, carriers, and industry officials to achieve trade goals and grow their businesses.

4.3. Harmonization of Transportation Law and Regulation

Considering the legal and regulatory strides to date made by NAFTA in many key industries, we find that North American surface transportation is still only part of the way towards reasonable policy harmonization. Globalization and the
importance of modern supply chains means that the transportation industry and associated public policy need to complete a similar process to ensure continued trade growth. While this kind of policy shift might seem relatively straightforward, there are a number of obstacles.

A major obstacle to improved transportation policy harmonization is the fundamental difference in legal systems between the NAFTA members. As is well known, most of Canada (especially Western Canada) and the entire United States employ a common law legal system. In Mexico, although elements of common law exist, the country largely relies upon a civil law system. Civil law tends to overlook details and focus instead on expansive, general principles, whereas the doctrines of common law are established in judgments regarding specific disputes. The “rules” of common law are found largely in case law and are supported by statute, whereas the “rules” of civil law are codified in a Civil Code and are supported by statute. Common law gives priority to jurisprudence, whereas civil law gives priority to codified doctrine. These differences could raise difficulties with respect to harmonizing NAFTA transportation law because courts in the different jurisdictions use different methods of framing law, or may favor different remedies for the settlement of disputes. In addition, each legal system has different rules regarding conflict of laws (common law) or private international law (civil law), which could make determination of jurisdiction to hear an international dispute difficult.

In spite of this, there are important commonalities upon which to structure policy harmonization. Both systems of law used in North America recognize the right of the contracting parties to choose the law governing their agreements. This makes it possible for the NAFTA countries to outline in the provisions of an agreement how they would like NAFTA-related transportation disputes to be resolved (e.g. in accordance with American law or by an independent tribunal applying public international law).

One of the major accomplishments of NAFTA was the establishment of a clear set of regulations to ensure that each country would be subjected to the same treatment when conducting business on the other's territory. Ultimately, harmonization is about making systems interconnect and operate more efficiently and effectively. Since implementation of NAFTA, trade flows in North America have become increasingly North-South rather than East-West (Transport Canada, 1996). The freight transportation industry would likely welcome even tighter policy harmonization within North America to support this trade expansion. In turn, freight transportation firms will need to consider even greater investment into inter-modal services. To obtain both outcomes will require the development of a more coherent policy at the NAFTA level regarding both inter- and intra-modal alliances and mergers.

5. THE QUEST FOR A BETTER DISTRIBUTED GOVERNING SYSTEM

Central control of most parts of the economy and society is now recognized as impossible. Furthermore, it is becoming increasingly clear that one cannot simply think of governing any system, such as transportation, as what states or governments do; rather, governing involves an array of constructed processes that determine how different interactions will lead to specific outcomes.
Three convergent approaches—economic, political and sociological—provide useful insights into the nature of the governing system and offer a few hints on how we can bring greater clarity to the options. In the first instance, there would appear to be three basic domains of governing (state, markets and society), which operate on somewhat different aspects of life (political, economic and social) and use different governing mechanisms (command and control, exchange and voluntary association). Each of these structures manages one or more social processes, which when combined produces increasingly greater complexity: competition and interdependence among actors creates new roles for actors to fill; actors are at times being encouraged to add new subsystems; and large systems are made up of smaller simpler subroutines. These complex systems inevitably involve variably coupled interdependent, multiple entities, within a dense web of causal connections, which are open to external events. While the synergies within these open systems may exhibit non-linear behaviours, they also generate synergies and feedback that can stimulate learning and innovation (see Phillips, 2007, for more detail on distributed governing systems).

Most would agree that governing systems are increasingly distributed, multilayered and interdependent, some involving self-organizing networks and others which are centerless systems defined by subsidiarity and mutual recognition. Governance of transportation policy in the 21st century is inevitably going to need to come to grips with the need to define and use these distributed systems and subsystems for governing.

The political opportunity and economic imperative for pursuing a new form of North American surface transportation policy would appear to be well grounded. Moreover, our review of the regulatory and policy efforts related to rate setting, competition and mergers policy and harmonization of general rules suggests that there remains significant room for improvement. However, we believe that, in each policy area examined, there is one potential platform (or at times competing platforms) on which a common policy or nested, distributed set of structures could be developed.

It is noteworthy that a number of transportation lobby groups in Canada and the US may be willing to participate in open discourse. For instance, engaging the rail sector would be relatively straightforward, as there are so few Class I carriers operating across North America and they effectively have a single lobby group (the American Association of Railroads, with the Canadian arm called the Railway Association of Canada). Conversely, the trucking industry is far more fragmented, even within each country. Finding a consensus or fair representation among trucking operators can be difficult at the best of times. But engaging trucking in this discourse would be critical as trucking continues to be crucial to the evolution of North American supply chains. A more distributed, purpose-built set of structures in support of regional transportation needs or linked to established supply chains might be an alternate model in this part of the sector.

What is missing, perhaps, is some discussion about how one can precipitate such a radical rethink of our respective governing systems. To precipitate discussion, one suggestion might be to look to the European Union, which has recently enacted a set of common transportation regulatory standards among member states (Harrison, 2000). The economic gravity modeling results mentioned earlier suggest they have been very effective in reducing artificial
barriers to economic specialization and trade. This in the first instance might provide a strategic benchmark. The structure and operation of the Single Market Treaty negotiations before 1992 in Europe might also provide some guidance on the nature of a negotiating structure—one way forward might be to meld an interest-based bargaining model with an extended use of the EU-based principles approach. While in the EU the overarching principle of subsidiary (i.e. that matters ought to be handled by the smallest or lowest competent authority) is largely restricted to government structures, in the North American transportation context one could see the possibility of subsidiarity to non-state authorities, including both market and collective actors. Clearly more thought is needed on how to initiate such an effort.

6. CONCLUSIONS

With the dramatic increase in trade volumes in North America since the implementation of NAFTA, as well as new security concerns that have arisen since the terrorist acts of 2001, harmonization of industrial policy between the NAFTA countries has become a more prominent issue. Parties from all sectors continue to closely examine the benefits and costs of common regulations, as well as possibilities for further negotiation.

More work needs to be done to establish how such a change in governance structure might be motivated across such a large and geographically dispersed industry. Security issues now seem to be driving US border and trade policy with Canada and Mexico—but if security issues can reliably be set aside, it is noteworthy that a number of transportation lobby groups in Canada and the US may be willing to participate in an economic discussion of the future for transportation policy in North America.

REFERENCES


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