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CANADA'S "NEW MAIN STREET":

The Trans-Canada Highway as Idea and Reality, 1912- 1956.

by

David W. Monaghan

**Thesis submitted to
the School of Graduate Studies and Research
in partial fulfilment of the requirements for the
M.A. degree in History.**

Université d'Ottawa / University of Ottawa

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Abstract**Canada's "New Main Street:"
The Trans-Canada Highway as Idea and Reality, 1912-1956.**

**David W. Monaghan
University of Ottawa, 1996**

**Supervisor:
Professor Donald Davis**

The purpose of this thesis is two-fold. First it examines the development of the concept of a Trans-Canada Highway from the early 1900's to 1940. Its roots can be traced to the significant increase in motor vehicle use, and the gathering momentum that characterized automobile technology in the 20th century. While the early development of the technology relied upon the promotional activities of automotive enthusiasts, the state was by no means oblivious to the potential benefits of automotive technology. Provincial governments in Canada contributed to the momentum through the provision of improved roads. Indeed, without publically funded roads, the new technology would have bogged down both literally and metaphorically. The thesis outlines the technological momentum that characterized developments in highway technology and standards in the face of rising traffic volumes and the role of highway bureaucracies in promoting and sustaining the growth of the technology. It also explores how road networks allowed provincial governments to expand their own influence and, through user fees and gasoline taxes, to increase substantially their revenue base. By the 1920s automobile revenues comprised the major source of provincial revenues in Canada due to both domestic demand and a burgeoning tourist trade based upon motor travel.

Secondly, the thesis examines why the federal government became involved in the construction of a great national road. This was by no means a foregone conclusion since

the Canadian constitution effectively excluded the federal government from the provincial demesne of highway and road development. Nevertheless, by 1919 Ottawa was providing funding to the provinces for the development of a national highway system. While most provinces were eager to accept financial assistance for an increasingly expensive highway system, Ottawa remained uneasy in its role as a highway financier. This thesis will show that from the 1920s through the early 1950s the primary interest of the federal government in the Trans-Canada Highway was as a weapon against unemployment, the government's interest in the road waxing and waning with the business cycle. Ottawa's decision to embark upon the project in 1949-1950 was essentially driven by its concerns over rising unemployment and as a form of public investment designed to help counteract a projected downturn in the Canadian economy. However, once it had committed itself to the construction of a first rate, hard-surfaced highway in 1949, Ottawa was no longer content to simply fund the project but established the minimum standards and the route to be followed by the Trans-Canada Highway. With this higher level of involvement, the prestige of the federal Liberals then became associated with the Highway and its primary goal was the completion of a national highway.

Acknowledgement

A thesis, like a highway, is the product of the effort and contributions of many people, some direct, others indirect. I would like to acknowledge the assistance of a number of individuals who contributed in one way or another to the completion of this thesis. The staff at the Department of History, University of Ottawa have been of considerable assistance. Professor Michael Behiels played an important role in the process, for it was he who initially suggested that the Trans-Canada Highway was a subject worthy of greater study. My supervisor, Professor Donald Davis, has been of immeasurable assistance by suggesting directions of study, through the application of his critical skills and for his personal support in the preparation and completion of the thesis. Also, I would like to thank Ms. Anne St-Jacques, Academic Assistant, for her co-operation in negotiating the administrative details that are such a part of academic life.

My employer, the National Museum of Science & Technology, contributed to the process by providing a much needed two months to undertake research and write. My colleagues in the Curatorial Division, including my supervisors, were frequently helpful and sympathetic, particularly in the final phases of the thesis. Ms. Hilary Perrott and Ms. Anna Adamek of the Library and Information Services provided considerable help in locating and retrieving primary and secondary sources for this work.

Finally, I must thank my family, Frances, Alex, and Emma for their patience, concern, and understanding over those many days when my mind was fixed on a strip of asphalt built many years ago and so far removed from their own lives. Perhaps, now, as promised, we will be able to see it together.

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Introduction

On October 18, 1912 a diminutive looking Englishman by the name of Thomas Wilby dipped the front wheels of his Canadian-built Reo touring car into the Pacific Ocean to make history. A journalist and avid motorist, Wilby and his American mechanic, Frank Haney, had just completed, with Reo's sponsorship, a well-publicized cross-Canada tour, the first ever by automobile. The trip from Halifax to Victoria had taken fifty-two days at a cost of innumerable flat tires and several major repairs to their vehicle.²

Their feat was repeated by Dr. Perry Doolittle, president of the Canadian Automobile Association (CAA), in 1925. Like Wilby and Haney, he was sponsored by an automobile manufacturer, the Ford Motor Company of Canada, who outfitted Doolittle with a new 1926 Model T and a co-driver, Ford photographer Ed Flickenger. The duo completed the cross-country trek in 39 days, which suggested some progress in the quality and number of roads across the country. Yet, as with Wilby, the intrepid travellers were unable to complete their trip entirely by road. In Northern Ontario and again in British Columbia their car had to be equipped with flanged wheels in order to use the railway line to bridge gaps in the road network. Doolittle's transcontinental trek thus demonstrated that a trans-Canada highway was still more an ideal than reality.

Both Doolittle and Wilby were members of a growing number of automobile enthusiasts who saw a Trans-Canada highway as a symbol of the inevitable progress of

² Thomas Wilby, *A Motor Car Tour Through Canada* (London: John Lane, 1914), see also: John D. Nicol, *Jack Haney*, (Markham: Fitzhenry & Whiteside, 1989).

modern technology. Where the railway had helped build the country, the modern highway would unify it.³ The exploits of Wilby and Doolittle's served as object lessons that underscored both the potential of automobile travel and the existing obstacles to progress. Their message found a ready audience among automobile organizations springing up across the country. Doolittle was a founding member of the socially exclusive Toronto Automobile Club, and he played a prominent role in the activities of a variety of motorist clubs. He was also a frequent speaker at the annual meetings of The Good Roads Association, a lobby group dedicated to encouraging government investment in improved road networks. An untiring booster of automobiles and good roads, throughout the 1920s and into the 1930s Doolittle continued to lobby nationally for a Trans-Canada Highway, and was known by some as "The Father of the Trans-Canada Highway."⁴

Yet it took another fourteen years after Doolittle's death in 1935 before the Dominion government, with the support of the majority of the provinces, was sufficiently convinced of the benefits from a Trans-Canada Highway to pass the Trans-Canada Highway Act. Despite a unanimous vote by parliament, the highway remained incomplete when officially opened by Prime Minister John Diefenbaker on September 3, 1962. Much of the Newfoundland section on the 8,000 kilometre had yet to be paved and would not be finished until 1965.

The long delay in initiating, and then completing "Canada's New Main Street,"

³ Ibid., 281

⁴ Edwin C. Guillet, The Story of Canadian Roads (Toronto: University of Toronto Press, 1966), 224.; on Doolittle see: Hugh Durnford and Glenn Baechler, The Cars of Canada, (Toronto: McClelland and Stewart, 1973), 220.

was not surprising, given the immensity of the task. The longest continuous highway in the world, the Trans-Canada Highway was one of the major engineering feats of the post-war period. By 1965, its construction had required over 14 million days of labour and had cost in excess of \$923 million, more than \$4 billion in 1992 dollars.⁵ Unfortunately, it has not received historical treatment of equal scope. Indeed, Canadian highway development in general has received scant attention from historians. Edwin Guillet's particularly Whiggish survey of Canadian highway development in The Story of Canadian Roads, remains the standard work in the field despite its antiquity.⁶ More recently, Larry McNally's brief but valuable chapter on street and highway development in Building Canada: A History of Public Works, has supplemented Guillet's survey through the application of modern historical method in a comprehensive survey of highway development and road building technology in Canada. However, in both cases, the Trans-Canada Highway received only cursory attention.⁷

Provincial histories shed little additional light on the Trans-Canada Highway. Limited in number and quite varied in their approach, these studies run the gamut in their emphasis from technical development to political analysis. At one end of the spectrum there are works such as R.G. Harvey's highly personal examination of British Columbia's

⁵ Canada, Department of Public Works, Annual Report: Proceedings Under the Trans-Canada Highway Act, Fiscal Year Ended March 31, 1965, (Ottawa: Queen's Printer, 1965), Tables, 4, 5.

⁶ Guillet, Canadian Roads, 218-233.

⁷ Larry McNally, "Roads, Streets, and Highways," in Building Canada. A History of Public Works, ed. Norman Ball, 30-58, (Toronto: University of Toronto Press, 1988).

highway network in The Coast Connection. A highway engineer and former Deputy Minister of Highways for B.C., Harvey has provided a vivid and often technical description of highway construction in the province that is of particular value for the period following World War II. At the other end of the spectrum is David Siegel's study of the nature of provincial and municipal relations during the development of Ontario's highway network.⁸ In these discussions of provincial highway growth, the Trans-Canada Highway receives only passing references.

Highway development has figured also in a larger number of studies dealing with the motorization of Canada, including those by G. T. Bloomfield, Donald Davis and Stephen Davies. Since these studies tend to concentrate upon several different issues relating to the adoption of motor vehicle technology in Canada prior to 1930, highway development, while important, remains a secondary consideration, rather than the focus, of their studies. Moreover, because they have limited their studies to the period prior to 1930, the Trans-Canada Highway has remained outside of the parameters of these studies.⁹

In fact, there are only two monographs dealing specifically with the Trans-Canada

⁸ R.G. Harvey, The Coast Connection, (Lantzville, B.C.: Oolichan Books, 1994.) and David Siegal, "Provincial-Municipal Relations in Ontario: A Case Study of Roads," Ph.D. diss, Univ. of Toronto, 1983.

⁹ For example see; Gerald T. Bloomfield, "Motorisation of the New Frontier: The Case of Saskatchewan, Canada, 1906-1934," In The Economic and Social Effects of the Spread of Motor Vehicles, ed. Theo Barker, 165-193. (London: MacMillan, 1987); Donald Davis, "Dependant Motorization: Canada and the Automobile to the 1930's," in Journal of Canadian Studies 21:3 (Fall 1986): 106-132; and Stephen J. Davies, "Ontario and the Automobile, 1900-1930: Aspects of Technological Integration," Ph.D. diss., McMaster University, 1987.

Highway: Edward McCourt's The Road Across Canada and Wes Rataushk's more recent Silver Highway. Perhaps it is appropriate, given the fact that the construction of the Highway was strongly influenced by the importance of automobile tourism, that of the two books on the subject, one is an enjoyable travelogue and the other a photo essay.¹⁰ However, neither author has much to say about the actual history of the highway or the lengthy process that led to its construction. Consequently, this thesis is the first study to discuss the development of the Trans-Canada Highway in a comprehensive manner. For that reason, it seeks to narrate the program's basic chronology as well as to analyze the socio-political context which produced it.

This thesis seeks to explain why this remarkable project, long projected, was finally built. It focuses on the passage of two federal statutes, the Trans-Canada Highway Act of 1949, and the amending legislation of 1956, that finally provided the wherewithal to complete the trans-continental link. Given its enormous cost, the highway's completion was far from being the inevitable product of Canadian geography or capitalism. As with the Canadian Pacific Railway, it took political will to force the roads through the Rockies and the muskeg of Northern Ontario. After all, there were already excellent American highways on which to make the journey from the Canadian East to West. Constitutional impediments long delayed the highway's construction and in theory could have prevented its completion for decades yet to come. The constitutional problem was simple: the Federal government had no clear authority under the British North America Act to build

¹⁰ Edward McCourt, The Road Across Canada, (Toronto: MacMillan, 1965); Wes Rataushk, Silver Highway. A Celebration of the Trans-Canada Highway. (Markham: Fitzhenry & Whiteside Ltd. 1988).

highways outside of the territories and National Parks, and the provinces, which did, were more interested in improving their internal trucking and commutation routes than in building a tourist highway across Canada.¹¹

Hence, it is important to understand the special circumstances that produced both the decision of the Federal government to intrude on the provincial domain of highway construction, and the provincial governments' decision to welcome rather than to repel the intrusion. We shall see that Federal interest in highways was not new in 1949: the rise of motorized transportation in the early 20th century had prompted its first, limited forays into the provincial field of road development well before 1939. However, the Trans-Canada Highway constituted the first time that the Federal government took direct responsibility for the construction standards and route an inter-provincial highway was to follow. With the federal government in the driver's seat, the provinces briefly occupied the back seat of an important roads project. Only in the postwar period, the apogee of Federal power, could this seating arrangement have happened. How this momentary reversal of roles came about and what motivated the Federal Government to push a national highway to the fore are the questions at the root of this inquiry.

This thesis will demonstrate that the initial inspiration underlying Ottawa's decision to embark upon a the construction of the Trans-Canada in late 1949 and early 1950 lay in the Federal Cabinet's fears over rising unemployment. Rather than a bold new national initiative designed to capitalize upon the obvious potential of automobile technology or an

¹¹ M.G. Lay, Handbook of Road Technology, vol 1. Planning and Pavements 2 ed. (N.Y.: Gordon & Breach, 1990), 50.

attempt to construct a new symbol of national pride, the Highway's primary goal was to fight regional unemployment.

To understand this process, this study has drawn upon a substantial body of contemporary material associated with the construction of highways in Canada. Journals such as The Canadian Engineer, subsequently Roads and Bridges, and Engineering Contract Record provide a wealth of information of the development of provincial highway standards and systems. As trade journals, they often functioned as mouthpieces for the growing highway lobby, including organizations such as the Canadian Good Roads Association and the various provincial highway departments. In this respect they provide insight into the agenda and concerns of the industry. As well, provincial government publications have been used to understand their perspective.

Given the federal focus of this thesis, government record groups at the National Archives of Canada have naturally provided the bulk of the evidence. Inasmuch as the federal government has not had a department with primary responsibility for highway assistance since the closure of the Dominion Highway Commissioners office in 1928, Federal highway records are dispersed through several record groups. Department of Finance records provide insight into the federal government's perspective on highways and their role in postwar reconstruction. The early development of the Trans-Canada Highway is partially documented in the records of the Federal Department of Mines and Resources. Following 1950, documentation on highway is located in the records of the Department of Public Works. Of particular value are the lengthy transcripts of the three Federal-Provincial Conferences on the Trans-Canada Highway held in 1949, 1950 and

1955, respectively. Copies of their transcripts are located in the Library of Parliament and provide a rich and sometimes candid source of information. Finally, the personal papers of the Hon. R. H. Winters, Louis St Laurent, and Privy Council records shed light on the politics of the Highway.¹²

These various sources suggest that the federal government's attitude towards the construction of a Trans-Canada Highway underwent a transition between 1946 and 1956. The causes and nature of this transition are the crux of this inquiry.

¹² The R.H. Winters papers in the NAC is the second largest collection of documents dealing with the Federal Government's involvement in the construction of the Trans-Canada Highway after those in the Dept. of Public Works. Winters was the minister responsible for the Highway from 1949 until 1956. Among the privy Council Office Records, this study relied upon the Cabinet Conclusions, or typed minutes of Cabinet Meetings, that were part of the modernized recording structure adopted by the Privy Council Office after 1940.

Chapter I

Early Attempts at a Trans-Canada Highway.

Under the terms of the BNA Act 1867, the construction of roads and highways was a provincial responsibility falling under the definition of "local" works. The Dominion government received authority over railways and river navigation, for they were recognized as the premier modes of commerce and communication, whose development required a level of investment and coordination above the potential of county or provincial governments.¹³ Conversely, road transportation throughout the nineteenth century was a local concern, organized at a county, township or parish level. This administrative structure mirrored the usual limits of road transportation technology at the time, restricted by the range and load bearing capacity of draught animals. This constitutional arrangement seemed quite satisfactory until demand arose for roads suitable to motor vehicles. That demand developed with surprising rapidity after 1900 from three sources: the activities of urban-based automobile clubs, from farm organizations, and from promoters of American motor tourism.

This growth of demand for improved highways underwent three stages of development. The first stage was marked by a steady increase in motor vehicle use after 1900 that provided considerable impetus and a larger potential lobby for improved roads and the Good Roads Movement. Between 1903 and 1914 private and commercial registrations in Canada increased from 178 to over 74,000 vehicles. The process accelerated during the First World War and by its end registrations had risen to almost

¹³ The Constitution Act, 1867, 30 & 31 Victoria, c. 3, sec 92.10.

350,000 vehicles. In the mid-1920s Canadians were not only the second largest per capita owners of automobiles, they also produced the second largest number of cars in the world after the United States. By 1930 registrations had risen by 300 percent.¹⁴

Motorisation was initially an urban phenomenon, as suggested by both early registration records as well as growth of urban-based automobile clubs, such as those in Hamilton (1903), Toronto (1903), and Winnipeg (1904).¹⁵ These social clubs undertook public relations activities to counteract opposition from non-motorists, particularly in rural districts, and promoted automobile use and regulation, while lobbying for improved roads and signs. As the scope of their activities and interests expanded, local organizations joined into larger regional ones such as the Ontario Motor League (1907), the Manitoba Motor League (1908), and the Canadian Automobile Federation (1913), later the CAA (1915), to further their causes at both provincial and federal levels.¹⁶

The second phase involved the spread of motor vehicles beyond an urban setting.

¹⁴ F.H. Leacy, ed., Historical Statistics of Canada, 2nd ed. (Ottawa: Statistics Canada, 1983), T147-178; motor vehicles existed in Canada prior to the introduction of mandatory registration in Ontario in 1903; however, their numbers were negligible; also, Donald Davis, "Dependant Motorization: Canada and the Automobile to the 1930's," in Journal of Canadian Studies 21:3 (Fall 1986), 109.

¹⁵ McNally, 37; G.T. Bloomfield, "Motorisation of the New Frontier: The Case of Saskatchewan, Canada, 1906-1934," in The Economic and Social Effects of the Spread of Motor Vehicles, ed. Theo Barker (London: MacMillan, 1987), 170-173.

¹⁶ On rural opposition see: K. Churchill "Harnessing the Auto: Motorization and the Countryside in Ontario, 1900-20," unpublished Canadian Historical Association paper, Charlottetown, 1992; the role and growth of the Ontario Motor League is discussed by: Stephen J. Davies, "Ontario and the Automobile, 1900-1930: Aspects of Technological Integration," (Ph.D. diss., McMaster University, 1987), 205 - 218; also, McNally, "Roads," 37.

In the 1910s increasing numbers of rural inhabitants, persuaded of the utility of the new technology, sought the mobility afforded by automobiles and trucks. After 1910 car manufacturers, particularly Ford of Canada, directed their promotional efforts at farmers by emphasizing the social and economic benefits of motor vehicle ownership. This was particularly true of Ford's TT truck, introduced in 1919.¹⁷ These efforts were rewarded in the predominantly rural West, where the motor vehicle worked its way into the economic and social fabric of rural life. In Saskatchewan motor vehicle ownership was consistently high, being second only to Ontario in registrations between 1914 and 1921.¹⁸

As farmers motorized, they pressured local and county governments to provide them with "good roads." However, highways suitable for motoring were an expensive commodity, beyond the limited financial and administrative means of municipal or county governments. Improved earth or gravel roads capable of handling regular horse-drawn traffic broke down under the shearing force of motor vehicle wheels travelling in excess of 28 kmph (18 mph). Moreover, the cost of constructing improved roads was made even more daunting by the growing reluctance of local governments to call on farmers to provide free labour for roadwork (under the statute labour laws), or the farmers to

¹⁷ Examples of the emphasis placed by Ford of Canada upon truck sales to farmers are to be found in The Ford Truck Bulletin first issued by Ford of Canada in 1919. National Museum of Science & Technology Library, Ottawa, MGTR F6990 3305E 1919.

¹⁸ Gerald Bloomfield, "The Automobile and the Canadian Landscape: A Retrospective View," unpublished Canadian Historical Association paper, Winnipeg, June 1986, 7-8. See also James J. Flink, The Automobile Age (Cambridge: MIT Press, 1988), 135-140.

volunteer it.¹⁹

Given the political clout and restiveness of farmers in the early twentieth century, provincial governments inevitably became more involved in highway construction and finance. In Ontario, the Public Roads and Highways Commission Report of 1914 (which led to the establishment of a Provincial Highways Department in 1917) rested "the case for good roads upon the farmer's economic importance in the Province." It said that, "Good roads will enable him to increase his output, and the entire community will be benefited."²⁰

The third contributing force was the growing significance of tourism revenues. It was highlighted by former Ontario Premier E.C. Drury, in his Forts of Folly. Drury, whose United Farmers of Ontario had a fair roads plank in their 1919 election platform, reflected on the province's dynamic highway policy under his Minister of Public Works, F.C. Biggs. The former Premier summarized their policy in this way:

One of the objectives [of the road policy was] the development of the American tourist trade. If our friends across the line persisted in keeping our products out of their country by high tariffs, we would bring their citizens over the boundary using the natural beauties of our country as a magnet to attract them, and sell them our products here. Good motor roads were a means to this end.²¹

The economic potential of automobile tourism and its influence upon the development of

¹⁹ W. A. McLean, Annual Report on Highway Improvement in Ontario, 1910, (Ontario Sessional Papers, 1910), 44-46

²⁰ Ontario, Report of the Public Roads and Highways Commission of Ontario, 1914, (Toronto: King's Printer, 1914), 35.

²¹ Quoted in Charles M. Johnston, E.C. Drury: Agrarian Idealist, Ontario Historical Studies Series (Toronto: University of Toronto Press, 1986), 110.

provincial highway systems is a case in point. Donald Davis has illustrated how the lure of American motor tourists, and their dollars, exerted considerable influence over Canadian highway investment. As early as 1908, two-thirds of the motor vehicles on Ontario roads were registered to non-residents - the majority Americans. In 1914, even with a thirteen-fold increase in motor vehicle permits, 24 percent of drivers on Ontario roads were Americans.²²

By 1914 both Ontario and Quebec had constructed improved highways to encourage tourism from the United States. Indeed, the first "modern" highway in Canada, connected Montreal with New York State in 1912. Already it was evident that Canadian highway development was going to emphasize a north-south axis to the detriment of east-west, or inter-provincial, connections.²³ Tourism revenue provided an excellent rationale for increasing public expenditures on highways and strongly reinforced the highway's image as an investment rather than ongoing consumption. In reflecting upon the benefits of the Canada Highways Act before the 1925 Annual Convention of the Canadian Good Roads Association, the Dominion Highway Commissioner stated that, government investment on highways over the previous five years was paying dividends as increasing numbers of American tourists were attracted by our better roads.

news of the improvement of the highways of Canada has been gradually reaching the American people until last year, when approximately 2,000,000 U.S. cars enteredthis country, leaving, it is estimated \$140,000,000 to \$150,000,000 for purchases and maintenance. Figures of this kind must be convincing, ample

²² Ontario, Report of Highway Commission, 1914, 104-105. Davis, "Dependant," 125-126.

²³ *Ibid.*, 126; McNally, "Roads, Streets," 43; Guillet, Canadian Roads 166.

evidence of the national importance of our recent comparatively large outlays...²⁴

As Campbell's comments show, highways could positively affect the balance of payments and might even counteract the ineffectual efforts of the Dominion government to reduce American tariffs. However, the emphasis upon tourist routes tended to draw funds away from the market or township roads. Thus, the resulting emphasis upon improving main, inter-urban, as opposed to market roads was not without opposition.²⁵

Politicians were anxious to capitalize upon growing interest in good roads and motor vehicle use. The increasing involvement of provincial governments in motor vehicle legislation and highway administration were closely linked to the process of province-building in the period. The expanding scope and nature of provincial government regulation and highway development after 1910 illustrates the growing economic importance of motor vehicle use and related activities, such as manufacturing and servicing, not only in Ontario but elsewhere. J.A. Corry, in a study prepared for the Rowell-Sirois Commission in 1939, remarked that the pattern of growth of highway administration in Ontario, Quebec, Saskatchewan and Nova Scotia was so similar "that there is no need to refer to them separately."²⁶

However, there were some milestones in the rise of provincial powers, such as the 1914 Commission that recommended that Ontario assume more centralized control over

²⁴ Campbell, "Success of Federal Aid," 472

²⁵ Davies, "Ontario and the Automobile," 366-370.

²⁶ J.A. Corry, The Growth of Government Activities Since Confederation, (Ottawa: King's Printer, 1939), 133.

provincial highway development while urging a \$30 million investment in roads over a fifteen year period. Saskatchewan similarly appointed a Board of Highway Commissioners to assist in the planning and construction of a provincial road network in 1912. Its legislature also authorized the Provincial government to borrow up to \$5 million for road improvement.²⁷ Other provinces adopted a similar approach, such as Quebec (1912), New Brunswick (1917), Nova Scotia (1918), and Alberta(1923).²⁸

Even as they were creating provincial highway authorities, the provinces were also imposing provincial-wide licensing, at first of motor vehicles, but by the end of the 1920's, of their drivers as well. Provincial governments were deaf to the ignored entreaties of local governments to share their license revenue. They also hogged the gasoline tax revenues after they initiated this tax in 1922. Consequently, the automobile greatly expanded the wealth and prestige of provincial governments. By the 1920's, highway spending had become the single most important item in the provincial budget: between 1919 and 1936 the provinces spent \$884.1 million on their highways.²⁹

Automobile taxation was frequently rationalized by government as a means of compensating the public purse for road improvements. Their behaviour was consistent with the argument, advanced by Garth Stevenson amongst others, that the state in Canada, either provincial or federal, has endeavoured to assist economic growth and the

²⁷ Ibid. 9; Bloomfield, "Motorisation on the New Frontier," 179-180; Mark Rose, Interstate: Express Highway Politics, 1939-1989, Revised ed. (Knoxville: Univ. of Tennessee Press, 1990), 7-8.

²⁸ Guillet, 163-169.

²⁹ McNally, 44-45.

accumulation of private capital by a variety of means. Stevenson has stated:

Often in Canada it has done this by providing various guarantees and incentives to private enterprise or by intervening directly to supply services such as electric power or transportation without which private profit-making would be impossible. In other words, some of the risks or costs of private enterprise are assumed by the state and paid for by the taxpayer.³⁰

In much the same way as the Dominion government had constructed railways to assist in the economic development and political unification of Canada, provinces undertook to develop road networks as tools to help in the consolidation of their political influence and power, the development of provincial economies and in attracting private investment.³¹

The analogy between the national economic importance of railway construction and the development of a trans-Canada highway would be increasingly adopted by proponents of highway construction to induce Dominion investment in road construction.

In much the same way as other new sources of revenue, such as liquor taxes, new motor vehicle revenues permitted the provinces to extend the range of their activities and assume a greater proportion of the financial burden for a wide range of high profile public activities, most notably road construction and maintenance. The 1920's was a decade when provincial treasuries swelled with new revenue and provincial governments grew proportionately.

How much of this increase could be attributed to the motor vehicle no one can say for certain. Indirect benefits, such as the economic 'spin off' of tourism, were hard to

³⁰ Garth Stevenson, Unfulfilled Union, 3rd ed. (Toronto: Gage, 1989), 74.

³¹ see, for example: David Siegel, "Provincial Municipal Relations in Ontario: A Case Study of Roads" (Ph.D. diss., University of Toronto, 1983), 13-35, 382.

calculate. Provincial governments tended, however, if anything to overestimate them. Direct revenue from licenses and gasoline tax, the latter an Oregon innovation adopted by a majority of the provinces between 1922 and 1928, increased from \$8.3 million in 1921 to over \$46 million in 1933. By that date motor vehicle revenues represented 30 percent, the single largest source, of provincial net general revenues in Canada. These new sources of revenue permitted the traditional tax base, property taxes, to remain relatively stable even as provincial government expenditures rose.³²

1.1 Dominion Forays into Highway Financing and Planning.

As the provincial response to the automobile evolved, the American influence was manifest: on ideas about taxation, about highway management (the provincial highway departments having their counterparts in the states), and about the importance of serving the American motorist. Not only the provinces were looking southward for the money and ideas for building and administering a highway network. The Dominion government also looked enviously at the initiatives of the US government. Beginning in 1894, the U.S. Federal Government had been increasingly involved in road improvement by encouraging reform in methods and administration, through the Office of Public Roads (1905).³³ Ottawa's earliest response to growing interest in road improvement followed soon thereafter, with the establishment of the Railway Grade Crossing Fund in 1907, a sphere

³² Canada, Royal Commission on Dominion-Provincial Relations, Book I, Canada: 1867-1939 (Ottawa: King's Printer, 1941), 130; Guillet, 157; Leacy, Historical Statistics, H92-112.

³³ Bruce Seely, Building the American Highway System, (Phil.: Temple Univ. Press, 1987), 30

where federal authority over railways, literally and metaphorically, intersected provincial concerns.³⁴ Moreover, in 1912-1913 the Conservative government, in response to pressure from the good roads lobby, attempted to provide the provinces with financial assistance for road construction, but the initiative was quashed by the Liberal opposition. In re-introducing the Bill 32 to the Senate in May 1913, Conservative Senator J.A. Lougheed of Calgary stated "I doubt there is any subject that has received less attention at the hands of the provinces of the Dominion, than the improvement of the highways."³⁵ The Act was blocked by a Liberal-dominated Senate on constitutional grounds. In his response to the Bill, Liberal Senator Sir George Ross summarized his party's position when he said that "it is constitutionally beyond the function of the Dominion to make an appropriation of that kind."³⁶

The First World War further curtailed the possibility of Dominion funding for highway development. However, the highway lobby sustained interest through the formation of national organizations such as the Canadian Automobile Association and the Canadian Good Roads Association that would exert their influence following the war.³⁷

³⁴ D.V. Smiley, Canadian In Question: Federalism in the Eighties, 3rd ed. (Toronto: McGraw-Hill, Ryerson, 1980), 172.

³⁵ Debates, Senate, 15 May 1913, 547.

³⁶ Debates, Senate, 16 May 1913, 562-563; McNally, "Roads," 45.

³⁷ Robertson, "History of the Trans-Canada," 6-7. The CGRA was more than a group of interested citizens. From its inception it was an influential lobby comprised of provincial highway officials from across the country. In 1930, its executive included the Minister of Highways of Quebec (President), Minister of Public Works of B.C. (First Vice-President), while its Directors comprised representatives from the OML, the Canadian Auto Manufacturers' and Exporters' Association and both national railways, Canadian Engineer

Their efforts bore some fruit in 1919 when the Union government passed The Canada Highways Act of 1919 as part of its post war reconstruction programme to provide employment and assist provinces in the construction and improvement of roads. A maximum of \$20 million was allocated for use beginning April 1, 1919 and ending March 31, 1924. The Act was administered by the Department of Railways and Canals through a Dominion Highway Commissioner, A.W. Campbell. An engineer of considerable professional stature, Campbell was a seminal figure in the development of Canadian roads. Appointed Ontario's Provincial Instructor in Road Making in 1896, he was Deputy Minister of Public Works of Ontario from 1902 to 1910. His nickname, "Good Roads," was indicative of his national reputation for his abiding interest and work in the development of improved road construction along progressive principles.³⁸

Funding was conditional upon the submission by each province of a detailed, five year, provincial highway plan with a classification of primary and secondary provincial roads. While emphasizing the need to improve roads of major agricultural and commercial importance within each province, the Act was planned to "form, as far as possible, a general system of interprovincial highways," effectively a trans-Canada highway.³⁹ Once

59:13, (23 Sept. 1930), 118.

³⁸ Canada, Statutes of Canada, 9-10 George V., Chap. 54.; the most comprehensive discussion of the Canada Highways Act is found in: Luella Gettys, The Administration of Canadian Conditional Grants, (Chicago: Public Administration Service, 1938) Chap. IV, 66.; "Obituaries: Archibald W. Campbell," Canadian Engineer 52:19 (May, 1927), 512.

³⁹ Canada, Report of A.W. Campbell, MEIC, Commissioner of Highways, 1920 (Sessional Paper No. 20., 1921) 84.

submitted, the federal government's specialists reviewed the rationale, specifications, cost, location and construction methods of provincial road projects before certification. Regional engineers were assigned by the Dominion Highway Commission to provide assistance to provincial authorities while also verifying that agreements were followed.⁴⁰

In developing the Canada Highways Act it would appear that the Dominion government was inspired by, if it did not directly copy, the American Federal-Aid Highway Act of 1916 and the project of the American-based Lincoln Highway Association.⁴¹ Both government plans exemplified a progressive concern for the application of business methods, accountability, and professionalism in public administration. The Canadian Act's requirements accelerated the trend towards the development of specialized provincial highway departments. Not as generous as the American, the Canadian plan provided each province with an \$80,000 lump sum grant, with further funds being distributed on a per capita basis to each province.

The Dominion's contribution was applicable to 40 percent of the cost of roads both designated by the province and approved by the Dominion Highway Commissioner's office. In character with the cooperative nature of the agreement, Ottawa chose not to dictate highway standards to the provinces, but based its recommendations upon the adequacy of provincial specifications vis-à-vis the type and volume of traffic on the

⁴⁰ Gettys, Administration, 70-71.

⁴¹ Seely, American Highway System, 42-43; on the Lincoln Highway see: Thomas J. Schlereth, US 40: A Roadscape of the American Experience, (Indianapolis, Indiana Historical Society, 1985): 10.

specific routes.⁴²

While generally lauding the federal aid programme, provincial officials and special interest groups were not entirely pleased with the extent of federal aid and the assistance formula. At the CGRA Annual Meeting of 1921, both the acting premier of Nova Scotia and the premier of British Columbia questioned the wisdom of encouraging federal interference in provincial affairs by accepting highway funds. And not very generous funding at that: the New Brunswick Minister of Public Works demonstrated that the 40% subsidy was actually only 20-25% of road expenditures, once one accounted for such excluded items as preliminary engineering costs, rights of way, and bridges.⁴³

Nor did everyone agree that the federal money should be directed towards building a transcontinental highway. Even those provinces that welcomed federal financial assistance tended to reject the idea that geopolitics rather than traffic data should determine highway construction priorities. Ottawa's hope that provincial highway systems would link up to form a transcontinental highway ran afoul of regional interests. Provincial governments were under considerable pressure from their own constituents to concentrate their limited funds on local road improvement programmes. At its 1923 convention, the Conference of Ontario County Road Superintendents and Engineers expressed its support for Federal Aid, but disapproved of spending "any public money on a so-called Trans-Canada Highway at the present time when the building of any portion of such a road is not

⁴² Canada, Report of A.W. Campbell, MEIC, Commissioner of Highways, 1921 (Sessional Paper No. 20,, 1922) 95.

⁴³ "Canadian Good Roads Convention at Halifax," Canadian Engineer, 40 (19 May 1921) 476-77.

warranted by local traffic."⁴⁴

The Canada Highways Act also bogged down in red tape. For example, the stipulation that the money be channelled through the provincial highway departments made one of the top federal priorities -- an improved highway through Northern Ontario to link Quebec with Manitoba -- unattainable. Although Ontario obtained about 30 percent of the total funding of the act, it could not apply the money to road-building in the north of the province, in "New Ontario" north of the Severn River, because the Department of Northern Development had responsibility for highways in this region. This department did not qualify under the Act for federal aid, and its limited funds went to colonization roads in any case. Hence the Canada Highways Act did nothing to change the fact that anyone wishing to motor across Canada had to take a detour south of the Great Lakes. Much of Northern Ontario remained impenetrable by car in 1928 when the Act expired.⁴⁵

1.2 The First Trans-Canada Highway Project.

Ottawa's commitment to highway development and a Trans-Canada highway network was short lived. While it extended the Canada Highways Act to March 31, 1928 to meet existing commitments, it declined to augment the original \$20 million allocation despite pressure from several provinces and from the CGRA to share the Dominion government's tariff revenue of approximately \$15 million a year from imports of motor

⁴⁴ "Resolutions Adopted at Good Roads Convention," Canadian Engineer 44:12 (20 March 1923): 346.

⁴⁵ Debates, House of Commons, 2 June 1931, 2231.

vehicles, parts, accessories, gasoline and road building equipment. The American example spurred on the provinces and the highway lobby to press the Dominion government for money: between 1921 and 1930, Washington contributed \$839 million in Federal Aid to the states.⁴⁶ But more compelling was the spiralling cost of provincial roadwork, thanks to expanded jurisdiction over rural roads, soaring labour costs in the early 1920's, and increased demand for improved highways from motorists, bus operators and truckers. Trucks were a particular problem for provincial highway departments, as the Ontario Royal Commission on Transportation of 1938 remarked: the number of commercial vehicles had increased 41-fold between 1916 and 1937, almost four times as rapidly as motor cars. Nationally, between 1928 and 1936 truck registrations increased by almost 30 percent, with Alberta showing the largest net gain, almost 100 percent.⁴⁷ This commercial traffic may have been as the highway lobby contended, an investment in the future; but the investment was certainly not cheap. A provincial highway official attributed the 500 percent increase in the average cost of earth road construction in Alberta to the change in highway standards resulting from higher traffic volumes. The other western provinces experienced similar escalation in highway costs.⁴⁸

By the late 1930s, roads built a decade earlier were already substandard. In New

⁴⁶ Seely, 73

⁴⁷ Ontario, Report of the Royal Commission on Transportation, 1938, (Toronto: King's Printer, 1939), 62; J.C. Lessard, Transportation in Canada, Royal Commission on Canada's Economic Prospects, (Ottawa: Queen's Printer, 1957) Schedule 2A

⁴⁸ H.R. MacKenzie, "Road Development in Western Canada," Canadian Engineer, 77:14 (3 Oct. 1939), 5-6.

Brunswick, the provincial standard changed three times in twelve years, the road width increasing from 20' [6.0 m] (1919-29), to 24'[7.3 m] (1930) and finally to 28' [8.5 m](1931). Despite arguments that revenues generated through tourism and other automobile-related activities offset highway expenditures, in reality highway departments were involved in a cycle of obsolescence in which they were both instigators and victim. By continually redefining highway standards in the name of economics or highway safety, highway departments could maintain pressure on their political masters for continued funding. Thus, by 1930 provincial capital and operating expenditures for highways exceeded \$76,000,000 against provincial motor vehicle and gas tax receipts of \$42,826,000. Even in Canada's wealthiest province, Ontario, motor vehicle revenues in 1938 fell short of net annual highway expenses by almost 20 percent.⁴⁹

With the end of the Canada Highways Act in 1929, the Mackenzie King government in Ottawa, citing the rising federal debt and jurisdictional difficulties, adamantly refused to invest further in the highway network.⁵⁰ King's Liberals had opposed highway investment in 1912 and were indifferent to the Canada Highways Act when in power between 1921 and 1930. For example, they trimmed the staff budget for the Dominion Highways Department from \$59,259 in 1923 to \$37,383 in 1926.⁵¹ However, as long as they commanded only a minority government (until 1926) the

⁴⁹ Canadian Annual Review, (1930-31), 412; "Status of the Trans-Canada Highway," Canadian Engineer, 62:25 (21 June 1932); 20; Ontario, Royal Commission, 1938, 3.

⁵⁰ "Federal Aid For Highways," Canadian Engineer 56:11 (12 March 1929), 347.

⁵¹ Canada, Report of the Auditor General For the Year Mar. 31, 1923 Vol. III, Dept. of Railways and Canals, Part W45-46. and 1926, Part W14.;

Liberals felt compelled to extend the Highways Act. Once they enjoyed a majority government, not even the economic collapse in late 1929 could get them to spend more on highways. King was reluctant to interfere in provincial affairs. He explained to Parliament :
 “.... Under our Constitution I do not think it was ever intended that this Federal Government should become the agency through which problems which are primarily municipal and provincial should be dealt with.”⁵²

Seizing an opportunity, the Conservative opposition championed the cause of highway assistance by introducing federal highway bills to Parliament in 1929 and 1930. During the 1930 election the Conservative Party called for the construction of a Trans-Canada Highway as part of a national employment scheme. A party advertisement during the campaign combined nationalism, tourism and public investment, all inherent in highway construction, in addressing the unemployment problem created by the financial collapse of 1929:

What Canada needs is a policy to provide jobs. A policy that will build a national highway across Canada instead of forcing motorists to use American roads to get past the Great Lakes, with the result that they now leave in the United States the money which they spend by the way instead of spending it for supplies in Canada, as they would if Canada had a through road, and thus solve the unemployment situation.⁵³

Following the Conservative victory in the 1930 election it was apparent that the

⁵² Canadian Annual Review, 1929-30, 54; King's sometimes outspoken opposition to provincial assistance eventually landed him in considerable trouble, see: Desmond Morton, A Short History of Canada (Edmonton: Hurtig, 1983): 174-75.

⁵³ Debates, House of Commons (22 May 1931), 1890; Debates, House of Commons (2 June 1931), 2233.

government's strategy for the Trans-Canada Highway had not been carefully defined at either a fiscal or administrative level. Nor was it certain who would actually administer the work they had promised: the federal or provincial governments.⁵⁴ In 1930 a sum of \$20 million was allocated under the Unemployment Relief Act for employment projects, including the "Trans-Canada Highway." This was the first time that the Highway was specifically mentioned by name in the allocation of federal funds.⁵⁵

The Conservatives' initiative duplicated the financial terms of the Canada Highways Act: fifty percent of construction costs would once again be covered by Ottawa. Given the constitutional situation, the Dominion government did not attempt in 1930 to dictate the highway's route: that would be left to the provincial governments (who were to bear in mind the route's potential benefits), although Ottawa reserved for itself the right to reject the provincial plans.⁵⁶ The Dominion government wanted the construction programme to focus on eliminating gaps in the trans-continental highway in the B.C. interior and in northern Ontario. Work in other provinces would involve improving alignments, road width and surfaces.⁵⁷

Work on the Trans-Canada would go slowly under the Conservatives in the 1930's, for Ottawa had more important priorities than merely completing the

⁵⁴ Debates, House of Commons (Sept. 12, 1930), 181-183.

⁵⁵ Canada, The Labour Gazette 35 (1935), (Ottawa: King's Printer, 1936), 477-479.

⁵⁶ Public Archives of Canada, Unpublished Sessional Papers, 6th Session of 17th Parliament, No 263, RG 14,D 2, Vol. 311; Peter Heenan to W.G. Gordon, Nov. 21, 1934.

⁵⁷ "Status of the Trans-Canada Highway," Canadian Engineer 62:25: 15-16; Debates, House of Commons, (2 June 1931), 2233-2234.

transportation link as quickly as possible. It wanted to get unemployed young men out of the cities and to put them to work, and out of trouble, in the remote bush camps established by the Ontario and British Columbia provincial governments. To provide as many jobs as possible, construction techniques regressed: the chief engineer overseeing work in Ontario proudly reported in 1933 to his colleagues at the Engineering Institute that "the work was carried on as an Unemployment Relief measure without the assistance of any efficient machinery now used in road making. Every effort was made to use man power."⁵⁸

Under such a regime progress was not rapid. Further impeding progress in Ontario was provincial indecision over which route the Trans-Canada should take north of Lake Superior to Schreiber: a southern route hugging the Great Lakes that started in Sault Ste. Marie; or a more northerly highway across the clay belt from Hearst. The latter had the most "colonization" or settlement potential, but tourists would obviously prefer the shorter route through Sault Ste. Marie. Not until 1935 did Ontario's Minister of Lands and Forests, Peter Heenan finally, announce his government's decision:

The Trans-Canada Highway is not a colonization road, it is for the purpose of bringing in tourists, and to allow our citizens to pass from one part of the Dominion to the other without having to go through the United States.

Under these criteria the southern route possessed an obvious advantage due to its proximity to 40 million potential tourists who lived within 24 hours drive of Sault Ste-

⁵⁸ James Stinton, "Trans Canada Highway," Engineering Journal 16:3 (March 1933): 110.

Marie. Roads linking the region to the United States, would attract "thousands and thousands of tourists" to the "great playground of the province."⁵⁹

Even Heenan's announcement did little to speed construction, and by 1937 the Ontario government had reversed its decision. Tourism now seemed less important than developing the resources of Northern Ontario. Premier Hepburn announced the policy change to the Ontario Good Roads Association:

... It was incumbent upon the government to provide the necessary avenues of transportation in order to have proper development and to extend the mining area.. So, we held up to some extent our expenditures on the Trans-Canada Highway in order that we could build the necessary mining roads. These roads are more necessary, today, because of the tremendous increased demands for base metals.⁶⁰

This reversal was no doubt influenced by the financial constraints of the period and by the major gold find at Little Long Lac in 1934 that turned the Beardmore-Geraldton area into a mining centre. Accordingly, the province employed the federal money for the Trans-Canada into an "unofficial" northern route from Nipigon to Geraldton and thence to Hearst.⁶¹

The construction of the Trans-Canada Highway required substantial resources that were in short supply. As the financial and social crisis deepened in the 1930s even the Conservatives lost their enthusiasm for federal funding of highways, Trans-Canada or

⁵⁹ Peter Heenan, "Our Northern Ontario Heritage," Canadian Engineer 68:9 (26 Feb. 1935): 67-68.

⁶⁰ "Address by Hon. Mitchell F. Hepburn," Canadian Engineer 72:9 (2 Mar. 1937):45

⁶¹ Peter George, "Ontario's Mining Industry, 1870-1940," in Progress Without Planning: The Economic History of Ontario from Confederation to the Second World War, Ian M. Drummond OHSS (Toronto: University of Toronto Press, 1987), 63.;

otherwise. Speaking before the 1933 Annual Meeting of the Canadian Good Roads Association, Prime Minister R. B. Bennett said of the project:

... It is a work for many years, and I dare say that some of you realize, as I do from the position that I occupy, that at most we have been a bit over-anxious about many things; keeping up with the Jones's has sometimes been an expensive and costly process.⁶²

The Jones's in this case were the United States, whose road building activities had created considerable envy in the period. Construction of the Trans-Canada Highway and other road projects under the Relief Acts continued after the Liberal Party returned to power in Ottawa in the election of 1935, but with the now customary lack of urgency. There was also a shift in the emphasis on funding as the Liberals introduced the Mine Access Road Program in 1936 - a small program to assist in the development of resource roads. It was this shared -cost program that probably influenced Ontario's decision to shift its efforts from the construction of the southern Trans-Canada Highway to the northern route and the improvement of roads in mining regions.⁶³ With the outbreak of war in 1939 and the termination of the Relief Acts, the transcontinental highway project entered another phase of development. Federal involvement in the construction of the Trans-Canada Highway slowed to a trickle as resources were allocated to the war effort.

By 1940 the Canadian highway network had undergone significant development in three ways. There were approximately 510,000 miles of road of which 123,000 were

⁶² "Address by the Right Hon. R.B. Bennett," *Canadian Engineer* 64:6 (7 Feb, 1933), 24.

⁶³ V. Setty Pendakur and D. Leslie Burke, *Canadian Highway System Study. Federal Interest in Highways: An Historical Perspective*, (Montreal: Minister of Transport [Transportation Development Agency], 1972), 3; also, "Road Construction This Year," *Canadian Engineer* 72:4 (Jan. 26, 1937), 19-20.

surfaced in one form or another. Provincial governments had formed highway departments, with some encouragement from the Dominion government under the Canada Highways Act. Initially influenced by lobby groups, governments had thrown themselves into road building programmes which had taken on a dynamic of their own by the mid-1920's, as politicians were convinced of the economic and political benefits of improved road communication and tourism. Thus, while motor vehicle registrations grew at a rate of 5 percent per year between 1925 and 1936, public investment in highways increased at 9.5 percent. This trend was particularly evident during the Depression when poorer provinces, such as Nova Scotia and New Brunswick, concentrated much of their relief efforts in road construction and repair.⁶⁴

During the inter-war period the Dominion government was an unenthusiastic participant in the good roads cause. The Liberal Government, in particular, was reluctant to involve itself in shared-cost programmes, despite broad-based support for the Canada Highways Act. Ottawa's failure to capitalize upon the economic and political potential of highway construction was symptomatic of its failure to provide effective leadership in the period. The Rowell-Sirois Commission expressed the situation this way:

The popular basis of provincial political power was being solidly laid at a time when the Dominion was losing its intimate touch with the people, and when its developmental projects no longer gripped the imagination and no longer gave increasing employment to labour or capital. Instead the Dominion was intensively

⁶⁴ Report of the Royal Commission on Dominion-Provincial Relations. Book II, Recommendations, (Ottawa: King's Printer, 1941),204; Dominion-Provincial Conference on Reconstruction, Public Investment and Capital Formation, (Ottawa: King's Printer, 1941), Sec. 4, 71-72.

engaged in making vexatious levies for the payment of old debts.⁶⁵

The fact that the new technology was producing major shifts in the balance of federal-provincial relations was not lost upon the Royal Commission on Dominion-Provincial Relations. The rise of motor vehicle traffic, specifically the 250,958 commercial vehicles on improved inter-city highways and rural routes, was producing a significant rift in the transportation infrastructure as motor vehicles and railways competed for traffic.

The growing importance and spread of motor vehicle technology increasingly called into doubt the "local" character of roads and raised questions of political jurisdiction and fiscal responsibility. In 1925, the Dominion Highway Commissioner, A.W. Campbell, went so far as to suggest that "the automobile has caused all roads to cease to be regarded as merely local." The Commissioner elaborated by stating:

It follows that at the option of the public, interprovincial highways and works connecting or intended to join two or more provinces together come within the sphere of federal supervision and control.⁶⁶

By 1940, the concept of a transcontinental highway had evolved from the musings of automobile enthusiasts to a project undertaken by the Government of Canada, only to apparently slip into abeyance. In our next chapter, we shall examine how the Trans-Canada Highway project was revived in Ottawa during the 1940s and how the federal government appropriated the idea of a national highway link as a project of its own, even as it endeavoured to avoid full financial responsibility for the project.

⁶⁵Royal Commission on Dominion-Provincial Relations, Book I, Canada: 1867-1939 (Ottawa: King's Printer, 1941), 134.

⁶⁶ Dept. of Railways and Canals, Highways Branch, The Canadian Highway and Its Development, Bulletin No. 7 (Ottawa: Kings Printer, 1925), 40-41.

Chapter II

Planning for Peace

The decade after World War II marked the beginning of Canada's highway system as we know it. There were numerous highway projects undertaken in the postwar decade: the construction of the four lane Toronto by-pass - Highway 401, the extension and improvement of the Queen Elizabeth Way through southern Ontario, the construction of a paved divided highway joining Calgary and Edmonton to name but a few.⁶⁷ In this context, federal interest in the Trans-Canada revived, the highway becoming part of its postwar reconstruction program. This decade saw federal power, greatly reinforced by the war emergency, at its apogee, and highways were just one of several provincial spheres where it pondered greater involvement. As before the war, the good roads lobby continually encouraged the Dominion government to assert a national presence in the development of nation's highway network. Their entreaties had much greater strength in the 1940s, however, because of the ever-growing "momentum" of the automotive system in Canada.

Momentum, according to historian Thomas Hughes, is an inherent characteristic of mature systems, as motor vehicles had become by 1945:

They have a mass of technical and organizational components; they possess direction, or goals; and they display a rate of growth suggesting velocity. ..The large mass of a technological system arises especially from the organizations and people committed by various interests to the system.⁶⁸

⁶⁷ Guillet, 196-199.

⁶⁸ Thomas Hughes, "The Evolution of Large Technological Systems, " in The Social Construction of technological Systems, ed. Wiebe Bijker, Thomas Hughes, and Trevor Pinch (Cambridge, MIT Press, 1987), 76-77.

The momentum of the motor vehicle system became manifest in the immediate postwar period 1945. This was the point at which motor vehicles consolidated their hegemony among transportation systems in Canada. In 1945 there were 1.5 million motor vehicles in Canada. By 1950 registrations across Canada had almost doubled to 2.6 million vehicles.⁶⁹ The increase in registrations was greatest among commercial vehicles, the prewar trend accelerating thanks to the wartime demonstration of the speed, versatility, and great potential of trucking. Consequently, commercial vehicles increased their share of the motor vehicle fleet from approximately one-sixth of motor vehicle registrations in 1939 to 24 percent in 1950.⁷⁰ Meanwhile Canadian truck production increased 60 percent between 1947 and 1952. Not only were there more trucks, they were also capable of carrying heavier loads. While the majority of these vehicles continued to be light trucks, with a gross vehicle weight of 2½ tonnes or less, the number of heavy trucks (gross vehicle weights of over 8 tonnes) increased almost 500 percent in the 1947-1952 period.⁷¹

The provinces, convinced both of the economic benefits of trucking, and anxious to promote competition (especially in the West) to local rail monopolies, scrambled to provide suitable highways. By the late 1940s, highways had become, to borrow another term from Thomas Hughes, "reverse salients." These "are components in the system that

⁶⁹ J. O. Martineau, "Statistical Survey of Highway Development in Canada," Roads and Bridges, 87:10 (Oct. 1947): 84-85

⁷⁰ Urquhart, 550.

⁷¹ Automobile Manufacturers Association, Motor Truck Facts, 1953 Ed. (Washington: Automobile Manufacturers Association, 1953), 9

have fallen behind or are out of phase with the others."⁷² A reverse salient, since it impedes the expansion of the system, like the proverbial squeaky wheel, receives disproportionate attention until eliminated and synchronized with the system. Throughout the 1940's and well into the 1950's the highway network in Canada, as the least developed element within the automotive system, was just such a reverse salient. That is to say, highways -- both in quality and in extent -- were lagging behind, their inadequacies impeding the diffusion of motor vehicles and the growth of the automotive system. The private sector's acquisition and use of motor vehicles was outstripping the public sector's ability to furnish the roads that would permit the technology to reach its full potential.

The Canadian road system in the 1940's was quite unimpressive, especially when compared to that of the United States. While Canada had a non urban road mileage of 553,000 miles [884,800 km] in 1946, only 18,000 [28,967 km] of these were hard surfaced, 121,800 [196,012 km] were gravel or stone and 413,900 [666,089 km], or 75 percent, were of earth construction.⁷³ The United States had approximately six times the total Canadian mileage, of which only 44 percent was of earth construction. However, even these figures do not provide an adequate portrait of the state of the Canadian road network in the late 1940's. Ontario and Quebec accounted for 58 per cent of all gravel roads and 70 per cent of all hard surfaced (i.e. concrete or asphalt) highways while

⁷² Hughes, "Large Technological System," 73.

⁷³ M.C. Urquhart, Historical Statistics of Canada, 1st ed. (Toronto: Macmillan Ltd., 1965), 549.

accounting for less than a quarter of total road mileage in the country.⁷⁴

Canada was lagging well behind in highway improvement, even though the provincial governments had invested \$1.6 billion in their road networks between 1920 and 1946. There is every indication that Canada had invested a higher percentage of its GNP into its highway network than the United States throughout much of the 1920s.⁷⁵ From 1946 to 1948, alone, provincial highway expenditures amounted to \$742 million, considerably more than the \$367 million they obtained through gas and licensing fees and only marginally less than the \$751 million they spent on health, education and social welfare during the same period.⁷⁶

Faced with the perennial Canadian problem of a limited population dispersed over a vast area, provincial investment in highway construction could not keep pace with the speed of technological change, volume of use, or widening geographic distribution that characterized motor vehicle technology in Canada. Highways thus were a form of reverse salient that resulted in governments dedicating increasingly larger percentages of their resources to modernize and expand their highway infrastructure following WWII. In these circumstances, any additional money for highways was welcome. Constitutional reservations weakened about federal spending in this domain. Thus the provincial

⁷⁴ Historical Statistics (1st ed.), 550; see also J.O. Martineau, "Statistical Survey of Highway Development in Canada," Roads and Bridges 87:10 (Oct. 1947), 83-85.

⁷⁵ Davis, "Dependant," 121.

⁷⁶ J.C. Lessard, Transportation in Canada (Ottawa: Royal Commission on Canada's Economic Prospects, 1956) Schedule 2G,2; Lessard quotes a figure for associated revenues of \$446,155,000 for this period ; Urquhart, 209, 218.

governments responded to the revived federal government interest in the Trans-Canada Highway as more opportunity than threat. Of course, the provinces would do their best to make sure that this highway improved the efficiency of their motor vehicle systems. National dreams and myths did not build pavement capable of withstanding eight-ton trucks.

2.1 Opening a Transcontinental Route

Meanwhile the interest of the federal government in highways was reviving. Not that had it ever been entirely moribund. To be sure, the Second World War inevitably reduced its commitment, and that of provinces, to highway construction. Thanks to stringent wartime fiscal controls, little capital was available for highway construction. Limitations on the production and use of civilian vehicles further reduced the demand and revenues for it. Finally, the limitations placed on the use of petroleum products, restrictions on the importation of road building equipment from the United States, and the diversion of a wide range of materials to the war effort, forced provincial highway authorities to limit the majority of their activities to the maintenance of existing roads and to post-war planning.⁷⁷

Expenditures on highway construction accordingly fell to \$71 million in 1943, roughly 39 percent less than in 1940. The bulk of this money constituted maintenance work: new construction amounted to less than a third of total expenditures, whereas in

⁷⁷ "Scarcity of Roadbuilding Materials," Roads and Bridges (May, 1942): 50; see also: Currie, 466-67.

1940 it had accounted for 57 percent.⁷⁸ (See Table 1 for a breakdown of highway expenditures and revenues in this period.) Yet construction never entirely ceased, and during the first three years of the war a number of major highway projects were completed. The most significant Canadian development was the completion of a Trans-Canada through road between 1939 and 1942.⁷⁹ This work involved the elimination of the two remaining gaps in the route and continued projects begun in the 1930's. Had highway standards remained the same in the 1940s as in Wilby's era, one might have been hailing the completion of the "Trans-Canada Highway in 1942," but this designation now implied a modern, all-weather highway; and that would await the 1960's.

Even so, the work done in 1939-1942 was consequential. An important gap was removed when British Columbia's 190 mile [305 km] Big Bend Highway, connecting Revelstoke with Golden B.C., finally opened in June 1940 after a decade of effort. The completion of the meandering gravel road at last permitted motor vehicle travel between Alberta and the West Coast without need of a detour through the United States. The federal government, citing the highway's defence value, assumed the costs of Big Bend's construction.⁸⁰ The remaining break in the transcontinental route was located in Northern Ontario between Nippigon and Hearst, a distance of approximately 340 miles [547 km].

⁷⁸ Lessard, Transportation, Schedule 2G,2.

⁷⁹ While the Alaska Highway was constructed in this period, for the purpose of this study it is not considered a Canadian project. Even during the civilian construction phase beginning in 1943, the highway was administered by the US PRA.

⁸⁰ R. G. Harvey, The Coast Connection (Lantzville (B.C.): Oolichan Books, 1994), 83, 112-113.; see also: Guillet, 224-226 and Robertson, History of Trans-Canada, 20

Table 1

Annual Expenditures on Rural Roads and Urban Streets
and User Revenues
1939 ~ 1953

(thousands of dollars)

Year	Construction	Maintenance	Administration	Total	Federal	Provincial	Municipal	Total	Revenues
1939	66,250	35,867	4,355	106,472	8,652	79,092	18,728	106,472	79,915
1940	66,264	43,707	5,765	115,736	1,986	96,419	17,331	115,736	85,479
1941	45,126	44,936	3,223	93,285	6,220	66,901	20,164	93,285	91,139
1942	31,920	40,798	2,952	75,670	7,517	51,142	17,011	75,670	85,323
1943	20,596	47,301	3,440	71,337	485	53,255	17,597	71,337	87,507
1944	35,313	48,058	3,980	87,351	3,975	62,293	21,083	87,351	88,700
1945	37,727	61,601	4,267	103,595	1,157	73,624	28,814	103,595	92,979
1946	90,442	71,544	7,083	169,069	6,300	126,772	35,997	169,069	113,471
1947	141,003	115,095	10,887	266,985	7,963	211,623	47,399	266,985	157,066
1948	172,901	119,335	14,143	306,379	6,448	251,452	48,479	306,379	175,618
1949	184,101	122,815	12,248	319,164	10,393	244,669	64,102	319,164	196,040
1950	183,562	132,056	15,413	331,031	17,170	247,027	66,834	331,031	222,332
1951	229,302	151,723	19,942	399,399	21,909	293,078	84,412	399,399	252,213
1952	284,861	174,758	15,825	475,591	25,239	356,029	94,323	475,591	278,004
1953	284,630	177,116	17,514	480,049	27,037	347,880	105,132	480,049	307,664

The first 109 mile [175 km] western section between Nippigon and Geraldton was opened to traffic in late 1940 following six years of construction. The cost of the highway was shared on a 50/50 basis by the governments of Ontario and Canada.⁸¹

With the completion of the trans-continental route a high priority by 1941 thanks to military consideration, its final gap -- between Hearst and Geraldton -- was erased by October 1942, at a cost of \$6 million. Though it traversed a distance of 153 miles [246 km] through difficult terrain comprised primarily of muskeg, the highway was, for a gravel road, built to relatively high specifications. Its completion, as R.M. Smith, Deputy Minister of the Ontario Department of Highways, pointed out, provided "an all-Canadian route for the transportation by road of military forces and supplies, and of raw materials from farm, forest, stream and mine to markets and factories."⁸²

Thus, by October 1942 it was possible to drive from Halifax to Vancouver on an all-Canadian highway, for the first time. The route stretched 4,224 miles [6,830 km]. Almost half of that distance was hard surfaced, the longest continuous paved stretch running almost 1200 miles [1930 km] from Halifax to Ottawa. However, much of the highway west of Ottawa was of gravel construction.⁸³ There was remarkably little

⁸¹ T.F. Francis, "Scenic Highway in Northern Ontario," Roads and Bridges 75:1 (Feb, 1941): 12-13.

⁸² R.M. Smith, "Six Million Dollars to be Spent on the Trans-Canada Highway between Geraldton and Hearst," Roads and Bridges 79:1 (Jan. 1941): 17-18; see also T.F. Francis, "The Final Link of the Trans-Canada Highway in Northern Ontario," Roads and Bridges 80:1 (Jan. 1942): 25-26 and "Completion of Ontario Section, Trans-Canada Highway," Roads and Bridges 80:10 (Oct. 1942): 45-46.

⁸³ Robertson, 12.

publicity given to the final opening of a transcontinental route. The lack of fanfare might well have been due to the fact that the road no longer met the expectations of those who had called for its construction in the first place. Increasingly, gravel roads were no longer perceived as meeting the needs of a modern, motorized, nation. This was not yet the Trans-Canada Highway of Perry Doolittle's dreams.

Changing expectations of the meaning of the term "highway" is evident in the other highway initiatives partially funded by Ottawa around the outbreak of the war. In 1938 the Liberal Government had initiated a general tourist-highway program to pave and otherwise upgrade access routes from the United States as well as access roads into National Parks. As J. M. Wardle, a senior official within the Department of Mines and Resources, pointed out at the close of 1941, the state of Canadian highways impeded further growth of the tourist (read "American") market. Wardle stated:

Canada with her present limited system of paved highways could not handle to advantage a fully developed tourist trade from this tremendous source without substantial expansion in her tourist-highway facilities.⁸⁴

These remarks paraphrased earlier comments made before the Ontario Good Roads Association by D. L. Dolan, chief of the Dominion Travel Bureau. In a classic example of preaching to the converted, Dolan commented, "we must give to the American tourist a system of modern, dustless highways, over which it will be a delight for him to travel."⁸⁵

The lure of American tourist dollars had always provided a strong incentive for

⁸⁴ Ibid. 100.

⁸⁵ D. Leo Dolan, "Canada's \$300,000,000 Industry Needs More and Better Roads," Roads and Bridges 79: 4 (April, 1940): 16-17.

provincial governments to provide easy access routes from the American border to major urban centres.⁸⁶ While the highway lobby had consistently argued the financial benefits of American motor vehicle tourism during the 1920's and early 1930's, until 1938 Ottawa appears not to have accepted these arguments at full value. However, its attitude changed as it looked for ways to improve Canada's foreign exchange situation, particularly following the outbreak of the war. To obtain United States currency, the federal Government invested nearly \$6.5 million between 1938 and 1941 on access highways to facilitate American tourist traffic. Based on a maximum federal contribution of 50 percent of actual construction costs, provincial governments improved international links on the Niagara Peninsula and the Queen Elizabeth Way in southern Ontario as well as entry routes in southern B.C., Alberta, Manitoba, and New Brunswick.⁸⁷ Thus, while the war did constrain the rate of highway development in Canada, the demand for new highways never ceased. The Dominion government even undertook to assist provinces through the provision of funds towards the construction or improvement of routes it deemed of value for either strategic or foreign exchange reasons.

2.2 Planning For Peace

Even though wartime constraints limited the physical expansion of the highway network and the growth of the automotive fleet, the motor vehicle system retained considerable momentum during the war, thanks to the continued promotion of the "good

⁸⁶ See pg. 16 above and, Davis, Dependent, 124-125.

⁸⁷ J.M. Wardle, "Tourist Trade Still in Its Infancy," Roads and Bridges 80: (1941): 100-102.

roads" cause by the small army of engineers and highway professionals still working for the provincial governments and their allies in construction. By the 1940s provincial road departments had developed substantial engineering and technical expertise both in terms of policy development and construction. In 1940, The Canadian Engineer estimated that the country's nine provincial highway departments employed over 500 professional and administrative staff. These departments worked in concert with over 700 specialized road contractors in the country.⁸⁸

In the continued competition for provincial government funds, this group proved highly adept at demonstrating to their political masters how their activities, and their expertise, could address broad political concerns. They offered to build Canada, not just roads. They explained how highway improvements would attract American dollars through tourism, provide direct employment, especially to unskilled and semi-skilled men, through road construction, and facilitate economic growth by reducing the cost and time employed in the movement of goods and people.⁸⁹

Throughout the war the industry press maintained a barrage of articles and reports providing the statistical, financial and social arguments that highway proponents subsequently used to convince political and economic planners of the need for an improved highway system on both a provincial and national level. These articles invariably

⁸⁸ "To Serve a Great and Growing Field," Roads and Bridges, 78 (Jan, 1940), 11.

⁸⁹ This 'translation' of interests is explored the literature associated with the actor-network theory in the study of the history of technology, see: Bruno Latour, Science in Action: (Cambridge, MA: Harvard Univ. Press, 1987) and David Hounshell, From the American System to Mass Production (Baltimore: Johns Hopkins Univ. Press., 1984).

emphasized the military importance of highways, the potential for increased motor vehicle revenues after the war, and the potential role of highway construction as an employment measure.⁹⁰ The Canadian Good Roads Association was particularly active in this respect. T. G. Morgan, Chairman of its Executive Committee, published a flurry of articles in various journals addressing the issue of post-war road development. The arguments used were consistent with those employed since the turn-of-the-century and conjure up images of a perpetual motion machine, in this case creating economic opportunities and providing a financially self-liquidating public service. In one of his more widely circulated articles, Morgan reminded his readers:

It is important to remember that road building is a self-liquidating investment to the taxpayers monies. The users of our highways eventually pay for them. Our highways are revenue producers and are most valuable and important public assets.⁹¹

These arguments won converts. As early as 1940, the Canadian Good Roads Association at the suggestion of Ontario Minister of Highways T.B. McQuesten passed a resolution recommending that the provinces plan for post-war highway expansion. At the federal level, highways figured in the discussions of the various wartime committees created to advise the government on how to provide full employment in peacetime conditions. Reconstruction committees such as the federal government's Advisory Committee on Reconstruction, or James Committee, anticipated a far more intrusive role for government

⁹⁰ W.G. Robertson, "Postwar Highway Transportation," Roads and Bridges (Oct. 1944): 96.

⁹¹ Theodore G. Morgan, "Problems of Post-War Highway Development," Engineering and Contract Record 56:1 (Jan. 1943): 16

in post-war Canada in terms of both social and economic planning.⁹² It and the Special Parliamentary Committee on Reconstruction both recommended an enhanced federal role in highway construction in general, and completion of a modern Trans-Canada Highway in particular. Their recommendations attested both to the lobbying skills of the highway movement as well as to the pervasive belief that the further growth of the motor vehicle system would promote postwar prosperity.

The final report of the Sub-Committee on Publicly Financed Construction Projects in September 1943 was the first federal committee to specifically recommend federal assistance for highway construction. One of five sub-committees of the James Committee reporting on individual fields, and chaired by K. M. Cameron, Chief Engineer of the Department of Public Works, this committee had close dealings with the CGRA and provincial highway authorities.⁹³ Its final report strongly supported highway construction as an economic and unemployment measure.

In keeping with the opinion of highway specialists, the report issued a strong warning against wasting federal funds through the type of unemployment relief programme that the government had assisted during the 1930's. Acknowledging the considerable planning already achieved by provincial authorities, the Sub-Committee called for the co-ordination of road building programs according to a master plan for a national communication network. To this end, the committee created a priority listing of

⁹² Robert Bothwell, Ian Drummond, and John English, Canada Since 1945, rev. ed., (Toronto: U of T Press, 1993), 46-47.

⁹³ PAC, Department of Finance, RG 19 (E-3(j)), vol. 3585, File R-09, Minutes of the Sub-committee on Post-War Construction Projects, Minutes 117 and 177.

road projects which it deemed eligible for federal funding. It thought that first priority should be given to national highways, more particularly the Trans-Canada Highway and its branches.⁹⁴ The James Committee's final report of 1944 recommended that special emphasis be given to programs exploiting the potential of the tourist trade through the creation of additional national parks and improved tourist roads. The report stated:

Canada has a magnificent asset in her scenery and her wild life. Few will bring more immediate and more lasting economic returns, or provide greater inner satisfaction, than the supplying of the amenities, as the people of the United States have done in their holiday land, to make this great asset readily and easily available to those who wish to enjoy the beauty of our northland, our mountains, our rivers, our lakes and our seas.⁹⁵

The drive to increase federal funding of highways received a second boost from the recommendations of the Special Parliamentary Committee on Reconstruction and Re-Establishment, chaired by J.G. Turgeon. The Turgeon Committee conducted an on-going series of public hearings between 1942 and 1944 that provided a forum for a discussion of some of the larger issues facing the Canadian transportation industry following the war. While some provinces used the hearings to present their own post-war needs, the railways and commercial motor vehicle associations used the hearings to raise the issue of road - rail competition.

While one might assume that trucking interests would have embraced the

⁹⁴ Canada, Publically Financed Construction Projects - Final Report of Sub-committee (Ottawa: King's Printer, 1944), 32; regarding the highway professionals' opposition to relief funding, see:

⁹⁵ Canada, Report of Advisory Committee on Reconstruction, (Ottawa: King's Printer, 1944), 32; on the James Committee see: R.A. Young, "Reining in James: the Limits of the Task Force," Canadian Public Administration, 24:4 (Winter, 1981), 596-597.

possibility of federal funding for highway construction in their presentations to the Turgeon Committee, their distrust of Ottawa's intentions resulted in a generally neutral approach to the subject. The Canadian Automotive Transportation Association's (CATA) brief to the Turgeon Committee ignored the issue of highway funding entirely, emphasizing instead the importance of trucking to the war effort. In particular, the CATA attempted to counter the railways' earlier submissions, complaining of unfair motor competition, that had called for greater federal control over road transport. The CATA adamantly opposed federal regulation of any aspect of the industry. Their distrust of the federal government was based upon Ottawa's strong ties with the railway industry, and the perception that trucking interests could not receive a fair hearing in Ottawa so long as railway companies received preferred treatment from the Dominion government.⁹⁶ The federal government's ownership and defence of debt-ridden Canadian National Railways provided ample evidence to confirm these suspicions.

A number of provinces presented briefs to the Parliamentary Committee. For example, Alberta and Saskatchewan both raised the issues of highway construction and funding in their respective presentations. While the issue of unfair freight rates was raised, the provinces undertook to emphasize the important place accorded to highway expenditures in their post-war plans. The benefits from an infusion of provincial funds into

⁹⁶ Canada, Special Committee on Reconstruction, Minute #12, 425; The trucking industries distrust of the federal government's involvement in highway policy, particularly interprovincial regulation was based upon Ottawa's strong links, financial and political with Canadian railways. Truckers' alliance with provincial governments is an excellent example of the role played by class fractions in Canada's political economy; see: G. Stevenson, Unfulfilled Union, 3rd ed. (Toronto: Gage Publishing, 1989), 74-75.

the provincial highway networks would be straightforward: employment opportunities for returning veterans - particularly the unskilled and semi-skilled, and the potential influx of tourist dollars, both Canadian and especially American.⁹⁷

The Turgeon Committee's Fourth Report in 1944 avoided the issue of road versus rail competition and "the serious question of freight rates" while recommending further examination of these topics. The report did confirm prevailing provincial support for both the need for increased federal involvement in highway planning and construction as well as the enormous potential value of American automobile tourism to the post-war economy. It recommended "that as soon as possible after the war, a first-class permanent all-season highway be constructed right across Canada." For maximum tourism impact, the highway should be connected with all National and Provincial Parks, with particular attention being paid to connections in each province with the U.S. highway system.⁹⁸

Provincial post-war plans had reached a point where detailed highway plans and projections were ready in each province by the summer of 1945. These reconstruction plans obviously covered a wide range of regional priorities, but improved highways figured prominently in all them. As of September 1945, the provinces' highways projects called for an expenditure of over \$1 billion in public spending over the next decade. Post-war highway plans ranged from Ontario's ambitious \$250 million program to a mere \$2 million budgeted by P.E.I.. Apart from the scale of investment, the provinces followed a

⁹⁷ Ibid, Evidence # 30, November 26, 1943, 812.

⁹⁸ Canada, Special Committee on Reconstruction and Re-Establishment, Fourth Report to the House, Wednesday, January 26, 1944, (Ottawa: King's Printer, 1944), 4

similar approach to their projected expenditures. Initial activities were to address deferred maintenance, to be followed by the upgrading of existing routes, particularly paving, and construction of new highways. As in the case of British Columbia's projected \$210 million highway program, the ability of many of the provinces to implement these projects was contingent upon generous Ottawa assistance.⁹⁹

2.3 Ottawa's Response

While the provinces looked to highway investment as one means of kick-starting their economies following the war, the federal government's approach to the subject remained quite vague, particularly as it applied to public investment. Indeed, the federal government entered the post-war period without a comprehensive plan for the nation's transportation system. C. D. Howe outlined the basis of the government's reconstruction policy when he presented the government's White Paper on Employment and Income to the House of Commons in April 1945. Although committed to maintaining "a high and stable level of employment and income" following the cessation of hostilities, he emphasized that the government was not about to embark upon a program of massive public spending to ensure that goal. Howe stated the government's position as follows:

The Government does not believe it to be either desirable or practicable to look to the expansion of government to provide, to any large degree, the additional employment required. It follows that a major and early task of reconstruction is to facilitate and encourage an expansion of private industry, including primary and

⁹⁹ "Provinces Plan Billion Dollar Road Program," Engineering and Contract Record 58:9 (Sept. 1945): 48-49, 116.

other industries.¹⁰⁰

The full extent of the federal government's plans for post-war Canada were outlined in more detail within the Green Book Proposals of August 1945. Though subsequently hailed by historians as "a comprehensive plan to restructure Canadian federalism," the Green Book did not propose any marked departures in federal government policy towards highway transportation, planning and finance.¹⁰¹ Even so, building upon the recommendations of the James and Turgeon Committees, there was an admission that Ottawa had some responsibility to assist in the construction of transportation facilities of national importance. The recognition that highways, in the form of "[a]trans-Canada highway, international connections, approaches to national parks....," were of national importance was certainly a victory for the highway lobby.¹⁰²

Nevertheless, the federal government as yet showed no indication of wishing to assume a more active role in highway development than it had in the past. The specifics of the Green Book merely mentioned those activities that it had been undertaking for the past decade: namely, potential federal assistance for a Trans-Canada Highway, improved international connections, amelioration of access routes to national parks, and railway grade crossings. Similarly, the Green Book Proposals revealed that Ottawa believed that

¹⁰⁰ Canada Employment and Income, with Special Reference to the Initial Period of Reconstruction (Ottawa: King's Printer, 1945), 1, 3.

¹⁰¹ R. Bothwell, I. Drummond, J. English, Canada Since 1945 rev. ed. (Toronto: UTP, 1993) 74

¹⁰² Canada Dominion Provincial Conference, Plenary Session 1, August 6, 1945, (Ottawa: King's Printer, 1946), 81.

the existing primacy of provincial governments over highways would remain intact. Even in the case of transportation facilities designated to be of national importance, such as the Trans-Canada Highway, the federal government still passively suggested that it was "prepared to consider assisting [the provinces] provided specific agreements can be reached."¹⁰³

The Dominion government was not willing to invest heavily in public works projects until economic indicators showed that additional federal investment was needed to stabilize the employment situation. Post-war recovery was to be led by private enterprise and increased public consumption of goods. Public investment projects, particularly those designated as non-essential, were to be relegated to a reserve shelf of projects that could be called upon when required. This arrangement was essentially what Howe referred to as the "timing" of public investment projects. From all indications Ottawa, in contrast to the provinces, considered highway construction a non-essential investment.¹⁰⁴ Indeed, it appears that the Dominion government's attitude towards highways reverted to its Depression-era view that highway investment were primarily designed to employ as many men as possible on unemployment relief.

Shortly after the release of the Green Book Proposals in August of 1945, British Columbia, Saskatchewan and Manitoba attempted, unsuccessfully, to secure clarification of Ottawa's position with respect to the Trans-Canada Highway, international access routes and other highway projects. Subsequent requests for federal assistance for specific

¹⁰³ Ibid., 78-79.

¹⁰⁴ Canada, Employment & Income 15-17.

highway projects from both Saskatchewan and Manitoba were rejected.¹⁰⁵

Ottawa's priorities lay elsewhere. The introduction of improved social benefits, (e.g. Unemployment, Family Allowances, Pension services) asserted the federal government's presence on a national scale. Other programs, such the National Housing Act, provided an indirect stimulus to the national economy and address urgent public needs. With respect to public works programs, the federal government remained unmoved. Hence on September 12, 1946, the Cabinet Committee on Reconstruction informed the provinces that the Government was deferring any discussion of federal assistance to highway projects, pending resolution of financial agreements with the provinces. This policy remained in effect from 1946 until at least mid-March 1948.¹⁰⁶

The federal government's apparent indifference to the project may be explained in a number of ways. Firstly, the government lacked the clear cut constitutional and legal responsibility to undertake highway projects outside of its own Crown lands. Moreover, the economic arguments that proved such a powerful tool in convincing provincial authorities to invest in highways, in particular as a means of generating increased provincial revenues, did not have the same appeal for Ottawa. In fact, one could even argue that the federal government was acting like the typical "free rider," benefitting itself financially from the expansion of the motor vehicle system, while letting the provinces take

¹⁰⁵ NAC, Dept. of Mines & Resources, RG 21, Vol. 1, 291.4.10.121.2 (Trans-Canada Highway), Letter from J.T. Douglas to C.D. Howe, December 6, 1945, also, H. Anscomb to C.D. Howe, March 14, 1946.

¹⁰⁶ NAC, Dept. of Finance, RG 19, Vol. 4014, 188-1 Cabinet Committee on Reconstruction, Minutes of Meeting of 16 March 1948, 4; also, Minutes of Meeting of 12 May 1947, 4.

the political heat from collecting the taxes needed to eliminate the “reverse salients” -- narrow gravel highways with torturous curves -- that slowed the system’s momentum. Certainly the provinces made this accusation often enough.

However, there is a broader issue underlying the intellectual gap between the two parties as to the relative importance of a Trans-Canada Highway in post-war Canada. Within the federal government there was no single power, a highway “voice”, that could directly influence policy. Since the termination of the Canada Highways Act in 1928, the highway transportation field had been marginalized with the Government. The Department of Mines & Resources was the only section where highway and road development was considered a federal government function. Even so, it was a minor activity associated with limited resource development and tourist activities in National Parks. In the absence of a more comprehensive perspective on highway development, is it a surprise that the federal government still perceived the Trans-Canada Highway from a traditional political perspective as an unemployment measure?

Chapter III

The Road to Full Employment.

For three years following the introduction of the Green Book Proposals in August 1945, Ottawa sought to avoid further discussion of highway projects with the provinces. Lobbying efforts on behalf of a Trans-Canada Highway from municipal boards of trade and business groups thus had little effect on government policy, although they did demonstrate widespread support for the project.¹⁰⁷ The federal government's refusal to enter into ad hoc agreements on highway construction with the individual provinces may be cited as an example of its desire to develop a consistent national policy on joint federal-provincial endeavours. There is ample reason, however, to question Ottawa's depth of understanding of and commitment to the Trans-Canada Highway.

Both the White Paper and Green Book Proposals had referred to the need for the development of a reserve, or shelf, of soundly planned post-war public investment projects that could be implemented quickly in the event of rising unemployment. The facts suggest that the federal bureaucracy had actually had considerable difficulty in assembling a reserve of projects and was far from organized with respect to any development projects.¹⁰⁸ Prior to October 1948, the Cabinet appears to have been uninformed as to the

¹⁰⁷ For example, the Canadian Construction Association passed resolutions in 1947 and 1948 calling for Ottawa to undertake a trans-continental road programme, NAC, Department of Mines and Resources, RG 21, Vol. 1, File 291-4-10-12-2, R.G. Johnson to C.D. Howe, 16/10/48; also: "Federal Aid for Roads is Urged in Legislature," Voice of Motordom (publication of Alberta Motor Association), 12:12 (Mar. 1946), 6.

¹⁰⁸ An internal report responding perceived problems in the execution of the Government's public investment policy stated that the shelf of reserve projects "is still far from adequate to meet the requirements of any substantial economic recession,." NAC, Dept. of Finance

most rudimentary financial or technical issues involved in the construction of a Trans-Canada Highway. Even very preliminary estimates on the cost of the project had not been prepared prior to June of that year, almost three years after it had been touted as a possible joint federal-provincial project.¹⁰⁹

After an inquiry from C.D. Howe, in late September 1948 the Public Projects Branch of the Department of Reconstruction and Supply requested the Department of Mines and Resources to provide information on the potential cost of a paved Trans-Canada Highway. In his reply to Howe several weeks later G.D. Mallory, Acting Coordinator of Public Projects, informed the Minister that the information was not so much a report, but a "collection of special data designed to serve as a ready reference."¹¹⁰ Mallory's note made it clear that such fundamental elements as specifications and route for the highway had yet to be determined.

The majority of the information package was made up of a twenty-seven page report, composed by J.M. Wardle, Director of Special Projects for the Department of Mines and Resources, the previous June. Wardle's report was a summary of options for a paved Trans-Canada Highway. It discussed a variety of routes and standards whose estimated costs ranged from \$80 to \$200 million with a completion date of seven to twelve years, respectively. Wardle's simple report is of particular significance since it

Records, RG 19, E-5(d), Vol. 4014, J.R. Baldwin, "Draft Report to Cabinet Reconstruction Committee," March 3, 1948, 2.

¹⁰⁹ Canada, Employment and Income, 16.

¹¹⁰ NAC, Department of Mines and Resources, RG 21, Vol. 1, File 291-4-10-12-2. Mallory to Howe, Oct. 19, 1948.

established the parameters for the federal government's subsequent approach to the project.¹¹¹ (See Map 1 for Proposed Routing in 1948)

Howe's, and one may assume also the Cabinet's, higher level of interest in the Trans-Canada Highway project resulted from concessions accorded to western and eastern delegations at the Liberal Convention the previous August. During the convention, provincial delegates, particularly those from the west, expressed a number of complaints over transportation issues. Western apprehension over transportation costs had been exacerbated in late 1946 with the railways' application for a 30 per cent increase in freight rates, which was granted over the opposition of the western provinces. Even so, the Board of Transport Commissioners in March 1948 authorized a 21 per cent increase (with certain exceptions) in railway freight rates.¹¹² Faced with rising costs and declining profits, the following July the railways had applied for another, immediate increase of 15 per cent .

Provincial concerns about freight rates burst out during the Federal Liberal Convention in August of 1948. Following the introduction of his "business" resolution to the party faithful, C.D. Howe cited the Trans-Canada Highway as one of the "rainy day" projects the government had on reserve to counteract a potential downturn in the economy.¹¹³ Given his indifference to the project and the fact that the majority of his

¹¹¹ Department of Mines and Resources, File 291-4-10-12-2, M.W. Mackenzie to G.D. Mallory, 24/09/48.

¹¹² "Railways Ask for 30 percent Freight Rate Increase," Canadian Transportation (Nov. 1946), 616-617; "Moderate Freight Rate Increase," Canadian Transportation (April, 1948), 193-194.

¹¹³ Liberal Party of Canada, Report of the Proceedings of the National Liberal Convention, Aug. 5-7, 1948, Ottawa, Canada (Ottawa: Le Droit, 1948), 94

speech generally emphasized the need to limit government involvement in the economy, it is highly doubtful that his reference to the Trans-Canada Highway was intended to elicit much response. Nevertheless, Premier Byron Johnson of British Columbia, following Howe onto the podium, called for clarification on the project. Johnson stated:

I think there should be a definite policy announced in connection with the Trans-Canada highway. It may be that this is not the time to do it, but I think the people of Canada want to know what is to be done. That is certainly true from the provincial point of view. I submit that the Liberal party should announce the extent of co-operation which the provinces will receive in connection with the construction of the Trans-Canada highway. I say that not for political purposes because I know that our Party intends to do it.¹¹⁴

Premier Johnson's remarks obviously hit a chord within the convention. The following day, when introducing a resolution entitled "Employment and a High Standard of Living," William Tucker, leader of the Saskatchewan Liberal Party, voiced his support for Johnson's remarks and called for the federal government to "assume its full share of responsibility for seeing to it that these highways do connect adequately all parts of our country." Tucker went on to say that just as the federal government had given financial support to a national railway system, the Liberal Party in government should take an energetic part in the development of the railways' modern counterpart - the transcontinental highway.¹¹⁵

The following day, Tucker and Angus MacDonald, the Premier of Nova Scotia, proposed a resolution that called for a Royal Commission to investigate regional transportation disparities and for the government to complete the Trans-Canada Highway.

¹¹⁴ Ibid., 96

¹¹⁵ Ibid. 102

The resolution passed. In commenting on its passage, Jack Pickersgill reported that the resolution had received "more spontaneous support from the delegates than almost any other proposal."¹¹⁶

The Liberal Party Convention motivated the federal government seriously to consider a Trans-Canada Highway project. Publicity concerning the Party's position as well as the possibility of an election within the year no doubt added some impetus to the planning process. Certainly, it was not by sheer co-incidence that Howe made his first request for information on the project shortly after the convention. Federal planning on the project began in earnest in October of 1948. J.S. MacKinnon, the Minister of Mines and Resources, wrote to Howe as Acting Prime Minister on October 14 to request approval to invite provincial representatives to an informal conference on the Trans-Canada Highway. Cabinet agreed to this initiative at its October 20th meeting.¹¹⁷ MacKinnon subsequently wrote the provincial premiers on October 29 to invite their representatives to attend a meeting in Ottawa to discuss "a great many problems to be studied in connection with a project of this importance and magnitude."¹¹⁸

Prior to the initial conference on the Highway on December 14 -15, 1948 the federal government defined its position in a report submitted to the Cabinet by the

¹¹⁶ Ibid. 234.; the Royal Commission on Transportation was subsequently established on December 29, 1948 with W.F. A. Turgeon as chair;. J.W. Pickersgill, My Years with Louis St-Laurent. A Political Memoir. (Toronto: Univ. of Toronto Press, 1975) 106.

¹¹⁷ NAC, Cabinet Conclusions: 20/10/48, RG 2, A5a. Vol. 2642

¹¹⁸ NAC, Unpublished Sessional Papers, 1st Session of the 21st Parliament, No. 152b, RG 14, D2, Vol. 548, J.A. MacKinnon to E. Manning, October 29, 1948.

Committee on Economic and Industrial Development on December 8. These departmental representatives recommended that Ottawa fund 50 percent of the actual construction costs on the project, with the provinces assuming responsibility for designating routes and providing the rights-of-way. For reasons that remain unclear MacKinnon disagreed with the recommendation. However, Prime Minister St Laurent encouraged him to be cautious when dealing with the provinces. St Laurent reportedly told the minister that, "No indication should be given at the meeting that the federal government had a plan which they wished to put forward."¹¹⁹ It would seem that the Prime Minister was particularly concerned that the Trans-Canada Highway proposal might be perceived by the premiers, especially Maurice Duplessis of Quebec, as a federal intrusion into provincial affairs.

Louis St. Laurent does not appear to have been an enthusiastic supporter of the Trans-Canada Highway and had not been pleased when the Party membership had called for federal participation in a national highway programme. However, given the popularity of the motion, St. Laurent felt compelled to follow through on the Convention's recommendation. According to Jack Pickersgill, St. Laurent's less than enthusiastic response to the proposal was based in part upon his belief that Quebec would ultimately not participate in the federal-provincial initiative and that it would simply provide Duplessis with further ammunition to decry federal centralization. Certainly, Duplessis' reply to MacKinnon's invitation to attend the initial discussions affirms the validity of this concern. Referring to MacKinnon's statement regarding the great many problems associated with the planning and implementation of a Trans-Canada Highway project,

¹¹⁹ NAC, RG 2 A5a, Vol. 2642, Cabinet Conclusions, 08/12/48, 15

Duplessis added " in particular, the constitutional problem which we consider of paramount importance."¹²⁰

These concerns undoubtedly explain the extremely cautious approach Ottawa was to take in ensuing months. Cabinet minutes provide ample evidence of the Prime Minister's continual attempts to ensure that the federal government was perceived as a neutral broker in the scheme, responding to a popular desire for a national highway and prepared to treat the provinces equitably. Four days before the opening of the first Trans-Canada Highway conference, St Laurent again cautioned MacKinnon to emphasize that Ottawa was simply responding "to a widespread desire throughout Canada to have a Trans-Canada Highway coast-to-coast."¹²¹

The December conference proceeded as scheduled, although Quebec did not participate. The federal government informed the provincial representatives that it was willing to contribute towards the construction of a hard-surface highway on the basis of actual construction costs. It proposed that the actual route, specifications, and other technical issues relative to the Highway could be discussed at a future conference pending submission of information on those topics by the individual provincial authorities.¹²² This first meeting with the provinces did raise concerns regarding the accuracy of preliminary federal studies on the cost of the Highway. While these had suggested a total budget of

¹²⁰ Pickersgill, St-Laurent, 105-106., Unpublished Sessional Papers, Vol. 548, no. 26, Duplessis to MacKinnon, November 3, 1948.

¹²¹ Cabinet Conclusions 10/12/48, 4.

¹²² NAC, Unpublished Sessional Papers, 1st Session of the 21st Parliament, No. 152b, RG 14, D2, Vol. 548, J.A. MacKinnon to D.B. MacMillan, December 20, 1948.

\$266 million for the completion of the Highway, MacKinnon now reported to Cabinet that the actual cost would be higher, given the routes being discussed with the provinces.¹²³

Meanwhile, G.D. Mallory, of the Public Projects Branch (Reconstruction), was questioning whether the Trans-Canada Highway initiative could be reconciled with the Government's stated policy of deferring public works projects. He held that the Highway should be put back on the "shelf" of public works projects intended for use in the event of an economic downturn and rising unemployment. Mines and Resources officials disagreed. Seconding the position of their minister, J. S. MacKinnon, they countered that there was an obvious need for a transcontinental link to meet existing transportation and economic needs. In a note to Mallory, H.L. Keenleyside, Deputy Minister of Mines and Resources, argued that "there seems ample justification to regard the Trans-Canada Highway as a public work of immediate importance and no longer in a category designed for the relief of unemployment."¹²⁴

However, the Department of Mines and Resources lost this bureaucratic battle and the responsibility for overseeing the Trans-Canada Highway. Less than a week after the December 1948 Conference, Mallory informed his staff that the Department of Reconstruction would henceforth "play a leading role in further consultations with the

¹²³ Cabinet Conclusions, 15/12/48, 5.

¹²⁴ NAC, Department of Mines and Resources, G.D. Mallory to Dr. H.L. Keenleyside, 25/11/48, and H.L. Keenleyside to G.D. Mallory, 29.11.48

provinces, and with the assembly of provincial proposals and estimates."¹²⁵ In February of 1949 formal ministerial responsibility for the project was transferred from Mines and Resources to Robert Winters, Minister of Reconstruction and a cabinet protege of C.D. Howe.¹²⁶ There is every indication that the transfer was amicable and was intended to relieve MacKinnon of additional duties.¹²⁷ Yet, on a technical level it was an illogical decision, since Mines and Resources, in charge of the development of highways in and through National Parks, was the only federal department with any experience, limited though it might have been, in the construction of highways. The transfer demonstrated that the federal government's involvement in the Trans-Canada Highway was tied to its reconstruction policy and would continue to be deferred until the fight against unemployment required it.

3.1 In Pursuit of Unanimity

A draft bill to authorize the government to enter into agreements with the provinces for the development of a Trans-Canada Highway was initially submitted to and accepted by Cabinet in January 1949. However, by April problems had arisen in the planning process due to the failure of Ontario and Quebec to submit the information requested the previous December. St Laurent still insisted upon unanimity among the

¹²⁵ Mines and Resources, H.G. Cochrane to G.D. Mallory, 22/12/48.

¹²⁶ Robert Bothwell and William Kilbourn, C.D. Howe. A Biography, (Toronto: McClelland and Stewart, 1979), 224.

¹²⁷ NAC, St Laurent Papers, MG 26 L Vol. 70/ "Unofficial - Correspondence to Minister of Reconstruction & Supply," marginal notation in R.H. Winters to J. Pickersgill, 28/02/49.

provinces before proceeding further. Until all provinces had submitted their information, no agreement would be signed regarding the Trans-Canada.¹²⁸ Consequently, Cabinet voted to defer action on the bill.

Why St Laurent insisted upon a unanimous agreement from the provinces remains unclear from the record. Based on the Prime Minister's ambivalent attitude to the project, it is highly probable that the proviso enabled the Government to defer the project to a more economically suitable time while shifting the blame for the delay to the two largest provinces. In this way, the federal government could sustain its pose as an honest broker responding to public demands for an east-west link, keeping the western and Atlantic provinces hopeful of eventual assistance, while fending off Quebec's charges that it sought to undermine provincial autonomy. The western and Atlantic provinces were offered the hope of eventual assistance, while Quebec was not stirred up over provincial rights in the run-up to a federal election.

As the Government dissolved Parliament in preparation for the 1949 General Election, the Liberal Party could even claim that it had initiated planning for the project. The Liberals were not alone in promising an all-season, modern Trans-Canada Highway. The promise appeared in the election platforms of all three major federal parties, in testament to the tremendous momentum of the motor vehicle system after the war.¹²⁹

The re-election and formation of another Liberal government resulted in very rapid

¹²⁸ Cabinet Conclusions: 07/04/49 and; Ibid., 03/05/49, 9, 12.

¹²⁹ D.Owen Corrigan, Canadian Party Platforms: 1867-1968, (n.p.: Copp Clark, 1968), 172, 183-184, 188.

movement on the project. Robert Winters, who resumed his duties as Minister of Reconstruction and Supply, and his staff continued their fact-finding work with provincial highway authorities during the summer. By early September, Winters wrote to the provincial highway ministers stating that the Government intended to seek legislation enabling Ottawa to assist the provinces to complete a Trans-Canada Highway in the following session of Parliament. An outline of the terms of agreement was attached. One important addition to the federal proposal was that, although the choice of the route for the Highway resided with each province, Ottawa now stipulated that "the Trans-Canada highway as a whole should follow the shortest practicable East-West route across Canada." ¹³⁰

In light of Cabinet's earlier concerns over unanimous agreement among the provinces, the reasons for the Government's decision to proceed with the legislation on the Trans-Canada Highway are not obvious. After all, a report submitted by Winters to Cabinet on 25 October had suggested that the project was fraught with difficulties. Only four of the ten provinces -- B.C., Manitoba, Saskatchewan, and Newfoundland -- had accepted the terms of the preliminary agreement and submitted routes acceptable to Ottawa. Alberta disagreed with the cost-sharing formula and maintained Ottawa should assume at least two-thirds of the cost. The three maritime provinces had submitted routes

¹³⁰ NAC RG 32, B-24, Vol.58, File 7-8 pt.1, Draft of a Letter to Provincial Highway Ministers From the honourable Minister of Reconstruction and Supply; see also: Memorandum to Cabinet, Oct. 25, 1949, 1.

deemed unwarranted by Ottawa based upon its "shortest practicable route formula."¹³¹

Premier Leslie Frost of Ontario candidly informed Winters that he had no enthusiasm for a Trans-Canada Highway. Yet he affirmed that Ontario would participate in the construction of the highway if the other provinces deemed it necessary. Nevertheless, the province had yet either to submit a projected route or to accept formally the cost sharing proposals. Finally, Quebec, conspicuous by its absence in earlier discussions, remained aloof. While Duplessis verbally informed Winters that the federal approach was reasonable, the province, like Ontario, had neither formally agreed to any federal proposals nor provided any information on proposed routes.¹³²

Despite Winters suggestion to Cabinet that agreement from all provinces would be forthcoming, it is highly unlikely that the Government would have launched a \$150 million initiative based solely on the optimistic prognosis of a comparatively junior minister. Similarly, while the Government had promised action on the Trans-Canada Highway during the election, the large Liberal majority in the Commons did not require immediate movement on a project that had been bandied about for the previous thirty years. What explained, then, the sudden decision to proceed with the Trans-Canada project, even in the absence of provincial unanimity? The decision was most likely rooted in Government concerns over the worsening unemployment projections in the country.¹³³

¹³¹ NAC, Robert Winters Papers, RG 32, B-24, Vol.58, File 7-8 pt.1, R. H. Winters, Memorandum to Cabinet, Oct. 25, 1949, 1

¹³² Ibid.,2.

¹³³ Ibid, 2-3

In mid-October the Cabinet Committee on Economic Policy received a report on the economic outlook for 1950 that provided a grim employment forecast on account of international trends. Howe later reported to Cabinet that there were indications that unemployment in Canada could rise by 50 to 150 percent over the next twelve months. Newfoundland would be especially hard hit, as the Prime Minister nervously noted. He may have feared a third, negative plebiscite in Newfoundland on Confederation if economic conditions worsened there. In order to counteract this situation, the Cabinet Committee recommended, *inter alii*, that "useful projects of a national character, such as those connected with housing, Trans-Canada Highway and resource development, be examined with a view to early implementation."¹³⁴

This decision illustrates how the Cabinet's perception of the Trans-Canada Highway project had not evolved very far beyond the make-work mentality of earlier federal governments. Despite the on-going attempts by some provincial governments and the highway lobby to elicit federal support in the construction of new transportation systems, only the threat of rising unemployment, particularly in Canada's newest province, finally moved the Government to act. Cabinet approved the committee's recommendations and the Trans-Canada Highway Act was tabled in the House of Commons on October 25, 1949.

In proposing the motion in the house on November 21, Winters reiterated the

¹³⁴ Cabinet Conclusions, Meeting of Oct. 20, 1949, 6.; a month earlier Newfoundland's Premier Smallwood had announced a large program of secondary road construction would be launched using "hand labour - not machinery - to relieve unemployment," see: "Road Program for Newfoundland," *Roads and Bridges*, 87:10 (Oct. 1949), 57.

Government's rationale for the legislation, citing popular demand and increasing provincial need. The highway would be a first-class, hard-surfaced road that would assist in the development of trade, natural resources and the Canadian tourist industry. Winters thus sounded like a provincial highways minister or a speaker at a good roads convention. He did not list employment creation among the benefits to be accrued from the project. Nor did he refer explicitly to the federal government's "shelf" of public works projects. Even so, the spectre of unemployment lurked behind the minister as he spoke: using a term that had figured prominently in previous Liberal statements on the project, Winters stated, "it is now timely to bring the project to realization."¹³⁵

Under the terms of the Trans Canada Highway Act the federal government would contribute up to 50 percent of the cost of highways already built between April 1928 and December 1949 that could be incorporated into the Trans-Canada Highway. At the same time, the government would also compensate provinces up to 50 percent of the cost of new construction, excluding the right-of-way, for the Highway. The federal government would pay 100 percent of road construction costs through National Parks. A maximum of \$150 million was to be spent by 1956.¹³⁶ Federal funding was contingent upon the provinces conforming to specified, minimum, standards for a first class, two lane, hard surfaced highway whose route the federal government would determine.

The debates that followed in the House concerning the Trans-Canada Highway Act exhibited a rare agreement on the need for and benefits of a national highway. The

¹³⁵ Canada, Parliament, Parliamentary Debates (Commons), 21 November, 1949, 2023.

¹³⁶ Canada, Statutes of Canada, 13 George VI., Chap. 40.

obvious growth and importance of motor vehicles and the roads they used to Canadian society were no longer questioned. Disagreement concentrated on how the idea was to be executed. The questions raised in the Commons anticipated many of the more contentious issues that were to mark the history of the project over the next six years. George Drew, Leader of the Opposition, provided some of the most cogent criticism of the Liberal proposal, as he questioned the validity of the federal estimates, issues of routing, the specifications to be followed, and the financial ability of some provinces to match Ottawa's contribution.¹³⁷

Drew's comments on the Government's proposal proved to be prophetic. Even as Winters convened a second Federal-Provincial Conference on the Trans-Canada Highway five days after the passage of the Trans-Canada Highway Act on December 10, the future of the project remained in doubt. Ostensibly called to discuss technical aspects of the project, the conference proceedings exposed little agreement on basic issues. In contrast to Winters' previous assurances, the provinces remained critical of the agreement. New Brunswick complained that under the Bill provincial responsibility for preliminary expenses such as surveys and the acquisition of rights-of-way would result in the provinces assuming 66 percent of the Highway's cost, not the 50 percent mentioned. Representing the opinion of the western provinces, British Columbia continued to maintain that as a national project, the federal government should assume full cost of the

¹³⁷ Debates (Commons), 21 November, 1949, 2024-2027.

highway.¹³⁸

The route to be followed by the Highway remained an issue. The fact that Ottawa had now called into question the Trans-Canada Highway routes designated by the provinces in the 1930s caused considerable concern for New Brunswick and Nova Scotia. Ontario questioned the fact that the federal government's preferred route from Montreal led through the Nation's Capital and thence to North Bay, thereby serving only 15 percent of the province's population.¹³⁹

While there were grounds for agreement with the majority of the provinces, Québec was another problem. Ernest Gohier, Chief Engineer of the Québec's Department of Roads accused Ottawa of interference in provincial affairs. Gohier maintained his province's right to determine the route across the province. The fact that the province's choice of route had to meet with the approval of federal engineers was not acceptable. Quebec settled any lingering doubts about its participation in the project in early April when Maurice Duplessis responded negatively to Winters' letter inviting the provinces to sign the agreement. Duplessis informed the Minister that "he felt the Trans-Canada Highway arrangement was simply the first step in an effort by the Federal Government to achieve control of all forms of transportation in Canada."¹⁴⁰

Duplessis' response raised a serious problem for the federal government since it

¹³⁸ Canada, "Proceedings of the Federal-Provincial Conference on the Trans-Canada Highway, December 15-16, 1949," copy of typed ms. in Library of Parliament, Ottawa, 79, 89.

¹³⁹ Ibid., 127-129.

¹⁴⁰ Ibid., 170-172; Winters Papers, R.A. Robertson to R.H. Winters, 11/04/50, 1.

had long maintained that, as a national project, the agreement was contingent upon acceptance by all the provinces. In theory, Quebec's opposition should have killed the highway. However, just as the concerns over rising unemployment had stimulated action on the project the previous November, so too did anxiety over employment in the Spring of 1950 make the government less insistent on unanimity.

By February 1950 unemployment figures in Canada had reached alarming proportions. Over a six week period ending February 2, an additional 100,000 individuals registered as seeking work through the National Employment Service. This raised the total number of registered unemployed Canadians to 376,000.¹⁴¹ In early April, while St Laurent was absent from the Capital, the Cabinet discussed the progress of the Trans-Canada Highway agreement and the probability that Quebec would not sign. Unemployment conditions, particularly in Newfoundland, resulted in a reversal of position vis-à-vis provincial unanimity. In the Cabinet's opinion it was felt that "work on the highway in Newfoundland might provide substantial employment, which would be very desirable during the present year."¹⁴²

In light of the Prime Minister's strong reservations on the subject, it is understandable that the Cabinet delayed a final decision on the matter until St Laurent returned. St Laurent yielded to the consensus shaped in his absence. At a meeting on April 19, the Cabinet, with St Laurent, agreed that the project should proceed. It

¹⁴¹ Canada, Department of Labour, The Labour Gazette Vol. L (1950) (Ottawa: King's Printer, 1951), 366.

¹⁴² Winters Papers, Vol 58, files 7-8, pt. 1, N.A. Robertson to R.H. Winters, April 11, 1950, 2.

concluded that "it was desirable that agreements should be concluded with whatever provinces were ready to sign at that time."¹⁴³

3.2 Partial Success

As he opened the meeting called to endorse formally the Trans-Canada Highway Agreement on April 24, 1950, Robert Winters remained openly optimistic that most provinces would sign. As he pointed out, the agreement represented "to a remarkable degree the mutual acceptance of a great many points."¹⁴⁴ Yet, the full extent of provincial dissatisfaction became apparent as Quebec, Nova Scotia, New Brunswick, and Newfoundland refused to sign. Quebec Minister of Roads Antonio Talbot stated that the agreement "did not include sufficient guarantee for the protection of the rights of Quebec." He said the province was unwilling to divert resources from its own list of highway priorities. Quebec regarded its access to both New Brunswick and Ontario to be adequate already.¹⁴⁵

Nova Scotia and New Brunswick also decided not to sign the agreement. Both provinces had previously expressed support for the plan, but were in a difficult position since they possessed the most paved mileage of all the provinces along their previously designated sections of the Trans-Canada Highway. They had sought assurances from

¹⁴³ Ibid. Robertson to Winters, April 19, 1950.

¹⁴⁴ Canada, "Proceedings of the Federal-Provincial Conference for the Signing of Agreements on the Trans-Canada Highway, April 24, 1950," typed ms copy in Library of Parliament, 6.

¹⁴⁵ Ibid. 12-13.

Ottawa that they would receive credit for these roads even if they did not conform to the federal standards. This, Ottawa was unwilling to concede. It wanted the highways improved to its own Trans-Canada specifications. Yet W.S. Anderson, New Brunswick's Minister of Public Works, objected that the reconstruction of roads which the province had not yet paid off and that could function adequately for a decade or more yet was "a wasteful extravagance."¹⁴⁶ Nova Scotia's position was similar to that of New Brunswick, in that it had serious concerns over incurring what it considered needless expense to upgrade highways that already met provincial traffic needs. The province was also dissatisfied over the selection of St. John's, Newfoundland as eastern terminus of the highway. Prior to Newfoundland's entry into Confederation, the official eastern terminus had been Halifax. The new route would require extensive new construction through Cape Breton Island, avoiding Halifax and much of the more heavily populated southern sections of the province.¹⁴⁷

Ironically, Newfoundland, the province whose economic difficulties had provided much of the inspiration for the federal government to proceed with the Highway plan in April 1950, declined to sign the agreement. Citing insufficient time to review the full implications of the agreement and questioning the quality of the highway required, the province requested further time to consider the proposal.¹⁴⁸

Given their long standing interest in federal assistance towards the construction of

¹⁴⁶ Ibid. 25, 28.

¹⁴⁷ Ibid., 41

¹⁴⁸ Ibid., 49

the Trans-Canada Highway, it is not surprising that, despite some misgivings, the western provinces accepted the terms of the agreement. Ontario, having won concessions that would bring the Trans-Canada Highway along a southern route closer to Toronto, also found the agreement acceptable. Prince Edward Island, assured of a first-rate highway linking the province with both Nova Scotia and New Brunswick, was the most pleased participant at the meeting. Premier Jones, referred to the Trans-Canada Highway agreement as "a model for other similar agreements."¹⁴⁹

Between December 1948 and April 1950, the federal government through negotiation with the provinces had attempted to arrive at a consensus as to how it might best achieve the completion of a national highway. Ottawa's approach to the project was constrained by two imperatives. On the one hand there was a desire to ensure that all provinces were treated equitably, hence its 50-50 funding formula.

The second imperative was to ensure that the Trans-Canada Highway would conform to a series of minimum specifications. Ottawa's initial decision to construct the highway to an established standard across the country was also tied to a desire to provide a common service in all provinces. Paradoxically, these two directives were in conflict with each other. Shortly after the passage of the Trans-Canada Highway Act, an editorial in Saturday Night Magazine suggested the root cause of this conflict.

Surely if there is one basic axiom which the long history of Dominion-Provincial Relations has established it is that when negotiating with a group of provinces so vastly different and disparate in wealth, population, resources and topography, any rigid formula of this kind, whether it be "per capita" equity, or "dollar for dollar" grants, is unsatisfactory. Something much more comfortable to individual

¹⁴⁹ Ibid., 46.

provincial capacity is required"¹⁵⁰

A number of political factors motivated the federal government to undertake the construction of the Trans-Canada Highway. Cabinet interest in the project was spawned by western and eastern demands for a more diversified, and competitive, transportation system suited to modern motor vehicle technology. Implicit in its consideration of the Highway was the Government's genuine desire to capitalize on growing provincial and public interest in the construction of improved highways and a Trans-Canada route. These were considerations that led the federal government to discuss the project, but they did not compel it to implement it.

As this chapter has demonstrated, Ottawa continued to perceive the Trans-Canada Highway primarily as a national employment measure. Had it not been for the federal government's anxiety over rising levels of unemployment in the winter of 1949-1950, it is doubtful whether it would ever have dropped the precondition of provincial unanimity. It is arguable that the need to demonstrate the benefits of Canadian citizenship to Newfoundlanders in the form of construction jobs and improved transportation links to Canada was worth the risk of alienating Quebec. The Trans-Canada Highway project had always been awash in political considerations. Ottawa's decision finally to push ahead with the project over provincial opposition and apathy shows how important it had become to its political calculations.

¹⁵⁰ Wilfred Eggleston, editorial, Saturday Night Magazine 65:10 (Dec. 15, 1949), 5

Chapter IV

"The Shortest Practicable East-West Route"

Ottawa's approach to the construction of the Trans-Canada Highway after 1949 was a political response to a technological and financial issue. On the one hand, the Cabinet finally launched the project as a result of its own concerns over rising unemployment. Ottawa's return to the highway planning and construction field mirrored its involvement under the Canada Highways Act (1919) and the Relief Acts of the 1930s, and as such was not inspired by a significant change in the Government's economic or transportation policy.

On the other, the federal government consciously portrayed itself as an agency responding to public demand for the construction of a modern highway across the country. Indeed, this image was accurate. For much of the previous decade, provincial governments, industry organizations, the press, and business groups had sought to convince Ottawa of the need for federal assistance to highway construction. The decision to proceed with the Trans-Canada Highway project is partially attributable to the success of these lobbying efforts. Certainly, as provinces sought new means to construct increasingly expensive, modern, hard surfaced highways the possibility of federal funding was undoubtedly alluring to provincial governments faced with increasingly higher highway bills.

Yet, the record of the Trans-Canada Highway agreement from December 1949 to December 1956, underscores a weakness inherent in Ottawa's approach to the construction of a national highway. From the outset of the project in 1948, federal

planners recognized that, in order to take full advantage of Trans-Canada Highway assistance, provincial capital spending would have to be diverted to it from other projects. In short, the Trans-Canada had to be recognized as both a regional and a national highway priority by all participants for it be completed according to plan.¹⁵¹ In other words, Ottawa would have to convince ten provincial governments that the completion of a high quality Trans-Canada highway was in their own best interest.

The very ambitiousness of the project and the conditions set out within the Act suggested a certain naivete. Federal insistence that the Highway would follow 'the shortest practicable east-west route' across each province and the country as a whole, failed to take into account that the Trans-Canada Highway could not be treated in isolation, but should have been considered as part of an already burgeoning transportation system in each province. In fact, the provinces would have preferred a return to the general funding arrangements that had existed under the Canada Highways Act. As E.C. Carson, B.C.'s Minister of Public Works, stated to R.H. Winters in early 1949, federal assistance toward the development of a trans-Canada highway network was considered by some a far more beneficial economic measure than the construction of a single road.¹⁵²

The very concept of a highway is not that it necessarily provides the most direct link between two locations, but that it does provide an effective and safe connection while

¹⁵¹ NAC, Department of Mines and Resources, RG 21, Vol. 1, 291.4.10.12.2, Memo to G.D. Mallory, Oct. 13, 1948, Trans-Canada Highway study, 1.

¹⁵² Public Archives of Canada, Unpublished Sessional Papers, 1st Session of the 21st Parliament, No. 152b, RG 14, D2, Vol. 548, No. 100, E. C. Carson to R.H. Winters April 14, 1949.

delivering the greatest social and economic return for the investment. Highway planning involves a number of closely related considerations: location or routing, construction standards, administration, financing and, given the public nature of a number of the former, public policy issues. The route followed by any highway, the Trans-Canada included, is of tantamount importance, as it determines the potential amount and type of traffic to be borne by the road surface and as such, the standard of road required and its cost.¹⁵³

In the case of the Trans-Canada Highway, highway standards and location were effectively predetermined by the agreement. This situation precluded in many respects the cost-benefit analysis associated with the construction of highways, particularly when the "shortest practicable route" formula was applied. In this chapter, we will examine how the issues of construction standards and routing created serious problems for every participant except the western provinces because of a recurring conflict between the cost of construction (i.e. standards) and potential traffic or demand (route).

4.1 Benefits of a Modern Trans-Canada Highway

The Trans-Canada Highway Act of 1949 was designed not to construct a Trans-Canada Highway *de novo*, for as we have seen a trans-continental highway had been completed in 1942. But much of it was gravel and impassable after Spring flooding or winter snows. Moreover, there were not all that many tourists, especially pampered

¹⁵³ M.G. Lay, Handbook of Road Technology, vol. 1 Planning and Pavements 2nd ed. (N.Y.: Gordon & Breach, 1990), 54-55.

American ones, who relished the thought of travelling hundreds of kilometres of gravel roads as their vacation. The 1949 legislation sought to upgrade and to link existing roads according to a consistent, modern standard throughout the country. As Robert Winters suggested in his opening remarks to the Federal-Provincial Conference convened to sign the Highway agreements on April 24, 1950, a modern society called for more than gravel roads: "We have now reached the half-way mark of the Twentieth century," he stated, "but still have no highway which will enable motor vehicle passengers to drive in comfort across Canadian soil from the Atlantic to the Pacific."¹⁵⁴

For many years lobbyists had approached the construction of a Trans-Canada Highway as a matter of national pride. In a 1948 letter to the Prime Minister, a Saskatchewan municipality summarized the affront of bad roads to Canada's national dignity: "We consider it a shame and disgrace that Canadians, or any motorist for that fact, must resort to travelling south of the border in order to get from one part of Canada to the other."¹⁵⁵ In a more positive vein, an editorial in Roads and Bridges commended the federal government following its announcement of the Trans-Canada Highway Act for "recognizing its obligations in connection with the development of a coast-to-coast highway that will be the pride of all Canadians and a unifying bond among the provinces."¹⁵⁶

¹⁵⁴ "Conference for the Signing of Agreements," 3-4.

¹⁵⁵ NAC, Department of Mines and Resources, RG 21, Vol. 1, 291.4.10.12.2, Town of Watrous, Sask. to W.L. MacKenzie King, 20 October 1948.

¹⁵⁶ "Parliament to Consider Federal Aid," Roads and Bridges, 87:8 (Aug. 1949), 51

Nationalist pride in the all-weather Highway, initially underplayed by the federal government, increased as the construction proceeded. By 1953 these sentiments reached epic proportions, in a cinematic sense, when Ottawa commissioned the National Film Board to create a documentary to promote the Highway under the title: "Canada's New Main Street." The title was quite appropriate given that 'main street' undoubtedly was intended to evoke strong images of community and commerce. Incidentally, the evocative title of the film also coincided with the federal government's position that the Trans-Canada Highway was not a four-lane, controlled-access expressway designed for high speed traffic, but rather a high quality, two-lane paved road suitable for tourism and trucking.¹⁵⁷

Western Canadians emphasized the trucking possibilities. An editorial in the Western Producer epitomized their anticipation that the Highway "will be a strong link between industrial east and the agricultural west and [will constitute] a beachhead on the trade and geographic barrier separating the two."¹⁵⁸ Moreover, it went without saying that 1,300 km of black top linking Winnipeg, Regina and Calgary would provide a strong commercial link between these major western centres and give the railways a run for their money. Western politicians looked to long-distance trucking to end the railways' monopoly over surface, commercial traffic, the enhanced competition lowering freight rates. Consequently, they pressured the federal government to end its existing ban on

¹⁵⁷ Canada, Department of Public Works, Annual Report. Proceedings under the Trans-Canada Highway Act Fiscal Years Ended March 31, 1954, (Ottawa:DPW, 1954), 5.

¹⁵⁸ Editorial, Western Producer May 4, 1950, 6.

truck traffic through National Parks, so that Vancouver and Calgary could be linked commercially via the Banff and Yoho Parks. With British Columbia making this concession its price for participation in the Trans-Canada project, the federal government by 1950 agreed to through trucking.¹⁵⁹

If the Trans-Canada were to deliver its hoped-for benefits, those trucks would have to share the road with thousands of tourist automobiles. Everyone emphasized the tourist potential of Canada's "Main Street." In the late 1940s revenues from increased tourism traffic were exceeding all expectations: in 1948-49, American tourist spending in Canada was tagged at \$570 million, making tourism one of Canada's primary export industries.¹⁶⁰ By then virtually everyone agreed with the Financial Post that it was a "truism" that there was a "plottable [sic] relationship between the volume of business a district gets and its paved mileage."¹⁶¹

The emphasis placed upon the ability of Canadians to cross the country without having recourse to American routes cannot be fully appreciated without first understanding Canada's foreign exchange situation in the post-war period. The need to facilitate internal tourist traffic and to increase the flow of American tourist dollars into Canada was particularly acute in the late 1940s as the country underwent one of its worst foreign exchange crises in history. Due to an on-going drain of American dollar reserves,

¹⁵⁹ NAC, Unpublished Sessional Papers, 1st Session of the 21st Parliament, No. 152b, RG 14, D2, Vol. 548, E.C. Carson to Colin Gibson, Minister of Mines and Resources, Dec.23, 1949"; see also: Debates (Commons) June 2, 1950, 3155.

¹⁶⁰ Debates (Commons), November 21, 1949, 2028.

¹⁶¹ "Better Roads Draw Tourists," Financial Post Feb. 11, 1950, 34.

spurred by increased domestic demand for American products and heavy Canadian government borrowing, in November 1947 the federal government had to introduce stringent import restrictions.¹⁶² To avoid even stricter and more unpopular controls, the federal government sought to increase the already substantial flow of American tourist dollars into Canada while at the same time reducing the need for Canadians to travel south. By 1948, the foreign currency implications had emerged as a secondary consideration behind the construction of the Trans-Canada, the federal government having finally bought the arguments of the highway lobby.

4.2 Post-War Highway Engineering in Canada.

It was of course ironical that Canada's Main Street -- this road to national pride -- was ideally to be clogged with visiting Americans. Adding to the irony was Canada's dependence on American know-how for ideas on how to build and finance the highway. There was nothing new in this dependence: it dated back to the inception of the Good Roads Movement in Canada in the 1890s. Had a federal highway department existed, there might have been more Canadian self-reliance, inasmuch as the short-lived (1919-1929) Highway Branch of the Department of Railways and Canals had produced Road Bulletins in an attempt to fill the void that existed for information on road administration, financing and, to a lesser extent, construction.¹⁶³ Although the Branch seems not to have

¹⁶² Bothwell, et al., 70-71 and 172-173;

¹⁶³ An excellent example of these early efforts is: Department of Railways and Canals (Highways Branch) The Canadian Highway and Its Development Bulletin No. 7 (Ottawa: Kings Printer, 1925)

been involved in actual highway research, bureaucratic necessity would probably have brought this in due course. However, with the demise of the Highways Branch in 1929 even this limited activity ended.

Organizations like the Canadian Good Roads Association, whose annual congress furnished a venue for an exchange of information between provincial highway officials, did not provide any technical leadership in the road construction field prior to the early-1950s. Consequently, Canadian engineers had to obtain technical information from American sources. This trend was true in a wide range of fields and Canadian membership in American professional societies grew at a rate that raised concerns among established Canadian groups, such as the Engineering Institute in the late 1940 and early 1950s.¹⁶⁴

The CGRA along with Canadian technical publications such as the Canadian Engineer, whose highway section became known as Roads and Bridges in 1940, and The Contract Record, regularly featured articles from American sources, typically by members of the U.S. Bureau of Public Roads. These articles fed a taste for federal interventionism. American developments in federal aid programs towards the end of the war inspired editorials in Canada's specialist press criticizing Ottawa's approach to highway assistance.¹⁶⁵

¹⁶⁴ "What's Wrong With Canada," The Engineering Journal 32:12 (Dec. 1949): 829-830, regarding complaints over Canadian engineers increasing membership in American professional societies.

¹⁶⁵ Pointing out that Canadian government highway aid had never come near to the American, on a per capita basis, a 1944 editorial called for Ottawa to provide an annual minimum investment of \$50 million for three years, representing 10 percent of the \$500 million recommended under the U.S. Post-War Federal-Aid Highway Act of 1944; "Federal Aid for Postwar Road Construction," Roads and Bridges, 82:7 (July 1944), 39

Canadian civil engineering journals openly envied the close relationship which the federally-funded Bureau of Public Roads (BPR) had established since 1893 with a variety of quasi-governmental organizations to undertake and coordinate research on highway construction methods, finance, and materials. The results of this empirical research were widely circulated on both sides of the international border.¹⁶⁶ The BPR's association with the American Association of State Highway Officials (AASHO, founded 1914) had proved particularly fruitful. By ensuring that its engineers occupied the chair of the AASHO's various technical committees, the Bureau decisively had moulded the AASHO's specifications. The BPR required adherence to AASHO standards and practices for states to be eligible for the considerable sums of federal aid for highway construction that were managed through the Bureau.¹⁶⁷

Canadian governments, provincial as well as federal, generally had neither the resources nor the inclination to undertake the enormous range of tests and research conducted by the Americans.¹⁶⁸ It was easier and cheaper for provincial highway

¹⁶⁶ Bruce Seely, Building the American Highway System, (Philadelphia: Temple Univ. Press, 1987), 12; for example, in early 1949, an official with the Canadian Department of Reconstruction and a key figure in the development of Ottawa's Trans-Canada Highway proposals had availed himself of the BPR's services by requesting a copy of their booklet Federal Legislation and Regulations Relating to Highway Construction. NAC, Dept. of Mines and Resources, Vol. 1 Mallory to A.C. Clark, Feb.21, 1949.

¹⁶⁷ *Ibid.*, 121-125.

¹⁶⁸ NAC, Dept. of Public Works, RG 11; 84-85/061; Vol. 1205; file 9-0-0, pt.1; W.R. Binks, Report on AASHO Meeting, Chicago, Mar. 6-7, 1952, 4.

departments to use AASHO construction standards for their main highways.¹⁶⁹ Even Ontario shied away from the economic costs of independent research on highways: as late as 1952 the Ontario Research Council's Highways Research Program's proposed budget of \$200,000 still could not survive the funding review process. Instead, the Ontario Department of Highways was told to offer a university a grant of \$10,000 to conduct highway research.¹⁷⁰

Even so, the provinces were gradually adding highway research to their administrative functions. By 1954, most of the Provinces were maintaining laboratories for general soil and material analysis. Ontario's Department of Highways, had a large Materials Testing Branch with five specialized sections. These research activities were expensive (which may explain why Saskatchewan did not establish its own research and testing branch until 1953).¹⁷¹ As a result, provincial administrative costs rose from \$5.7 million in 1940 to \$15.4 million, or 267 percent, between 1940 and 1950.¹⁷² This latter sum, however, was still a pittance when compared to the estimated \$3.7 billion spent on

¹⁶⁹ See Table III; also: W.A. Clarke, "Bituminous Pavements," The Engineering Journal 33:9 (Sept. 1950), 780-781.

¹⁷⁰ NAC, Department of Public Works, RG 11, 84-85/061; Vol. 1205, File 9-0-0; Report from R. A. Low to R. A. Campbell, Nov. 4, 1952.

¹⁷¹ Ontario, Annual Report of the Department of Highway for the fiscal year ending March 31st 1952, (Toronto: Queen's Printer, 1952), 16-20. Apparently the largest department, The Soils Section, had only been formed in 1939, see: J. Walter, "Soil Research in the Department of Highways," Ontario Research Commission, Interim Report, February 1947, (Toronto: Kings Printer, 1947), 57-58.; Jean Laramour, "Jack Douglas and Saskatchewan's Highways," Saskatchewan History 37:3 (Autumn, 1983), 99.

¹⁷² See Table 1.

highway construction budgets in the United States in 1949.¹⁷³

Even so, the provinces certainly had more expertise in highway matters at the inception of the Trans-Canada Highway project than the Dominion government. There being no federal highway bureau or department after 1929, it was left to the Department of Mines and Resources to formulate its original plans for the Trans-Canada Highway. It alone had any practical experience in building highways. In 1949, this department oversaw some 2,100 miles (3,400 km) of roads in the National Parks, the Canadian portion of the Alaska Highway, and roads in the Yukon and North West Territories. Even Canada's smallest province, P.E.I., had 30 percent more road mileage under its jurisdiction. Moreover, the Alaska Highway, constructed under the auspices of the U.S. Bureau of Public Roads and only recently handed over to the Canadian Government, made up more than half of this mileage.¹⁷⁴

One might suggest that this comparative lack of experience among federal civil servants in the planning and vetting of highway construction projects raises the question of Ottawa's ability to analyze provincial construction estimates in the initial planning phase of the Highway. Their relative lack of technical expertise may explain why federal bureaucrats tended to downplay technical issues in favour of political considerations. This tendency is perhaps most obvious in an exchange in April 1949 between J. M. Wardle, the Director of Special Projects for Mines and Resources -- in his capacity as an advisor to the Department of Reconstruction -- and Reconstruction officials. Wardle noted a list of

¹⁷³ Seely, 194-195.

¹⁷⁴ 'Highway Statistics,' Roads and Bridges 87:10 (Oct. 1949),

potential problems with the proposed terms of the Trans-Canada Highway Act. The possible extension of the Highway into Newfoundland raised serious concerns. Additional work in the province had not been previously considered and to do so would raise the estimated federal contribution to the Highway to as much as \$200 million, instead of the \$150 million projected by the Trans-Canada Highway bill. He also expressed concerns regarding retroactive payments to the provinces, stating that it was "imperative that Dominion officials have the opportunity for experience first," before committing the Government to a policy of compensating provinces for previous construction costs.¹⁷⁵ Wardle's misgivings were ignored and the bill remained unchanged.

The federal government recognized that it had to improve its highway expertise. Consequently, in 1950 the Trans-Canada Highway Division was established under the Engineering and Water Resources Branch of the Department of Resources and Development. The new division reported to J.M. Wardle, Director of the Engineering and Water Resources Branch. It was charged with monitoring the construction of the single largest highway project ever undertaken in Canada. It was to inspect all phases of the construction process in order to ensure conformity to the Act. Apart from its headquarter's staff in Ottawa, the Trans-Canada Highway Division maintained eight Supervising Engineer's offices, one in the capital city of each of the participating provinces. These engineers acted as liaison with provincial highway officials. They were backed up by Supervising Field Engineers who had offices at strategic points along the

¹⁷⁵ NAC, Department of Mines & Resources: Trans-Canada Highway, RG 21 Vol. 1, 291.410.12.2, H. G. Cochrane to G.D. Mallory, April 6, 1949.

route. The field engineers conducted periodic inspections of work in progress and provided on-site federal government representation along the construction route.¹⁷⁶ By 1953, the Division had a staff of 38 engineers, 5 technical officers, 4 draftsmen and 5 survey assistants. This new federal presence in highways did not come cheap: in 1951-52, staff salaries and wages totalled \$326,000.¹⁷⁷

As the Highway Division's new engineering staff set about the task of monitoring the progress of the Highway they were drawn into the orbit of the more technically advanced American organizations. Apart from their involvement in Canadian organizations like the CGRA, in the early 1950's three to four engineers from the Highway Division regularly attended AASHO and Highway Research Board (HRB) conferences which they valued as "opportunities for contact with leading highway engineers from various states."¹⁷⁸

Division engineering staff also drew on the experiences of their American counterparts at the Bureau of Public Roads. For example, following the 1951 Annual General Meeting of the AASHO, J.G. Linton, thought it important to note in a report that he had spoken with BPR engineers in order to obtain their candid opinion of "their feelings

¹⁷⁶ Department of Public Works, Annual Report. Proceedings Under the Trans-Canada Highway Act, Fiscal Year Ended March 31, 1954, (Ottawa: DPW, 1955), 3-4. P.E.I. shared a Supervising Engineer with New Brunswick.

¹⁷⁷ Canada, Public Accounts of Canada for the Fiscal Year Ended March 31, 1951, (Ottawa: King's Printer, 1951), W-19; Canada, Public Accounts of Canada for the Fiscal Year Ended March 31, 1952, (Ottawa: King's Printer, 1953), W-20., also: Debates (Commons) April 9, 1954, 3937. By contrast in 1956, the U. S. BPR employed 1,100 engineers, see: Seely, 235.

¹⁷⁸ NAC, Department of Public Works, RG 11; 84085/061; Vol 1205; file 9-0-0, pt.1 Norman Mass to Deputy Minister (Young), Dec.30, 1952.

and problems in their dealings with the States and how strict the Federal Bureau is."¹⁷⁹ Indeed, one might suggest that Division engineers looked upon their American counterparts with a certain degree of awe. After hearing a presentation on new trends in road research by a researcher from Washington, R.A. Low reported, "it was, I believe, a revelation to Canadian engineers to learn of the hundreds of projects being conducted at the present time under the auspice of the H.R.B."¹⁸⁰

With so much research being done in the United States, federal engineers Canada saw no need to fund it themselves, as Campbell, Chief Engineer of the Trans-Canada Highway Division, explained to his subordinates and to his superior, Wardle.¹⁸¹ The primacy of American technology and expertise was fully accepted by federal engineers. Indeed, one might say that as the federal government pressed its provincial counterparts to develop a first rate road for the use of all Canadians, the road they were building was American in design.

4.3 Highway Standards

One of the distinguishing factors, apart from its size and cost, of the Trans-Canada Highway project was the federal government's introduction of a series of highway standards as a condition to funding. In this sense the Highway project symbolized Ottawa's

¹⁷⁹ Ibid., J.G. Linton, Report on the AASHO 37th Annual Meeting; January 12, 1951, 2.

¹⁸⁰ Ibid., R.A. Low, Summary Report of CGRA Annual Meeting of 1951. At the time Low was Chief Executive Engineer of the Trans-Canada Highway Division.

¹⁸¹ Ibid., R.A. Campbell to R.A. Low, Oct. 26, 1951.

growing reliance upon conditional grants, or shared-cost programs, in the period following World War II.¹⁸² Indeed, the Trans-Canada Highway is frequently cited as one of the more important and successful examples of the use of conditional grants in this period.¹⁸³

The federal government's use of a conditional formula for Highway funding was in part based on its experience during the 1930's. Trans-Canada Highway construction conducted under the Relief Acts had generally been perceived by both provincial and federal authorities as highly inefficient. The Liberal Government's Green Book Proposals was probably alluding to this experience when, in reference to Public Investment Policy, it lamented that "activity in many fields has been based on improvised and expedient arrangements which have fallen short of what the general public interest would require."¹⁸⁴

Thus Ottawa "felt that it had," as R. H. Winter explained in 1950, "some obligation to encourage the provinces to build a highway of good standard," and that this could only be achieved by laying down and adhering to certain basic specifications.¹⁸⁵ Since Ottawa and the provinces were mutually reliant on the United States road bureaus for their ultimate standards, the federal government was willing to let the provinces devise the criteria for it to impose. Thus the initial standards for the Trans Canada were developed by representatives of the four western provinces at the first Federal-Provincial Conference (re: the Trans-Canada) of December 1948. Their recommendations were

¹⁸² Smiley, 172.

¹⁸³ Stevenson, 154.

¹⁸⁴ Dominion Provincial Conference, (Aug. 1945), 77.

¹⁸⁵ Conference for Signing of Agreements (1950), 5.

subsequently submitted, with very minor modifications, by Winters as part of the draft terms of the Highway agreement in September of 1949. Both provincial and federal engineers defended the proposed standards by affirming that these conformed to the AASHO's 1945 "Design Standards for Interstate Highway Systems."¹⁸⁶ The U.S. precedents, which played such an important role in Canada's highway thinking after the war, suggested a zoned highway standard designed to address the climatic and traffic conditions in specific regions. Thus, the highway standard adopted for a given region would incorporate design elements best suited to its particular needs.¹⁸⁷

The general standards that were to rule highway construction between 1950 and 1956 were endorsed by the Federal Provincial Conference on the Trans-Canada Highway held in Ottawa on December 15-16, 1949. (See Table 2 for a description of the general specification.) They underwent further minor modifications prior to the signing of the agreements in April of 1950. In their final form they actually permitted a high degree of flexibility for the provinces since the majority of fields allowed for both minimum and preferred construction standards.

The width of the hard surface (asphalt) pavement, could range from 22 to 24 feet [6.7 - 7.3 metres]. Similarly, the shoulders on each side of the paved surface, though

¹⁸⁶ NAC, Unpublished Sessional Papers, No. 152a, RG 14, D2, Volume 548 " Submission to Federal Government on Standards for Trans-Canada Highway...., Dec. 15, 1948;" and: NAC, Robert Winters Papers, MG 32, B-24, Vol. 58, File 7-8, pt. 1, "Outline of Suggested Terms of Agreements under which Assistance would be given for Completing the Trans-Canada Highway," 2

¹⁸⁷ Dept. of Mines and Resources, Vol 1, 291.4.10.12.2, H.G. Cochrane to G.D. Mallory, April 6, 1949.

Table 2
Proposed Specifications for the Trans-Canada Highway, 1949¹

Width of Right of Way - Minimum	100 feet
Width of Pavement	22 or 24 feet
Width of Shoulder	10 feet
Thickness of Asphaltic Pavement (Plant Mix)	3 inches (minimum)
Thickness of Stone Base Course - Strict Minimum	12 inches (recommended) 9 inches
Curvature - Maximum	6 degrees
Gradient - Maximum	6 degrees
Sight Distances, Horizontal, Vertical	600 feet (minimum)
Bridges:	
Loading	H20 - S16
Overhead Clearances Full Width	14 feet (minimum)
Width (30 foot span and less)	Full Width of Grade
Width (Span over 30 feet)	26 feet (minimum between curbs)
Curbs	18 inches

¹ The above information was derived from: NAC, Hon. Robert Winters Papers, MG 32, B-24, Vol. 58, file 7-8, pt. 1, Outline of Suggested Terms of Agreements Under Which Assistance Would Be Given for Completing the Trans-Canada Highway, Sept. 1949.

preferably 10 feet [3.05 m], could be as narrow as 5 feet [1.5 m]. Similar variations existed for the Highway's right-of-way, curvature, and grade. However, the load bearing capacity of the highway's base course, set at an axle load of 18,000 pounds [8,165 kg], and the thickness of asphalt pavement, 3 inches [7.6 cm] compressed, were two standards that were applied consistently throughout the country.¹⁸⁸

Even though the federal government never officially adopted a zoned standard for the Highway, following the Dominion Provincial Conference of December 1949, there was de facto acceptance of a dual highway standard. One early federal government publication even erroneously stated that the 24 foot pavement width was the standard set for the western provinces while the 22 foot width was to be followed in the eastern provinces.¹⁸⁹ This was actually an oversimplification of a complex issue since strict adherence to norms would have resulted in extremely high construction costs in British Columbia and the Maritimes. Variations existed within each region of the country.¹⁹⁰

British Columbia had to contend with the problems associated with cutting a highway through mountainous terrain. Strict standards concerning the alignment of the road, width of the right of way and of shoulders would have increased costs beyond the immediate financial ability of the province to proceed with the project. By 1949, in some

¹⁸⁸ Canada, Department of Public Works, Report of the Proceedings Under The Trans-Canada Highway Act For the Fiscal Year Ended March 31, 1955, (Ottawa, Queen's Printer, 1955), 13-14. specifications for the Trans-Canada Highway are provided in Table 2.

¹⁸⁹ Dominion Bureau of Statistics, The Canada Year Book, 1950 (Ottawa: King's Printer, 1950), 648.

¹⁹⁰ Conference, Dec 1949, 28-33.

cases the province was spending in excess of \$400,000 per mile for highways through mountainous terrain. This was substantially more than the provincial average of \$60,000 per mile for graded (but not paved) highways. Even so, the construction standards of the mountainous sections of British Columbia's Trans-Canada route did not reach the province's usual norms.¹⁹¹

In New Brunswick and Nova Scotia the source of the problem was more historic in nature. Since their road systems were among the oldest in the country, the provinces had to contend with difficulties stemming from earlier standards. In contrast to the western provinces, where the prevailing right of way ranged from 100 to 200 feet [30.5 - 61.0 m], in New Brunswick, the prevailing right of way was 56 feet [17.1 m], some 10 feet [3.0 m] below the minimum required for the Trans-Canada Highway. In some areas, such as along the proposed route of the Trans-Canada Highway adjacent to the St. John River, the right of way was as narrow as 30 feet [9.1 m]. Newfoundland presented even greater problems since much of their road system, poor as it was, was only 24 feet [7.3 m] wide.¹⁹²

Despite regional differences, the overall standards for the Highway were consistent with highway trends throughout the country. This was particularly true with its emphasis upon a hard surface pavement of either asphalt or concrete. Even as the national total for

¹⁹¹ H.C. Anderson, "Lack of Engineers Affects Road Program in British Columbia," Roads and Bridges 89:10 (Oct. 1949), 106.

¹⁹² A.W. Barbour, "Narrow Rights-of-Way Are Problem in New Brunswick," Roads and Bridges 87:10 (Oct. 1949), 102; R.M. French, "Provision for Shoulders Is Difficulty in Newfoundland," Roads and Bridges 87:10 (Oct. 1949): 100.

non-urban road mileage stabilized in the vicinity of 550,000 miles (880,000 km.), the total number of hard surfaced miles doubled from 17,300 miles (27,680 km) in 1945 to 37,000 miles (59,200 km) in 1955 - (See: Table 3 for statistics on highway mileage and paving).

Highway standards in the period following World War II generally called for the widening, straightening and flattening of roads to reduce risk and maintain traffic flow at higher speeds. Hard surfacing of roads was one element in this process. This trend was a result of the large number of highway traffic surveys conducted in the United States and elsewhere from the 1930's onwards. These provided valuable analytical and empirical data on driver and vehicle performance that in turn were translated into improved design standards.¹⁹³

The term 'geometric design' was applied to highway planning following the war as a catch phrase to describe the interaction of various factors that went into the design of modern roadways. These factors included such items as the vertical and horizontal alignment, roadway width, surface treatment and an increased emphasis upon lengthening the sight distances on highways. In 1948 the term was still sufficiently new to require explanation in a US Public Roads Administration report. It has since become a rudimentary concept in highway design. As M.G.Lay describes it, "A basic principle of the geometric design of roads is that the appearance of the road should clearly indicate to the driver the speed and path that his vehicle should adopt in order to proceed with comfort,

¹⁹³ J.R. McLean, Two-Lane Highway Traffic Operations: Theory and Practice, (N.Y. Gordon and Breach, 1989), 19.

Table 3

Summary of Hard Surfaced Mileage of Nonurban Roads in Canada¹

Year	Grand Total all types	Hard surfaced mileage	% of Total
1945	552,000	17,300	3.1
1946	553,000	18,100	3.2
1947	493,000	19,000	3.8
1948	556,000	20,700	3.7
1949	561,000	22,700	4.0
1950	567,000	24,000	4.2
1951	568,000	26,300	4.6
1952	512,800	28,600	5.6
1953	517,800	30,700	5.9
1954	524,100	33,300	6.3
1955	----	37,000	
1956	----	39,100	

¹ Urquhart, 549

economy and safety."¹⁹⁴

Although driver comfort undoubtedly played a role in the adoption of more exacting standards, highway safety was a factor of critical importance. The increased emphasis upon the application of standards to road and highway construction was in part a response to the rising accident rate on North American highways. As the speed, size and volume of motor vehicles increased, roads that had been designed for slower moving traffic posed a greater risk to drivers and a problem for highway planners. In a popular article, J.D. Millar, Ontario's Deputy Minister of Highways, provided a concise, if not simplistic, characterization of post-war highway design priorities: "The problem of early roadbuilders [sic] was one of getting traffic out of the mud. The current problem is to control and guide the mighty force of destruction which the internal combustion engine has unleashed."¹⁹⁵

The increase in the number of fatalities and injuries as well as the escalating value of property damage from motor vehicle accidents was a matter of continuing concern to all levels of government. Between 1946 and 1950 over 205,000 Canadians were killed or injured in traffic accidents, and the numbers were increasing annually. In context, this was more than twice the number of Canadians killed and wounded on active service during

¹⁹⁴ "Standards of Highway Design for Modern Traffic Conditions," Roads and Bridges (Aug. 1948), 64; M.G. Lay, Handbook of Road Technology, vol. 1 Planning and Pavements, 66.

¹⁹⁵ J.D. Millar, "Making Highways Safe," Canadian Geographical Journal 40:3 (Mar. 1950), 128.

World War II. (See Table 4 for accident statistics.)¹⁹⁶ Slightly less than half all of these accidents occurred along non-urban roads.¹⁹⁷ Improved highway design figured prominently in government attempts to reduce accidents and encourage road safety. A good road, the President of the Ontario Safety League reminded one audience, "is a road upon which the human tendency to err, both as driver and pedestrian, is reduced to a minimum."¹⁹⁸

Improved highways also resulted in economic benefits, both for highway users and government. Hard surfaced roads reduced the cost of vehicle operation, whereas improved design increased highway capacity and permitted higher average speeds, a benefit to both the commercial and private users.¹⁹⁹ Paved surfaces contributed to a substantial reduction in transportation expenses, a factor of particular importance to commercial motor vehicle operators. The adoption of new highway standards was also intended to accrue direct financial benefits for highway agencies by extending the 'life' of roads. Premature obsolescence of highways had been a recurring problem as the average speed and weight

¹⁹⁶ Canada, The Canada year Book, 1951, (Ottawa: Kings Printer, 1951), 750-751. Damage to property was also considerable. In 1949, the estimated cost of property damage from traffic accidents in Canada was \$19,156,000, an increase of almost 30 percent over 1948. Regarding war casualties see: C.P. Stacey, Arms, Men, and Governments (Ottawa: 1970), 66.

¹⁹⁷ Ontario: Highway Dept. Report, 1952, 173.

¹⁹⁸ R.A. Stapells, "How to Approach the Problem of Highway Safety," Roads and Bridges 87:10 (Oct. 1949), 148.

¹⁹⁹ C.H. Oglesby and L.I. Hewes, Highway Engineering, 2nd ed. (N.Y.: J. Wiley & Sons, 1963), 64-71; Oglesby and Hewes cite HRB Reports that refer to the fact that driving on paved surfaces could reduce some vehicle expenses by half.

Table 4

Motor Vehicle Accident Victims: 1936-1956 ¹

Year	Fatalities	Injuries	Total
1956	3,184	72,884	76,068
1955	2,084	49,828	51,912
1954	2,715	47,020	49,735
1953	2,921	56,749	59,670
1952	2,701	57,738	60,439
1951	2,412	54,755	57,167
1950	2,161	50,032	52,193
1949	2,276	43,883	46,159
1948	1,976	38,098	40,074
1947	1,760	32,685	34,445
1946	1,663	30,679	32,342
1945	1,556	24,422	25,978
1944	1,374	20,228	21,602
1943	1,437	20,390	21,827
1942	1,409	22,809	24,218
1941	1,852	30,984	32,836
1940	1,723	29,504	31,227
1939	1,584	25,104	26,688
1938	1,545	24,585	26,130
1937	1,642	25,703	27,345
1936	1,316	23,207	24,523

¹ Urquhart. T271-284.

of vehicles increased throughout the 1930s and 1940s.²⁰⁰

Although initially higher in cost, paved roads had a considerably longer life span and lower annual maintenance costs than gravel surfaces, but only if they were constructed to meet projected traffic demands. Hence, there is a direct relationship between traffic studies, highway standards and projected traffic volumes. The approach to highway construction implicit in the BPR and AASHO standards represented a change in the manner by which highways were planned and constructed. Indeed, the majority of highway studies carried out by these two agencies in the 1930s and 1940s concentrated upon the issue of highway capacity and the relationship between highway design, writ large, and traffic requirements.²⁰¹

One of the major difficulties facing Ottawa in the implementation of the Trans-Canada Highway project was that the standards adopted for the Highway did not necessarily meld with the restrictions Ottawa placed upon its route. The difficulties which the Highway project encountered were the result not so much of the implementation of comparatively high standards for the Highway, as of the federal government's failure to appreciate fully the relationship between those standards and its insistence that the Trans-Canada Highway follow a route that, from the perspective of certain provincial governments, would far exceed traffic requirements. Thus, in referring to the preliminary

²⁰⁰ "Standards of Highway Design," 64-65.

²⁰¹ While the cost of a completed mile of asphalt road was estimated at \$30,000. in comparison to \$15,000 for gravel, the annual maintenance cost of the former was approximately one quarter that of gravel, see: A.G. Bruce, Highway Design and Construction, 1st ed. (Scranton, PA.: International Textbook Co., 1934), 576-577; see also: McLean, Two-Lane Highway, 9-18.

specifications for the Trans-Canada Highway, a road official from Newfoundland, could state "compared with our previous specifications, they seem very much like a dream."²⁰²

4.4 The Route

The route of the Trans-Canada Highway was undoubtedly the most contentious issue arising from the on-going discussions on the project. Ottawa's decision that the Highway would follow the "shortest practicable east west route across each province and the country as a whole," proved to be a major stumbling block, particularly in the east. Simply put, Ottawa and the provinces often disagreed over what was "practicable." As far as Ottawa was concerned, "practicable" was synonymous with "financially expedient." It wanted a direct route that kept its own financial outlay to a minimum. In an ideal world, the route would have been a straight line drawn by a ruler .

For Nova Scotia and New Brunswick, Ottawa's approach to the routing and standards of the Highway placed the provinces at a distinct disadvantage once Newfoundland had joined Confederation and the Trans-Canada Highway project. Both provinces had already expended considerable sums in constructing and paving of the Trans-Canada Highway route as specified by the Relief Acts of the 1930s. By the terms of the Trans-Canada Act of 1949, the federal government would reimburse the provinces fifty percent of the past construction costs of those highways which became part of the Trans-Canada, provided they had been built to the projected standards. These clauses were conceived with the Maritime provinces in mind, with a view to helping them pay for

²⁰² French, "Difficulty in Newfoundland,": 100.

the construction of the remaining portions of the Trans-Canada Highway through their region. But the new, higher standards meant that most of New Brunswick's earlier construction work did not qualify for subsidy.

As for Nova Scotia, the shortest route to Newfoundland by-passed Halifax as well as much of the construction work the province had earlier undertaken on what it assumed would be the route of the Trans-Canada. The fact that Canada's "New Main Street" would not directly serve the province's capital and largest centre of population raised local doubts as to its merits. Merrill Rawling, Nova Scotia's Minister of Highways and Public Works, accordingly wrote Robert Winters in February 1950 that his government, "would find it extremely difficult to expend money on a Trans-Canada Highway route which does not meet the economic or social needs of the Province."²⁰³

New Brunswick's Minister of Public Works, W.S. Anderson, similarly complained in writing in Winters in early 1950 when Ottawa said it would not permit the Trans-Canada route to take a thirty mile [48 km] detour through Saint John. New Brunswick was adamant that the Highway should run through the province's largest city and port. Anderson wrote:

It is true that we would shorten this route by approximately thirty miles if we crossed the St. John River at Fredericton using our present Route number 9 to Sussex, but in our opinion this does not comply with your definition "shortest practical [sic] East-West route," as the only practical route from an economic standpoint is through St. John, it being the commercial centre of the province. It is also one of the most important winter-ports in Eastern Canada and possesses tourist attractions of a kind not found elsewhere in North America.

²⁰³ NAC, Unpublished Sessional Papers, 5th Session of the 21st Parliament, No. 108a, RG 14, D2, Vol. 574., no. 78, Merrill D. Rawding to R.H. Winters, Feb 3, 1950.

Winters' reply underscores how Ottawa's approach to the route issue could ignore many of the factors that contributed to good highway planning. In Ottawa's opinion, the provincial proposal simply did not conform to the definition of "shortest route," if Saint John were included. Ultimately it was not.²⁰⁴ Even so, New Brunswick reluctantly signed the Trans-Canada Highway agreement. Nova Scotia, however, refused to sign after being advised by Winters that he could not give advance assurances that the final route would absorb enough of their first-class road network to make the subsidy formula attractive to them.²⁰⁵ Nova Scotia would not sign the Trans-Canada Highway agreement until 1952.

In dealing with New Brunswick and Nova Scotia, Ottawa was quite rigid in its definition and defence of the "shortest practicable route." However, the federal government was more willing to bend in its negotiations with Ontario. With Quebec on the sidelines, Ottawa had to make whatever compromises were necessary to ensure the participation of the nation's largest province in the agreement. Initial federal proposals on routing had recommended the upgrading of the existing road through Ottawa, North Bay, Cochrane, Hearst, thence to the Fort William and the Manitoba border. This northern route undoubtedly provided the most direct and cost effective means of completing the

²⁰⁴ NAC, Unpublished Sessional Papers, 5th Session of the 21st Parliament, No. 100a, RG 14, D2, Vol. 574., no. 69, R. H. Winters to W. S. Anderson, Feb. 14, 1950, and no. 71, W.S. Anderson to R.H. Winters, Jan. 18, 1950.

²⁰⁵ NAC, Unpublished Sessional Papers, 5th Session of the 21st Parliament, No. 108a, RG 14, D2, Vol. 574., no. 29, Rawding to Winters, April 15, 1950, and no. 24, Winters to Rawding, April 19, 1950.

Trans-Canada Highway across Central Canada.²⁰⁶

However, Ontario had made it known early in discussions that it was not willing to consider the northern route, as it serviced only a small fraction of the province's total population. As early as 1944 a "leaked" report detailing Ontario's post-war policy on tourist roads discounted the tourist potential of the northern route, as it was too distant from American points of entry. Preference was accorded to a paved highway along the north shore of Lake Superior, leading from Sault Ste. Marie on the international border.²⁰⁷

Although the northern route favoured by federal planners would satisfy the needs of motorists travelling between Quebec, Ottawa and Manitoba, it had little direct benefit for Ontario. Ontario was interested in a route that would serve both national and provincial needs, particularly in southern Ontario where traffic volume was increasing at a phenomenal rate. The province forced a compromise, the Trans-Canada taking a more southerly route from Ottawa through Peterborough, Orillia, Parry Sound and Sudbury, and thence along the north shore of Lake Superior. The route addressed both the needs of southern Ontario while tapping the potential tourist market in the U.S.. The improved highway could relieve pressure on roads in southern Ontario and provide improved access for Torontonians to the cottage country north of Orillia.²⁰⁸

This version of Ontario's Trans-Canada Highway route of the 1930s was not only

²⁰⁶ NAC, Department of Mines and Resources, RG 21, Vol. 1, 291.4.10.12.2, Memo to G.D. Mallory, Oct. 13, 1948, Trans-Canada Highway Study, Table II (a) and Table II (f).

²⁰⁷ "Ontario's Postwar Tourist Roads," Roads and Bridges 82:11 (Nov. 1944), 85.

²⁰⁸ Siegel, "A Case Study of Roads," 50-51.

52 miles longer than Ottawa had wanted, but also had less paved mileage and required approximately 162 miles of new construction before it was passable. In short, Ottawa's acceptance of Ontario's longer, meandering, and more expensive proposal underscores the role that political expediency sometimes played in the project.²⁰⁹ Ontario, too powerful to be left out of the project, was courted by Ottawa by the provision of the most generous definition of the routing formula.

In western Canada, where settlement patterns had generally followed the lines of the earlier railways, which themselves had been built in as straight a line as possible, the "shortest east-west route" formula proved to be of no major consequence. The Trans-Canada Highway in western Canada ended up virtually paralleling the Canadian Pacific Railway. There was, even so, some controversy. In a replay of earlier discussions regarding the most economical route for railways to cross the Rockies, western Canadians debated whether the Trans-Canada Highway route should follow the northern Yellowhead Pass or the southern Kicking Horse Pass.

By 1948, the route favoured by the governments of Saskatchewan, Alberta and B.C. followed the 'central' route from Regina through Calgary, Banff and Golden. This was a *fait accompli* following British Columbia's decision to have its section of the Highway enter Alberta via the Big Bend Highway. Alberta and Saskatchewan were quick to acquiesce to B.C.'s decision since it avoided the provincial government having to make a "no win" choice itself between the rival claims of Edmonton and Calgary or Saskatoon

²⁰⁹ Annual Report: The Trans-Canada Highway Act, 1954, 5.; Dept. Mines & Resources, Trans-Canada Highway Study, Table II (a).

and Regina.

This decision spawned the Trans-Canada Highway System Association (Yellowhead Route). The Association, whose president and vice-president were the Mayors of Edmonton and Saskatoon, respectively, mounted a strong campaign in favour of the northern route through the Yellowhead Pass. (See Map. 2, for the three alternate western routes) Mirroring all of the arguments previously used in the railway debates, the Association's lobbying effort sought to demonstrate that the route through Saskatoon and Edmonton was more economical, better met the strategic needs of the country, and served a larger population base than the southern route selected by their provincial governments.²¹⁰

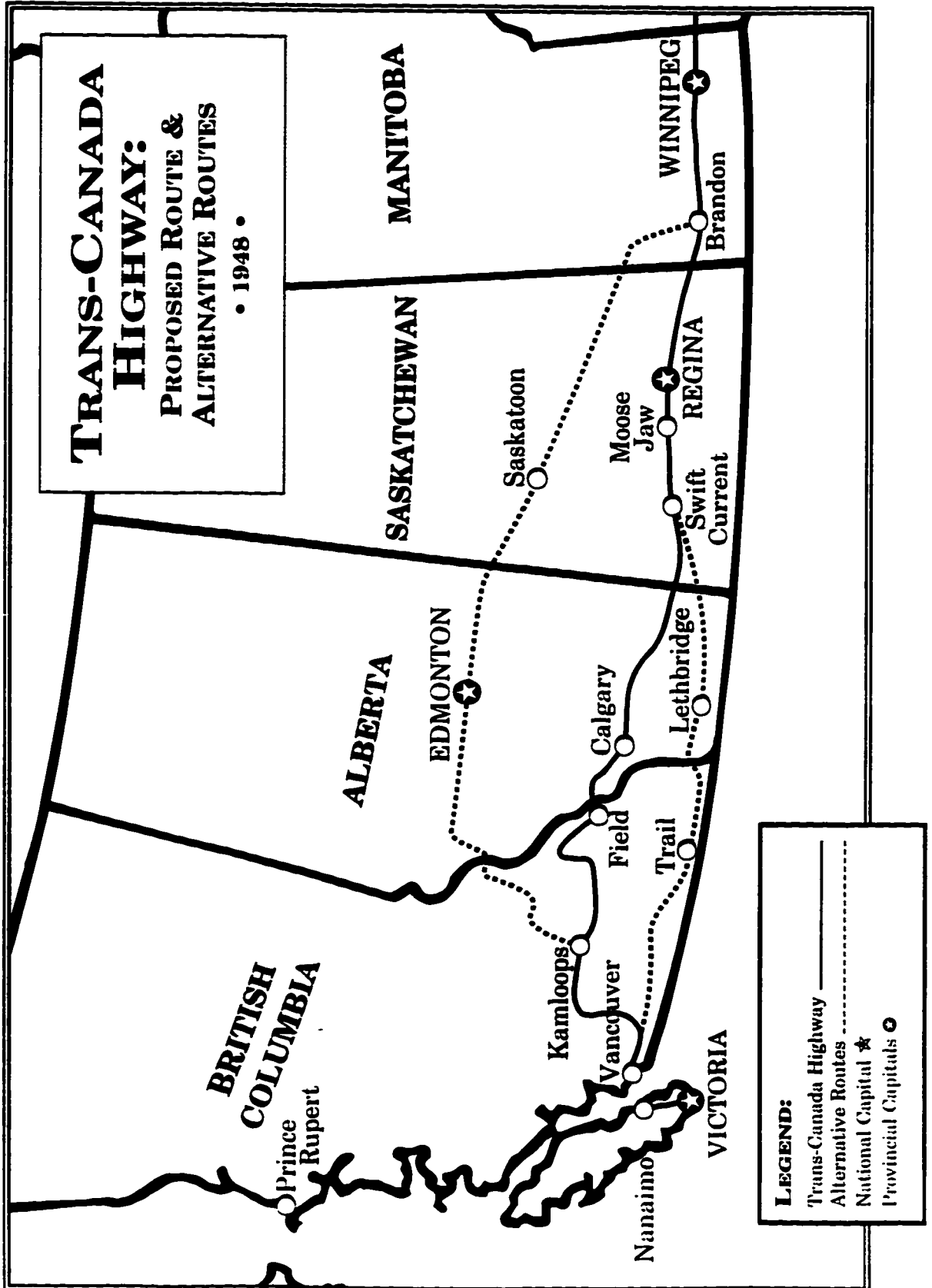
The subsequent actions of the Trans-Canada Highway Association offer an excellent example of the way in which various class fractions will seek to augment the power of one level of government versus another in order to promote their own economic interests. As Garth Stevenson has pointed out:

Class fractions within a province that find the provincial government hostile or unresponsive to their needs will support the strengthening of the central government as a counterweight and may call upon the central government to intervene on their behalf against the provincial government.²¹¹

In a brief presented to Ottawa in the Spring of 1949, the TCH Association argued in favour of the federal government's control over the selection of the route. In this

²¹⁰ "Trans-Canada Highway Yellowhead Route," Canadian Transportation (July, 1949), 404-405; see also, Charles H. Grant, "The Evergreen Route," Roads and Bridges 78:5 (May, 1940), 12-13, 83.

²¹¹ Stevenson, 75.



respect, the TCH Association was a unique phenomenon in the history of the Trans-Canada Highway project. Pointing to the national importance of the project and the federal government's primacy in matters of inter-provincial transportation in marine, rail and air transport, the brief called for a Royal Commission to determine the route and technical issues associated with the project. The Association contended that:

The selection of its route must be considered as a question of general importance to the people of Canada as a whole and that the decision upon the question of the route should not be left (so far as Saskatchewan, Alberta and British Columbia are concerned) to the provinces through which the highway will pass. Each province is bound to be guided by provincial considerations rather than national."²¹²

Although Ottawa did not acquiesce to the Association's recommendations, it did toy with the idea of establishing a federal Highway Commission to oversee the construction of the Highway. The Canadian Construction Association had called for the formation of a Dominion-Provincial Highways Commission at its 1949 Annual General Meeting.²¹³ The Prime Minister had received a number of letters from Quebec senators in early 1949 that were generally favourable to the idea. Their interest was purely partisan, and based upon their experience with federal funding provided to Quebec under the National Health Program (1948).

With reference to the latter, Senator P.H. Bouffard complained to St.-Laurent that Liberal contractors had been systematically denied construction work by the Quebec

²¹² "Brief on Trans-Canada Highway Submitted to Committee of Federal Cabinet," Roads and Bridges 87: 6 (June, 1949), 60-62; this article was a reprint of the brief presented to a Cabinet committee.

²¹³ "Roadbuilding Was Important Theme at C.C.A. Conference," Roads and Bridges 87: 2 (Feb. 1949): 59, 110.

government, which favoured their Union nationale competitors. He went on to say "Je n'ai pas de doute que le même système se continuera quant à la construction de la route Trans-Canada."²¹⁴ The subsequent decision by Quebec to not pursue the funding available under the Trans Canada Highway Agreement, may well have saved St.-Laurent some embarrassment in his native province. Regardless, the issue of a Federal Highway Commission was abandoned by Ottawa by late February of 1949.²¹⁵

While the introduction of federal highway standards and the "shortest practicable east-west route" formula proved to be matters of contention in the development of the Trans-Canada Highway, there were undoubtedly benefits to be obtained from this approach. From a federal perspective the development of highway standards through a co-operative approach with the provinces, and based broadly upon American practices, limited serious criticism. It was hard for provincial governments to argue that they were not in favour of better and safer roads built according to internationally recognized standards. In this respect Ottawa could portray itself as promoting the welfare of all Canadians.

The method of designating the route of the Highway across the country reinforced Ottawa's position as an objective "facilitator" in the project. It ensured that Ottawa would not be drawn into regional or fractional debates over the relative merits of one route or another. As the persistent activities of the Trans-Canada Highway Association

²¹⁴ NAC, St Laurent Papers, MG 26, file R-71 (Roads correspondence with Members of Parliament), "Senator P.H. Bouffard to St-Laurent, 21/02/49."

²¹⁵ NAC, Mines and Resources, RG 21., Vol. 1, "H.G. Cochrane to G.D. Mallory, 21/02/49."

demonstrate, Ottawa was able to avoid serious regional conflicts by pleading that it was only following the request of the respective provinces. At the same time, the experience of Ontario demonstrates that political considerations could easily outweigh other concerns in determining the eligibility of specific routes. While politically astute, from a technical standpoint the approach delayed the project, since it took time for Ottawa to develop the necessary technical expertise for supervising the project. While the Trans-Canada Highway Agreement of 1949 provided some of the tools required for the project, it failed to take into account the specific needs and limitations of the provinces. To complete the project, a second agreement was necessary in 1956, as Chapter V relates.

Chapter V

Building Canada's New Main Street

Garth Stevenson has described the Trans-Canada Highway as "one of the most important and successful of shared-cost programs."²¹⁶ Certainly, in terms of the sums allocated the Highway was one of the most important projects of the post-war period. But was the project successful? If the success of any plan is measured by the realization of its stated goals within the time frame and budget allocated, it is highly unlikely that in the early 1950s anyone would have considered the Trans-Canada Highway project even a qualified success. The success of the Highway in its completed form and its impact upon the social and economic fabric of Canada lay in the future, long after the original deadline of 1956 and outside the parameters of this study.

Following the initiation of the project in 1950 progress on the Trans-Canada Highway was painfully, if not embarrassingly, slow. By 1955 federal officials were openly admitting that none of the provinces would be able to complete their sections by the termination of the agreement on March 31, 1956.²¹⁷ Of the 4,591 miles [7388 km] of highway covered under the agreement, only 1,964 miles [3,160 km] were completed to standards defined in the Highway Agreement and 322 miles [518 km] of the route remained impassable. The project was also running over budget: with only a third of the highway completed to standards, 60 percent of the federal funds assigned to the Highway

²¹⁶ Stevenson, 156

²¹⁷ W. R. Binks, "The Trans Canada Highway," Proceeding of the Thirty-Sixth Convention of the Canadian Good Roads Association at Banff, Alberta, September 13-16, 1955, (Ottawa: Canadian Good Roads Association, 1956), 41.

had been expended.²¹⁸

In this final chapter, we will examine a number of factors that contributed to the slow development of the Trans-Canada Highway in the first six years of its existence, the provincial resentments the delays engendered, as well as the federal response to them. Attention will also be given to the growth of the administrative and technical expertise within the federal government and how this represented the growing recognition of the true complexity of the task outlined in the Trans-Canada Highway agreement. In this respect, the Trans-Canada Highway Division attempted to establish a niche for itself in the highway construction fraternity and to play a co-ordinating role in the further application of standards to the Highway. The Trans-Canada Highway project was a new experience for all participants, in particular federal engineers, who undertook to coordinate the nuts-and-bolts activities of a national highway programme even as the route and standards continued to evolve.

5.1 Highway Developments: 1950-1956.

There were a number of reasons for the slow progress of the Trans-Canada Highway between April 1950 and December 1956. First, one could blame the rushed and incomplete advance preparation during the development phase of the project in the twenty months between October 1948 and April 1950. The idea that a \$300 million project, spanning the continent and involving the co-ordination of nine or ten provincial

²¹⁸ Canada, Department of Public Works, Annual Report Proceeding under the Trans-Canada Highway Act Fiscal Year Ended March 31, 1955, (Ottawa: Queens Printer, 1955), 5,9.

governments, could be planned and implemented within such a short period of time proved unduly optimistic. Second, the newly formed Trans-Canada Highway Division, as the agency responsible for monitoring the project, had to undergo a considerable learning curve following its establishment in 1950.

Division engineering staff quickly made their presence known in the highway engineering fraternity both nationally and in the United States. Records of the Division from 1950 to 1952 document extensive involvement by Division staff in at least seven professional organizations. While the reports of these meetings indicate that Division personnel were accumulating useful data that was immediately applied to the Trans-Canada Highway, there are strong indications that their active participation was also intended to legitimize the activities of the Division within the highway profession. Thus, in recommending federal financial support of the AASHO's planned accelerated traffic loading tests, W. R. Binks, the Division's foundation engineer, suggested that:

....the various highway agencies in the USA would realize that we are particularly interested in the advancement of highway engineering. The Provincial Governments would also realize that the Federal Government is willing to take the initiative in such work for the promotion of better highways.²¹⁹

Even as it attempted to establish its position within the engineering community, the Division's position within the federal bureaucracy remained in flux as it underwent two re-organizations prior to 1956. Following the election of 1953, R.H. Winters was named Minister of Public Works and the Division was transferred to his new department. There

²¹⁹ NAC, Dept. of Public Works, RG 11, 84-85/061; vol. 1205, file 9-0-0, pt.1 "Report on AASHO Meeting by W. R. Binks; Chicago, March 6-7, 1952," 5; Volumes 1205 and 1206 concern conference and travel reports and claims of the Division.

were further changes in April 1954 when the Development Engineering Branch was established within the Department of Public Works. The formation of the Branch is indicative of the growing complexity of the Highway portfolio and the federal government's expanded commitment to highway development in general. In this respect, the Branch mirrored most provincial highway departments, in that it also had specialized sections dealing with administration (Trans-Canada Highway Division); bridges and structures (Structures Division); and Materials Testing (Testing Laboratory Division).²²⁰

As is often the case in departmental restructuring, conflicts arose within the Branch over the extent of divisional authority in the implementation of the Highway Agreement. In one noteworthy case, J.M. Wardle, now Chief Engineer of Public Works, had to intercede in a conflict between R.A. Campbell, Chief Engineer of the Trans-Canada Highway Division, and V.S. Thompson, Chief Engineer of the Structures Branch, in order to reestablish a working relationship which would prevent further delays in processing provincial claims.²²¹

Administrative problems did not exist solely within the Trans-Canada Highway Division. The Highway Agreement, while providing broad standards under which the Trans-Canada would be constructed, did not define how these would be implemented. Indeed, one of the major difficulties appears to have been the lack of conformity in

²²⁰ Annual Report: Trans-Canada Highway 1954, 3; Binks, "Trans-Canada Highway," 44.

²²¹ NAC, Dept. of Public Works, RG 11, Vol. 1212, 38-0-0, pt. 1, V.S. Thompson to R.A. Campbell, Feb. 21, 1955, and R.A. Campbell to V.S. Thompson, March 11, 1955, and following. Thompson questioned the "uneconomical use of materials" in two bridge designs submitted by B.C. and approved by Campbell's Division .

practices between the provinces. By October 1951, more than a year after the signing of the Trans-Canada Highway Agreement, the Division found it necessary to convene a Federal-Provincial Engineers Conference on November 28, 1951 to discuss technical matters associated with the project. In his introductory comments, J.M. Wardle, Director of the Engineering and Water Resources Branch pointed to the importance of obtaining uniformity in all phases of design and construction of the project. The purpose of the meeting was "to define specific methods of meeting the requirements of Schedule B, the technical standards section of the Highway agreement."²²²

The meeting was attended by representatives of all ten provinces: Nova Scotia, which eventually signed the agreement in May 1952, and Quebec, who did not sign until 1960, accepted invitations to attend.²²³ The conference covered a wide range of technical subjects and was divided into nine separate committees. These discussed subjects ranging from standardizing administrative practices, to surveying standards, geometric highway design, as well as bridges and structures. The Division considered the conference a major success and another similar technical meeting was held in September 1952.²²⁴

²²² Ibid, Summary, Federal-Provincial Engineers Conference, November 28th-30th, 1951, 1.

²²³ G.B. Williams, "The Trans-Canada Highway," in Proceedings of the 1970 Convention, Canadian Good Roads Association, Oct. 4-10, 1970. (Montreal: R.T.A.C., 1971), 264. The Quebec Liberal Party under Jean Lesage called for the province to recuperate shared-cost programme funds lost through the U.N.'s refusal to participate in many federal projects, such as the Trans-Canada Highway. Their election in 1960 paved the way for Quebec's participation in the project, see: Dale C. Thompson, Jean Lesage & The Quiet Revolution. (Toronto: Macmillan, 1984), 76, and 367.

²²⁴ Ibid, 2; Canada, Dept. of Resources and Development, Report of Proceedings under the Trans-Canada Highway Act for the fiscal year end March 31, 1953. (Ottawa: Dept. of Resources and Development, 1953), 10-11.

Even as the specifications were defined, the route of the highway continued to undergo study. For example, in early 1951 Ontario finally confirmed its route between Sudbury and Chapleau. Rather than proceeding in a straight line between the two communities, the province decided to push the road south through Thessalon. This added another 150 miles [241 km] to the road, but brought the Highway closer to Sault Ste. Marie and the American border. Once again, Ottawa accepted Ontario's meandering version of a "straight" line.²²⁵

Probably the most noteworthy change was the decision to abandon the Big Bend Highway route through the interior mountains of British Columbia in favour of running through Rogers' Pass. This particular change was necessitated by plans for the construction of a hydro-electric project on the Columbia River that would flood a large section of the Highway adjacent to the river. Beginning in 1953 and over the next three years the Trans-Canada Highway Division undertook surveys through Glacier and Mount Revelstoke National Parks with a view to determining an alternative route through the Selkirk Mountains. The suitability of the route through Roger's Pass was officially confirmed on March 13, 1956 by H.A. Young, Deputy Minister of the Department of Public Works in a letter to the B.C. Minister of Highways, P. ("Flying Phil") Gagliardi.²²⁶

The new, more direct route between Golden and Revelstoke B.C. had the immediate benefit of reducing the distance of the Highway by almost 110 miles [177 km].

²²⁵ NAC, Records of Dept. of Public Works, RG 11, Acc 84/85-061, Box 1210, file 34-6-0, R.B. Jennings to R.A. Campbell, 19 Feb. 1951.

²²⁶ Annual Report: Trans-Canada Highway, 1954, 4.; also: NAC, Dept. of Public Works, RG 11, ACC. 84-85/061, Box 1210/26-10-0, Maj. H. A. Young to P. Gagliardi, March 13, 1956.

There were other, less obvious benefits. Since most of the new section of highway was to be constructed through National Parks, much of the financial and administrative responsibility for the new route was absorbed by the federal government. Given the fact that the route proved to be one of the most difficult and expensive to construct, British Columbia undoubtedly benefitted from the decision as much as did road-weary motorists who continue to marvel at the vistas along one of the most magnificent stretches of highway in Canada. (See Map 3 for the 1952 Trans-Canada Route Map)

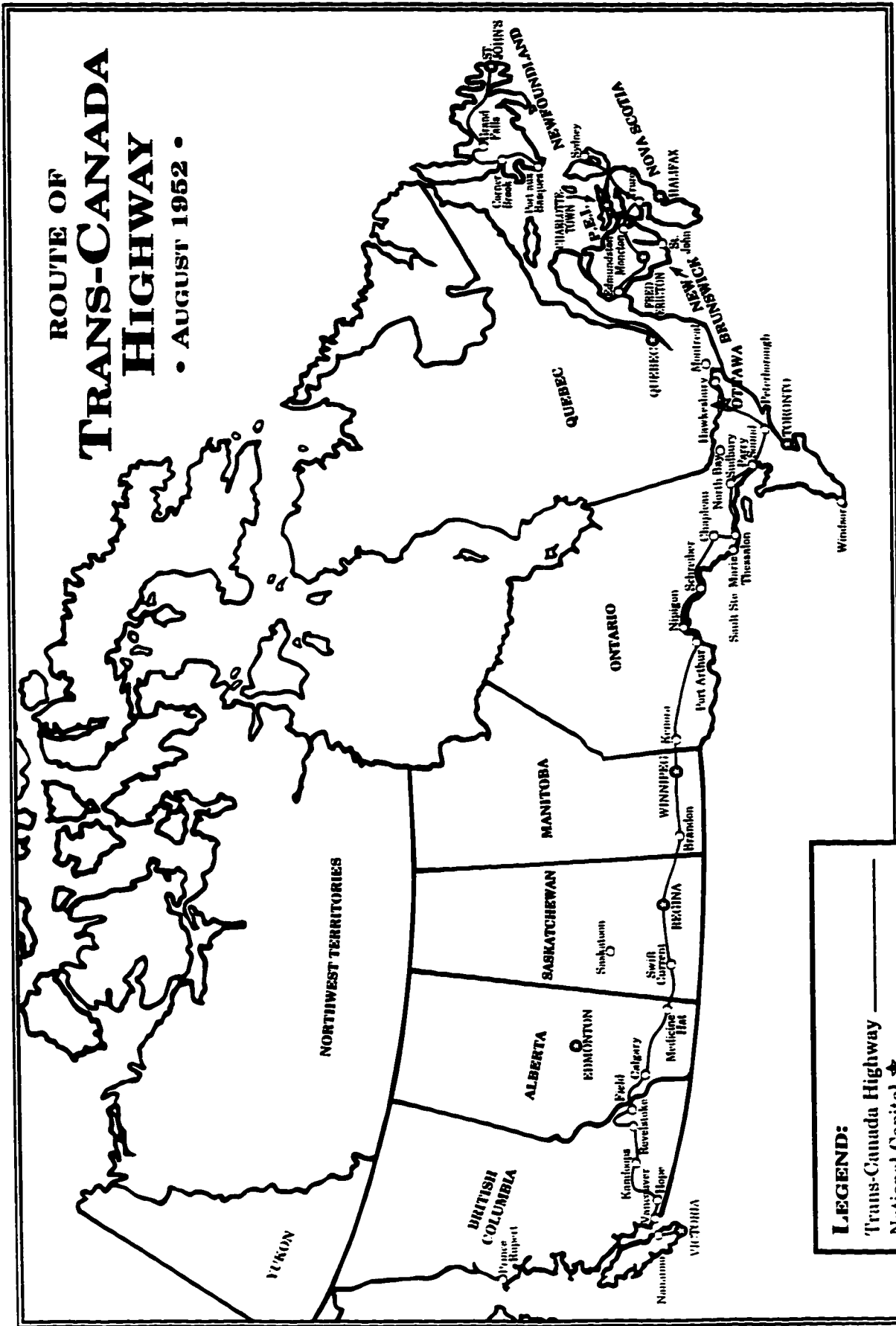
In Nova Scotia, work only began on the Highway following its signing of the Trans-Canada Highway agreement in May 1952. The province had refused to participate in the project on the grounds that Ottawa was unwilling, quite possibly unable, to provide a detailed estimate as to what proportion of the route would be eligible for retroactive payments. However, the impasse eased when Winters finally acceded in March 1951 to Nova Scotia's request that he send the Trans-Canada Highway Division's Supervising Engineer for New Brunswick, A.S. Gunn, to Halifax to undertake a preliminary appraisal of the Nova Scotia section of the Trans-Canada Highway.²²⁷ Previously, Winters had refused to consider a formal appraisal of the province's route, but now he cordially replied to Merrill Rawding, Nova Scotia's Highway Minister, that, "... We shall be very happy to have [Gunn] make a brief survey of your designated route and advise in a general way as to whether certain sections do, or do not, meet the specifications."²²⁸

²²⁷ NAC, Unpublished Sessional Papers, 5th Session, 21st Parliament, No. 108a, RG 14, Ds, Vol. 574, Merrill D. Rawding to Hon. R.H. Winters, March 21, 1951.

²²⁸ Ibid, R.H. Winters to Hon. M. Rawding, April 4, 1951.

ROUTE OF TRANS-CANADA HIGHWAY

• AUGUST 1952 •



LEGEND:

- Trans-Canada Highway —
- National Capital ★
- Provincial Capitals ●

As of May 1952, Quebec had not designated its route.

This concession helped. But federal money was an even stronger persuader, and Nova Scotia finally agreed to participate in the Trans-Canada project after the federal government's agreed to begin construction of the highly contentious Canso Causeway in 1952. Funded by the Department of Transport, the fixed link between Cape Breton and the mainland formed an important link in the Trans-Canada Highway across Nova Scotia. While no direct connection between the two events has been found, the province signed the Trans-Canada Highway agreement on May 15, 1952, the same day that the first contracts for the construction of the Causeway project was announced.²²⁹ Nine of the provinces were finally on board. In Canada, that can even look like unanimity. However, Nova Scotia's tardy entry into the project ensured that it would be impossible to complete the project within the time frame set in 1949.

There were other factors that mitigated against the progress of the Highway nationally. The Korean War (1950-53) resulted in serious shortages in certain strategic materials, particularly steel and cement following the introduction of Government controls in 1951. A 1950 report in the Financial Post even suggested that the Trans-Canada Highway project would be shelved as a result of the crisis.²³⁰ Although this never appears to have been a serious consideration, the highway lobby was sufficiently worried to mobilize against postponement. Thus the Manitoba Motor League wrote to the Minister that structural steel should be made available to such a "national" project as the Trans-

²²⁹ L.J. Doucet, The Road to the Isle, (Fredericton: Univ. Press of New Brunswick, 1955), np. 34-35; Annual Report, Trans-Canada Highway, 1954, 2.

²³⁰ " ' Almost certain' to shelve Trans-Canada way in 1951," Financial Post. 9 Dec. 1950, 1.

Canada Highway. Meanwhile, the CGRA's managing director, Major C. W. Gilchrist, published an article in the Financial Post decrying possible cuts to highway construction. Noting the potential strategic value of highways, Gilchrist argued that highway construction should receive top priority in a period of national emergency. Like the Americans, Canada needed to bolster its defense by sustaining and improving its current highway network.²³¹

Gilchrist's comments epitomized the growing awareness of the military importance of highways in the early 1950s. One of the earliest, if not the first, national highway surveys conducted by the Department of National Defence took place in 1953. Not too surprisingly, the survey confirmed the overall limited standards of the Canadian highway network and noted the need for considerable improvement to meet military, industrial and civil defense requirements.²³² Consequently, the Trans-Canada Highway project survived the Korean crisis. Even so, the shortage of steel was so acute that R.A. Campbell, the Highway Division's Chief Engineer, informed all Supervising Engineers in August 1951 that the federal Government was now willing to pay 50 percent of the cost of temporary wooden structures, primarily bridges and overpasses, and an equal percentage of the cost of permanent replacement structures when built.²³³ This letter formalized an agreement

²³¹ C.W. Gilchrist, "Should Highways Have Top Priority No Curtailment in Peace and War?" Financial Post 24 February, 1951, 22;

²³² Lt.-Col. D. W. Cunnington, "How Do Canada's Highways Meet Military Requirements?" Roads and Engineering Construction 91:3 (Mar. 1954), 175-176.

²³³ NAC, Dept. of Public Works, RG 11, Vol. 1212, 38-0-0, pt. 1, R.A. Campbell: Memo to All Supervising Engineers, Aug. 20, 1951.

that had been reached informally between H.A. Young, the Deputy Minister, and J.D. Millar, Deputy of Highways for Ontario, the previous January. Apparently not all the provincial governments were alerted to the change in policy regarding temporary structures, as Campbell's memo to J. M. Wardle in early October 1951 revealed:

We feel that it would be inadvisable to mention this at the Good Roads Association Convention, as to the best of our knowledge, the remaining Provinces are not aware of this ruling because it is felt that if this were generally known, the Provinces might relax their efforts to obtain steel for the Trans-Canada Highway in favour of Provincial roads.²³⁴

Campbell's comment alludes to the single greatest cause for delays in the construction of the Highway in the early 1950s: namely, the provincial obsession with building their own highway systems. Between 1950 and 1952, annual provincial expenditures for roads and streets increased from \$247 million to \$356 million. Provincial highway budgets broke records year-after-year as highway departments continued the upgrading of primary and secondary provincial routes. By 1954, Canadian governments were projecting an annual expenditure of \$451 million on their highways.²³⁵ Highway budgets continued to represent a substantial portion of overall provincial spending, 22.1 percent of Saskatchewan's budget in 1953.²³⁶ Under the continuing pressure of rising motor vehicle registrations and use, provincial highway departments concentrated their

²³⁴ NAC, Dept. of Public Works, RG 11, 84-85/61, vol. 1205, file 9-0-0, pt 1., R.A. Campbell to Mr. Wardle, 11 October 1951.

²³⁵ See Table 1; "For Highways 415 Millions a Year: How Provinces are Sharing Peak Spending," Financial Post 10 April 1954: 44-46.

²³⁶ Antonio Talbot, "Annual Review of the President," Proceedings of the Thirty-Seventh Convention of the Canadian Good Roads Association Oct. 2-5, 1956, (Ottawa: Canadian Good Roads Association, 1957) 11; Laramour, "Jack Douglas", 103.

resources upon the improvement of highways connecting growing metropolitan centres. This was most evident in Ontario, where the continued upgrading of controlled access highways such as the Queen Elizabeth Way and Highway 401 were the central pre-occupation of the Department of Highways.

In this scramble for materials and resources, the Trans-Canada Highway was a project of secondary importance. Its construction schedule had assumed it would become a provincial priority. When it did not, progress inevitably was slow.²³⁷ Nevertheless, construction statistics on the Highway between 1949 and 1956 point to some progress. (See Table 5 for construction statistics) Grading along the route advanced at an average rate of 250 miles [402 km] per year. Completed mileage, following paving of graded surfaces, was naturally slower but showed an annual average growth of 188 miles [303 km] per year. There was a slight increase in paved mileage in the period between 1953-1956 when the completion rate of the Highway grew to an average of 206 miles [330 km] per year.

Newfoundland posed the one of the greatest problems for the project due to the fact that the route from St. John's to Port-aux-Basques had to be entirely re-constructed to Trans-Canada Highway standards. By the end of 1956 the province had not paved any of its designated route. Nova Scotia, which had entered the agreement late, also was registering slow progress. In Ontario the construction of the route in the Chapleau area

²³⁷ NAC, Records of Dept. of Mines and Resources, RG 21, Vol. 1, file. 291.4.10.12.2, "The Trans-Canada Highway," 1.

Table 5
Trans-Canada Highway
Construction Statistics
1949-1956¹

Province	Cumulative Graded Mileage					Cumulative Paved Mileage					Total Miles TCH Act		
	1949-53	1953-54	1954-55	1955-56	1949-53	1953-54	1954-55	1955-56	1949-53	1953-54		1954-55	1955-56
Nfld	122.0	139.2	175.4	215.6	-----	-----	-----	-----	-----	-----	-----	-----	610
P.E.I.	32.2	38.6	54.7	55.0	31.2	34.4	46.1	52.4	74	74	74	74	74
N.S.	-----	-----	8.7	32.0	-----	-----	4.0	18.8	310	310	310	310	310
N.B.	45.6	45.6	58.8	66.0	33.1	45.6	52.2	59.6	388	388	388	388	388
Ont.	260.9	309.2	373.2	416.0	133.0	250.0	314.8	350.6	1,412	1,412	1,412	1,412	1,412
Man.	66.8	114.9	117.4	152.0	73.5	96.1	130.1	153.6	305	305	305	305	305
Sask.	216.8	270.0	317.1	367.0	93.3	160.7	230.4	305.3	414	414	414	414	414
Alta.	188.2	196.4	196.4	214.1	51.3	109.1	150.9	196.1	292	292	292	292	292
B.C.	87.5	124.8	162.4	204.4	81.4	104.6	139.7	177.3	692	692	692	692	692
Parks		12.2	13.0	26.0	-----	5.8	5.8	5.8	83	83	83	83	83
Total	1,020.0	1,250.9	1,477.1	1,750.6	496.8	806.3	1,074.0	1,319.4	4,580	4,580	4,580	4,580	4,580

¹ Source: Annual Reports of Proceedings under the Trans-Canada Highway Act., 1953-1956.

was not progressing well, and it comprised the largest single gap in the proposed route. By 1955, despite advances in construction and an investment of \$202 million the route remained impassable. The extent of the problem was made evident in November 1955, when G.B. Williams, Chief Engineer of the Development Engineering Branch, provided the Deputy Minister of Public Works with a confidential memo that stated that, at the existing rate of progress, sections of the Trans-Canada Highway would not be completed until at least 1970, or later.²³⁸

5.2 Plugging The Gaps

The project was undoubtedly in trouble. So too, by association, was the Liberal government in Ottawa that had initiated it. In the House of Commons, opposition members sought answers as to why the Trans-Canada Highway was moving at a snail's pace. Asked in 1954 when the project would be completed, Winters evasively responded that the Government had no commitment to the Highway beyond 1956. He further attempted to deflect criticism of the Government's performance by emphasizing that it was the individual provinces, not the federal government, who were responsible for the construction of the Highway. Ottawa was in a difficult position, Winters explained, but, "...We have been doing everything we can to urge on the provincial governments the desirability of making haste within the terms of the agreement."²³⁹

²³⁸ Binks, "Trans-Canada Highway," 42-43; NAC, Dept. Public Works, RG 11, Acc. 84-85/061, Box 1206 file 9-0-0, G.B. Williams to H.A. Young (Deputy Minister), 7 Nov. 1955.

²³⁹ Debates, 3937-3939.

Nonetheless, by 1955 the Liberal Government was faced with a dilemma. As the Minister had intimated in the Commons, it could allow the Highway Agreement to expire as required in December 1956 without the Highway being completed. However, allowing one of the Government's major national construction initiatives to collapse in a possible election year would not be politically astute.²⁴⁰ Conversely, the Government could take steps to complete as much of the project as quickly as possible. This second, more politically appealing option was the one taken.

In November 1955 Robert Winters, as the Minister responsible for the Highway project, convened another Federal-Provincial Conference to discuss means whereby the provinces could be encouraged to accelerate their work on the Highway. In stark contrast to the Government's earlier approach that portrayed Ottawa as a facilitator, the Minister presented a series of proposed amendments that would substantially increase federal contributions to the project. The Government was prepared to submit these proposals to Parliament as an amendment that would see the Trans-Canada Highway Act extended from 1956 to 1960 and the total admissible federal contribution increased to a maximum of \$250 million.²⁴¹

The Federal-Provincial Conference of 1955 was intended to address many of the concerns that had limited provincial participation in the project. At the beginning of the conference Winters proposed a new formula for federal contributions to encourage the

²⁴⁰ Bothwell, et al., 142-143; the other project was the St. Lawrence Seaway.

²⁴¹ Canada, "Proceedings of the Federal-Provincial Highway Conference, Ottawa, November 14-15, 1955," Warren Buskard, official reporter. Tms (photocopy) in Library of Parliament, 12-14.

elimination of the gaps in the Trans-Canada Highway through construction of routes where none then existed. These 'gaps' represented slightly over 10 percent of the total route.²⁴² The proposed formula saw the elimination of federal funding for previous construction, that is sections constructed before 1949, and the introduction of a federal contribution of 90 percent of costs for 10 percent construction within each province. The existing 50 percent contribution for new construction would continue, provinces had to sustain outlays on the highway equal to the average for the previous two years. The new agreement would be extended to 1959. One final change entitled provinces to substitute a "good standard" of paved highway for Trans-Canada Highway standards.²⁴³

The new proposals illustrate the degree of concern which the federal government had over the halting progress of the project. Winters stated, "the whole object of this formula is to provide an impetus to the work and get new construction going to close the gaps and get the maximum amount of mileage completed."²⁴⁴ Over the next two days, the provinces voiced a variety of concerns over the administration and financing of the project. These concerns centred on the issue of provincial priorities, highway standards and routing as well as the degree of financial assistance accorded to the provinces.

Saskatchewan's J.T. Douglas offered the most succinct explanation of the provinces' inability to proceed on schedule with the project. It had been impractical for the provincial governments to delay, he said, the development of other important routes

²⁴² Highway Conference 1955, 9.

²⁴³ Ibid., 10-13.

²⁴⁴ Ibid., 25.

within provinces in order to concentrate on the Trans-Canada Highway. Douglas elaborated:

One of the difficulties faced by Saskatchewan..has been the diversion of funds from our regular program of highway construction to meet the requirements of the Trans-Canada Highway, resulting in a neglect of a number of urgent projects.

He went on to comment that the deviation from provincial schedules would have an adverse effect upon the "internal economy of the province" by encouraging the deferral of reconstruction projects which would ultimately result in major capital expenditures for the provinces.²⁴⁵

Douglas' comments regarding provincial priorities were seconded by James Allan, Ontario's Minister of Highways. In light of the fact that the province had to contend with increased volumes of traffic in southern Ontario, the density of traffic on much of the proposed Trans-Canada Highway did not warrant immediate attention. The 57,000 cars that choked the Q.E.W. on a Labour Day were as many cars as much of the proposed Trans-Canada Highway would see in a year. In Allan's opinion, the standards for the Trans-Canada Highway were simply not warranted by the traffic the road would carry. A similar opinion was held by E.S. Spencer, Minister of Public Works for Newfoundland.²⁴⁶

Financial matters were the primary concern of provincial representatives. Allowable expenses under the shared cost agreement continued to be a contentious issue. The provinces maintained that the original 50/50 cost sharing plan was a misrepresentation

²⁴⁵ Ibid., 53; for Talbot's comments see above

²⁴⁶ Ibid., 26-27; for Spencer's remarks see: Ibid., 93-94.

of the true costs of construction. Responsible for the purchase of the right of way as well as the construction of intersections and other expenses, the provinces were in fact paying close to 60 percent of the true construction costs. Given the current arrangement, even if the federal government paid for 90 percent of the remaining project, the federal contribution in the final accounting would not exceed 53 percent of true costs.²⁴⁷ In order to make the arrangement more equitable, the provinces, led by Alberta, argued that the federal government should assume a greater proportion of actual construction costs for intersections and similar works required by federal standards.²⁴⁸

The provinces wanted Ottawa to pay more than 50 percent of the total cost of the highway, perhaps as much as much as 100 percent. Some thought it should even reimburse them for work already done since 1949. Newfoundland even complained that almost 40 percent of its current provincial budget was going into road construction and that it desperately needed additional funding.²⁴⁹ Since Ottawa had established the route and standards for the Highway, it should pay a greater proportion of its cost, said the provinces.. Their appetite for highway dollars was insatiable in 1955: federal aid should extend beyond the Trans-Canada Highway, they said, to encourage completion of the project and to stimulate economic growth at a time when the Canadian economy was once again going into recession..²⁵⁰

²⁴⁷ Ibid. 43, 58.

²⁴⁸ Ibid., 200.

²⁴⁹ Ibid., 127.

²⁵⁰ Ibid., 50, 96, 229.

Alberta's representative G. E. Taylor raised the issue that the federal government obtained \$225 million a year from duties levied on the automobile and related industries. Comparatively speaking, the \$150 million promised over six years for the Trans-Canada Highway was a paltry sum. Taylor thought that half of the \$225 million should be allocated to the provinces for highway use within the framework of a systematic national highway policy.²⁵¹

The federal government had no desire to share its motor vehicle revenues indefinitely or to stay in the highway business permanently. Winters stated categorically, "the Federal Government is not prepared to announce a program of participation in highways beyond the Trans-Canada Highway, which [alone] has national significance."²⁵² He pointed to the federal government's current budget deficit and to its unwillingness "to do anything which is in the nature of an invasion or encroachment on provincial jurisdiction"²⁵³ as justifications for inaction. The federal government was not anxious to change the fifty-fifty funding formula either, for this protected it against demands that it pay most or all of the cost of the highway. Yet provincial entreaties were rewarded with minor federal concessions. It now agreed to pay half the cost of constructing intersections and grade separations. It resolved the issue of highway standards by extending federal subsidies to paved routes constructed to acceptable (i.e. provincial) standards. Finally, it agreed to extend the agreement to 1960, as the provinces requested.

²⁵¹ Highway Conference 1955, 88.

²⁵² Ibid., 143.

²⁵³ Ibid., 91, 107.

The first amendment to The Trans-Canada Highway Act was passed in 1956. It increased the federal contribution by \$100 million, for a total of \$250 million. By December of that year all nine participating provinces had renewed their agreements for the construction of the highway.²⁵⁴ In his opening remarks to the second reading of the amendment, R. H. Winters compared the Trans-Canada Highway to the building of the CPR, the sacred cow of Canadian unity; both, it would seem, would take eleven years to build. But, he proudly said, the similarities went further inasmuch as the Trans-Canada Highway, "would help to weld the country more closely together and ... contribute to national growth and development just as the railways did in the nineteenth century."²⁵⁵

The minister's comments underscore the fact that a number of factors contributed to the decision of the federal government to fund the Trans-Canada Highway project. Nevertheless, it was its potential as a national employment initiative that remained its most alluring benefit for the federal Liberal government. Tourism, long touted by many as an 'export' of unparalleled importance, was certainly a secondary or tertiary benefit. This was particularly true following the rapid expansion of Canadian petroleum production in Alberta following the Leduc find of 1947. Increased domestic production, which by 1956 met three-quarters of demand, reduced Canadian imports of petroleum and improved the

²⁵⁴ Canada, Department of Public Works, Annual Report of Proceedings Under the Trans-Canada Highway Act for fiscal year ended March 31, 1957, (Ottawa, Queen's Printer, 1957), 1-2.

²⁵⁵ Debates (Commons), April 19, 1956, 3069.

nation's exchange situation.²⁵⁶ The Highway thus served a purpose by encouraging Canadians to remain in Canada. Nevertheless, domestic tourist traffic, as the provinces frequently noted, did not warrant the construction of the Highway. Ottawa knew, as did the provinces, that improved north-south connections, specifically international points of entry, were historically more the key to increasing tourism receipts than the construction of a transcontinental route.

Perhaps the most telling evidence of the importance of employment creation as a function of the Trans-Canada Highway is found in the annual reports issued on the project. From the first comprehensive reports beginning in 1952, detailed information is provided on annual expenditures, progress of work, contracts let, as well as the number of hours of direct and indirect employment created by the project. The reports up to 1956 and even into the 1960's never provide information on the type or volume of traffic on the highway, even after its official opening in 1962.²⁵⁷ From this fact alone, one may surmise that from the perspective of the federal government, all other benefits stemming from the construction of the Trans-Canada Highway, apart from employment creation, were of secondary importance.

The federal government's approach to the construction of the Trans-Canada Highway between 1950 and 1956 illustrates how it assumed an increasingly important role in the realization of the project. Initially conceived as a provincial initiative supported by

²⁵⁶ Morton, Short History, 215; see also: John Richards and Larry Pratt, Prairie Capitalism: Power and Influence in the New West, (Toronto: McClelland and Stewart, 1979), 44-45.

²⁵⁷ see; Canada, Annual Report: Proceedings Under the Trans-Canada Highway Act, Fiscal Year Ended, March 31, 1965, (Ottawa: Dept. of Public Works, 1965).

federal assistance, the departments responsible for the construction of the highway soon asserted themselves into a leadership role out of the need to define and control the construction process.

In the face of lagging provincial activity in the project, the Government undertook to encourage greater provincial interest by increasing its financial support for the project. Most importantly, by the 1950s the construction of the Trans-Canada Highway was no longer perceived as essentially an unemployment relief measure, but had assumed a momentum of its own. As that momentum lagged, in the face of divergent provincial priorities or limited budgets, Ottawa sought to increase the incentives for provincial participation. One way of doing this was through increased funding. Another was by reducing the standards for construction in order to ensure the completion of a paved transcontinental route. Thus, by 1956 the Trans Canada Highway was no longer perceived solely as a means to an end for the federal government, but had become a goal in itself.

Conclusion

In 1929 the Federal government ended Ottawa's first foray into the realm of road administration and financing by terminating further discussion on the renewal of the Canada Highways Act of 1919. The Act, which had distributed \$20 million in conditional grants to the provinces, was ostensibly a victim of Ottawa's attempt to control its war debt. The Prime Minister, Mackenzie King, reportedly stated that extending the Act would have meant raising taxes and "he was not disposed to increase still further federal taxation, while that of the provinces -- who profited most by the construction of highways -- remained at the present level." Ironically, in March of 1929 the employment crisis which the Act had been intended to combat was no longer a current issue.²⁵⁸

Twenty years later another Liberal Government enacted legislation "to encourage and assist in" the construction of a Trans-Canada Highway by as much as \$150 million. This legislation resumed, after a long hiatus, previous government policy, both Liberal and Conservative. In 1919 and again in 1930 Federal Governments had supported provincial highway efforts as part of a more comprehensive employment programme. Indeed, the Trans-Canada Highway had been proposed in 1943 as an ideal national project to absorb the unemployed during any post-war economic slump.

Yet this continuity in government purpose was overshadowed by the revolutionary impact of the automobile on government agendas, especially after World War II. By 1946 there were approximately 1.6 million motor vehicles on Canadian roads. By the end of the decade, this number had almost doubled. The upward trend in motor vehicle ownership

²⁵⁸ "Federal Aid for Highways," The Canadian Engineer, 56 (12 Mar. 1929): 347.

appeared inexorable. As more Canadians took to the highways, roads designed to handle pre-war volumes were swamped with traffic. Moreover, once behind the wheel of more powerful post-war cars, Canadians killed and maimed themselves in ever increasing numbers. Even the finest highways in Canada, such as Ontario's Queen Elizabeth Way, failed to meet the needs of both private and commercial users for effective and safe transportation. Coincident with this trend toward a motorized society was the equally constant demand by provincial governments, in particular those on the Prairies and in the Maritimes, for federal assistance for highway and road construction. The Rowell-Sirois Report on Dominion-Provincial Relations, as well as a number of committees on Reconstruction emphasized the growing significance of highway investment, the former from a debt perspective, the latter from revenue generation, particularly for the provinces from tourism.

As outlined above, the Trans-Canada Highway had a long and chequered history in Canada. There had always been a strong lobby for it, composed of automobile associations, highway construction firms and engineers, provincial highway officials, and enthusiasts like Dr. Perry Doolittle. Constitutional niceties and federal stinginess meant that the project limped along for decades with minimal funding. However, in 1949 the purse strings were significantly loosened and the Trans-Canada Highway became a high priority to a Federal government that now recognized its "universal" appeal. It had become, as the saying goes, all things to all people. The political context of the project had three principal elements. First, outside of the Quebec government, there was no significant opposition to the project in the broad political arenas. Where difficulties did arise, it

normally involved not the idea of Federal financing, but rather its stinginess. Indeed, so little did the constitutional implications of the highway bother the nine participating provinces in the 1949-1955 period that they seemed quite prepared to let the Federal Government pay for the project in its entirety. But the Federal government repeatedly turned down their "generous" offer..

Highway specifications were the second political element. The Federal government wanted them uniformly applied throughout the country. There was no particular engineering need for this uniformity. Rather it was a symbolic, "political" gesture, a throwback to an earlier era when a railways had to be built to the same gauge to maximize national efficiency. At a time when only a fraction of Canadian highways were paved, black top and an occasional climbing lane would have been quite sufficient in many regions. In its romantic attempt to build Canada's "Main Street," the Federal government ignored the condition of the various provincial highway networks and local traffic requirements. Instead, it attempted to enforce a bureaucratic norm on widely divergent situations.

Had Canada possessed something like the Bureau of Public Roads in the United States, it might have made sense for federal "experts" to pressure the provinces to conform to a national standard of highway design that had evolved over time and with experience. But the Trans-Canada Highway Division of the Canadian government was a novice in the field of highway construction, its small engineering group highly over-worked and under-staffed. Ironically, one of the provinces most upset with the Federal standards being imposed, for they far exceeded its own fiscal capabilities to match, was

Newfoundland. The irony lay in the fact that the 1949 legislation was supposed to prove the benefits of Confederation to the sceptical Newfoundlanders. Instead, by 1955 they were drowning in construction bills.

The highway's route was the third political consideration. The Federal government thought it was playing smart politics by doing its utmost to keep costs and the taxes needed to pay for the project in check. Hence it wanted to build the road straight through the wilderness rather than circuitously through the towns. Failing to learn from its earlier experiences with such projects as the national Transcontinental Railway, the Federal government thus insisted on a route that failed to take into account some of the major economic factors underlying highway location - namely potential traffic, population centres, and traffic volume. There was something ironic about a Canadian "Main Street" whose route bypassed three or four provincial capitals. The Federal government was politically naive ever to think that the provincial governments would wholeheartedly embrace a project that did not address their own highway needs. The slow progress of the Highway in some provinces was no doubt the result of this cavalier treatment. Moreover, Ottawa's squabbles with New Brunswick, Nova Scotia, and Ontario over the route (and the issues of compensation the route raised) did much to undo the goodwill that the Highway supposedly embodied.

The Trans-Canada Highway Act of 1956 addressed these three political issues. By revising many of the conditions attached to the original agreement, it constituted Ottawa's recognition of some of these initial failings. It was an attempt to reduce the political fallout from them. The Act also symbolized how completely the politics of the Trans-Canada

using the Trans-Canada Highway as an unemployment relief project. Had it not been for the fear of a major economic downturn in early 1950, it is questionable whether the Prime Minister and his Cabinet would have waived their previous concerns over unanimous provincial agreement to the terms of the Act. In short, Ottawa was quite prepared to shelve the project until an economic recession necessitated it. The provinces, by contrast, thought highways vital to their own economies; and they pressed the Federal government for any road money they could get, even for a national highway, provided they could determine its route.

By 1956 there had been a role reversal. Once federal prestige had been committed to the project, Ottawa came pleading in 1955 for accelerated provincial spending, and for a faster completion date. What had once been merely a means of unemployment relief, had transformed into a shining national goal: Canada's Main Street. The make work project of the 1930s had become the national dream for the 1950s. The provinces never signed on to this myth, which meant that the Federal Government found itself investing ever more into a project that by its official termination in 1970 was to cost Ottawa over \$825 million for a road whose original specifications were now the norm for a paved rural route. Buoyed by the post-war boom, Ottawa was briefly attempted to direct the flow of highway development in Canada. However, it was ill-prepared for this new role, and was unwilling to accept the full cost of its initiative. As such, Canada's Main Street suffered the fate of its namesakes in many Canadian towns and cities as its importance was eclipsed by more 'modern' provincial highways. In the end, Canada obtained its transcontinental highway, but as a standard for future highway development, it was too little highway, too late.

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