Enhancing Prosperity

The Importance of Revitalizing Canada's Transportation Infrastructure

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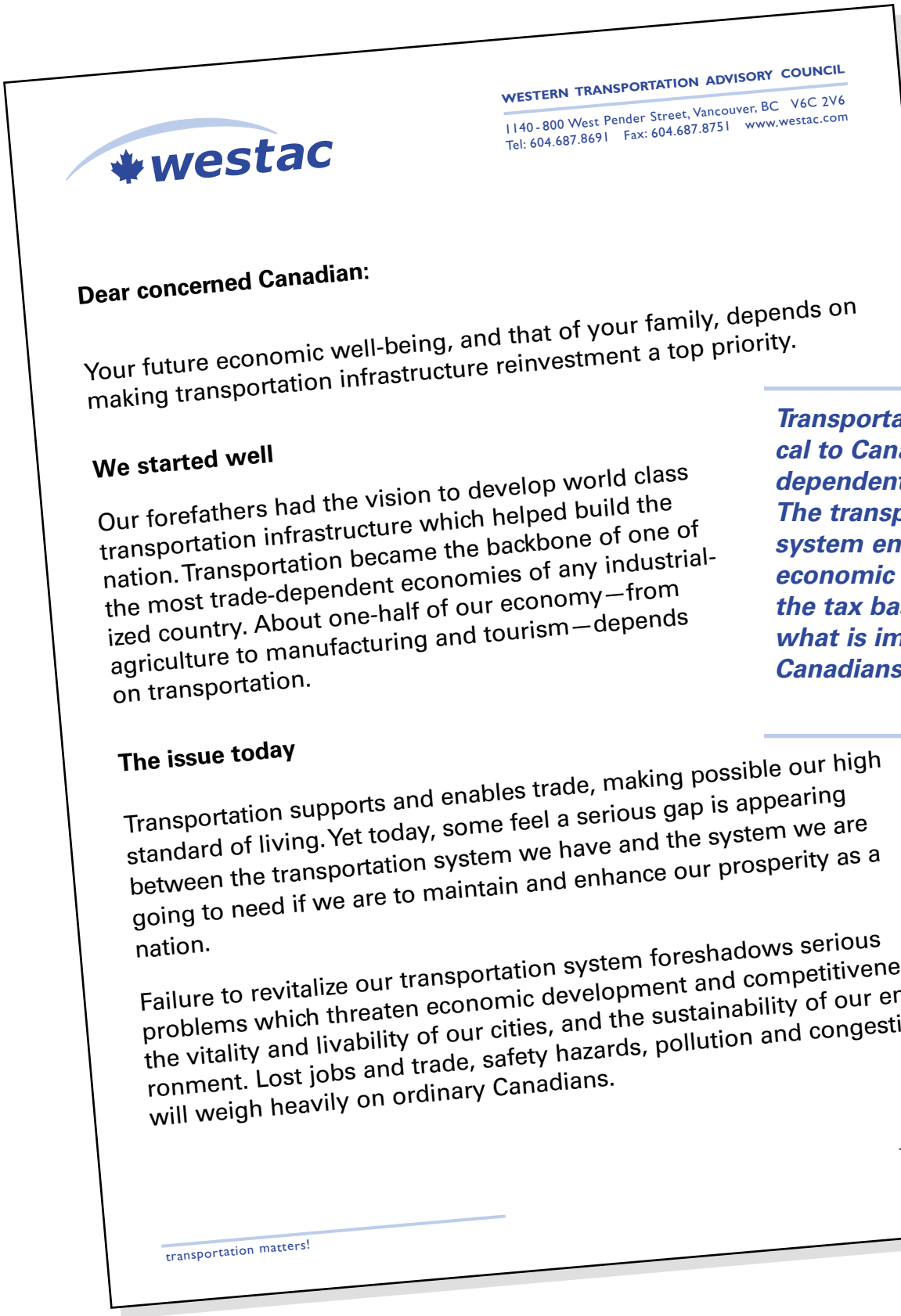
Transportation infrastructure reinvestment in all modes is recognized by WESTAC as one of Canada's biggest challenges.

Because of its complexity and high cost, there is disagreement about transportation infrastructure priorities and the best way to pay for them.

This briefing aims to advance the debate about the importance of transportation infrastructure by elevating its status on the national agenda. We must act now to revitalize Canada's transportation system because it will continue to support our economic vitality and standard of living.

In this briefing . . .

- *Executive summary (letter)*
- *Transportation enables our prosperity*
- *Trade growth and consumer expectations increase transportation's importance*
- *Efficient, reliable transportation is essential to reinforce our competitive position*
- *Urgent need for infrastructure renewal*
- *Transportation infrastructure backgrounder*



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Dear concerned Canadian:

Your future economic well-being, and that of your family, depends on making transportation infrastructure reinvestment a top priority.

We started well

Our forefathers had the vision to develop world class transportation infrastructure which helped build the nation. Transportation became the backbone of one of the most trade-dependent economies of any industrialized country. About one-half of our economy—from agriculture to manufacturing and tourism—depends on transportation.

The issue today

Transportation supports and enables trade, making possible our high standard of living. Yet today, some feel a serious gap is appearing between the transportation system we have and the system we are going to need if we are to maintain and enhance our prosperity as a nation.

Failure to revitalize our transportation system foreshadows serious problems which threaten economic development and competitiveness, the vitality and livability of our cities, and the sustainability of our environment. Lost jobs and trade, safety hazards, pollution and congestion will weigh heavily on ordinary Canadians.

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transportation matters!

Transportation is critical to Canada's trade-dependent economy. The transportation system enables our economic wealth and the tax base to pay for what is important to Canadians.

WESTAC, 2002

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Parts of the infrastructure have been worn down without adequate reinvestment. For example, some roads are deteriorating while traffic continues to grow at a faster rate than population. There are instances where Canadian commercial truckers use the US interstate system instead of the Trans-Canada Highway because of its poor condition.

Competitive disadvantage

Most Canadians live in cities. The 2001 Census shows more than half of all Canadians live in four urban regions. Traffic gridlock is choking off mobility and eroding our quality of life. Congested roads restrict goods from efficiently reaching airports, ports and intermodal rail terminals. Local governments struggle to find the money to improve transit which would help ease congestion and reduce air pollution.

Urban land use is controversial. Transportation often competes with other development projects which may yield inferior social and economic benefits. It is worth remembering that if urban mobility fails, businesses and jobs will relocate.

Airports, ports, roads and railways continually require large sums to modernize their infrastructure and keep pace with our competitors. We are at a disadvantage to foreign rivals such as the US, where transportation receives greater funding support as a matter of public policy.

In sparsely populated rural and remote regions, roads are becoming financially unsustainable even though they form the basic links between communities. In these areas, airports, ports and rail lines are not only needed for trade, but as links to the outside world.

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For the first time since the Liberals were elected in 1993, the top issue of concern for Canadians was the economy, surpassing health care.

Pollara, National Post, Jan., 2002

We've slipped from 3rd to 5th in the world in our standard of living during the 1990s. As a result, after-tax income for the average Canadian family of four is $10,000 per year lower.

C.D. Howe Institute, 2001

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Why it's happening

All governments are under pressure to reduce taxes, eliminate deficits and provide more services. With social programs consuming the vast majority of limited public dollars, support for transportation infrastructure--either through direct public expenditures or policy changes--does not get the attention it deserves as an economic engine.

What are the solutions?

Our transportation system is a national asset. We must make investments in this system that leverage our competitive strengths by:

- defining a "core" national transportation system which is essential to the economy, trade and tourism;
- encouraging modal balance and modal integration to ensure that we spend scare resources wisely and promote sustainable transportation;
- encouraging private and public sector cooperation to find innovative funding solutions;
- ranking urban and rural needs and infrastructure spending priorities across jurisdictions;

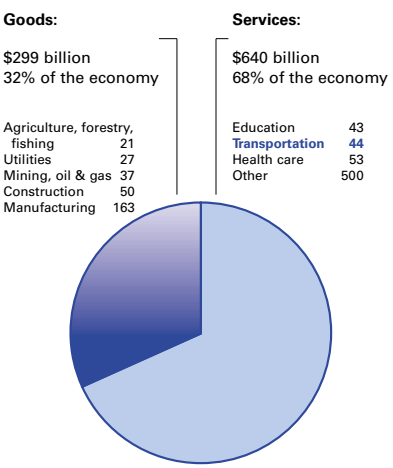
Please become engaged with this critical issue and **publicly support the importance of a strong transportation system.** Excellent transportation will benefit generations of Canadians to come.

Dave Gardiner
President, WESTAC

Canada depends on exports

Source: Statistics Canada, 2000 exports, $ billions

Transportation supports economic output



Source: Statistics Canada, 2001 GDP in 1997 constant dollars

Transportation enables our prosperity

Canada is a trading nation. Exports represent 43 per cent of our economy,[1] nearly double the OECD average and five times that of the US economy. We also earn $16 billion from foreign tourists each year. Sales to foreigners underpin Canada's economic well being and are made in highly competitive markets. A competitive, efficient and safe transportation system is therefore essential.

Commercial transportation itself accounts for $44 billion, or 5 per cent of the economy. Its impact, however, is much larger. It is difficult to think of a business that does not use transportation. Some industries such as agriculture, forestry, mining, manufacturing, construction and energy are particularly dependent on transportation. These sectors account for a large proportion of the Canadian economy (GDP).

Transportation critically affects the productivity and performance of any business that uses it. Transportation enables our economic wealth and the tax base to pay for what is important to Canadians. These facts, however, are not widely recognized and greater efforts are required by those in transportation to increase the level of awareness.

Trade growth and consumer expectations increase transportation's importance

International trade has grown rapidly over the past decade. World trade increased 6.5 per cent annually between 1990 and 2000, more than three times faster than the increase in global production.[2] This growth is expected to continue because of economic growth, reduced trade barriers and lower transportation and communication costs. Economic integration between trade partners also increases the importance of transportation.

Just-in-time production and distribution systems are integral to modern business, particularly for higher-value consumer goods that are driving growth. Rapid delivery and low cost systems are also important for bulk commodities where transportation costs may represent the greatest single cost of the delivered price of an export.

[1] Statistics Canada, 2001 exports of goods and services were $470 billion and imports $414 billion (GDP based on expenditures).
[2] Scotiabank Group, NAFTA Quarterly, Summer 2001.

Electronic business and the Internet are revolutionizing transportation, not reducing it. People and businesses can search, compare, buy and pay for goods on-line. They then expect instant delivery which puts pressure on transportation to respond.

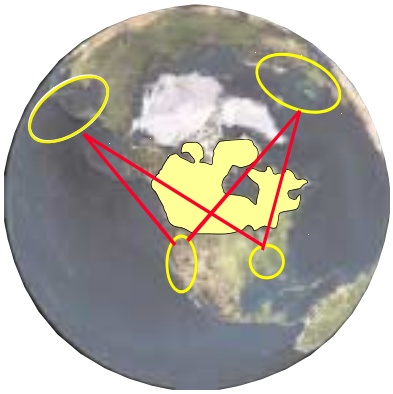
Efficient, reliable transportation is essential to reinforce our competitive position

Canada has a strategic location advantage as a global "bridge route" among powerful trading blocs. Proximity to major markets, a skilled work force, strengths in technology, and innovation have allowed us to compete. However, as trade expands and economies become more integrated, any industry that might depend on a low valued Canadian dollar to shore up their exports would be concerned.

The US and other G7 nations are making major reinvestments in their transportation systems because of their public policies. This represents a dual threat. It gives foreign competitors low distribution costs into the Canadian market, and the potential to lure business away from our trade routes. For example, the British Columbia cruise industry alone accounts for more than $0.5 billion in spending, and Seattle has aggressively pursued this business with subsidized terminal facilities and promises of lower-cost domestic airlift for US passengers. Recently, Seattle attracted three cruise ships to home-port their Alaska business and plans additional terminal facilities to challenge other Vancouver-based cruise business.

Without a cost competitive, responsive and safe transportation system, we risk losing existing trade and failing to attract new traffic.

Canada is located at a trade crossroads



Courtesy of Prince Rupert Port Authority

Infrastructure and economic growth

The importance of transport infrastructure investments for economic growth has long been recognized. At the same time, these investments do not guarantee economic growth; they must be targeted to where the conditions are right, where complementary resources are present and market developments are taking place. Management and decision frameworks must be in place to foster investment where it will produce the greatest overall return.

Canada Transportation Act Review Panel, 2001

Urgent need for infrastructure renewal

The basic objective should be a transportation system that supports economic growth and opportunity. This system must be: reliable, safe, secure, efficient, competitive, adequately funded and environmentally sustainable. Today's knowledge economy has also raised customer expectations, making integrated transportation and the effective use of all modes increasingly important.

Some feel a serious gap is appearing between the transportation system we have and the system we are going to need if we are to maintain and enhance our prosperity as a nation (see text box).

A common awareness among all levels of government and the private sector as to the **serious** and **urgent** need for transportation infrastructure reinvestment is crucial. **Supporting the need for transportation reinvestment is as important as it was when we built the trans-continental railway that linked Canada together so many years ago.**

Historical approach to transportation...

Constructing the system

In the past, the formula was straightforward: develop the system and prosperity would follow. It took a leap of faith to construct the:

- Transcontinental, intercolonial railways and branch lines
- National highway system and other roads
- Airports and air navigation system
- St. Lawrence Seaway System and regional ports
- Oil and gas pipelines

... closing the gap through strategic investments in infrastructure and innovation

21st century goals...

Renewing & sustaining the transportation system

Today, governments and industry must find new efficiencies, encourage innovation and embrace new technologies to ensure a responsive system. We must recognize:

- Canada relies on transportation to achieve its economic potential and improve our quality of life
- Transportation is essential to trade competitiveness and therefore it is in the national interest to support
- The need for an integrated, nationally important system that maximizes the strengths of each mode
- The need for adequate funding to renew and sustain the system

Paying for infrastructure: a role for users, governments and the private sector

Governments have long recognized the importance of market forces to promote an efficient and competitive transportation system. The physical assets and the right to collect user fees for national airports, national ports, NAV Canada and the St. Lawrence Seaway were transferred to local control in the 1990s. Rail freight subsidies were eliminated, CN Rail privatized and a more streamlined process was introduced for rail line abandonments and transfers to short line operators. Essentially, Transport Canada transformed itself over the last decade from an owner and operator to a landlord and safety regulator.

Public roads are under provincial/territorial and local government responsibility and with a few exceptions, have not been privatized. Rail, marine and air transportation are commercially driven. Infrastructure investment and funding in these modes is explicitly linked with user charges.

In December 2001, the federal government announced the $2 billion Canada Strategic Infrastructure Fund, to be administered under the Deputy Prime Minister. This fund may be used for "large strategic infrastructure projects," including transportation and other infrastructure. New funding of $600 million was also announced for border infrastructure over five years to facilitate trade. These funds will be supplemented with provincial/ municipal government and private sector funding.

Infrastructure investments needed to respond to growing demands will be significant. As more financial resources become available for transportation projects, it is essential that projects demonstrating the greatest benefits be given a priority.

Provincial and municipal governments are finding it increasingly difficult to pay for roads through the normal practice of appropriating general tax revenues (which include income, sales and property taxes, fuel taxes and vehicle licence fees). Road use is growing at a faster rate than population or the ability to pay for improvements. Ad hoc bilateral federal/provincial funding arrangements do not provide the stability the provinces desire. Yet it is also prudent for the federal government to maintain fiscal flexibility.

Recent examples of Federal transportation and other commitments …

- *$2.0 billion Strategic Infrastructure Fund*
- *$1.2 billion for border-related measures (including $600 million for border infrastructure)*
- *$600 million Strategic Highway Infrastructure Program*
- *Doubling of Green Municipal Enabling Fund and Green Municipal Investment Fund*

Provincial, territorial and local government expenditures on transportation …

- *Provincial and territorial governments spent $7.66 billion on all transportation in 2000-2001*
- *Local governments spent an additional $8.23 billion.*
- *Overall, 81% of provincial, territorial and local government transportation expenditures were for roads.*

Transportation in Canada, 2001 Transport Canada Annual Report.

The current system (financing road infrastructure out of general tax revenues) ensures that the recurring infrastructure problems of the past will continue in the future.

Royal Commission on National Passenger Transportation, 1992

The federal government collects some $4 billion in road fuel taxes while its recent annual spending on roads is about $200-300 million. There is a view that the federal government should use much more of the revenues it collects from fuel taxes to pay for road improvements.[4] Pressure is also mounting on the federal government to provide financial support for public transit in major urban centres. The federal government continues to prefer the flexibility from fuel consumption taxes contributing to general revenues.

The recent Canada Transportation Act Review (CTAR) Panel examined the question of roads funding. CTAR's June 2001 report concluded that "road wear and the use of congested road space would be reduced if users were required to pay the costs directly" (an example would be a road toll).

The Panel said that road investment requirements would be reduced "if the only investments undertaken were those justified by their user benefits and if alternative investments in other modes were undertaken when they produced even greater benefits." This might allow the size and quality of the road network to better meet the demands of users prepared to pay the costs, as occurs for air, rail and marine shippers and travellers.

There are several ways to fund infrastructure:

- ***direct private investment***
- ***direct government investment***
- ***public-private partnerships (which include toll roads and incentives such as tax exempt bonds)***

This complex topic requires more study and the federal government is developing a "Transportation Blueprint" in response to the Panel's work.

It remains that additional funds must be found if we are to sustain our roads. **Direct government funding, private investment and combinations of the two (public-private partnerships) should be considered. This will foster more innovative funding solutions. It also provides opportunities to address pollution and traffic congestion by using more efficient vehicles and modes.**

[4] For example, this position is taken by the Federation of Canadian Municipalities representing more than 1,000 municipalities and 80% of the population, the Canadian Chamber of Commerce with more than 170,000 members, and various automobile associations. The CTA Review Panel proposed that federal fuel taxes be recognized as part of the price paid for the use of road infrastructure, or as charges for costs imposed on the environment and used to fund a transport agency.

In the case of rail, marine and air infrastructure, funded by private investment capital, the policy focus should be competitive imbalances that may exist between modes and between Canada and foreign competitors such as differing taxation rules.

Defining investment priorities

We need strong leaders at every level of government and in the private sector to ensure that transportation infrastructure is adequately funded. From a trade perspective, the federal government is in a position to provide strong coordination that will help achieve several national objectives (see text box).

One possibility might be to redefine a smaller "core" transportation system that is in the national interest to support. This system would be recognized as a strategic asset, essential to Canada's foreign trade and tourism competitiveness and might include an integrated network of:

- major border crossings
- major inter-provincial and inter-regional roads (a sub-set of the National Highway System)
- strategic local access roads
- main line rail system
- Canada Port Authority ports and St. Lawrence Seaway System
- National Airport System airports

The national transportation system has largely already been defined; however, investment priorities within this system and funding still must be determined. A set of principles should be established to recognize such factors as whether a project enhances Canada's trade position.

Revitalizing the transportation system represents a good opportunity to achieve progress on several national objectives:

- ***economic growth***
- ***enhanced productivity & competitive position***
- ***national security***
- ***environmental sustainability***
- ***social programs***

WESTAC, 2002

More effective cross-jurisdictional planning needed

Viewing infrastructure across several jurisdictions allows common challenges and trade barriers to be addressed more effectively. Yet this is elusive because we tend to operate in "silos".

For example, road, rail and air links to British Columbia are of major strategic importance to the west as a region. However, other western provinces don't view infrastructure improvements in British Columbia as a priority even though gateways such as Vancouver and Prince Rupert are critically important to the western economy. We need more effective cross-jurisdictional planning for the greater regional or national economic good.

Separate criteria should also apply to urban and rural transportation. Small and remote communities typically cannot support more than one transportation service provider or afford to pay for infrastructure renewal. Here, there is a role for government to connect communities as a public good. Rural and remote issues might justify government funding on rural revitalization or economic development grounds. **In crowded urban centres, municipalities should consider transportation projects as wealth generators when evaluating alternative land uses.**

Maximizing the existing system

We must use our resources wisely. Government transportation budgets are limited and private sector capital demands competitive returns.

Improving the use and efficiency of each mode is needed to avoid perpetuating any shortcomings inherent in the existing system. There is disagreement about whether our policies treat all modes equitably. This is of concern since failure to retain competitive signals between modes precludes efficient use of each mode. **We must work hard to ensure that expenditures of scarce public funds are the best use of transportation budgets.**

There are some unique situations. In the export grain transportation system, should the present road system be redesigned recognizing, for example, that wear and tear on prairie roads can be reduced through greater use of rail? As a second example, must all roads be paved, or can some less costly standard be accepted as practical in regions with low traffic volumes?

We should ask whether excess capacity on one corridor should be taken up before investments are made on another more congested route. As well, opportunities may exist to reduce costs by combining or coordinating operating authorities within a region (e.g., port or airport authorities).

Getting to the "next level" requires unconventional thinking, cooperation and factual, balanced information to make informed choices.

More work required

This document is intended as a catalyst to raise the level of understanding about transportation's importance as an economic engine and to advance the debate about solutions.

The issues are complex. More detailed inputs will be required. WESTAC, in collaboration with other organizations, continues to advance this important subject. In the meantime, several important questions remain:

- What obstacles prevent us from making **better use of the existing transportation system and modes?**
- What **vision and principles** should be used to define a nationally important transportation system?
- What are the infrastructure **investment priorities** and how can we agree on these priorities?
- What are the best options to provide **sustainable funding** for transportation to enhance our competitive position and quality of life?

Transportation supports your family's future

Simon, Age 2

Transportation infrastructure backgrounder

Infrastructure *— transportation, communication, power, water, sewer, etc.—is the basic structural foundation of a society. The role of infrastructure in supporting a nation's economic health and social/environmental development is well recognized.*

Transportation infrastructure *is everything but the vehicles and the people who operate and maintain the system. It includes, for example: roads, highways, bridges, rail lines, marine locks and terminals, pipelines, airport terminals and runways, and railway and bus stations. It also includes traffic control systems and technology such as air navigation, vessel dispatch, and rail signaling systems. The different modes are highly interconnected and are very expensive to maintain and upgrade.*

	Ownership & funding	The system and its cost
Roads 	Mainly public ownership Funding: - mostly provincial/ municipal general tax revenues (fuel taxes, licence fees) - federal cost-sharing contributions	There are more than 1.4 million km of public roads in Canada. About 1.2 million km (85%) are local roads. The remainder, largely primary and secondary highways and major urban arterial/collector roads, fall under provincial/territorial jurisdiction. The 24,000 km National Highway System (NHS) carries 25% of the traffic, but is only 3% of the total road network. The majority of road traffic is private vehicles. In 1999-2000, total road expenditures for all levels of government were $12.5 billion. The federal portion is reported by Transport Canada to be $400 million. The provinces and territories spent more than $11 billion maintaining and improving the NHS since 1988. The replacement cost of 1 km of paved 2-lane road is about $1 million.
Rail 	Privately owned Funding: - private capital	There are 50,000 route-km of rail lines. Canadian National (CN) and Canadian Pacific Railway (CPR) own/lease and operate 33,000 route-km, while regional and short line railways account for 16,000 route-km. Railways are highly capital intensive, spending four times the average of other industries on fixed plant and equipment. CN and CPR invested $10 billion in capital projects (1994-2000). Growing short line and regional carriers plan to spend $100 million (2000-2005). Significant additional capital is required to increase the capacity of lines to handle larger cars. The replacement cost of 1 km of rail line is roughly $1.6 million.
Ports & Waterways 	Private and public ownership Funding: - CPA's - user fees and leases - Terminals - private capital - Public ports - general tax revenues	There are 18 ports designated as Canada Port Authority (CPA) ports listed in the Canada Marine Act, as well as hundreds of other public ports and port facilities. The St. Lawrence Seaway is another important part of the marine infrastructure with 15 locks and 50 regional ports. Planned investments at key CPA ports such as Vancouver, Montreal, Quebec and Halifax total over $200 million (5-year plans). Widening the locks on the St. Lawrence Seaway and deepening the channel to accommodate larger modern ships would run into the billions.
Air 	Private and public ownership Funding: - NAS airports - airport improvement fees - Non-NAS airports - municipal fees, property taxes, federal Airport Capital Assistance Program (ACAP) - Private sites - private capital - NAV Canada - user fees	Canada has some 1,800 air landing sites. Within this, 26 airports form the National Airport System (NAS) and handle at least 200,000 passengers each year or serve provincial/territorial capitals. Air industry infrastructure also includes the air navigation system. NAV Canada, a private, non-share capital corporation, comprises a system of seven Area Control Centres, 43 control towers and other service/maintenance stations. Runways, terminal facilities and air navigation systems require large reinvestments. The net book value of the NAS airports is reported by the Canadian Airports Council to be $1.5 billion. Transport Canada provided $48 million under the Airport Capital Assistance Program to non-NAS airports in 2000.

Source: Transport Canada 2000 Annual Report; assistance from Alberta Transportation

Transportation enables our economic wealth and the tax base to pay for what is important to Canadians.

We must raise transportation higher on the public's agenda if we are to attract enough money to reinvest in our transportation infrastructure.

This publication was reviewed for accuracy by Members and others knowledgeable in the subject. The Council is grateful for this input.

About WESTAC

WESTAC is not a lobby group. The Council was formed in 1973 as a non-profit association of business, government and labour organizations active in the western transportation system. WESTAC's mandate is to advance the western Canadian economy through the continued improvement of the region's transportation system.

Member Organizations:

Air Canada
* Alberta, Government of
Algoma Central Corporation
* BCR Group of Companies
Brotherhood of Locomotive Engineers
Brotherhood of Maintenance of Way Employees
Canada Steamship Lines Inc.
* Canada, Government of (Transport Canada)
Canadian Merchant Service Guild
* Canadian National Railways
Canadian Pacific Railway Company
Canadian Wheat Board
CAW - Canada
Chamber of Maritime Commerce
* CRSA Logistics Ltd.
Mr. Kevin Doyle, Honorary WESTAC Director
Edmonton Regional Airports Authority
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