

STRAIGHTAHEAD

A Vision for Transportation in Canada



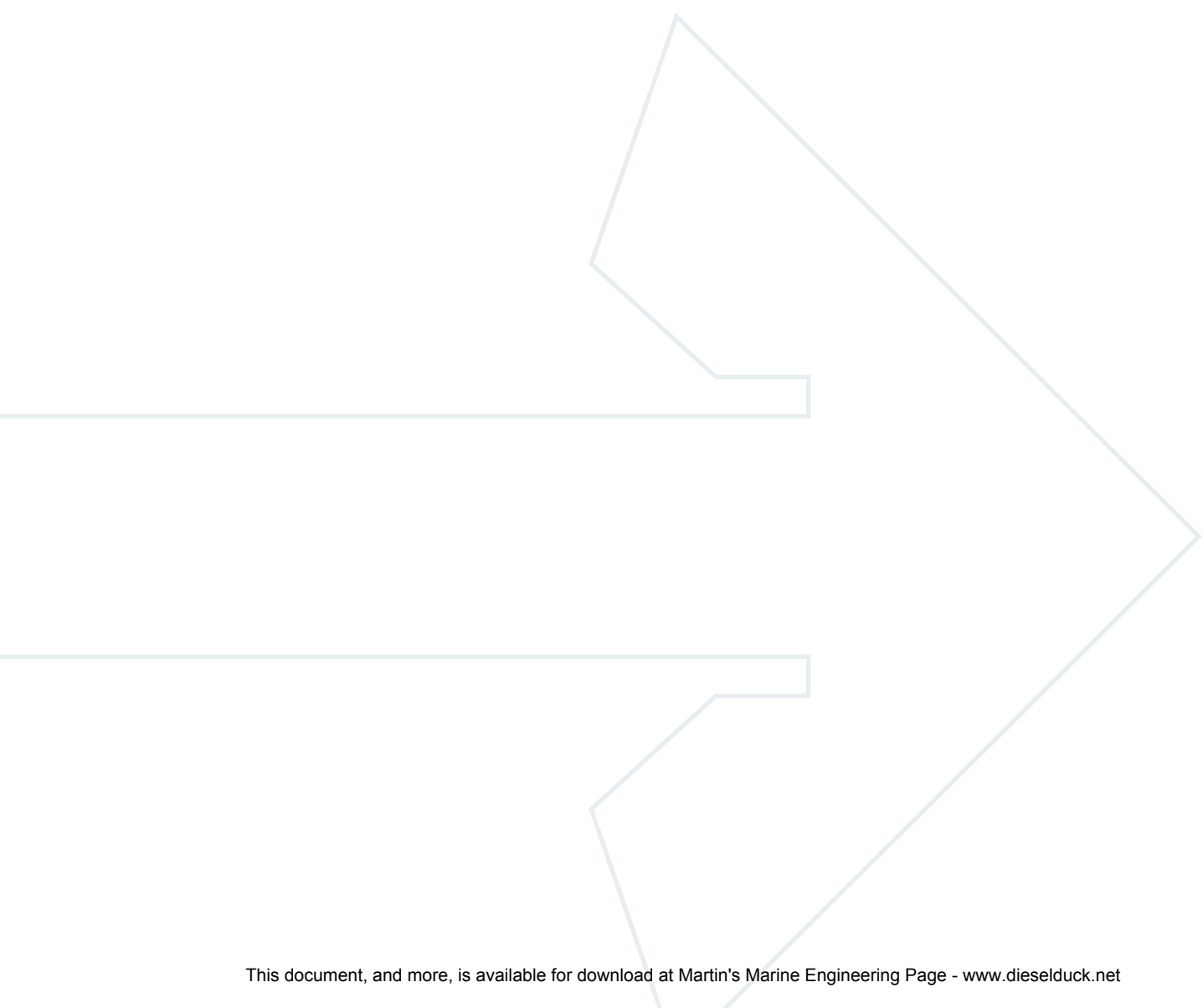
Transport
Canada

Transports
Canada

Canada 

STRAIGHTAHEAD

A Vision for Transportation in Canada



CONTENTS

| | |
|--|----|
| FOREWORD | 5 |
| INTRODUCTION | 7 |
| PART1 – POLICY OBJECTIVES | 9 |
| CHAPTER1: Currents of Change | 11 |
| Historical Perspective | 11 |
| Challenges Ahead..... | 14 |
| CHAPTER2: A Transportation Vision – Our True Course | 17 |
| Our Vision..... | 17 |
| Realizing the Vision | 21 |
| PART2 – STRATEGIC DIRECTIONS | 23 |
| CHAPTER3: Marketplace Framework | 25 |
| Our Achievements | 25 |
| Our Future Actions..... | 28 |
| CHAPTER4: Infrastructure | 45 |
| Our Recent Achievements and Commitments | 46 |
| Selected Investment in Transportation..... | 46 |
| Our Future Actions..... | 47 |
| Governance and Commercialization | 48 |
| Strategic Investments..... | 53 |

CHAPTER 5: Protection of the Environment57

 Federal Actions to Date57

 Trends in Air Pollution and Greenhouse Gas Emissions58

 Future Policy Directions on Greenhouse Gas Emissions59

 Our Future Actions.....61

CHAPTER 6: Safety and Security.....67

 Our Achievements67

 Actions Taken and Proposed.....68

 A New Approach to Safety – Smart Regulation.....69

 Mode-Specific Strategic Initiatives70

 Transportation Security.....72

CHAPTER 7: Innovation and Skills.....75

 New Challenges Ahead75

 Promoting an Innovative Transportation Sector.....76

 Meeting the Skills Challenge80

CONCLUSION83



FOREWORD

Transportation built Canada.

Transportation will help to determine the future success of Canada.

These may be provocative statements, but every student of Canadian history knows that the evolution of Confederation has rested in large part on securing the transportation links that connect us as a nation. Throughout our history, governments have embraced a succession of bold transportation visions – national railways spanning the continent, an international seaway, the Trans-Canada Highway, and transcontinental air services.

Our national transportation system, linking every corner of this country, opened our doors to the rest of the world and to the commercial markets beyond our borders. We are a trading nation, in an age of globalization, that relies on the safe and efficient movement of people and goods in order to maintain our prosperity and quality of life. As our nation has evolved, we have built a world-class transportation system.

We have done much to continually improve our transportation system. Safety and security, accessibility, economic efficiency and environmental performance have all become cornerstones of that system. But new challenges arise and we must now ensure that our transportation policies continue to move Canada straight ahead.

In April 2001, I stood before an audience at the Vancouver Board of Trade and launched an enormous undertaking by Transport Canada to create a framework for the kind of transportation system that will take us into the next decade and beyond. Countless hours of consultations, including roundtable discussions that I hosted across the country, and extensive internal policy analysis have resulted in a comprehensive statement of vision and direction about Canada's transportation system.

Several months before I launched this undertaking, a panel of distinguished Canadians began a year-long legislated review of the *Canada Transportation Act*. That review assessed whether the Act provided Canadians with an efficient, effective, flexible and affordable transportation system. The panel received more than 200 submissions and produced over 90 recommendations. Their work was an important building block in preparing this framework document.

I am proud to present to Canadians this vision of the future of our transportation system. A great debt of gratitude is owed to the many people who expressed opinions and perspectives, presented problems and offered solutions, and above all, recognized the fundamentally important role that transportation plays in our daily lives as we move Canada straight ahead.

A handwritten signature in black ink, appearing to read 'D. Collenette'. The signature is fluid and cursive, written over a white background.

Hon. David M. Collenette, P.C., M.P.
Minister of Transport

INTRODUCTION

Extensive consultations have been held in recent years with the goal of advancing a strategic plan that will enable the federal government to address the key challenges facing transportation in Canada over the long term.

In June 2001, the Government of Canada released *Creating a Transportation Blueprint for the Next Decade and Beyond: Defining the Challenges*, which outlined areas in which we would seek to make progress to ensure that the national transportation system will continue to serve the needs of Canadians now and into the future. The Minister of Transport and Transport Canada officials subsequently held discussions with provincial and territorial ministers and officials. They also met with key transportation stakeholders and received input from the general public. Input from earlier consultative processes, including the Transportation Table on Climate Change, Transport Canada's second *Sustainable Development Strategy* and the Minister's Millennium Transportation Conference, has also been taken into account.

Vision and Balance, the report of the *Canada Transportation Act* Review Panel, was made public in July 2001. The Review Panel had begun its work a year earlier, with a mandate to review the operation of the Act and any other legislation dealing

with the economic regulation of a mode of transportation under Parliament's legislative authority. Based on more than 200 submissions and an extensive review of recent transportation research and analysis, the Review Panel produced a comprehensive report with more than 90 recommendations covering a wide range of transportation issues.

The Review Panel's conclusions, along with the opinions of stakeholders, the provinces and territories, and the public, were considered carefully in preparing *Straight Ahead – A vision for transportation in Canada*, which is organized as follows:

Part I outlines the **historical perspective** to provide a context for this reflection on Canada's transportation policies, identifies the **driving forces** that will affect the sector's future and proposes a **vision for transportation in Canada**.

Part II outlines the Government of Canada's **strategic directions** to address key issues in the years ahead and advances specific **legislative proposals** in certain areas.

PART1

POLICY OBJECTIVES

CHAPTER 1

Currents of Change

Throughout Canada's history, transportation policy has been a major part of national policy. But it cannot remain static. It must adapt to new challenges and the currents of change.

HISTORICAL PERSPECTIVE

Construction and nation building

Throughout Canada's history, transportation policy has been a major part of national policy. Linking the diverse regions of the country by means of the great intercontinental railways was fundamental to Canada's creation. The scale of the undertaking and its associated risks were too great for private enterprise alone, so the national government took the lead. The Intercolonial Railway and the Canadian Pacific Railway were made possible through land concessions and federal funding. The federal government, as an expression of national policy, also supported the subsequent growth of the national rail network providing service to all regions. Decades later, the St. Lawrence Seaway was built as a joint public project of the Canadian and U.S. governments. The federal government also built the country's networks of major ports and airports, provided marine and air navigation systems, and contributed to the construction of the national highway system, all in the interest of supporting Canada's social and economic development.

Acknowledging the importance of transportation, the federal government, over time, became a major direct operator of facilities and services. When railways failed in the early 20th century, the government took over several that were considered essential and consolidated them as Canadian National Railways, which it continued to operate for most of the remainder of the century. This also brought federal ownership of the railway's subsidiary east coast ferry services. These public transport enterprises already existed when air services began to develop, and it was a logical extension for the government to build and operate the airport and air navigation infrastructure and to set up a publicly owned carrier, Trans-Canada Airlines (which later became Air Canada), to operate domestic services.

Throughout much of this period, companies were granted exclusive rights to routes, often in return for providing services on other specified routes. This approach was considered efficient, because services could be extended and guaranteed to smaller communities that would not otherwise have been provided by private enterprise. As the resulting monopolies could not be allowed complete pricing freedom, the government created boards to set or approve rates and monitor services.

Quality of service and fairness of rates remained the subject of controversy throughout the period. In rail specifically, these were the major issues considered by six royal commissions between 1917 and 1959.



IMPORTANCE OF TRANSPORTATION TO ECONOMIC ACTIVITY

- **The Canadian transportation system carries more than \$1 trillion worth of goods every year.**
- **Nearly 16% of all personal spending is on transportation, and nearly 90% of that is on personal motor vehicles.**
- **Over the last decade, the Canadian transportation sector experienced an average annual growth rate of 6.1%, almost doubling that of the economy at 3.3%.**
- **In 2000, more than 850,000 people held jobs in the transportation industry or related functions, representing 7% of the Canadian workforce.**
- **In 2000, almost half the \$38 billion spent on domestic tourism was spent on transportation.**
- **Over the last 20 years, carriers' costs have fallen in real terms by \$10 billion, or 30%.**
- **In 2000, more than \$20 billion was spent on maintaining and operating infrastructure operated by government and private operators.**

Economic deregulation

As competition developed with new modes of transportation – motor vehicles in particular – the scope of the national debate broadened. Competition for freight between rail and truck

was the main concern of the MacPherson Royal Commission of 1959-1962, which recognized the potential for intermodal competition to serve the public policy purposes of reducing transportation costs and rates and stimulating service improvements. The coming into force of the *National Transportation Act* in 1967 subsequently relaxed the regulation of rail freight rates to permit the railways to compete with trucking. The Act also implemented the Commission's recommendation to include a formal declaration on national transportation policy. The declaration, which survives in modified form in section 5 of the current *Canada Transportation Act*, emphasized the national interest in economically efficient transportation.

The relaxation of rail regulation in the 1960s provided some stimulus to rail cost and rate reduction, but competition between railways was still restricted – as it was among air, truck and bus carriers – by market entry and price regulations. Accumulating evidence of the success of deregulation in achieving cost reductions and innovation in other sectors and countries led to another round of policy changes aimed at stimulating competition within modes. Articulated in the government's 1985 policy paper, *Freedom to Move*, and incorporated in the *National Transportation Act, 1987*, the changes liberalized market entry rules and pricing constraints for air carriers operating in domestic markets and further liberalized rail freight rate regulation. Confidential contracts were permitted, together with measures intended to increase competition among rail carriers and to provide recourse against abuse of market dominance. Companion legislation, the *Motor Vehicle Transport Act, 1987*, also eased the entry rules for extra-provincial truck carriers, allowing greater competition among them.

Privatization and commercialization

Experience with deregulation and market competition among carriers, together with the successes of federal policy in privatizing services in other sectors, focused attention on transportation services that were still delivered or funded by the federal government. A series of bold policy actions began in the late 1980s. Incentives to reduce costs were strengthened by reducing or eliminating federal subsidies

to private carriers and for federal infrastructure. Air Canada and Canadian National Railways, both operating in competition with private sector companies, were made subject to the same market forces as their competitors through privatization, in 1988-89 and 1995 respectively. Further stimulus to rail carrier efficiency was provided in the *Canada Transportation Act* of 1996, easing the process of plant rationalization and encouraging the creation of shortline railways while maintaining provisions limiting unfair use of monopoly power.

At the same time, new governance models were adopted to introduce elements of commercial discipline and local autonomy for the federal network of airports and ports. Small regional or local facilities were offered for transfer to public or private agencies. Essential facilities in remote areas continued to receive direct support from the federal government.

For the larger facilities, innovative policies of ‘commercialization’, rather than outright privatization, were adopted. Under these policies, the sites of the national airports and ports remain under federal ownership, but local/regional interests now operate the facilities. They are required to be financially self-sufficient; they have the freedom to set prices and fees but are also required to be not-for-profit corporations and to adhere to principles of public accountability. Together, these conditions are designed to provide the ability to be self-sustaining, including financing future expansions, and to contain the incentives for exercising market power. Federal ownership was retained to ensure these national assets remain in public hands in the national interest.

In the case of air navigation services, a unique form of not-for-profit corporation was created in 1996. NAV Canada, which purchased the assets and took responsibility for providing future services, adopted the organizational structure and charging principles specified in the legislation. Representation on the board of directors allows users to be involved in strategic decisions, and safeguards are provided against excessive pricing and spending.

Similarly, the St. Lawrence Seaway Management Corporation was created in 1998 as a not-for-profit corporation to operate the seaway with user involve-



ment in day-to-day decisions. The seaway infrastructure, however, remained with the government.

Safety and security – constants in transportation policy

While policies on delivery and economic regulation of transportation services have evolved over time, safety and security have remained central objectives of national transportation policy. Legislation and regulations established safety requirements for personnel, equipment and practices in rail, water and air transport, in addition to the internal operating policies and procedures that apply in respect of federally operated facilities. With growing public concern in the last three decades, the safety of road vehicles and the transportation of dangerous goods also became increasingly important federal priorities.

With the commercialization of federal facilities, operating policies were replaced with regulations. Over time, the government sought ways to permit flexibility in achieving safety requirements while maintaining safety standards. In many areas, specifications for equipment and practices, for example, were replaced by performance requirements or voluntary commitments. This stimulates ingenuity and more efficient solutions. Given the global nature of transportation, federal policy has also aimed explicitly at international harmonization of standards.

Within Canada, shared safety goals have been addressed for decades by federal, provincial and territorial governments through co-operative programs that are leading examples of intergovernmental collaboration.

More recently, the events of September 11, 2001, caused a major re-examination of all facets of transportation security that will have a lasting impact in the years to come.

CHALLENGES AHEAD

Transportation policy cannot remain static. It must adapt to new challenges and the currents of change – continentalism, globalization, environmentalism, urbanization, a more diverse and aging population, and the high technology explosion – that will shape Canada’s economy and society in the years ahead.

The focus of Canada’s transportation industry is increasingly global, with more and more transportation firm revenues being derived from services provided beyond our borders, and from the United States in particular. While **globalization and North American integration** create new opportunities for transportation users and providers, they also highlight the need for a broader definition of the competitive business environment, for greater harmonization of standards and for smart regulations. Transportation policy must provide market frameworks that allow carriers and infrastructure providers to adapt, innovate, remain competitive and serve the public.

Canada is an increasingly urban country; 80% of Canadians now live in urban areas. **Urbanization**, together with the ever-increasing amount of economic activity that originates in urban centres, is putting pressure on public transit and on road infrastructure. Transportation policy must address the challenges that growing congestion poses for the development of competitive cities and healthy

communities. At the same time, urbanization is also challenging many rural areas that are experiencing population decline and shifting transportation demand. Transportation policy must provide the framework for carriers to adapt and for communities to maximize the value of their transportation assets and to adjust during this period of transition.

The **environmental impacts** of transportation have long been a federal concern, notably noise and contamination at federal facilities and emissions from transportation equipment. These have been addressed by regulating carriers and equipment manufacturers and establishing operating procedures for federal facilities. In recent decades, environmental damage has become a much greater public concern. The federal response has included more extensive environmental assessment and planning processes for infrastructure, as well as more stringent standards for pollutant emissions. At the same time, mounting concerns about transportation’s environmental impact, and particularly its contribution to climate change and air quality problems, require clear, proactive and innovative policy direction from the federal government and collaboration among provinces, territories and transportation stakeholders.

Transportation policy must be sensitive to the needs of the “**scheduled economy**” which critically depends on highly reliable, tightly controlled, just-in-time transportation services. This has been a key factor in the growth of trucking, container traffic, and air cargo over the last decades. Finding means to reconcile the needs of our scheduled economy with the environmental imperatives will be one of the difficult transportation policy challenge that we will face in the years to come.

In the wake of September 11, 2001, Canadians have a heightened sense of awareness about the importance of transportation **safety and security** to human health and well-being, as well as our ability as a nation to trade effectively. The federal government has implemented several key measures to address the security of the travelling public and to keep borders secure, open and efficient. Security considerations will continue to be prominent in future policy development.

The Government of Canada **Innovation Strategy** is challenging all sectors of the economy to become more **innovative** and to develop a highly **skilled workforce** to compete in the global marketplace. At the same time, there is growing recognition within the transportation sector that innovation and skills are critical in addressing the challenges confronting the industry.

Significant regulatory changes have occurred in recent decades, and the latest divestiture and commercialization efforts in the transportation sector are well advanced. The report of the *Canada Transportation Act* Review Panel, completed in 2001, and the review of the *Canada Marine Act* now under way, together with other ongoing reviews in specific areas, provide good opportunities to take a broader, more critical look at the situation, assess the extent to which current policy objectives have been met,

and determine what further adjustments need to be made.

The transformation and commercialization of transportation infrastructure have resulted in the creation of many new entities. While local/regional interests operate these not-for-profit corporations, the federal government retains overall responsibility for articulating a policy framework to guide the development of the system. This exercise provides an opportunity for the government to propose a common vision for all participants in the transportation network.

Straight Ahead addresses these currents of change and also constitutes Transport Canada's contribution toward the government's commitment in the September 2002 Speech from the Throne to "introduce a new strategy for a safe, efficient and environmentally responsible transportation system".



CHAPTER 2

A Transportation Vision – Our True Course

Canadians are proud of their world-class transportation system and know that their quality of life depends on it. In recent years, they have encouraged the government to show leadership in establishing a new vision for transportation in the 21st century.

Historically, governments have embraced a succession of bold transportation visions – a national railway spanning a continent, an international seaway, a transcontinental air services system, and commercial authorities to manage transportation infrastructure. This legacy provides a strong foundation on which to build.

Looking to the future, to preserve and strengthen Canada's transportation system and advance Canadians' quality of life, transportation policy must provide a framework that addresses the three elements of a sustainable transportation system – social, economic and environmental – giving carriers and infrastructure providers the opportunity to adapt, innovate, compete, and serve shippers and travellers in a way that takes into account each of these elements.

Transportation must continue to meet the highest practicable standards of safety and security, and this will remain Transport Canada's primary focus. Transportation must also be economically efficient, so that it uses all resources in the most efficient and effective manner, contributing to domestic growth and Canada's competitive position in world markets by meeting shippers' and travellers' needs. Finally, transportation must be environmentally respectful,

so that its impact on the environment and on the health of Canadians is acceptable to current and future generations. Finding the right balance among these three elements is the fundamental policy challenge.

We cannot foresee everything that lies ahead. Leadership and vision imply, however, maintaining a firm focus on our ultimate goal while correcting our course as needed to respond to the currents of change or unexpected events. Further, each mode of transportation has its own institutional and historical context: the speed of change will not be identical. This document serves to point transportation policy in the right direction in support of a better quality of life for our communities.

OUR VISION

Our vision of a sustainable transportation system for Canada is guided by the following principles:

- highest practicable safety and security of life and property – guided by performance-based standards and regulations when necessary;
- efficient movement of people and goods to support economic prosperity and a sustainable



quality of life – based on competitive markets and targeted use of regulatory and spending interventions;

- respect for the environmental legacy of future generations of Canadians – guided by environmental assessment and planning processes in transportation decisions and selective use of regulatory and spending interventions;
- user pricing that better reflects the full costs of transportation activity, and transportation infrastructure decisions that meet user needs – based on governance models that provide for stakeholder involvement and transparency;
- reasonable access to the national transportation system by Canada’s remote regions;
- accessibility in the national network without undue obstacles for persons with disabilities;
- co-ordinated and harmonized actions across all modes of transport in support of intermodality and to achieve modal neutrality; and
- partnerships and collaboration among governments and with the private sector for an integrated, coherent transportation policy framework, taking into account the respective jurisdiction, role and responsibilities of all participants.

These principles and their interrelationships are discussed in more detail below.

Safety and security – a transportation culture

Government will retain overall responsibility for providing a legislative and regulatory framework that promotes the safety, security and integrity of the transportation system. The transportation system needs to provide for the highest practicable safety and security standards to prevent deaths, injuries and physical damage and preserve individual well-being and national security.

The safety of passengers and goods will increasingly be achieved through performance-based strategies that include the implementation of safety management systems by equipment operators, carriers and infrastructure providers in their day-to-day operations and by rigorous standards for new facilities, vehicles and equipment. Safety management systems will enable operators and infrastructure providers to demonstrate – through management direction, corporate resources, performance measurement and monitoring – their commitment to the safety of employees, customers and the public, and their support of a ‘safety culture’.

By implementing harmonized transportation security requirements, effective and efficient borders will be maintained with Canada’s continental and international trading partners. Legitimate trade and legal movement of people will be facilitated through better transportation facilities, equipment and technology, and skilled personnel. Effective risk management strategies will deal with the threat of international terrorism.

Constant vigilance and enforcement actions by government where required will ensure that safety and security are not sacrificed by focusing on short-term economic pressures.

Since September 11, 2001, all parties involved in transportation security, whether in government or industry, including ports, airports and carriers, have responded with heightened awareness and increased vigilance aimed at preventing terrorist activity. These efforts will be pursued.

Market-based system efficiency – a lasting principle

An economically efficient transportation system supports trade, economic prosperity and an enhanced quality of life through low costs, high productivity, best use of all modes, and innovation and skills. Economic efficiency ensures that carriers and infrastructure providers can meet users' demands using the fewest resources possible.

Competition is the means to ensure existing competitors and new entrants innovate, take risks and provide new services to meet Canadians' transportation needs in both urban and rural areas, resulting in cost reductions, efficiency gains and service improvements.

Government intervention may be necessary, on occasion, to correct for market imperfections, prevent abuse of market power, and address distortions arising from the failure to take into account the full environmental and other costs of transportation activities. Modal neutrality – the level playing field between transport modes – will be sought whenever government intervention is necessary.

Regulatory and dispute resolution mechanisms will be available in appropriate targeted circumstances where efficient and competitive results are not achieved through market forces, with incentives for settling disputes commercially. Market entry will be facilitated by removing or minimizing barriers to entry.

Respecting the environment – a legacy for future generations

Clean air, water, soil and habitat are a legacy for future generations. The transportation system's design and use must take account of environmental impacts and reflect Canadians' wish to bequeath a generous environmental legacy. Strategies to address environmental objectives will ensure compatibility between environmental responsibility and the pursuit of economic growth.

An environmentally sustainable transportation system will be furthered through a market-based competitive framework by ensuring that environmental

assessment and planning processes inform transportation decisions. Progress will be made toward including the cost of environmental impacts in the prices paid by transportation users. A more environmentally sustainable and efficient transportation system will result, over time, from empowered users making informed decisions about transportation use and modal choices in light of the full cost of available alternatives.

The transportation system will address environmental concerns, including urban air pollution and greenhouse gas emissions, by gradually reducing the intensity of carbon fuel use, developing alternative fuels and technologies, and offering viable choices for urban travellers. Innovation, skills, long-term planning and public investments are required to shape the future of our urban environments.

The right pricing signals and investment decisions

Carriers and infrastructure providers must constantly adjust capacity to meet future growth in freight and passenger traffic. A market-based transportation framework will allow the interplay between user demand and the investment decisions of carriers and infrastructure providers to establish fair and efficient pricing, with proper reflection over time of the environmental and social costs of transportation activity.

The right pricing signals to transport users and industry decision makers will lead gradually to the appropriate level of traffic use and distribution of traffic among modes. Pricing signals that better reflect infrastructure costs will help transportation infrastructure earn sufficient revenue to cover its costs and ensure that infrastructure investments are warranted by user demand and their willingness to pay. Finally, in the longer run, pricing signals that better reflect all costs – including infrastructure, environmental and social costs – will contribute to sustainable market efficiency by affecting industry's production and location decisions.

Stakeholder involvement will inform infrastructure providers' decisions. In the case of infrastructure formerly provided by the public sector, governance

models – such as for airports, ports, and the Seaway – will be fine-tuned periodically to foster commercial and competitive discipline while meeting public interest concerns in areas such as accountability and transparency. Progress will be sought with provinces and territories toward establishing an effective governance model for major road infrastructure and pricing to road users that determines future road investments.



Access for Canada's remote communities

Undertakings in current policies with respect to maintaining reasonable access to the national transportation network by Canadians living in remote regions will be maintained. The government will meet this objective by maintaining federally supported infrastructure in the most cost-effective manner and will be prepared to examine alternative arrangements with all other partners who have a role in this area, including provinces and territories and the private sector.

Removal of undue obstacles for persons with disabilities

The transportation system must respond to the mobility challenges of an aging population and of persons with disabilities, as part of our inclusive society. Equipment manufacturers, operators, carriers and infrastructure providers will be required to accommodate the needs of persons with disabilities in their planning, development, design and operations. Concerted efforts to remove undue obstacles to mobility will continue.

Partnerships and integration among jurisdictions and with the private sector

International and domestic policy agendas are intertwined, and market frameworks, standards and regulations will be negotiated increasingly in international contexts. Transportation policy must therefore be co-ordinated and harmonized across modes of transport, among governments within Canada, and between Canada and other countries.

Given the sharing of responsibilities under the Canadian constitution and the long history of successful intergovernmental collaboration, the Government of Canada will continue to consult and work with the provinces and territories. Cooperation mechanisms such as the Council of Ministers responsible for Transportation and Highway Safety will continue to provide an invaluable forum for consultation and sharing of views as well as for the coordination and harmonization of joint actions; it will be even more important in the future as we move toward a new vision for transportation in Canada.

Transportation policy will adapt continually to the forces of change and unexpected events and to the healthy debate between governments and stakeholders about the best integration of economic, environmental and social/safety objectives.

Providing adequate transportation infrastructure in a market-based competitive framework, with proper governance models and better pricing signals to users, will often demand inventive partnerships and joint ventures between the public and private sectors to allocate and manage project risks, tap needed skills and innovation, and access funds to meet public policy objectives.

Overall integration of transportation policy will be pursued along four complementary lines:

- integration of economic efficiency with other basic goals, including environmental and social/safety objectives;
- integration of financial and regulatory obligations across competing modes, seeking modal neutrality whenever possible;

- integration of modes, transportation networks and policies to support the competitiveness of national and international transportation systems; and
- integration of public and private interests and co-ordination of policies across departments and with other jurisdictions to achieve effective partnerships, including at borders.

Research and skills development to support innovation

In setting our course and realizing our vision for a sustainable transportation system, we will rely on the skills of Canadians and their capacity to innovate. A highly innovative sector, driven by a highly skilled workforce, is a critical underpinning of all the goals we have set for the national transportation system. This will require an increased focus by all players in the system on mechanisms to foster skills development, research and development, and deployment of new technologies.

REALIZING THE VISION

Realization of our vision will be demonstrated by achieving a proper balance in all our key decisions between the social, economic and environmental elements of a sustainable transportation system. This will mean continual, steady progress and the removal of major obstacles and barriers to efficiency, safety and security, environmental responsibility, access and accessibility. Doing the right

things, guided by our vision for Canada's national transportation system of the future, will see the following results:

- the proper distribution of activity across transport modes, with each carrier, mode or combination of modes competing on the basis of its unique, inherent advantages;
- efficient transportation decisions resulting from users progressively assuming a larger portion of the full cost of their transportation choices;
- the appropriate level of investment being directed to transportation infrastructure, through the right pricing signals, proper governance structures and private capital, and through selective partnerships and government intervention to address failure of market forces and to achieve public policy objectives;
- achieving government-defined outcomes acceptable to Canadians with respect to safety and security, the environmental impact of transportation activity, access to the national transportation system, removal of undue obstacles for persons with disabilities and harmonization of standards with other governments;
- innovation rewarded through increased efficiency and a declining total cost of transportation activity; and
- governments working together toward achievement of joint objectives taking into account their respective roles and responsibilities.

PART2

STRATEGIC DIRECTIONS

The first part of this document outlined a vision for transportation and principles to guide future federal policies and programs. Part II describes immediate federal intentions, including a number of proposed new actions, and identifies longer-term priorities.

Federal actions during the last few decades – including economic deregulation, divestiture and commercialization of infrastructure, and subsidy reduction – gave crucial impetus to cost reduction and service improvement, to the benefit of users. Following these successes, the continuing task for governments is to assess how further efficiency gains are likely to be achieved in the sector and what actions they might take to facilitate them. The current federal assessment is that opportunities exist to make further adjustments in **marketplace frameworks** and to **infrastructure management and funding**. Chapters 3 and 4 describe proposed actions in these two fields.

These actions need to be integrated with other key policy objectives and with actions focusing on the **environment, safety and security** and **innovation and skills development**. They are dealt with in Chapters 5 to 7.

Many key initiatives proposed here respond to the recommendations of the *Canada Transportation Act* Review Panel of 2001. The Panel was comprehensive in its recommendations, yet also precise on the requirement for specific actions. The Government of Canada has analyzed the proposals and reviewed the perspectives of all stakeholders, including those of other governments. Conclusions reached following these consultations are reflected in the actions now proposed.

CHAPTER 3

Marketplace Framework

Transportation policy must provide market frameworks that allow carriers and infrastructure providers to adapt, innovate, remain competitive and serve the public.

OUR ACHIEVEMENTS

Ensuring the continued improvement of transportation services through a competitive marketplace has been the successful focus of federal transportation policy for the last 40 years. Experience has demonstrated that competition stimulates performance. In turn, competition in the transportation sector contributes to the competitiveness of the Canadian economy and to the achievement of our prosperity objectives. Successive changes in the *National Transportation Act* of 1967 and 1987 and the *Canada Transportation Act* of 1996 liberalized market entry rules and largely dismantled the direct prescription of prices.

Entry by carriers into the domestic air market and the trucking sector was made easier to encourage competition, in the interest of better service for shippers and travellers. Price regulation was eliminated to allow carriers to offer competitive bundles of price and service quality, putting pressure on costs and stimulating productivity. The privatization of Air Canada in 1988 added further incentive to control costs and improve service.

Entry by carriers into international air markets and the continental trucking sector was also liberalized, although to a lesser extent. U.S. and Canadian trucking regulations allow carriers from each country to carry freight across the border, but continue

to prohibit competition for purely domestic traffic (known as 'cabotage'). For international aviation, services remain subject to the Chicago Convention rules on designation of national carriers and to bilateral agreements on market entry, capacity, pricing and other operating conditions. Canada has gradually liberalized relationships with other like-minded countries to give carriers access to Canada's market, provided the other country agrees to reciprocal rights. Most notably, Canada concluded a major Open Skies agreement with the United States in 1995, which essentially permitted carriers to offer service on any transborder route, while continuing to prohibit cabotage.

In marine transport, restrictions on competition still exist through the *Shipping Conferences Exemption Act, 1987*. The Act exempts liner shipping conference agreements from certain provisions of Canada's *Competition Act*, thereby allowing a conference (an association of shipping lines) to act collectively in providing scheduled services on specific trade routes based on agreed rates and services. Shipping conferences generally have protection from domestic competition laws in the countries where they operate because they assert that they can provide stable rates and reliable service for shippers only through this protection. Transport Canada initiated a review of the Act in 1999, which resulted in a number of liberalizing amendments, most notably the introduction

of more freedom for individual conference lines and shippers to enter into confidential service contracts.

The marine transport sector also has its own version of cabotage, governed by the *Coasting Trade Act*. Although the Act reserves domestic marine transport to Canadian vessels, amendments made in 1992 allow for temporary entry of foreign vessels on a case-by-case basis. Similar legislation in the United States has prevented Canada from considering bilateral liberalization.

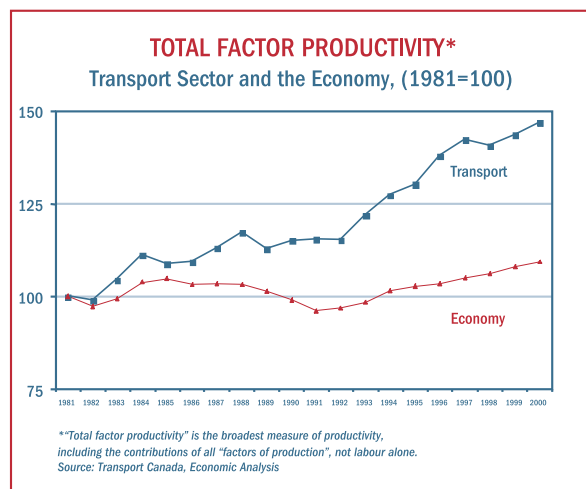
In rail, the potential for direct competition among carriers for freight traffic is more limited, as individual carriers own their own track network, and parallel tracks are not viable everywhere. Canada is unusual by world standards in having alternative rail carriers on many routes. Most countries (other than the U.S.) have either a single, state-owned carrier or commercialized carriers with exclusive rights to routes or regions. For most of their history, the Canadian mainline railways were prohibited from competing on price through uniform regulated prices and competed instead on service levels. They were also restricted in their ability to cease unremunerative services or to abandon track, effectively necessitating higher revenues from higher-volume routes to support losses on other routes.

Deregulation of pricing began in the 1960s to permit competition between rail and truck carriers and to stimulate competition among rail carriers. However, in providing greater pricing discretion, provisions to prevent abuse of market power were strengthened. These include the longstanding provision of regulated interswitching rates, augmented by allowing shippers to request regulated 'competitive line rates'. Rail shippers could take advantage of the final offer arbitration procedure, introduced in 1987, to challenge rates offered by carriers. The 1996 Act also gave railways greater freedom to sell or abandon track. The other major structural change in the rail market was the privatization of Canadian National in 1995, subjecting it entirely to market forces.

The overall success of these reforms is demonstrated by carriers' economic performance. Transport Canada has examined output, productivity, costs and prices across carriers in the transport sector

since the early 1980s and compared them to the performance of the economy as a whole (reported in the various annual reports on transportation). The period was one of major change and volatility in the national economy, including periods of severe recession as well as rapid economic growth, substantial restructuring of business and government activities, and liberalized trade, particularly with the U.S. The transport sector was affected by these broader economic forces, as well as by changes in federal transportation policy and severe fluctuations and reorientation in transport demand. Nevertheless, trends in performance are discernable.

The total output of transportation services (measured by passenger and freight movements) doubled between 1981 and 2000. For the transportation sector as a whole, productivity increased over the 1981-2000 period by 44%, averaging 1.9% annually. Productivity increases were particularly strong during the 1990s, averaging 2.5% annually following the major structural reforms of the 1987 Act. For the economy as a whole, productivity improved by less than 10% over the entire period from 1981 to 2000, or 0.5% annually.



Annual transport costs fell by more than \$13 billion over the period, compared to the costs that would have been experienced had productivity not improved. Users benefited from these cost reductions through transport prices falling by 21% in real terms (after removing the inflation factor) –

a saving of \$10 billion over the period. Carriers also benefited from an increase in net income, allowing them to reinvest in the modernization of their operations.

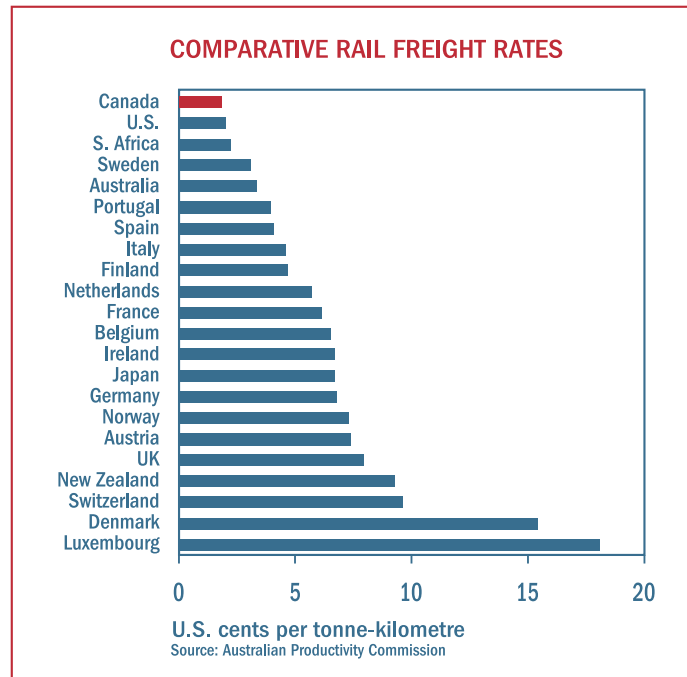
The performance of Canadian rail carriers was particularly impressive. Productivity of the two national railways (Canadian National and Canadian Pacific) improved by up to 80% between 1981 and 2000, while output of services expanded by about 17% and total costs fell by 43%, compared to the level they would otherwise have reached at that level of output. Overall, carriers retained about 15% of the cost reductions, allowing them to achieve greater financial self-sufficiency, while prices to users fell by 35%.

This improved performance has allowed Canadian shippers and the Canadian economy to be more competitive in world markets. An analysis by the Australian Productivity Commission of the relative performance of freight railways in 22 developed countries in the late 1990s concluded that Canadian freight railways had the lowest rail freight rates in the group, just ahead of the United States.

The government's policy will remain focused on fostering a rail system that is efficient for all stakeholders, including grain producers.

The 1996 legislative changes to track abandonment procedures facilitated the devolution of sections of the national railways' track to shortline operators. By 2001, more than 40 shortline or regional railways were operating 15,900 kilometres of track, or nearly one-third of the entire rail network. Shortline operators have proven capable of achieving cost efficiencies and reinvigorating freight service on lower-density traffic routes.

In the trucking industry, the efficiency gains were also impressive, with total productivity increasing by 37% between 1981 and 2000. Productivity gains were more pronounced after the mid 80's, i.e. after industry deregulation. These gains, combined with moderate pressure from factor prices, led to a 30% reduction of unit costs in real terms. Shippers benefited from a 25% reduction in freight rates worth \$5.8 billion.



The performance of Canadian air carriers has seen some improvement but remains a serious concern for government. Productivity improved by about 35% between 1981 and 2000, more than the general average for Canadian business, though new evidence suggests that it has ceased to improve in recent years. Ticket prices also declined during the period, when averaged across all routes and travellers and adjusted for inflation. This reflects increased competition among carriers as well as cyclical fluctuations in demand. However, productivity improvements and the resulting cost reductions were not sufficient either to allow the industry to recover from financial losses incurred during the recession of the early 1990s, or to prevent financial losses from accumulating in subsequent years.

Canada lost a number of charter and scheduled operators in the 1990s recession, but these were replaced in the mid-1990s by other carriers that took advantage of the deregulated environment to offer new services, both domestic and international. While some of these have failed, notably Canada 3000, others survive and are flourishing, the most prominent being WestJet. As was the experience worldwide, some large carriers failed or had to reorganize, including Canada's second largest carrier, Canadian Airlines International Ltd., which operated



a full-service domestic and international route network from 1988 to 2000. By allowing Air Canada to acquire Canadian Airlines in early 2000 and merge the two operations, the government ensured that key services were not interrupted. At the same time, safeguards against abuse of dominant position in the airline industry were introduced.

OUR FUTURE ACTIONS

Shippers, communities and travellers have reaped big benefits from enhancements to the market framework. As a consequence, the government agrees with the assessment of the *Canada Transportation Act (CTA) Review Panel* that the fundamental direction of transport policy remains sound. Competition and market forces will continue to guide the development of the national transportation system. Where competition is weak or absent, government intervention may be needed to restore competitive outcomes with the least possible disruption to the market framework. This framework must take into account various international regimes (for air and marine) and the policies of our international partners (for all modes). Some modifications are proposed in the Canadian market framework to fine-tune it and provide further improvement. The following sections describe these opportunities by mode of transport.

The air industry – setting a balanced framework

The principal challenge facing the government in the three years since Air Canada acquired Canadian Airlines has been the adequacy of competition in the airline industry. Air Canada's dominant position in the domestic market has focused public attention on the importance of being able to choose among competing services and prices.

Understanding this central issue, the government responded by adopting Bill C-26 in July 2000, which incorporated Air Canada's undertakings regarding measures to enhance competition, to maintain service to communities and to ensure fairness to employees. It provided authority under the *Competition Act* to suspend abusive market behaviour by a dominant carrier and better identify anti-competitive behaviour.¹ It also established new powers for the Canadian Transportation Agency with respect to pricing on monopoly routes. The government subsequently renewed the Agency's ability to investigate such prices: Bill C-23, adopted in 2002, was designed to keep abusive behaviour out of the marketplace until a final determination is made by the Competition Tribunal and provided for substantial penalties. Although the government's intention to update its international air policy was deflected by the events of September 11, 2001, the government nevertheless liberalized the policy to permit any number of Canadian carriers to compete in an international market, regardless of its size, if the necessary traffic rights are available or can be acquired.

Informed and independent views on whether further changes were desirable were provided by the CTA Review Panel. Advice was also sought from the Independent Transition Observer on Airline Restructuring, appointed on August 1, 2000 to examine the overall impact of airline restructuring. These advisers have reinforced the view that continuing efforts to improve competition should remain at the heart of the government's aviation strategy.

The government concurs with this perspective. In this regard, a key challenge for government regulators is defining clearly the line between of

¹On January 16, 2003, the Quebec Court of Appeal ruled that section 104.1 of the *Competition Act* dealing with temporary order with respect to potentially anti-competitive behaviour was inoperative because of its incompatibility with the *Canadian Bill of Rights*. The Government of Canada is reviewing this decision.

aggressive competition and abuse of dominance. The Competition Tribunal is reviewing a case that should clarify whether provisions in the *Competition Act* are appropriate or need adjustment.

→ **The government will update its legislative tools as needed to ensure that Canada's aviation markets are and remain competitive and free of market abuse.**

A second key challenge is ensuring that small domestic operators have the tools necessary to compete effectively with a large carrier without unfairly penalizing the latter. The government is already committed to including in the *Canada Airports Act* a provision requiring airport authorities to ensure that domestic operators have competitive access to essential airport infrastructure. Further, in keeping with the findings of the Independent Transition Observer,

→ **The government will introduce legislation to assist domestic air carriers in meeting their needs for interlining, joint fares, pro-rates and loyalty marketing programs where required to enhance competition without causing hardship.**

There is continuing pressure on the government to remove restrictions on foreign participation in Canadian domestic and international air markets by allowing non-Canadians to invest more in domestic airlines and foreign carriers to gain some access to domestic markets and better access to Canada's international routes. There is a view that these measures, balanced where possible with new opportunities for Canadian air carriers, would permit more competition to develop over time, helping the industry achieve greater efficiency and giving the travelling public additional service and price options.

Considering first the domestic market, some have suggested that foreign competition be introduced

by allowing foreign airlines, entrepreneurs or investors to establish or purchase domestic air operators within Canada or by permitting foreign international air carriers to offer domestic air services in Canada on extensions of their international flights. This would be a very substantial step, and one for which there are few international precedents. Historically, in Canada as in other countries, the national airline industry has played a unique role. Canada's airline industry has been seen traditionally as our unofficial ambassador in the world's airports, a symbol of our national identity, reflecting in part what it means to be Canadian. For reasons such as these, more has been expected of this industry than others; in particular, federal law has required that it be at least 75% owned and *de facto* controlled by Canadians. Opinion polls continue to show that, other things being equal, Canadians prefer the domestic airline industry to remain under Canadian ownership. These same polls indicate, however, that Canadians may be prepared to see changes in airline ownership in return for the benefits of increased choice and lower fares.

The government recognizes that, under the right circumstances, opening Canada's air markets to greater external participation on a reciprocal basis could introduce some new competition and lead to greater efficiency. As such, this option deserves close scrutiny. In the government's view, however, now is not the appropriate time to undertake this step. The harsh realities of the current marketplace indicate that the primary effect of making such a significant change would be to weaken an already vulnerable industry.

Around the world, most airlines are in crisis. Canadian carriers are still feeling the effects of last year's economic downturn, exacerbated by the precipitate decline in air travel and the rise in insurance costs after September 11, 2001. The long-term trend among passengers, including business travellers, has been increasing price sensitivity, putting ever-increasing pressure on airline revenues. These forces create an uncertain environment for all airlines but threaten especially the business model for full-service carriers like Air Canada. Air Canada is introducing a series of

measures to deal with this new reality. Several other carriers are attempting to establish and expand their own competitive niches, not always with long-term success, as demonstrated by the failure of Canada 3000 in November 2001.

The government believes that all Canadian carriers need more time to adjust to these challenging market conditions before they will have the strength to compete effectively with new foreign entrants and to benefit from any reciprocal opportunities available under a more liberal framework.

On the international front, the government is not prepared at this time to give foreign carriers unrestricted access to Canada's international market as a matter of policy, out of concern for the impact on the Canadian airline industry. Even so, there is no reason to interrupt the gradual liberalization of Canada's air agreements that has been going on for some years. There is no debate about the benefits of the 1995 air agreement with the United States for all stakeholders. This agreement essentially opened the bilateral market to unrestricted services by carriers of both countries. Canada has negotiated similar agreements in recent years with some of its other major bilateral partners, also to good effect. Where the government sees net benefits for Canada, it will seek a similar result in bilateral air negotiations with other partners. Additional rights, such as those involving passenger or cargo services to third countries, will also be considered for exchange on a case-by-case basis. In making its determinations, the government will weigh the benefits to Canadian communities of enhanced service and the availability of balanced and usable service opportunities for the Canadian airline industry.

→ **The government will continue the gradual liberalization of Canada's bilateral air agreements, using the 1995 Canada-United States Open Skies agreement as a guide.**

Finally, consistent with the establishment of the position of Air Travel Complaints Commissioner to assist travellers in obtaining satisfaction of their travel complaints, and in response to the recommendations of the Independent Transition Observer,

the government will continue to address the needs of the travelling consumer. The government will focus on ensuring that pricing information in air travel advertising is complete and not misleading, that better public access to airline tariff information (terms and conditions of carriage) is provided, and that the interests of passengers with respect to the terms and conditions of travel operated under a confidential contract are protected. As well, the current review of the computer reservation systems regulations will be expanded to assess the extent to which alternatives to the traditional use of computer reservation systems can affect competition in air services and whether the air travel information provided through traditional and alternative channels is presented in a manner that is fair, transparent and non-discriminatory.

→ **The government proposes to set minimum standards of airline commercial behaviour when essential for the protection of consumers and consistent with a fully deregulated market.**

Freight rail

After a detailed analysis of the situation, the CTA Review Panel came to a number of important conclusions about the performance of the rail system and the extent of competition.

The Panel noted that the rail system works well for most users, most of the time. The Panel found that the system is fundamentally competitive and efficient. Canada and the United States rank at the top of international comparisons on overall rail system performance. The railways have achieved significant improvements in financial performance in recent years, attributable in part to the strong performance of the North American economy but also to impressive gains in productivity. The Panel found no evidence that the railways are earning excessive profits.

The Panel also concluded that Canada's rail system is not inherently anti-competitive; that market abuse is not systemic or widespread; and that most shippers in most markets within Canada are well served.

According to the Panel, in aggregate, rail freight rates in all market categories, except grain, have either remained static or declined since 1988, reflecting the fact that the railways have shared a significant portion of their efficiency gains with shippers.

In May 2000, the government announced changes to its grain transportation and handling policies. One of the major changes was moving from regulated maximum freight rates for grain movements to a cap on the revenues that CN and CPR could earn from regulated grain traffic, including an 18% reduction in the railways' grain revenues from what they would have been without the policy changes.

The government accepts the Panel's conclusions that Canada's freight rail transportation system generally works very well, that Canada's differential rail pricing practices are not inherently anti-competitive or abusive, and that there is no need for sweeping regulatory measures to raise the level of competition.

The Panel examined rail freight issues and, more particularly, whether to enhance the running rights provisions in the *Canada Transportation Act* as a means of improving railway competition. The current running rights provisions allow a federal railway to apply to the Canadian Transportation Agency for the right to run over another railway's tracks if the two railways are unable to negotiate a commercial arrangement. The Agency may grant running rights and impose rates and conditions, taking into consideration the public interest.

In May 2001, the Agency ruled that it did not have the authority to grant running rights that included traffic solicitation, that is, the right to pick up traffic. The Agency, in its decision of September 10, 2002, concluded that a statutory running right is an "exceptional remedy" that requires actual evidence of market abuse or failure before a running rights application could be granted.*

The CTA Review Panel supported running rights, including traffic solicitation, to enhance railway competition but only as an extraordinary measure "where there is clear evidence that the railway providing the service is not acting in the public interest." The Panel felt that access charges should be set



"high enough that new entrants cannot exploit a network in which they have no proprietary interest and track owners are encouraged to make investments needed to sustain the infrastructure".

Shippers were generally pleased that, in principle, the Panel supported expanded running rights. However, many shippers felt that the Panel's proposed access fees were too high and, as a result, that the Panel's overall proposal on running rights would be unworkable.

For their part, railways identified a range of concerns, including the loss of efficiency from the reduction of traffic densities and the practical difficulties of establishing a fair level of compensation for the host railway.

The government considered the Panel's report but could not identify an approach that would adequately balance concerns about network viability and the need to encourage reinvestment in the system with shippers' concerns about the level of access fees.

As indicated in the Panel's report, the experience with "open access" in other network industries is not directly applicable to the rail sector because of operational, technical, financial and economic differences. The Panel noted that demand in the rail industry is static or rising slowly, and there are no innovative technologies that offer the promise of greatly reduced costs or significantly new ways of doing business.

Expanded running rights could result in inefficiencies being introduced in the system by fragmenting

*This matter is currently before the Federal Court of Appeal.

traffic among two or more operators or reducing the economies of scale and density that are essential to efficient railway operations.

The government is also concerned, as noted in the Panel's report, about the level of regulatory oversight that would be required to ensure that in day-to-day operations the host railway provides fair access to trains operated by a guest railway under regulated running rights. The Panel stated that "the anticipated results of new regulations must be weighed against the real costs they will entail." There could be significant costs to both government and industry associated with running rights applications and compliance with any orders issued by the Agency.

More importantly, however, the issue of enhanced running rights must be considered in the context of other shipper protection provisions in place. The *Canada Transportation Act* contains a number of provisions to help shippers get the best rates and service from the railways and to encourage competition between carriers. These include provisions related to level of service, confidential contracts, interswitching rates, connection rates to an interchange point and final offer arbitration. These provisions generally work well and will be refined, as necessary, as described below.

Consequently, given the lack of evidence of a systemic problem in the rail industry; the significant productivity gains achieved from a less interventionist approach; practical concerns about access fees; the substantial regulatory burden involving regulated running rights; the availability of a number of other regulatory remedies to address specific problems; and possible adverse impacts on system efficiency; the government believes that the current running rights provisions should be retained.

These current provisions give the Agency discretion to impose running rights, taking into consideration a broad range of public interest issues, including enhanced railway competition. The current running rights provisions are an appropriate component of a broader package of remedies and will be retained.

→ **The government proposes to retain the current running rights provision.**

The government does, however, share the Panel's view that there may be instances of inadequate market forces and that, in such cases, targeted provisions or recourse are needed to protect users from potential abuse of market dominance. Such provisions could also be expected to stimulate further carrier efficiency. The remainder of this section sets out the government's position on key issues raised with the Panel.

The Act allows any party to complain to the Canadian Transportation Agency if they are not satisfied with the level of service provided by a railway. The Panel recommended that the existing provisions be replaced with a requirement that a railway include, in its tariff, the level of service associated with a published rate. There was no support from shippers for the Panel's recommendations, based on the view that it might preclude the Agency from issuing a ruling on the adequacy of the service being offered. There were also concerns about the practicality of publishing meaningful levels of service for the numerous railway tariffs that are in place.

→ **The current level of service provisions are working well and the government proposes to retain them.**

The final offer arbitration (FOA) provisions provide a mechanism for resolving disputes between shippers and carriers, in particular regarding freight rates. The arbitrator is required to choose between the final offer submitted by the shipper or by the carrier. The grain-related amendments to the FOA provisions, implemented in 2000, added an expedited process for disputes under \$750,000. The Panel was satisfied that, on balance, the FOA provisions "adequately address the problem of carrier dominance and potential abuse in a way that is fair to both shippers and carriers."

- **The existing final offer arbitration provisions work well and the government proposes to retain them with some minor amendments. For disputes under \$750,000, the arbitrator would be required to consider as well whether alternative, effective, adequate and competitive means of transportation are available. In addition, the provisions will be amended to clarify that a group of shippers may join in one proceeding and submit one offer for arbitration when their offer seeks a common relief; that FOA applies to incidental charges and services such as car cleaning; and that other persons subject to railway charges, such as terminal operators, may apply for FOA.**

The Act's interswitching provisions authorize the Agency to set rates for interchanging traffic from one railway to a second ('connecting') railway within a 30-kilometre zone of an interchange point, that is, a point where traffic can be 'switched' between two carriers. Some stakeholders suggested to the CTA Review Panel that the interswitching limits be expanded beyond 30 kilometres. However, the Panel recommended that the existing interswitching limits be retained.

- **The government proposes to retain the current interswitching provisions with the clarification that the Agency be allowed to prescribe maximum rates, thereby allowing parties to agree to lower rates.**

The Act allows a shipper to apply for regulated rates to an interchange point that is beyond the 30-kilometre limit for interswitching rates. A shipper must have an agreement with the connecting railway in order to apply for a regulated rate. The Panel



recommended that this requirement be dropped and that the remedy be available to shippers without effective transportation alternatives, and when the rates were substantially above rates for similar movements of the same commodity.

- **The provisions on regulated rates to an interchange point with a second carrier will be improved by removing the obligation for a shipper to have an agreement with the connecting carrier. In determining whether a shipper should be granted a regulated connection rate, the Agency would be required to decide whether the level of the rate proposed by the railway company is substantially above rates for similar commodities under similar conditions and whether alternative transportation is available. Guidance would be given to the Agency in setting the regulated connection rates.**

Under the current legislation, the Agency must be satisfied that a shipper would suffer "substantial commercial harm" before imposing a regulated remedy with respect to a rate or service, such as competitive line rates or level of service. The Panel recommended that this provision be repealed, since it focuses on the shipper rather than on the behaviour of the carrier.

- **The government proposes to remove the requirement for the Agency to assess whether a shipper would suffer “substantial commercial harm” before giving the shipper access to a regulatory remedy against a carrier.**

The Act also requires that a rate or condition of service imposed by the Agency on rail movements be “commercially fair and reasonable to all parties”. The Panel recommended that this provision be kept, since it may help prevent an unreasonable regulatory result in some circumstances.

- **The government proposes to retain the provision requiring that Agency-prescribed rates and conditions of service be “commercially fair and reasonable to all parties”.**

After extensive consultations, the government announced major changes to grain handling and transportation policies in May 2000. They included replacing regulated maximum rates with a cap on the revenues railways could earn from regulated grain movements and gradually expanding a tendering process by the Canadian Wheat Board for grain shipments to western Canadian ports. The policy reforms were aimed at moving to a more commercial system. The Panel also recommended that the system be moved to a more commercial basis, which could lead to a repeal of the revenue cap. In addition, the Panel recommended that the closure of producer car loading sidings be subject to formal notification.

- **The government will continue to monitor the impact of its 2000 grain policy reforms before making decisions on further policy changes.**
- **The government proposes that the *Canada Transportation Act* be amended to require railways to publish a list of sidings available for loading grain**

producer cars and to give a 60-day public notice before removing such sidings from operation.

Passenger rail

Consistent with the 2002 Speech from the Throne commitment to reduce congestion in our cities and bottlenecks in our trade corridors, the Government of Canada will introduce legislative measures that will benefit passenger rail services.

VIA Rail

VIA Rail was established in 1977 through incorporation under the *Canada Business Corporations Act*. Unlike many other Crown corporations, VIA does not have its own legislation. In support of the government’s commitment to revitalize the national passenger rail system, legislation will be introduced to confirm and continue VIA Rail’s current mandate, structure, powers and operations.

- **The government proposes to establish VIA Rail’s mandate in legislation.**

Publicly funded passenger rail services

Recognizing the public benefits of publicly funded passenger rail services, and considering that these services are essentially government mandated and that, as a result, the operating entities may encounter difficulties in negotiating on even terms with host railways, the government proposes that a new recourse be provided to improve access to rail infrastructure for publicly funded passenger service under commercially reasonable terms. VIA Rail, commuter rail authorities, and other publicly funded passenger operators would be strongly encouraged to conclude commercial agreements with infrastructure owners. When commercial negotiations are unsuccessful, the proposed amendments to the *Canada Transportation Act* would provide a specific recourse.

- **The government proposes to amend the *Canada Transportation Act* to allow publicly funded passenger rail service providers, when commercial negotiations are unsuccessful, to seek adjudication from the Canadian Transportation Agency within a reasonable timeframe, on the terms and conditions of operation on federal rail lines, including fees and service charges by the host railway.**

In the interests of greater transparency, and because commuter rail contracts are entered into by public bodies, the CTA Review Panel recommended that commuter rail contracts be made public. The government accepts the recommendation and proposes to extend it to VIA Rail.

- **The government proposes that future contracts with publicly funded passenger rail service providers be made public. Existing agreements would also be made public unless one of the parties can demonstrate to the satisfaction of the Agency that the contract contains commercially sensitive information and that it would be harmed by its release.**



Surplus urban rail corridors

Preserving surplus rail corridors for subsequent use by urban transit is a potential concern in large urban centres. A railway line that is no longer required for freight service must first be offered for continued railway operations, then to governments for a price no greater than net salvage value (NSV). The government proposes to retain this approach to corridor valuation. Urban transit authorities, which, in some urban areas, serve several municipalities, have no right to receive such offers. In the interests of protecting corridors that may be required for urban transit, the government agrees with the recommendation of the CTA Review Panel to amend the Act to require an offer of sale to urban transit authorities before municipal governments.

The current discontinuance provisions do not technically include railway passenger stations, 'spurs' or 'sidings', some of which are of sufficient length to have potential use for commuter rail. The Government proposes that railways be required to offer these line segments and passenger stations to governments and urban transit authorities before removing them from service.

- **The government proposes that the rail line discontinuance process incorporate an offer of sale to urban transit authorities before municipal governments.**
- **The government proposes that railways be required to offer spurs and sidings in urban areas and passenger stations to governments and urban transit authorities, for not more than net salvage value, before removing them from service.**

Determination of net salvage value

The Act requires that, where no interest has been expressed in the purchase of a line for continued rail operation, a railway company must then offer to transfer its interests in the line to governments for not more than net salvage value (NSV). A government interested in purchasing the line must advise the railway company in writing that it accepts the

offer. If they cannot agree on the NSV of the line, either party can apply to the Agency for a determination of the NSV. In other words, a government is required to accept and bind itself to an offer to purchase without certainty regarding the purchase price.

The government proposes to amend these provisions to improve the notification provisions throughout the process and to allow a government or an urban transit authority to seek a determination of NSV from the Agency when it receives an offer from a railway company and before it binds itself to an offer to purchase. A determination from the Agency would give a government or urban transit authority the necessary information to decide whether it wants to purchase the line.

These new provisions would be particularly useful in urban areas where the potential for alternative use of urban rail corridors is greatest.

→ **The government proposes that the line transfer and discontinuance provisions of the *Canada Transportation Act* require railways to provide notification to governments, urban transit authorities and the Canadian Transportation Agency at certain stages during the process.**

→ **The government proposes that governments and urban transit authorities be able to seek a determination of net salvage value from the Agency after receiving an offer from a railway company and before committing themselves to an offer to purchase.**

Other issues

Leased lines

A railway company's obligations under the Act cease with respect to a line that is transferred pursuant to the discontinuance process specified in the Act, including lines that are transferred by lease. This means that shortline operators or governments do not have the opportunity to acquire a leased line

that reverts to the transferring railway, if the railway does not resume service on the line. It also means that CN and CPR are not obliged to pay the \$10,000 per mile for leased grain-dependent lines that revert to them.

→ **For leased lines that revert back to the transferring railway and on which the transferring railway does not resume service, the government proposes that the Act be amended to provide that:**

- before the transferring railway dismantles the line, it must advertise the line for sale on a commercial basis and, if a sale does not take place, it must then offer it to governments; and
- if the line is grain-dependent, the transferring railway must pay \$10,000 per mile annually over three years to the local municipalities.

Railway noise

In the late 1990s, the Agency became actively involved in resolving noise-type complaints between railways and adjacent landowners, mainly in urban residential areas. However, in December 2000, the Federal Court of Appeal ruled that the Agency had no jurisdiction to entertain such complaints arising from the operations of a federally regulated railway under the Act.

The Railway Association of Canada and Canadian Pacific Railway have since established voluntary mechanisms with the Federation of Canadian Municipalities to address noise and other complaints stemming from proximity to railway operations. The government wants to ensure, however, that the Agency has the authority to resolve noise complaints if a voluntary settlement among the parties is not attainable. The Agency is well positioned to strike a balance between the operational needs of railways and the legitimate expectations of neighbouring residents not to be subjected to unnecessary and avoidable inconvenience.

- **The government proposes that the *Canada Transportation Act* be amended to require that railways keep any adverse noise effects to a minimum when constructing or operating a railway, taking into consideration the requirements of railway operations and services and the interests of affected communities.**
- **The government proposes that the Agency be given the statutory power to:**
 - develop and make public guidelines, in consultation with interested parties, to explain the elements it will take into consideration when deciding on noise complaints and to elaborate collaborative measures for the resolution of noise complaints;
 - require a complainant to demonstrate to the Agency that all voluntary or collaborative measures have been exhausted before the complaint is considered by the Agency; and
 - investigate noise complaints and require a railway company to undertake such means in its construction or operation as are, in the opinion of the Agency, reasonable in order to keep any adverse noise effects to a minimum, taking into consideration the requirements of railway operations and services and the interests of affected communities.

Motor carriers – setting a North American framework

The Canadian trucking industry operates within a North American continental market and has been a key element in the success of the Canadian economy in reaping the benefits of the NAFTA agreement. The

elimination of systemic and institutional factors, such as inconsistencies in standards and regulations, is critical to maintaining the seamless movement of freight across international borders and between provinces and territories. The CTA Review Panel and many stakeholders urged more action by federal, provincial and territorial governments to achieve uniformity of regulations and the consistent treatment of extra-provincial trucking across jurisdictions to ensure progress toward a truly continental market.



The government agrees with the Panel on the need for a cohesive framework to govern the multiple elements of the trucking sector, including a national regime for trucking in which extra-provincial carriers are treated consistently throughout Canada, in a manner compatible with the trucking regimes of our NAFTA partners. NAFTA contains formal mechanisms for resolving truck standard compatibility issues.

The *Motor Vehicle Transport Act* amendments (adopted in June 2001) give the federal government a powerful tool for achieving a national regime, with provisions to:

- create a national safety performance regime, based on consistently applied national carrier safety ratings, to be administered by the provinces;
- allow for direct federal regulation of carrier safety standards;
- allow the federal Minister of Transport to enter into formal agreements with other countries to harmonize or mutually recognize carrier standards; and
- allow federal regulation of truck conditions of carriage.

The Council of Ministers responsible for Transportation and Highway Safety reached consensus in September 2002 on a national safety rating standard. Provinces and territories are currently establishing a carrier safety rating regime that is consistent with national standards, so that the *Motor Vehicle Transport Act* amendments can be proclaimed when these provincial and territorial regimes are in place; these are expected in 2003.

- **The government will continue to take a leadership role to ensure that a consistent national safety rating regime is put in place.**
- **The government will continue to seek greater compatibility in North American standards through existing NAFTA and bilateral mechanisms.**

One of the key issues for motor carrier safety is the appropriate limit to be placed on commercial drivers' hours of service. Following review of the question by the House of Commons Standing Committee on Transport, federal, provincial and territorial ministers of transport and highways reached consensus in September 2002 on proposed changes to the national standard.

- **The government will continue to work co-operatively with provincial and territorial governments to ensure that a consistent national hours of service regime is put in place.**

The bus industry – setting a consistent framework

In the *Motor Vehicle Transport Act, 1987*, the Government of Canada delegated to provinces and territories the regulation of extra-provincial bus carriers. Currently there are inconsistencies among the various provincial/territorial regimes, the most significant being in market entry rules. Some provinces retain regulation of routes and services by scheduled service carriers, while others have eliminated such regulation. Differences also exist for entry by carriers to charter services.

The CTA Review Panel concluded that this fragmented regime was cause for concern and acknowledged a policy choice between the *status quo* and federal legislation to deregulate extra-provincial carriers. As the Minister of Transport had asked the Senate Standing Committee on Transport and Communications to examine bus issues, the Panel hesitated to make a recommendation in this area.



The government is concerned about the fragmented market framework in the bus industry. Since 1994, successive ministers of transport have advocated the creation of a uniform national regulatory regime and the elimination of controls on market entry, price and service and have sought consensus from provinces and territories, industry and the public on a timetable for implementing such a regime. Although most provinces and stakeholders agree that scheduled bus service regulation could be streamlined, and charter bus services could be deregulated, there has been no agreement on full elimination of all economic controls.

Among the key elements raised in the context of this debate is the availability of scheduled bus services to rural communities and the possible cross-subsidization of low traffic density routes by high traffic density routes, on the one hand, and the impact of regulation on cost-effective and innovative provision of bus services to all regions, on the other.

In December 2002, the Senate Standing Committee tabled its report on bus issues. It made recommendations in a number of areas, the key one being a national liberalization of economic entry controls through adoption of a reverse onus entry test. Currently, in most provinces that maintain economic controls, an applicant for a new service is required to prove that the service is in the public interest. Under a reverse onus system, applications for new services are approved unless opponents can prove that granting the application would not be in the public interest. A reverse onus regime relaxes, but does not totally eliminate, economic controls.

In order to mitigate the pressures on low-density rural service which a liberalization of entry would probably create, the Committee also recommended a \$30 million transitional subsidy fund for each of the first five years after the adoption of the reverse onus test. The fund is to be used to help establish local community bus services in rural areas in situations where another level of government and/or a local business is willing to co-invest.

The Committee recommended a review of the impact of the reverse onus scheme after five years to determine whether further regulatory steps might be appropriate.

→ **The Minister of Transport is reviewing the December 2002 recommendations on intercity bus issues, including rural and small community bus access, and will be consulting with his provincial and territorial colleagues, as well as stakeholders, in due course.**

International maritime shipping

International efforts have been a key aspect of forming maritime transport policy in Canada. Endeavors by the Organization for Economic Cooperation and Development (OECD) and the International Maritime Organization (IMO), have ensured that Canada remains at the forefront of shaping economic policy as it relates to the maritime shipping industry. Canada participates actively in the 1992 International Oil Pollution Compensation Fund, an intergovernmental organization that provides compensation for pollution damage resulting from spills of persistent oil from tankers such as the *Prestige* which sank in November 2002 off the coast of Galicia in north-west Spain. Incidents such as the one involving the *Prestige* highlight the range of players involved in international shipping and the importance of representation in various international shipping forums to formulate policy that assists in protecting the Canadian environment and economy against such mishaps.

Transport Canada also participates in the work of the United Nations Commission on International Trade Law (UNCITRAL), which has recently undertaken a review of current practices relating to the carriage of goods by sea. Disparate national laws and fragmented international conventions in this area have left significant gaps that obstruct the free flow of goods and increase the cost of transactions.



Much of international maritime container cargo is handled by shipping lines that belong to various shipping conferences. These are essentially associations of ocean carriers that have the purpose or effect of regulating rates and conditions of ocean transport among their member lines. Like the U.S. and other countries, Canada exempts such agreements from its competition law through the *Shipping Conferences Exemption Act, 1987*. In 1999, Transport Canada initiated a review of this Act, which resulted in a number of liberalizing amendments, which came into force in January 2002.

In 2001, the CTA Review Panel accepted the arguments that the dominant effect of the conferences is to inhibit cost efficiency and raise prices and recommended multilateral action to remove the exemptions. Currently, Transport Canada is in the preliminary stages of developing a strategy to monitor the impact of the recent amendments and has participated internationally to gauge views on the CTA Review Panel's recommendation.

→ **Transport Canada will continue to contribute to international shipping policy developments through participation in international forums.**

→ **Transport Canada will monitor the impact of the *Shipping Conferences Exemption Act, 2002*, and its effects on competition.**

Marine Industry Benefits Study

Marine transportation is an integral component of Canada's transportation network and is vital to the nation's economy. It facilitates both domestic and international trade and is integral to the competitiveness of Canadian industry; yet, there has never been a comprehensive review of its benefits to Canada.

To analyze the value of marine transportation to the Canadian economy, Transport Canada will participate, in partnership with Canada's major marine associations, in a review of the benefits of marine transportation. The review will examine all marine and marine-related services in Canada including the movement of freight and passengers, transshipment activities as well as the storage and handling of commodities. It will be broad ranging and address areas such as the environmental, security and safety impacts of marine transportation and the contribution of the marine industry to the competitiveness of Canadian industry.

- **In partnership with industry, Transport Canada will participate in a review of the benefits of marine transportation and its contribution to the competitiveness of Canadian industry.**

Multi-modal issues

Several marketplace issues affecting more than one mode of transportation also need to be addressed. This section presents future strategic directions with respect to transportation mergers and acquisitions, data for decisions, accessible transportation and official languages.

Transportation mergers and acquisitions

In the air and rail sectors, one or two large carriers dominate market capacity, with a number of smaller carriers serving the balance of the market. In North America, mergers and acquisitions have been normal business practice in these sectors to consolidate weak carriers, reduce surplus capacity, and improve cost efficiency and profitability. In 2000, a revised review process was adopted in Canada for air carriers. In other modes, mergers follow the procedures of the *Competition Act* only. The proposed combination of Canadian National and Burlington Northern Santa Fe in 2000 highlighted the lack of a public forum in Canada to review significant proposed transportation transactions.

The CTA Review Panel noted that the scope of the review process under the *Competition Act* is limited to competition issues and provides no opportunity to consider broad national or public interest issues. Noting that “the process is by necessity not very open or public”, the Panel proposed that a transportation-specific review process be established to review the national or public interest issues that may arise from merger proposals, particularly in light of growing pressure toward rail integration in North America.

The government agrees with this analysis and proposes to adopt a variant of this recommendation, in which a revised air carrier process will be applied to mergers in all modes under federal jurisdiction above a specified threshold.

- **The government proposes that a new process be introduced to review significant merger or acquisition proposals above a specified threshold involving carriers or transportation service providers under federal jurisdiction. The new process would be an extension of the existing airlines merger review process for airlines adopted in 2000.**
- **Notice of proposed transactions involving transportation undertakings notifiable to the Commissioner of Competition would also be given to the Minister of Transport. The Minister would have the authority to appoint a person to review the proposed transaction where the Minister determines that the proposal raises sufficient public interest issues as it relates to national transportation.**
- **The Minister would receive the recommendations of the Commissioner of Competition, including proposed measures, before taking a recommendation to Cabinet.**

Data for decisions

The development of sound public policy, the ability of the government to perform its oversight role and the administration of government programs all require reliable data describing the transportation system and its use. Both the CTA Review Panel and the Independent Transition Observer on Airline Restructuring recommended that the government improve information available for policy analysis by government, industry and the concerned public.

They proposed expanding the collection and dissemination of transportation data and developing new procedures to reflect developments in transportation and in data management technology.

Data collection needs to be expanded in some respects, to reflect new developments in transportation activities and programs. For example, commercialization of former public infrastructure has resulted in the reduced availability of operational data that were previously internal to the government and are essential for the effective monitoring of transportation system integrity. At the same time, data collection procedures need to be made more efficient, taking advantage of developments in data processing technology and minimizing the burden on those that provide data. For example, increased collaboration among federal agencies that currently collect the same or similar data would reduce the burden on industry. On the other hand, changes in procedures are also necessary to ensure that required data are in fact submitted and are reliable, including effective penalties for non-compliance.

→ **The government proposes to amend the *Canada Transportation Act* provisions on data collection to ensure the availability of consistent, useful information on the various elements of the transportation system.**

Accessible transportation

It is government policy to ensure that undue obstacles to the mobility of persons with disabilities are eliminated from federally regulated transportation services and facilities. To achieve this objective, the following instruments and initiatives have been put in place:

- provisions in the *Canada Transportation Act* authorize the Canadian Transportation Agency to resolve individual complaints;
- to resolve systemic issues, the Agency has regulations, codes of practice and standards concerning accessibility in the air, rail and marine modes



of transportation and an Agency advisory Committee to facilitate consultation with stakeholders on accessible transportation needs and issues;

- Transport Canada has established a code of practice and a dispute resolution mechanism for intercity bus transportation and supports a research and development program on accessible transportation; and
- a Ministerial Advisory Committee on Accessible Transportation holds regular consultations with stakeholders on accessible transportation needs and issues and is developing a plan entitled “Strategic Directions” to guide a long-term, accessible national transportation framework.

→ **The government will evaluate the impact of existing legislative provisions and codes of practice and determine whether other measures are needed to improve access to the federally regulated transportation system.**

The government is cognizant of the mobility needs of Canada's aging population, which today makes up 12% of the total population and will account for close to 23% by 2041. Transport Canada will evaluate the "Strategic Directions" plan being developed by the Ministerial Advisory Committee on Accessible Transportation and will consider the mobility challenges facing aging Canadians in developing a long-term federal strategy for an accessible transportation system.

- ➔ **The government will work with the community of persons with disabilities, senior citizens and the transportation industry to develop a long-term, multi-modal, federal strategy for enhancing the accessibility of the national transportation system.**

Mediation

The CTA Review Panel supported the use of alternative dispute resolution processes with respect to matters under the purview of the Agency, noting that this is consistent with the goal of achieving negotiated solutions rather than regulatory outcomes whenever possible.

Mediation can help parties resolve disputes in a simpler, more rapid, less litigious and costly manner. It can also narrow the gap between the parties before the Agency exercises its adjudication role. Furthermore, after the dispute, parties to a mediated agreement are generally more committed to its implementation and have a healthier relationship.

- ➔ **The government proposes to amend the Act to give the Canadian Transportation Agency the statutory authority to engage in mediation with respect to matters within its jurisdiction while ensuring adequate safeguards to maintain its quasi-judicial role.**

Linguistic Duality

In addition to the safety information that must be given to passengers in the two official languages in modes of transport under federal jurisdiction, some passenger carriers and other transportation entities are subject to the *Official Languages Act*. For example, Air Canada and its subsidiaries and VIA Rail must make their services available to their customers in their preferred language where there is significant demand.

- ➔ **The government will continue to address compliance with the provisions of the *Official Languages Act* by exercising appropriate oversight and discussing enforcement measures for improving the situation.**

CHAPTER 4

Infrastructure

Ensuring the necessary level of investment in our national transportation system is essential in a globalized world and in our increasingly urbanized society. The federal government plays a key role in creating an appropriate environment to encourage investments in transportation infrastructure that serve the national interest and enhance the quality of life in our communities.

Over the last decade, the government has fundamentally changed both the macro- and micro-economic environment for transportation infrastructure investments. Deficit reduction and the lowering of the national debt, inflation and interest rates have created a climate conducive to long-term investments, including in transportation infrastructure. In addition, fundamental changes to several elements of the national transportation network, notably the governance of ports and airports under federal control, have already done much to stimulate investment in facilities and involve stakeholders more directly in decision making.

Looking forward, the government is committed to maintaining a climate conducive to investment in infrastructure. It will also complete the program of commercialization and divestiture of ports and airports wherever possible, fine-tune the governance regimes based on recent experience, and explore new avenues for the commercial development of transportation infrastructure and services.

At the same time, the government acknowledges that not all forms of transportation infrastructure have regimes in place that would allow them to be essentially self-supporting. The government agrees with the statement by CTA Review Panel that transportation infrastructure cannot be limited to what can recover its full costs. Canada faces enormous infrastructure funding pressures in both urban and rural areas. The government sees merit in exploring with provinces, territories and other interested parties new mechanisms to address these pressures over the next few years. At the same time, it intends to continue to play a role by making selective and strategic investments, jointly with public and private partners, in support of an efficient, safe and environmentally responsible transportation system.

Finally, it will continue to address the issue of reasonable access by remote communities to the national transportation system, recognizing that in many instances, the provision of services and facilities will be the responsibility of parties other than the federal government.

OUR RECENT ACHIEVEMENTS AND COMMITMENTS

The 1990s saw major changes in several elements of the national transportation system that were formerly under federal government control. New commercial enterprises were established to take over operations to control costs further, attract investment and improve the efficiency of transportation infrastructure. Locally-based airport authorities and other entities now operate 25 of the 26 airports of the National Airport System (NAS), and other transfer arrangements have been made for most of the airports formerly operated by the federal government. Canada port authorities operate 19 ports owned by the federal government. NAV Canada operates the air navigation service, having purchased the government's civil aviation facilities, and is the only privatized air navigation enterprise in the world.

These new commercialization models share common features:

- *Not for profit:* The commercial enterprises are not-for-profit corporations, a feature that contributes to counterbalancing the market power that operators of these facilities could otherwise exercise.
- *Financial self-sufficiency:* They have autonomy over pricing and investment decisions and finance investments from their operating revenues or fees or through debt issues. This ensures that these elements of Canada's transportation infrastructure respond to existing and future user demands for service on a financially self-sufficient basis.
- *New governance structures:* Community representatives and stakeholders are selected to be on the boards of directors, and public accountability for major decisions is prescribed through various instruments. Government maintains regulatory authority over safety, security and environmental protection.

While experience with some of these new models is relatively recent, there is already ample evidence that they are producing positive results. They have unleashed the economic potential of facilities formerly operated by the federal government: more than \$5 billion has been invested in airport capital

projects; 16 of the 19 Canada port authorities are forecasting close to \$700 million of capital expenditures over the 2002-2006 period; NAV Canada has invested more than \$600 million in new technology; and the St. Lawrence Seaway Management Corporation has reduced its costs below projected cost level targets and provided toll rebates in 2001 and 2002.

Service improvements are evident – safety has been maintained or enhanced, and several significant capacity expansions to meet future requirements have been completed or are under way. At the same time, significant savings have accrued to taxpayers as the private sector has made the necessary capital investments.

The government is closely monitoring the conduct of these commercialized enterprises and, in responding to recommendations from the Auditor General and the House of Commons Public Accounts Committee, will ensure that improvements in their procedures and accountability continue to be made. Appropriate, effective governance of infrastructure will remain a central focus of federal transportation policy.

SELECTED INVESTMENT IN TRANSPORTATION

The financially self-sustaining governance models discussed above have proven successful in allowing for investment in many components of the national transportation network. Not all modes have reached the same level of development, however, and certain areas continue to depend on public investment. Furthermore, new imperatives such as the security requirements in the wake of September 11, 2001 have called for significant funding commitments.

In its last two budgets, the government announced major investments in a wide range of strategic infrastructure benefiting all regions of Canada, including many initiatives supporting strategic national transportation objectives. In particular, Budget 2000 provided \$600 million for the Strategic Highway Infrastructure Program (SHIP), of which \$500 million was allocated for strategic improvements to the national highway system.

The remaining \$100 million from SHIP is available for system integration initiatives, such as the Border Crossing Transportation Initiatives (\$65 million); deployment of intelligent transportation systems (\$30 million); and planning and feasibility studies (\$5 million).

While previous national infrastructure programs have been successful, it has become apparent that some large-scale infrastructure projects across the country were beyond the scope and capacity of existing programs. The \$2 billion Canada Strategic Infrastructure Fund, announced in Budget 2001, responds to these needs.

The new program, under the leadership of the Minister Responsible for Infrastructure, provides for investment in various categories of infrastructure that are vital to advancing Canada's social and economic objectives, including highway and railway infrastructure, as well as local transportation infrastructure.

Budget 2001 also provides \$600 million over five years for a new Border Infrastructure Fund. Under this program, the government will seek partnerships with the provinces, municipalities and the private sector and will help finance improvements to infrastructure at or near the border. Potential border-related projects could include new or improved highway access to border crossings, processing centres for commercial vehicles to speed up border clearance times and soft infrastructure such as the deployment of intelligent transportation systems across Canada.



RECENT FEDERAL COMMITMENTS

The 2000 federal budget provided:

- **\$2.05 billion for the Infrastructure Canada Program, which finances municipal infrastructure projects**
- **\$600 million for the Strategic Highway Infrastructure Program**
- **\$25 million for the Green Municipal Enabling Fund**
- **\$100 million for the Green Municipal Investment Fund**

The 2001 federal budget included significant allocations benefiting transportation, including:

- **\$2.2 billion for air travel security**
- **\$2 billion for the new Canada Strategic Infrastructure Fund**
- **\$600 million for the new Border Infrastructure Fund**
- **\$25 million increase in the Green Municipal Enabling Fund**
- **\$100 million increase in the Green Municipal Investment Fund**

OUR FUTURE ACTIONS

Looking forward, the government has identified three areas of focus for Canada's transportation infrastructure:

- ➔ **First, the government will complete its commercialization and divestiture program wherever possible, fine-tune the governance models of those elements of the national transportation system that have been commercialized and explore new avenues for commercialization where feasible. Government support will continue to be provided to address new security issues and extraordinary events.**

- **Second, building on the September 2002 Speech from the Throne commitment to “put in place a 10-year program for infrastructure to accommodate long-term strategic initiatives essential to competitiveness and sustainable growth”, the government will continue to make selected strategic investments in partnerships with other levels of government and the private sector, including transportation investments that will help reduce congestion in our cities and bottlenecks in our trade corridors and assist in meeting our climate change and clean air objectives.**
- **Third, in areas of federal responsibility and in collaboration with its partners, where applicable, the government will continue to address the issue of reasonable access by remote communities to the national transportation system.**

The remainder of this chapter describes proposed federal actions in each of these areas.



GOVERNANCE AND COMMERCIALIZATION

A legislative framework for commercialized national airports

The CTA Review Panel, along with the Local Airport Authority Lease Review and the Auditor General, recommended various refinements to the management of airport authorities. Transport Canada is currently developing a *Canada Airports Act* that will set out the economic framework for the behaviour of airport authorities. This legislation will preserve flexibility for airport authorities to generate necessary revenues to sustain financial viability and will:

- clarify the responsibilities of the government and the airport authorities;
- strengthen the governance structure for airport authorities;
- establish requirements for transparency and consultation between airport authorities and interested parties;
- establish principles for charges imposed by airport authorities, with special provisions for airport improvement fees, and an appeal process;
- address competition issues, including equitable access for air carriers to airport facilities and slots;
- require that National Airport System (NAS) airport activities be consistent with Canada’s international obligations, including in the area of trade;
- establish principles for non-core activities undertaken by airport authorities; and
- establish appropriate enforcement mechanisms.

- **The government will introduce a bill, the *Canada Airports Act*, to clarify the respective responsibilities of the government and of airports of national significance and set out requirements for airport authorities respecting governance, accountability and transparency as part of economic oversight.**

Airport rent policy review

Airport authorities agreed, in exchange for the use of the land and the transfer to them of operating airports developed at public expense, to pay rent as part of the lease arrangements. Today eight of 22 authorities pay rents to the federal government and others are scheduled to begin rent payments in the next few years. Airport authorities, air carriers and other interested parties have called for a review of the government's rent policy on the grounds that the rent payments jeopardize the financial viability of airport authorities or have an undue impact on air travel and the air industry. The Public Accounts Committee and the Auditor General have suggested that the government take further measures to ensure that the fair market value of these assets is accurately determined for the benefit of taxpayers before entering into lease negotiations or renegotiating existing leases.

The government announced in June 2001 that Transport Canada would review the current rent policy for NAS airports operating pursuant to leases with the federal government.

→ **A review of the rent policy for NAS airports is underway. The government will examine its findings and is committed to balancing the interests of all stakeholders, including the air industry and Canadian taxpayers, in establishing its future policy on rent.**

Completing airport commercialization and divestiture

Under the national airports policy, airports in the NAS are to be commercialized and achieve financial self-sufficiency, while non-NAS airports are to be divested to local interests or closed. The NAS airports, which serve the vast majority of Canada's air traffic, have all been devolved to locally managed airport authorities, with the exception of Prince George

which will be transferred on March 31, 2003. The vast majority of the regional/local and small airports have been divested, but 13 remain to be transferred. The government is confident that current negotiations will result in the transfer of the remaining regional/local and small airports by March 31, 2005.

→ **Transport Canada is committed to completing the commercialization of the National Airport System airports and to divesting the remaining regional/local and small airports that are scheduled for transfer.**

Viability of regional and small airports

Funding locally managed regional or small airports is the responsibility of the community and the airport operator. However, federal funds have been made available under the Airports Capital Assistance Program (now extended to 2005) to certified airports with year-round regularly scheduled passenger service that are not owned or operated by the federal government to assist with their capital projects related to safety, asset protection and operating cost reduction such as runways and taxiways. Municipalities and provinces have raised concerns about the viability of locally managed regional and small airports, particularly in light of continuing airline industry restructuring. The government is aware of these concerns and Transport Canada has agreed to study the viability of these airports. The Government of Canada's Rural Secretariat and other interested stakeholders will be consulted.

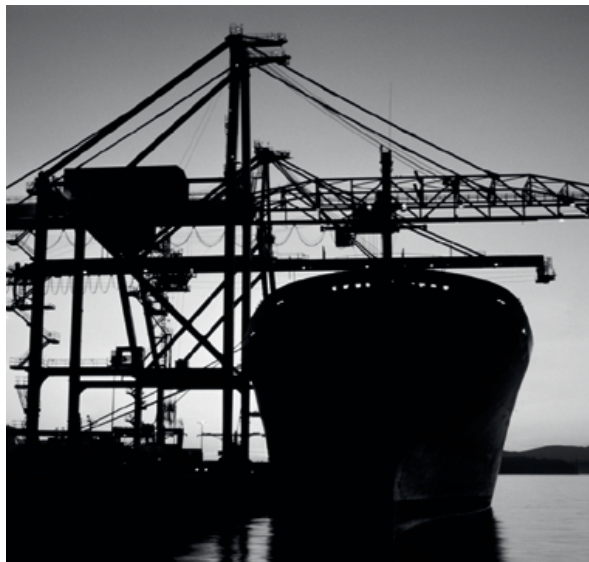
→ **A federal study of the viability of regional and small airports will be completed in 2003.**

Port divestiture

Not unlike airports, national ports have been commercialized and must achieve financial self-sufficiency. Regional/local ports are to be divested to provincial governments or local interests, including municipal authorities, community organizations or other local stakeholders. In most cases, divestiture is accompanied by a funding contribution. Such funds are negotiated with the new owners on the basis of continuing operation of the port. Under this model, sufficient funds are provided at the date of transfer, so there is no capital assistance program. In some cases, new owners have actually purchased the port facilities, resulting in small revenues accruing to the Government of Canada.

The Port Divestiture Program allows communities to benefit from the advantages of local operation, including flexibility for the port to respond to changing needs and new business development opportunities. Since 1996, this initiative has saved taxpayers more than \$100 million.

The government has extended the Port Divestiture Program until March 31, 2003, to enable continued negotiation of port divestitures where Transport Canada had a positive indication of provincial cooperation, if required, and where active discussions were underway as of December 31, 2001. Targeting ports where negotiations are underway will allow the best use of funding and resources.



→ **The government intends to complete, by March 31, 2003, wherever practicable, the planned divestiture of ports and harbour beds within the terms of the existing program extension.**

Transport Canada continues to have management responsibility for regional/local ports that remain undivested at the end of the program, now scheduled to end on March 31, 2003. Before March 2003, the government will review the progress of the program and its options regarding undivested ports.

→ **Transport Canada will consider options for the future of its remaining ports and will conduct a full program evaluation of port divestiture.**

Review of the *Canada Marine Act*

The *Canada Marine Act* requires that the Minister complete a review of its provisions and operation during the fifth year following its coming into force in June 1998. In response to requests from marine industry stakeholders and the recommendations of the CTA Review Panel, the government initiated a review of the Act in 2002. Its purpose is to refine the governance structure based on the experience gained in implementing the Act. The Minister of Transport issued a guidance document in May 2002 to assist in the review and appointed a Panel to conduct consultations and formulate recommendations.

→ **Following presentation of the findings of the *Canada Marine Act* Review Panel in 2003, the government will determine what further refinements to the Act may be required.**

Ferries

The government has established a commercial framework for the provision of marine transportation services, with greater reliance on the private sector to operate ferry services and to achieve efficiency through new ways of doing business. Private

operators have responded well to this commercial framework and are considering how to further the commercialization process. The efficiency of federally supported ferry services has improved, with enhanced governance and local accountability in the management of operations. Under the National Marine Policy, some of Marine Atlantic's ferry services were transferred from the Crown corporation to provinces, others were disbanded, and some were commercialized through a competitive tender process, with substantial savings in the delivery of services.

Federal government support to Atlantic Canada ferry services is restricted to those provided by Marine Atlantic Inc. and two private-sector operators: Northumberland Ferries Ltd. and C.T.M.A. Traversier. Marine Atlantic Inc. provides constitutionally guaranteed ferry service from North Sydney, Nova Scotia, to Port-Aux-Basques, Newfoundland, as well as a seasonal operation between Argentia, Newfoundland, and North Sydney. The other two operators provide an alternative to the constitutional service to Prince Edward Island and service to a remote port in the Magdalen Islands respectively.

Bay Ferries Ltd. operates two Bay of Fundy services from government ferry terminal facilities under lease until 2007.

BC Ferries is a provincial Crown corporation with a fleet of 40 vessels serving 26 routes. It is the largest ferry operation in North America. The British Columbia government receives a yearly federal grant (\$23.5 million in 2001) in lieu of direct federal involvement in the provision of ferry services in coastal waters.

→ **With the overall objective of improving ferry services, the Government will continue to explore cost reductions and efficiency improvements through new ways of doing business including the management of its real property assets.**

Evaluating further commercialization of marine navigational services

Marine navigational services are provided mainly through direct government operation, shared among different departments. Throughout public consultations, representatives of the domestic marine industry expressed concerns about the provision of many essential services, such as pilotage, providing and setting buoys and signals, traffic control and ice-breaking, by federal organizations. The CTA Review Panel recommended that such services be provided commercially.

→ **Transport Canada, in partnership with Fisheries and Oceans Canada and industry partners, will evaluate alternative methods of delivering marine navigational services.**

International bridges and tunnels

There are 24 international bridges/tunnels for cars and trucks between Canada and the United States: nine between New Brunswick and Maine, one between Quebec and Vermont, seven between Ontario and New York, four between Ontario and Michigan, and three between Ontario and Minnesota. These crossings account for the vast majority of Canadian exports to the U.S. and play a vital role in Canada's transportation system.

Various governance regimes are in place: 22 are publicly owned (five are federal, 16 are provincial/municipal, and one is exclusively U.S.-owned), and two are privately owned. Of the publicly owned facilities, the Canadian half of four facilities is owned or controlled by a Canadian Crown corporation, three by a provincially controlled bridge authority, one by a U.S. authority, and the rest by provincial departments of transportation. Twelve, all in Ontario, are self-sufficient toll facilities.

With the rapid increase in cross-border trade and traffic, the heightened need for security along the border and the new border initiatives under way in both Canada and the U.S., there is greater interest than ever before in ensuring adequate capacity at the border. There are currently several proposals

for new border crossings between Canada and the U.S., including the Peace Bridge expansion (Fort Erie, Ontario), the Calais-St. Stephen new crossing (New Brunswick), the conversion of the Whirlpool railway bridge (Niagara Falls, Ontario), and several proposals for a third Windsor-Detroit crossing.

Canada lacks a clearly defined process for the efficient review and approval of new international bridges and tunnels. Some 14 of the existing 24 crossings are subject to special acts which were designed and adapted to fit individual needs. Others have no governing legislation. Proposals may require approvals under other acts for specific issues, such as navigation, water levels, or environment, but are not assessed on their overall benefits to Canada's transportation system.

In the U.S., a presidential permit is required as an initial step for any new international crossing, to ensure the proposal meets transportation objectives and will improve the efficiency of the transportation system. Canada does not have a similar process for reviewing proposals to build new international bridges and tunnels. To respond better to the demand for new border capacity:

→ **The government will clarify the process for authorizing new international bridges and tunnels. The government proposes to amend the *Canada Transportation Act* to require the authorization of the Governor in Council (GIC), upon the recommendation of the Minister of Transport, for new international bridge or tunnel crossings for vehicular traffic. The proponent would have to meet any conditions stipulated by the GIC, as well as existing federal legal requirements (such as navigation, environment, boundary waters, etc.).**

Exploring governance and pricing of road and urban transit infrastructure

Significant progress has been made in developing the full economic potential of facilities in the air and marine modes by establishing management

models that promote more commercial decision-making and more responsive governance structures. Both the road system and the urban transit system, arguably the backbone of Canadian transportation and the primary means of linking communities and activities throughout the country, have been left largely untouched by these reforms. The CTA Review Panel noted many challenges in the future provision of adequate road infrastructure and urban transit systems. In particular, the Panel identified several factors that undermine the health of current systems: the growth of traffic, high unit transit cost, the need for a practical approach to ensure sustained funding, the lack of an effective pricing regime, and uncertainties about the total cost of road transportation. The Panel offered bold, innovative concepts for new governance frameworks and new principles to guide investment, financing, costing and pricing decisions for roads and public transit. At the same time, the Panel acknowledged the debate about the role of the federal government and the complex jurisdictional and public financing issues.

While federal responsibility for highways and urban transportation is minimal, the government recognizes their contribution to trade, competitiveness and mobility for all regions of Canada. Good connections to facilities under federal jurisdiction and the best use of all transport modes are also important contributors to the overall efficiency of the transportation system.

Recognizing the success of the models now in place for the air, freight rail and marine modes, the government believes that innovative options for managing the enormous funding pressures associated with road transportation and urban transit should be explored with other levels of government and the private sector. New governance models – such as the introduction of transportation authorities and the possibility of earning user revenue for infrastructure investment, including the tolls now charged for some highways and bridges – afford an opportunity to address the longstanding concern of provincial and territorial governments about a sustained funding regime for road infrastructure. While not minimizing the extent of public concerns in connection with these concepts, the successes achieved in other transportation modes call for at least a careful

consideration of all possible options. The federal government is interested in pursuing consideration of these issues with provinces and territories.

The government's interest in investigating alternative governance models for road infrastructure and urban transit should not create an expectation of change in its policy with regard to excise taxation of fuels. Some stakeholders advocate federal spending on highways based on the fact that federal revenue from fuel used in transportation is not returned to the sector, contrasting this with the U.S. government's dedication of revenues from fuel taxes and user fees to highways, transport infrastructure and urban transit. Federal fuel taxes are an instrument of fiscal, not transportation policy and are an important source of general revenue, used to finance many federal spending priorities, including health care, social security and national defence.

→ **Recognizing the challenges associated with jurisdictional and funding issues, Transport Canada intends to explore with provincial and territorial governments the implications of possible new governance and investment models for road transportation and urban transit.**



STRATEGIC INVESTMENTS

To Act as a magnet for talent and investment, Canada must continue improving its world-class transportation system by reducing congestion in our cities and bottlenecks in our trade corridors. The federal government acknowledges that not all forms of transportation infrastructure have regimes in place to allow them to be financially self-sufficient. In the absence of such regimes, the federal government recognizes that select federal assistance to such actions can result in large benefits.

Accordingly, in partnership with other levels of government and the private sector, it will make selective and strategic investments in transportation infrastructure to improve the quality of life of Canadians.

When making strategic investments, the Government will place a high priority on projects supporting (1) an integrated transportation system, (2) trade and passenger corridors, and (3) urban transportation needs.

Any project that supports these three priorities will need to comply with applicable criteria of current or future programs, including the 10-year infrastructure program announced in the September 2002 Speech from the Throne.

Moving to a more integrated transportation system

The national transportation system is more than the sum of its components; its strength also depends on the synergies that result from connections and integration of modes and from the collaborative efforts of many jurisdictions. There is growing recognition that Canada's competitive position and its ability to attract talent and investment will depend on continued improvements in our transportation system. Increasingly, integrated logistics chains with global reach compete with one another. Intermodal transportation requires that the connections, both physical and electronic, between modal systems be fully integrated, so that the most efficient mode or combination of modes is used and total logistics time and costs are reduced. In this context, strong collaboration among jurisdictions becomes essential. An integrated transportation system also

requires planning and feasibility studies so that transportation needs can be properly assessed and considered from a multi-modal perspective. Transportation planning requires long lead times and collaborative approaches among the many players involved in transportation investment programs. Recent examples include the proposed study of the potential investment needs of the Great Lakes/St. Lawrence Seaway system and the exploration by Transport Canada of possible opportunities to promote short sea shipping as a means to help alleviate highway congestion and facilitate trade, improve utilization of waterway capacity and reduce greenhouse gas emissions.

→ **The government will place a high priority, when making strategic investments, on intermodal transportation, intelligent transportation systems and planning and feasibility studies in support of such investments in the context of an integrated national transportation system.**

Supporting efficient trade and passenger corridors

Moving people and goods efficiently, safely, securely and in an environmentally respectful way is vital to the national economy. Accessibility and efficiency of transportation and distribution networks are also major considerations for potential foreign investors. Canadian exports and imports, especially to and from the United States, demand reliable and timely traffic flows at border points, as well as the efficient movement of goods through integrated trade corridors. The Government of Canada, in collaboration with U.S. federal authorities, provincial/state transportation departments, municipalities and stakeholders, ensures that transportation infrastructure/capacity and state-of-the-art technology fully complement harmonized and streamlined border processes. Canadians also require a high degree of mobility and must have affordable travel options that contribute to alleviating congestion and meeting environmental objectives. There is also growing recognition that passenger and freight rail and marine transportation offer an affordable alternative to other modes of

transportation in some areas of the country while contributing to environmental and safety objectives.

→ **The government will place a high priority, when making strategic investments, on trade and passenger corridors such as the National Highway System, federal roads and bridges, transportation border infrastructure, shortline freight infrastructure, road-rail grade crossings and passenger rail revitalization. In particular, the government will work collaboratively with the provinces, municipalities, stakeholders, and U.S. authorities to facilitate the secure and efficient movement of people and goods along corridors and at border crossings through co-ordinated transportation planning, deployment of advanced technologies and border infrastructure improvements.**

Urban transportation needs

Most Canadians live in urban centres, where much of Canada's economic activity is generated. Canadian cities are home to major railways, highways, ports and airports. Urban land requirements, urban traffic congestion and transportation-related pollution are some of the impacts of the transportation system affecting the quality of life in our cities.

The September 2002 Speech from the Throne recognized that modern infrastructure is key to the prosperity of our cities and the health of our communities.

The efficient and safe movement of people and goods is crucial for greenhouse gas reduction, ensuring a thriving economy and supporting the well-being of all Canadians. Traffic congestion is a major problem in larger urban areas. Concerted efforts are required to alleviate traffic congestion in urban areas and minimize its detrimental impact on the environment, economy and society.

Ensuring adequate funding for urban transportation infrastructure is a major challenge for Canadian

URBANIZATION: A CHALLENGE TO TRANSPORTATION

The 2001 Census confirmed that Canada is becoming an increasingly urban nation:

- **Four Canadians in five live in urban areas of 10,000 people or more, where population growth has been 5.2% over the past decade.**
- **Population growth has been particularly strong in three highly urbanized regions: the extended Golden Horseshoe of southern Ontario; the Greater Montreal region; and the Lower Mainland of British Columbia and southern Vancouver Island. It was also strong in the Calgary-Edmonton corridor. Population growth in these four regions was 7.6%.**

cities. Urban transportation projects are already eligible for funding under the Canada Strategic Infrastructure Fund, as well as the \$2 billion Infrastructure Canada program announced in 2000.

In the Speech from the Throne, the government announced that it will put in place a 10-year program for infrastructure. This program, under the leadership of the Minister Responsible for Infrastructure, will contribute to reducing congestion in our cities.

To promote more sustainable urban transportation systems, transportation planners recommend a combination of options, such as demand management to optimize the use of existing transportation infrastructure, active promotion of alternatives to private vehicle use (such as expansion of infrastructure to permit walking and bicycling) and strategic investments in infrastructure to support urban tran-

sit systems. Other investment options include road and rail grade separations in urban centres, which can reduce traffic delays and lower fuel consumption and greenhouse gas emissions, and urban by-passes, which can help diminish congestion in urban centres while contributing to trade and national competitiveness by permitting through traffic to avoid congested conditions. Urban transportation solutions must be locally supported to be successful. Often they require the co-ordinated involvement of various levels of government.

→ **The government will place a high priority, when making strategic investments, on urban transportation needs, such as public transit, major urban by-passes and road and rail grade separations.**

Rural issues and remote access to the national transportation system

Effective transport infrastructure is also critical for rural areas and their ability to compete domestically and in world markets and to meet their broader socio-economic needs. Remote communities are critically dependent on essential transportation links for accessing the national transportation system on a year-round basis.

To address the needs of rural areas and remote communities, the Government of Canada intends to pursue its policy of encouraging local control of transportation infrastructure and innovative arrangements where these make sense (airports, ports, shortline railways). This is consistent with the view that the full potential of these assets in leveraging regional economic development can best be achieved when they are placed in local hands.

→ **The government intends to pursue its policy of encouraging local control of transportation infrastructure and of finding innovative arrangements to support transportation in rural Canada.**

At the same time, the federal government will target and leverage its limited resources:

- to essential services, i.e. remote areas where there is no alternative year-round service;
- to strategic investments supporting economic growth that benefit all of Canada; and
- to encourage partnerships with other levels of government and the private sector to address local infrastructure needs.

In respect of remote communities, the government's current commitments include:

- operation of designated remote airports under the National Airport Policy (pending a review of its long-term role at remote airports);
- operation of remote port facilities under the National Marine Policy;

- financial assistance under the existing Airports Capital Assistance Program (now extended to 2005) to eligible airports not owned or operated by the federal government, including in remote areas;
- ensuring that air navigation fees are not higher in the North than in other parts of Canada, under the *Civil Air Navigation Services Commercialization Act*; and
- support of passenger rail service to selected remote communities through subsidy payments for VIA Rail and private operators.

➔ **The government will continue to seek the best means to provide reasonable access to the national transportation system for remote communities where such access is not financially self-sufficient but is essential to their survival.**

CHAPTER 5

Protection of the Environment

As recognized in our vision for transportation, the vital importance of transport activity requires policies that ensure that the goals of economic efficiency, safety, security and environmental responsibility are taken into account. The environmental impacts of transportation can have serious implications for public health and our quality of life. Traffic in all modes produces air pollution, noise, community disruption and habitat destruction to varying degrees, while fossil fuel combustion produces greenhouse gases that contribute to climate change. Problems in urban areas are obviously greater and are exacerbated by congestion.

FEDERAL ACTIONS TO DATE

The government has taken significant steps to address environmental impacts within its jurisdiction. Actions to limit environmental damage have been extensive for decades, including regulation of emissions and noise from vehicles and craft, operating procedures at federal facilities and planning procedures for federal investments. Transport Canada's recent and current actions are included in its Sustainable Development Strategy, initiated in 1997 and revised in 2000, and in the federal *Action Plan 2000 on Climate Change*. Investments in local sustainable transportation options will also be eligible for federal funding through the recently announced Canada Strategic Infrastructure Fund.

Federal action has been responsible for some major environmental improvements in the last few decades, particularly reductions in air pollutants and other contaminants, through new technologies and changes in operating practices at federal facilities and federally regulated carriers. At the same time, much less success has been achieved in reducing transport fuel use and associated greenhouse gas emissions and in limiting urban road congestion. Both remain priorities for national action, but both require substantial actions beyond those of the federal government alone. Concerted action with provincial/territorial, regional and municipal governments is essential, in light of their various responsibilities for the network and for the policy instruments that are used to effect change.

Important elements of effective solutions lie directly in the hands of travellers, freight shippers, and commercial carriers, in how they choose to travel, ship, or operate, including choice of modes, vehicles, destinations, times, speed and distribution strategies. Continued development of necessary partnerships with other governments, industries and users remains a major priority for federal action.

TRENDS IN AIR POLLUTION AND GREENHOUSE GAS EMISSIONS

Transportation is a major source of emissions of the contaminants controlled by federal regulations. Based on the most recent data available, transportation is responsible for 52% of total emissions of nitrogen oxides, 21% of volatile organic compounds, 39% of carbon monoxide, and about 5% of the particulate matter of most concern (smaller than 2.5 microns). Federal standards for emissions of these contaminants from motor vehicles have been among the most extensive federal environmental measures in terms of the amount of equipment affected. They have also been among the most successful; transportation emissions of these contaminants have fallen in total over the last 20 years or so, despite substan-

tial increases in traffic. Further reductions will be forthcoming in the next decade as a result of compliance with announced standards. Emissions will eventually rise, however, if technology and standards remain static. Therefore, further measures will be needed to encourage alternative vehicle and fuel technologies.

Transportation, both personal and commercial, produces significant amounts of greenhouse gases (GHG). In fact, the transport sector is the largest single contributor to GHG emissions in Canada. Over 70% of these emissions are generated by road transportation, and about two-thirds occur in urban areas.

Canadians' individual choices about the vehicles they drive and when they use them can make a substantial difference in the GHGs emitted from transportation. Fuel consumption by cars and light trucks improved substantially after 1978, as a result of voluntary commitments by vehicle manufacturers to meet new vehicle standards equal to those in the United States. Total fuel consumed by cars and light trucks actually decreased for 20 years, despite an expansion in traffic. But it is now growing again, because vehicles are becoming larger and are being driven more frequently and for longer distances. Equally important, U.S.



fuel efficiency standards have not been changed substantially since 1986.

In the commercial sector, freight transportation choices are made in a complex business environment that imposes different requirements for speed, reliability and types of service (for example, refrigerated goods). These choices depend on a wide range of factors, including distance, door-to-door cost and access to infrastructure. Freight activity is expected to increase by some 60% by 2020, which means we will need to improve fuel efficiency within the freight modes and better integrate their activities to maximize the fuel and GHG efficiency of the system.

Overall, transport GHG emissions rose by more than 20% between 1990 and 2000. Some of that growth can be attributed to the restructuring of trade and transport patterns during the decade. Underlying demand for transport will continue to be tied to trends in economic activity and population growth, and emissions can be expected to keep rising unless these linkages are decoupled.

FUTURE POLICY DIRECTIONS ON GREENHOUSE GAS EMISSIONS

In support of our international commitments to reduce greenhouse gases, the Prime Minister signed ratification documents for the Kyoto Protocol. To achieve our objectives, the government has put forward a plan, the Climate Change Plan for Canada, the result of several years of consultations and discussions with the provinces, industry and other stakeholders.

The plan includes measures that will begin to slow the growth in transportation GHG emissions between 2000 and 2010. Achieving these reductions will require substantial investment in technological innovation and infrastructure, changes in the way goods are moved and changes in the travel behaviour of individual Canadians.

Reducing emissions from transportation represents both a major challenge and an important opportunity. Many of the measures that could be adopted in transportation may generate multiple benefits

beyond GHG reduction, including cleaner air, improved health, newer and more efficient transportation systems, better integration among modes and reduced congestion.

Strong measures are needed from all levels of government, acting on their own and jointly in partnership. The goal is to establish a policy framework and business climate that promote a more sustainable transportation system. All sectors of Canadian society, including transportation, will be called upon to do their part.

One key to success will be to focus our efforts where the biggest differences can be made. It is clear that the focus for action must be on vehicles and fuels that produce fewer emissions, increased use of alternative means of passenger travel and more efficient transportation of goods.

Efficient vehicles

The government will continue its efforts with industry to achieve a significant improvement in average fuel consumption for new vehicles, working towards the introduction of more fuel-efficient vehicle technologies into the Canadian market so as to achieve a 25% improvement by 2010. The government will also work to stimulate demand for new, more efficient vehicles. This will involve new campaigns aimed at improving the quality of information available to consumers regarding the fuel efficiency and carbon burden of vehicles on the market, including a new vehicle ranking system similar to the Energy Star system currently used on consumer appliances. These efforts will also help consumers improve their own vehicle maintenance and use practices, thus reducing emissions from vehicles now on the road.

Less GHG intensive fuels

When blended with gasoline at low concentrations (such as 10%), ethanol can reduce the GHG-intensiveness of our gasoline supply. Most vehicles in Canada today can operate safely on ethanol-blended gasoline (E10). The government proposes to work with provinces and territories to increase an initial target established in Action Plan 2000 so as to achieve a target of 35% of the national gasoline

supply to contain a 10% ethanol blend. Alternatively, there could be a standard for a certain percentage of fuel to be greenhouse gas free, which would encourage the development of cellulosic ethanol. While grain-based ethanol will play an important role in the short term, it is recognized that cellulosic ethanol is an emerging Canadian technology that holds much promise over the longer term.

Canada is also a world leader in new technologies for the production of biodiesel, which is made from low-cost waste materials and offers good potential for GHG and clean air benefits. The Plan proposes that federal, provincial and territorial governments collaborate on how to reach a target of 500 million litres of biodiesel production by 2010 using a variety of tools including incentives, standards and research and development.

Passenger transportation

In keeping with its commitment in the 2002 Speech from the Throne regarding modern infrastructure and a new strategy for a safe, efficient and environmentally responsible transportation system, the government proposes that strategic investments put greater emphasis on public transit infrastructure projects with provinces and territories. It will also explore collaborative efforts to establish supporting transportation management and land use planning frameworks.

The Climate Change Plan for Canada proposes an individual target of one tonne reduction for each Canadian, recognizing that some have the scope to do more and some to do less. Approximately 50% of personal GHG emissions in Canada are from passenger road transportation. Public education and outreach initiatives will provide Canadians with better information on how they can contribute.

Efficient freight transportation

The government will intensify its efforts with freight associations and industry to seek continuous improvements in the fuel efficiency of the freight system. This will engage all freight modes, as well as others involved in the supply chain. Voluntary agreements with industry will be nego-

tiated, and new education and awareness tools will be developed to promote and encourage take-up of new technologies and best practices. In particular, governments could work with industry and service providers to encourage the purchase and installation of equipment that could cost-effectively reduce emissions.

Transport Canada will also pursue public-private collaboration to promote the use of intermodal freight opportunities and to increase the use of lower-emissions vehicles and modes. This could be done through support for improvements in infrastructure and service levels, greater use of intelligent transportation systems, identifying and removing barriers to intermodal freight, harmonizing national and international standards and showcasing best practices and new technologies.

User responsibility for the full costs of transportation

Pricing could play a much broader role in addressing the environmental and social costs of transportation. Governments share a collective responsibility to ensure that the costs of transportation infrastructure are not excessive, including all the resources required to provide infrastructure and the environmental and social costs arising from its use. Costs are likely to be excessive if not taken fully into account in network planning and investment decisions and in users' transportation choices. The most direct way to ensure they are taken into account is to require that users pay directly in transportation prices for all the costs they impose, including infrastructure costs, social costs and environmental costs.

The first question is whether the financial costs of infrastructure are recovered appropriately from users – notably road infrastructure costs. Debate continues among industry participants and academics about the structure of efficient charges by type of user, type of facility and time of day.

The other, and potentially larger, question concerns the costs or harmful effects of transport that users impose on society generally – that is, effects such as congestion, accidents, pollutants, noise, disruption and so on. These are known in the jargon as ‘external costs’ or ‘externalities’. It is difficult to assign a dollar value to some of them, but many argue that users would ‘internalize’ them, or factor them into their decisions, if direct charges were introduced. There has been academic consideration of charging for these social costs for decades, along with strong support from environmental (and safety) advocates. The question has become less academic as research has provided estimates of the cost of these effects – for example, by drawing inferences from the amounts people appear willing to pay to avoid them. In some countries, the problems of congestion and associated environmental damage have been judged sufficiently urgent, and the research on costs sufficiently persuasive, that official policies of charging directly for social costs are being adopted. A resolution of the European Conference of Ministers of Transport accepts as a principle that users should be required to pay social costs and agrees to its implementation through regulations or pricing. The resolution sees this as a long-term objective. Some European countries have already introduced explicit surcharges for environmental costs, however, and a few countries worldwide have introduced charges for congestion.

Transport Canada has followed the academic and policy discussions on social cost internalization and has concluded that establishing a financial value for social costs in Canada remains very uncertain. Efficient and practical means of charging for social costs have not yet been designed, including how to reflect differences in mode, vehicle type, time of day and location when setting charges. Whether direct charges should be introduced, in addition to customary government planning and regulatory practices, is clearly a serious issue for public discussion. The issue is also greatly complicated by the differing responsibilities of the various levels of government. The greatest concerns surrounding social costs relate to roads in urban

areas, for which provinces, regions or municipalities share primary responsibility.

Joint action would be needed to achieve consistent, integrated national solutions to infrastructure pricing in all modes. The CTA Review Panel suggested a reconsideration of the charging mechanisms for the *financial* costs of providing road infrastructure as a reasonable first step, while investigation of *social* costs is pursued for the longer term. The Government of Canada is interested in collaborating with industry, provincial, territorial and municipal governments and with academia in the search for a broader consensus on the full costs of transportation and practical solutions.

OUR FUTURE ACTIONS

Understanding the full cost of transportation

As part of its *Sustainable Development Strategy 2001-2003*, Transport Canada committed to evaluating the impact of internalizing the environmental and social costs of transportation decisions. The department will continue to work on the issue and is interested in collaborating with industry and other governments in developing appropriate charging mechanisms for roads, initially incorporating real infrastructure costs, with the potential eventually to include environmental and social costs for all modes.

➔ **Transport Canada will increase its understanding of the full cost implications of, and better pricing signals for, the use of different modes of transportation.**

Integrating the environment in decision-making

The vision presented in Chapter 2 proposes a commitment to environmental responsibility. This will be included in the declaration of National Transportation Policy in the *Canada Transportation Act*, as recommended by the CTA Review Panel, and will be implemented through greater integration of environmental objectives in federal transportation policy and programs.

→ **Transport Canada will integrate environmental considerations more systematically in the decision-making process for transportation and specifically incorporate environmental responsibility as a fundamental principle in the National Transportation Policy set out in the *Canada Transportation Act*.**

Delivering on existing commitments

In its *Sustainable Development Strategy 2001-2003*, Transport Canada committed to fostering transportation that is sustainable in the widest sense of the word – economically, environmentally and socially. The strategy identified seven priority challenges: improving education and awareness of sustainable transportation; developing tools for better decisions; promoting adoption of sustainable transportation technology; improving environmental management of Transport Canada operations and lands; reducing air emissions; reducing pollution of water; and promoting efficient transportation. These priorities reflect our vision of respecting the environment as well as balancing our transportation policies to integrate environmental goals.

→ **Transport Canada will fully implement its *Sustainable Development Strategy 2001-2003* and build on its success in developing future strategies.**

Clean air

To improve Canada's air quality, the government committed \$120 million in 2001 to support its Clean Air Strategy and announced its plan, *Providing Cleaner Air for Canadians*. Environment Canada will lead implementation of the Clean Air Strategy over the next 10 years, including regulating motor vehicle exhaust emissions under the *Canadian Environmental Protection Act*. Transport Canada will continue its statutory programs related to aviation, marine and rail emissions. Its actions on urban and freight fuel consumption and GHG emissions in the

Climate Change Plan for Canada will also contribute to reductions in contaminant emissions.

→ **Transport Canada will continue to work with partners on improving standards and reducing air emissions from transportation.**

Taking action on climate change

In October 2000, the government announced its *Action Plan 2000 on Climate Change*, taking major steps toward meeting Canada's target under the Kyoto Protocol. The transportation component of the plan will potentially reduce GHG emissions (CO₂-equivalent) by 9 megatonnes in 2010. This action plan forms an important foundation for the reductions outlined for transportation in the government's Climate Change Plan for Canada.

Action Plan 2000 included five important initiatives in transportation:

- Through its \$40-million Urban Transportation Showcase Program, Transport Canada is working in partnership with other levels of government to test and demonstrate innovative and integrated sustainable transportation strategies and practices in our cities.
- Transport Canada is working in partnership with Natural Resources Canada and the industry to negotiate a significant voluntary improvement in fuel efficiency by 2010. This recognizes developments in the industry and in U.S. government policy. The initiative is supported by a comprehensive public awareness campaign to promote green choices, and Transport Canada is evaluating and showcasing advanced technology vehicles to help remove barriers to their uptake by consumers.
- The government is paving the way for the introduction of fuel cell vehicles, through the Canadian Transportation Fuel Cell Alliance, which will develop the necessary supporting framework for the fuelling infrastructure.
- Ethanol holds considerable promise as an alternative fuel. Action Plan 2000 introduced incen-

tives to increase the supply and use of ethanol produced from biomass so that a targeted 25% of gasoline could contain 10% ethanol.

- Through the \$14-million Freight Efficiency and Technology Initiative, Transport Canada is collaborating with Natural Resources Canada to promote greater efficiencies in freight transport. The program works with freight carriers to improve operating efficiency and environmental awareness and supports projects that demonstrate innovative tools, technologies and best practices.

Future policy directions on climate change were described at the beginning of this chapter. The government is strongly committed to taking further steps to reduce transport GHG emissions, in collaboration with other governments and the transportation industry.

- ➔ **Transport Canada will continue implementing the transportation component of the *Action Plan 2000 on Climate Change*, and collaborate with other government and industry partners to implement the new measures identified in the *Climate Change Plan for Canada*.**
- ➔ **Transport Canada will continue to lead in the development of additional measures in the transportation sector, consistent with Canada's national strategies on greenhouse gas emissions reduction.**

Responsible action must also be taken to avoid any potential disruption of the transportation system as a result of climate change.

- ➔ **Transport Canada will work to understand the vulnerabilities of the transportation system to the effects of climate change and to develop effective strategies to respond to harmful impacts.**

Cleaner water

Transportation activities contribute to water pollution through spills and leaks of fuels, oils and solid and hazardous waste by-products into rivers, lakes, oceans, harbours and beaches, as well as ground water. For instance, high concentrations of chloride related to the use of road salt on roadways or releases from salt storage sites or snow dumps have been monitored in ground and surface waters. As well, an additional environmental concern arises when ships release ballast water that introduces non-native aquatic species into Canadian waters.

Existing federal regulations and operating practices prevent or control the discharge of effluents and wastes and respond to accidental spills. Canada is committed to eliminating substandard shipping and supports strong port control measures. Transport Canada will work in collaboration with Fisheries and Oceans Canada and Environment Canada to improve the effectiveness of monitoring and inspection programs and develop more effective performance standards.

- ➔ **Transport Canada will continue to work with partners and stakeholders to develop Canadian standards, monitor compliance, influence global marine transportation standards, and ultimately reduce and prevent water pollution.**

Developing technological solutions for sustainable transportation

Transport Canada is committed to finding and applying innovative solutions to the challenges facing Canada's transportation sector. All five major elements of the *Action Plan 2000 on Climate Change* support the demonstration of technologies and best practices to help reduce greenhouse gas emissions in all modes, in partnership with transportation industries and users.

→ **Transport Canada will promote innovation in transportation by supporting the development and implementation of advanced technologies to support environmental sustainability.**

Supporting more environmentally friendly transportation choices

All jurisdictions must contribute to achieving the appropriate balance in the use of transport modes, taking environmental effects fully into account. Concrete steps are needed to encourage modal efficiency and the availability and use of intermodal services. The federal government's contribution to intermodal solutions will include support for modal connections and for public transit through the expanded infrastructure spending announced in Budget 2001 and the 10-year infrastructure program announced in the September 2002 Speech from the Throne. In addition, Transport Canada's Sustainable Development Strategy and the *Action Plan 2000 on Climate Change* include development



of management tools and demonstrations of effective measures to achieve the appropriate modal choices.

- ➔ **Transport Canada will work with other jurisdictions to augment the availability of more environmentally respectful forms of transportation.**

Transport Canada also intends to capitalize on the opportunities to travel ‘smarter’ – by encouraging transportation demand management, including transit priority, road and parking management, and integrated transportation planning. This will build on the lessons learned from the Urban Transportation Showcase Program.

- ➔ **Transport Canada will continue to work with provinces, municipalities and stakeholders to minimize congestion and pollution from motor vehicles in urban areas.**

Raising Canadians’ awareness

Through its Sustainable Development Strategy, Transport Canada committed to a number of initiatives that are raising Canadians’ awareness of the environmental impacts of their transportation behaviour, including the Moving on Sustainable Transportation program, the Green Commute Program, the Urban Transportation Showcase Program and others. The department will seek partners to develop a long-term, phased information campaign to increase public awareness, particularly about the consequences of transportation choices and the solutions available.

- ➔ **Transport Canada will expand its efforts to give Canadians better information on environmentally sustainable transportation choices by launching a national awareness campaign.**

Working with international partners

Increasingly, environmental challenges transcend boundaries. Solutions to key issues of climate change, air pollution, ozone depletion and water pollution require that Canada work closely with its major trading partners, particularly the United States. Transport Canada represents the government in a number of international agencies to advance sustainable transportation systems, including the United Nations, the Organisation for Economic Cooperation and Development, the International Civil Aviation Organization, the North American Commission for Environmental Cooperation and a number of transportation research bodies.

- ➔ **Transport Canada will enhance efforts to collaborate with the U.S. and the international community to address transport-related environmental issues.**

CHAPTER 6

Safety and Security

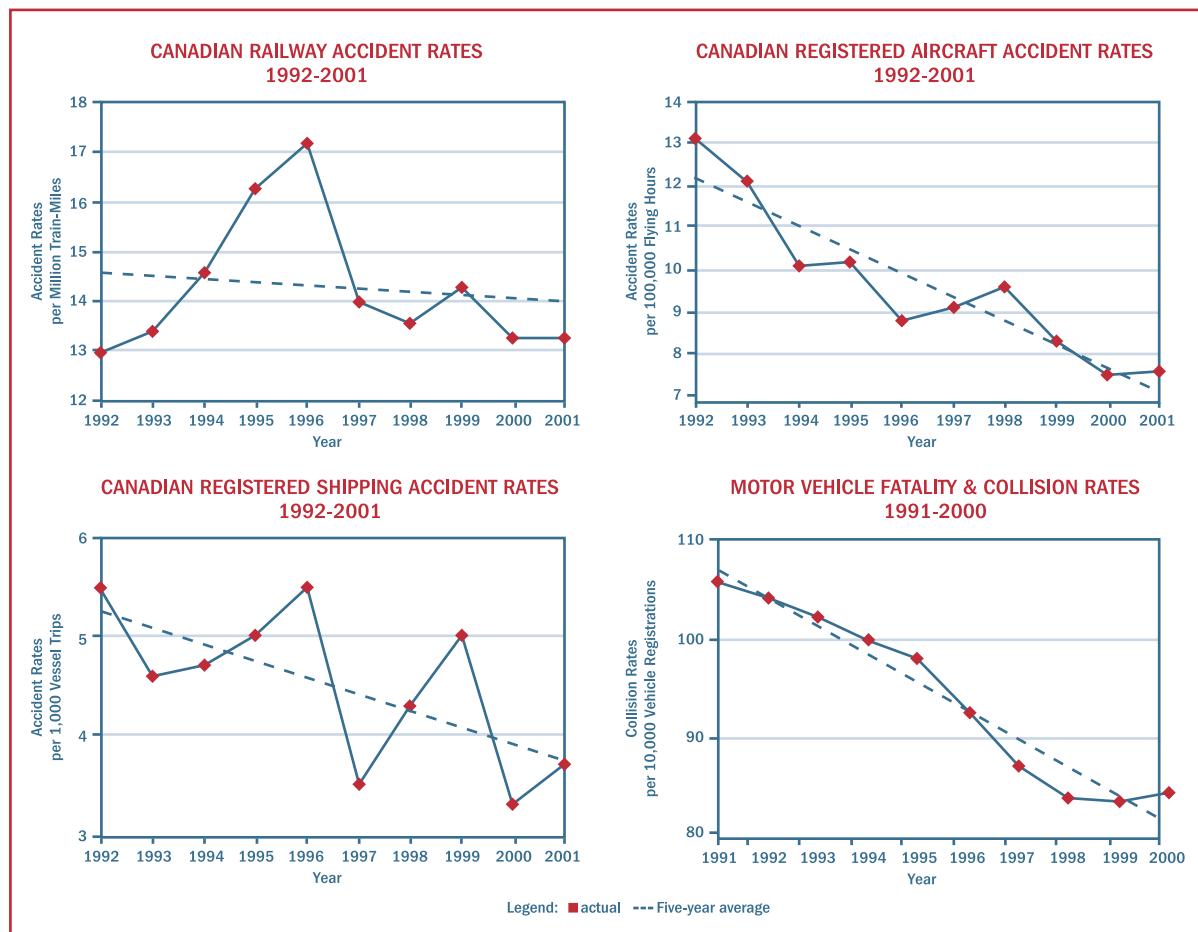
A safe and secure transportation system has long been a central objective of national transportation policy. Safety and security must be integrated, however, with efficiency and environmental objectives to support our vision of a sustainable transportation system for Canada. Achieving the right balance is the challenge, and smart regulation is part of the solution.

OUR ACHIEVEMENTS

Canada has one of the safest and most secure transportation systems in the world. The long-standing focus on safety by industry participants has contributed to fewer accidents and fatalities, despite increases in traffic. The accompanying graphs show downward trends in accident rates for all modes of transport over the last 10 years.

Canada is among the world leaders in safety management. There is a long tradition of research to identify safety problems and to develop solutions. Governments have taken effective steps to promote and implement such solutions through actions such as legislation, regulation, programs and education. Federal, provincial and territorial governments have co-operated extensively in these efforts, particularly in areas of shared jurisdiction, such as road safety. The participation of transportation industry stakeholders, including carriers and manufacturers, has also been an essential element in progress to date.

Systematic safety management has included the development of explicit goals for safety in each of the main modes of transportation, along with strategies for their attainment. These strategies reflect the transformation resulting from commercialization and divestiture, including Transport Canada's oversight role and responsibility as safety regulator for new operating entities. All these efforts remain in place and form the basis of the federal action plan for transportation safety and security. In addition, following the events of September 11, 2001, steps were taken immediately to enhance the security of transportation and border crossings through programs to increase vigilance and inspection in all modes. Several legislative initiatives were also introduced, including the proposed *Public Safety Act, 2002*, to improve Canadians' safety, to prevent terrorist attacks and to respond quickly if further threats should arise. As well, amendments to the *Aeronautics Act* give air carriers the ability to provide limited advance data on passengers to foreign authorities for security purposes. Such information



is currently being provided to the United States as required by U.S. law.

The action plan outlined below continues federal efforts to apply rigorous risk management principles to safety and security across all modes, based on sound research, analytical comparisons of risk and the evaluation of prospective interventions to determine priorities. It continues the process of shifting the emphasis from prescriptive regulation to a comprehensive approach and commitment to achieving safety, and it seeks interjurisdictional consistency in safety and security, domestically and internationally.

ACTIONS TAKEN AND PROPOSED

In 1999, Transport Canada published a *Strategic Plan for Safety and Security*, based on extensive consultation with stakeholders. The plan focused

on safe practices, risk reduction, stakeholder awareness, effective intervention and the periodic measurement of performance. It also serves as an umbrella under which mode-specific strategic plans and programs operate. As the plan is about to enter its fourth year of implementation, events and pressures from both the external and the internal environment indicate a need to revise and update the plan.

➔ **Transport Canada will continue to implement the strategies of the current *Strategic Plan for Safety and Security*. A formal evaluation of the plan's performance and a subsequent update of the plan will be completed.**

A NEW APPROACH TO SAFETY – SMART REGULATION

In many areas, Transport Canada has been moving away from a prescriptive, ‘command and control’ approach to safety to one that recognizes transportation service providers as being primarily responsible for day-to-day implementation of safety measures and for demonstrating achievement of the required level of safety. Our intention is to make greater use of the full range of compliance and enforcement tools available to promote safe practices and to reduce risk. This does not imply any less resolve to intervene where necessary. Rather, our intention is to rely less on traditional prescriptive approaches in regulation, compliance and enforcement and to consider the use of additional and alternative tools. As well, with the support of safety-related research and development, we also expect this approach to stimulate innovation and the use of new safety-related technology in the traditional and emerging sectors of the transportation industry.

→ **Transport Canada will continue reforms aimed at establishing a performance-based approach to safety and security.**

Legislative and regulatory reform

The success of our safety oversight depends on sound legislation and regulations that provide direction, authority and flexibility for the department’s role. Many transportation safety statutes have been established or revamped recently or are in the process of being modernized to reflect this requirement. These include the *Canada Shipping Act, 2001*, the *Railway Safety Act*, the *Aeronautics Act*, the *Transportation Appeal Tribunal of Canada Act*, the *Motor Vehicle Transport Act* and the *Motor Vehicle Safety Act*.

Many of these statutes allow the department to develop safety management systems regulations, requiring industry to develop strategies for managing the safety of their operations and to report on these strategies to the department. This will ensure that safety is appropriately encouraged and supported with management time, corporate resources, performance measurement and monitoring. Safety management systems requirements will enable industry to demonstrate commitment to the safety of employees, customers and the public in a concrete and visible manner.

→ **Transport Canada will continue to work to revise transportation safety statutes and regulations, as required, to enhance the safety and security of the transportation system.**

Consultation

To be effective, our strategic approach to safety and security requires the collaboration and buy-in of all stakeholders. Transport Canada has established and will continue, now more than ever, to support the consultative mechanisms that are integral to developing its safety legislation, regulations and policies. We will continue to work closely, for example, with the Canadian Aviation Regulatory Advisory Council, the Canadian Marine Advisory Council, the Rail Safety Consultative Committee, the Canadian Council of Motor Transport Administrators and the Minister’s Advisory Council on the Transportation of Dangerous Goods, along with domestic and international industry associations and other interested stakeholders, in our pursuit of the safest transportation system.

→ **Concerted efforts will continue to be made to ensure a transparent legislative and regulatory process that engages our partners and stakeholders in the pursuit of the safest transportation system in the world.**

Safety culture

Establishing a safety culture is essential to building a safe and secure transportation system. Requirements for safety management systems, along with the other strategies outlined above, reflect the partnership approach that is essential for the continued safety of Canada's transportation system. These strategies, together with public and industry awareness activities in all modes of transportation, are designed to contribute to greater industry engagement and accountability to foster the development of a safety culture at all levels of the transportation sector.

→ **Transport Canada, with its partners, will continue to foster a strong safety culture in support of the safest transportation system in the world.**

Harmonization

Harmonization of safety standards not only responds to efficiency requirements in a globalized economy but also enhances our ability to improve safety and security. By working effectively with the international community and by taking an active role in international regulatory development, the Government of Canada has contributed to improving transportation safety and security standards worldwide. As an example, the international marine safety community is striving to rid the world of substandard shipping. Through the Port State Control initiative, the foreign vessels entering a sovereign state's waters are boarded and inspected to verify compliance with various major international maritime conventions.

Canada is also engaged in numerous other harmonization activities at all levels, including the development of international motor vehicle safety regulations through the United Nations, international civil aviation regulations through the International Civil Aviation Organization, consistent approaches to rail safety among NAFTA partners, and the national application of a consistent motor carrier safety regime by all jurisdictions in Canada.

→ **Transport Canada will continue to promote a co-operative approach to the domestic and international harmonization of transportation safety and security standards.**

MODE-SPECIFIC STRATEGIC INITIATIVES

The approach and initiatives presented above provide the foundation for several sector-specific strategic initiatives, including many that contain precise safety targets. Implementation of these initiatives will address key safety and security challenges and enhance the transportation system's performance. Notable examples of such initiatives include the following:

Road Safety Vision 2010

Road Safety Vision 2010 aims to improve the safety of roads by reducing the average number of road fatalities and serious injuries in Canada by 30% by 2010. Achieving such a reduction would result in a substantial contribution to safety, as road collisions continue to account for 90% of all transportation-related deaths.

→ **Transport Canada will collaborate with all its *Road Safety Vision 2010* partners and show national leadership to achieve the program's objective.**

Civil Aviation, Flight 2005

Flight 2005 is designed to respond to key challenges facing aviation safety in Canada, including most notably, growth in traffic, environmental concerns and new technologies. Under this program, business plans, including target completion dates for various initiatives, were developed and published. Two of the more significant initiatives are: (1) implementation of the safety management system concept, requiring aviation organizations to develop strategies for managing the safety of their operations and

to report on these strategies; and (2) the comprehensive assessment of behavioural and organizational situations that contribute to human errors in the aviation industry and the development of appropriate mitigation measures.

→ **Transport Canada will continue working with the aviation industry to further improve aviation safety in Canada in pursuit of *Flight 2005* targets.**

Rail Safety, *Direction 2006* and Beyond

The primary objective of *Direction 2006* is to increase public and industry awareness of the safety issues surrounding railway rights-of-way and grade crossings and to achieve a 50% reduction in the number of railway crossing collisions and trespassing incidents by 2006. The program is a partnership between public and private sector stakeholders, including Transport Canada, provincial and municipal governments, law enforcement agencies, safety organizations, and railway companies and their unions. *Direction 2006* is an example of the success that can be achieved to enhance railway safety by establishing and implementing integrated programs, each contributing to reducing accidents and incidents involving railways.



→ **Transport Canada will continue to work with its partners to contribute**

actively to meeting the objectives of *Direction 2006* and to develop and implement integrated and effective rail safety programs.

Marine Safety, *The Way Ahead* and *The Next Wave*

Marine Safety's current strategic plan, *The Way Ahead, 1997-2002*, reached full maturity at the end of last year. While much of the vision it articulates is still valid, planning is under way for the follow-on to these strategic priorities, entitled *Marine Safety 2003-2010, The Next Wave*. The linchpin of the current plan – enactment of the *Canada Shipping Act, 2001* – became a reality in November 2001. The revised plan will build on the vision, which calls for an enhanced regulatory framework to support a culture focused on safety and emphasizes the establishment of performance-based requirements; innovation, including the use of new technology; and the development of quality assurance programs. Information systems will be revamped to ensure that data collection systems provide the best possible information for safety planning and decision-making.

→ **Transport Canada will work in partnership with the marine industry toward the future for marine safety as envisaged in *The Way Ahead* and *The Next Wave*.**

Transportation of Dangerous Goods, Target 2010

The department is in the process of developing a document entitled "Transportation of Dangerous Goods, Target 2010". Integrating the fundamental concepts of the *Safety and Security Strategic Plan*, this document will set the stage for improving an already safe system for transporting dangerous goods. It will aim for further improvements in the rate of industry compliance with transportation of dangerous goods legislation and regulations by 2010, in support of the ultimate objective of no fatalities, serious injuries or significant dam-

age to property or to the environment as a result of accidental releases of dangerous goods.

→ **Transport Canada will develop and implement *Transportation of Dangerous Goods, Target 2010*.**

TRANSPORTATION SECURITY

Following the events of September 11, 2001, the government took action on several fronts to enhance transportation security. Initiatives introduced to improve aviation security include:

- enhancements to pre-boarding screening of passengers, including the purchase and deployment of new explosives detection systems;
- a national program of RCMP officers on selected flights;
- mandating the locking of cockpit doors on aircraft for the duration of flights; and
- mandatory requirements for fortified cockpit doors and funding to assist with security modifications to existing aircraft.

The government also set up a new Crown corporation, the Canadian Air Transport Security Authority, with responsibility for several key aviation security services:

- the pre-board screening of passengers, screening of non-passengers accessing restricted areas and all screening equipment at airports, including explosives detection systems;
- arrangements with the RCMP for officers on board selected domestic, transborder and other international flights;
- contributions toward the costs of airport policing; and
- management of airport restricted area passes in conjunction with airport authorities.

Working in co-operation with other departments and agencies and with stakeholders, additional security enhancements have also been made in the marine transportation sector. Initiatives include the following:

- requiring vessels to give 96 hours' notice before entering Canadian waters (formerly 24 hours);
- working with U.S. authorities to enhance security in the Great Lakes and Seaway system by pre-screening ships before they enter the system, conducting on-board inspections before ships proceed to port, and sharing intelligence on ships entering the system;
- increased security patrols and surveillance by port authorities; and
- increased coastal surveillance.

The government has also been working with other jurisdictions and with industry stakeholders to enhance the security of road and rail traffic. The government is continuing to work with stakeholders to implement security requirements and practices appropriate to the needs of each mode of transportation. Technological enhancements to security, such as explosives detection systems, intelligent pass systems incorporating biometrics, intelligent transportation systems and modification in aircraft design, are being analyzed with the goal of applying the best technologies in all transportation modes.

The government is also working with the United States and with other countries and organizations, including the International Maritime Organization and the International Civil Aviation Organization, to develop a more secure international regime that provides enhanced security while facilitating the efficient flow of people and goods in the air, maritime and surface modes. It is also working in collaboration with provinces, the private sector and U.S. authorities to promote transportation worker screening processes and credentials that facilitate secure and efficient cross-border flows, enable market access and complement harmonized border inspection processes.



→ **The government will seek to prevent, minimize and respond effectively to threats to the security of the national transportation system while promoting an efficient border.**

Integration of modal plans

The department's Safety and Security Group has been focusing in the past few years on cross-modal safety issues and sharing best practices in support of an integrated approach to safety and security.

The initiatives just described are proving successful in moving Transport Canada in the right direction. We can improve our global strategic outlook further by aligning modal strategies on a common planning horizon. This would provide a defined timeframe for re-evaluating and modifying our strategies as required.

→ **Transport Canada will work with stakeholders, in a timely manner, with the goal of aligning its planning horizon to the year 2010 for strategic safety and security initiatives in all modes of transport.**

CHAPTER 7

Innovation and Skills

The preceding chapters set out a vision for sustainable transportation and proposed directions to implement this vision in the key areas of marketplace frameworks, infrastructure, environment, and safety and security. Success in these areas will depend on the sector's ability to innovate and on the skills of its workers.

NEW CHALLENGES AHEAD

Historically, transportation has been identified as a sector that is both capital- and labour-intensive. Increasingly, however, it is also becoming a knowledge-based sector. In a knowledge-based economy, innovation is critical to maintaining a safe, secure, productive and competitive transportation sector. From the research, development and application of technologies that contribute to intelligent transportation systems, to the adoption of new management practices, Canada's transportation system will need to see improved efficiency, environmental performance, safety and security through innovation.

Transportation innovations will require additional qualifications and multiple skills from transportation sector employees. Intense competition for skilled workers will challenge the sector to find original and creative ways to attract, develop and retain its workforce, for which life-long learning will be an essential element. Skills shortages in the

workforce will be compounded by the fact that almost all segments of the transportation industry now face increasing retirement rates. In some areas at least 50% of existing workers could retire in the next 5 to 10 years. The range of transportation-related occupations and trades likely to be affected includes pilots, air traffic controllers, truck drivers, engineers, scientists, mechanics and ships' officers. At the same time, the pool of younger workers is declining, and competition for younger skilled workers will come from around the world.

The transportation sector and its partners require innovative approaches to exploit opportunities and solve problems, a strong research and development capacity, and the ability to develop new knowledge and technology quickly and deploy them rapidly where they are needed. Government in turn must foster a climate conducive to innovation, and the entire sector must work together to ensure a highly skilled, adaptable workforce.

PROMOTING AN INNOVATIVE TRANSPORTATION SECTOR

Through its Transportation Development Centre (TDC), Transport Canada is actively involved in transportation research and development. TDC manages a multi-modal R&D program that focuses on improving safety, security, energy efficiency and accessibility. This activity supports the government's priority of augmenting research capacity to respond to emerging public policy priorities and to enhance commercialization of knowledge.

TDC programs extend through the different stages of the innovation cycle – from concept definition to demonstration and deployment. Projects are contracted out to a variety of organizations across Canada – manufacturers, operators, research groups, universities and consultants. A number of research projects are also co-funded by TDC's research partners in other federal departments, other governments in Canada and abroad, and the private sector.



FEDERAL SUPPORT FOR TECHNOLOGICAL INNOVATIONS AND R&D

The Government of Canada has established mechanisms for developing and commercializing innovative technologies. While these are not targeted solely to the transportation sector, transportation often benefits directly. Prominent examples include these:

- The *Canadian Foundation for Innovation* has funded research on intelligent transportation systems, roads and pavement development, road safety, and fuel cells.
- *Technology Partnerships Canada* has funded research on clean vehicle technologies, aerospace and aircraft maintenance, airbag technologies, marine navigation, airport pollution, and naval ship wastewater pollution.
- The *Industrial Research Assistance Program* helps small and medium-sized enterprises meet technology challenges.
- The *Sustainable Development Technology Fund* encourages the development and demonstration of new technologies, especially those aimed at reducing greenhouse gas emissions and improving air quality.
- The *Program of Energy Research and Development* includes funding for “Cleaner Transportation for the Future”.
- The *Climate Change Action Fund* is intended to support early actions to reduce greenhouse gas emissions.
- The focus of the *Canadian Transportation Fuel Cell Alliance* is hydrogen fuelling infrastructure development for fuel cell vehicles.
- The *Green Municipal Investment Fund* can be used for, among other things, supporting the conversion of transit vehicles to operate on more sustainable fuels.

The government also promotes university R&D through such programs as the *Networks of Centres of Excellence*, the *Canada Research Chairs Program* and the *Industrial Research Chairs Program*. All have the potential to benefit transportation-related research, a prime example being AUTO 21, a national research initiative supported through the *Networks of Centres of Excellence*.

Current research examples supporting Transport Canada's priorities include the following:

- **Safety** – a next-generation, low-cost emergency locator transmitter for aircraft; highway-railway grade crossing and trespassing research; projects on commercial driver fatigue;
- **Skills development and training** – an ice navigation simulator to facilitate training and reduce requirements for on-board experience;
- **Security** – a container tracking system in a Canadian port to assess its suitability in identifying container movements;
- **Environment** – developing safety and performance criteria for alternative fuels;
- **Accessibility** – collecting data for research on facilities to assist travellers with disabilities on-board small aircraft; and
- **Standards** for intelligent transportation system applications.

At the federal level, Canada has an excellent base of research activities, programs and partnerships on which to build. In February 2002, the government launched Canada's Innovation Strategy, explained in two complementary papers: *Achieving Excellence: Investing in People, Knowledge and Opportunity* and *Knowledge Matters: Skills and Learning for Canadians*. Transport Canada is committed to working with public, private and academic partners to ensure that the transportation sector remains vibrant and creative. Research and development will play a crucial role, but so too will efforts to ensure the sector has a highly skilled workforce and the conditions conducive to innovation, so that it can remain a strong contributor to Canada's wealth and well-being.

Canada's Innovation Strategy highlights the importance of innovation clusters; these are internationally competitive growth centres with institutions devoted to R&D and a strong base of entrepreneurial firms. Nurturing clusters is an important element of the Innovation Strategy. Clusters represent concentrated economic activity that is enabled by effective transportation. Transport Canada and its sector partners will need to focus a high level of awareness on the transportation needs of both

established and emerging innovation clusters if they are to flourish.

Federal research capacity is but one means to promote new ideas in transportation. Other equally important areas that advance the innovation agenda in the sector include the broader R&D environment, university research, intelligent transportation systems (ITS), and innovation in business practices.

Increasing research and development

The transport sector needs to increase its commitment to research and developments through partnership-based R&D projects. Transport Canada needs to play a stronger role as the catalyst and liaison to connect transportation partners with potential collaborators from outside the transportation industry. Sectors where co-operation will potentially benefit transportation include the information technology and environment sectors.

Subject to funding availability, the department will focus on advancing R&D in five areas where public interest benefits are linked to established federal priorities:

- **Intermodal integration:** facilitating the seamless movement of the travelling public, including persons with disabilities, by improving intercity and commuter connections; facilitating the transfer of goods between modes by focusing on infrastructure improvements at intermodal transfer points; increasing efficiency at major trade gateways, including ports and border crossings; and facilitating e-commerce adoption.
- **Congestion:** reducing congestion in urban areas and key transportation corridors by focusing on ITS; urban transportation planning and engineering; public transit infrastructure; urban rail technology; and transportation demand management.
- **Environmental pressures:** decreasing the impact on human health and the environment by focusing on urban transit and system integration; advanced vehicle and fuel efficiency technologies; fuel cells and hybrid propulsion systems; and ecosystem monitoring.

- **Safety and security:** understanding human factors in accidents; mitigating the delays and costs of increased security measures by advancing new technologies in areas such as automation and passenger screening technologies; instructional technologies; advanced vehicle controls; explosives detection systems; aircraft modification; and container screening.
- **Accessibility:** reducing the barriers to the mobility of persons with disabilities, considering the various needs of these persons, the physical and operational barriers, the various stages in which these barriers could originate (planning, development, design, operations) and the many transportation stakeholders involved (e.g. equipment manufacturers, carriers, infrastructure providers, incidental services).

The department will also continue to identify and take advantage of opportunities that advance key transportation goals. Examples of support include: the Federal Program of Energy R&D, which provides funding for the development of more environmentally friendly transportation; the department's investments under its ITS Deployment and Integration Plan; and the recently announced Freight Sustainability Demonstration Program (funded through *Action Plan 2000 on Climate Change*) which will fund demonstrations and evaluations of innovative tools, technologies and best practices for reducing greenhouse gas emissions resulting from freight transportation in all modes.

- ➔ **Transport Canada will work with transportation and non-transportation sector stakeholders to increase transportation-related research and development.**

Supporting university research

Universities are key players in supporting Canada's capacity to innovate. They contribute to developing a highly skilled workforce, perform research to fuel competitiveness, and collaborate with the private sector and government to develop new technologies and spin-off companies. While Canada's Innovation Strategy acknowledges that more

needs to be done to support our research infrastructure, significant investments have been made in recent years. With appropriate interest and commitment by researchers, federal mechanisms like the Networks of Centres of Excellence, the Canada Foundation for Innovation, and the Canada Research Chairs could provide opportunities to fund research that will contribute to a more innovative, sustainable transportation sector.

- ➔ **Transport Canada will explore, with partners, mechanisms to facilitate increased research on transportation and transportation-related issues in the private sector and at universities and will explore the range of existing federal programs to identify opportunities to further transportation R&D.**
- ➔ **Transport Canada will explore interest in establishing a visiting chair program at Transport Canada to create opportunities for research on government priorities with the university sector.**

Intelligent transportation systems

Intelligent transportation systems involve the application of computers, communications, control and sensor technology, and management strategies in an integrated manner to improve the functioning of the transportation system in all modes. Used effectively, ITS promotes new ways of understanding, operating, expanding, refining, reconfiguring and using the transportation system. Over the past number of years, the public and private sectors have invested millions of dollars in ITS research and development and in initial deployment of the resulting products and services.

The objective of the ITS Plan, launched in November 1999, is to advance the safety, efficiency and security of the multi-modal transportation system, provide increased access to transportation services, and reduce fuel consumption and environmental impact. To help accomplish these goals, the Plan prescribes a broad set of policy, deployment, and research and development activities.



In particular, Transport Canada is leading an initiative, in partnership with the private and public sectors, to develop a 5-year R&D plan to foster innovation and help position the ITS industry, and the transportation sector more generally, for the challenges of the future. The objectives of the R&D plan reflect the department's priorities of efficiency, safety, security, environmental sustainability, mobility and accessibility. The following specific areas are ITS R&D priorities:

- developing national standards;
- traffic management systems, especially incident detection and response, and route diversion strategies;
- commercial vehicle operation;
- advanced public transportation systems: fare systems, fleet management and traveller information systems;
- road weather information systems;
- transportation security for goods and people, including border and container security; and
- accessibility.

- **Transport Canada will continue to work with its partners in developing an ITS R&D Plan in an effort to accelerate commercialization of knowledge and technology uptake in the area of ITS.**
- **Transport Canada will continue to promote and support the adoption of ITS technologies to advance the safety, efficiency and security of the multi-modal transportation system, provide increased access to transportation services, and reduce fuel consumption and environmental harm.**

Business transformation and government on-line

With wireless technology and Internet connections, information technology is no longer simply about automating existing processes and increasing productivity. It has the power to profoundly transform the business environment by reinventing the relationship with customers and clients. It also creates tremendous opportunities for both the private and the public sector.

To be competitive and ensure long-term success, private sector firms must focus on their future markets and apply a well-researched logistics strategy. Transport is a key element of such strategies.

A single commercial transaction can now involve more than 20 partners in what is known as the 'value chain', including in particular numerous transport firms. Today, integrated value chains, not single firms, deliver on promises to customers. Synchronizing all members of the value chain is becoming the key focus of innovation for partners in the integrated value chain, including transportation firms. Transport Canada, together with other government and industry partners, is supporting Industry Canada's development of a technology roadmap for logistics. This roadmap is a tool to chart market directions, forecast technological developments and inform strategic choices by firms. This tool will help Canadian firms close

the gap where they lag behind competitors in other countries.

For its part, through the Government On-Line initiative, the Government of Canada is examining business transformation opportunities made possible by the use of advanced technology. The regulatory functions of completing inspections, issuing permits, processing licence payments, and ensuring Canadians' safety and security can now be addressed more effectively through the judicious use of new technology.

The work of Transport Canada is becoming more complex because of changing demographics, knowledge transfer requirements, expectations for immediate access to information, shifting public/private sector roles and increased security requirements. Wireless technology and business transformation activities can improve service delivery and equip Transport Canada personnel to respond to challenges and pressures in the transportation industry.

- ➔ **Transport Canada will continue working on the Industry Canada-led initiative to develop, with other government and industry partners, a technology roadmap for logistics.**
- ➔ **Transport Canada will explore means of stimulating the adoption of e-commerce technology by the transportation sector consistent with the Connecting Canadians agenda.**
- ➔ **Transport Canada will increase the provision of services to the sector through the Government On-Line initiative.**

MEETING THE SKILLS CHALLENGE

The transportation sector is increasingly a knowledge-based one. As both customers and international competitors modernize, the transportation

sector must respond. This creates demands for diverse and complex skills transcending those traditionally associated with transportation.



FEDERAL MECHANISMS TO PROMOTE SKILLS DEVELOPMENT

A variety of initiatives promote skills development, and Canada's Innovation Strategy outlines ways for the Government of Canada to work with partners to strengthen its support in this area. Existing mechanisms include these:

- **Canada Study Grants**
- **Official Languages in Education Program**
- **Canada Millennium Scholarship Foundation**
- **Canada Education Savings Grants**
- **Promotion of trade and technical careers through Skills Canada and the Canadian Apprenticeship Forum and support through the Employment Insurance program**
- **Labour Market Development Agreements**
- **Aboriginal Human Resource Development Strategy**
- **Employability Assistance for People with Disabilities**
- **National Literacy Secretariat**
- **Support to Sector Councils**
- **Community Learning Networks**
- **Programs to assist the settlement and integration of immigrants**

Like other sectors of the economy, the transportation sector faces the additional barrier of structural change in the labour market. The population is aging, labour is growing ever more mobile, and other sectors – indeed other countries – will compete to attract a shrinking pool of workers. The transportation sector will therefore have to recruit, retain and retrain a motivated, adaptable workforce with the ability and opportunity to learn continuously.

There is evidence that certain traditional transportation skills are in short supply and others are threatened by imminent waves of retirement. Growth in the industry means that even retaining current numbers, already a challenge, will prove insufficient to meet the demand. Skills now in short supply include pilots, truck drivers, marine officers, aircraft technologists, and port and airport technical staff. Even these traditional jobs require not just new skills for new technologies, but the ability to adapt throughout a career to a work environment of ever-increasing complexity.

Non-traditional skills are also in short supply in the sector. Emerging fields like ITS design, logistics, and security require a critical mass of skilled labour. Meanwhile, skills in demand in other sectors may not be available to transportation firms. For example the sector faces nation-wide shortages of software skills, technical and engineering skills, tool and die makers, and computer numerical control technicians. There is also a shortage of management candidates with the skills to be effective decision-makers in a complex, competitive industry.

Underpinning these skills is higher education. The sector will need to work closely with universities and colleges to ensure that transportation programs are available, up-to-date and attracting capable candidates. The accessibility of life-long learning will be an essential component of Canada's innovation environment.

To attract employment candidates, the transportation industry will have to be more effective at overcoming stereotypes and selling itself, especially to young Canadians entering the labour market, as a vibrant knowledge-based industry. It will also

have to be innovative in arranging working conditions to minimize the adverse effects of jobs that may involve working outdoors, in remote areas, or on long shifts.

These challenges are considerable but not insuperable. Transport Canada is committed to working with the transportation sector, universities and colleges, other governments and other government departments to ensure the continued availability of a world-class workforce for the transportation sector.

Supporting and creating transportation sector councils

Led by Human Resources Development Canada, the government supports a range of industry-led sector councils developing sector-specific strategies for their human resource needs. These councils are critical to understanding the labour needs of the sector and responding to them. The councils contribute to a range of initiatives, including:

- generating market information such as occupation studies;
- developing national occupational skills standards for sectors, which provide an essential starting point for educators and trainers and help workers and employers determine training needs; and
- providing curriculum advice for learning institutions that can be applied to education, training or to the certification of skilled workers, according to standards established across an industry.

Budget 2001 provided \$24 million over the next two years to increase support for exemplary councils and expand the network of councils to other strategic sectors of the economy. When fully phased in, the government's support of sector councils will double to \$60 million per year. This represents an opportunity for the transportation sector; while Transport Canada will seek to facilitate the creation of new sector councils, leadership must come from partners active in the sector, based on clearly demonstrated need. To address its future skills needs, the transportation sector must take full advantage of funding, both by ensuring that existing

councils are exemplary in their functioning, so as to maintain funding, and by advancing the creation of new councils to meet the sector's needs.

Current transportation-related sector councils include the Canadian Trucking Human Resources Council, the Canadian Aviation Maintenance Council, the Motor Carrier Passenger Council of Canada and the Canadian Automotive Repair and Service Council. Studies are now underway to assess the possibility of creating new councils in rail transportation and the marine sector.

→ **Transport Canada will continue to work in close collaboration with transportation-related sector councils, as well as assisting sectoral partners considering the creation of new councils.**

Creating partnerships for skills development

While training and education are primarily a provincial responsibility, the federal government has played an important role in responding to continuous learning requirements. Further analysis and partnerships with industry, educational institutions and government will be required to identify areas of potential skill shortages and

means to alleviate mismatches between training and education programs and industry needs.

Apprenticeship, internship and other placement programs will also be critical for training knowledge workers and upgrading the skills of the current transportation workforce. For example, creating transportation-related chairs at Canadian universities or exploring additional Networks of Centres of Excellence would both attract students to the study of transportation-related issues and improve the overall level of instruction available to them.

→ **Transport Canada will work with sectoral partners to identify areas of potential skills shortages in the transportation sector and the means of addressing these shortages.**

→ **Transport Canada will explore partnerships to promote and support programs leading to the development of transportation-specific skills and knowledge in Canadian universities and colleges.**



CONCLUSION

Transportation plays a key role in support of Canada's economic activity and in the day-to-day lives of Canadians. Throughout Canada's early development, government made use of regulatory instruments to ensure that transportation was a direct enabler of various social and economic objectives. Measures were adopted to enhance its safety and security, accessibility, and economic efficiency, as well as to minimize its impact on the physical environment.

Changes in Canadian society gradually altered the public policy outlook on the transportation system. Reduction of economic regulation evolved through the period between 1960 and 1990 and was followed in the 1990s by major changes in the governance of the public portions of the system.

What has not changed is the pervasive importance of transportation to Canada's wealth and well-being. Large population centres, like smaller and more remote communities, need the physical connections offered by the transportation system. Although service levels and modal choices necessarily vary across the system, transportation remains a crucial aspect in everyone's daily life – ensuring access to the necessities to maintain health and quality of life, enabling the pursuit of economic activities, providing access to education and recreation, and maintaining contact with family and friends.

With our trade-oriented economy, Canada has always been aware that its transportation system

must take into account and adapt to factors outside its boundaries as well as to the aspirations of Canadians in their daily lives. Globalization and increased North American integration have elevated competitive pressure on Canadian firms and the workforce. The transportation system is a major petroleum user which constitutes a significant challenge as Canada defines its contribution to the world response to global warming and climate change. Security initiatives have acquired new prominence and require changes and new investments by all modes of transportation to allay public concerns about increased risks.

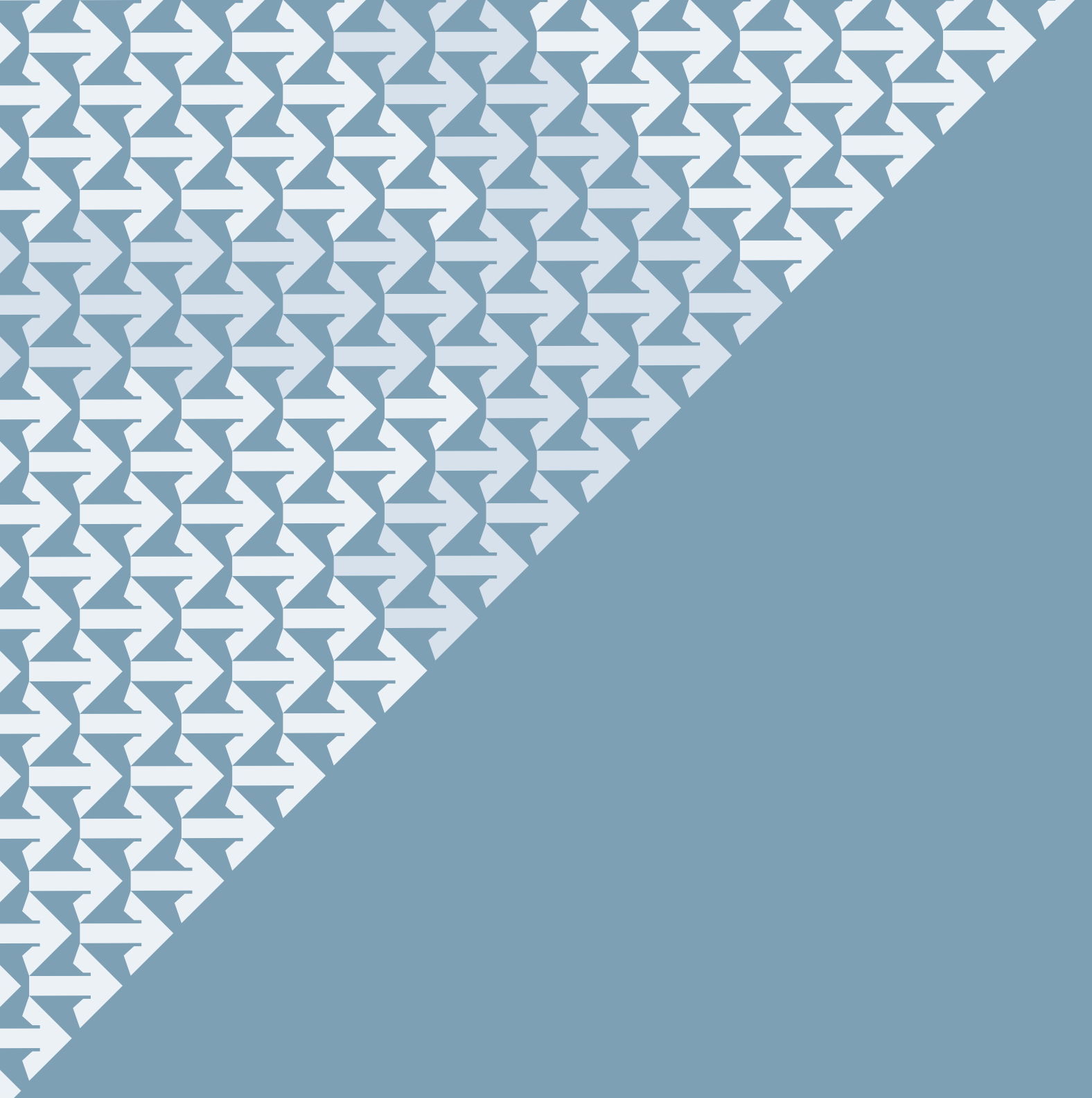
Straight Ahead culminates a period of extensive stakeholder consultation, including the 1998-99 *Climate Change Table on Transportation*, the Millennium Transportation Conference in 2000, and the report of the *Canada Transportation Act Review Panel* in 2001, after a year-long dialogue with Canadians. In June 2001, the Minister of Transport issued *Creating a Transportation Blueprint for the Next Decade and Beyond: Defining the Challenges* to open a discussion with stakeholders about key policy challenges facing transportation.

Canada's transportation system is, by and large, successful at what it sets out to do: it works well for most users most of the time. *Straight Ahead* enunciates the Government's intention to continue and build upon the many successes already evident in our transportation system and embraces objectives that show our true course for the future.

CONCLUSION

Providing a vision for the coming decade and beyond, *Straight Ahead* seeks a better matching of investment decisions in infrastructure to user needs and offers a framework to guide future transportation policy development and initiatives.

In the end, continued progress in realizing the strategic directions laid out in *Straight Ahead* depends on the willingness and co-operation of all parties, governments and the private sector, to move in a common direction and to make supportive and innovative choices in that direction as opportunities arise.



STRAIGHT AHEAD - A Vision for Transportation in Canada

Cat: T22-118/2003 ISBN: 0-662-67127-9

© Her Majesty the Queen in Right of Canada, (Transport Canada) 2003

This document is available on the Web at www.tc.gc.ca/Straightahead.

This document, and more, is available for download at Martin's Marine Engineering Page - www.dieselduck.net