

# **Transportation and Public Works**

**Business Plan  
2006-2007**

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## **1. Message from the Minister and Deputy Minister**

Over the past year the Department has seen a number of changes. Both of us are new to the job and the Department has undergone a slight reorganization to enable us to better meet the needs of Nova Scotians and our clients. The year ahead will allow us the opportunity to put this new structure into place and to move forward on meeting our customer needs.

With this new structure we will implement systems and processes to help us improve our service delivery models and to help improve the overall management of our highway system. We will develop a new service delivery model for Public Works and will continue the development of both bridge and pavement management systems.

Our number one asset is our human resources. With our aging workforce we will continue to work on and implement succession management programs. One such program will see us hire an additional four new entry level engineer positions.

Nova Scotia is well positioned to become an integral part of Canada's Atlantic Gateway to North America. We will work with major stakeholders to develop a gateway vision and strategy.

We will continue to work with the Department of Education on school construction and renovation projects. We will also continue to work with HRM on the development of land that is jointly owned by HRM and the province.

Highway maintenance and construction are still main components of our work. We will continue work on improving the 100 series highways, and we will continue to implement our 4R's (resurfacing, restoration, rehabilitation, and reconstruction), Road Improvement Money and Steel Truss Bridge programs.

Field communications provide important services to government, safety first responders, and emergency services. We will continue to plan for future communication technologies and provide mobile vehicular communication support to safety first responders.

Nova Scotia is active in the federal initiative for Road Safety Vision 2010. To help us improve road safety and to help us meet the targets set out in the vision we will continue with road safety initiatives throughout the province. We will also hold a Road Safety Vision 2010 provincial forum.

We also want to ensure the safety and security of our IT infrastructure and our data. To help with this we will be implementing a Data Network Strategy.

We look forward to working with our staff and stakeholders over the coming year.

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**Minister**

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**Deputy Minister**

## **2. Mission**

Construct, manage and maintain provincial highways, buildings and related infrastructure, and provide accommodation, property, corporate information technology and communications services to support sustainable economic growth and social well-being.

Transportation and Public Works is an infrastructure department that

- provides services - direct or procured - to Nova Scotians and other government departments
- focuses on our clients
- commits to safety, cost-effectiveness, and quality

## **3. Planning Context**

The Department of Transportation and Public Works, through its diverse mandate, delivers a variety of services to the public and the provincial government departments and agencies.

Reliable, safe and efficient transportation and public infrastructure are key to the progress of our economy. The roads we maintain, the buildings we construct and the partnerships we create contribute to our economy. To provide these services and more to our clients, the core businesses are managed and delivered by our Highway Programs and Public Works divisions. Their responsibilities include the construction, maintenance and operation of provincial roads, bridges and ferries, the planning and management of highway and building infrastructure, and the provision of government support services, such as accommodation and property services. Apart from supporting the Department's activities they also contribute to the fulfillment of the Government's priorities to the province.

### **3.1 Opportunities and Challenges**

The Department strives to provide efficient services to its clients in a rapidly changing environment of advancements and challenges. In doing so, the Department will continue to monitor regional, national and international issues that can have an impact on the economic and social well being of Nova Scotians.

The following are some of the key challenges and opportunities that will influence the Department's work in the coming year.

**Human Resources**

The Department employs approximately 2,500 individuals of which about 500 are eligible to retire by 2008. With the loss of experienced employees to retirement comes the challenge of retaining corporate knowledge and succession planning. Arrangements are currently underway to work with the TPW management team to identify critical positions and critical employees in light of preparing a succession management plan. Attrition also provides career advancing opportunities for employees as well as opportunities to recruit new people into government. It provides an opportunity for renewal of the organizational structure and business processes, and to influence cultural change. The objective of the plan is to facilitate the development of knowledge, skills and behaviors that will ensure that the Department meets its present and future operational requirements and business goals. This plan will first identify all employees in key positions (including senior management and critical positions) that are eligible to retire over the next five years. Based upon this analysis, appropriate development strategies and action plans will be developed and implemented.

**Aging Infrastructure**

Pavement doesn't last forever. The average age of pavement across Canada is 17 years. In Nova Scotia, the average is 21 years. As a consequence of deferred maintenance, the cost of repaving old roads has gone up considerably - from \$120,000 to \$200,000 per kilometer.

On the building side, Transportation and Public Works manages the capital maintenance of more than 1,430 government-owned buildings with an assessed value of approximately \$580 million. Many of these facilities are more than 40 years old and need significant repairs. As our population grows older, we will be required to provide even greater accessibility for people who are disabled due to age or illness. Funding for the increasing volume of maintenance required will be a continuing challenge.

**National Transportation Strategy**

At the direction of the premiers through the Council of the Federation, Nova Scotia worked with the other provinces and territories to develop a national multi-modal transportation strategy. The strategy was publicly released in December of 2005. The goal of this strategy is to achieve a new transportation funding partnership with the federal government that will result in substantial and sustained funding for transportation infrastructure, according to provincial priorities. The national transportation strategy provides an opportunity for the development of a new long-term funding partnership with the federal government for transportation infrastructure.

**Gateway to North America**

Nova Scotia's strategic location on the east coast of the continent places this province in a solid position to capitalize on the surging growth in trade between North America and Asia. To help us take advantage of these opportunities we need to move deliberately and promptly to develop a

clear gateway vision and strategy for Nova Scotia. If we don't act quickly and decisively we could lose out to our American competition.

### **Changing Technology**

Technology continues to change at an extraordinary rate. New technologies will provide opportunities for us to change the way we approach service delivery. In particular, Information Technology (IT) plays a crucial role in providing timely services to our clients. But, given the constantly changing environment of IT it is a challenge to ensure smooth functioning of our IT systems. The introduction of newer systems such as SAP, although beneficial for our clients, requires adequate training of staff and other human resources and technical support services. The Information Technology Service Review may look at streamlining our systems and ensure the best form of service delivery for our clients.

## **4. Strategic Goals**

The following goals support the Government's corporate priorities

- Enhance the value and safety of the transportation system
- Manage provincial real property, effectively and efficiently, for government's best strategic advantage
- Provide the infrastructure and related policies necessary to support economic growth of the province
- Provide efficient, cost-effective and environmentally sound government services to address customers' needs

## **5. Core Business Areas, Priorities for 2006-2007, and Performance Measures**

The Department has two operational areas: Highway Programs and Public Works. Public Works is a core business area, while Highway Programs has two core business areas: Maintenance and Operations (Highways), and Engineering and Construction (Highways). Corporate support sections include Policy and Planning, Communications and Public Affairs, Human Resources, Financial Services, and Information Technology.

The Department's core businesses can be summarized as follows:

## 5.1 Maintenance and Operations (Highways)

### What it Means

This core business area provides fleet management, compliance services and maintenance and operations for provincial roads, bridges, and ferries.

Programs and services in this core business area are designed to ensure efficient and effective maintenance of the provincial highway system along with its safe operation, thereby contributing to economic well-being within the province.

### Priorities for 2006-2007

- The amount of highway maintenance work carried out on rural roads including asphalt patching, ditching and graveling, shoulder repairs, brush cutting, and guardrail will increase. In order to do this, funding for the Road Improvement Money (RIM) program will be increased from \$10 million to \$20 million over a 4 year period. Last year saw an increase of \$2.5 million. This year will see an additional \$2.5 million, bringing the total for 2006-2007 to \$17.5 million.
- Vehicle Compliance will evaluate and monitor the Weigh-In-Motion (WIM) technology at Aulds Cove to assess the possibility of expanding WIM technology within the province.
- The Department will develop and implement an action plan to address the recommendations of the Office of the Auditor General audit on Provincial Fleet Management at the departments of Transportation and Public Works and Natural Resources.
- We will continue progress on implementing the Salt Management Plan, including partnering with the Federal Government in the Highlands National Park to share facilities to minimize the impact of road salt on the environment. In 2006-2007, we will also see the installation of new weigh scales to better monitor salt use, and the construction of impermeable pads at salt storage facilities.
- The Department will also continue to expand its Road Weather Information System (RWIS) to cover those areas of the Province not already covered and continue to expand the use of pre-wetting salt adding to the value that we get from this system.
- The Department will work with industry stakeholders to minimize the impact of spring weight restrictions on business without compromising the condition of the roads. This

will be done by exploring better methods of notifying the industry of road opening and closures, and by installing and using frost depths sensors tied into the RWIS system to provide more accurate and timely data to make road closure decisions.

- In 2006-2007, the Highway Maintenance Program will focus additional funding on highway maintenance, guardrail repairs/upgrades, line painting, brush cutting, and highway signs. This work will contribute to making Nova Scotia highways and roads safer and smoother.

## **5.2 Engineering and Construction (Highways)**

### **What it Means**

This core business area provides highway engineering and design and highway construction services. Under this core business area, programs and services have been established to support the departmental goals of providing a safe transportation system and provincial highway infrastructure which contribute to economic growth.

### **Priorities for 2006-2007**

- The Department will continue to deliver the Construction Program for highways. Highlights of the Construction Program for 2006-2007 include:
  - completion of Highway 103 twinning from Otter Lake to Upper Tantallon
  - completion of the new Highway 103 Barrington
  - completion of the Highway 125 Coxheath Interchange
  - completion of the Highway 118 Wright Avenue Interchange
  - continuation of Highway 101 twinning from St. Croix to Three Mile Plains and from Falmouth to Avonport
- Improvements to the management of the highway system will continue with the Department's work on the bridge management system. The bridge management system will provide a method of cataloging the approximately 4000 bridges in Nova Scotia. In the future, inventory and condition information will help to determine bridge maintenance and replacement priorities.
- The Department will dedicate funds and staff to bring about the implementation of a pavement management system in fiscal 2006-2007 to better utilize current funding levels for the capital repaving program.



- Funding for the 4R's program (resurfacing, restoration, rehabilitation, and reconstruction) on provincial highways will increase by 10 per cent over 4 years. Last year saw an increase of for maintenance improvements. The Capital Program for highways will see an additional \$34 million this year, bringing a total increase of \$64 million over a two year period.
- The Department is in the second year of a two year program that will again see the recruitment of four new entry level engineer positions. This will, in the short term and long term, help to address succession management needs throughout the Highway Programs Branch.
- This year is the fourth year of the five year Steel Truss Bridge Program. Expenditures for 2006-2007 are estimated to be \$13 million.
- In 2006-2007, the Department will start implementing a comprehensive and integrated software solution and new business processes that will allow us to better manage the Highway Capital Management Program (HiCaMP).
- The Department will help improve highway safety by introducing a new Temporary Workplace Traffic Control Manual and hosting a Provincial Road Safety Vision 2010 forum.
- As well, we are leading an Ignition Interlock Project Team with representatives from Justice, Service Nova Scotia and Municipal Relations, and Addiction Services. The Project Team will develop guidelines to support the implementation of an Ignition Interlock Program in Nova Scotia in 2007.
- New Seatbelt Regulations have been prepared to prescribe the criteria (i.e., age, height, weight) for child and booster seat use in Nova Scotia. These regulations will come into effect in 2007. In preparation for these new regulations the Department will be undertaking a public awareness and education campaign in 2006.

**Performance Measures — Highway Programs**

<b>Measures</b>	<b>Base Year and Last Actual</b>	<b>Target</b>
Highway services that address customers' needs: Per cent of Nova Scotians indicating they are satisfied or very satisfied with the provincial highway system.	63% (2004) 59% (2005)	Maintain or increase the percentage that are satisfied or very satisfied with the provincial highway system.
Highway services that address customers' needs: Meeting customer's service expectations in filling cracks and potholes. <sup>1</sup>	86% (2004) 86% (2005)	By 2007-08, decrease this service gap.
Highway services that address customers' needs: Meeting customer's service expectations on paving sections of the highway. <sup>1</sup>	71% (2004) 69% (2005)	By 2007-08, decrease this service gap.
Highway services that address customers' needs: Meeting customer's service expectations on surface conditions of shoulders. <sup>1</sup>	68% (2004) 63% (2005)	By 2007-08, decrease this service gap.
Highway services that address customers' needs: Meeting customer's service expectations on helpfulness of non-commercial highway signs. <sup>1</sup>	60% (2004) 42% (2005)	By 2007-08, decrease this service gap.
Highway infrastructure that supports economic growth: Levels of riding comfort for 100-series highways. International Roughness Index is measured on a scale of 0-5, where 0 = smoothest and 5 = unacceptable.	1.41 (2004) 1.41 (2005)	Maintain the level of riding comfort on 100 - series highways.

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<sup>1</sup>Gap analysis, measures the "gaps" between what Nova Scotians consider important, and the quality rating offered by residents to these particular services, i.e., the per cent of Nova Scotians indicating that the service is "very important" and rating it as less than "excellent". A "gap" exists if the service is considered to be of great importance to the public, while at the same time service expectations are not being met. Lower gap scores indicate that service expectations are being met, high gap scores show that there is a problem.

Measures	Base Year and Last Actual	Target
Improve highway safety: Casualty (fatality and injury) rate per 10,000 motor vehicles registered.	94.4 (2003) 90.9 (2004)	Continue to decrease casualty rate per 10,000 motor vehicles registered.
Improve safety of commercial vehicles: Involvement of commercial vehicles in collisions.	35 (1996-2001) 25 (2004)	By 2008 to 2010, a 20% reduction in the average number of collisions involving commercial vehicles compared to the average from 1996 to 2001.

### 5.3 Public Works

#### What it Means

This core business area has the responsibility for the provision of common services such as postal services, building design and construction, building services and operations, and accommodations for government departments, agencies, boards and commissions. It is also responsible for the corporate delivery and management of government-wide information technology and telecommunication services, including the management of province-wide mobile radio programs for public safety and public works agencies at all levels of Government.

#### Priorities for 2006-2007

- We will develop a new service model and strategy to support the service operations of the realigned Public Works division. This process is being designed to confirm core service functions and responsibilities and devise a model that will allow improved service provision levels and commitments.
- With Halifax Regional Municipality, the Department will investigate opportunities for the joint development of provincially and municipally owned property, such as a joint long term plan for the HRM parking lot adjacent to the Dennis and Hansard Buildings, and the former Halifax Infirmary site.
- The Department will continue to manage the design and construction of new schools and school addition and renovation projects for the Department of Education. The Department has set a target to obtain Leadership in Energy and Design (LEED) certification on at least 50 per cent of new buildings.

- We will implement the Data Network Strategy to ensure the Provincial Data Network (PDN) continues to be secure, manageable, sustainable, assessable and reliable to meet the increasing demands by government and the general public for access to information. The PDN must be able to sustain growing information technology demands of new applications or services while adequately protecting the Province from increasing security risks.
- In consultation with the Commission for Disabled Persons, the Department will continue with a multi-year program to prioritize and enhance accessibility for disabled persons using government offices.
- The Department will develop a province-wide dam safety program including an operation and maintenance manual and an emergency response program for each site.
- Work will continue on a multi-year planning process for next generation mobile field communication technologies. The current Trunk Mobile Radio system contract renewal is in 2010. The proposed planning process is being undertaken due to the investment decisions that will be required well in advance of the contract expiry and renewal.
- The Department will put into service two mobile vehicular communications support vehicles to assist public safety first responders.
- We will implement the transition from Commercial Insurance protection to Complete Self Insurance for government assets.

**Performance Measures — Public Works**

Measures	Base Year and Last Actual	Target
Energy efficient and sustainable buildings: Per cent of completed projects that have energy performance that meets or exceeds the Commercial Building Incentive Program (CBIP) requirements.	75% (2004-2005) 100% (2005-2006)	Annually, 90% of new building projects to meet CBIP requirements. [25% better than Model National Energy Code for Buildings (MNECB)].
Energy efficient and sustainable buildings: Comparison of simulated energy performance data to actual energy performance.	N/A	Annually, 90% of actual results are consistent with theoretical results.

Measures	Base Year and Last Actual	Target
Energy efficient and sustainable buildings: Per cent of buildings that are designed using Leadership in Energy and Design (LEED) and achieved LEED certification.	8 buildings designed to LEED (3 are under construction) LEED certification is pending construction completion (2004-2005)	By 2006-2007, 100% of new buildings designed to LEED and 50% of completed buildings receive LEED certification.
Appropriate and cost efficient accommodation and property services: Per cent clients indicating satisfied or very satisfied.	84% (2003-2004) 87% (2004-2005)	Maintain a high level of satisfied clients.
High availability of 'uptime' for public safety network filed communications for public safety organizations: Percentage of time the site is available to process local and multi-group radio calls, also called 'uptime.'	99.95% (2004)	99.90% network availability or 'uptime.'

## 5.4 Transportation Policy

### What it Means

In addition to functions related to the provincial highway system, the Department provides policy direction to ensure an effective air, rail and marine transportation system. In particular, the Department ensures that the provincial transportation interests are supported and represented in appropriate federal/provincial negotiations. The Department is also responsible for administering the safe operation of provincially regulated railways.

### Priorities for 2006-2007

- The Department will work with major stakeholders to advance Nova Scotia's position as an integral part of Canada's Atlantic Gateway to North America.
- We will pursue a sustained and substantial federal funding program for highways.

- By working through federal, provincial and territorial mechanisms, and other avenues, we will seek changes in the federal air policy environment to support opportunities in Nova Scotia.
- In collaboration with the Federal Government and other provinces, we will assess challenges and prospects for short line railways and determine the future role of government with respect to these railways.

## 6. Human Resource Strategy

The Department will work on the following human resource priorities in 2006-2007:

- **Leadership Development/Succession Management**  
Management will work together to develop the next generation of employees. This involves skill and competency development of all employees in leadership roles, identification of critical positions/individuals (i.e., how would the retirement of an employee adversely affect operations), and completing succession plans for these roles. This will ensure that the Department can continue to operate efficiently and effectively.
- **Employee Health & Wellness**  
One of the guiding principles for a healthy workplace must include leadership through involvement. Development and sustainability of a healthy workplace often involves a transformation in thinking and behaviour at all levels. This can only be achieved through the commitment and support of senior management to reinforce and allow changes necessary for improvement. We will continue to work on these guiding principles with the enhancement of the Department's Wellness Strategy — improving our health and wellness initiatives to support the government's proposed Wellness Strategy.
- **Fitness for Work Program - medical screening and evaluation (covers operators of safety sensitive equipment and CUPE employees)**  
This policy and program is one of the components of the Department's comprehensive occupational health and safety program. It represents part of our ongoing efforts to improve occupational health and safety performance by the Department and to protect and promote the health and safety of all employees. It is also an integral part of our efforts to demonstrate "due diligence" with respect to all work undertaken by the Department.
- **Short Term Illness (STI) - Third Party Management**  
We will be involved with the Public Service Commission's Third Party STI claims management proposal to be provided by Manulife. The Department must be front and

centre in the development of this proposal to ensure adherence to our case management program (early and safe return to work).

- **Benefits and Pension Counseling (high numbers)**
  - The Department will take on the decentralization of the Benefit component from the Public Service Commission. This includes new enrollments, benefit maintenance, changes and terminations for all Health and Group Life plans for all clients.
  - We will continue to prepare employees for the retirement process with one on one counseling and group seminars. An average of 8 to 10 retirements per month is anticipated.
  - We will update the pension session to meet current needs and concerns. This will be presented to all of the interested groups within the TPW HR CSU clients.
  
- **Human Resource Training for Line Management**  
 We will deliver updated human resource training to Department line managers over the upcoming year.

## 7. Budget Context

### Fiscal 2006-2007 Operating Budget Highlights

Program and Service Area	2005-2006 Estimate	2005-2006 Forecast	2006-2007 Estimate
	(\$ thousands)	(\$ thousands)	(\$ thousands)
<b>Net Program Expenses</b>			
<b>Highway Programs</b>			
Administration, Highways and Bridges	\$ 94,961	\$102,430	\$101,476
Snow and Ice Control	\$ 43,671	\$ 37,702	\$ 43,922
Ferries and Fleet	\$ 5,929	\$ 6,292	\$ 6,229
Maintenance Improvements	\$ 61,365	\$ 61,044	\$ 78,143
Vehicle Compliance	\$ 2,568	\$ 2,284	\$ 2,568
Highway Engineering	\$ 4,343	\$ 5,111	\$ 5,370
<b>Total Highway Programs</b>	<b>\$212,837</b>	<b>\$214,863</b>	<b>\$237,708</b>

<b>Public Works</b>			
Administration	\$ 583	\$ 583	\$ 710
Security and Risk Management	\$ 1,292	\$ 1,327	\$ 1,617
Real Property Services	\$ 3,281	\$ 3,326	\$ 3,434
Utilities and Industrial Parks	\$ 473	\$ 454	\$ 473
Corporate Information Technology Operations	\$ 4,554	\$ 4,554	\$ 4,634
Field Communication Services	\$ 7,126	\$ 7,126	\$ 6,580
Engineering, Design & Construction	\$ 1,161	\$ 1,142	\$ 1,160
Environmental Remediation	\$ 1,760	\$ 1,410	\$ 2,010
Building Services	\$ 8,463	\$ 8,663	\$ 9,013
Public Works Special Projects	\$ 14,838	\$ 16,457	\$ 16,405
<b>Total Public Works</b>	<b>\$ 43,531</b>	<b>\$ 45,042</b>	<b>\$ 46,036</b>
Senior Management, Policy & Planning, Support	\$ 7,586	\$ 7,535	\$ 8,211
<b>Total Net Program Expenses</b>	<b>\$263,954</b>	<b>\$267,440</b>	<b>\$291,955</b>
<b>TCA Purchase Requirements</b>	<u>\$160,878</u>	<u>\$167,526</u>	<u>\$199,249</u>
<b>Provincially Funded Staff (FTE's)</b>	<u>2,030</u>	<u>1,956</u>	<u>1,995</u>

### Operating Highlights

- Base funding increase of \$8.5 million which funds RIM and 4R commitments, as well as inflationary pressures for fuel, heating oil, materials and supplies.



•	New Initiative funding included:	
•	Nova Scotia Gateway Strategy	\$250,000
•	Highway Safety Enhancements (traffic line painting, brush cutting, guardrail, signs)	2,500,000
•	Building Improvements	1,250,000
•	Volunteer Initiatives (dispatch strategy for volunteer fire departments)	100,000
•	Environmental Remediation - TPW garage sites	250,000
•	Traffic Signal Installations	1,250,000
	<b>Total New Initiatives</b>	<b>\$5,600,000</b>

### **TCA Budget Highlights**

- \$34 million increase in highway capital funding which will primarily be repaving.
- The extra TCA highway funding and the completion of several large multi-year projects resulted in an increase to the amortization budget of \$13.7 million for fiscal 2006-2007.