

**DEPARTMENT OF TRANSPORTATION  
AND PUBLIC WORKS**

**ANNUAL ACCOUNTABILITY REPORT  
FISCAL YEAR 2005-2006**



**Nova Scotia Department of Transportation and Public Works**

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**1. ACCOUNTABILITY STATEMENT**

The accountability report of the Department of Transportation and Public Works for the year ended March 31, 2006, is prepared pursuant to the Provincial Finance Act and government policies and guidelines. These authorities require the reporting of outcomes against Transportation and Public Works business plan information for the fiscal year 2005-2006. The reporting of departmental outcomes necessarily includes estimates, judgments and opinions by the Department's management.

We acknowledge that this accountability report is the responsibility of the Department's management. The report is, to the extent possible, a complete and accurate representation of outcomes relative to the goals and priorities set out in the Department's business plan for the year.

Minister \_\_\_\_\_

Deputy Minister \_\_\_\_\_

## **2. MESSAGE FROM THE MINISTER**

On behalf of the Department of Transportation and Public Works, I am pleased to present this accountability report for fiscal year 2005-2006.

This report reflects the Department's efforts to achieve the priorities outlined in its 2005-2006 business plan and the initiatives undertaken to address issues and opportunities which arose during the year.

The Department, in its efforts to provide Nova Scotians a road system that is safe and efficient, continued to increase its capital funding for highway operations for the period 2005-2006. We signed a Canada Strategic Infrastructure Fund (CSIF-1) agreement with the Federal Government in the amount of \$61 million and worked on the following:

- We awarded 63 contracts across the province as part of the \$15 million Road Improvement Money (RIM) program.
- More than 400 km of 4R's program (resurfacing, restoration, rehabilitation, and reconstruction) work was completed on local roads and collectors, and approximately 100 km of 100 series highways were resurfaced.
- The Department advertised, tendered and completed 168 highway construction and improvement projects for roads and bridges under the Capital Program and Maintenance Improvement Programs.
- Four new Road Weather Information System (RWIS) sites were added.
- We hired and equipped eight new compliance officers to enhance coverage across the province, as well, we continued to increase the hours of operation at the provincial scale houses.
- Six new entry level engineer positions were filled to address staffing needs throughout Highway Programs.
- We also completed eleven projects under the Steel Truss Replacement program (\$11.8 million).

The Department now chairs the Road Safety Advisory Committee (RSAC). A full time coordinator for the committee was hired and the committee was active in a number of projects, including; co-sponsoring the seasonal road safety checkpoints; funding the production of bicycle and pedestrian safety booklets, and the school bus safety campaign.

The demolitions of the Halifax Infirmary and the Nova Scotia Community College, Bell Road Campus, were completed and the construction tender for the replacement of St. Pat's/Q.E. High School was awarded. As well, three schools were opened in 2005-2006: Hammonds Plains South Elementary School, Amherst Elementary School, and Cumberland Elementary School.

Approximately \$60 million was spent on the construction, additions and renovations of schools throughout the province.

The Department ordered, configured and delivered 70 satellite phones to a variety of key users to reduce the volunteer sector's dependency on "microwave" services, and we acquired the first vehicle to provide transportable cross band and emergency repeater support services.

All new buildings are being designed to Leadership and Energy Design (LEED), and we are actively pursuing LEED certification on these buildings. We are also working with other departments on government's house in order initiative.

Finally, I would like to express my thanks to the staff for their hard work and commitment to providing excellent programs and services, and securing the best interests of Nova Scotians.

Hon. Angus MacIsaac,  
Minister of Transportation and Public Works

### **3. INTRODUCTION**

#### **Purpose**

The 2005-2006 Accountability Report for the Department of Transportation and Public Works is a report on the progress achieved by the Department toward the goals, priorities, performance measures and financial targets established in our 2005-2006 Business Plan. Both documents should be read together to get a clear understanding of what the Department set out to do in 2005-2006 and how we did against those objectives.

The accountability reporting process is consistent with the Government of Nova Scotia's commitment to the principles of open and accountable government. Business plans and accountability reports are key to enabling departments and government as a whole to assess performance on an annual basis.

#### **Restructuring of the Department**

During the 2005-2006 fiscal year the Department underwent an internal restructuring. The new Highway Programs division includes the previous Highway Operations division plus the planning and management of highway infrastructure (which was a part of the old Public Works division). The new Public Works division includes the remainder of the old Public Works division plus all of the old Government Services division. In this report the priorities and accomplishments of the Department are reported according to the new structure.

#### **The Structure of this Report**

The report that follows will outline the Department's progress and accomplishments against the priorities identified in our 2005-2006 Business Plan. The report will then provide a summary of our financial results for 2005-2006, as well as details regarding our performance measures and the results achieved.

#### **4. 2005-2006 DEPARTMENT PRIORITIES AND ACCOMPLISHMENTS**

##### **Core Business #1: Highway Programs**

This core business area provides fleet management, compliance services, and maintenance and operations for provincial roads, bridges, and ferries. It also is responsible for highway engineering and design, and highway construction services.

Programs and services in this core business area are designed to ensure efficient and effective maintenance of the provincial highway system, and provide a safe transportation system and provincial highway infrastructure. These will contribute to the economic well-being of the province.

##### ***Priority***

1. Increase the amount of highway maintenance work carried out on rural roads, including: asphalt patching, ditching and graveling, shoulder repairs, brush cutting, and guardrail. In order to do this, funding for the Road Improvement Money (RIM) program will be increased from \$10 million to \$20 million over a four year period. The first year saw an increase of \$2.5 million, the second year will see an additional \$2.5 million, bringing the total for 2005-2006 to \$15 million.

##### ***Accomplishments***

- In 2005-2006, an additional \$2.5 million was approved for the RIM program in the provincial budget. The total budget that was available for the RIM program was \$15 million.
- Under the 2005-2006 RIM program 68 tenders were called, with 93% of these being awarded contracts across the province. Some examples include a contract awarded to Aberdeen Paving Ltd in the amount of \$111,663.50 (tender 60126495) for ditching and graveling in Shelburne County; Lafarge Canada Inc was awarded a contract for asphalt spreader patching and shouldering in Annapolis West, in the amount of \$170,527.00 (tender 60126095); and Welshtown Forestry Ltd was awarded a contract in the amount of \$183,100.00 for guardrails in various roads in Pictou, Cumberland and Colchester Counties (tender 60126258).

***Priority***

2. Provide highway maintenance services in a cost effective manner, utilizing a mixed service delivery approach consisting of both private sector and internal resources. The Department will continue to contract for services where circumstances permit, subject to these changes being cost effective and having minimal impact on long term staff.

***Accomplishments***

- In 2005-2006, 30 projects were tendered of which 7 had no bids and 18 tenders (60%) were not awarded. In the majority of cases the tender prices were higher than TPW's internal costs, therefore, fewer tenders were awarded than expected.

***Priority***

3. Increase funding for the 4R's program (resurfacing, restoration, rehabilitation, and reconstruction) on provincial highways by 10% over four years. Last year saw an increase of \$625,000 for maintenance improvements and \$2.5 million increase for capital program. This year will again see an additional \$625,000 for maintenance improvements and an additional \$30 million for the capital program.

***Accomplishments***

- A total of 168 highway construction and improvement projects were advertised, tendered and completed for roads and bridges under the Capital Program and Maintenance Improvement Programs.
- In 2005-2006, more than 400 km of 4R's program work was completed on local roads and collectors, and approximately 100 km of 100 series highways were resurfaced.

***Priority***

4. The Department will be implementing a three year capital program planning initiative for highway construction and maintenance projects. Implementation of this program will result in more efficient planning, early project estimates and tender calls, and better utilization of resources.

***Accomplishments***

- Pavement condition surveys were completed on the 100 series highways, as well as the 200 and 300 series highways using the Department's Automated Road Analyzer (ARAN). About 1700 km of local road repaving priorities were also evaluated.

- Pavement condition ratings, as well as traffic and serviceability factors, were used in rating and prioritizing projects for the current year’s program.
- The Department is continuing to work towards the development of multi-year programs.

**Priority**

5. Work will continue on implementing a comprehensive Salt Management Plan (SMP). So far, all activities potentially resulting in the release of road salt into the environment, such as storage and handling and the application of salt on roads, have been reviewed and best management practices have been developed. The next step is to monitor these practices and compare results against set targets.

**Accomplishments**

- A number of targets were set and the Department will review its performance against these targets. Some examples of targets and achievements include:

<b>TPW Salt Management Plan Sample Objectives</b>	<b>2003-2004 Baseline</b>	<b>2005-2006 Target</b>	<b>2005-2006 Actual</b>
Decrease the number of tonnes of sand (with 5% salt added) stored outdoors.	57,000	37,000	6,000
Increase the number of winter maintenance facilities where the weight of salt and sand is determined by weigh scales.	19	23	26
Increase the number of truck equipped with electronic spreader controls.	219	231	242
Increase the number of winter maintenance facilities that have brine production capability.	18	26	28

- The 2005 annual report was completed and submitted to Environment Canada in July 2005.
- A Transportation Association of Canada (TAC) trainer conducted a Train the Trainer session in October. This session provided TPW staff with the information required to train district personnel on winter maintenance technologies and salt management.

***Priority***

6. The Road Weather Information System (RWIS) will expand by four to six new sites. These new additions will bring the total to 35 to 37 sites, completing the RWIS Network and thus providing RWIS coverage throughout the province.

***Accomplishments***

- Four new RWIS sites were added in the Summer of 2005 (Highway 105 at Bucklaw, Highway 103 at Pubnico, Highway 118 at Waverley, and Highway 107 at Lake Echo).
- The Department participated in a Maritime Provinces RWIS tender which was awarded to AMEC. AMEC will operate and monitor the province's RWIS sites for the next five years. The Department also started working with Environment Canada on the development of a national Road Weather Information Network (RWIN).

***Priority***

7. The Department will implement a Pavement Management System to assist operational and planning staff in undertaking a proactive pavement management strategy. The strategy will help extend the overall life of asphalt pavements and preserve the existing paved network in the most cost effective manner.

***Accomplishments***

- Funding was approved for development of a Pavement Management System (PMS). Development of PMS requirements and standards, as well as discussions with potential software vendors, will commence in the Fall of 2006.

***Priority***

8. Vehicle Compliance will expand its enforcement and truck safety roles with the addition of vehicle compliance officers to enhance coverage across the province, as well as, increasing the hours of operation at provincial scale houses. This will help to increase road safety and prevent premature damage to provincial highways.

***Accomplishments***

- Work on hiring and equipping eight new compliance officers was undertaken in 2005-2006. The new officers will be in place early in 2006-2007. The hours of operation at the scale houses have increased and will continue to increase as training of the new officers

proceeds on a phased process. The goal is to have all scale houses open 120 hours per week (i.e., 24 hours a day, 5 days a week) by January 1, 2007.

***Priority***

9. A weigh-in-motion and vehicle compliance enforcement technology will be established in the eastbound lane of the Trans-Canada Highway 104 at the Auld's Cove Weigh Station. This technology will screen commercial vehicles for weight compliance. The project will be cost shared 50/50 with the federal government, and will conform with the Intelligent Transportation Systems (ITS) Architecture for Canada.

***Accomplishments***

- Installation of the weigh-in-motion system was completed in September of 2005. Training on the system operation was undertaken in the Fall and data collection started. Some of the issues were still being worked out at the end of the fiscal year. The system will be evaluated during the 2006-2007 fiscal year.

***Priority***

10. The Department will recruit six new entry level engineer positions. This will, in the short term and long term, help to address staffing needs throughout the Highway Operations Branch.

***Accomplishments***

- All six positions were filled early in the fiscal year.

***Priority***

11. The Department will implement a Winter Road Condition Monitoring and Information System to support the Snow and Ice Control Program and provide information to the public. The intent is to utilize the full potential of the new technology, such as new telecommunications, RWIS and weather forecasting, to ensure timely and consistent weather information throughout the province.

***Accomplishments***

- A draft request for proposals for the provision of a Winter Road Condition Monitoring and Information System was prepared. It is expected that the system will be implemented and ready for operation for winter 2006-2007.

***Priority***

12. The \$50 million Steel Truss Bridge Replacement Program, a five year program, will continue in 2005-2006 with projects worth approximately \$13 million being undertaken.

***Accomplishments***

- Eleven projects were done under the Steel Truss Replacement program with a total of \$11.8 million. They are:
  - Bayers Mill Bridge - \$0.46 million
  - Black Brook Bridge - \$0.78 million
  - Lower Eel Creek Bridge - \$0.97 million
  - Vernon Bridge - \$2.06 million
  - Simpson's Bridge - \$0.5 million
  - Bruhm Bridge - \$0.56 million
  - Clydesdale Bridge - \$0.94 million
  - Marydale Bridge - \$0.48 million
  - Port Clyde Bridge - \$1.58 million
  - Carleton Bridge - \$1.21 million
  - East Kempt Bridge - \$2.31 million

***Priority***

13. Work will continue on the implementation of a multi-year plan to expand Nova Scotia's 100 series highway system to improve safety, expand capacity and stimulate economic growth. The following projects, worth approximately \$25 million, will be active in 2005-2006:
- Highway 101 Twinning, St. Croix to Avonport
  - Highway 101 Elimination of at-grade intersections
  - Highway 103 Twinning, Otter Lake to Tantallon
  - Highway 103 New alignment at Barrington
  - Highway 104 Twinning, New Glasgow to Pine Tree Road
  - Highway 118 New interchange at Wright Avenue Extension
  - Highway 125 Twinning, Coxheath to Sydney River

***Accomplishments***

- Twinning of Highway 101 continued with the construction of the St. Croix River bridge and Avonport Interchange modifications. Clearing was 95% completed in 2005-2006.
- The Trunk 1 structure at Joggins was 70% completed under a contract with Dexter Construction. Clearing took place in March 2006.

- Twinning of Highway 103 continued with the preparation of two paving tenders. Tenders were called in March 2006.
- The new highway at Barrington continued with construction of the last small grading section, the interchange structure, the Barrington River structure, and the paving.
- Clearing took place on the Highway 104 New Glasgow to Pine Tree Rd. project in March 2006.
- The Highway 118 Wright Avenue project was 50% completed in 2005-2006.
- Twinning of Highway 125 was postponed until 2008-2009. However, the Coxheath Interchange structure and Sydney River bridge widening were 80% completed in 2005-2006. The ramps and paving of the interchange are scheduled for completion in 2006.

***Priority***

14. Work will be undertaken in consultation with the other Atlantic Provinces to develop an Atlantic Provinces harmonization of overweight and over-dimension special permit conditions policy. This policy will improve consistency throughout the region, improve service to the trucking industry, and help ensure the safety of the traveling public.

***Accomplishments***

- Officials of the four Atlantic Provinces continued to work on the development of an over-dimension special permit conditions proposal, and an overweight special permit conditions discussion paper is also being developed.

***Priority***

15. The Department will coordinate the Road Safety Advisory Committee and road safety rule-making initiatives to take advantage of synergies for the purpose of improving quality of deliverables.

***Accomplishments***

- The Department now chairs the Road Safety Advisory Committee (RSAC). We also provided \$75,000 in financial support, and a new coordinator for the committee was hired. During the period 2005-2006 the work of the committee included:
  - advancing recommendations to government on booster seat legislation
  - a strategic review of RSAC's business plan and organizational structure to more closely align its work with Road Safety Vision 2010
  - developing a road safety social marketing campaign targeted at speeding and drinking and driving

- funding the production of bicycle and pedestrian safety booklets, the school bus safety campaign
- co-sponsoring the seasonal road safety checkpoints

***Priority***

16. A high collision location identification and remedial improvement program will be implemented to improve the safety performance of the provincial highway system.

***Accomplishments***

- A consultant's report was received in June of 2005. A proposal for the implementation of the road safety management system was submitted by Delphi-MRC and was accepted by the Department. Completion of this part of the project is expected in the Fall of 2006.

***Priority***

17. The Department will continue negotiations toward the signing of two Federal cost-shared agreements under the Canada Strategic Infrastructure Fund program for expansion of the National Highway System.

***Accomplishments***

- The Minister of TPW signed a CSIF-1 Agreement with the Federal Government on October 7, 2005. The agreement is for five years and contains two projects:
  - Highway 104 from east of Exit 25 at New Glasgow to Pine Tree Road (8 km at \$12 million).
  - Highway 101 twinning from Exit 4 at St. Croix to east of Exit 5 at Three Mile Plains, and from Exit 7 at Falmouth to Exit 9 at Avonport (24 km at \$36.7 million). This project also includes the replacement of three at-grade intersections at Exit 25 Joggin Bridge, Exit 32 Hectanooga Road, and Brooklyn Road at grade separated intersections (\$12.3 million).
- TPW and Infrastructure Canada have started to put together information packages for Federal Ministerial approval under the proposed CSIF-2 program.

### **Core Business #2: Public Works**

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.

#### ***Priority***

18. In 2005-2006, approximately \$60 million will be used to continue construction, additions and renovations of schools.

#### ***Accomplishments***

- **Central Kings** - This project is in the third phase of a multi-phased project that includes additions and renovations to the existing high school. Phase 3 started in February 2005 and will be completed early in 2006-2007.
- **West Kings** - The West Kings project includes a multi-phased redevelopment that includes additions and alterations to the existing high school. Phase three renovation was to the Phase four renovation of the balance of the 1978 areas commenced in April 2005 and will be reoccupied in stages (it began in September 2005 and will be ending by August 2006). 1955 areas and was completed in April 2005. Phase five is scheduled to be complete by January 2007, and phase six by September 2007.
- **Ecole Rose de Vents** - This is a multi-phased redevelopment that includes an addition and alterations to the existing school. In 2005-2006, phase one, which included an addition, was completed, and phase two was substantially completed. Phase three design (a pre-school addition) started in February 2006, with construction scheduled to be complete by January 2007.
- **Ecole NDA** - This project includes renovations and alterations to the existing school and is a multi-phased redevelopment. Three phases of work were completed and phase four is underway and scheduled for completion in late 2006. The design for renovations to the Auditorium (fifth phase) is being reviewed with award of the construction contract in fiscal year 2006-2007 and completion of the work in fiscal year 2007-2008.
- **Iona Rankin School** - Work was underway on a design build contract to construct the new school with construction scheduled for completion in the Summer of 2006; for occupancy in December 2006.
- **Kingswood Elementary School (Hammonds Plains South)** - This school was opened for students in September 2005.

- **Barrington Municipal High School** - Construction was nearing completion for the new Barrington High School and the school will be occupied early in 2006-2007.
- **Citadel High School (St. Patricks/Queen Elizabeth High Schools replacement)** - This project was put out to tender in 2005-2006. This school is scheduled for occupancy in September 2007. The demolition of the Nova Scotia Community College, Bell Road Campus, was completed.
- **Oyster Pond Academy (Robert Jamieson School)** - Work started on site for the construction of this school. The tender for the remainder of the school construction was awarded to Maxim Construction and work continued for a planned completion in August 2007. This school is expected to be ready for occupancy in September 2007.
- **Five Bridges Junior High School (Sir John A. MacDonald replacement)** - This is a multi-phased redevelopment of the existing school, with construction more than 50% complete on the new high school in Tantallon. Completion is scheduled for the Summer of 2006, to be ready for occupancy in September 2006.
- **Spring Street Academy (Amherst Elementary)** - Opened for students in September 2005.
- **Cumberland North Academy** - Opened for students in September 2005.
- **Musquodoboit High School** - Design is nearing completion with the tender to be awarded and construction to commence in fiscal year 2006-2007.

***Priority***

19. The Department will continue to manage the delivery of maintenance and preventive maintenance for buildings operated by the Department to ensure safety of the occupants and asset preservation.

***Accomplishments***

- A process was undertaken to identify mandated and preventative maintenance requirements to operate the 30 buildings owned by the Government of Nova Scotia. Facilities Maintenance Guidelines were prepared and a project schedule drafted.

***Priority***

20. In order to meet the guidelines of the Government's green policy for buildings, the Department will decrease energy consumption in existing government buildings and in all new building and renovation projects.

21. The Department will start the first year of a multi-year program to upgrade heating, ventilation and lighting in departmental buildings. These improvements will be funded through the savings generated by the energy efficiencies derived from the upgrading.

These two priorities have been combined for reporting as there are overlaps in the accomplishments for each.

***Accomplishments***

- The Department is actively pursuing Leadership in Energy and Design (LEED) certification in several new buildings (four schools under construction, two justice centres, and a provincial building). All new construction projects will be designed to meet or exceed Commercial Building Incentive Program (CBIP) and LEED requirements with respect to energy efficiency and environmental design. Energy efficiency issues of older buildings are addressed when renovation projects are completed (i.e., upgrading of insulation).
- In conjunction with other departments, the Department is working on a government house in order initiative which includes energy performance contracting to improve energy efficiency in existing government buildings, an energy use inventory of all existing government buildings, energy efficiency standards for new/replacement of Heating, Ventilation and Air Conditioning (HVAC) equipment, natural gas conversion, and alternate energy applications.

***Priority***

22. The Department, in consultation with the Commission for Disabled Persons, will start a multi-year program to prioritize and enhance accessibility for disabled persons using government offices.

***Accomplishments***

- In 2005-2006, \$300,000 in funding was provided to help make government buildings accessible for people with disabilities.
- A committee was established to prioritize projects and the projects for 2005-2006 were determined. Projects were completed at One Government Place, Sydney Provincial Building, and the Baddeck Provincial Building. Work was underway on the Bridgewater Provincial Building and Pictou Justice Centre.
- Eleven audits were completed in 2005-2006.

***Priority***

23. Work will continue with organizations like Clean Nova Scotia and The Ecology Action Centre on conservation and efficiency programs.

***Accomplishments***

- The Department now sits as an advisory board member on the Ecology Action Centre transportation committee (TRAX).
- We also participate on the steering committee and provide technical assistance to Clean Nova Scotia for the “Toward a Brighter Future” project. The goal of this project is to improve the energy efficiency of public schools through education initiatives and building retrofits.
- A contribution of \$5,000 and on-site expertise was provided to Clean Nova Scotia for delivering a program designed to clean up illegal dumping sites.

***Priority***

24. The Department will begin the development of a new service model and strategy to support government service operations. 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.

***Accomplishments***

- Due to restructuring in the Department the new Public Works division will start work on this priority in 2006-2007.

***Priority***

25. With Halifax Regional Municipality (HRM), 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.
26. The demolition and use planning for the Halifax Infirmary site will be completed. The next step in the Halifax Infirmary site development is to undertake a joint planning exercise with HRM and the Spring Garden Road Business Association.

These two priorities have been combined for reporting as there are overlaps in the accomplishments for each.

***Accomplishments***

- A Memorandum of Understanding (MOU) was signed with the HRM to undertake two planning exercises. These exercises are expected to be completed in the Summer of 2006 and include the following sites:
  - the area around Queen Street and Spring Garden Road
  - Grande Parade, the former Trustcan site, and Province House
- The demolition of the Halifax Infirmary was essentially completed in 2005-2006.

***Priority***

27. The Department will develop a management information database to support better management of provincial real property assets. The emphasis of this development is to improve quality management information that will support operations and decision making for government owned buildings.

***Accomplishments***

- A final report was submitted by DDA Solutions. Work was undertaken to review the report and develop plans to move forward.
- A project is underway to collect and unify our building information to provide a functioning building database.

***Priority***

28. The Department, jointly with the Office of Economic Development, is conducting a review of the current information technology operational services to recommend a long term IT service delivery model for the Government.

***Accomplishments***

- A review of IT operations was conducted and an IT service delivery model was recommended and accepted. A committee of Deputy Ministers is currently developing an implementation plan for government consideration to centralize IT support services. It is expected that the new service model will be in place for April 1, 2007.

***Priority***

29. Work will begin on a planning process for the next generation of corporate field communications systems. The current Trunk Mobile Radio system contract renewal is in 2010. Due to the investment decisions that will be required well in advance of the contract expiry and renewal, the proposed planning process is being undertaken at the earliest possible date.

***Accomplishments***

- A user requirement study for key radio users was completed in February. Phase II of the evaluation of alternatives began and is scheduled to be completed in November of 2007.

***Priority***

30. To support the Wide Area Network Security Policy and a newly hired Manager of Network Security, TPW will be actively implementing a program of cyber security practices and measures.

***Accomplishments***

- The Manager implemented network security standards for all government departments.
- Security standards for electronic applications were created and are in draft awaiting feedback before being implemented.
- An update to the network and Internet acceptable use guidelines was undertaken and will be submitted for approval in 2006-2007.
- Education and awareness sessions were held with groups from various departments, and the creation of a full security awareness training manual was started.
- The manager was regularly consulted by all departments on IT security issues.

***Priority***

31. Currently TPW is in the process of implementing a variety of technological strategies to provide alternative service options that will reduce the volunteer sector's dependency on "microwave" services.

***Accomplishments***

- The Department ordered, configured and delivered 70 satellite phones to a variety of key users. A second order of 40 phones was placed and will be delivered in 2006-2007.
- The first vehicle to provide transportable cross band, emergency repeater support service was acquired.

**Transportation Policy**

Assess provincial needs and opportunities for all major modes of transportation and determines the appropriate measures for government to take in support of strong air, land and sea links.

***Priority***

32. On a bilateral basis and in concert with other provinces and territories, the Department will make representation to the federal government on the urgent need for substantial and sustained funding for infrastructure, particularly roads.

***Accomplishments***

- Premier Hamm wrote to the Federal Minister of Transport in April 2005 seeking sustained and dedicated highway program funding. In August 2005, the Acting Minister of TPW reiterated Nova Scotia's position in a bilateral meeting with the federal Minister. Premier MacDonald met with Prime Minister Harper in March and positioned federal funding for highways as one of Nova Scotia's top priorities.
- The Premier of Nova Scotia along with the premiers of British Columbia and the Northwest Territories, co-led the development of a national transportation strategy "Looking to the Future: A Plan for Investing in Canada's Transportation System." The Council of Federation released the strategy in December 2005 with a call to the Federal Government to be a partner in implementing the strategy.

***Priority***

33. The Department will work through the Council of Ministers and the Federal Standing Committee on Transport to ensure progress is made towards a more enlightened federal air policy environment to support opportunities in Nova Scotia.

***Accomplishments***

- In March 2005, the Department presented a submission entitled “Air Liberalization & the Canadian Airports System” to the federal Standing Committee on Transport (SCOT).
- In June 2005, the Department presented a submission in response to the consultation on Canada-United States Air Transport Agreement to Transport Canada.
- In October 2005, the Department presented its views on air liberalization at the Halifax International Airport Authority (HIAA) Air Access Forum. This forum involved many stakeholders including Transport Canada.

## **5. OTHER ACCOMPLISHMENTS**

- A team of employees from the Department's Construction Trades division volunteered their services to work on two Habitat for Humanity houses under construction in Westphal in August 2005. Staff donated their time and efforts to install roof shingles and associated roofing materials on the homes. The Department also provided surplus tools for the local Habitat for Humanity affiliate.
- Two teams in the Department received the Premier's Award of Excellence. A team of TPW equipment operators in Sydney won the award for the development of a "Snow School." The school provided comprehensive training for snow plow operators, allowing them to operate the one-person truck plows. The second team was from the Public Safety and Radio Communications group. They won the award based on their work on the Evaluation of Alternatives Project - Phase I. This project was looking at the best way to improve communication in the field for Nova Scotia's volunteer public safety community.
- In October 2005, the Department completed the grade crossing reflectorization project to improve the visibility of railway crossings at 54 uncontrolled crossings (public crossings that do not have gates or flashing lights) on railways under provincial jurisdiction. The Department provided the Cape Breton & Central Nova Scotia Railway and the Windsor & Hantsport Railway with reflective material and the railways completed the installation at the public crossings. Studies have indicated that motorists approaching a crossing at night may not see a train on the track in front of them. Their headlights shining through the passing train, however, will reflect off the reflective material on the back of the sign on the far side of the track and create a strobe effect that will register with most drivers.

## 6. FINANCIAL RESULTS

The core business functions of the Department of Transportation and Public Works have been translated into a high level operating budget allocation, as shown in the following table. The table indicates the budgeted net expenditure information reported in the 2005-2006 Business Plan and the actual net expenditures for 2005-2006.

Program and Service Area	2005-2006 Estimate	2005/06 Actuals	Variance	
	(\$000s)	(\$000s)	(\$000s)	
<b>TCA Purchase Requirements</b>	<b><u>\$160,878</u></b>	<b><u>\$167,548</u></b>	<b><u>(\$6,670)</u></b>	1
<b>Net Program Expenses</b>				
<b>Highway Operations</b>				
Administration, Highway and Bridges	\$99,304	\$109,583	(\$10,279)	2
Snow and Ice Control	\$43,671	\$37,377	\$6,294	3
Ferries and Fleet	\$5,929	\$6,572	(\$643)	
Maintenance Improvements	\$61,365	\$59,542	\$1,823	4
Vehicle Compliance	\$2,568	\$2,194	\$374	
<b>Total Highway Operations</b>	<b>\$212,837</b>	<b>\$215,268</b>	<b>(\$2,431)</b>	
<b>Public Works</b>				
Administration, Security & Risk Management	\$1,910	\$1,700	\$210	
Public Works and Special Projects	\$14,838	\$16,279	(\$1,441)	5
Building Services and Utilities	\$8,463	\$8,686	(\$223)	
Engineering Services	\$1,160	\$1,286	(\$126)	
Environmental Remediation	\$1,760	\$1,686	\$74	
Real Property Services	\$3,281	\$3,230	\$51	
Industrial Parks & Utilities	\$473	\$266	\$207	
Corporate IT Operations & Field Communications Services	\$11,680	\$11,924	(\$244)	
<b>Total Public Works</b>	<b>\$43,565</b>	<b>\$45,057</b>	<b>(\$1,492)</b>	
Administration and Support	\$7,552	\$7,501	\$51	

<b>Program and Service Area</b>	<b>2005-2006 Estimate</b>	<b>2005/06 Actuals</b>	<b>Variance</b>
	(\$000s)	(\$000s)	(\$000s)
<b>Total Net Program Expenses</b>	<b>\$263,954</b>	<b>\$267,826</b>	<b>(\$3,872)</b>
<b>Provincially Funded Staff (FTEs)</b>	<b><u>2,281.0</u></b>	<b><u>2,186.0</u></b>	<b><u>95.0</u></b>

1. Additional approved capital funding \$7.0 million.
2. Additional approved funding \$2.5 million, Bridgewater flooding \$0.3 million, equipment refits \$2.8 million, write down of obsolete parts \$0.6 million, and increased activities due to favorable season.
3. Savings resulting from favorable winter conditions.
4. Project delays resulting in corresponding savings and increase in amortization due to additional approved highway capital funding \$0.6 million, and transfer of roads to HRM \$0.5 million.
5. Write down of Shelburne Youth Centre asset \$1.8 million, offset by operational savings.

## 7. PERFORMANCE MEASURES

### OVERALL SATISFACTION - PROVINCIAL HIGHWAY SYSTEM

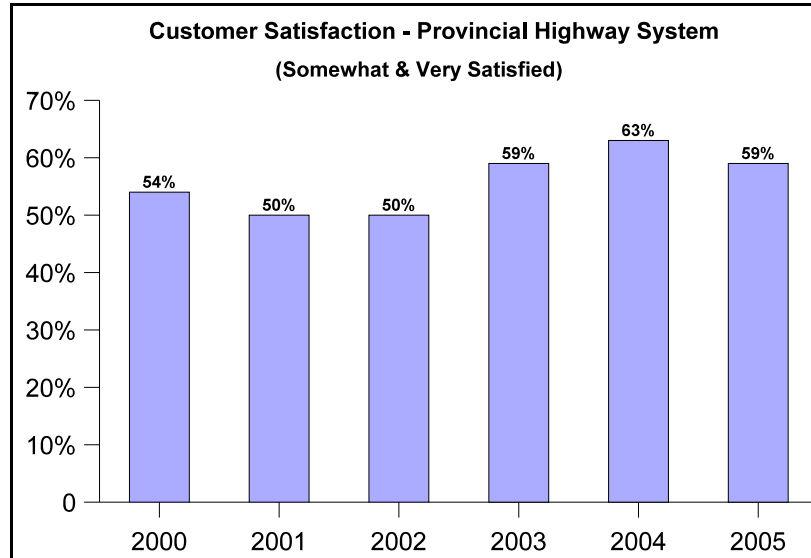
One of Transportation and Public Works' (TPW) core business areas is Highway Programs. A desired outcome of this core business area is to "provide a safe transportation system and provincial infrastructure to contribute to economic growth and sound environmental services to meet customers' needs."

#### WHAT DOES THIS MEASURE TELL US?

TPW conducts Customer Satisfaction Surveys to determine and evaluate the public's satisfaction with the provincial highway system. It is a measure of how effective the Department is in "providing highway services that meet customers' needs." While the Department's performance in providing highway services plays a significant role in the satisfaction response, there are other factors that may influence the overall perception of satisfaction.

#### WHERE ARE WE NOW?

In 2000, 54% of Nova Scotians were satisfied with the provincial highway system. Overall satisfaction declined in 2001 to 50%. There was no change in 2002. In 2003, overall satisfaction increased to 59%. Again in 2004, overall satisfaction increased to 63%. In 2005, satisfaction was at 59%.



#### WHERE DO WE WANT TO BE?

Maintain or increase the percentage of Nova Scotians indicating that they are satisfied or very satisfied with the provincial highway system.

**MEETING CUSTOMERS EXPECTATIONS - GAP ANALYSIS**

Overall satisfaction with the provincial highway system is a measurement that takes into account all the highway programs that TPW provides. Some of the key services include: filling cracks and potholes, resurfacing sections of the highway, surface condition of highway shoulders, and the helpfulness of non-commercial highway signs. Through our customer satisfaction survey we are able to collect data to determine how we are doing in meeting customers’ expectations with respect to these services.

**WHAT DOES THE MEASURE TELL US?**

Gap analysis measures the “gaps” between what Nova Scotians expect and what they receive. 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. Gap scores are reported as percentages. Lower gap scores indicate that service expectations are being met, high gap scores show that improvements should be made.

**WHERE ARE WE NOW?**

The service gaps for three of the four areas of interest have not changed significantly over the past six years. The exception being, the helpfulness of non-commercial highway signs, which decreased substantially to 42% in 2005, from 60% in 2004. Filling cracks and potholes continues to have the largest gap.

**Meeting Customers Expectations - GAP Analysis**

<b>Highway Services</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>
a. filling cracks and potholes	87	80	88	85	86	86
b. resurfacing sections of the highway	73	69	78	68	71	69
c. surface condition of highway shoulders	68	63	72	67	68	63
d. helpfulness of non-commercial signs	58	63	71	66	60	42

Note: Lower gap scores indicate that service expectations are being met, high gap scores show that improvements should be made.

**WHERE DO WE WANT TO BE?**

By 2007-2008, TPW would like to narrow the service gap identified in all these service areas.

### **INTERNATIONAL ROUGHNESS INDEX (IRI) FOR HIGHWAYS**

Another desired outcome of Highway Programs is to “provide highway infrastructure that supports economic growth.” The condition of our highway system plays a key supporting role in the development of the provincial economy and is measured using an International Roughness Index (IRI).

#### **WHAT DOES THE MEASURE TELL US?**

IRI is measured on an increasing scale from 0 upwards, where 0 = smoothest pavement and 5 = rough older pavement. An IRI value of 1.6 or below for 100-series highways is considered good according to the *National IRI Survey - 2001*. The level of riding comfort on 100-series routes reflects highways’ contribution to increased economic development by enabling industry to access new resources, facilitating the transport of raw materials and finished goods, and providing mobility for workers and consumers to reach the work place and market place.

#### **WHERE ARE WE NOW?**

The riding comfort on our 100-series highways has improved. An IRI baseline of 1.48 was established in 2002. In 2003, the IRI for 100-series highways was 1.45, and in 2004 it dropped to 1.41, where it remained in 2005.

<b>IRI Level</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
Nova Scotia	1.48	1.45	1.41	1.41

Source: Data produced by Automatic Road Analyzer (ARAN)

#### **WHERE DO WE WANT TO BE?**

TPW will strive to maintain the level of riding comfort on 100-series highways.

**CASUALTY RATES**

TPW is working toward the outcome of “improving highway safety” through various programs and initiatives. TPW uses a measure of casualty (fatality and injury) rates per 10,000 motor vehicles registered to assess progress toward this outcome.

**WHAT DOES THE MEASURE TELL US?**

Casualty rates are impacted by driver behavior, vehicle safety, enforcement, education and engineering programs. The casualty rate is used by TPW as an overall indicator of how well government’s programs are contributing to highway safety. A change in the casualty rate may be caused by any one or combination of the factors listed. TPW is directly responsible for highway engineering initiatives and assumed responsibility for driver and vehicle rule making late in 2003-2004.

**WHERE ARE WE NOW?**

The recorded casualty (fatality and injury) rate per 10,000 motor vehicles registered in 2000 was 123.9. In 2001, the casualty rate per 10,000 motor vehicles registered declined to 109.4. The rate decreased again in 2002, to 102.8. The rate in 2003 was 94.4, continued to decrease to 90.9 in 2004, and was 85.0 in 2005.

**Casualty Rates**

<b>Year</b>	<b>Fatalities</b>	<b>Injuries</b>	<b>Casualties/ 10,000 Motor Vehicles Registered</b>
<b>2000 (base year)</b>	87	6999	123.9
<b>2001</b>	80	6327	109.4
<b>2002</b>	88	5949	102.8
<b>2003</b>	70	5291	94.4
<b>2004</b>	90	5118	90.9
<b>2005</b>	72	4913	85.0

Source: Nova Scotia Collision Record Database

**WHERE DO WE WANT TO BE?**

Our objective is to continue to decrease the casualty rate per 10,000 motor vehicles registered.

### **COMMERCIAL VEHICLES SAFETY**

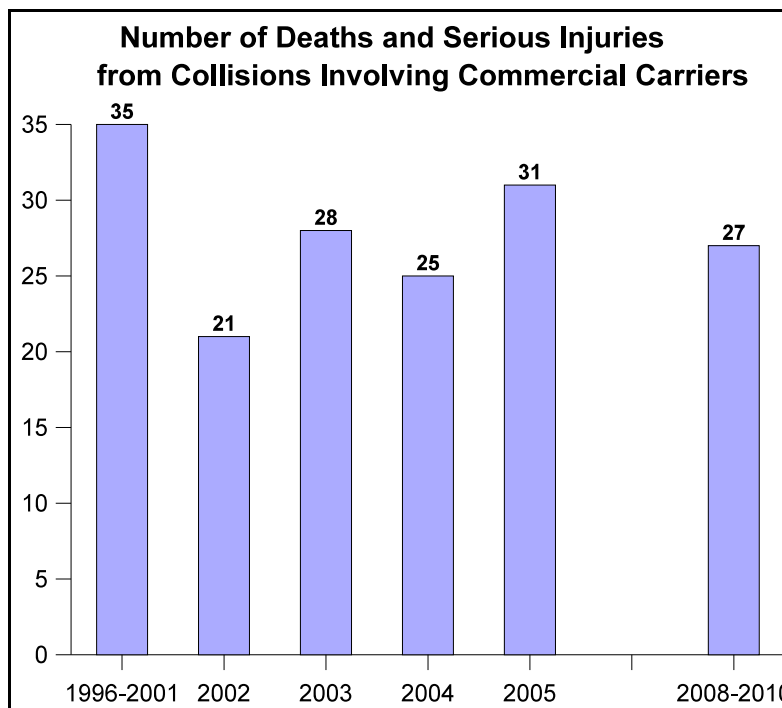
Another measure of our efforts toward the outcome of “improving highway safety” is to examine the number of deaths and serious injuries due to collisions involving commercial carriers in Nova Scotia. Improving road safety through the prevention of collisions and minimizing the consequences of collisions is a major concern of the Department.

### **WHAT DOES THE MEASURE TELL US?**

Collisions involving commercial carriers are impacted by driver behavior, vehicle safety, enforcement, education and engineering programs. The adoption of the Road Safety Vision 2010 provides roadway safety benchmarks over time, and in cooperation with provincial governments and national safety organizations, TPW continues its efforts to improve road safety in Nova Scotia.

### **WHERE ARE WE NOW?**

The average number of deaths and serious injuries due to collisions involving commercial vehicles was 35 from 1996 to 2001. The number in 2002 was 21, and in 2003 was 28. In 2004, the number dropped to 25. In 2005, the number of deaths and serious injuries due to collisions involving commercial vehicles was 31.



### **WHERE DO WE WANT TO BE?**

Our objective is to improve the safety of commercial carriers and have an average of 27 over the period 2008-2010.

### **CBIP REQUIREMENTS**

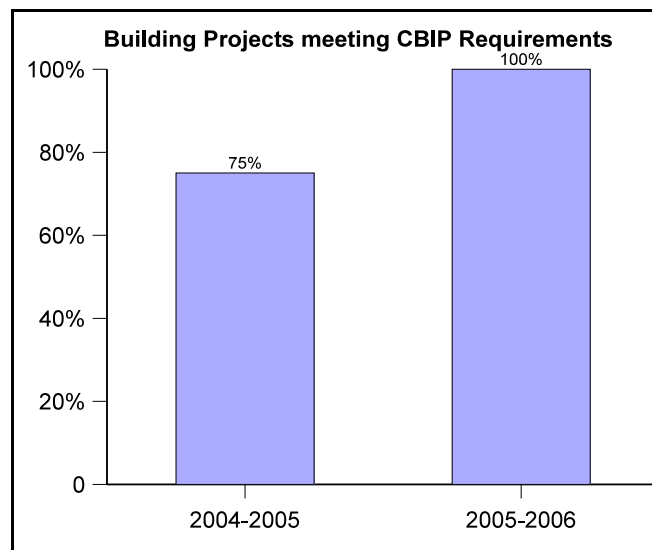
One of TPW's outcomes is to provide energy efficient and sustainable buildings in order to meet the guidelines of the Government's green policy for buildings. One of the measures for this is the per cent of completed new construction projects that have energy performance that meets or exceeds the Commercial Building Incentive Program (CBIP) requirements. This is an energy performance which is 25% better than Model National Energy Code for Buildings (MNECB).

### **WHAT DOES THE MEASURE TELL US?**

The measure tells us what percentage of new building projects met CBIP requirements in a given year. Simulation software is used to calculate energy performance (MJ/square meter/year) based on input from the design parameters. Actual energy performance data is collected from buildings designed to the CBIP requirements. TPW staff analyze the results comparing the simulated energy during design with the actual energy use results.

### **WHERE ARE WE NOW?**

In 2004-2005, 75% of new building projects met CBIP requirements. This figure increased to 100% in 2005-2006.



### **WHERE DO WE WANT TO BE?**

Annually, our target is to have 90% of new building projects meet CBIP requirements.

### **ENERGY PERFORMANCE**

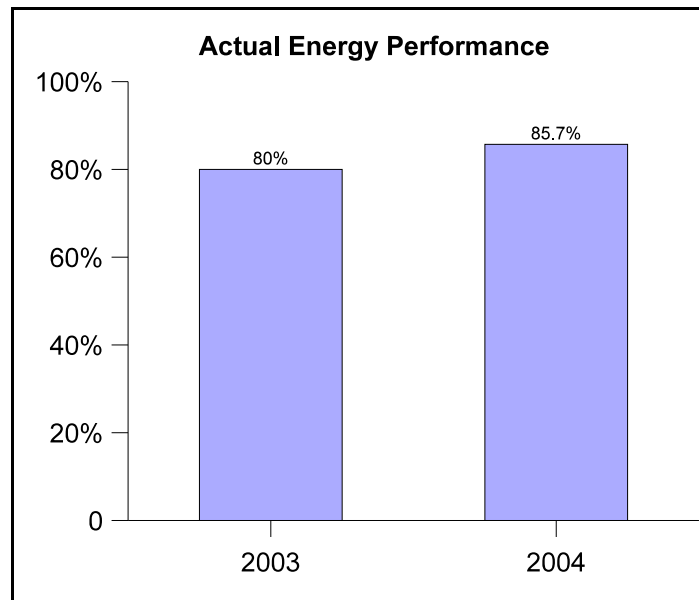
Another measure related to the outcome of “Energy Efficient and Sustainable Buildings” is a comparison of simulated energy performance to actual energy performance.

### **WHAT DOES THE MEASURE TELL US?**

This measure provides us with a comparison of energy use (MJ/square meter/year) of the simulated building (based on building design) to actual energy use (MJ/square meter/year) of the building based on operating electricity and fuel consumption from utility billings.

### **WHERE ARE WE NOW?**

The actual energy data used for comparison purposes is provided by outside agencies and therefore not always available for measurement purposes. Based on the data available, in 2003 the actual energy performance of four out of five (80%) buildings met or exceeded the theoretical energy performance. The actual energy performance of six out of seven (85.7%) buildings met or exceeded the theoretical energy performance in 2004. Insufficient data was available to allow for a 2005 comparison.



### **WHERE DO WE WANT TO BE?**

Annually, our target is to have 90% of actual results being consistent with the theoretical results.

### **LEED CERTIFICATION**

The last measure for our “Energy Efficient and Sustainable Buildings” is the per cent of buildings that are designed using the Leadership in Energy and Design (LEED) requirements with respect to energy efficiency and environmental design and the per cent of completed buildings achieving LEED certification.

### **WHAT DOES THE MEASURE TELL US?**

As part of the ongoing collaboration between the Public Works departments across Canada, the Department agreed to endorse and support sustainable “green” building design and to use LEED as the tool to measure the degree to which each design meets that goal. The LEED rating system is a measurement system that assigns credit points for sustainable building initiatives in the design and construction phases.

### **WHERE ARE WE NOW?**

In 2005-2006, seven new buildings were designed to LEED certification (four schools, two justice centres, and a provincial building were under construction).

LEED certification is only received after construction is completed. Western HRM High School (Sir John A. MacDonald replacement), Tantallon, is the first building expected to get LEED certification after construction is completed in the Fall 2006.

### **WHERE DO WE WANT TO BE?**

By 2006-2007, 100% of new buildings designed to LEED certification and 50% of completed buildings receive LEED certification.

### **SATISFACTION OF GOVERNMENT CLIENTS**

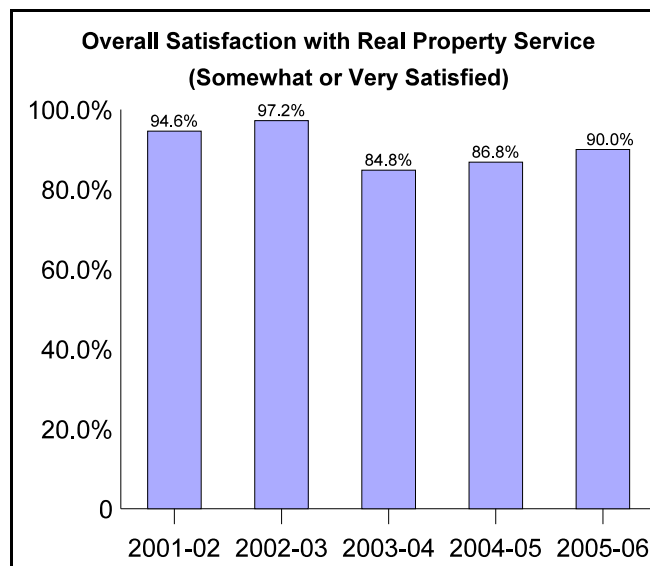
One of TPW’s core business areas is Public Works. A main activity in this area is the delivery of accommodation and property services. A desired outcome of this area is to “provide appropriate and cost efficient accommodation and property services.”

### **WHAT DOES THE MEASURE TELL US?**

The annual Customer Satisfaction - Accommodation and Property Services survey provides the Department with a customer-based evaluation of how well it provides these services to government departments, agencies and boards. “Somewhat satisfied” and “very satisfied” responses are totaled together to get an overall indication of the level of satisfaction with Real Property services. While the Department’s performance in providing these services plays a significant role in the satisfaction response, there are other factors that may influence the overall perception of satisfaction.

### **WHERE ARE WE NOW?**

In 2001-2002, 94.6% of clients were either somewhat or very satisfied with TPW’s Real Property Services. In 2002-2003, 97.2% were satisfied, and in 2003-2004, client overall satisfaction declined to 84.8%. In 2004-2005, 86.8% were satisfied. This percentage increased to 90.0% in 2005-2006.



### **WHERE DO WE WANT TO BE?**

Our target is to maintain the high level of satisfied clients.

### UPTIME

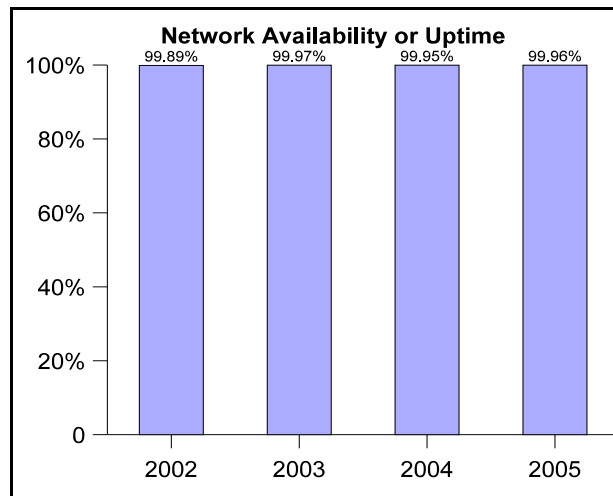
One of TPW's core businesses in Public Works. A main activity of this service is public safety and radio communications. One of the goals of the Department is to ensure that there is a high availability of "uptime" for the public safety network field communications for public safety organizations (such as police, fire and ambulance) in Nova Scotia.

### WHAT DOES THE MEASURE TELL US?

We measure this by measuring the percentage of time the site is available to process local and multi-group radio calls (also called 'uptime'). Network availability or "uptime" is determined by reviewing performance reports for each of the system's 69 tower sites. Each site's "service availability percentage" (i.e., the percentage of time the site is available to process local and multi-group radio calls or "uptime") is measured monthly in total hours (not including site outages as the result of planned maintenance work). Outage hours by site are subtracted from the total hours the site is up, and multiplied by 100, giving a service availability percentage.

### WHERE ARE WE NOW?

In 2002, 99.89% of the time the networks were available to process local and multi-group radio calls. The uptime availability increased to 99.97% in 2003. In 2004, 99.95% of the time the 68 tower sites cumulatively were available to process local and multi-group radio calls. In 2005, the uptime rate was 99.96% of the 69 sites<sup>1</sup>.



### WHERE DO WE WANT TO BE?

Annually, 99.90% network availability or 'uptime'.

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<sup>1</sup>In 2005, Chaswood site was added to improve TMR coverage in the Dollar Lake area, increasing the total number of sites from 68 to 69.