# DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS

# ANNUAL ACCOUNTABILITY REPORT FISCAL YEAR 2003-2004



## Nova Scotia Department of Transportation and Public Works

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November 15, 2004

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#### 1.0 ACCOUNTABILITY STATEMENT

The accountability report of the Department of Transportation and Public Works for the year ended March 31, 2004, 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 2003-04. 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        | <br> |  |
|-----------------|------|--|
|                 |      |  |
|                 |      |  |
| Deputy Minister |      |  |

#### 2.0 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 2003-04.

This report is a document of the Department's performance in relation to the goals and priorities presented in the 2003-04 Business Plan.

The Department continued its commitment to the safe and efficient movement of people and goods across Nova Scotia, and increased its capital funding again this fiscal year for highway operations. Dollars were invested across the province in a number of major projects, including the following:

- commencement of a \$50-million program to replace 66 of Nova Scotia's single-lane steel truss bridges;
- completion and opening of 21 kilometres of a newly twinned section of Highway 101 between Ellershouse and Mount Uniacke;
- completion of two major bridge projects in Cape Breton: the new \$10-million Margaree Harbour Bridge, and the \$15-million project to rebuild the Seal Island Bridge;
- completion and commissioning of the Petit Princess, the \$4-million car ferry that replaced the Joshua Slocum ferry in Digby County;
- commencement of construction on the twinning of Highway 103 between Otter Lake Interchange and Tantallon: this major project is estimated to cost \$39.5 million; and
- continuation of the planning on twinning Highway 125 between Balls Creek and Sydney River and a new interchange at Coxheath Road: this major project is estimated to cost \$20 million, with \$16.4 million provided by the Province, and \$3.6 million by the federal government under the cost-shared Strategic Highway Infrastructure Program.

The Public Works staff continued to design and manage building projects across the province, and completed new schools in Brookfield, Pictou East and Pictou West. Staff were also busy building and designing new justice centres in Port Hawkesbury and Lunenburg.

The Department also introduced new design standards in provincial buildings that will reduce greenhouse gases and save taxpayers' money. The standards reflect Nova Scotia's Energy Strategy which commits the province to reducing energy use in government facilities. Cost savings will result from new energy efficient designs and materials for walls, roofs and foundations, and energy-efficient systems for heating, lighting and ventilation.

Government Services staff continued to manage the provincial safety communications for the volunteer sector, and acquired new communications assets to improve the network. The communications network proved an invaluable and dependable resource to Nova Scotians during Hurricane Juan, and demonstrated the vital need to maintain and improve this service.

Also, the Department's Corporate IT Operations division completed a major portion of the Data Centre Project, and negotiated a three-year contract with EDS to service a critical piece of the province's information technology infrastructure.

In this year of record snowfalls, a hurricane, and major flooding, the Department of Transportation and Public Works worked hard to deliver important services to Nova Scotians. We are proud of their efforts.

Hon. Ron Russell, CD Minister of Transportation and Public Works

#### 3.0 INTRODUCTION

#### **Purpose**

The 2003-04 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 FY 2003-04 Business Plan. Both documents should be read together to get a clear understanding of what the Department set out to do in 2003-04 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.

#### The Structure of this Report

The report that follows will outline the Department's progress and accomplishments against the priorities identified in our FY 2003-04 Business Plan. The report will then provide a summary of our financial results for FY 2003-04, as well as details regarding our performance measures and the results achieved.

## 4.0 DEPARTMENT PROGRESS AND ACCOMPLISHMENTS

| Core Business   | Business Plan Priorities<br>2003-2004   | Accomplishments   |
|---|---|---|
| Core Business #1: Construction, maintenance, and operation of provincial roads, bridges, and ferries. | 1. Provide cost-effective maintenance services for provincial roads, bridges, and ferries and provide snow and ice control on provincial highways so that public satisfaction levels and condition ratings are maintained. This is to be accomplished through the use of an appropriate mix of in-house and contracted private sector services. The benchmarks to be used for the physical condition of the infrastructure are: International Roughness Index for 100 series highways (2002 value - 1.48) and the provincial condition survey, all roads (2002 value - F) while public satisfaction levels are to be measured by the Department's annual customer satisfaction of 50% in 2002). | The effectiveness of TPW's highway maintenance and snow and ice control services were measured using an International Roughness Index (IRI), Road Condition Survey, and a Customer Satisfaction Survey. According to the IRI, the smoothness of our 100 series highways improved slightly from 1.48 in 2002 to 1.45 in 2003. The average rating of road deficiencies remained unchanged in the Road Conditions Survey. Public satisfaction improved from 50% in 2002 to 59% of Nova Scotians indicating satisfaction in 2003. |

2. Continue to adjust the provincial salting program and complete the province's salt management plan to address concerns raised by the Federal Government's review of the use of road salts and their effect on the environment. Actions to include: continued construction of new storage facilities to increase storage capacity by an additional 10%; expand the use of Road Weather Information Systems by upgrading 5 older sites in Kings County and completing the Highway 104 system between Antigonish and Sydney; and increase the number of department units equipped to prewet salt and sand / salt mixtures by 50%.

Several initiatives have been undertaken by the Department to address the concerns raised by the Federal government's review of the use of road salts and their effect on the environment.

- A Salt Management Plan was developed and targets set for implementation in 2004.
- A tender was called and awarded for the construction of four new salt/sand storage facilities at Amherst, Cheticamp, Baddeck and Digby. As well, the salt storage sheds in Beechville and Middle Musquodoboit that were destroyed by the hurricane were replaced.
- The RWIS upgrade of the five older Kings County Stations was completed and one new RWIS station in Yarmouth County was installed. Work continued on identifying site locations for a new RWIS between Antigonish and Sydney and on Highway 101 between Kingston and Yarmouth.
- The number of trucks equipped with prewet salt and sand/salt mixture was increased from 25 to 34 this year.

3. Begin a steel truss bridge replacement program with a goal of replacing or upgrading the 65 highest priority steel truss bridges over the next five years. Program goals in FY 2003-04 are: to put in place sufficient engineering design resources; develop different "prefabricated design types"; and build four to six structures to evaluate the different design types.

The bridge priority list was prepared and announced. Work was completed on the Luther McNutt bridge, the Black Brook bridge in Pictou County, the Asylum Bridge, and the Canal Bridge. Work on the Black Brook bridge in Cape Breton continues. One additional staff member has been added to the engineering design section. Design work is continuing and expanding as approval is received from Navigable Water Inquiries and the Department of Fisheries and Oceans.

|  | 4. Complete and open the current phase of Highway 101 from Mt Uniacke to Ellershouse, and commence construction on Highway 125, as part of the federal cost-shared agreement signed in 2001. Initiate subgrade construction on the section of Highway 103 announced in FY 2002/03 - Beechville to Tantallon and continue work on the Highway 103 Barrington bypass.  | Approximately 20 km of new twinned Highway 101, Mount Uniacke to Ellerhouse was opened in October 2003.  Design work and environmental approvals were obtained for the construction work on Highway 125. Clearing continued from Balls Creeks easterly to Coxheath.  On Highway 103, a grading contract was awarded from Nine Mile River to Trunk 3 at Hubley Interchange.  A tender was called for continuing the work on  |
|--|--|---|
|  |  | Highway 103 Barrington bypass. Work will continue over the next two years.  |
|  | 5. Complete the Seal Island bridge deck replacement project and the Margaree Harbour bridge.   | Both the Seal Island Bridge and the Margaree<br>Harbour Bridge projects are complete and were<br>opened to traffic in fall 2004.  |
|  | 6. Continue the ferry fleet renewal program. Complete construction of the replacement for the Joshua Slocum ferry and finalize a replacement priority list and schedule for the remaining ferries.   | Construction of the new ferry, the "Petit Princess" was completed this year with the new ferry fully operational early 2004. A priority list and schedule was developed but has not been finalized.   |
| Core Business #2: Planning and management of highway and building infrastructure, including highway, bridge and building design services; project management services for government construction projects; environmental services; administration of provincial industrial water utilities. | 7. Provide design and construction management services, under the school renovation and construction program, for a variety of projects. These projects will include: Renovation - Phase II renovation of Sir John A. Macdonald High School, Construction - South Colchester High School, Windsor High School, Pictou East and Pictou West High Schools (Completion 2003); Sydney Elementary, Shelburne High School and Truro Junior High School (Completion 2004-05). | General building renovations and upgrades to the old Sir John A MacDonald High School have been completed and renovations for the conversion to a junior high school are scheduled for completion in September, 2004. Construction was completed on: South Colchester High School, Windsor High School, Pictou East High School, and Pictou West High School. Construction of the following schools is underway and they are scheduled for completion in the fall of 2004: Sydney Elementary School, Shelburne High School, and Truro Junior High School. Construction on Cumberland and Amherst Elementary Schools has been started and they are scheduled for completion in February, 2005. |

8. Complete design, planning, and Detailed design work continued throughout obtain environmental approvals for 2003-04 for expansion and upgrades to the expansion and upgrades In province's 100 series highway system. An particular, pre-engineering and Environmental Screening study for Highway environmental work will continue 101 St. Croix to Avonport was started. The on Highway 101 from St. Croix to report is scheduled to be submitted for Avonport, and Highway 104 from environmental approval by the Canadian New Glasgow to Sutherlands Environmental Assessment Agency in the fall River. This pre-engineering and of 2004. The Acadia Centre for Estuarine environmental work is planned to Research continues to study the Avon River be completed in 2004. (Windsor) causeway area's fish populations and salt marsh. In October 2003, a public consultation Open House was held in Avonport on the Ben Jackson Rd intersection replacement, Avonport View Park, and Avonport Interchange modifications. A traffic modeling and benefit/cost study of the Ben Jackson Rd intersection replacement alternatives was started in March 2004. A community impact and route evaluation study of Highway 104 New Glasgow to Sutherlands River was started in August 2003 and will be completed the following year. A public working session was held in March, 2004 as part of the study. Planning and design work is ongoing. 9. Implement a bridge management TPW selected the Ontario Bridge Management program for the province and System. Legacy information has been begin loading data collected in transferred to the new database and additional previous years, with a goal of 67% inventory and inspection results are being of provincial bridges inspected entered as inspections are carried out. and loaded into the new system by

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March 2004.

10. Evaluate a Geographic Information System (GIS) pilot project conducted with the SNSMR Nova Scotia Geomatics Centre. This pilot project created a geographic reference system for Cumberland County. This system could be used to support bridge management and other information systems implemented by the department in the future.

The pilot project in Cumberland County has been successfully completed and evaluated. Based on this evaluation, a proposal was developed in partnership with Service Nova Scotia and Municipal Relations for Phase 2 of the project, which is the implementation of a province wide GIS. TPW plans to proceed with the proposal.

11. Continue to pursue four of the Department's obligations, with respect to buildings, as outlined in Nova Scotia's Energy Strategy Implementation Plan. These obligations are: lead by example with a government house-in-order program that has targets for energy use in existing provincially funded buildings; the Provincial government will implement a plan for early conversion of provincially funded buildings to natural gas where it is economically feasible to do so; begin to phase in energy efficiency standards for commercial heating, ventilating, and air conditioning equipment in provincially funded buildings; and develop and maintain an inventory of energy use for all provincially funded facilities.

Work was ongoing throughout the year with respect to making existing provincially funded buildings more energy efficient. In all new construction, the main boilers were equipped and certified for use of natural gas. As regularly scheduled work was being done, energy efficient products and systems were being integrated into these buildings. The target is for all new buildings being designed and constructed by the Department to meet or exceed a level of energy efficiency 25% better than the Model National Energy Code for Buildings. This has been achieved in 11 buildings to date with approximately 21 buildings in various stages of the process. Work continued on developing an inventory of energy use for provincially funded facilities.

Core Business #3: Provision of support services to provincial government departments and agencies including accommodation and property services; stationary stockroom; postal services; the delivery of telecommunications and information technology to meet the corporate business needs of government; public safety field communications services, including Trunked Mobile and legacy radio services; and the administration of industrial parks and malls.

12. Investigate, with other levels of government, opportunities for the development of provincially owned property.

A feasibility study was completed on the construction of a new building on the former Trustcan site owned by Halifax Regional Municipality and inclusive of the Province's Dennis Building and Hansard Building sites. First draft of a business case supporting the development has been completed.

13. In partnership with the Office of Economic Development, continue supplier development programs and Nova Scotia
Business Opportunities Initiatives (NSBOI) to improve the flow of information of all public sector, federal, provincial, and MASH buying opportunities to Nova Scotia companies (e.g. distribution of new Procurement Branch Tenders Brochure). In addition, promote the expanded value and use of e-commerce in public procurement.

Due to departmental restructuring, this priority has been transferred to the Office of Economic Development.

| 14. Develop an electronic procurement (e-procurement) action plan, for the prioritization and implementation of e-procurement projects considered essential and critical to the procurement function within government as well as for the MASH (municipalities, agencies, schools and hospitals) sector.   | Due to departmental restructuring, this priority has been transferred to the Office of Economic Development.  |
|--|---|
| 15. Determine the government's current and future Data Centre needs for the storage and management of electronic information, and develop a Request for Proposals for those requirements. Processing and data for significant Provincial systems reside at the Data Centre, such as the Human Resources Management System, Registry of Motor Vehicles, and the Provincial Assessment System. In addition, the Data Centre hosts other applications for government departments including SAP and the Health Information System. | Presentations on our Data Centre needs was given to the IT Directors Forum, Business Technology Advisory Committee, and the full Deputies.  A Memorandum to Executive Council defining project and project scope has been drafted. Once finalized it will be forwarded to Cabinet for their approval.   |
| 16. Develop a long-term strategy for the future of provincial mobile radio infrastructure. The strategy will determine the most appropriate system for the use of this infrastructure in public safety services in the future.   | The Department has developed a multi-year strategy. Phase 1 deals with the volunteer sector and their use of provincial communications infrastructure. Phase 2 deals with all other public sector users of mobile radios in NS. Phase 1 has been developed and is in the process of being implemented. To support this strategy, the Department is acquiring new communications assets and services and retiring others to ensure volunteers continue to have high quality field communications. The Phase 2 strategy is being developed. |

| Development and implementation of policies related to air, marine, rail and road transport systems, including the administration of the safe operation of provincially regulated railways. | 17. Provide Nova Scotia's input into major federal legislative and policy reviews affecting all modes of transportation.   | With respect to Bill C-26 and major changes proposed therein to the Declaration of Transportation Policy contained in the Canada Transportation Act, TPW prepared two major submissions. One, on behalf of the Province of Nova Scotia to the House of Commons Standing Committee on Transportation and another to the Federal Minister of Transport for signature by the four Atlantic Ministers of Transportation. The Province opposes the removal of references to transportation as key to regional economic development and a major contributor to economic growth in Canada and its regions. |
|--|--|---|
|  | 18. Work, through the Council of   |   |
|  | Atlantic Premiers, on regional co-<br>operative initiatives to harmonize<br>measures affecting movement of<br>freight by truck and to improve air<br>service to, from, and within the<br>Atlantic provinces. | stakeholders, an initial draft of proposed special permit conditions for oversize loads and a draft discussion paper on overweight special permit conditions were developed.  Prepared background paper on air service for the Conference of New England Governors and Eastern Canadian Premiers. The paper recommended establishment of new U.S. preclearance facilities in Eastern Canada and pursuit of the possibility of initiating a pilot project on cabotage in the Eastern Canada/New England region.  |

From the Government Business
Plan, Page 40
The federal and Nova Scotia
governments have announced
funding of \$1.4 million to support
the expansion of commercial
opportunities at the Halifax
International Airport. The
investment will allow the Halifax
International Airport Authority to
develop an additional 14
commercial lots, to attract new
tenants and employment at the
airport.

Twelve commercial lots have been developed at the Halifax International Airport. The Province contributed \$500,000 towards the airside lot subdivision which supports both the development of the airport and local exporters.

#### 5.0 OTHER ACCOMPLISHMENTS

- The Department of Transportation and Public Works shared the Lieutenant Governor's Award for Engineering Excellence with consultants CBCL Limited of Halifax for the major overhaul of the Seal Island Bridge in Cape Breton. The bridge is a critical link in the province's highway system, carrying more than 7,500 cars a day in peak periods. Closing it would have created detours up to three hours long. Engineers solved the problem by using precast concrete panels that could be placed onto the bridge one at a time. The panels were cast at an offsite plant under ideal conditions for quality control, then trucked to the bridge and set in place with boom trucks.
- A design engineer with Nova Scotia's Department of Transportation and Public Works, received an Energy Efficiency Recognition Award from the Office of Energy Efficiency, Natural Resources Canada. The award recognizes the work as exceeding the voluntary energyefficient, new construction design standards laid out by the federal government in its Commercial Building Incentive Program.
- An engineer in the department's Sydney office, has been assisting the U.S. Federal Highway Administration by giving talks all over the United States on the topic of night paving. Rules around night paving for a paving job on Highway 125, near Sydney were developed. Given the high traffic volumes on Highway 125, a way to pave effectively at night while maintaining safety for workers and drivers was required. The specifications worked and night paving has been used successfully since then on other jobs in Nova Scotia.
- Staff from the Englishtown Ferry launched a rescue boat and plucked two swimmers from the
  dangerous currents of St. Anns Bay on July 9, 2003, quick action that almost certainly saved
  two lives. Four Department of Transportation and Public Works employees were given the
  Minister's Award, which is given to employees for outstanding action in the preservation of life
  or the prevention of serious personal injury.
- With nearly 600 of Transportation and Public Works employees eligible for retirement over the
  next five years, the department launched a workforce development plan called Planning for
  Progress to ensure Nova Scotians continue to get the best possible service. The program has
  four main programs: career planning/training for staff; advanced education or lifelong learning
  opportunities for staff; recruitment/outreach marketing of youth plus bursary; and succession

## planning.

## 6.0 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 2003-04 Business Plan and the actual net expenditures for FY 2003-04.

| Budget Allocation                           |          | l                      |          |   |
|---|----------|------------------------|----------|---|
| G B   | 2003-04  | (thousands)<br>2003-04 | Variance |   |
| Core Businesses                             | Estimate | Actuals                | variance |   |
| Field Administration                        | 18,235   | 17,552                 | 683      |   |
| Highways and Bridges                        | 56,368   | 57,162                 | <794>    | 1 |
| Snow and Ice Control                        | 38,726   | 42,384                 | <3,658>  | 2 |
| Fleet Management                            | 598      | 613                    | <15>     | _ |
| Ferry Enterprises                           | 4,789    | 4,870                  | <81>     |   |
| Employee Benefits                           | 11,049   | 11,844                 | <795>    |   |
| Total Highway Operations                    | 129,765  | 134,425                | <4,660>  |   |
| Engineering & Design                        | 1,733    | 1,677                  | 56       |   |
| Building Services                           | 7,562    | 7,355                  | 207      |   |
| Utilities                                   | 365      | 430                    | <65>     |   |
| Public Works/Special Projects               | 13,527   | 14,136                 | <609>    | 1 |
| Highway Engineering Services                | 3,216    | 3,022                  | 194      |   |
| Maintenance Improvements                    | 15,791   | 13,531                 | 2,260    |   |
| Road, Bridge, Ferry Amortization            | 47,603   | 26,085                 | 21,518   | 4 |
| Environmental Remediation                   | 1,736    | 5,492                  | <3,756>  | 5 |
| Total Public Works                          | 91,533   | 71,728                 | 19,805   |   |
| Real Property Services                      | 4,245    | 3,026                  | 1,219    | 6 |
| Procurement & Postal Services               | 1,306    | 1,377                  | <71>     |   |
| Technology Services                         | 4,201    | 3,452                  | 749      | 7 |
| Public Safety Communications Program Office | 8,411    | 8,027                  | 384      |   |
| Total Government Services                   | 18,163   | 15,882                 | 2,281    |   |
| Policy and Planning                         | 818      | 817                    | 1        |   |
| Senior Management                           | 635      | 676                    | <41>     |   |
| Corporate Services Units                    | 5,740    | 6,359                  | <619>    | 8 |
| Total Business Support                      | 7,193    | 7,852                  | <659>    |   |
| Total TPW                                   | 246,654  | 229,887                | 16,767   |   |

| Salaries and Benefits (included in above figures) | 96,240 | 93,267 | 2,973 |  |
|---|--------|--------|-------|--|
| Funded Staff (FTEs)                               | 2079.0 | 2042.0 | 37.0  |  |

- 1) Unexpected costs associated with the cleanup after Hurricane Juan.
- 2) Snow and Ice Control over budget due to severe winter weather conditions during the latter part of the winter
- 3) Increased benefit costs due to increased premiums and employees attaining regular status (CUPE employees met the requirement for benefits eligibility).
- 4) Tangible Capital Asset (TCA) policy change amortization rates.
- 5) Set up the liability for the Boat Harbour remediation.
- 6) Reduced maintenance projects and increased parking revenues.
- 7) Renegotiated Aliant contract resulted in lower costs.
- 8) Increased insurance claim liability.

## **Tangible Capital Asset Expenditure Summary 2003/2004** (thousands)

| Tangible Capital Account                   | Estimate <u>03/04</u> | Actuals <u>03/04</u> | <u>Variance</u> |
|--|-----------------------|----------------------|-----------------|
| Highway Operations                         | 112,367               | 105,474              | 6,893           |
| TPW Building Construction                  | 21,941                | 19,999               | 1,942           |
| Public Safety Communication Program Office | 600                   | 0                    | 600             |
| Total Tangible Capital Assets              | <u>134,908</u>        | <u>125,473</u>       | <u>9,435</u>    |

The Capital account surplus was primarily due to delays in tendering which resulted in TCA project savings for highway operations and building construction, plus, a deferred purchase of Nova Scotia Integrated Mobile Radio.

#### 7.0 PERFORMANCE MEASURES

Due to departmental restructuring, the responsibility for Government Procurement and Supply Services' performance measures have been moved to the Office of Economic Development.

#### **OVERALL SATISFACTION - PROVINCIAL HIGHWAY SYSTEM**

One of Transportation and Public Works's (TPW) core business areas is Highway Services. A desired outcome of this core business area is to "provide highway services that address customers' needs".

### WHAT DOES THE MEASURE TELL US?

TPW conducts Customer Satisfaction Surveys to determine and evaluate the public's satisfaction with the provincial highway system. It measures, in the public's opinion, 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.

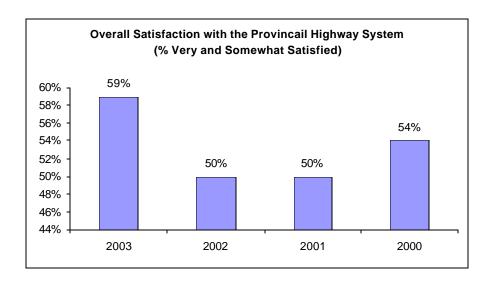
#### WHERE ARE WE NOW?

In the 2000 Customer Satisfaction Survey - Provincial Highway System, 54% of Nova Scotians were satisfied with the provincial highway system. Overall satisfaction declined in 2001 to 50%. There was no change in 2002. We suspect this was due to reductions to capital construction over the past six years.

Recent budget increases may have helped to address this issue. Overall satisfaction increased in 2003. Fifty-nine percent of Nova Scotians indicated that they were "very satisfied" (10%) or "somewhat satisfied" (49%) with the provincial highway system.

#### WHERE DO WE WANT TO BE IN THE FUTURE?

Our target for 2004-05 is to at least maintain the percentage of Nova Scotians satisfied overall with the provincial highway system. Some of the strategies that were implemented to achieve this target include: an increase in the Capital Budget by \$55 million over three years (FY 2001/02 - 2003/04), the continuation of the Road Improvement Money (RIM) fund for the repair and maintenance of rural roads, and conformance to summer and winter performance standards for highway maintenance operations providing consistent service levels for delivery to the public.



Customer Satisfaction Surveys - 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 services 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 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?

For each of the following services, the percentage of respondents that indicated that the service was "very important" and rated its quality as less than "excellent" was measured. From the 2000 Customer Satisfaction Survey - Provincial Highway System:

- a) filling cracks and potholes 87%
- b) resurfacing sections of the highway 73%
- c) surface condition of highway shoulders 68%
- d) helpfulness of non-commercial signs 58%.

In 2003, the gap decreased in three out of four service areas:

- a) filling cracks and potholes 85%
- b) resurfacing sections of the highway 68%
- c) surface condition of highway shoulders 67%
- d) helpfulness of non-commercial signs 66%.

#### WHERE DO WE WANT TO BE IN THE FUTURE?

By 2004, TPW would like to narrow the service "gap", identified in 2000, in the following three service areas: filling cracks and potholes, resurfacing sections of the highway and surface condition of highway shoulders. Also, TPW would like to at least maintain the service "gap" for helpfulness of non-commercial signs, at the base year level.

Some of the strategies being implemented to achieve this target include: an increase in the Capital Budget by \$55 million over three years (2001/02 - 2003/04), the continuation of the Road Improvement Money (RIM) fund for the repair and maintenance of rural roads, and conformance to summer and winter performance standards to be used in highway maintenance operations providing consistent service levels for delivery to the public.

**Meeting Customers Expectations - GAP Analysis** 

| Highway Services                       | 2000 (base year)<br>% | 2003<br>% | 2004 (target)<br>% |
|--|-----------------------|-----------|--------------------|
| filling cracks and potholes            | 87                    | 85        | 80                 |
| resurfacing sections of the highway    | 73                    | 68        | 65                 |
| surface condition of highway shoulders | 68                    | 67        | 65                 |
| helpfulness of non-commercial signs    | 58                    | 66        | 58                 |

Customer Satisfaction Surveys - Provincial Highway System

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

#### INTERNATIONAL ROUGHNESS INDEX

Another desired outcome of Highway Services 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). The IRI is a new advanced measure, internationally accepted and comparable across jurisdictions. (NOTE: Replaces previous measure - riding comfort index (RCI) of 100-series highways.)

#### WHAT DOES THE MEASURE TELL US?

IRI is measured on a scale of 0 - 5, where 0 = smoothest and 5 = unacceptable. 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. In 2003, it was 1.45. An IRI baseline of 1.48 was established in 2002. An IRI value of 1.6 or below for 100-series highways is considered good according to the *National IRI Survey - 2001*.

(NOTE: In 2000, 7.3 was the average RCI value. In 2001, the average RCI was 7.4. RCI was measured on a scale 0 - 10, where 0 = unacceptable and 10 = smoothest. Transportation Association of Canada's standard for 100-series highways is an RCI of 5.5 or better.)

#### WHERE DO WE WANT TO BE IN THE FUTURE?

TPW will strive to maintain the level of riding comfort on 100 - series highways. To achieve this, the Department has implemented End Product Specifications, whereby paving contractors are made responsible for product quality on all suitable paving contracts of 8,000 tons of asphalt or more; and is maintaining our surface treatment program to protect asphalt surfaces.

| Accountability Re | eport |
|-------------------|-------|
| Fiscal Year 2003- | 2004  |

Transportation and Public Works

|  | 5             | UNACCEPTABLE |
|--|---------------|--------------|
|  | 4             |              |
| INTERNATIONAL ROUGHNESS INDEX 1.6 OR BELOW CONSIDERED GOOD | 3             |              |
|  | 2             |              |
| CURRENT INTERNATIONAL ROUGHNESS LEVEL                      | <b>1.45</b>   |              |
|  | 0             | SMOOTHEST    |
| Data produced by Automatic Road Ana                        | alyser (ARAN) |              |

#### **CASUALTY RATE**

TPW is working toward the outcome of "improving highway safety" through various engineering 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 programs contribute 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 at the end of FY 2003-04.

#### WHERE ARE WE NOW?

The recorded casualty (fatality and injury) rate per 10,000 motor vehicles registered in 2000 was 123.9. Since then the annual casualty rate per 10,000 motor vehicles registered has been declining. In 2001, the casualty rate per 10,000 motor vehicles registered declined to 109.39. The rate continued to decrease in both 2002 and 2003, where it was to 102.81 and 94.44 respectively.

#### WHERE DO WE WANT TO BE IN THE FUTURE?

Our objective is to decrease the casualty rate per 10,000 motor vehicles registered. TPW has continued with 100-series highway twinning and new controlled access construction, developed and implemented summer and winter performance standards, and developed public education and awareness campaigns on current topics of prevailing priority such as the Work Zone Safety Campaign, Operation Christmas, and Winter Safety Day.

#### **Casualty Rates**

| Year             | Fatalities | Injuries | Casualties/<br>10K Motor Vehicles Registered |
|------------------|------------|----------|--|
| 2000 (base year) | 87         | 6999     | 123.9  |
| 2001             | 80         | 6327     | 109.39                                       |
| 2002             | 88         | 5949     | 102.81                                       |
| 2003             | 70         | 5291     | 94.44  |

Nova Scotia Collision Record Database

#### PERCEIVED SAFETY

Another measure of our efforts toward the outcome of "improving highway safety" is to examine Nova Scotians' confidence in the safety of provincial roads.

#### WHAT DOES THE MEASURE TELL US?

In the annual Customer Satisfaction Survey on the Provincial Highway System, we ask Nova Scotians how safe they feel when driving on provincial roads. "Somewhat safe" and "very safe" responses are totaled together to get an overall indication of perceived safety.

#### WHERE ARE WE NOW?

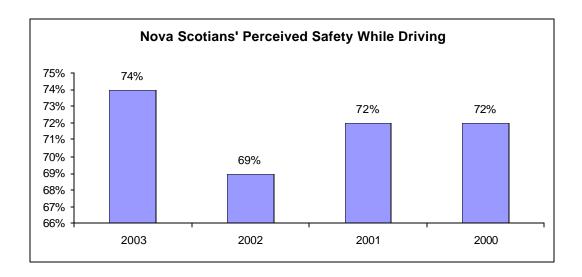
In the 2000 and 2001 surveys, 72% of Nova Scotians reported that they felt safe driving on our provincial roads. In 2002, the percentage of Nova Scotians indicating that the felt safe driving on our provincial roads was 69%. In 2003, 74% of Nova Scotians reported that they feel either "very safe" or "somewhat safe" when driving on provincial roads.<sup>1</sup>

#### WHERE DO WE WANT TO BE IN THE FUTURE?

Our objective is to improve or at least maintain the percentage of Nova Scotians that feel safe when driving on provincial highways. Some of the ways we are working toward "improving highway safety" are through the conformance to summer/winter performance standards, the pursuit of various safety initiatives through the Road Safety Advisory Committee, an increased emphasis on repaving in the capital program, and the continuation of 100 Series Highway twinning and new controlled access construction.

<sup>&</sup>lt;sup>1</sup>Even though the percentages have changed over the years, there is no significant difference in how safe Nova Scotians feel while driving. Not significant means that the difference in the data is not large and therefore the change could have occurred by chance or sampling error.

Customer Satisfaction Surveys - Provincial Highway System



#### TIMELINESS OF PUBLIC WORKS PROJECT COMPLETION

Another of TPW's core business areas is the design, construction and project management of government infrastructure. The percentage of projects completed within the agreed upon deadline is one measure of the "effectiveness and efficiency of the project management process".

#### WHAT DOES THE MEASURE TELL US?

Projects include the construction of new buildings such as schools and courthouses, renovations or alterations to existing government buildings and environmental projects such as the demolition of buildings and the clean-up of contaminated sites. The measure tells us what percentage of these projects completed in a given year were completed on time.

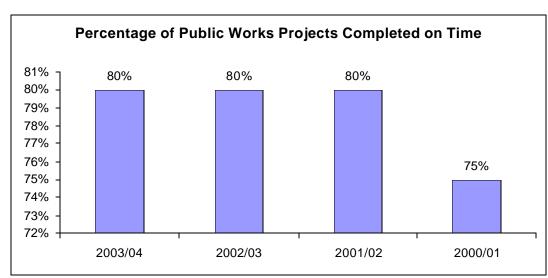
#### WHERE ARE WE NOW?

In FY 2000-01, 75% of the projects were completed on time. TPW managed 330 projects in FY 2001-02 and 80% of these projects were completed on time. Again, in FY 2002-03, 80% of approximately 250 public works projects were completed on time. In FY 2003-04, we completed approximately 80% of the 300 public works projects on time.

#### WHERE DO WE WANT TO BE IN THE FUTURE?

Our target is to have 85% of the Public Works projects completed on time. To achieve this target, TPW is focusing on improving the selection process for consultants, developing employee retention strategies to ensure a constant work force and investigating ways to streamline projects such as design-

build and phased construc tion.



Public Works Special Projects Capital Budget spreadsheet Project Budget Reports for Refundable Projects

#### **BUDGET VARIANCES - PUBLIC WORKS PROJECTS**

The second measure of our efforts toward the outcome of an "effective and efficient project management process" is the percentage of projects completed within budget.

#### WHAT DOES THE MEASURE TELL US?

The percentage of projects completed within budget is a comparison of the final costs of a project to the accepted budget for a project. This measure allows us to further assess our progress toward maintaining an "effective and efficient project management process". Projects include construction of new buildings such as schools and courthouses, renovations or alterations to existing government buildings and environmental projects such as the demolition of buildings and the clean-up of contaminated sites. This measure tells us how well we are doing in delivering these projects within the agreed upon budgets.

#### WHERE ARE WE NOW?

Based on the Public Works Special Projects Capital Budget spreadsheet and the Project Budget Reports for Refundable Projects, in fiscal year 2000-01, 90% of the projects were completed within budget. This continues to be the trend, in fiscal years 2001-02, 2002-03 and 2003-04, approximately 90% of the projects were completed within budget. Projects vary from small renovations and upgrades valued as low as \$25,000 to multi-million dollar additions, renovations, and new construction.

#### WHERE DO WE WANT TO BE IN THE FUTURE?

The target is to maintain the percentage of projects completed within budget. TPW plans to do this by being diligent about design decisions and requests for changes while work is in progress.

#### SATISFACTION OF GOVERNMENT CLIENTS

Another of TPW's core businesses is the delivery of accommodation and property services. A desired outcome of this core business area is to "provide appropriate and cost efficient accommodation 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.

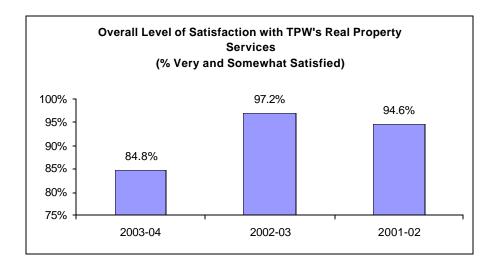
#### WHERE ARE WE NOW?

According to the 2001-02 Customer Satisfaction Survey - Real Property (base year), 94.6% of clients were either somewhat or very satisfied with TPW's Real Property Services. These services include accommodation and space allocation, management of leases, space planning, moves, redistributing surplus furniture, acquisition and design of system furniture, property acquisition and the disposal of surplus crown property.

In FY 2002-03, 97% were satisfied (43% somewhat satisfied and 54% very satisfied) with the real property services they received. According to results of the 2003-04 Customer Satisfaction Survey - Real Property, overall satisfaction declined. Eight-five percent of our customer indicated that they were either "very satisfied" or "somewhat satisfied".

#### WHERE DO WE WANT TO BE IN THE FUTURE?

Our target for FY 2004-05 is to maintain the high level of satisfied clients. Some of the strategies being implemented to achieve this target include: the development of an audit process for leased premises, improved communication between Property Officers and clients and adherence to Facilities Procurement Guide and policies.



Customer Satisfaction Surveys - Accommodation and Property Services

## COST EFFECTIVE TELECOMMUNICATIONS AND INFORMATION TECHNOLOGY SOLUTIONS

Through TPW's Government Services Division, TPW delivers corporate information and technology solutions to government. A desired outcome of this core business area is to "provide cost effective telecommunication and information technology solutions".

#### WHAT DOES THE MEASURE TELL US?

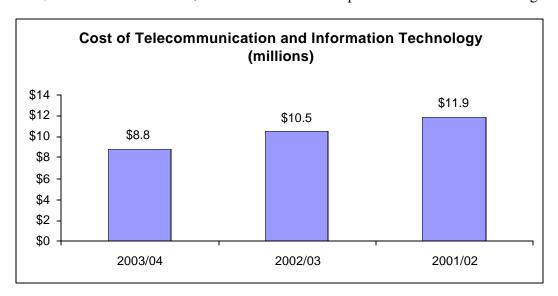
This measure tells us how cost effective we are in providing telecommunication and information technology services (local voice, long distance, cellular, paging and data networks) to our government clients.

#### WHERE ARE WE NOW?

In FY 2001-02, the base year, telecommunication and information technology costs were \$11.9 million. In FY 2002-03, the cost of these services was \$10.5 million. The cost of these services dropped to \$8.8 million in FY 2003-04.

#### WHERE DO WE WANT TO BE IN THE FUTURE?

Our target was to reduce telecommunication and information technology costs by 10% by working cooperatively with our clients to address their service issues, needs and potential cost savings opportunities. This target was surpassed in FY 2003-04 when the cost of these services had decreased to \$8.8 million. In the future, we strive to continual improve service while maintaining costs.



TPW's General Ledger Accounts