



Transportation and Infrastructure Renewal

2013-2014 Statement of Mandate

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1. Message from the Minister and Deputy Minister

We are pleased to present the 2013-2014 Statement of Mandate for the Department of Transportation and Infrastructure Renewal (TIR). Infrastructure is the backbone of Nova Scotia's economy and is critical to sustaining and strengthening our communities. The Department of Transportation and Infrastructure Renewal plays a vital role in building and maintaining a safe public infrastructure that Nova Scotians rely upon every day.

In 2010, the Department launched a 5-Year Highway Improvement Plan, an initiative of the *jobsHere* strategy. This plan was developed to help achieve our goal of providing a safe and efficient highway infrastructure and it highlights a balanced approach to improving our roads. The fourth edition of the plan (2013-2014) has been released, and outlines major highway construction projects, repaving, major bridge replacements and maintenance, and infrastructure work the province plans to pursue year by year over the next five years.

With the cost of roadwork increasing dramatically during the past number of years, several plan initiatives focus on implementation of the latest pavement preservation treatments and techniques. For example, TIR has established its own mobile asphalt plant, which began operation in Summer 2012. Using the new mobile asphalt plant, we can apply a new single lift of asphalt now, instead of waiting until the existing pavement has totally deteriorated. This allows the Department to improve the condition and extend the life of more roads at a fraction of the cost.

The Department also remains committed to making road safety a priority, and will continue to collaborate with our road safety partners to ensure Nova Scotia's roads are the safest place to travel in Canada. We are providing leadership in the development of a 5-year Road Safety Action Plan that addresses priority areas and outlines opportunities to promote a culture of road safety amongst Nova Scotians.

We continue to identify and implement measures to increase the energy efficiency of government owned buildings and also remain committed to implementing green building and environmentally sustainable measures in building design, construction and operations. We are designing and constructing all new buildings to achieve a minimum Leadership in Energy and Environmental Design (LEED) Silver Certification, where applicable, and are targeting design and construction for new buildings to LEED Gold Certification, where feasible.

Our employees continue to play an invaluable role within the department and demonstrate ongoing commitment to excellence and innovation. We look forward to leading the Department and providing the direction necessary to address all opportunities and challenges that may arise in the coming year.

Sincerely,

original signed by
Hon. Maurice Smith
Minister

original signed by
Paul LaFleche
Deputy Minister

2. Department Mission

The mission of the Department of Transportation and Infrastructure Renewal (TIR) is to:

- **Deliver quality public infrastructure for Nova Scotia**

3. Department Mandate

The Department has the mandate to:

- Provide a transportation network for the safe and efficient movement of people and goods
- Serve the building, property and accommodation needs of government departments and agencies
- Provide quality and effective common services to government departments, agencies, boards and commissions

The following strategic goals have been adopted to help the department achieve its mandate.

- To have a workforce that is proud, capable, engaged, healthy and diverse
- To enhance the value and safety of the transportation system in support of the province's economic growth
- To build, maintain, operate and manage government buildings and other public works infrastructure effectively and efficiently
- To provide cost-effective and environmentally friendly sound government services to address clients' needs

4. Government Priorities

TIR develops departmental priorities with the objective to support government in achieving its core priorities and a number of the department's strategic activities align with more than one priority.

Priority: Provide better healthcare for you and your family

As evident in the department mandate, road safety is a top priority for TIR. Initiatives that promote safety on Nova Scotia roads and decrease serious injuries related to traffic collisions can ultimately result in a decreased burden on the health care system, while at the same time contributing towards safe and peaceful communities. Strategic activities planned for the upcoming fiscal year will aim to achieve these goals through the implementation of a Road Safety Action Plan in conjunction with other stakeholder departments. The Road Safety Action Plan will include engineering, education and enforcement initiatives designed to improve safety.

TIR also continues to identify and implement measures to increase the energy efficiency of government owned buildings, implementing green building and other environmental sustainable measures in building design, construction and operations. These efforts contribute to an environmentally healthy province (also aligns with “get back to balance and ensure government lives within its means”).

Priority: Create good jobs and grow the economy.

An initiative of the *jobsHere* strategy, the 5-Year Highway Improvement Plan was developed to help achieve our goal of providing a safe and efficient highway system. Investing in work identified in the plan is one of the best ways to create jobs and improve the quality of life in our communities. The investment helps ensure that local businesses can transport their goods to market, Nova Scotians can stay connected to vital services, employment and education, and visitors can travel safely to our communities. The road building industry in Nova Scotia is a large source of jobs, creating an estimated 5,000 direct and 2,500 indirect positions every year. A typical \$2-million paving contract generates 60 direct jobs and about \$200,000 worth of business for the trucking industry, and spin-off benefits for local businesses that provide construction materials, metalwork/welding, engineering, electrical work and hazard removal.

TIR has released the fourth edition (2013-2014) of the 5-Year Highway Improvement Plan which includes a complete list of all capital projects that will be completed during the 2013-2014 construction season, and highlights projects completed during the 2012-2013 construction season. This plan highlights a balanced approach to improving our roads, with a larger portion of the highway improvement budget directed to improving paved roads before they become severely damaged and require costly repairs. This approach continues to ensure that available funding is used in a more efficient and effective way (also aligns with “get back to balance and ensure government lives within its means”).

Priority: Get back to balance and ensure government lives within its means.

Pavement preservation involves extending the useful life of asphalt pavements to improve smoothness, reduce potholes, and decrease rutting and cracking. This keeps the roads smoother and safer at a much lower cost than allowing the road to deteriorate to the point of needing full reconstruction.

In 2011, TIR established a chip seal crew to protect Nova Scotia's investment in paving, began to address the condition of low volume local roads, to improve competition, and to provide better service to rural areas. This initiative saved \$2.2 million in 2011 which was reinvested in highway infrastructure, and resulted in lower bid prices from contractors. The Department has also established a mobile asphalt plant which became operational in Summer 2012, which like the chip seal crew, allows the Department to provide asphalt at market value and encourages competition in all areas of the province. This helps to bring down costs in areas of the Province where there has been little to no competition and prices have been above normal market values. Analysis shows that TIR can do the work at a competitive price, with savings of approximately \$2.4 million in the first full year of asphalt plant operation, which translates into more kilometres of repaving.

TIR has been implementing a comprehensive Salt Management Strategy to reduce the impact on the environment and to improve the cost effectiveness and safety benefits of road salt by using the right amount of salt at the right time in accordance with winter service standards. Work will continue to expand the use of pre-wetting capacity to improve the overall effectiveness of the salt once it is placed on the road. In addition, the Department is testing new anti-icing techniques which involve pro-actively applying anti-icing products to roadways before or at the onset of winter storm events. These products help melt snow and reduce ice formation on roadways, thereby reducing the amount of time and resources required to restore roads to a clear, dry state.

5. Performance Measures

Strategic Goal: To have a workforce that is proud, capable, engaged, healthy and diverse				
Measure	Base Year	Target	Trends	Strategic Actions
Engagement Index (How's Work Going Survey)	2011: Engagement Index - 58	To increase engagement index	n/a	<p>Implement employee engagement plan.</p> <p>Complete the TIR diversity plan and begin implementation.</p> <p>Partner with Public Service Commission to develop manager capacity in recognizing and coaching performance.</p>

Strategic Goal: Provide a transportation network for the safe and efficient movement of people and goods

Outcome	Measure	Base Year	Target	Trends	Strategic Actions
Improve more roads in more communities	Per cent of planned work completed as outlined in the Five-year Highway Improvement Plan	Base Year: 2010-2011 % Planned Work Completed: Major construction: 100 Series Expansion: 100% Construction 100 Series: 100% Construction Arterial/ Collectors: 100% Asphalt Repaving: 100-series Highways: 100% Arterial/Collectors: 100% Local roads: 100% Pavement Preservation: 100% Subdivision Roads: 100% Bridges: Major Bridge Projects: 100% Other Bridge Projects: 85.7% Bridge Rehabilitation: 100%	100% completion of annual planned work [note that there are multi-year projects, but only work planned in the given year will be included in this measure]	2011-2012 % Planned Work Completed: Major construction: 100 Series Expansion: 100% Construction 100 Series: 100% Construction Arterial/ Collectors: 100% Asphalt Repaving: 100-series Highways: 100% Arterial/Collectors: 100% Local roads: 98.4% Pavement Preservation: 100% Subdivision Roads: 100% Bridges: Major Bridge Projects: 66.7% Other Bridge Projects: 78.6% Bridge Rehabilitation: 87.5%	Update and implement the plan for the next 5 year period (2014-2015 edition) Continue with chip seal crew established in the 2011 construction season. Continue with asphalt paving crew, established in 2012 construction season. Provide earlier tendering of Highway Construction projects for 2013-2014 season.

Strategic Goal: Provide a transportation network for the safe and efficient movement of people and goods

Outcome	Measure	Base Year	Target	Trends	Strategic Actions
<p>Highway infrastructure that supports economic growth</p>	<p>Average level of pavement roughness for 100-series highways as measured by the IRI (International Roughness Index). An IRI =1.00 would be new pavement and IRI=5.00 would be rough older pavement.</p> <p>An IRI value of 1.6 or below is considered good according to the National IRI Survey - 2001.</p>	<p>Base Year: 2004</p> <p>% of 100-series highways with average IRI <= 1.80:</p> <p>2004: 99.4%</p> <p>Average IRI for the entire 100-series highways</p> <p>2004: 1.41</p>	<p>A minimum of 95% of 100-series highways with an IRI value <= 1.80</p> <p>Maintain the average IRI for the entire 100-series highways below 1.60</p>	<p>% of 100-series highways with average IRI <= 1.80:</p> <p>2005: 99.4%</p> <p>2006: 96.9%</p> <p>2007: 97.0%</p> <p>2008: 99.4%</p> <p>2009: 99.4%</p> <p>2010: 99.4%</p> <p>2011: 99.3%</p> <p>Average IRI for the entire 100-series highways:</p> <p>2005: 1.41</p> <p>2006: 1.37</p> <p>2007: 1.37</p> <p>2008: 1.30</p> <p>2009: 1.28</p> <p>2010: 1.20</p> <p>2011: 1.25</p>	<p>Continue to invest in infrastructure projects under Federal funding agreements.</p> <p>Work with other Atlantic Provinces to secure future federal infrastructure funding.</p> <p>Continue investment in expansion of 100-series highway system, through planning design and construction activities.</p> <p>Continue to use pavement preservation strategies to improve the condition of the highways more cost effectively.</p>

Strategic Goal: Provide a transportation network for the safe and efficient movement of people and goods

Outcome	Measure	Base Year	Target	Trends	Strategic Actions
Improve Highway Safety	Three year rolling average of motor vehicle collision fatalities and serious injuries per 100,000 population.	Base Year: 2005/06/07 Average Rate: 42.6 per 100,000 population.	Decrease the three-year average rate of fatalities and serious injuries.	2006/2007/2008: 40.8 per 100,000 2007/2008/2009: 40.8 per 100,000 2008/2009/2010 37.7 per 100,000 2009/2010/2011 38.4 per 100,000	Continue implementation of rumble strips program, including both edge strips and centerline rumble strips. Continue the in-service road safety reviews.* Implement 5-year Road Safety Action plan in conjunction with stakeholder departments. Continue the Road Safety Advisory Committee to provide advice to government around road safety initiatives. Continue with policy analysis of road safety issues. Maintain Commercial Vehicle Safety Alliance (CVSA) standards for commercial vehicle inspections completed. Maintain increased hours of operation for scale houses achieved in 2011.

* An in-service road safety review is an in-depth engineering study of an existing road using road safety principles with the purpose of identifying cost-effective countermeasures that would improve road safety and operations for all road users

Strategic Goal: Serve the building, property and accommodation needs of government departments and agencies

Outcome	Measure	Base Year	Target	Trends	Strategic Actions
Energy efficient and sustainable buildings	Number of new government buildings that achieve Silver LEED certification	Sir John A. Macdonald High School building was the first new building to achieve LEED Silver certification (April 2008)	<p>All new buildings achieve Silver LEED certification.</p> <p>Ultimate Target: All new buildings be carbon-neutral after 2020</p>	<p>TIR has applied for LEED certification for 26 buildings</p> <p>5 new buildings are targeting LEED Gold Certification.</p> <p><i>Results are not known until the application has been reviewed by the certifying organization.</i></p>	<p>Design and construct all new buildings to achieve a minimum Leadership in Energy and Environmental Design (LEED) Silver Certification, where LEED certification is applicable.</p> <p>Target design and construction for new buildings to LEED Gold Certification standards, where feasible.</p>
	Comparison of simulated energy performance data to actual energy performance	Base Year: 2004 85.7%	<p>90% of actual results are consistent with theoretical results</p> <p>Ultimate Target: 95% (or more) of actual results are consistent with theoretical results</p>	Data pending	<p>Continue to identify/implement measures to increase the energy efficiency of government owned buildings.</p> <p>Analyze data comparing actual energy use versus simulated use and work with other government entities to take corrective action if required.</p>

6. Budget Context

Transportation and Infrastructure Renewal			
	2012-2013 Estimate	2012-2013 Forecast	2013-2014 Estimate
Program & Service Area	(\$ thousands)	(\$ thousands)	(\$ thousands)
Departmental Expenses:			
Senior Management	915	915	922
Corporate Services Unit	2,875	2,651	2,931
Policy and Planning	1,232	1,182	1,348
Highway Programs	349,711	353,972	360,892
Public Works	66,884	62,024	59,365
Total Departmental Expenses	421,617	420,744	425,458
TCA Purchase Requirements	338,939	303,667	299,875
Provincially Funded Staff (FTE's) Gross	2,070	2,025	2,056