

# Long term strategic capital planning framework

## Investing in infrastructure renewal

Department of Transportation and Infrastructure  
February 2016





# Table of contents

- Message from the Minister . . . . . 1
- 1 Introduction . . . . . 2
- 2 The infrastructure inventory of the Government of New Brunswick. . . . . 4
  - a Provincial infrastructure . . . . . 4
  - b Asset conditions . . . . . 4
- 3 Key infrastructure challenges . . . . . 6
- 4 Long-term capital planning . . . . . 7
- 5 Long-term strategic capital planning framework – the process . . . . . 7
  - a Asset Management – rehabilitation for existing highway assets . . . . . 8
  - b Evidence-based analysis for adding highway assets or decommissioning existing assets . . . . . 9
  - c Asset Management – rehabilitation and evidence-based analysis for buildings . . . . . 9
- 6 Cost of rehabilitation and construction of transportation and buildings infrastructure . . . . . 10
- 7 Governance . . . . . 11
- 8 The resulting planning framework. . . . . 11
  - a Building on knowledge . . . . . 11
  - b Partnerships . . . . . 11
  - c Leveraging opportunities . . . . . 11
  - d Economic impact of spending on infrastructure renewal . . . . . 12
  - e Expected outcomes – benefits and challenges . . . . . 12
- 9 Accountability, reporting and communications . . . . . 13
- 10 Conclusion: Looking forward – planning for the future. . . . . 13
- Appendix A: . . . . . 14
- Appendix B: . . . . . 15

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# Message from the Minister

Our government is committed to making strategic investments in infrastructure renewal that will maximize economic benefits, support economic growth in New Brunswick and ensure public safety. This commitment aligns with our priorities to create jobs, manage our fiscal situation and make New Brunswick the best place in which to raise a family.

As Minister of Transportation and Infrastructure, I am proud to present this document, *Long term strategic capital planning framework: Investing in infrastructure renewal* as the basis for developing our capital plan. This framework and the resulting plan will highlight our proposed investment in roads and other public infrastructure to support immediate job creation and to provide predictability in our construction program.

Our government's planned capital investments will enable us to maintain our highways and other infrastructure more effectively because they are based strategically on the principles of Asset Management and are the result of evidence-based assessments.

This *Long term strategic capital planning framework* is the roadmap to guide and move New Brunswick forward. Our government is using an evidence-based decision process. This framework shows effective and responsible forecasting, and it provides for increased transparency and accountability to New Brunswickers.

We plan to work closely with the federal government, municipalities and our partners in New Brunswick's construction and consulting engineering and architects industry in implementing this framework.



Honourable Roger Melanson  
Minister of Finance  
Minister of Transportation and Infrastructure



# 1 Introduction

The Government of New Brunswick supports a massive infrastructure. Throughout this document, the focus will be on two major categories of infrastructure:

- **Highways**, which includes roads, bridges, culverts and other structures related to the movement of vehicles in New Brunswick; and
- **Buildings**, which includes office buildings, hospitals, schools and other buildings owned or leased by the provincial government to provide services to New Brunswickers.

The Department of Transportation and Infrastructure manages most of the provincial government's infrastructure. This document outlines how the department will invest to maintain, rehabilitate and, where appropriate, decommission infrastructure and build new ones.

One of the department's key methods is a proven methodology known as Asset Management. It involves the creation of a long-term detailed plan with respect to the provincial government's infrastructure. Along with the implementation of this methodology, the department has created a planning framework that includes the following components:

- **Asset Management** to address rehabilitation; and
- **evidence-based assessment** to address new builds (i.e., new construction) and decommissioning.

This *Long term strategic capital planning framework* will support several provincial government priorities, including:

- **Creating jobs:** While construction can lead to positive impacts, research shows investments in transportation infrastructure, specifically, lead to sustained benefits in terms of improved productivity and economic competitiveness.
- **Fiscal responsibility:** Projects that are part of this plan have been selected using proven Asset Management and evidence-based assessment tools to ensure that higher rehabilitation costs are avoided and that projects which add capacity demonstrate the highest return on investment compared to competing capital investments.
- **Best place to raise a family:** Given that New Brunswick has one of the highest per-capita transportation costs in Canada, transportation investments will make our roads safer, shorten commute times, reduce vehicle operating costs and make life in New Brunswick more affordable.

## Investing in infrastructure renewal

For years, fiscal challenges and other factors have resulted in the deferral and delay of rehabilitation and upkeep of New Brunswick's highways and buildings. As a result, the condition of the provincial government's infrastructure has been allowed to deteriorate. This led to the 2012 report by the Office of the Auditor General, which stated:

*We are concerned that as the infrastructure debt grows, the Province will be in a situation where sustainability of the highway network cannot be maintained due to the higher cost of repairing greatly deteriorated roads with limited annual funds.*

This framework responds to the Auditor General's call for action.

It also illustrates the provincial government's vision to invest strategically in infrastructure renewal to maximize economic benefits and support economic development for New Brunswick while ensuring the safety of infrastructure and the public.

Investments in strategic infrastructure will create much-needed jobs and economic growth. The provincial government has committed to achieving this targeted objective by:

- creating an infrastructure investment fund of \$900 million in additional funding over six years; and
- developing a multi-year infrastructure spending plan that will:
  - be based on Asset Management principles and evidence-based assessments to enable more effective and efficient planning and prioritizing of capital needs;
  - ensure predictability; and
  - increase transparency and accountability;

This framework primarily encompasses three categories of infrastructure assets:

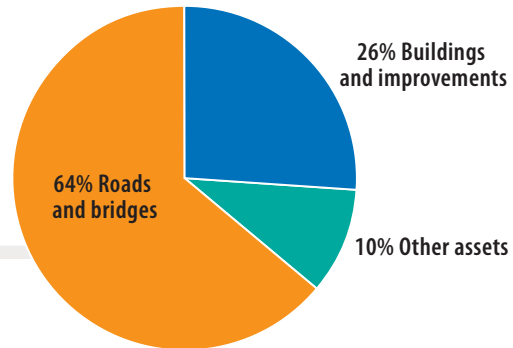
- **Existing assets** that, through maintenance, repair or rehabilitation, can continue to serve the province for years to come. These would be addressed through Asset Management – rehabilitation: to maintain and repair each asset through its useful life, making sure it receives the care it needs at the appropriate time. When done properly, this can result in assets lasting longer, with less money spent to maintain and repair them during their lifetime;

- **New assets** that need to be built as a result of a careful review and prioritization process. These would be addressed as new builds: to identify and prioritize new capital projects using evidence-based assessment tools; and
- **Existing assets** that should be considered for decommissioning because they are no longer useful or usable. These would be addressed through decommissioning: to identify and prioritize assets that could be considered redundant using evidence-based assessment tools.

## 2 The infrastructure inventory of the Government of New Brunswick

The Government of New Brunswick has more than \$8 billion in assets, including \$5.2 billion in roads and bridges and \$2.15 billion in buildings and building improvements – this inventory grows every year. New Brunswick has the third most surfaced roads per capita in Canada, after Prince Edward Island and Saskatchewan.

2014–2015 Crown asset inventory and value (\$8.15 billion)



### a Provincial infrastructure



#### Transportation\*

- 22,813 km of provincial highways (April 2015)
  - 3,226 bridges
  - 9 ferry crossings (six river and three coastal)
- \*km numbers include Public Private Partnerships (P3s)

#### Buildings

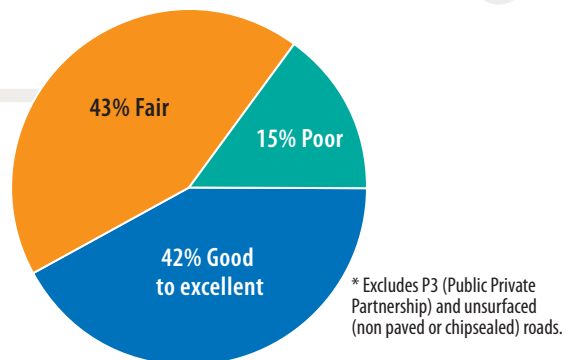
- Buildings owned: 375
- Buildings leased: 147
- Three industrial parks

### b Asset conditions

As part of this framework, the department's goal is to improve the overall condition of infrastructure assets. It can achieve this in part by using Asset Management tools that will allow it to consider the life cycle of each asset as well as what rehabilitation the asset may require at each stage in its life. The department can then invest wisely, doing the right work at the right time to ensure the long-term viability of the asset.

**Road condition:** The department is using Asset Management to develop efficient and effective plans to improve road surface conditions and make the best use of rehabilitation funding.

Fall 2015 DTI road inventory condition





Road conditions are based on a roughness index:

- Good to Excellent: Good means the asset has some minor deterioration but is still functioning at a very high level of performance. Some preservation activities can be considered. Excellent means the asset is very close to new condition with very little deterioration.
- Fair: The asset has deteriorated to the point where rehabilitation or replacement would be considered. Functional performance is still acceptable.
- Poor: The asset has deteriorated to the point where either major rehabilitation or complete replacement is needed. Functional performance is at less than acceptable levels.

**Bridge conditions** are based on the Bridge Condition Index (BCI). During regular inspections, information is collected on each bridge component to generate a BCI. The BCI by itself is not a measure of the safety of a structure. It is calculated by assessing and rating each component of the structure to determine the current value. BCI helps the department understand the bridge inventory and is just one of the methods used to see what structures may need repairs, rehabilitation or replacement.

Fall 2015 DTI bridge inventory condition



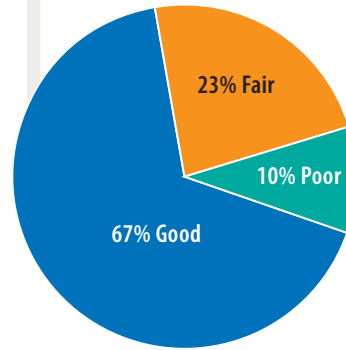
The BCI rates a structure between 0 and 100 as follows:

- Good to Excellent: BCI range of 71 to 100. Rehabilitation is not typically needed within the next five years.
- Fair: BCI range of 60 to 70. Rehabilitation is needed within the next five years.
- Poor: BCI less than 60. Rehabilitation is needed in about one year.

The department is working to address bridge conditions by strategically planning rehabilitations and incorporating Asset Management strategies into its planning.

**Roof condition:** The chart below illustrates an example of a condition index specific to roofs within the department's portfolio of buildings and based on age and deficiencies. The department uses the following condition index to invest capital rehabilitation dollars strategically.

Fall 2015 DTI roof condition by area



- Good: No visible deficiency or very minor deficiencies that typically do not warrant repair (such as aesthetic issues).
- Fair: Small number of deficiencies with limited severity. Deficiencies require monitoring or minor repairs.
- Poor: Severe or widespread deficiencies that require major repairs or replacement.

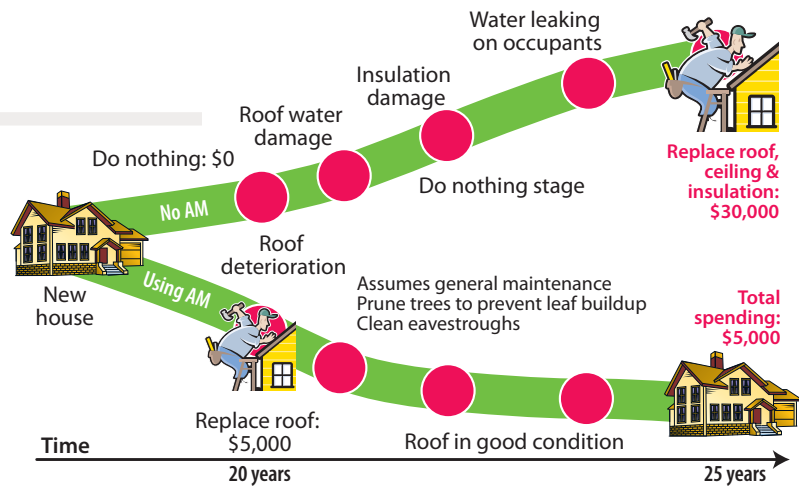
# 3 Key infrastructure challenges

When it comes to infrastructure, New Brunswick must contend with a number of factors:

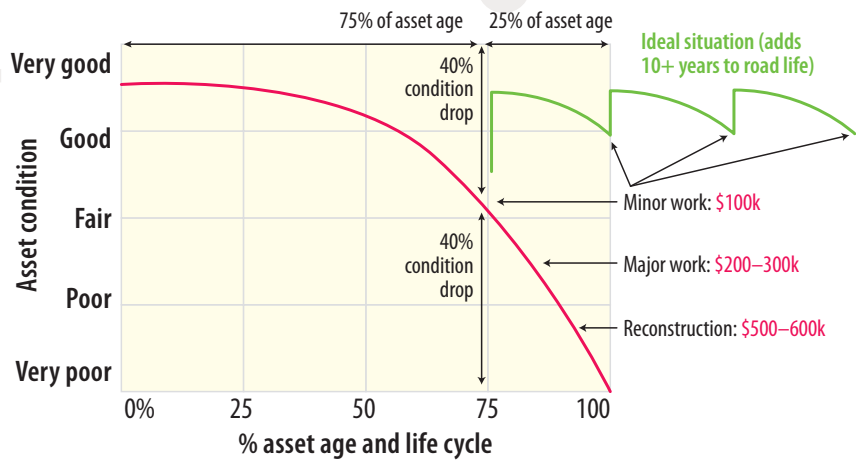
- The need for immediate investment in rehabilitation of aging infrastructure to ensure it lasts as long as possible. As infrastructure ages, maintenance costs increase.
- The fiscal situation of the provincial government illustrates the importance of developing this framework to prioritize projects strategically.

It is imperative to ensure that Asset Management principles and tools are used to determine least life cycle costs in the maintenance and rehabilitation of infrastructure and that other evidence-based decision tools are used to prioritize major capital projects. The provincial government must show leadership by championing the Asset Management philosophy.

The following diagrams explain the benefits of applying Asset Management – rehabilitation for existing assets. The first is a simple analogy of how Asset Management would benefit a homeowner. Note that expenditures are six times higher when routine maintenance and rehabilitation are neglected. The second one shows how treatment costs escalate as scheduled rehabilitation is deferred.



## Asset management on asphalt



## 4 Long-term capital planning

The capital planning exercise includes the development of a plan with three tiers:

- an operational one-year plan;
- a tactical three-year plan; and
- a long term, strategic 10-year plan.



## 5 Long-term strategic capital planning framework – the process

All major capital infrastructure projects go through the following phases:

- identification and prioritization;
- environmental and functional planning;
- design; and
- construction

A project can take many years to move from the identification and prioritization to construction and completion. It is important to account for the total process timeline for each potential project in the development of the long term strategic capital plan.

During the capital planning process, projects are identified and prioritized using a variety of tools and approaches, which may include:

- review of infrastructure condition indexes and weight restrictions;
- consideration of environmental issues;
- review of internal technical data such as accident statistics;
- consultations with industry stakeholders;

- consultations with municipalities;
- input from MLAs;
- consultations with other provincial government departments; and
- Asset Management and evidence-based assessment tools.

Once projects are prioritized, environmental and high-level planning activities take place. This can take several years depending on the project and includes activities such as environmental screening, land acquisition, public consultations (including consultations with affected First Nations communities), surveys, geotechnical investigations and obtaining appropriate permits. The next phase includes detailed design and construction specifications leading to the purchase of required goods and services, construction and completion of the project.

Refer to Appendix A: Department of Transportation and Infrastructure capital planning timelines – major capital projects (ongoing annual cycle).

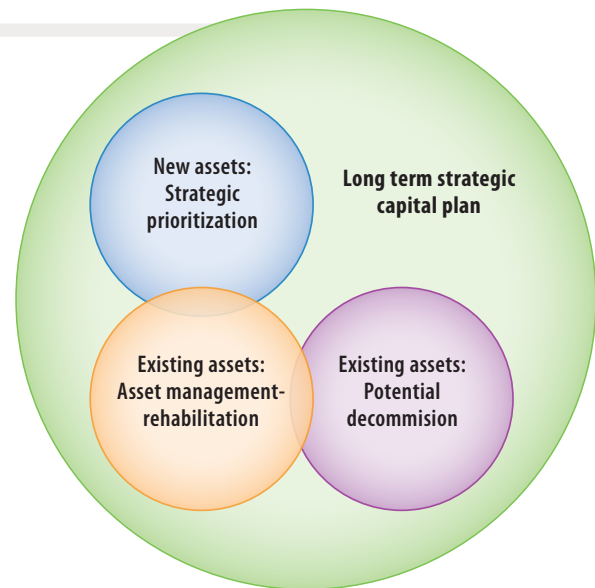
## Department of Transportation and Infrastructure's planning framework approach:

After projects are identified, they are prioritized under this framework, using specific Asset Management tools or evidence-based analysis related to the asset and project type:

- Asset Management – **rehabilitation** of existing highway assets;
- Evidence-based analysis for **adding** new highway assets (*new build*) or **decommissioning** of existing highway assets;
- Asset Management – rehabilitation and evidence-based assessment (analysis) for **buildings**.

The objective of this framework is to provide recommendations to ensure:

- the department's infrastructure assets are maintained in a way that maximizes their safe operational life at minimum cost;
- new capital projects are prioritized using predetermined, well-supported criteria (evidence-based analysis) and that their estimated ongoing rehabilitation



costs are fully identified and accounted for as future liabilities; and

- the department's infrastructure assets are reviewed as warranted for potential decommissioning.

## a Asset Management – rehabilitation for existing highway assets

Asset Management indicates the appropriate level of rehabilitation funding required to address the aging infrastructure. It specifically indicates when and where minor, major and reconstruction treatments are needed.

- **Minor treatment** for asphalt is typically a surfacing measure such as removing a thin layer of asphalt and then paving. Roads requiring this repair typically have cracked or deformed surfaces that, if not treated, will quickly lead to more significant, more costly, rehabilitation efforts.
- **Major and reconstruction treatments** repair significant problems with the asphalt and involve removing much of it and repaving. This treatment is needed when the road surface is broken up, potholed and or shows significant cracking. This repair may have been prevented if minor treatment had been completed before.

The goal of using Asset Management rehabilitation is to ensure that work is performed at the optimal time to avoid future and more costly repairs – simply, *the right treatment, at the right place and at the right time*, versus a “worst first” approach.

By definition, projects that typically do not change the capacity of the network are considered Asset Man-

agement rehabilitation projects. In other words, projects that simply rehabilitate assets (bringing them back to their original state) without affecting capacity would be identified and prioritized using Asset Management rehabilitation principles.

As noted previously, the department uses Asset Management methodology to plan for the maintenance, repair, rehabilitation and sometimes decommissioning of infrastructure assets such as bridges, culverts, roads and buildings.

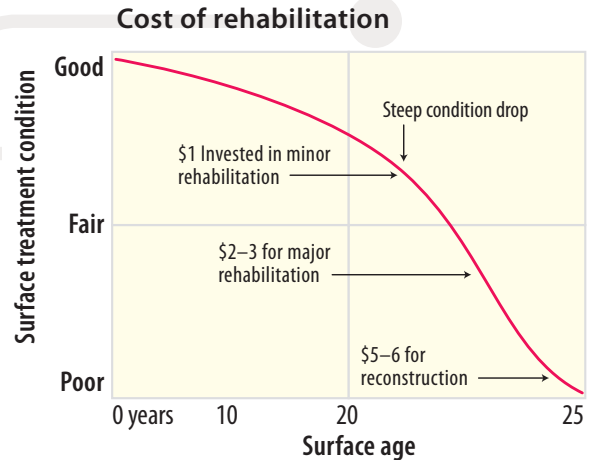
All assets deteriorate over time. Regular maintenance and minor rehabilitation can slow this down. Treating an asset before major deterioration can help avoid costlier work later on. It has the added benefit of providing a better, safer experience for the public.

Asset Management strategically manages and schedules maintenance, repair and rehabilitation and, where appropriate, decommissioning, which over the long term will help to address the challenges posed by the provincial government's aging infrastructure in an efficient, economical manner.

In general terms, an Asset Management approach to capital infrastructure rehabilitation involves a series of steps:

- 1) Creating an inventory of the assets owned by the provincial government, including:
  - a. assessing the value of each asset or group of assets;
  - b. assessing the condition of each asset; and
  - c. estimating how long each asset can be expected to remain in service before it has to be replaced;
  - d. identifying the maintenance, repair and rehabilitation required in the short term to bring each asset to a condition deemed good or excellent;
- 2) establishing how much money is required in the short term and long term to spend on Asset Management;
- 3) establishing a list of priorities that will result in the most efficient use of resources available to spend on assets in the short term and long term;
- 4) creating an Asset Management plan that sets schedules for the appropriate management of each asset in the short term and long term; and

- 5) implementing the plan effectively while addressing any unforeseen circumstances that might arise.



Asset Management – rehabilitation involves a large team of professionals, working in consultation with stakeholders to create the provincial government’s Asset Management plan. These include engineers, accountants, data analysts as well as maintenance and construction professionals.

## b Evidence-based analysis for adding highway assets or decommissioning existing assets

When the department is considering adding an infrastructure asset (for example, a new bridge or building) or decommissioning an asset (for example, a bridge that is no longer needed), it uses evidence-based analysis tools including a Multi-Criteria Analysis (MCA) matrix methodology.

Before the department reviews proposed transportation projects using evidence-based assessment tools (such as the MCA matrix), it must complete an engineering pre-screening process to identify the best or preferred option from an engineering and safety perspective. The MCA matrix represents a shift from a very

subjective prioritization approach to a broader-based, objective process that evaluates projects using four criteria – economic, social, environmental and cultural.

The criteria include multiple indicators used to score a project. Potential projects will be reviewed and scored through the MCA matrix, and the results will be used by department management to prioritize and rank projects more effectively through the long term capital planning process.

It should be noted that data (including data collection) is critical to the project prioritization process and the use of these evidence-based analysis tools.

## c Asset Management – rehabilitation and evidence-based analysis for buildings

The planning framework for buildings follows the same principles as Asset Management – rehabilitation and evidence-based assessment (analysis) for highways and bridges. Building assets include roofs, windows, boilers, elevators and flooring. Building Asset Man-

agement is a process and decision support framework that addresses the full service life of physical assets in a cost-effective manner.

## 6 Cost of rehabilitation and construction of transportation and buildings infrastructure

While the department makes every effort to stabilize or reduce the cost of rehabilitating infrastructure, various influences can affect the costs for different assets. For example, harsh weather (such as ice storms and flooding) can cause significant wear on infrastructure, increasing the cost to rehabilitate these assets. The department uses every opportunity to bundle contracts and to issue early tenders to contractors to control construction costs.

There are challenges created with the continual addition of assets to the provincial inventory that need to be built or acquired, maintained, and repaired over the years. As a result, the department carefully reviews

each proposed addition to ensure it is an efficient use of public resources and that, in the long term, it will contribute to the economic growth of the province.

To control the size of its asset inventory, the department also reviews certain assets that may no longer be required by the provincial government and the public to see if they might be either decommissioned (removed from use so that they no longer require costly maintenance or repair) or sold. Examples include: a provincial government building that is no longer needed for office space could be sold or leased to a third party; or an aging or redundant bridge that no longer sees significant amounts of traffic could be taken out of service.



### Highways (in 2015 \$'s)

**Rehabilitation and repaving (two-lane highway):**  
about \$300,000 to \$450,000 per kilometre.

**Upgrading (grading and paving):**  
\$500,000 to \$2 million per kilometre.

**Chipseal:**  
about \$20,000 to \$70,000 per kilometre.

**Other pavement preservation treatments:**  
about \$20,000 to \$200,000 per kilometre.

### New highway construction (in 2015 \$'s)

**Grading and paving (four-lane):**  
about \$2.9 million to \$4.2 million per kilometre.

**Grading and paving (two-lane):**  
about \$500,000 to \$2 million per kilometre.

### Bridges (in 2015 \$'s)

**Rehabilitation:**  
\$500 to \$3,000 per square metre.

**New construction:**  
\$4,500 to \$5,500 per square metre.

### Buildings (in 2015 \$'s)

**Rehabilitation:**  
\$15 to \$20 per square metre.

**New construction:**  
about \$20 to \$40 per square metre.

## 7 Governance

Broadly speaking, governance refers to the structure and processes used to oversee, manage, and administer a program in accordance with policies, guidelines and legislation. The department has established a governance model to formalize the structures and processes involved in the development of this framework. The governance model helps ensure a systematic, broad-based and objective approach is followed to identify, evaluate and prioritize proposed projects. It clearly defines and documents procedures, roles and responsibilities of each partner, helping to ensure continuity and coordination as well accountability for the decisions and rationale behind the projects on the capital plan. Finally, it provides quality assurance by ensuring that all information is fully validated before communicated outside of the department.

As an organization committed to performance excellence, the department is confident that its governance model ensures the development of a comprehensive long term strategic capital plan for building, rehabilitating and decommissioning of its infrastructure assets.

A governance committee and a senior-level steering committee have been formed to coordinate and align the activities of multiple branches involved in developing, maintaining and implementing the plan.

## 8 The resulting planning framework

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### a Building on knowledge

This framework builds on previous planning and knowledge. Using the methodology identified, it has been refined to reflect Asset Management principles, evidence-based assessments and best practices for highways, bridges and buildings consistent with provin-

cial government commitments and recommendations of the Office of the Auditor General.

Continually making improvements to how the department plans and the tools used is part of the annual strategic capital planning framework process.

### b Partnerships

Partnership opportunities with the federal government, private sector companies and municipalities, for example, could provide a means to address infrastructure deficiencies in a timelier manner and when funding

is limited. Alternative service delivery could allow for private sector involvement along with governments to design, build and maintain particular assets.

### c Leveraging opportunities

Under the federal government's *New Building Canada Plan*, there are significant leveraging opportunities from investing in Asset Management rehabilitation. Within the Provincial-Territorial Infrastructure Component of the *New Building Canada Fund*, rehabilitation of roads classified as National Highways may be eligible for cost sharing of up to 50 per cent. Rehabilitation of National Highway System highways is eligible for federal fund-

ing, which means that New Brunswick's dollars can be leveraged through the *New Building Canada Plan*.

Beyond this opportunity, the department has identified the following partners as sources of potential leveraging:

- Federal:
  - Transport Canada – Gateways and Trade Corridors, Grade Crossing Improvement Program (Rail).

- Industry Canada – National Research Council.
- Atlantic Canada Opportunities Agency – Atlantic Innovation Fund, etc.
- Municipal
  - Partnering with municipalities.
- Provincial
  - New Brunswick Innovation Foundation.
  - Department of Post-Secondary Education, Training and Labour.
  - Similar opportunities.
- Inter-jurisdictional

- Bridges between New Brunswick and Quebec or Maine.

In addition to government, there are also opportunities to leverage private-sector dollars from shared construction funding of transportation strategic corridors (e.g., partnership with the forestry sector), nursing homes, social housing, etc.

As part of the prioritization process, discussions with other partners will be undertaken to consider all potential leveraging opportunities.

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## d Economic impact of spending on infrastructure renewal

As transportation costs are as high as 30 per cent for some industries, investing in infrastructure can significantly reduce business costs and improve the competitiveness of the provincial economy. Recent research by the Conference Board of Canada reveals that each \$1 invested in transportation infrastructure reduces business costs by, on average, 11 cents. This could prove an attractive selling point to attract new businesses to, and retain existing businesses in the province. Transportation infrastructure investments can benefit New Brunswick families by reducing collisions that lead to fatalities and injuries; lowering vehicle operation costs;

reducing travel / commute times; and improving access to health care and other services.

In addition to the economic growth from improved competitiveness, there are significant impacts generated from the construction phase. According to Statistics Canada's input-output tables, every \$1 million invested in the transportation engineering construction sector generates \$620,000 in GDP and 9.87 jobs directly or indirectly. Similarly, every \$1 million invested in the non-residential building construction sector generates \$600,000 in GDP and creates 9.5 jobs directly and indirectly.

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## e Expected outcomes – benefits and challenges

The Auditor General has recommended the provincial government apply Asset Management principles to reduce growing liabilities associated with the infrastructure deficit. As previously stated, Asset Management – rehabilitation for highways reduces the cost of vehicle operation, improves safety and reduces travel time which benefits the public and industry. Moreover, it adds to New Brunswick's competitive advantages for attracting and retaining businesses. Jobs and GDP benefits are generated from the construction phase and from improved competitiveness that well-maintained roads create, such as reduced travel times, less vehicle depreciation and increased load capacities.



## 9 Accountability, reporting and communications

The long-term planning that the department used to generate this framework will be updated annually and approved through the capital budget process.

## 10 Conclusion: Looking forward – planning for the future

Long-term strategic capital planning is imperative. With evidence-based assessment tools, the department will make decisions that strategically align with economic development opportunities, job creation and safety of the travelling public. Asset Management and this framework are the foundations supporting the department's core business processes: plan, build, maintain and divest / decommission.

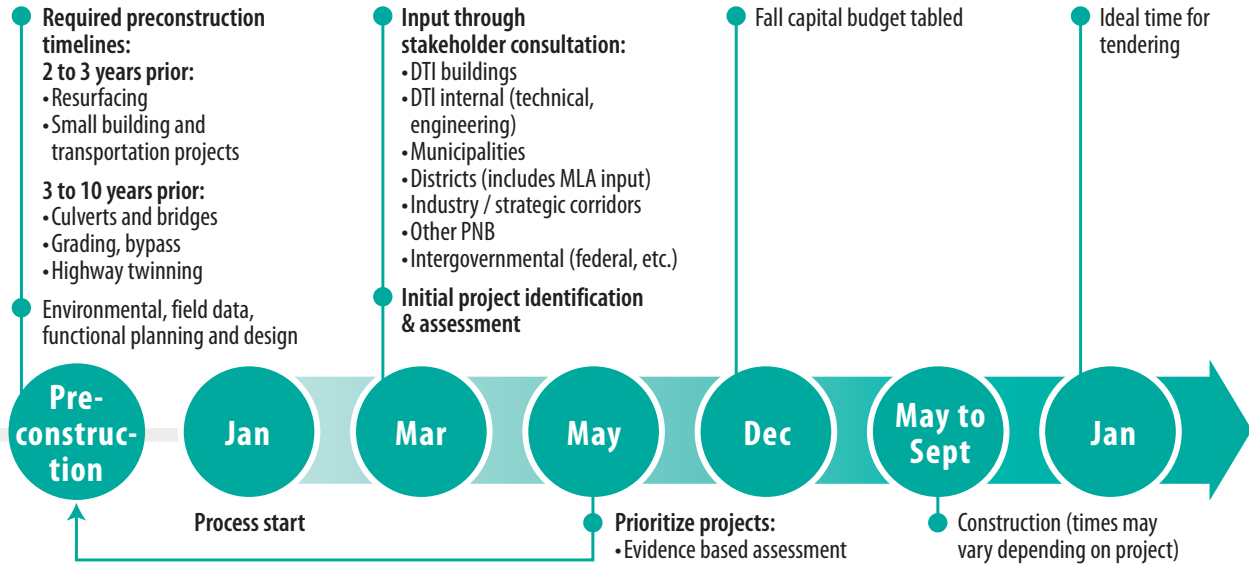
The department needs to consider and may need to address the following policies in support of the long term strategic capital planning process:

- road surface policy: implementation would result in future rehabilitation savings by having the most appropriate and economical surface for each road.
- climate change mitigation and adaptation: further incorporation of flood risk mitigation and adaptation planning into Asset Management planning and the capital planning framework.

The aggressive long term strategic capital plan based on this framework will need appropriate internal (departmental) resources with the proper skill sets to deliver it. This framework and the resulting plan assume that New Brunswick construction companies, engineering consultants and architects can take on this infrastructure spending. The department may have to make adjustments to address the capacity and response of these sectors.

# Appendix A:

## Department of Transportation and Infrastructure capital planning timelines – major capital projects (ongoing annual cycle)



# Appendix B:

## Listing of capital projects 2016-17

### Permanent highways

#### Capital projects

2016-17

#### Paving arterials (Route 1 – Route 99)

Description	Length (km)
Route 2, Aulac River Bridge No. 1 (A750) area to Nova Scotia Border – Missaguash River Bridge No. 1 (M525) – eastbound	5
Route 2, Mapleton Road area to beginning of MRDC highway – westbound	3.5
Route 2, Memramcook village limit area to Memramcook River No. 5 North (M328) area – westbound	8.6
Route 3, Gardiners Creek No. 2 (G085) south area to Route 640	3.7
Route 3, Route 745 to Maxwell Crossing Road	3.8
Route 4, Route 3 to Davis Brook area	2.3
Route 7, beginning of three-lane (Finnegans Hill) to divided highway area	8.3
Route 7, Kimble Drive interchange area to Route 8 overpass (B200)	2.3
Route 7, Route 8 overpass area (V200) toward Doak Road – southbound	2.2
Route 8, Clearwater Branch Road area to Clearwater Brook	3.4
Route 8, Route 105 underpass (B096) to new Route 8 bypass	5.2
Route 10, Starkey Road area to Highfield Cross Road area	3.2
Route 11, Bathurst viaduct (B189) to Vanier Boulevard (Route 180) interchange area	4.6
Route 11, Bouctouche River Bridge No. 5 (B771) to Route 11 / Route 134 interchange area	4.2
Route 11, Burnt Church Road to Route 450 area	2
Route 11, Gloucester / Restigouche county line area toward Armstrong Brook No. 3 (A585)	6.1
Route 11, Hornibrook Road area to Canobie Road area	6.1
Route 15, Collins Lake Road area to hydro line	3.8
Route 15, Route 933 interchange area to Aboujagane River Bridge (A030)	2
Route 15, Scoudouc Industrial Drive underpass (S188) area to Painsec Junction CNR overpass (P051) – westbound	5.7
Route 16, Troop Valley Road area to Parson Road area	3
Route 17, Adams Gulch area toward Stuart Road	3.3
Route 17, C.C. Siding Bridge (C004) to Fournier Street	3

## Permanent highways

### Capital projects

2016-17

#### Paving collectors (Route 100 – Route 199)

Description	Length (km)
Route 101, Route 8 underpass area (R145) to Wayne Squibb Boulevard (city depot)	0.9
Route 104, Upper Stone Ridge Road to Sisson Settlement Road area	3.4
Route 105, Bath village limit toward Beechwood Road	4.6
Route 105, Brookside Drive intersection area from the end of the median barrier to the beginning of the median barrier	0.6
Route 105, Maple Street intersection to beginning of divided highway, four lanes plus turning and acceleration lanes	0.2
Route 107, Juniper Road toward Beaufort Road	4
Route 108, Railroad crossing area (2015 contract area) to Route 395	3.6
Route 109, 2009 contract to Corey Road	4.8
Route 112, Watts Brook area to Flat Rock Brook area	2.9
Route 115, Saint-Grégoire Road area to Route 134	2.7
Route 117, Kent / Northumberland county line to Sargent Road	4.8
Route 120, Route 161 to 2014 contract	1.7
Route 126, Murray Settlement Road toward Barnaby River Bridge No. 5 (B114)	3.2
Route 130, Aroostook village limit to Perth-Andover village limit area (250 m inside municipality)	3.6
Route 130, Limestone Siding Road area to Route 2 interchange area	2.9
Route 133, Gaudet Road area to Pointe-à-Nicet Road	5.8
Route 134, Aldouane River Bridge No. 1 (A210) to Saint-Louis-de-Kent village limit	3.6
Route 134, Shediac River Bridge No. 1 (S277) toward Cocagne	4.5
Route 170, Route 3 traffic circle to Valley Road area	1.5
Route 170, Shore Road area to Route 127	5.9
Route 172, McGee Brook (M198) to ferry landing	5
Route 176, Route 1 interchange area toward C.K. Justason Road	1.3
Route 197, Westmorland Street Bridge (F830) to Maple Street	0.7

## Permanent highways

### Capital projects

2016-17

#### Paving – locals (Route 200 – Route 999 and named roads)

Description	Length (km)
Aulac Road, Route 16 to Bayview Road	0.4
Cocagne Sud Road, Route 11 overpass (S545) to Route 134	1.8
Grattan Road, Route 11 interchange (G550) to Route 134	0.6
Nicholas-Denys Road, Madisco Road toward Trois-Cantons Road	2.5
Parker Street, Route 132 to Bursil Avenue (Scoudouc Industrial Park area)	2.8

Description	Length (km)
Riverview East Drive, 2015 contract toward Erb Settlement Road	3.2
Route 215, Beaulieu Road toward Collin Road	5.1
Route 305, Sainte-Marie-Saint-Raphaël village limit to Route 310	4.4
Route 313, Lamèque town limit to Gauvin Road	3.5
Route 320, Frigault Lane area to 2010 contract	2.4
Route 365, Seal Brook Bridge No. 1 (S213) area to Tracadie town limit	2.5
Route 375, Route 2 to Canada / USA border (carry-over)	4.3
Route 385, Dyer Road area to Ogilvy Lane area (carry-over)	5.3
Route 395, Route 108 area to Cedar Turn Brook area (carry-over)	6.5
Route 395, Route 108 to Camp Lane area	0.5
Route 475, Côte-Sainte-Anne Road to Route 505	2.1
Route 480, Ouellette Road area to Kouchibouguac River Bridge No. 3 (K465) (carry-over)	1
Route 495, Saint-Maurice Road to McNairn Road area	3.6
Route 505, Route 134 to Chockpish River Bridge (C280)	3
Route 630, York / Charlotte county line area toward Route 4 (2015 contract)	3
Route 770, St. George town limit to Red Rock Road – various locations	3.1
Route 865, Norton village limit to Drury Cove Road area	2

## Permanent highways

### Capital projects

#### 2016-17

#### Grading

Description	Length (km)
Allison Boulevard interchange – ramp backslope repair	-
Charters Settlement Road upgrade	3.4
Fredericton International Airport entrance reconstruction	-
Route 126, Collette area curves – Job 1	1.5
Route 385, Four Mile Brook area to Dickenson Brook area (multi-year)	1.9
Route 480, Route 126 area toward Saint-Athanase Road	1.4
Route 645, Tracy area – slope repair	0.5
Route 770, St. George to Red Rock Road area – slope stabilization (two sites)	0.4
Salem Road (carry-over)	3.6

**Permanent highways  
Capital projects  
2016-17  
Wildlife management**

Description	Length (km)
Enhanced moose signage – various locations	-
Proactive brushcutting – various locations	-
Route 2, Route 122 to Charlie Lake Road (wildlife fence / wildlife structure)	9

**Permanent highways  
Capital projects  
2016-17  
Chipseal**

Description	Length (km)
Aboujagane Road, Route 933 to Route 933	6
Alcida Road, 2014 reseal to end of designation	1.2
Allain Avenue, Leawood Avenue to McNulty Avenue	0.3
Allen Avenue, Musquash Road to Thompson Drive	0.9
Alphonse Road, Route 315 to Cormier Road	2.2
Apple Street, Route 280 to Oak Street	0.4
Austin Road, Knight Road to end of designation	2.2
Back Road, Route 690 to Denton Road	4.3
Baseline Road, 1.1 km from Petitcodiac village limit to Westmorland / Kings county line	3.4
Bedec Road, Route 505 to Allain Road	3.4
Bell Settlement Road, Route 540 to Red Bridge Road	5.1
Bellefond Road, between 2011 and 2012 work	2
Bérubé Road, Route 255 to Montagne à Comeau Road	2.7
Big Hole Brook Road, Storeytown Road to end of designation	0.8
Birch Drive, Apple Street to Oak Street	0.4
Bloomfield Ridge Road, Route 625 toward end of designation	5
Bomer Street, Allen Avenue to Thompson Drive	0.1
British Settlement East Road, Route 935 to end of designation	2.8
Bryson Road, 2015 pulverize to Whittaker Road	2.1
Carpenter Bald Hill Road, Route 705 to Cross Road	5.2
Charleston Road, Centerville village limit to McKeaghan Road	4.9
Cliff Street, Weisner Road to Dupuis Avenue	0.3
Collins Lake Road, Route 15 to end of designation	4.3
Cormier Cove Road, Rockland No. 1 Road / Taylor Road to Memramcook village limit	0.8
Cormier Crescent, Route 134 to Route 134	0.5
Cormier-Village Road, 5.7 km from Route 133 to end of designation	2

Description	Length (km)
Côte-Sainte-Anne Road, Route 505 to Route 475	3.9
Cowling Crescent, Weisner Road to Leawood Avenue	0.2
Cumberland Point Road, 2015 reseal toward MacLean Road	4
Dallaire Street, Route 132 to end of designation	0.6
Dauversière Road, 2010 pulverize to end of designation	0.6
de la Gare Street, Pointe-Verte village limit to Route 11	3.9
des Jaunes Road, Route 205 toward Rang 2 Road	0.7
Desherbiers Road, Gerasime Gallant Road to end of designation	2.6
Desherbiers Road, Le Buttereau Road to end of designation	3
Doyleville Road, Louison River Bridge No. 2 (L855) toward Belledune village limit	0.6
Drapeau Road, Balmoral village limit to end of designation	2.4
Drummond Station Road, CS 1, 1.9 km to 4.4 km	2.5
du Portage Road, Route 340 to Saint-Amateur Road	2
Duguayville Road, asphalt toward Route 355 (Sainte-Rose)	2.3
Duguayville Road, 2014 pulverize to end of chipseal	0.9
Dupuis Avenue, Allain Avenue to Cowling Crescent	0.5
East Scotch Settlement Road, Scribner Road area toward Route 870 and Bullmoose Hill Road area	3
Emmerson Hill Road, Rosehill Road to Sainte-Anne Road	0.9
F. Martin Road, Sirois Road to end of designation	0.4
F.X. Brideau Road, Saulnier Ouest Road for 1.3 km	1.3
Fishing Club Road, Route 116 to end of designation	1.1
Flatlands Road, 2.3 km from Route 17 to Route 11	1.7
Frances Street, Allen Avenue to Thompson Drive	0.1
Gallagher Ridge Road, Route 126 to end of designation	2.5
Godin Road, Haché Road to Route 350	2
Grandeur Avenue, Nature Drive to la Fontaine Drive	0.1
Gray Street, Pabineau Falls Road to end of designation	0.7
Grub Road, Albert / Westmorland county line to Middlesex Road / Bannister Road	5.6
Grub Road, Salisbury Back Road to Albert / Westmorland county line	0.1
Hazelton Road, 2007 reseal to end of designation	3.1
Homestead Drive, Route 10 to end of designation	0.2
Immigrant Road, Route 16 toward Route 955 / Route 960	3
Indian Gardens Road, First Nation to end of designation	1.3
Indian House Road, Route 470 to end of designation	0.3
Indian Island Road, Route 505 to end of designation	0.8
Intervale Road, Broad Road to New Road	0.9
Johnson Road, Northumberland / Kent county line to Sainte-Athanase Road	1.2
Johnston Lane, Upper Durham Road to Lower Durham Road	1

Description	Length (km)
Johnville Road, Dooley Road to Mahoney Road	3
Katia Street, Route 315 to end of designation	0.3
Kenshaw Street, Weisner Road to Leawood Drive	0.4
Kincardine Road, 1.6 km from Muniac Road toward end of designation	2.1
Kindale Street, McNulty Avenue to Weisner Road	0.2
King Street, Sackville town limit to Woodlawn Road / Baseline Road	2.3
Kingsley Road, Begin 5.6 km from Route 620, heading westerly	2.6
Kintore Road, CS 1, Sta. 0.0 km to 6.1 km	6.1
Knight Road, Cambridge-Narrows village limit toward Mill Cove Road	3.1
Knightville Road, Old Mine Road to Manning Road area	4.1
La Fontaine Drive, LeBlanc Back Road to Mariette Road	0.8
La-Prairie Road, Route 134 to Richard Road	5.6
Lavigne Road, Main Street to end of designation	0.7
Lavigne Road, Route 350 to Caraquet town limit	6
LeBlanc Back Road, Melanson Road to Dieppe city limit	0.8
Ledge Road, Oak Haven Road to St. Stephen town limit	4.8
Loop Road, Saint-Joseph Road to Saint-Joseph Road	2
Lower Durham Road, end of asphalt to end of designation	7.2
Lynnfield Road, Route 745 to end of designation	7.3
MacDougall Road, Shediac River Road to Scotch Settlement Road	9.3
Maillet Lane, Route 535 to end of designation	0.1
Main Street, Centenaire Street / Sunnyside Drive toward end of designation	6
Mallet Road, Broad Road easterly	0.4
Mariette Avenue, Nature Drive to La Fontaine Drive	0.2
Martin Road, Levelling CS 1, 2.1 km to 3.7 km and CS 1, 14.3 km to 18.9 km	6.2
Martin Road, Pulverize CS 1, 3.7 km to 8.3 km	4.6
Maxwell Road, Lavina Road to end of designation	0.4
McKeaghan Road, 200 m from Route 560 toward end of designation	0.4
McLaughlin Road, Pointe-à-Bouveau Road to Tracadie town limit	2.1
McLaughlin Road, Pointe-à-Bouveau Road toward Sureau Blanc Street	0.7
McNulty Avenue, Weisner Road to Mulberry Street	0.9
Meadow Brook Road, Route 101 to Sand Brook Road	4
Michaud Road, Route 17 to end of designation	1
Miracle Drive, Route 134 to end of designation	0.2
Moose Mountain Road, 2.2 km from Route 565 toward Haley Road	4.7
Morehouse Corner Road, Steenberick Court to end of designation	3
Mulberry Street, McNulty Avenue to Leawood Avenue	0.3
Murphy Road, Route 750 to Saint David Ridge Road	2



Description	Length (km)
Mystérieux Road, Route 145 toward Pokesudie Road	0.3
Nature Drive, LeBlanc Back Road to Mariette Road	0.7
Nepisiguit Falls Road, 2013 chipseal to end of designation	3.6
New Road, Broad Road to 2014 pulverize	1.3
Newcastle Centre Road, Route 690 to Cedar Street	2.5
Nixon Road, Route 895 to Synton Road	4.7
Nixon Road, Synton Road to Route 910	2.9
North Barnaby Road, Route 118 to Semiwagan Road	3.8
North Napan Road, Johnson Bridge Lane toward Route 117	4
Northwest Road, 2015 second seal toward Route 430	5
Notre-Dame-des-Érables Road, Route 340 to end of designation	1.2
O'Neill Road, Route 870 toward Route 875	4.8
Oak Street, Birch Drive to Apple Street	0.1
Old Camp Road, Route 655 to end of designation	0.4
Old Route 120 Road, Route 120 to Baker-Brook village limit	1.1
Ottawa Road, Route 180 to Louis Road	0.7
Pacific Junction Road, Route 128 toward end of designation	2.8
Petit Carey Road, Route 11 / Route 150 to Four Roads Road	1.5
Portage Vale Road, Route 1 to Portage Pit Road area	3.1
Power House Road, Thompson Drive to end of designation	0.3
Raymel Road, Route 133 to 1418 Access Road	2.4
Restigouche River Road, Evergreen Road toward Route 11	13.8
Richardson Road, Route 127 to Route 755	5.8
Richibucto-Village Road, Route 505 South to Route 505 north	4.5
Rivière-à-la-Truite Road, Trois Milles Road to Edmundston city limit	1.5
Rivière-Verte Road, 7.3 km from Rang 5 Road / Ruisseau-à-Thibodeau Road toward Rivière-Quisibis Road	2.1
Rivière-Verte Road, Rang 5 Road to Rivière-Quisibis Road (various locations)	3.7
Rivière-Verte Road, Rang 5 Road to Rivière-Quisibis Road (various locations)	3.6
Robinson Road, Saulnier Ouest Road to Tracadie town limit	0.9
Rockland No. 1 Road, Cormier Cove Road / Taylor Road to end of designation	0.4
Roussel et Martin Road, Bossé Road to end of designation	3
Route 105, Fox Creek Road to Campbell Settlement Road	4.4
Route 105, Murch Bridge to Route 610	11
Route 105, Rocky Road Area to Route 615	1.2
Route 105, Route 615 to Mactaquac Provincial Park entrance	2.1
Route 107, 2015 pulverize toward Deersdale	5
Route 107, CS 3, 12.0 km to CS 4, 1.6 km	2
Route 108, 2006 reseal toward North Branch Renous River	10

Description	Length (km)
Route 108, 2010 double seal to Cascade Road	5.2
Route 108, 2015 pulverize toward Renous	7
Route 108, Boise Cascade Road to 2007 reseal	2.7
Route 108, Plaster Rock village limit toward Renous	7.1
Route 111, 2012 pulverize toward Back Settlement Road	5.7
Route 114, Pollett Road area to Fundy National Park entrance	3.1
Route 116, 2016 reseal to Route 126	10
Route 118, 2013 work to Barnaby River	7.3
Route 124, Route 695 toward Church Loop Road	4.1
Route 145, Pokesudie Road to end of designation	0.5
Route 180, Caribou Mines Road going west to Caribou Road	6.7
Route 180, CS 7, Sta. 11.2 to Sta. 17.6	6.4
Route 205, des Jaunes Road toward end of control section	5.3
Route 265, Range 5 and 6 Road to Broderick Hill Road	7.1
Route 322, Robertville Road to Saint-Laurent Road	3.3
Route 355, 400 m past Duguayville Road toward Route 135	2
Route 360, 2012 pulverize to railroad tracks	2.1
Route 380, Main New Denmark Road to King Christensen Road	5.4
Route 390, 12.1 km from Arthurette Bridge to Cuffley Lane	5.2
Route 420, 4 km from Williamstown Road to Route 415	0.9
Route 430, 2015 second seal to North West Miramichi Bridge No. 5 (N680)	3
Route 430, 6.5 km from Route 435 to hydro line	4.4
Route 435, 2007 reseal to Maple Glen Road	4.5
Route 485, Route 490 to du Vieux Pays Road	3
Route 490, 2014 pulverize to Cormier-Village Road	3.4
Route 490, Kent / Westmorland county line to 2015 pulverize	3.5
Route 540, 2012 reseal northerly to York / Carleton county line	7.7
Route 540, Bell Road to Woodlawn Road	3.1
Route 605, 2014 reseal heading southerly	1
Route 605, Route 595 to Cross Road area	2.6
Route 635, Club Road to Adams Road	5.8
Route 635, Route 636 to Lake Road	4.2
Route 640, Mazerolle Settlement Road to Yoho Lake Road	10.5
Route 645, Route 640 to Roach Road	6.7
Route 670, 2015 pulverize to Route 690	4.1
Route 670, Coy Road toward Route 690	6.4
Route 735, 2007 reseal to Route 730	4.8
Route 735, Route 730 to 2015 levelling and from end of 2015 levelling to end of road	14.8

Description	Length (km)
Route 755, Lilly Hill Road to Route 170	1.2
Route 755, Route 3 to Route 750	7
Route 755, Sawyer Road to Lilly Hill Road	1.8
Route 760, McMinn Road Area to Stillwater Road	12.4
Route 770, Clarence Ridge Road to Route 127	10.1
Route 785, Duplisea Road toward St. George	7.8
Route 820, Reynolds Road to Kings / St. John county line	2.6
Route 845, Perry Point Road to Gondola Point ferry landing	5
Route 850, McCutcheons Wharf Road area toward Rogers Road	5
Route 880, Route 121 to Route 10	8.8
Route 890, Whites Mountain Road to Rouse Road	8
Route 910, Riverview town limit past Tower Road / Nixon Road	11.3
Route 933, Malakoff Road to Des Babe Road	3.9
Route 945, Cap-Pelé village limit to Poucette Road	2.4
Sainte-Louise Road, Cormier Road to Nicol Road	1.3
Saint-Joseph Road, Route 525 to Dunlop Road area	4.4
Saint-Laurent Road, Route 322 to Jean-Louis Road	2
Saint-Lazare Farm Road, des Dallaire Road toward end of designation	1
Saint-Lazare Road, Route 495 to des Dallaire Road	2.5
Saulnier Ouest Road, Père Romeo Street to end of designation	2.2
Scoudouc River Road, Route 132 to end of designation	1.7
Semiwagan Road, North Barnaby Road to 2015 reseal	3.5
Sharkey Road, Route 550 to Route 560	6.5
Shipyard Road, Route 1 to Stillwater Road	0.8
South Renous Road, between gravel sections	2.7
Steenberrick Court, Route 104 to end of designation	0.5
Stella Street, Allen Avenue to Thompson Drive	0.1
Stevenson Road, Route 123 to Harley Road	3.5
Stillwater Road, 1.8 km south of Route 760 to Reardon Road	1.8
Sunnyside Drive, Centenaire Street to end of designation	0.5
Tait Crescent, Allain Avenue to Leawood Avenue	0.4
Thompson Drive, Bomer Street to Stillwater Road	0.8
Thompson Road, 1.3 km from Steeves Settlement Road to Fawcett Hill Road	2
Timberland Drive, Route 180 to Scenic Drive	0.5
Todds Point Road, Oak Haven Road to end of designation	3
Tompkins Road, Black Lake Road to Lerwick Road	4
Tower Hill Road, Route 750 to Route 755	5.9
Tweedie Road, Greenfield Road to end of designation	2.1

Description	Length (km)
Upper Skiff Lake Road, Scott Siding area to end of designation	2.8
Upper Woodlands Road, Route 620 to end of designation	2.5
Urney Road, 3 km from Piccadilly Road to Waterford Road	3
Vaillancourt Road, Rivière-Quisibis Road to end of designation	1.4
Valleyview Road, Route 180 to end of designation	1
Weldfield Collette Road, 2005 second seal to 2007 reseal	3.4
Weldfield Collette Road, pulverize from gravel toward Route 11	2.1
West Branch Back Road, Zion Church Road to Route 470	0.5
Wetmore Creek Road, 2014 levelling to Route 790	2.5
Whittaker Road, Route 101 toward Post Road	2.6
Wilmot Road, Deal Road to Upper St. Thomas Road	2.5
Woodlawn Road, Dorchester village limit to Baseline Road / King Street	3.2
Worden Road, Route 845 to Perry Point Road	4.9
Zionville Road, Route 148 to end of designation	2.2

## Permanent highways

### Capital projects

2016-17

### Large culverts

Description	Length (km)
Culvert No. 14 and No. 15 (SS05 and SS06), Route 7	-
Fisher Brook Culvert No. 1 (YS20), Route 8	-
GD12	-
GD19	-
RA23	-
RG09	-
RG10	-

## Permanent bridges

### Capital projects

2016-17

### Bridges

Description	Length (km)
Baxter Brook Bridge No. 1 (B201), Route 970	-
Benjamin River Bridge No. 1 (B366), Route 134 (carry-over)	-
Bradbury Brook (T283), Thorough Fare Road – Grand Manan	-
Breau Creek No. 1 (B702), Breau Creek Road	-
Clements Brook No. 2 (C420), Riverview Drive on-ramp	-
Cocagne River Bridge No. 1.5 (C500), Route 11	-

Description	Length (km)
Eel River Bridge No. 5 (E460), Hartin Settlement Road	-
Ferry program	-
Florenceville Bridge (F470), Route 130 – Phase 1 rehabilitation	-
Hailes Brook Bridge No. 2 (H025), Petit Ouest Road	-
Hawkshaw Bridge (H385), Hawkshaw Bridge Road – Phase 1 rehabilitation	-
Jemseg River Bridge No. 1 (J200), Route 105 – remove spans (carry-over)	-
Jonathan Creek No. 1 (J450), Main Street	-
Jonathan Creek No. 3.5 (J520), Route 15	-
Kelly Brook No. 2 and No. 3 (K060 and K065), Kelly Road	-
Knowlan Bridge (K430), Route 870	-
Kouchibouguacis River Bridge No. 1 (K510), Route 134 (carry-over)	-
Lamb Brook (L083), Route 116	-
Lamèque – Shippagan Bridge (L100), Route 113 – Phase 1 rehabilitation	-
Little River No. 2 (L545), Champlain Drive	-
Little River No. 3 (L550), Hickey Road	-
Magaguadavic River Bridge No. 1 (M060), South Street (multi-year)	-
Maltampec Brook No. 1 (M091), Route 350 (carry-over)	-
McKay Brook Bridge (M234), Route 510	-
McLean Brook No. 1 (M254), Route 515	-
Mill Creek No. 2 (M402), McNairn Road	-
Miller Brook No. 1 (M446), des Cap Street	-
Munro (M680), Route 778 (multi-year)	-
Narrows Bridge (N065), Route 695 – deck rehabilitation	-
Pokemouche River Bridge No. 4 (P580), Godin Road (multi-year)	-
Regent Street Route 8 underpass (R145) – temporary pedestrian overpass	-
Regent Street Route 8 underpass (R145) – widening and rehabilitation (carry-over)	-
Renous River Bridge No. 1 (R175), Route 8 – rehabilitation (carry-over)	-
Reversing Falls Bridge (R215), Route 100 – foundation rehabilitation	-
Richibucto River Bridge No. 5 (R280), Route 126 (carry-over)	-
Robinson Brook No. 5 (QC01), Route 715	-
Rockwell Stream Bridge No. 1 (R475), Broad Road (multi-year)	-
Southwest Miramichi Bridge No. 5 (S677), Porter Cove Road	-
Southwest Miramichi River Bridge No. 2 (S668), Route 118 Blackville – Phase 2 rehabilitation	-
Southwest Miramichi River Bridge No. 4 (S674), Route 8 Doaktown – rehabilitation (carry-over)	-
Starkey Brook (S785), Route 715	-
Sypher Brook (S894), Route 690	-
Tobique River Bridge No. 1 (T390), Route 105 – Phase 2 rehabilitation (multi-year)	-
Tobique River Bridge No. 5 (T405), Route 385	-
Wilson Brook (W647), South Canaan Road	-

**Permanent highways**  
**Capital projects**  
**2016-17**  
**Major project areas**

Description	Length (km)
Regent Street / Prospect Street intersection (cost-shared)	-
Route 106, Acadie Avenue and Amirault Street reconstruction (cost-shared) (carry-over)	1.3
Route 108, railway crossing area (grading and paving) (multi-year)	1.1
Route 115, Route 2 toward Royal Oaks – Phase 2A and Phase 2B, grading and paving (carry-over)	0.6

**Federal-provincial cost-shared projects**  
**Capital projects**  
**2016-17**  
**Projects**

Description	Length (km)
<b>Route 11, Caraquet bypass</b>	
Bertrand roundabout to Lavigne Street, wildlife fence (carry-over)	3.9
Bertrand roundabout to Leger Street, paving	-
Lavigne Street to existing Route 11, wildlife fence (carry-over)	8.5
Leger Street to existing Route 11, grading, paving, signing and lighting	-
<b>Route 8 / Route 11, Centennial Bridge (Miramichi River Bridge No. 1, C244)</b>	
Phase 2 rehabilitation (carry-over)	-
Phase 3 rehabilitation (multi-year)	-
<b>Route 11 twinning, Route 15 to Shediac River</b>	
Route 11 main lanes, Route 133 ramps and service road (grading)	1.6
Route 11 main lanes, Route 133 ramps and service road (paving)	1.6
Route 11 to Route 15 southbound merge lanes (grading and paving)	1.7
Route 15 / Route 11 overpass (R548) (multi-year)	-
Route 133 / Route 11 underpass (R544) (carry-over)	-
Route 134 interchange modifications (grading, paving, signing and lighting)	-
Route 134 toward Shediac River – southbound lanes (paving)	3.3

**Public works and infrastructure (buildings)**  
**Capital improvement list**  
**2016-17**

Building name	Location	Description of work
Bus garage	Sackville	Envelope upgrades
Collège communautaire du N.-B.	Grand Falls	Roof replacement
Saint John Correctional Centre	Saint John	HVAC upgrades
Madawaska Regional Correctional Centre	Saint Hilaire	Roof replacement
District garage	Fredericton	Roof replacement
Bathurst Health	Bathurst	Masonry repointing
Industrial Park	Scoudouc	New lift station
Lab Building	Saint John	Masonry repointing
Maintenance depot	Chamcook	Plumbing upgrades
Maintenance depot	Saint-Léonard	Roof replacement
Marysville Place	Fredericton	Mechanical / electrical upgrades
Provincial Building	Saint John	Masonry / windows
Provincial Building	Grand Manan	Roof replacement
Salt dome	Bay du Vin	Dome rehabilitation
Salt dome	Harvey	Dome rehabilitation
Salt dome (Kelly Road)	Miramichi	New salt storage facility
Sand dome	Bay du Vin	Dome rehabilitation
Sand dome	Riley Brook	Dome rehabilitation
Sand dome	Saint-André	Dome rehabilitation
Visitor Information Centre	St. Stephen	Fit ups

