

Chapter 4

Volume II: Performance Audit Independent Assurance Report



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Department of Transportation and Infrastructure

HIGHWAY SAFETY



Chapter 4 Highlights

Lack of strategic planning for highway safety Inadequate monitoring and oversight of P3 highways

Delays and inefficiencies in departmental maintenance

Inadequate documentation and transparency in capital planning

Lack of performance measurement of highway safety outcomes

OVERALL CONCLUSION:

Our audit work concluded that the Department of Transportation and Infrastructure's systems and practices for the safe movement of people and goods are not adequate to support their mandate.

Results at a Glance

HIGHWAY SAFETY

Practices do not support effective oversight of highway safety



| | FINDINGS | | | | |
|----|---|--|--|--|--|
| | No formalized strategic plan regarding highway safety | | | | |
| | The Department has not completed 41% of required audits on P3-operated highways | | | | |
| 3 | 34% of reported highway safety concerns have not been addressed | | | | |
| | Lack of targeted repair times for department-operated highways | | | | |
| 55 | Capital project selection decisions made without adequate documented rationale | | | | |
| | No measures or targets related to collision and fatality reduction | | | | |

About the Audit

INTRODUCTION TO THE AUDIT

- 4.1 The Department of Transportation and Infrastructure (the Department) is mandated to provide and support sustainable infrastructure that allows for the safe and efficient movement of people and goods.
- **4.2** The Department's responsibilities include the planning, construction, maintenance and management of provincial highways, including signage, lighting, pavement markings and the regulation of speed limits.
- **4.3** There are approximately 18,000 kilometers of provincial highway across the province, including 705 kilometers that are operated through public-private partnerships (P3s).

WHY WE CHOSE THIS TOPIC

- **4.4** Adequate highway infrastructure is essential for ensuring public safety. In the absence of effective systems and practices for monitoring, maintaining and capital planning, highways can present safety hazards that may contribute to the likelihood and severity of collisions resulting in injuries and fatalities.
- 4.5 According to Transport Canada's *Canadian Motor Vehicle Traffic Collision Statistics* for 2023, New Brunswick reports the highest per capita fatality rate among all Canadian provinces.

AUDITEE

4.6 Our auditee was the Department of Transportation and Infrastructure. We also obtained information from the New Brunswick Highway Corporation (NBHC) relating to highways under their control.

AUDIT SCOPE

- **4.7** We examined the Department's systems and practices for ensuring the safety of highways as defined in the *Highway Act* and the *New Brunswick Highway Corporation Act*.
- 4.8 In 2016, the Council of Ministers Responsible for Transportation and Highway Safety (the council), launched *Canada's Road Safety Strategy 2025*, which is a national initiative to improve road safety in Canada offering best practices and initiatives to assist jurisdictions in adopting their own road safety plans.

- **4.9** This council is Canada's key intergovernmental forum for transportation matters and both the departmental Minister and Deputy Minister are members.
- **4.10** Canada's Road Safety Strategy 2025 identifies the following three key risk areas that can impact the number of Canadians that will die or be injured on our roads:
 - drivers/users
 - infrastructure
 - vehicles

For the purposes of this audit, we focused on highway infrastructure.

- 4.11 The audit covered the period from April 1, 2023 December 31, 2024. Information outside of this period was also collected and examined as deemed necessary. As part of our work, we interviewed departmental staff and reviewed relevant policy, legislation and other documentation supporting the Department's systems and processes.
- **4.12** More details on the audit objectives, criteria, scope and approach we used in completing our audit can be found in Appendix II and Appendix III.

AUDIT OBJECTIVE

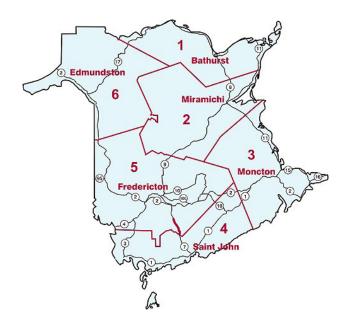
4.13 Our audit objective was to determine if the Department of Transportation and Infrastructure has adequate systems and practices in place to allow for the safe movement of people and goods in accordance with their mandate.

CONCLUSION

- **4.14** Our audit work concluded that the Department of Transportation and Infrastructure's systems and practices to support the safe movement of people and goods are not adequate to fulfill its mandate. Overall findings are as follows:
 - the Department lacks a formalized highway safety plan
 - the Department does not exercise adequate oversight of P3 highways
 - there is a lack of targeted repair times for maintenance on department-operated highways
 - there is a lack of timely review of traffic safety concerns
 - there is inadequate documented rationale for changes to asphalt and chipseal projects selected for the *Road Ahead* capital plan
 - there are no key performance indicators related to collision and fatality reduction

Background

- **4.15** Between 2020 and 2023, New Brunswick reported 19,758 collisions on provincial highways.
- **4.16** The Department's highway safety mandate is carried out by the regional transportation districts as well as the Department's Construction, Design, Capital Planning and Operations Branches.
- **4.17** The province is divided into six transportation districts:



Source: Obtained from the Department (unaudited)

4.18 These districts are responsible for the maintenance and operation of the highway network including arterial, collector and local highways as follows:

| Type of Highway | Numbering | Traffic Volume (Vehicles/Day) | Typical Speed |
|-----------------|--------------------|----------------------------------|---------------|
| Arterial | 1 - 99 | 2,000 - 10,000 | ≥ 100 km/h |
| Collector | 100 - 199 | 1,000 - 5,000 | 80 - 100 km/h |
| Local | 200 - 999 or named | < 1,000 | 60 - 80 km/h |

P3 HIGHWAYS

- **4.19** The New Brunswick Highway Corporation (NBHC), established in 1995 under the *New Brunswick Highway Corporation Act*, is a Crown corporation that has been assigned administration and control of major sections of the provincial highway network.
- **4.20** NBHC is governed by a board of directors including the Minister of Transportation and Infrastructure, the Minister of Finance and Treasury Board and their Deputy Ministers. The Department provides administrative and project management resources for oversight of the P3 contracts.
- **4.21** NBHC has entered into contracts with three private operators to design, construct, operate and maintain the sections of the highway noted below in accordance with standards established by the Department.

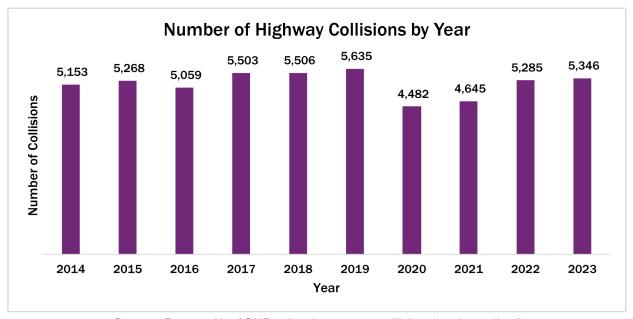
| | | High | way | Loca | ation | | Co | ntract |
|------------------------------------|----------|-------|-----|---|--------------------------|-------------|------|------------------|
| Project | Operator | Route | Km | From | То | Term | End | Projected Value* |
| Fredericton- Moncton Highway | MRDC | 2 | 195 | Longs Creek | Moncton | 30 years | 2028 | \$583 million |
| Trans-Canada | Brun-Way | 2 | 261 | Quebec - New Brunswick Border | Longs Creek | 28 | 2033 | \$698 million |
| Highway | , | 95 | 14 | Woodstock | USA- Canada Border | years | | |
| Route 1 Gateway | Gateway | 1 | 235 | St. Stephen (USA - Canada Border) | River Glade | 29 years | 2040 | \$804 million |

^{*}Projected value adjusted for the Consumer Price Index based on the life of the contract. Information provided by the department.

Highway Safety Outcomes

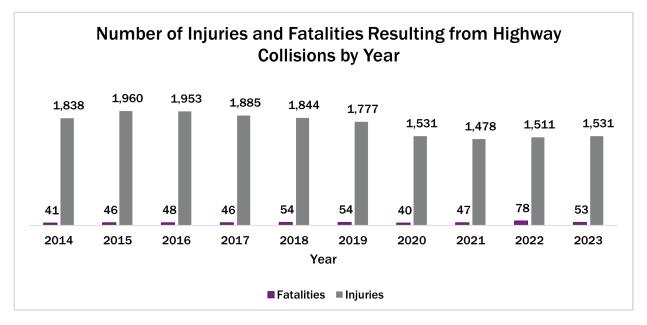
LACK OF A FORMALIZED HIGHWAY SAFETY PLAN

- 4.22 The Department has representation on the Council of Ministers Responsible for Transportation and Highway Safety (the council). Canada's Road Safety Strategy 2025 was launched and endorsed by the council which included recommendations for provinces to develop a similar strategy. However, as at the time of our audit, the Department had not developed a provincial highway safety strategy to reduce the number of fatal and serious injury collisions on highways.
- **4.23** There have been between 4,482 and 5,635 highway collisions per year in the last 10 years as noted in the chart below.



Source: Prepared by AGNB using department collision data (unaudited)

4.24 As noted in the chart below, while the number of injuries in collisions on highways decreased by 17% over the 10 years, the number of fatalities has increased by 29%.



Source: Prepared by AGNB using department collision data (unaudited)

Recommendation

4.25 We recommend that the Department of Transportation and Infrastructure develop a formalized highway safety strategy as recommended in *Canada's Road Safety Strategy* 2025 for reducing collisions and fatalities on New Brunswick highways.

Condition of Highway Infrastructure

HIGHWAYS IN POOR CONDITION

4.26 As noted in *Canada's Road Safety Strategy 2025*, highway infrastructure can contribute to the likelihood and severity of crash occurrence.

- **4.27** The Department collects data on asphalt and chipseal highway surface for highways managed by the Department and P3 operators. They then use this roughness and distress data to classify the condition as:
 - very good
 - good
 - fair
 - poor
 - very poor
- **4.28** The Department defines a highway in good condition as close to new condition, a highway in fair condition may have some cracks and ruts and a highway in poor condition needs major repair.
- **4.29** While the data has been collected for highways in 2024, it has not been classified since 2023.
- **4.30** Overall surface condition of department-operated highways for 2023 showed that 43% were in poor or very poor condition.
- **4.31** The Department sets targets pertaining to the percentage of department operated highways they expect to be in good or fair condition. As noted below the targets were not met in 2023-2024:
 - Asphalt highways:

| Type of Highway | Target | Actual |
|-----------------|--------------|--------|
| Arterial | Arterial 90% | |
| Collector | 75% | 65% |
| Local | 75% | 63% |

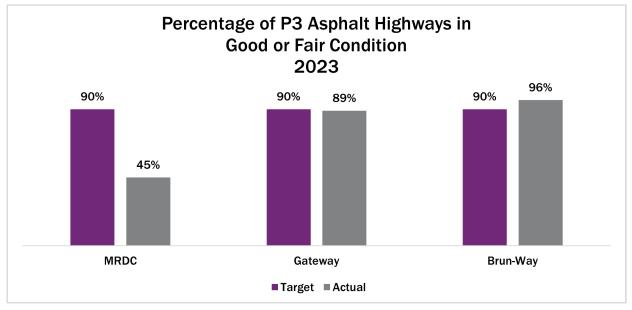
Chipseal highways:

| Type of Highway | Target | Actual |
|-----------------|--------|--------|
| Collector | 75% | 62% |
| Local | 75% | 51% |

- **4.32** P3 contracts do not have the same targets as departmental highways. However, there are specific measurement targets to assess compliance with highway roughness, distress and rutting conditions included in P3 contracts.
- **4.33** The percentage achievement of contract target conditions obtained from P3 operator pavement inspection reports is summarized below:

| Pavement Condition Indicator | Target | MRDC | Gateway | Brun-Way |
|----------------------------------|--------|-------|---------|-----------------|
| International Roughness Index | 100% | 95.4% | 99.6% | 97% |
| Surface Distress Index | 100% | 79.4% | 98.9% | Not Reported |
| Rut Depth | 100% | 99.6% | 100% | 100% |

4.34 If we were to assess P3-operated highways using the Department's highway categorization, Brun-Way would meet the 90% target of asphalt highways in good or fair condition at 96%. Gateway and MRDC would not meet the target.



Source: Prepared by AGNB using departmental surface condition data (unaudited)

Recommendations

- **4.35** We recommend that the Department of Transportation and Infrastructure ensure the timely classification of highway conditions to support decision making.
- **4.36** We recommend that the Department of Transportation and Infrastructure ensure timely corrective action when stated targets for highway condition have not been met.

Monitoring and Oversight of P3-Operated Highways

THE DEPARTMENT IS NOT ENSURING RECEIPT AND REVIEW OF ALL REQUIRED REPORTING

- **4.37** There are key reports required from the operator in accordance with contract standards including:
 - performance indicator reports
 - incident reports involving vehicles and wildlife
 - maintenance activities for winter and summer
- **4.38** While adequate reporting was received from Brun-Way and Gateway, the Department is not ensuring the receipt of key reports required from MRDC as noted below:

| Report MRDC | | Brun-Way | Gateway |
|----------------------------------|----------------|---------------|---------|
| | % of Deliveral | bles Received | |
| Performance Indicator Reports | 0% | 95% | 100% |
| Incident Reports | 0% | 100% | 100% |
| Maintenance Activity Reports | 0% | 100% | 100% |

- **4.39** The Department's *Quality Manual* requires that once reports are received, they must be reviewed to ensure all relevant contract requirements are being met.
- 4.40 Our audit work found:
 - not all reports are being received
 - reports that are received are not being reviewed by the Department

Recommendation

4.41 We recommend that the Department of Transportation and Infrastructure ensure that all reports required from public-private partnership highway operators are received and reviewed to ensure all relevant contract requirements are being met.

LACK OF MONITORING COMPLIANCE WITH CONTRACTS

- **4.42** The Department's *Quality Manual* has documented key monitoring requirements including, site audits, review of operator management systems, communicating findings to the operators and ensuring timely follow up of known issues.
- **4.43** While the manual dictates the requirement for site audits, it does not specify frequency. However, the Department informed us their goal is to perform two site audits per week, per operator.
- **4.44** We noted that the Department did not consistently meet their goals as noted below:

| Project | P3 Operator | Site Audits Completed (%) |
|--------------------------------|-------------|---------------------------|
| Fredericton-Moncton Highway | MRDC | 38% |
| Trans-Canada Highway | Brun-Way | 78% |
| Route 1 Gateway | Gateway | 60% |

4.45 The Department stopped completing operator management system audits in 2017.

Recommendations

- **4.46** We recommend that the Department of Transportation and Infrastructure perform all required site audits for public-private partnership highway operators to meet departmental monitoring objectives.
- **4.47** We recommend that the Department of Transportation and Infrastructure conduct management system audits for all public-private partnership highway operators in accordance with the departmental *Quality Manual*.

THE DEPARTMENT IS NOT CONSISTENTLY INFORMING OPERATORS OF AUDIT FINDINGS IN A TIMELY FASHION

- 4.48 We were informed that when an audit deficiency is noted by the Department:
 - if it is observable from the highway the issue is not communicated to the P3 operator
 - if it is not observable from the highway the issue is communicated to the P3 operator
- **4.49** The Department informed us the reasoning behind this approach is that they assume the operator will notice issues themselves through daily patrols and correct it in accordance with contract standards.
- **4.50** By not informing P3 operators of observed deficiencies in a timely fashion, corrective action may be delayed or not taken.

Recommendation

4.51 We recommend that the Department of Transportation and Infrastructure develop a process that ensures public-private partnership highway operators are informed of observed deficiencies in a timely manner.

THE DEPARTMENT IS NOT ISSUING NON-CONFORMANCE NOTICES AS REQUIRED

- **4.52** P3 contracts specify maximum repair times to correct deficiencies. The Department is required to issue a non-conformance notice if repairs have not been completed within these timelines. Examples of the type of issues noted in a non-conformance notice include:
 - inadequate snow removal
 - poor vegetation and brush control
 - pavement surface defects
- **4.53** As of December 31, 2024, there were 122 instances where the Department did not confirm deficiencies were corrected or issue non-conformance notices as required:
 - 18 for MRDC
 - 48 for Gateway
 - 56 for Brun-Way

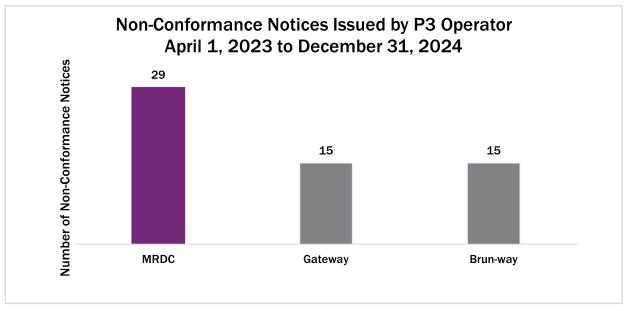
Recommendation

4.54 We recommend that the Department of Transportation and Infrastructure issue public-private partnership highway operators non-conformance notices for all deficiencies that have not been corrected within established contractual repair times.

THE DEPARTMENT DOES NOT ENSURE DEFICIENCIES NOTED ARE ADDRESSED

4.55 When the Department issues a non-conformance notice to a P3 Operator, a meeting is held to discuss the issue and to establish a timeline for remediation.

4.56 During our audit period, there were 59 non-conformance notices issued as follows:



Source: Prepared by AGNB based on department data (unaudited)

- **4.57** Gateway and Brun-Way addressed all non-conformance notices.
- **4.58** MRDC resolved 20 of the 29 non-conformance notices issued. Of the nine non-conformance notices outstanding as of December 31, 2024:
 - MRDC did not provide a response or provide a remediation date for any of the reported deficiencies
 - three were outstanding for more than 365 days for repairs related to signage, pavement and drainage defects
- **4.59** Not addressing outstanding non-conformance notices may result in continued non-compliance with standards intended to maintain the safe condition of the highway for the travelling public.

Recommendation

- **4.60** We recommend that the Department of Transportation and Infrastructure ensure that public-private partnership highway operators address all non-conformance notices in a timely manner.
- 4.61 In order to evaluate the work completed pertaining to non-conformance notices, the Department requires the operator to provide photographs or work orders showing the work was complete.
- **4.62** However, we noted documentation for completion was not always provided and, in some cases, photographs were not sufficient to demonstrate completion of the work.

4.63 Inadequate evidence does not allow the Department to ensure non-conformance notices are appropriately addressed.

Recommendation

4.64 We recommend that the Department of Transportation and Infrastructure ensure that adequate documentation of correction of deficiencies on public-private partnership highways is obtained from operators.

Monitoring and Oversight of Department-Operated Highways

LACK OF TARGETED REPAIR TIMES

- **4.65** The Department's *Highway Maintenance Manual* states it is the "key responsibility of the Department to ensure the safety of the travelling public" which "requires continual monitoring and maintenance of the roadway network".
- **4.66** Contract conditions for P3 operators include clear, measurable maintenance standards including condition thresholds and time limits for repair. The Department's *Highway Maintenance Manual* for department-operated highways lacks the same level of specificity and quantifiability.
- **4.67** The following chart compares examples of repair standards from the *Highway Maintenance Manual* for department-operated highways to P3-operated highway contracts.

| | Targeted Repair Time | | |
|---------------------------|----------------------|--|--|
| Maintenance Standard | P3 Operator | Department-Operated Highways | |
| Pavement Markings | 45 days | No standard | |
| Regulatory/ Warning Signs | 1 day | No standard | |
| Debris/ Obstructions | 24 hours | No standard | |
| Wildlife Fencing | 20 days | As soon as possible | |
| Potholes | 48 hours | As soon as possible | |
| Guiderail | 10 days | On a priority basis for collision repair | |

4.68 A lack of specific standards inhibits staff's ability to maintain highways in a consistent and timely manner across districts and limits the Department's capacity to ensure safety and accountability.

Recommendation

4.69 We recommend that the Department of Transportation and Infrastructure update its *Highway Maintenance Manual* to ensure standards are clear and measurable.

LACK OF MAINTENANCE INSPECTIONS

- **4.70** The *Highway Maintenance Manual* includes requirements for regular inspections of drainage, guiderail, wildlife fencing and highway signage, however, the Department informed us these inspections were not being completed.
- **4.71** By not conducting regular maintenance inspections, the Department is not adequately monitoring the highway network to identify deficiencies that require correction to ensure the safety of the travelling public.

Recommendation

4.72 We recommend that the Department of Transportation and Infrastructure ensure the completion of inspections of department-operated highways.

TARGETS FOR WINTER SNOW REMOVAL NOT BEING MONITORED

- **4.73** In 2023, departmental data reported 25% of collisions on highways categorized as having slippery surfaces resulted in injury or fatality.
- **4.74** The departmental *Winter Maintenance Service Policy* specifies requirements for winter snow removal by highway classification.

| Type of Highway | Level of Service | Target Completion (after storm ends) |
|-----------------|--------------------|---|
| Arterial | Driving lanes bare | 24 hours |
| Collector | Bare wheel path | 48 hours |
| Local | Snow packed | May not receive services for extended periods |

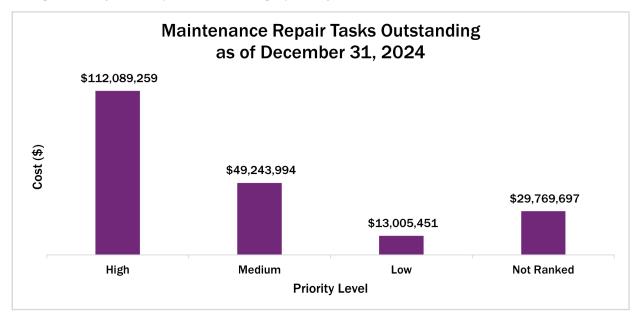
- **4.75** The *Winter Maintenance Service Policy* requires the Department to monitor compliance with the levels of service to ensure consistent application across the province and to report on compliance annually.
- **4.76** However, the Department informed us they do not monitor or report on the achievement of their stated targets.

Recommendations

- **4.77** We recommend that the Department of Transportation and Infrastructure monitor the achievement of winter levels of service in accordance with policy to ensure snow removal is complete within specified timeframes consistently across the province.
- **4.78** We recommend that the Department of Transportation and Infrastructure report on the achievement of winter levels of service in accordance with policy.

LACK OF RISK-BASED STRATEGY TO ADDRESS MAINTENANCE NEEDS

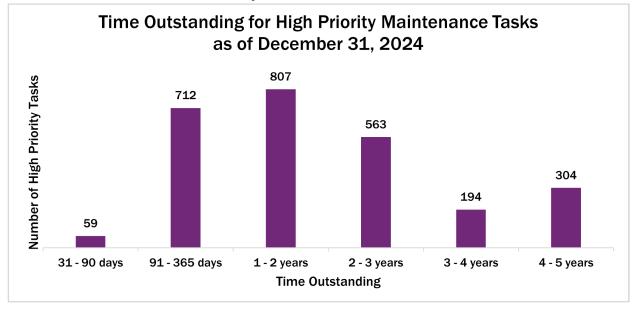
- **4.79** The Department ranks maintenance repairs for department-operated highways based on priority levels (low, medium, high).
- **4.80** There are over \$204 million worth of maintenance tasks outstanding with 55% being categorized by the Department as high priority.



Source: Prepared by AGNB based on department's Maintenance Needed system

4.81 We also noted there are almost \$30 million of identified maintenance repairs that have not been categorized and therefore making it challenging for the Department to prioritize timing of repairs.

4.82 At the conclusion of our audit period, 2,639 high-priority tasks remained outstanding, with 304 unresolved for more than four years.



Source: Prepared by AGNB based on department's Maintenance Needed system

4.83 Examples of high priority tasks outstanding more than four years include guiderail repairs, highway leveling, fixing shoulder washouts and replacing culverts.

MAINTENANCE TASKS ARE NOT BEING COMPLETED IN A TIMELY MANNER

4.84 During our audit period, 4,904 maintenance tasks were completed. The chart below notes repairs that were completed by priority ranking:

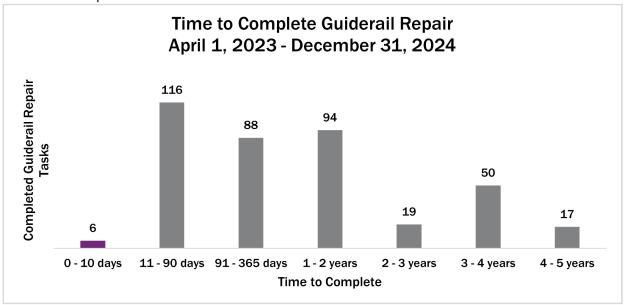


Source: Prepared by AGNB based on department's Maintenance Needed system

4.85 Our work identified that maintenance tasks are not completed in a timely manner. Some examples are provided below.

Guiderail

- **4.86** Steel beam guiderail is located along certain sections of the highway to protect the public by restraining and redirecting vehicles leaving the highway.
- **4.87** Per the P3 contracts, the maximum time to repair damaged guiderail on P3-operated highways is 10 days, however, the Department 's *Highway Maintenance Manual* prioritizes repairs to guiderail based on traffic damage with no targets set.
- **4.88** During the audit period, 390 of 884 guiderail repairs were completed. We found that 98% of the time, guiderail on department-operated highways was not repaired within the 10-day timeframe expected for P3s.

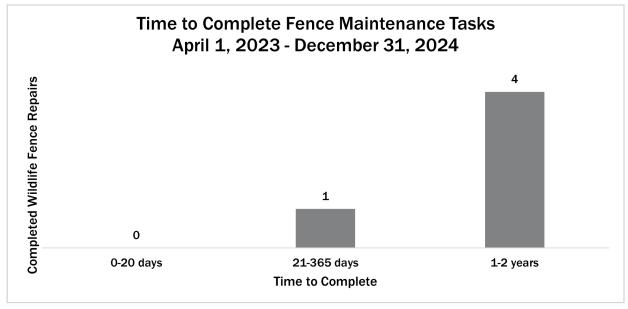


Source: Prepared by AGNB based on department's Maintenance Needed system

Wildlife Fencing

- **4.89** As per departmental data, animals were a major contributing factor in 23% of collisions in 2023.
- **4.90** Wildlife fencing is located along certain sections of the highway to improve traffic safety by restricting the movement of animals such as moose, deer and bears.
- **4.91** Per the P3 contracts, wildlife fencing repairs must be completed within 20 days, however, the Department's *Highway Maintenance Manual* specifies that a repair to fencing on department-operated highways be done "as soon as possible" with no specific target documented.

4.92 During the audit period, five of 29 tasks concerning repairs to damaged wildlife fencing were completed. None of these were done within 20 days.



Source: Prepared by AGNB based on department's Maintenance Needed system

Recommendations

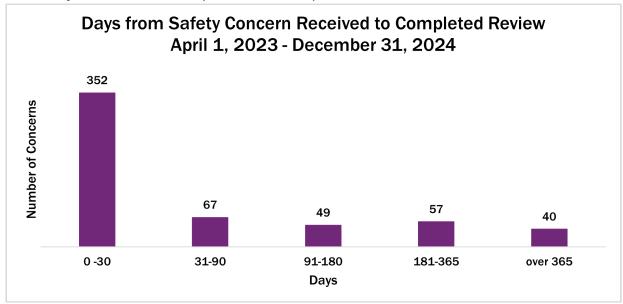
- **4.93** We recommend that the Department of Transportation and Infrastructure develop a strategy to address high risk tasks in a timely manner and document mitigation strategies for repairs that cannot be managed promptly.
- **4.94** We recommend that the Department of Transportation and Infrastructure categorize all maintenance repair tasks as high, medium or low.

Responsiveness to Safety Concerns

HIGHWAY SAFETY CONCERNS NOT REVIEWED IN A TIMELY MANNER

4.95 The Department receives highway safety concerns from the public, Members of the Legislative Assembly (MLAs) and departmental staff. Reported concerns relate to various issues including speed limits, signage, lighting and surface conditions.

- **4.96** Concerns are entered into an excel database to be reviewed by departmental staff. Recommendations are developed as deemed appropriate and forwarded for action to the responsible district.
- **4.97** No standard turnaround times exist for addressing concerns.
- **4.98** Of the 862 highway safety concerns reported to the Department during our audit period, 66% were reviewed by the Department leaving 34% unaddressed.
- **4.99** The concerns reviewed were not timely. The chart below displays the days from identification of a safety concern to the Department's completed review.



Source: Prepared by AGNB based on department's traffic safety database (unaudited)

4.100 Without timely review, there is a risk urgent safety concerns are not being addressed in a timely manner.

Recommendation

4.101 We recommend that the Department of Transportation and Infrastructure ensure timely review of traffic safety concerns.

THE DEPARTMENT DOES NOT ENSURE THE RESOLUTION OF HIGHWAY SAFETY CONCERNS

- **4.102** The Department does not ensure recommendations made to transportation districts to resolve noted highway safety concerns are implemented. We noted that in 10 highway safety reviews where recommendations were made, only one had evidence of the recommendation being implemented.
- **4.103** By not confirming the implementation of recommendations, the Department does not know if safety concerns are being addressed appropriately and in a timely manner.

Recommendation

4.104 We recommend that the Department of Transportation and Infrastructure have adequate procedures to ensure the implementation of highway safety recommendations.

Capital Projects for Department-Operated Highways

4.105 The Department's *Road Ahead* three-year major capital investment plan outlines how provincial highways will be built, repaired and maintained. The plan established in 2023-2024 covers the three-year period 2024-2026 and has an expected investment in the departmental highway network of \$737 million consisting of 572 approved projects.

| District | # of Projects |
|---------------|---------------|
| 1 Bathurst | 63 |
| 2 Miramichi | 42 |
| 3 Moncton | 138 |
| 4 Saint John | 97 |
| 5 Fredericton | 182 |
| 6 Edmundston | 50 |
| Total | 572 |

SAFETY IMPROVEMENT PROJECTS ARE PRIORITIZED AND SELECTED BASED ON RISK

- **4.106** At the time of our audit, the Department had identified 36 safety improvement projects requiring capital funding including roundabouts, interchanges and ramp improvements.
- **4.107** The Department has a process for prioritization where the projects are ranked based on a weighted score of various factors.

4.108 The three safety improvement projects selected for inclusion in the *Road Ahead* capital plan aligned with the departmental prioritization process.

INADEQUATE DOCUMENTED RATIONALE FOR CHANGES TO ASPHALT AND CHIPSEAL PROJECTS

- **4.109** The departmental asset management system generates the list of capital projects for asphalt and chipseal taking into consideration:
 - budget constraints
 - all work required to meet the Department's target for the percentage of highways in good or fair condition
- **4.110** The Department's technical and engineering staff, including district representatives, refine the project list based on local knowledge and the priorities of interested parties including MLAs and the Department of Tourism, Heritage and Culture.
- **4.111** Of the final asphalt and chipseal projects approved for the *Road Ahead* capital plan, we noted:
 - 27% of selected projects were not identified as requiring work by the asset management system
 - 22% of projects were selected despite the asset management system recommendation for work at a later date
- **4.112** Throughout the project selection process, various changes were made. We reviewed 26 changes and found none had adequate documented rationale.
- **4.113** Lack of documented rationale for changes to the capital plan not supported by data-based systems. This could result in work being performed that does not prioritize safety and decisions that could present a risk to the Government of New Brunswick.

Recommendation

4.114 We recommend that the Department of Transportation and Infrastructure document the clear rationale for changes made to data-based project selections in the *Road Ahead* capital plan to ensure critical safety risks are being addressed.

Capital Projects for P3-Operated Highways

CAPITAL WORK ON P3-OPERATED HIGHWAYS IS PAID WITHOUT MONITORING TO ENSURE WORK IS COMPLETED AS PER CONTRACT STANDARDS

- **4.115** The P3 contracts define the type of capital rehabilitation to be performed and in what year. Based on this projected work plan, the contract outlines payments to be made to the operator.
- **4.116** The Department has made the following payments for capital improvements to P3 operators in 2023-2024:

| Project | P3 Operator | Payments |
|--------------------------------|-------------|----------------|
| Fredericton-Moncton Highway | MRDC | \$51.8 million |
| Trans-Canada Highway | Brun-Way | \$20.4 million |
| Route 1 Gateway | Gateway | \$17.4 million |

Source: Prepared by AGNB based on departmental information (unaudited)

4.117 P3 operators prepare a capital plan for rehabilitation work to be completed, however, the Department does not compare the submitted plan to the contract requirements, nor do they ensure the work required was completed before payment.

Recommendation

4.118 We recommend that the Department of Transportation and Infrastructure review all public-private partnership capital plans to ensure that the capital work required as per the contract will be completed and if not, issue a non-conformance notice.

Strategic Safety Planning and Data Use

COLLISION DATA IS NOT ANALYZED IN A TIMELY FASHION

- **4.119** Accurate collision data supports risk mitigation in highway safety. Every collision that results in death, injury or damages to vehicles, wildlife, or department property valued over \$2,000 is required to be documented in the form of a collision report. These reports are completed by law enforcement officers and sent to the Department for review and processing.
- **4.120** The Department is unable to effectively utilize the collision data, as reports have not been entered into the collision database in a timely manner.
- **4.121** At the time of our audit work, the Department was finalizing provincial collision data from 2023. Of these 7,955 collision reports:
 - none were finalized in under one year
 - 80% took between one to two years to finalize
 - 20% took over two years to finalize
- **4.122** Not having timely collision data impacts the Department's ability to improve highway safety.

Recommendation

- **4.123** We recommend that the Department of Transportation and Infrastructure ensure collision reports are analyzed in a timely manner.
- **4.124** Each year, Transport Canada sends out a call for provinces and territories to submit collision statistics. The submission deadline is June 30th for the previous year's data.
- **4.125** The Department has consistently missed the submission deadline, due to New Brunswick collision data not being finalized in time.
- **4.126** Consequently, Transport Canada has used estimated collision data for New Brunswick to calculate highway fatalities and injuries. New Brunswick was the only province for which this was necessary.

4.127 These estimates resulted in fatalities being understated in 2020 and 2022 when compared to actual collision data.

| | Actual Collision Data | | Transport Can | ada Estimates |
|------|-----------------------|-------------------|---------------|---------------|
| Year | Fatalities | Injuries | Fatalities | Injuries |
| | Collision | ns per 100,000 Po | pulation | |
| 2020 | 7.2 | 278.2 | 6.4 | 342.7 |
| 2021 | 7.2 | 279.2 | 8.6 | 342.7 |
| 2022 | 10.4 | 293.4 | 6.2 | 331.5 |
| 2023 | 8.5 | 263.6 | 8.5 | 257.5 |

Source: Prepared by AGNB based on department collision data (unaudited) and Canadian Motor Vehicle
Traffic Collisions Statistics

- **4.128** Using actual fatalities per 100,000 population, New Brunswick had the highest rate of fatalities in 2023 across Canadian provinces at 8.5, with the overall Canadian average being 4.9.
- **4.129** By not providing timely collision data, the Department is unable to support national collision reduction efforts.

Recommendation

4.130 We recommend that the Department of Transportation and Infrastructure ensure the Transport Canada collision data submission deadline is met.

Use of Collision Data

- **4.131** Collision data is not being processed by the Department in a timely manner. This has notable impacts on how safety concerns are addressed.
- **4.132** Reviews of highway safety concerns regularly rely on collision data to support whether there is or is not a need for safety enhancements. Untimely collision data could result in a technician wrongly concluding that no safety concern exists.
- **4.133** For example, one highway safety concern related to a request that identified four collisions in the summer of 2023, however the Department's review was only supported by collision data from 2017-2021. The final conclusion recommended no changes to be implemented.

OPPORTUNITIES TO ANALYZE COLLISION DATA IN RISK ASSESSMENT

- **4.134** The Department does not use collision data to identify areas and sources of risk and employ mitigation measures required to reduce the number of collisions, injuries and fatalities on New Brunswick highways.
- **4.135** Our analysis of collision data from 2020 to 2023, identified risk areas in the provincial highway network:

| | | hways for sions | Top 5 Hig Fatal | hways for lities | | hways for ries |
|------|-----------|--------------------|-----------------------|---------------------|-----------|-------------------|
| Rank | Highway | Total | Highway | Total | Highway | Total |
| 1 | Route 2 | 2,021 | Route 11 | 36 | Route 2 | 493 |
| 2 | Route 11 | 1,250 | Route 2 | 23 | Route 11 | 469 |
| 3 | Route 134 | 1,147 | Route 8 | 15 | Route 134 | 407 |
| 4 | Route 1 | 995 | Route 134 | 14 | Route 106 | 215 |
| 5 | Route 106 | 619 | Route 105/ Route 1 | 9 | Route 1 | 206 |

Source: Prepared by AGNB based on department collision data (unaudited)

- **4.136** In addition to these metrics, collision reports also include valuable data on specific locations, causes for collisions, driver demographics and the presence of traffic control measures.
- **4.137** Without a formal review process to analyze collision data and serious incidents internally, high risk areas may go unnoticed, or the effectiveness of mitigation measures may not be evaluated.

Recommendation

4.138 We recommend that the Department of Transportation and Infrastructure analyze collision data to identify areas of risk and evaluate the effectiveness of mitigation measures.

Key Performance Indicators to Measure Safety

NO KEY PERFORMANCE INDICATORS RELATED TO COLLISIONS AND FATALITIES

- **4.139** The Department does not have a key performance indicator (KPI) related to collision and fatality reduction, despite in 2023 New Brunswick being:
 - the highest province in fatalities per capita in Canada
 - the third highest jurisdiction among provinces and territories combined in fatalities per capita in Canada
- **4.140** We found that other provinces including Ontario, Saskatchewan and Alberta publicly report on safety KPIs with targets such as:
 - fatalities per 10,000 licensed drivers
 - five year rolling average collisions per 100 million vehicle kms traveled
 - combined fatal and major injury collision rate per 100,000 population
- **4.141** Without a KPI to target and monitor the reduction of collisions and fatalities, the Department cannot be fully transparent with the public on the status of highway safety, or ensure they are meeting the obligations under their mandate.

Recommendation

4.142 We recommend that the Department of Transportation and Infrastructure establish and monitor key performance indicators related to collision and fatality reduction.

Appendix I:

RECOMMENDATIONS AND RESPONSES

| Par. # | Recommendation | Entity's Response | Target Implementation Date |
|--------|----------------|-------------------|----------------------------------|
|--------|----------------|-------------------|----------------------------------|

We recommend that the Department of Transportation and Infrastructure:

| 4.25 | develop a formalized highway safety strategy as recommended in Canada's Road Safety Strategy 2025 for reducing collisions and fatalities on New Brunswick Highways. | Agree • Strategy will include input from both DTI (for infrastructure related issues) and Public Safety (for driver related issues). • Strategy will include collision data. | 2028 |
|------|---|---|---------|
| 4.35 | ensure the timely classification of highway conditions to support decision making. | Agree The 2024 highway condition data has since been classified as of August 2025. The Department will continue to prioritize the timely classification of road conditions by August of each year. | Ongoing |
| 4.36 | ensure timely corrective action when stated targets for highway condition have not been met. | Agree Agree that 2023-24 provincial highway condition targets were not met. The Department has taken a corrective action in improving the condition of our highways by updating our Asset Management modeling software. The Department previously used age as a trigger for reporting on the condition of our highways. Today we are using collected distress data which allows for more accurate condition results and informed decision making. | Ongoing |
| 4.41 | ensure that all reports required from public- private partnership highway operators are received and reviewed to ensure all relevant contract requirements are being met. | Agree | Ongoing |

| Par. # | Recommendation | Entity's Response | Target Implementation Date |
|--------|---|-------------------|----------------------------------|
| 4.46 | perform all required site audits for public-private partnership highway operators to meet departmental monitoring objectives. | Agree | Ongoing |
| 4.47 | conduct management system audits for all public-private partnership highway operators in accordance with the departmental Quality Manual. | Agree | Ongoing |
| 4.51 | develop a process that ensures public-private partnership highway operators are informed of observed deficiencies in a timely manner. | Agree | Ongoing |
| 4.54 | issue public-private partnership highway operators non-conformance notices for all deficiencies that have not been corrected within established contractual repair times. | Agree | Ongoing |
| 4.60 | ensure that public-private partnership highway operators address all non- conformance notices in a timely manner. | Agree | Ongoing |
| 4.64 | ensure that adequate documentation of correction of deficiencies on public-private partnership highways is obtained from operators. | Agree | Ongoing |

| Par. # | Recommendation | Entity's Response | Target Implementation Date |
|--------|--|---|----------------------------------|
| 4.69 | update its Highway Maintenance Manual to ensure standards are clear and measurable. | Agree | 2029 |
| 4.72 | ensure the completion of inspections of department-operated highways. | Agree • Inspection being done through various mechanisms, including ARAN data, Transportation Information Centre tickets, Survey 123, regular inspection schedules on lighting, culverts and bridges. | Ongoing |
| 4.77 | monitor the achievement of winter levels of service in accordance with policy to ensure snow removal is complete within specified timeframes consistently across the province. | Agree • Highway supervisors regularly monitor road conditions and DTI continually strives to meet published levels of service. NB511 is updated twice daily. | Ongoing |
| 4.78 | report on the achievement of winter levels of service in accordance with policy. | Agree • Highway supervisors regularly monitor road condition and DTI continually strives to meet published levels of service. NB511 is updated twice daily. | Ongoing |
| 4.93 | develop a strategy to address high risk tasks in a timely manner and document mitigation strategies for repairs that cannot be managed promptly. | Agree | 2029 |
| 4.94 | categorize all maintenance repair tasks as high, medium or low. | Agree • This is already being implemented via the Survey 123 program identifying maintenance needed. | Ongoing |

| Par. # | Recommendation | Entity's Response | Target Implementation Date |
|--------|--|--|----------------------------------|
| 4.101 | ensure timely review of traffic safety concerns. | Agree | Ongoing |
| 4.104 | have adequate procedures to ensure the implementation of highway safety recommendations. | Agree | 2026 |
| 4.114 | document the clear rationale for changes made to databased project selections in the <i>Road Ahead</i> capital plan to ensure critical safety risks are being addressed. | Agree | Ongoing |
| 4.118 | review all public-private partnership capital plans to ensure that the capital work required as per the contract will be completed and if not, issue a non-conformance notice. | Agree | Ongoing |
| 4.123 | ensure collision reports are analyzed in a timely manner. | Agree Over the last several years the Department has reduced the backlog from 4 years to 4 months. Currently finalizing 2024 collision reports (Oct 2025). | Ongoing |
| 4.130 | ensure the Transport Canada collision data submission deadline is met. | Agree • On track to complete 2025 data by June 2026 to meet the Transport Canada submission. | June 2026 |

| Par. # | Recommendation | Entity's Response | Target Implementation Date |
|--------|---|---|----------------------------------|
| 4.138 | analyze collision data to identify areas of risk and evaluate the effectiveness of mitigation measures. | Agree • Currently working to improve the highway network assessment tool to provide more reliable statistical analysis and more functional flexibility. | 2027 |
| 4.142 | establish and monitor key performance indicators related to collision and fatality reduction. | Agree • Included in the development of a provincial highway safety strategy as per Recommendation 4.25. | 2028 |

Appendix II: Audit Objective and Criteria

The objective and criteria for our audit of the Department of Transportation and Infrastructure are presented below. The Department and its senior management reviewed and agreed with the objective and associated criteria.

| Objective | To determine if the Department of Transportation and Infrastructure has adequate systems and practices for the safe movement of people and goods in accordance with their mandate. |
|-------------|--|
| Criterion 1 | The Department has adequate systems and practices in place to identify and mitigate risks pertaining to highway safety including collisions. |
| Criterion 2 | Highway capital projects are selected and prioritized with due regard for safety considerations. |
| Criterion 3 | Highways are adequately monitored for safety. |
| Criterion 4 | Safety concerns are evaluated and addressed in a timely manner. |
| Criterion 5 | There are appropriately established, measurable and publicly reported key performance indicators for highway safety. |

Appendix III: Independent Assurance Report

This independent assurance report was prepared by the Office of the Auditor General of New Brunswick (AGNB) on Highway Safety with the Department of Transportation and Infrastructure. Our responsibility was to provide objective information, advice and assurance to assist the Legislative Assembly in its scrutiny of the Department of Transportation and Infrastructure with respect to Highway Safety.

All work in this audit was performed to a reasonable level of assurance in accordance with the Canadian Standard on Assurance Engagements (CSAE) 3001 – Direct Engagements set out by the Chartered Professional Accountants of Canada (CPA Canada) in the CPA Canada Handbook – Assurance.

AGNB applies the Canadian Standard on Quality Management 1 – Quality Management for Firms That Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements. This standard requires our office to design, implement and operate a system of quality management, including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

In conducting the audit work, we have complied with the independence and other ethical requirements of the Rules of Professional Conduct of Chartered Professional Accountants of New Brunswick and the Code of Professional Conduct of the Office of the Auditor General of New Brunswick. Both the Rules of Professional Conduct and the Code are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

In accordance with our regular audit process, we obtained the following from management:

- confirmation of management's responsibility for the subject under audit
- acknowledgement of the suitability of the criteria used in the audit
- confirmation that all known information that has been requested, or that could affect the findings or audit conclusion, has been provided
- confirmation that the findings in this report are factually based

PERIOD COVERED BY THE AUDIT

The audit covered the period between April 1, 2023, to December 31, 2024. This is the period to which the audit conclusion applies. However, to gain a more complete understanding of the subject matter of the audit, we also examined certain matters outside of this period as deemed necessary

DATE OF THE REPORT

We obtained sufficient and appropriate audit evidence on which to base our conclusion on November 19, 2025 in Fredericton, New Brunswick.