

## Return to Written Question

THE HONOURABLE WALLY SCHUMANN  
MINISTER OF INFRASTRUCTURE

### Maintenance of Highway No. 3

Mr. Speaker, I have a Return to Written Questions asked by Ms. Green on October 19, 2017 regarding the Maintenance of Highway No. 3.

Transportation infrastructure across the Northwest Territories competes with other high priority territorial programs for limited resources. With limited funding options available, new partnership opportunities and financing alternatives for capital project delivery have successfully been leveraged. The federal government's New Building Canada Plan has provided significant funding that has given the Government of the Northwest Territories the opportunity to continue to make ongoing system-wide improvements.

Major transportation infrastructure assets in the NWT are under a constant review and inspection process as part of the Government of the Northwest Territories asset management and life cycle management processes. Assessing and documenting risks, including those arising from climate change, along with recording the mitigating action taken form part of the overall record. The Department of Infrastructure accomplishes this through the use of a number of programs. The major programs that ensure we are allocating funding in the right areas include:

- Bridge Management System (BMS);
- Highways Surface Management System (HSMS);
- visual inspections of our highways, right-of-way, bridges and culverts by trained regional and headquarters staff; and,
- the Department of Infrastructure's 20-year needs assessment plan, which focuses mainly on the rehabilitation of the existing highways and road transportation network.

In terms of maintenance spending formulas, the industry and national guideline is to reinvest 0.75 to 1.5 per cent annually of the cost of the asset back into the asset. For example, using this formula, if it costs \$800,000 per kilometre to construct Highway No. 3, then we should be investing approximately \$12,000 per kilometre each year into the highway. Utilizing both the operations and maintenance and the capital budgets, the Department of Infrastructure is currently meeting this guideline.

Mr. Speaker, the NWT highway and road system is continually assessed for safety and reliability utilizing a variety of tools that give us a quantitative assessment of the conditions of the highways and roads. From this, the priority capital and O&M expenditures are determined and completed within available funds. Highway safety, operational requirements and National Highway Guidelines are all taken into consideration when determining the priority of work to be completed. The formula of reinvesting 0.75 to 1.5 per cent annually back into the highways can be adjusted slightly based on special circumstances. This philosophy is applied to determine the priority of effort to all of our highways and roads.

Infrastructure works in partnership with industry, the federal government and universities to improve the existing transportation system and leverage new technologies and construction methods that deal with a variety of issues. Activities that reinforce our current inspection regimes (processes and training) for transportation infrastructure include:

- Measuring our performance and the results of the inspections;
- undertaking test sections with the various experts in order to develop new designs and measures to adapt or mitigate climate change for northern infrastructure;
- continuing to work with other jurisdictions on research, development and best practices; and
- completing updates on climate change risk assessments for our infrastructure.

The Department of Infrastructure takes into account all consolidated reports, test results and new techniques developed from research and development to deal with special circumstances, such as the effects of climate change and permafrost degradation. As previously mentioned, Infrastructure has the flexibility to make minor adjustments to the amount reinvested in a particular highway.

Mr. Speaker, between 2012 and 2018, the Department of Infrastructure will have spent approximately \$18 million dollars on the rehabilitation and rebuilding of different sections of Highway No. 3, between kilometres 239 and 339. Funding for this work came from Bundle One of the Provincial-Territorial Infrastructure Component under the New Building Canada Plan. Additional O&M work on Highway No. 3 includes the application of chipseal overlay on approximately 85 km of

Highway No. 3 in 2018. It was recently announced that funding from Bundle 3 of the Provincial-Territorial Infrastructure Component of the New Building Canada Plan will enable a further \$22.5 million to be spent between 2019 and 2023 for the continued rehabilitation and rebuilding of Highway No. 3.

Transportation Association of Canada guidelines are utilized to identify and warn highway users of road hazards. The North Slave Regional Highway Maintenance staff conducts road patrols a minimum of twice a week, looking for and documenting any deficiencies in the road surface. They observe the structure of the road, the comfort and safety of road users and the environment. During patrols, they are required to carry hazard marking signs such as “bump” tabs, delineators, flags, etc. to mark any road hazards identified during their inspection. Once they have completed the inspection, a report is made to the Supervisor/Manager to establish a repair plan. If the repairs are delayed, permanent signage is put in place. The public is advised of any large areas of hazard, such as washboard, loose gravel or slippery conditions through the road reports. Staff from the Transportation Division also conduct regular inspections of the entire NWT highway network and file reports to the respective regional office and headquarters.

Thank you, Mr. Speaker.