

Ministry of Highways and Infrastructure



Annual Report for 2016-17

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Letters of Transmittal



*The Honourable
David Marit,
Minister of Highways
and Infrastructure*

Her Honour, the Honourable Vaughn Solomon Schofield, Lieutenant Governor of Saskatchewan
May it Please Your Honour:

I respectfully submit the Annual Report of the Ministry of Highways and Infrastructure for the fiscal year ending March 31, 2017.

The Ministry of Highways and Infrastructure is investing in the infrastructure required to meet the goals of the *Saskatchewan Plan for Growth*, while honouring government's accountability and expenditure management commitments. 2016-17 was the ministry's largest ever budget, with a \$1.148 billion appropriation. This investment allowed for the completion of over 1,800 km of upgrades and maintenance to the highway network, including over 400 km of work through surge commitment funding. Our investments also continued planning for construction projects that enhance capacity and increase safety on provincial highways, as well as supplying over \$500 million for the Regina Bypass project, which was more than 40 per cent complete by the end of the year. The ministry's investments in maintaining and building infrastructure, as well as its regulatory and policy modernization contributed strongly to the Government direction and Budget for 2016-17 to *Keep Saskatchewan Strong*.



Honourable David Marit
Minister of Highways and Infrastructure



*Fernando Antunes, P.Eng.,
Deputy Minister of
Highways and
Infrastructure*

The Honourable David Marit, Minister of Highways and Infrastructure

Dear Minister:

I have the honour of submitting the Annual Report of the Ministry of Highways and Infrastructure for the fiscal year ending March 31, 2017.

I acknowledge responsibility for this report and am pleased to provide assurances on the accuracy, completeness and reliability of the information contained within including the ministry's financial administration, controls and operational activities. The actions contained in this annual report highlight the ministry's initiatives that support the *Saskatchewan Plan for Growth* and ensure we are building and maintaining a safe, reliable and efficient transportation system to meet the needs of our province now and in the years to come.



Fernando (Fred) Antunes, P.Eng.
Deputy Minister of Highways and Infrastructure

Introduction

This annual report for the Ministry of Highways and Infrastructure presents the results for the fiscal year ending March 31, 2017. It provides results of publicly committed strategies, key actions and performance measures identified in the *Ministry of Highways and Infrastructure Plan for 2016-17*. It also reflects progress toward commitments from the Government's Direction for 2016-17: to *Keep Saskatchewan Strong, the Saskatchewan Plan for Growth – Vision 2020 and Beyond*, throne speeches and the ministry.

The annual report demonstrates the ministry's commitment to effective public performance reporting, transparency and accountability to the public.

Alignment with Government's Direction

The ministry's activities in 2016-17 align with government's vision and four goals:

Saskatchewan's Vision

"... to be the best place in Canada – to live, to work, to start a business, to get an education, to raise a family and to build a life."

Sustaining growth
and opportunities for
Saskatchewan people

Meeting the challenges
of growth

Securing a better quality
of life for all
Saskatchewan people

Delivering responsive
and responsible
government

Together, all ministries and agencies support the achievement of government's four goals and work towards a secure and prosperous Saskatchewan.

Ministry Overview

Vision

Transportation – Connecting Saskatchewan to the World.

Mission Statement

To provide a safe, reliable transportation system that supports Saskatchewan's growth agenda and quality of life. We strive to deliver innovative, sustainable infrastructure to serve the needs of our customers.

Mandate Statement

The ministry manages and provides for the future development of an integrated provincial transportation system which supports economic growth and prosperity for Saskatchewan. Our infrastructure investments will be guided by strategic transportation policy and incorporate operating and maintenance practices which promote the safe and efficient movement of goods and people.

About the Ministry of Highways and Infrastructure

Saskatchewan's road network is the largest in Canada on a per capita basis. The network consists of 26,184 km of highways, including 11,243 km of asphalt concrete pavement, 4,030 km of granular pavement, 4,868 km of thin membrane surface (TMS) highways, 5,764 km of gravel highways and 279 km of ice roads. The ministry also operates and maintains 727 bridges, more than 62,000 culverts, 12 ferries, one barge and 17 northern airports. The ministry budgeted 1,335.0 full time equivalents (FTEs) and utilized 1,385.0 including students.

The ministry's core lines of business focus on providing transportation services for a growing Saskatchewan by planning, building, maintaining, operating, regulating and developing policies for the transportation system. In everything the ministry does, safety is the top priority.

Planning includes working with stakeholders and partners, forecasting future infrastructure needs, and developing plans to meet these needs. It includes determining locations for new routes as well as twinning and passing lanes.

Building includes upgrading or new construction of provincial highways, bridges, culverts, airports and ferries. It involves the development of engineering standards, design and construction management, as well as providing engineering services for major construction projects and maintenance activities.

Maintaining involves management of the current transportation network, including provincial highways, bridges, culverts, northern airports and ferries. Maintenance activities are focused on ensuring a sustainable and reliable transportation system is available for the safe and efficient movement of people and goods and is up to national and provincial standards.

Operating involves the delivery of a wide range of citizen services to ensure the safe and efficient movement of people and goods. This includes pavement marking, signing, lighting, winter snow and ice control, ferry and airport operations and providing better customer service.

Regulating involves the development and enforcement of transportation legislation and regulation with a specific focus on commercial vehicles and provincial shortline railways.

Developing policies includes working with other jurisdictions, industry stakeholders and shippers to gain local knowledge to create conditions for the safe and efficient movement of people and goods, supporting economic and provincial growth and meeting the challenges growth brings.

Responsibilities for carrying out the ministry's mandate are distributed among the ministry's four divisions and the Communications Branch.

Planning and Policy Division

The Planning and Policy Division is responsible for strategic planning and policy development, including articulating a long-term vision for new provincial transportation infrastructure. Policy development focuses on creating the right conditions for economic and population growth and identifying the criteria to assess the current challenges and future opportunities to meet differing citizen and stakeholder needs. The division guides investments in the provincial multi-modal transportation system by setting investment criteria and prioritizing projects. It also develops and enforces transportation legislation with a specific focus on commercial vehicles and provincial shortline railways.

Corporate Services Division

The Corporate Services Division provides budgeting, capital programming, forecasting, financial reporting, quality management systems and geographical information systems to the ministry. This division is also responsible for procurement, information management, performance reporting, land management and traffic counting.

Operations Division

The Operations Division manages all the operational and maintenance programs. Preserving the transportation system involves preventative maintenance and management of provincial highways, bridges, airports and ferries. Operating the transportation system includes pavement marking, signing, lighting, mowing, snow and ice control, as well as ferry and airport operations. Related operational services such as traffic engineering, preservation and engineering services are also included.

Design and Innovation Division

The Design and Innovation Division manages all design and construction activities for preservation and capital projects. The division also facilitates the operation of the provincial highway network through a variety of support services, including developing and administering engineering standards and policies for road design, construction management, roadside development, access management, traffic guidance, signing standards and road safety (e.g. speed limits, access, etc.).

Communications Branch

The Communications Branch is responsible for strategic communications, education and awareness programs aimed at promoting public and highway worker safety and managing information on the Highway Hotline.

Progress in 2016-17

Government Goals



Strategic priority from the *Saskatchewan Plan for Growth*: Economic corridors and gateways facilitate growth in export and trade and the movement of goods and services locally, regionally, and internationally.

Ministry Goal

Efficient travel for trucks and commuters

Strategy

Reduce congestion by investing in new infrastructure around major cities and on high-traffic corridors.

Key Actions and Results

Construct the Regina Bypass.

- ⇒ Build Phase I of the Regina Bypass from Balgonie to Highway 33 for opening in late 2017.
 - ↳ Phase I of the bypass will improve safety and reduce congestion on the corridor east of Regina. Commuters between Regina and its bedroom communities, intraprovincial, national and international traffic will benefit by reducing the risk of potential fatal collisions and injuries associated with intersections on the same level at the point of crossing.
 - ↳ Phase I is on schedule for its targeted October 31, 2017 opening, followed by the opening of the Pilot Butte overpass in 2018. The Highway 33 overpass was originally scheduled to be completed as part of Phase I. However, only the north ramps will be completed by October 2017 in order to advance the Pilot Butte overpass by one year.
 - ↳ Significant progress was made in 2016-17, with all areas of the project and bridge construction underway by March 31, 2017. Major girders were up, bridge abutments were completed and the bridge embankments were substantially completed for Phase I. Significant progress was also achieved on the remainder of the project, which is to be substantially completed October 31, 2019.
 - ↳ Major portions of Phase I include the repaving of Highway 1 between Regina and Balgonie, interchanges at Balgonie, White City, and Tower Road as well as new service roads. Some of the major items are:
 - ↳ The Balgonie interchange includes single-lane roundabouts which improves safety by reducing the number and severity of conflict points and provides continuous flow for traffic;
 - ↳ White City features a diamond interchange which provides grade-separated access to Highway 1;
 - ↳ The Tower Road interchange allows motorists to drive at 110 km/h bypassing the City of Regina. It will provide free flow of eastbound traffic in and out of the city that use existing Highway 1; and,
 - ↳ The Pilot Butte overpass (planned to open in 2018) is a diverging diamond interchange (DDI), which will be the second of its kind in Canada. On a DDI, traffic on minor roads briefly cross to the opposite side of the road to make left turns onto the ramps instead of travelling through two intersections. This enhances the interchange's capacity and improves safety.
 - ↳ When the Regina Bypass is complete, it will extend from Highway 11 northwest of Regina, around the east side and then to Highway 1 on the west side of the city, as well as twin Highway 6 from the Bypass to Regina. It will serve commuters and truck traffic on Highways 1, 6 and 11 – all National Highway System-designated routes that converge on the city. It will also connect to Highway 33, an important route into the Bakken oil fields in southeast Saskatchewan.

- ↪ The Regina Bypass will complete the last link of the TransCanada Highway by achieving free traffic flow between the Manitoba and Alberta borders. In addition to safety benefits, the project will create about 8,200 jobs in the province.
- ↪ The value for money report prepared by Ernst & Young confirmed the public private partnership approach will save taxpayers \$380 million, about 16 per cent, compared to a traditional delivery model. The project has a total investment of \$1.88 billion (in 2015 dollars). This includes the design, construction, operation, maintenance and rehabilitation of the infrastructure through to 2049.
- ↪ The federal government is investing \$200 million in the Regina Bypass.

Procure and construct Warman and Martensville interchanges.

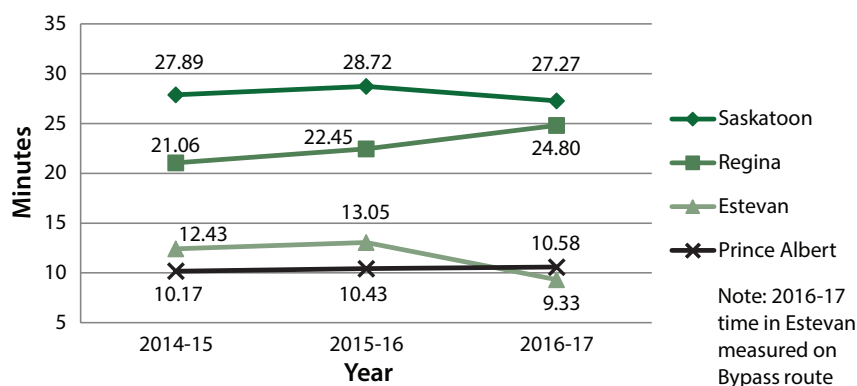
- ⇒ The Warman and Martensville interchanges, including connecting roads, were procured through a design/build process. The contract was awarded in June 2016 with construction commencing April 2017. The design/build process was chosen as the best value for money approach and incorporated private sector innovation into the project design and delivery.
- ⇒ By March 2017 the design-builder had mobilized its equipment, set up near Warman, and had 90 per cent of the designs completed. Construction of the overpasses is scheduled for completion in fall 2019.
- ⇒ With high traffic volumes on both Highway 11 and Highway 12, the new overpasses will reduce congestion, improve safety and provide access to current and future developments. The overpass on Highway 11 will provide a safe route in and out of Warman. In Martensville, the new overpass will distribute traffic along Main Street and Centennial Drive.
- ⇒ The Governments of Canada and Saskatchewan are cost sharing on the project with funding coming from the Provincial-Territorial Infrastructure Component – National and Regional Projects (PTIC-NRP). Canada will contribute up to 50 per cent of the total eligible costs, while Saskatchewan will be responsible for the remaining costs.

Work with provincial ministries, agencies, municipalities and the federal government to maximize federal investment from the New Building Canada Plan and the New Infrastructure Plan in Saskatchewan’s provincial and municipal infrastructure.

- ⇒ The ministry signed the New Building Canada Fund agreement with the federal government in 2015 to receive \$196.5 million. Individual projects that access the \$196.5 million must be submitted to the federal government by March 31, 2018.
- ⇒ The ministry submitted business cases for five corridor repaving projects to Infrastructure Canada in August 2016. The projects are eligible under the PTIC-NRP.
- ⇒ The ministry received approval in principle in October 2016 to proceed with the repaving project on Highway 11. The remaining four corridor projects were awaiting approval at the end of fiscal 2016-17.

Performance Measures

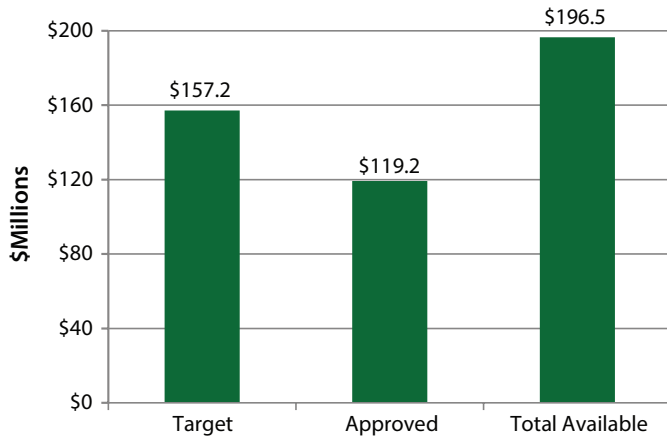
Travel time around major urban congested areas.



Source: Ministry of Highways and Infrastructure, Information Management Branch

Investments around urban centres are important for safe, free flow travel for commercial carriers and commuters. The data establishes a baseline and measures the ministry’s efforts over the long-term in addressing safety and congestion issues due to growth of urban census metropolitan areas. The measure shows the average travel time on designated routes through four urban centres. To gather this data, the ministry uses specific locations to measure the time it takes to get through these urban centres, while moving with the speed of traffic. In Regina the travel time has increased for two years as a result of construction activity related to the Regina Bypass and speed limit changes on Highway 1 East. Once a bypass is complete, the new route travel time is compared to the previous route. The expected result is a reduction in travel time, which is the case for the Estevan bypass.

Value of project agreements approved by the Government of Canada towards the \$196.5 million in federal funding allocated to the Ministry of Highways and Infrastructure – 2016-17 target is \$157.2 million.



Source: Ministry of Highways and Infrastructure, Network Planning and Programs Branch

In 2016-17 the ministry added \$48.1 million in new project approvals, for a total commitment by March 31, 2017 of \$119.2 million towards the \$196.5 million allocation. These amounts represent the federal contribution towards these projects. The ministry is identifying additional projects to access the remaining \$77.3 million that improve the highway network for the citizens of the province. This measure ensures best value and accountability in utilizing all of the federal funding. The approved \$119.2 million is made up of six projects:

- ⇒ Highway 16 twinning east of Saskatoon – \$22.8M;
- ⇒ Highway 7 passing lanes from Delisle to Rosetown – \$3.8M;
- ⇒ Highway 7 twinning west of Saskatoon – \$32M;
- ⇒ Highway 39 twinning east of Estevan to Bienfait project – \$12.5M;
- ⇒ Warman and Martensville Interchanges – \$32M; and
- ⇒ Highway 11 Repaving – \$16.1M.

Strategy

Improve the flow of goods in the supply chain by reducing impediments in the policy and regulatory environment.

Key Actions and Results

Work with national and regional task forces, along with provincial jurisdictions, to eliminate barriers to trade and interprovincial truck movement, and minimize the differences in policies, standards and regulations.

- ⇒ In November 2014, the New West Partnership (NWP) premiers and industry agreed that a transportation supply chain that increases capacity for long term growth must be competitive and efficient as well as safe and environmentally responsible. The Assistant Deputy Minister of Policy and Planning chaired the Pacific Gateway working group on Performance and Market Access that consisted of supply chain stakeholders and provincial representatives.
- ⇒ During the period ending March 2017, the ministry worked with industry partners including provincial trucking associations and warehousing groups to reduce the administrative cost of non-aligned standards for cargo movement including updating permit policy in western Canada and working within the NWP and the Manitoba – Saskatchewan Memorandum of Understanding to harmonize long combination vehicles regulations.

Identify supply chain capacity improvements through Pacific Gateway Alliance (PGA) working groups to improve access to international markets.

- ⇒ The working groups focus on reviewing the efficiency of the supply chain, specifically grain transportation, and provide options to improve its long-term efficiency, reliability and competitiveness in Western Canada. Cargo movements through the Pacific Gateway ports and rail movements to southern and eastern routes have rebounded and have set record movements. The effect of holding face to face meetings that addressed service levels, commodity forecast movements, and the public exchange of information among participants has improved working relationships. It also lead to new rail transportation products and a better understanding of coordinated movement of commodities across the network. The results of these improvements are described in the annual and quarterly reports of the West Coast ports, the Rail quarterly filings to the security exchanges in Canada and the United States, as well as in federal government reports.

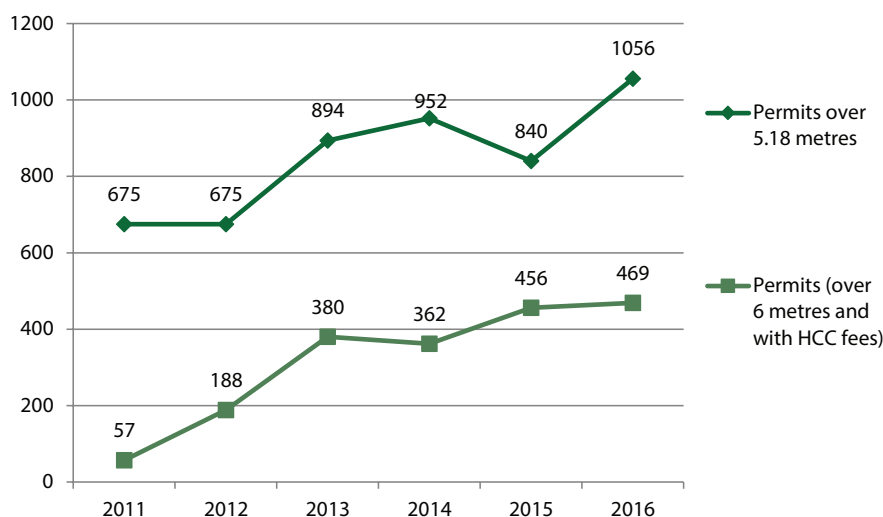
- ⇒ Since November 2015, the Western Canadian transportation trade corridors have displayed this improved performance in the movement of cargo, in part due to the working groups efforts including:
 - ⇒ Holding regular meetings with stakeholders and provinces to discuss performance and market access;
 - ⇒ Working off guiding principles and improving mechanisms to share information and measure progress from published historical experience;
 - ⇒ Generating a consensus approach to identify constraints, barriers and incentives to improve the movement of cargo;
 - ⇒ Reviewing and assessing service level agreements; and,
 - ⇒ Assisting the federal government and supply chain stakeholders to improve working relationships that result in a better understanding of system performance.

Collaborate with SaskPower and the Ministry of the Economy to develop a network of high-clearance corridors.

- ⇒ The ministry works as a facilitator of permit policy for high-clearance corridors (HCC), which provides time and financial savings to industry and SaskPower. The defined corridors are routes where overhead lines are removed so that SaskPower does not need to send crews to move and reinstall lines each time an oversized vehicle uses the highway.
- ⇒ Phase II construction of the HCC was completed in 2016-17. It added approximately 210 kms to the now 870 km HCC network, allowing over-dimension vehicles to access a greater area of the province.
- ⇒ Additions include 72 km on Highway 12 from Saskatoon to Blaine Lake, 110 km on a route which includes Highway 40 and Highway 3 as well as municipal roads from Blaine Lake to Highway 2, and 26 km north on Highway 2 to the Christopher Lake access.
- ⇒ Planning continues on future corridor expansion to make Saskatchewan more attractive to industry by eliminating physical obstructions when moving large loads.

Performance Measures

Utilization by industry of high clearance corridors.



Source: Saskatchewan Government Insurance (SGI)

The HCC allows industry to move oversized loads on a predetermined corridor where obstructions have been removed. The HCC is a user-pay system, where oversized loads are charged a fee that is collected by SGI. The fee is reinvested with the goal of having a self-sustaining HCC program that covers SaskPower's cost of moving or maintaining power lines. Only loads over six metres pay permit fees, with some farm equipment being exempt. In 2016-17, there were increases of 13 permits for loads more than six metres, and 216 permits for loads more than 5.18 metres. Fluctuations in permit requests are a result of changes in economic activity in the province, as well as increases to the corridor length. This measure shows how the ministry and its Crown partners are working together to support trade and investment in the province.

Government Goals

Sustaining growth and opportunities for Saskatchewan people

Meeting the challenges of growth

Securing a better quality of life for all Saskatchewan people

Delivering responsive and responsible government

Strategic priority from the *Saskatchewan Plan for Growth*: Enhancing quality of life – Transportation infrastructure is the foundation for economic growth and improved quality of life.

Ministry Goal

Improved Road Conditions

Strategy

Improve level of service through defined standards for provincial highways.

Key Actions and Results

Develop and implement level of service standards for summer and winter program delivery on highways.

- ⇒ To deliver improved customer service, the ministry continued its work on improvements to its levels of service and response time protocols for its preservation and maintenance activities. The ministry increased its examination of level of service standards to 18 sections across the province, from three in 2015, to evaluate response times for different surface types. Testing and tracking response times contributes to ensuring performance and will lead to more consistent experiences for the road user.
- ⇒ The ministry exceeded its construction and maintenance targets during the 2016 construction season due to a combination of factors including increased risk management, a lack of disruptions due to poor weather, as well as reallocating tender savings to complete additional projects.

Repave 200 km of highways in Saskatchewan.

- ⇒ Saskatchewan has made substantial investment in the transportation system. This includes repaving highways in a timely and effective manner, which will ensure that existing highway infrastructure remains safe for years to come.
- ⇒ In 2016-17, 280 km of capital rehabilitation of paved highways was completed. Some of the completed repaving projects include:
 - ↳ 33.1 km on Highway 1 west of Broadview;
 - ↳ 20.1 km on Highway 1 east of Belle Plaine;
 - ↳ 19.9 km on Highway 11 south of Hanley to north of Hanley;
 - ↳ 23.1 km on Highway 12 north of Martensville; and,
 - ↳ 24.5 km on Highway 6 north of the Junction of Highway 13.

Provide appropriate pavement treatments to increase the longevity of the assets to meet life cycle requirements.

- ⇒ Deliver 400 km of medium pavement treatments, which enhance condition and longevity.
 - ↳ Medium treatments on pavements include work such as thin lift overlays, rut fills with seals over top, and micro-surfacing.
 - ↳ In 2016-17, 435 km of medium treatments were completed, including:
 - ↳ 25.0 km on Highway 13 east of the Junction of Highway 13;
 - ↳ 24.7 km on Highway 16 north of Radisson; and,
 - ↳ 41.9 km on Highway 35 in three sets between Lipton and Elfros.
- ⇒ Deliver 600 km of light pavement treatments, which seals the surface from moisture and increases longevity.
 - ↳ Light pavement treatments protect the sub base of the road from water that can expand and shrink through freeze and thaw cycles, causing potholes and cracks. Sealing the pavements helps delay future, more costly rehabilitations during the pavement life cycle.
 - ↳ In 2016-17, 791 km of light pavement treatments were completed, including:
 - ↳ 45.2 km on Highway 9 south of Carlyle;
 - ↳ 32.2 km on Highway 2 north of Christopher Lake;
 - ↳ 24.0 km on Highway 31 north of Kerrobert; and,
 - ↳ 20.0 km on Highway 16 east of Foam Lake.

Complete construction of 100 km of rural provincial highways.

- ⇒ The ministry completed 143 km of rural provincial highway upgrades in 2016-17, including:
 - ↳ 16.2 km on Highway 35 from the U.S. Border to Oungre;
 - ↳ 28.5 km on Highway 21 between Leader and Eatonia;
 - ↳ 21.9 km on Highway 27 from the Junction of Highway 2 to Vonda; and,
 - ↳ 25.0 km on Highway 102 near Lac LaRonge.

Invest in the resurfacing of Highway 4 within the city limits of Swift Current through the Urban Highway Connector Program.

- ⇒ In 2016-17, work began on the two-year project to pave Highway 4. To prepare for surfacing in 2017, some material crushing and culvert installations were completed during the winter months.
- ⇒ The ministry also invested in other Urban Highway Connector projects including:
 - ↳ Transportation plans for Estevan, Melville, Martensville and Prince Albert, and
 - ↳ The rehabilitation of the north service road near 9th Avenue NW and Main Street in Moose Jaw.

Improve highway corridors at risk of future flooding with drainage improvements, including:

- ⇒ Highway 1 near Wolseley – culvert and berm installations
 - ↳ In 2016-17, the ministry replaced two culverts and began planning and design work for berm installations, with planned delivery for the 2017 construction season; and,
- ⇒ Highway 1 near Indian Head – drainage review and culvert installations
 - ↳ A drainage review and project design was completed with planned delivery in summer 2017.

Extend the service life and ensure the adequacy of drainage structures:

- ⇒ Replace or repair aging culvert and wood box drainage structures;
 - ↳ Culverts are an important part of the transportation network, allowing water to flow from one side of the highway to the other without eroding the road surface or base. Replacing underperforming or at risk culverts keeps corridors open and prevents potential road closures. This increases the availability of the highway network. A total of \$22.6 million was invested in 346 culvert replacements in 2016-17.
- ⇒ Replace 17 bridges, including five that will be replaced with culverts; and,
 - ↳ In 2016-17, the ministry replaced 22 bridges and an additional six culverts were installed to replace bridges.
- ⇒ Make major repairs on five bridges.
 - ↳ Five bridge rehabilitations were completed in 2016-17, including the Diefenbaker Bridge on Highway 2 in Prince Albert.
 - ↳ The ministry worked in partnership with the City of Prince Albert, which managed the project, to address the needs on the Diefenbaker Bridge. This critical link on the north-south corridor through the province is on the National Highway System, and is funded by the ministry. The bridge will be monitored to ensure its integrity.

Provide overnight winter road surveillance and minor winter maintenance on high volume highways.

- ⇒ This program ensures that winter maintenance on high volume highways throughout the province is meeting the ministry's winter maintenance level of service standard. Total provincial distance travelled by the Winter Night Surveillance Program from October 30, 2016 to March 31, 2017 was 210 400 km.

Invest \$52.4 million to improve and maintain infrastructure in northern Saskatchewan.

- ⇒ In 2016-17, the ministry invested \$61.4 million in operations, maintenance and construction of northern roads and airports, including:
 - ↳ Multiple bridge replacements on Highway 165 South of LaRonge and other locations;
 - ↳ Resurfacing west of Big River on Highway 55;
 - ↳ Clay capping on Highway 102 north of LaRonge; and,
 - ↳ Multiple culvert replacement and repairs.
- ⇒ This is \$9.0 million more than planned due to increased maintenance work, increasing the scope of work on the rehabilitation of Highway 102 near Missinipe, and crushing material for the 16 km of rehabilitation planned for 2017 on Highway 55 north of Big River.
- ⇒ Northern investment by year (in \$millions):

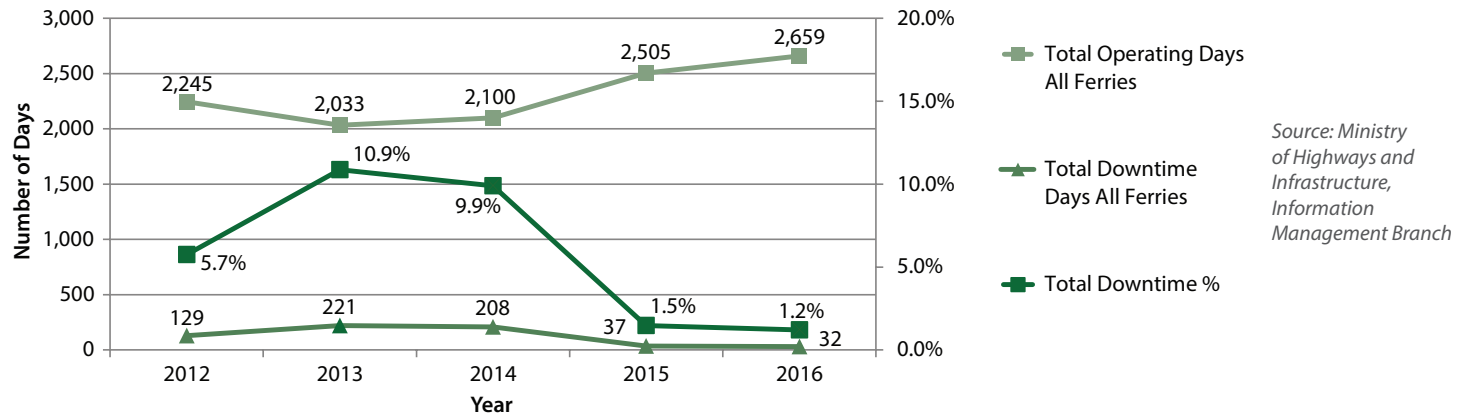
2012-13	2013-14	2014-15	2015-16	2016-17
\$39.8	\$45.7	\$45.4	\$61.1	\$61.4

Provide ferry connections at key municipal road crossings.

- ⇒ The ministry operates 12 ferries and one barge across the province, primarily at municipal road crossings. These seasonal crossings provide shorter routes across rivers for local travellers and commuters.
- ⇒ In 2016, all ferries operated beyond the average season end date, with most operating about 10 days later than average. The earliest opening ferry in 2016 was at Estuary, which began its season on April 19. The last to close was the Riverhurst ferry which ended its season on December 12.

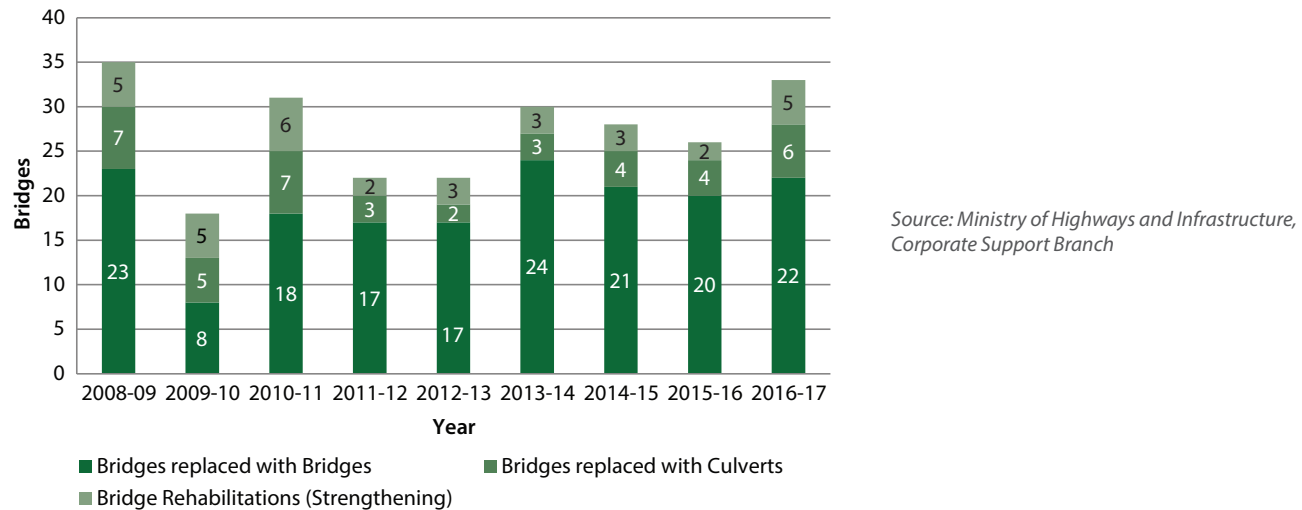
Performance Measures

Per cent of downtime for provincially operated ferries.



This measure shows the reliability of provincially-operated ferries. They provide a shorter route during the operating season. During the 2016 season, total operating days were 2,659 for all 12 ferries and the Wollaston Barge with a combined closure of 32 days. Ferries close due to the water level being too high or too low for safe passage, as well as to complete necessary repairs. In the 2013 and 2014 seasons, the Paynton ferry did not open because the municipal road leading to the ferry was closed due to flooding. This ferry would typically be open for about 200 days annually.

Number of bridges upgraded – target 22 bridges for 2016-17.



There are 727 bridges on the provincial transportation network. The ministry focuses on rehabilitating, repairing or replacing bridges to ensure the highway network is reliable and safe for all users. If a bridge failure occurs, trade may be impeded and citizens' quality of life may be impacted due to weight and/or traffic restrictions. In 2016-17, the ministry upgraded 28 bridges, which is comparable to the previous three years. This work is allowing the ministry to maintain the safety of its bridge assets. The ministry uses a Bridge Condition Index (BCI) to measure the overall state of its bridges. The BCI inputs are collected through bridge inspections. The detailed BCI assessments provide information about the remaining utility of these assets versus design life estimates. When a bridge's condition is poor, it is repaired, rehabilitated or upgraded. Where possible, the ministry replaces minor bridges with culverts.

Number of bridges inspected – target 100 per cent every two years.

As of March 31, 2017 inspections were completed on 384 out of a planned 386 bridge inspections (99.5 per cent completed).

Source: Ministry of Highways and Infrastructure, Technical Standards Branch

Bridges are an important part of the transportation network. As the highway network ages, bridges are inspected to ensure they are in good condition. The ministry targets to inspect all bridges over a two year period. There are 727 bridges in the network, and inspecting 384 bridges results in over 50 per cent of the bridges receiving an inspection, as some require an annual inspection. If access issues prevent a full inspection, inspectors may defer the inspection to the following fiscal year. In 2016-17, minor inspections were completed by in-house staff on 324 out of the planned 326 bridges. The two missed bridges were due to high water levels at the sites making it impossible to access the underside of the bridge. These bridges will be added to the 2017-18 inspection program. Major inspections were completed on all 60 planned bridges. Major inspections were completed by qualified engineering consultants.

Government Goals



Strategic priority from the *Saskatchewan Plan for Growth*: Increasing Transportation Safety – Continue to build safer communities.

Ministry Goal

Improved Safety

Strategy

Reduce collisions on the transportation system through targeted safety improvements at intersections and high-traffic corridors.

Key Actions and Results

Develop a comprehensive safety strategy.

- ⇒ Develop a multi-year safety strategy to reduce the number of collisions on provincial highways.
 - ↳ The development of the strategy is a multi-year project, including the following activities undertaken in 2016-17:
 - ↳ Reviewing findings from collision-data analysis, reviewing best practices regarding successful safety strategies, setting a vision statement and goals, and working with the steering committee, which includes representatives from the Ministry of Justice and Saskatchewan Government Insurance, to identify wider stakeholder consultations; and,
 - ↳ Reviewing and providing feedback on a preliminary list of data on the following types of collisions: animal, dark condition, intersection and vulnerable road user (such as pedestrians).
 - ↳ The work done in 2016-17 positions the ministry to develop a safety strategy (including vision statement, focus areas and list of potential countermeasures) that will include an action plan (short, medium and long-term targets), a monitoring and reporting plan, and a communication plan.
- ⇒ Integrate safety management tools into day to day activities to achieve safety targets.
 - ↳ The ministry continues to keep safety at the forefront of its activities to ensure a safe work environment for its employees, contractors and the public. This past year, the ministry's safety efforts resulted in improvements across the board. There was a 14 per cent reduction in injuries and the ministry met the target of a 40 per cent improvement from 2012.
 - ↳ In its efforts towards achieving the ministry's safety in the workplace goals, the ministry's Occupational Health and Safety unit spearheaded the following initiatives in 2016-17:
 - ↳ Developed a safety handbook for distribution at employee orientation;
 - ↳ Developed a safety app for smart devices with incident notification;
 - ↳ Participated in a "Stay at Work" pilot program – keeping employees on the job with duties that accommodate injury;
 - ↳ Updated training for equipment and set up multiple employee educational items on the government's employee learning portal; and,
 - ↳ Ran awareness campaigns with the focus on "Safe Conditions" and "Safe Behaviours".

- ↪ In its efforts to ensure the safety of the ministry's own vehicle fleet, the ministry's Commercial Vehicle Enforcement Specialist travelled to a variety of locations across the province educating managers, drivers and mechanics on the proper procedure for conducting a pre-trip inspection. These presentations and practical demonstrations were provided to approximately 560 ministry employees.

Deliver the twinning and passing lanes strategy.

- ⇒ Construct twinning and passing lanes to improve traffic flow and increase safety.
 - ↪ In addition to increasing safety on the highway network, twinning and passing lane projects increase efficient travel for moving freight and commuters, positively impact the citizen's driving experience and contribute to lowering greenhouse gas emissions.
 - ↪ Continue twinning 19.5 km on Highway 16 east of Saskatoon to Clavet.
 - ↪ The new twinned lanes were opened in the fall 2016, one year ahead of the original schedule due to favourable weather conditions and significant contractor progress in 2016.
 - ↪ The total amount of work on the new twinned lanes was 26.5 km including the 7 km bypass north of Clavet.
 - ↪ Continue twinning 26.5 km on Highway 7 west of Saskatoon to Delisle.
 - ↪ The first phase of the three phase project was completed in the fall with the opening of a 9 km section from west of Saskatoon to east of Vanscoy.
 - ↪ The ministry continued planning work on the second phase – a bypass around Vanscoy.
 - ↪ Construction of the third phase, an 11 km section from west of Vanscoy to east of Delisle is planned to begin in 2017.
 - ↪ Continue twinning 11.6 km on Highway 39 east of Estevan to Bienfait.
 - ↪ Construction on Highway 39 from east of Estevan to Bienfait began in the summer of 2016.
 - ↪ This is the first project under the Highway 6 and 39 twinning and passing lanes strategy linking the National Highway System to Saskatchewan's busiest border crossing at North Portal.
 - ↪ A large portion of the grading of the new lanes was completed. Paving of the new lanes is planned for 2017.
 - ↪ Major components of the work include a realignment of the junction of Highway 18 and Highway 39, and a relocation of the coal haul underpass, allowing an improved efficiency of local mining operations.
 - ↪ Continue planning for twinning and passing lanes on Highway 6 and 39 between Regina and Estevan.
 - ↪ The ministry progressed on the general location studies necessary for future improvements to the corridor, as well as continued the review of current and potential future needs including assessing sections where passing lanes may serve as an interim option. The ministry also engaged communities to present location work and discuss long term planning concerns and solutions.
 - ↪ The Highway 6 and 39 corridor between Regina and the United States border at North Portal forms an important international trade corridor that supports a high volume of truck traffic. The corridor is over 200 kilometres long, and there are varying traffic conditions along the route.
 - ↪ Continue planning for passing lanes on Highway 5 between Saskatoon and Humboldt.
 - ↪ New passing lanes between Saskatoon and Humboldt were announced in the 2015-16 budget. Planning work began in the summer of 2015 and continued throughout 2016 to determine the appropriate number and positioning of the passing lanes. This work defined the requirements and allowed the ministry to announce on March 22, 2017 that it will be constructing two sets of passing lanes on Highway 5 between Humboldt and Highway 2 during the 2017 construction year.

Through the Safety Improvement Program (SIP), invest \$7 million on safety projects, including:

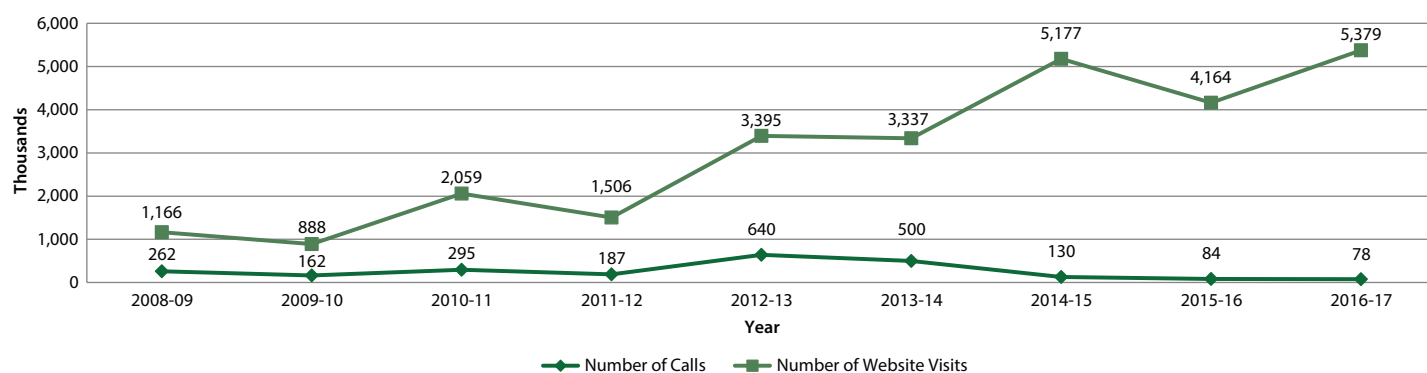
- ⇒ Auxiliary lanes and ramps at Kalium road on Highway 1;
 - ↪ In 2016-17, the ministry worked on designing and preparing to tender this project. Utility moves and other items delayed the tendering.
- ⇒ Turning lane improvements on Highway 3 at Shellbrook;
 - ↪ This project was awarded in April, 2016 and is planned to be completed in summer 2017. It is combined with rehabilitation work on Highway 3, which has a two-year timeframe. In 2016-17, 60 per cent of the rehabilitation work was completed and 50 per cent of the turning lane improvements were completed.
- ⇒ Traffic signals at Armour Road, Industrial Drive and Highway 6 near Regina; and
 - ↪ In 2016-17, one of the two planned sets of traffic signals was installed.
 - ↪ Installing traffic signals at this location was chosen due to increasing traffic levels from current and future industrial development in the area.
 - ↪ The signals will benefit local road users and those accessing the highway by reducing the delay experienced for those crossing Highway 6.

- ⇒ Lighting improvements at Highway 11 and Pasqua Street near Regina.
 - ↳ Additional lighting was installed around the interchange at Highway 11 and Pasqua Street to improve general visibility, specifically the points where a driver must make a decision, as this corridor has seen traffic growth over a number of years.
 - ↳ Existing lighting was removed, and 115 new light posts and eight under bridge lights were installed.

Year	2012-13	2013-14	2014-15	2015-16	2016-17
SIP projects completed	22	35	28	19	35
Investment (\$M)	\$5.0	\$8.2	\$6.8	\$5.4	\$8.0

Continue to provide quality road information for travellers through the Highway Hotline.

Calls and Website Visits to the Highway Hotline



Source: Ministry of Highways and Infrastructure, Communications Branch

- ⇒ The Highway Hotline provides motorists with information on highway conditions, road closures, construction zones, ferries and border crossings. The Hotline is also used to publicize and distribute Winter Weight and Spring Road Ban Orders to the trucking industry, rural municipalities and enforcement. In 2016-17, the Hotline:
 - ↳ Provided provincial road condition reports to the media at least four times a day during inclement weather;
 - ↳ Provided road closures information during flooding, forest fire crisis and the Husky Oil spill; and,
 - ↳ Upgraded its website static mapping to allow the public to pan and zoom.
- ⇒ With the trends of increased online viewing and a decline in calls to the Hotline, the ministry has expanded Hotline services such as:
 - ↳ Online road condition maps;
 - ↳ Text reports;
 - ↳ Mobile website;
 - ↳ Facebook page;
 - ↳ Twitter feeds;
 - ↳ Roadside cameras; and,
 - ↳ Online links to other jurisdictions' maps and services.

Reinforce safe driving practices in ministry work zones and around snowplows through the annual Work Zone and Snow Zone campaigns.

- ⇒ The goal of the Snow Zone Campaign is to increase awareness around the dangers of passing a snowplow. The ministry used a multi-media campaign targeted at work zone and snow zone safety including radio, print, digital and highway billboard advertisements and social media (Facebook, Twitter and YouTube). The ministry engaged more than 650,000 people through social media. The ministry also gained 240 new followers during the campaign, while the entire 30-second work zone safety commercial was viewed on YouTube over 130,000 times. Overall, there were more than 5.4 million digital impressions over the course of the campaign.
- ⇒ During the construction season, the ministry provided weekly construction updates that included work zone messaging aimed at enhancing motorist and highway worker safety.
- ⇒ Enforcement activities focused on influencing driver behavior in work zones. The ministry's Commercial Vehicle Enforcement participation in 'Slow to 60 – Joint Forces Operations' from June 20-24 resulted in 710 vehicles being stopped.
- ⇒ In 2016-17, there were five incidents where a snowplow was struck by a vehicle. In 2015-16, there were five incidents, and in 2014-15 there were ten. The snow zone campaign is used with the intention of reducing the number of incidents.

Deliver the Pavement Marking Program to provide visible pavement lines for a safe directional flow of traffic.

- ⇒ Pavement marking includes marking centre lines, edge lines, lane lines, intersection layouts and pavement signs. These markings provide road users with direction marking, safe passing zones and lanes to be used for making turns.
- ⇒ Weather can significantly impact the program, as late spring or early winter decreases the time available to complete pavement markings. Poor weather also slows construction and maintenance activities resulting in delays for pavement marking crews to complete planned work.
- ⇒ In 2016-17, the ministry completed 20,337 km of centre line marking, 25,524 km of edge line marking and 31,723 pavement sign units.

Deliver the Signing Stewardship Program to rehabilitate, replace and install new signs in order to keep the overall condition of the approximately 115,000 regulatory, warning, guide and information signs on the provincial network in good repair.

- ⇒ Through its Signing Stewardship Program, the ministry repairs and realigns signs. Realigning signs is necessary to meet current standards and can include changing the spacing between signs, between the object identified in the sign and the sign itself, or the order of the signs. Realignments also include new sign requests from municipalities.
- ⇒ In 2016-17, the signing stewardship team installed approximately 850 new signs. Many of these new signs were inventory required for new twinning lanes. The ministry also completed:
 - ↳ 2,988 single post repairs and 1 690 single post realignments;
 - ↳ 998 double post repairs and 840 double post realignments;
 - ↳ 1,800 single sign face replacements; and,
 - ↳ As a pilot project, 100 single post and 20 double post screw in anchor installations.
 - ↳ Utilizing screw in anchors was undertaken as a pilot project as the potential benefit will be reductions to the number of trips required when installing a sign, which reduces the overall cost of a sign installation. These installations should also reduce the potential of the signs heaving from the ground due to freeze and thaw cycles, which should reduce future repair costs.

Deliver public crossing and provincial rail inspection programs for provincially regulated rail lines and shortline companies.

- ⇒ The ministry checks sightline, signage and the condition of the road at railway crossings to make sure provincial shortline railway crossings meet current standards.
- ⇒ In 2016-2017, the ministry conducted 305 public grade crossing inspections and the results were shared with the railway. This number of inspections allows the ministry to complete its planned annual inspections of the approximately 1,200 public grade crossings on a four-year cycle.
- ⇒ Railways utilize this information in conjunction with their own inspections to prioritize and plan crossing maintenance and improvement activities.

Work with provincial shortlines to apply the new federal railway rules and rail safety regulations on provincially regulated railways.

- ⇒ During the process of updating the regulations, the ministry solicited feedback from the Saskatchewan Urban Municipalities Association (SUMA), the Saskatchewan Association of Rural Municipalities (SARM) and Saskatchewan shortline railways. Using stakeholder feedback, the Grade Crossing Standards and Guidelines were revised and aligned with updated federal crossing regulations and standards. The updated rules and regulations were distributed to stakeholders in winter 2017.

Collect and audit safety management plans from industrial and common carrier shortline railways.

- ⇒ The ministry's industrial safety management plan (SMP) audit goals for 2016-17 were achieved.
- ⇒ SMPs were collected, reviewed and audited for all common carrier shortline railways in the province.
- ⇒ SMPs for industrial railways were collected using a risk-based approach. Seventeen higher risk of the 61 industrial railways were asked to submit SMPs. Seven were collected by year end, with five audits or reviews being completed (audited against ministry guidelines).

Continue to participate in "Road Check" and "Operation Air Brake" annual international safety inspection events, and plan strategic enforcement activities to reduce commercial vehicle safety violations.

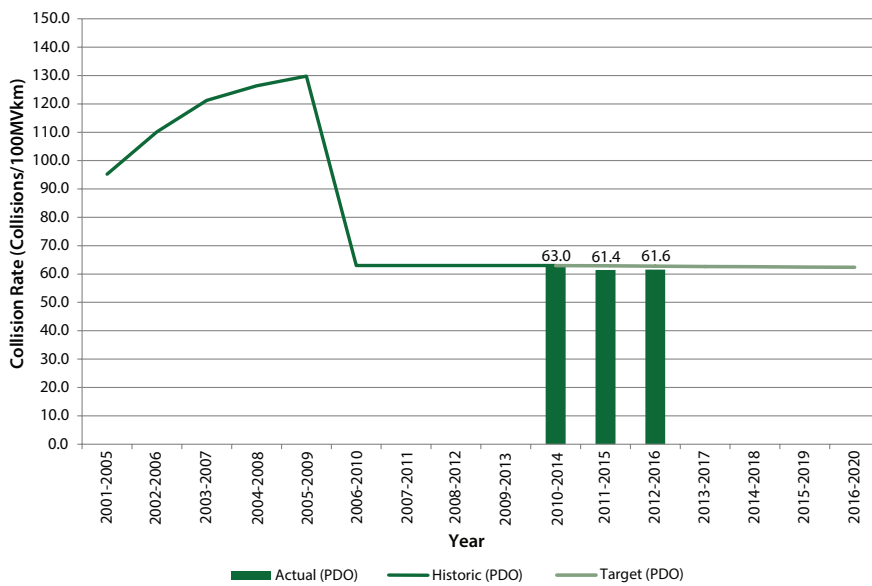
- ⇒ Road Check 2016 was held June 1-5, 2016 at the Swift Current weigh scales. A total of 760 units were inspected, with 128 units taken out of service for critical defects and 20 drivers taken out of service for hours of service violations.

- ⇒ Operation Air Brake’s purpose is to reduce the number of collisions caused by faulty braking systems on commercial vehicles by conducting roadside inspections and educating drivers, mechanics and others on the importance of proper brake inspection, maintenance and operation.
 - ⇒ Two Operation Air Brake enforcement blitzes were conducted in 2016-17. The first blitz was held in Moosomin, Melfort and Kindersley on May 4, 2016 with a total of 142 units inspected. The second blitz was held September 13-15, 2016 at various locations involving 34 Commercial Vehicle Enforcement (CVE) officers and four SGI inspectors.
- ⇒ A Spring Weight Ban Blitz was held near Spiritwood on April 20-21, 2016 involving 14 ministry personnel and local RCMP members. Fifty-five commercial and 13 farm plated units were inspected.
 - ⇒ Weight restrictions are put on many secondary weight highways every spring for about six weeks when the road thaws and weakens the base. Temporarily banning heavy truck travel on these routes protects the road and reduces costly repairs.
- ⇒ A Provincial Transportation of Dangerous Goods Blitz was held the week of September 27-29, 2016, in Estevan, Stoughton, Carlyle, Yorkton, Plunkett, Elfros and Swift Current involving 16 CVE officers and one RCMP member.

Performance Measures

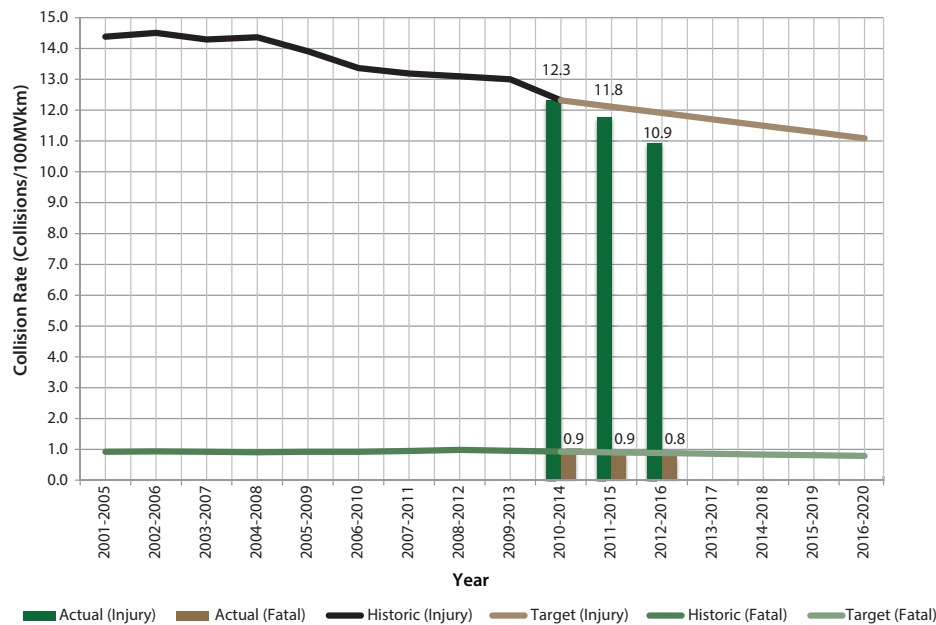
Number of fatalities, injuries and property damage collisions.

Five-Year Rolling Average Collision Rates – Property Damage Only



Source: Saskatchewan Government Insurance (SGI) and the Ministry of Highways and Infrastructure, Information Management Branch

Five-Year Rolling Average Collision Rates – Injuries and Fatalities



As part of the multiyear safety strategy, the ministry will be developing specific targets for identified strategic safety areas. In the interim, the ministry has set targets related to general collision rates. Collision rates are reported as the number of collisions per the number of vehicles on the highway system and the distances they have travelled (collisions/100 million vehicle kilometres). With over 26,000 km of highway and complex human driving factors involved, this metric will take time to show progress. The target will aim for a reduction in the five-year rolling average collision rate over the next five years. The data for this measure comes from SGI's Traffic Accident Information System (TAIS) database and travel data comes from the ministry's Traffic Services Unit. The following targets represent collision rate reductions by 2020. During this period, the ministry will continue identifying safety improvements system wide:

- ⇒ Injury collision rate reduction = 10%;
- ⇒ Fatal collision rate reduction = 15%; and
- ⇒ Property Damage Only (PDO) collision rate reduction = 1%.

*Effective Jan. 1, 2010, the damage threshold for recording PDO collisions from the claims system into SGI's database was increased from \$1,000 to \$5,000.

Government Goals



Strategic priority from the *Saskatchewan Plan for Growth*: Efficiently managing the transportation system – Integrated planning of initiatives at the provincial, regional, and municipal level that result in future population and private sector growth.

Ministry Goal

Integrated Planning

Strategy

Assess transportation demand through engagement with citizens and stakeholders.

Key Actions and Results

Develop an evidence-based evaluation approach for policy development.

- ⇒ The ministry developed an evaluation process that uses business case rationale and justification to make informed decisions. The results are citizen centred and ensure decisions are based on doing the right things that benefit the public interest.

Develop policy framework on:

- ⇒ Integrated rural highways;
 - ↳ In 2016-17, the ministry approved an updated rural highway policy. The policy was developed in consultation with six ministries. It is one of the tools used for network planning and project prioritization. The work on updating the policy framework also included aligning the nine-month primary weight and non-primary weight periods with winter weight and spring ban periods and reviewing rural road classification criteria.
- ⇒ Northern airports; and
 - ↳ A methodology for ranking airport upgrades based on a classification system was created that allows the ministry to review needs and prioritize future airport projects.
- ⇒ Northern transportation.
 - ↳ Northern transportation was reviewed within a broader integrated project prioritization framework which will allow the ministry to compare all categories of projects with one another. This approach is used to incorporate the needs of northern Saskatchewan within the overall strategic context of the ministry's strategic plan.

Integrate the core highway network within the ministry's planning and prioritization processes.

- ⇒ In 2016-17, the ministry developed an integrated prioritization process that is new to governments across Canada. It incorporated the Core Highway Network (CHN) definition. As the backbone of Saskatchewan's road transportation system, the CHN identifies the key highway corridors that support major economic activities, carry the majority of vehicle and truck traffic, and connect the majority of the province's population. These roads constitute 37 per cent of the total provincial network and are considered a priority for meeting the current and future transportation needs of the province.
- ⇒ The integrated prioritization process is a holistic approach to identify priorities and align the strategic plan and policy framework with recommended projects and treatment options. The process is flexible and capable of providing comprehensive prioritization, all measured against the government's strategic priorities. The outcomes are objective and evidence based.

Work with the SARM in developing a resource road program that leverages the New Building Canada Fund to build transportation infrastructure that supports moving goods to market.

- ⇒ The ministry worked with SARM to create a business case to fund a resource road program using PTIC-NRP funding from the federal government. The business case included partnering with municipalities, private industry and the federal and provincial governments to complete projects that would benefit economic growth in rural Saskatchewan. Although the approach was unsuccessful, the ministry continues to work with SARM and its partners to identify projects that benefit local economic growth.

Work with SGI to collaborate in the development of a single window permitting system across the western provinces by 2020.

- ⇒ The outcome of single window permitting is to assist a growing trucking industry by providing efficient service, while creating the conditions to maintain transportation assets in good condition. A single window permitting system will contribute to the government's goal of reducing red tape and creating efficiencies for industry to move freight more quickly across western Canada.
- ⇒ SGI launched improved interactive mapping upgrades to its permit system on June 4, 2016. The ministry collaborated with SGI by supplying the map and its data (bridges, structures, dimensional routes and road restrictions), as well as assisting in setting up the routing models. The ministry's bridge permitting unit has seen a reduced number of permit requests due to the changes within the SGI permitting system, which means more permits do not require ministry review and are issued in a timelier manner. SGI and the ministry are working with SARM to plan the next phase of the permit system upgrades.
- ⇒ The benefit for the trucking industry is that they are receiving more information on their route with the permit, and if route changes are necessary after the permit was issued, truckers are automatically notified by SGI. This helps commercial truckers avoid unexpected delays which ultimately impact their bottom line.

Complete transportation studies on:

- ⇒ Yorkton regional transportation; and
 - ↳ The ministry completed a regional transportation study to assess the road network around Yorkton to meet future regional transportation requirements. During this process, the ministry engaged stakeholders at open houses and a workshop.
- ⇒ Utility corridors in collaboration with Saskatchewan's Crown corporations.
 - ↳ The plan to partner with Crown corporations on this initiative was deferred due to funding restraint. However, the ministry and crowns agree that identifying utility corridors will benefit both short and long term planning by recognizing these potential constraints around development. When this project progresses, the ministry and private developers will have the knowledge of these corridors and will be able to identify other potential risks in order to reduce future traffic issues.

Work with provincial ministries to provide an enterprise solution for spatial data, along with public access to this information.

- ⇒ Through participation on the Saskatchewan Geomatics Executive Council and the Co-operative Operational Working Team, the ministry influences the direction of the Enterprise Geographic Information System (EGIS) project. It includes the design, construction and implementation of a shared geospatial data warehouse, as well as tools, knowledge and resources. EGIS will enhance decision-making through shared data and cross-ministerial support for clients.
- ⇒ In 2016-17, the ministry provided all road spatial data and completed the set-up of the government image server.

Performance Measures

Citizen satisfaction with the engagement process.

The ministry is in the process of defining improved methods of capturing stakeholder satisfaction with ministry services, condition of the provincial highway system and public and stakeholder consultation. This is being developed to measure the satisfaction of citizens with their involvement in the design of policies, programs and services that impact them.

Source: Ministry of Highways and Infrastructure, Communications Branch

Strategy

Define a sustainable transportation system by identifying multimodal solutions to address differing needs.

Key Actions and Results

Provide investments to support provincial air travel.

- ⇒ Support community airports through the Community Airport Partnership (CAP) Program, which results in a \$1.4 million investment for improvements to small airports.
 - ↳ For the eighth consecutive year, the provincial government provided funding through the 50/50 cost-shared program, which helps offset costs for airports that do not receive scheduled passenger service.
 - ↳ Twelve community airports in Saskatchewan were chosen for repairs and upgrades through the CAP program in 2016-17. The province budgeted \$700,000 for the program with the goal of creating \$1.4 million in investment through the matching funds from applicants. The program expenditures for 2016-17 were \$586,914, with a matching portion contributed by the communities. This is below the budgeted amount due to project savings and two approved projects that were not completed.
 - ↳ An example of how this program assists with community economic and social development is North Battleford. The city is doing major repaving to its main runway. In 2016-17, the program contributed over \$272,000 in funding for the resurfacing of nearly 15,000 square metres of runway. This result is a rehabilitated runway that can handle more types of aircraft which will enhance economic activity in the area.
- ⇒ Work with the private sector in Saskatchewan to improve aviation services.
 - ↳ The ministry sits as a member of the Provincial Aviation Advisory Committee which includes both private and public sector members. The committee makes recommendations for improvements. As a result, the ministry funded the design of two area navigation instrument procedures at the Cumberland House and Patuanak airports. These procedures make it possible for pilots to safely land in poor weather conditions, when pilots must rely on instruments rather than visual confirmation. The procedures were designed and submitted to NAV CANADA in March, 2017. The next steps are for NAV CANADA to approve and publish the procedures. Also in March 2017, NAV CANADA published the instrument procedures for the La Loche airport, a project that had been underway for a number of years.
 - ↳ To improve service at ministry airports, generators were installed at the La Loche and Ile-a-la-Crosse airports. The generators provide backup power for the airfield lighting systems in the event of power outages. This will benefit any nighttime landing requirements, especially Medevacs.

Develop a response to the Canada Transportation Act (CTA) review panel report recommendations.

- ⇒ The ministry acts as the provincial government's representative for the CTA review. The government focused its efforts on improving rail access for Saskatchewan shippers by collaborating and sharing research work on priorities identified in its submission with the Canada Transportation Agency and Transport Canada.
- ⇒ Saskatchewan's CTA submission priorities line up with the federal government policy position to advance competition and rely on the principle of market forces as the way to a competitive Saskatchewan economy. For most of Saskatchewan's cargo, rail is the land bridge to external trade. The province's position reflects the collaborative work of provincial ministries.
- ⇒ The ministry will be assessing the results of the CTA legislative amendments against the framework that has been developed over the last two years.

Support transportation system integration to improve mobility on the provincial and municipal road systems.

- ⇒ Invest \$16 million through the Municipal Roads for the Economy Program (MREP) – a partnership agreement with SARM – for municipal road and bridge enhancement and preservation.
 - ↳ For the 2016-17 construction season, seven road projects and 15 bridge and culvert construction projects were completed with MREP funding participation.

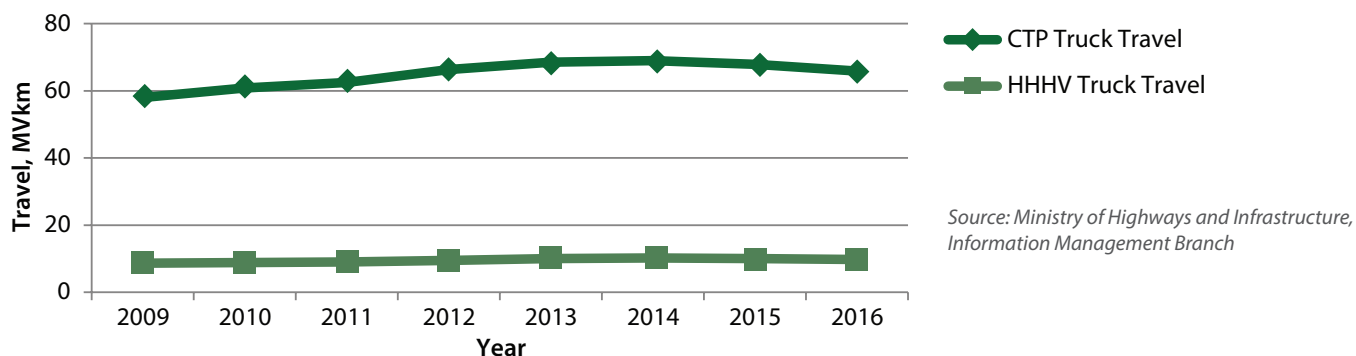
- ↪ The Clearing the Path (CTP) program funds road construction projects and the incremental maintenance of primary weight routes through rural Saskatchewan. This program assists the ministry by reducing truck traffic on Thin Membrane Surface (TMS) highways.
- ↪ The CTP network is designed to complement the existing system of primary weight roads, as well as provide primary weight access to communities. More than 6 600 kilometres of roads have been designated under CTP since 2007.
- ↪ In 2016-17, MREP provided about \$7.3 million towards its annual incremental maintenance funding for CTP designated roads.
- ↪ Five CTP capital projects were completed for a total cost of \$1.4 million.
- ↪ The Heavy Haul High Volume (HHHV) program assists rural municipalities with the costs of constructing or upgrading municipal roads, bridges and culverts that support economic activity and/or resource development.
- ↪ Two HHHV projects were completed for a total of \$1.42 million. These projects were located in the RM of Reciprocity No. 32 and the RM of Meadow Lake No. 588.

Work with rural municipalities to provide alternate truck routes on municipal roads through Strategic Partnership Program (SPP) agreements to help preserve TMS highways.

⇒ In 2016-17, there were 29 truck management agreements through the SPP for a total of 672 km.

Performance Measures

Usage of Clearing the Path and Heavy Haul Routes.



The data shows truck travel on CTP roads and the roads designated as HHHV. Designated truck routes preserve the condition of at risk TMS highways by moving heavier traffic to municipal roads that can handle higher weights. Preserving these TMS highways provides a better driving experience for users. Traffic volumes are also an indicator of economic activity within the province. The CTP initiative was launched in 2007 as a joint effort between the ministry and SARM to establish a network of RM roads capable of carrying trucks that are loaded to limits equal to highway primary weights. In many areas, the routes were developed with the aim of reducing the damage on highways that cannot withstand primary weight loads. The HHHV routes are roads designated within the rural municipal system. These roads are designated for use as heavy haul routes to assist with local economic growth and preserve other nearby roads.

Strategy

Improve Ministry processes through understanding and streamlining service delivery practices to build organizational capacity.

Key Actions and Results

Implement the best value approach for the ministry's construction procurement, including contractor performance rating process.

- ⇒ In 2016-17, a model for best value construction procurement was developed in consultation with internal and external stakeholders. However, it was not fully implemented as stakeholder concerns continue to be mitigated and the ministry aligns the development of a contractor performance evaluation program with Priority Saskatchewan's efforts on the Vendor Performance Evaluation policy.
- ⇒ In the interim, the ministry developed and began using an internal process to evaluate construction tender results that are close in price. In the Spring of 2017, the ministry implemented a best value approach where bids are evaluated using a scorecard approach.

Work with the Ministry of Central Services on improving the procurement process for construction materials.

- ⇒ The ministry worked with Central Services to develop communication channels, streamline processes and agree on mutually-beneficial improvement ideas. The expectations are to reduce redundancies, improve communications regarding expectations to the supplier and be proactive rather than reactive for regular items.
- ⇒ Improvements included a prequalification process for highly complex and/or high priced commodities. The two ministries are working together to identify materials that should be tendered using a different acquisition process.

Develop an innovation framework, including stakeholder engagement, to move innovations forward.

- ⇒ The ministry's Empower Innovation Committee developed an innovation framework that provides for the intake, cataloguing and testing of innovation ideas from across the ministry. It involves the engagement of 22 'Innovation Enablers' to take innovation management training to promote and invest in opportunities for continuous improvement across the ministry.

Develop an environmental protection plan (EPP) that will streamline environmental approvals while ensuring accountability with federal and provincial regulations.

- ⇒ The ministry engaged industry and created a working group to improve the EPP process and management tool. The revised management tool that was developed consolidates and describes the project specific environmental requirements of a contract. This improvement will enhance the accountability documentation and process. It will also increase all parties' project specific knowledge and allow them a more fulsome understanding of how environmental work will be accomplished, and how project work may impact the environment.
- ⇒ When the process improvement is complete, stakeholders will have access to a project specific document for easy reference onsite and as a compliance tool for site inspections of environmental requirements. This will assist in recordkeeping, contract oversight and allow for the inclusion and official approval of innovative processes.
- ⇒ At the end of 2016-17, revisions to the EPP document template were in progress. When completed, the ministry's next steps include implementation of the tool on select projects in 2017-18.

Collaborate with consultant engineers and road building contractors to improve the procurement and timing of public tenders, as well as the timeliness of delivery and quality of construction projects.

- ⇒ In 2016-17, the ministry continued to engage the Saskatchewan Heavy Construction Association (SHCA) and the Association of Consulting Engineers of Canada-Saskatchewan (ACEC-SK) to discuss strategic initiatives.
 - ⇒ One issue was the ministry's End Product Specification for asphalt paving contracts. The ministry worked collaboratively with SHCA to resolve agreed upon issues and implement changes.
 - ⇒ The ministry also continued to modernize its processes and procedures. For example, sections of the Project Administration Manual were posted to the "Doing Business with the Ministry" webpage to replace outdated processes and procedures in the existing construction manual.
- ⇒ The ministry shared several bulletin updates with industry partners to improve consistency and quality in contract administration, such as profile index testing, bridge final estimate, nuclear gauge correction factor, forecast template, supplemental agreement templates, and project information sheet.
- ⇒ The ministry began implementing a new project management system in 2016-17. It will support the efficient and effective delivery of projects and provide standards for ministry processes, concepts, workflows, and access to a centralized repository of reliable and timely information. The software will enhance the ministry's project delivery capability and capacity and increase consistency across the province. As consultants will be utilizing the software in the delivery of ministry projects, it is expected the software will result in consultants finding it easier to do business with the ministry as a result of consistent approaches, processes, and expectations. Piloting of the software is planned for 2017-18.

Performance Measures

Number of Innovation Ideas.

A total of 236 ideas were generated in this first year using dedicated resources to engage ministry staff.

Source: Ministry of Highways and Infrastructure, Operations Division

The Empower Innovation Committee was established in January 2016, with 2016-17 being its first full year of activity. Its purpose is to foster a culture that promotes employee collaboration around innovation. Innovations were solicited through engagement with employees, work units and management groups.

Percentage of identified innovations that are implemented.

A total of 131 innovation ideas – or 56 per cent – were implemented.

Source: Ministry of Highways and Infrastructure, Operations Division

New ideas were documented and shared with the organization through quarterly presentations at team meetings, written communication dedicated to innovation, bi-weekly on-line employee newsletter, and on a SharePoint site dedicated to innovation knowledge management. The ministry's innovation process is designed to evaluate projects early in the process to determine their viability. This strategy has proven successful in directing investment to high-value innovation projects, including:

- ⇒ Break-away sign posts: Employees developed and piloted a new post design for signs that are at high risk for damage due to collisions. The initial installation cost of the new structure is higher. However, the replacement cost is drastically lower and utilizes local resources that can respond quickly. The payback period of the new sign is approximately one month and the level of service responsiveness is three days rather than four months.
- ⇒ Automatic Flagger Assistance Device (AFAD): Employees from across the ministry worked together to design, construct, and pilot a device that allows a work zone flagger to communicate directions to traffic from a safer location – off the road surface. The team engaged private industry in the pilot and was successful in incorporating the option to use the device in the provincial standard for traffic control in work zones.
- ⇒ Temporary Reflective Pavement Marking Installation Tool: Employees developed a tool for installing pavement markings in a safer, upright position that reduces exposure to traffic. This activity is done any time the yellow line is covered by a road maintenance activity. The cost of the device is about two hundred dollars and efficiency gains present a payback period of one month. In addition, this device mitigates the risks of back injury and being struck by a vehicle while working.

2016-17 Financial Overview

In 2016-17, the ministry received \$1,147.6 million in appropriated funding on budget day and invested \$1,148.6 million including special warrants. The ministry's expenditures were over its appropriation due to the delivery of capital projects, primarily the Regina Bypass, where expenditures can vary significantly based on the work completed.

Program	(in thousands of dollars)				Variance Explanation
	2015-16 Actual	2016-17 Budget	2016-17 Actual	2016-17 Variance	
Vote 16:					
Central Management and Services	17,329	18,523	17,428	(1,095)	
Minister's Salary (Statutory)	48	49	51	2	
Executive Management	1,017	1,015	1,063	48	
Central Services	4,637	5,559	4,387	(1,172)	1
Accommodation Services	11,627	11,900	11,927	27	
Strategic Municipal Infrastructure	23,748	26,245	24,163	(2,082)	
Municipal Roads Strategy	14,150	16,000	16,000	0	
Strategic Partnership Program	1,522	1,890	1,367	(523)	2
Urban Connectors	7,447	7,655	6,209	(1,446)	2
Community Airport Partnership Fund	629	700	587	(113)	3
Operation of Transportation System	95,196	94,037	97,682	3,645	
Winter Maintenance	38,254	29,288	37,842	8,554	4
Road Safety and Traffic Guidance	22,797	24,011	21,830	(2,181)	5
Operational Services	17,470	24,900	21,461	(3,439)	6
Transport Compliance	4,898	5,016	4,517	(499)	1
Ferry Services	3,715	3,644	3,988	344	7
Airports	1,951	1,946	1,999	53	
Information Technology Services	6,111	5,232	6,045	813	8
Preservation of Transportation System	140,904	150,832	144,124	(6,708)	
Surface Preservation	128,610	138,914	131,805	(7,109)	9
Regional Services	12,294	11,918	12,319	401	10
Transportation Planning and Policy	3,548	3,361	3,751	390	10
Infrastructure and Equipment Capital	518,045	854,582	861,462	6,880	
Infrastructure Rehabilitation	87,721	113,690	113,448	(242)	
Infrastructure Enhancement	418,671	730,870	742,433	11,563	11
Accommodation Capital	4,137	4,031	414	(3,617)	12
Minor Capital	1,703	241	863	622	13
Machinery and Equipment	5,813	5,750	4,304	(1,446)	12
16 – Subtotal (Appropriation)	798,770	1,147,580	1,148,610	1,030	
Special Warrant*	0	70,000	0	(70,000)	
16 – Subtotal (Appropriation)	798,770	1,217,580	1,148,610	(68,970)	
Capital Asset Acquisitions	(518,045)	(924,582)	(861,462)	63,120	14
Capital Asset Amortization	146,053	162,423	161,473	(950)	15
16 – Total Ministry Expense	426,778	455,421	448,621	(6,800)	
Custom Work Net Recovery	(12)	0	(13)	(13)	
16 – Total Custom Work Net Recovery	(12)	0	(13)	(13)	
Total (Appropriation)	798,758	1,217,580	1,148,597	(68,983)	

*Vote 16 Special Warrant funding of \$70 M in capital was provided for increase of work relating to the Regina Bypass

Explanation of Major Variances:

1. Decrease due to FTE management and other administrative savings.
2. Decrease due to a reduction in partnership agreements undertaken in 2016-17.
3. Project costs came in lower than planned.
4. Winter maintenance costs exceeded budgeted levels.
5. Decrease due to deferred non-emergency repair and maintenance work.
6. Decrease due to administrative savings and transportation planning studies carried over to 2017-18.
7. Increase is due to maintenance activities at various locations.
8. Increase is due to inflation increases and licensing fees.
9. Variance due to deferral of planned work and additional work carried over to next fiscal year.
10. Increase due to organizational changes and increase focus on these programs.
11. Increase is a result of work advanced on the Regina Bypass Project at March 31, 2017.
12. Deferred capital replacements.
13. Completion of salt storage sheds from 2015-16.
14. Overpass installations on the Regina Bypass not completed until April 2017 along with other capital infrastructure work in progress changes at March 31, 2017.
15. Decrease is due to a reduction of capital work completed in 2015-16.

2016-17 Revenues

The ministry collects revenue relating to the sale of Crown lands or material on behalf of the government. The ministry also collects revenue from the federal government to reimburse the provincial government for infrastructure improvements completed under the federal-provincial cost shared infrastructure programs. All revenue collected is deposited in the General Revenue Fund. Below is a summary of the ministry's 2016-17 budgeted revenue compared to actual revenue.

Revenues	(in thousands of dollars)			
	2016-17 Budget	2016-17 Actual	Variance	Variance Explanation
Sales, Services and Service Fees	1,327	3,130	1,803	1
Transfers from Federal Government	106,500	131,211	24,711	
PPP Canada	80,000	104,600	24,600	2
Building Canada Fund – Major Infrastructure	6,500	7,441	941	3
Provincial Territorial Infrastructure Component	20,000	18,722	(1,278)	4
Other Federal Programs	-	448	448	5
Transfers from Government Entities	50	3,074	3,024	6
Total	107,877	137,415	29,538	

Explanation of Major Variances:

1. Increase in land, equipment and material sales.
2. Higher than expected construction work was completed on the Regina Bypass Project in 2016-17, which resulted in higher than expected revenues.
3. Higher than expected construction work was completed for Building Canada Fund – Major Infrastructure Component (MIC) projects, which resulted in higher than expected revenues.
4. Lower than expected construction work was completed on the Provincial Territorial Infrastructure Component projects, which resulted in lower than expected revenues.
5. There were two new minor federal agreements signed in 2016-17, resulting in an increase in revenue.
6. Highway construction projects were completed by the Transportation Partnerships Fund (TPF) and transferred to the ministry.

2016-17 Full Time Equivalent Employees (FTE)

FTEs	
Budget	1,335.0
Total Utilization Including Students	1,385.0
Variance	(50.0)

Explanation of FTE Variance:

The ministry utilized 1,297.0 FTEs with an additional 88.0 FTEs utilized for student employment resulting in 50.0 FTEs over utilized.

Transportation Partnerships Fund

The Transportation Partnerships Fund (TPF) was established effective July 1, 1997, pursuant to Section 8 of *The Highways and Transportation Act, 1997*. The purpose of the fund is to generate revenues to be used for highway improvement projects. The TPF generates revenues subject to the terms of trucking partnership agreements, in which the transportation companies pay the Fund a portion of cost savings achieved from being able to haul overweight and/or over-dimension loads. Additional revenues are raised through issuing permits and the marketing of transportation related technology and expertise.

The ministry is responsible for managing the TPF. The ministry's Transportation Partnership Program generated \$2.5 million in revenue and invested \$3.1 million on transportation system improvements in 2016-17. The TPF balance was \$11.3 million on March 31, 2017.

For More Information

If you have any questions or comments, we invite you to call 306-787-4800, or contact:

Communications Branch
1200-1855 Victoria Avenue
Regina, Saskatchewan S4P 3T2

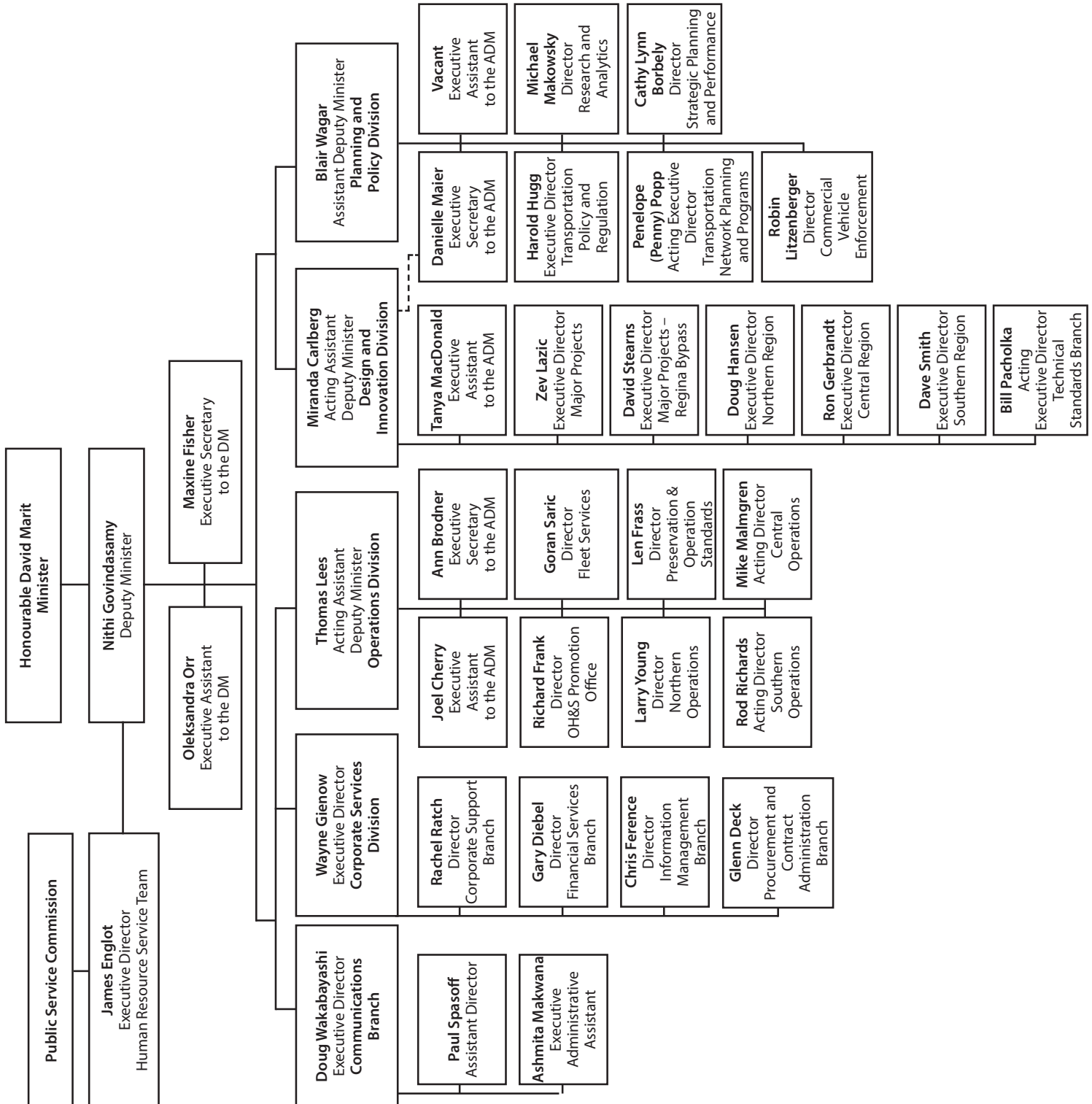
Or send us an email through the Saskatchewan Ministry of Highways and Infrastructure website:
<http://www.saskatchewan.ca/government/ministries/highways-and-infrastructure>.

Visit our website to find out about:

- ⇒ Road conditions and travellers information;
- ⇒ Construction projects;
- ⇒ Programs and services; and,
- ⇒ Updated tender schedule.

Appendices

Appendix A: Organizational Chart as of March 31, 2017



Appendix B: Loan Disclosure

The ministry administers the Shortline Railway Financial Assistance Program. Under this program, the province provided municipalities or local community groups that wanted to preserve rail service in their area with an interest free loan for the capital acquisition of rail infrastructure which was being abandoned. The loan is repayable over 15 years, with a discretionary three-year grace period.

Eight loans were advanced through this program:

- ⇒ In 1999-2000, investors received a \$177,000 provincial loan and a \$177,000 Canada Agriculture Infrastructure Program (CAIP) grant.
- ⇒ From 2004-2012 investors received six loans totaling \$6.6M with funding split equally between the Transportation Partnership Fund (TPF) and the General Revenue Fund (GRF).
- ⇒ In 2015-2016 investors received a loan in the amount of \$551,000 with all funding coming from the TPF.

There are five loans outstanding for the fiscal year ending March 31, 2017.

This loan program supported the ministry's objective to invest in multi-modal infrastructure such as regional airports and short line rail. A short line railway reduces truck traffic since agricultural products are hauled long distances by rail, rather than by large trucks on the provincial highway system. Reducing the amount of heavy truck traffic helps the ministry sustain the condition of rural TMS highways.

Short Line Railway Loans	(in thousands of dollars)		
	TPF	GRF	Total
	2016-17 Actual	2016-17 Actual	
Beginning Balance	1,709	1,158	2,867
Additions	-	-	-
Reductions	185	185	370
Ending Balance	1,524	973	2,497

Appendix C: Legislation

The Minister of Highways and Infrastructure is responsible for the following Acts and Regulations:

The Highways and Transportation Act, 1997

The Wollaston Lake Barge Operation Regulations

The Controlled Access Highways Regulations

The Provincial Highway Sign Control Regulations

The Provincial Highways Designation Regulations, 1990

The Highways and Transportation Act Regulations (Autowreckers Licensing)

The Vehicle Weight and Dimension Regulations, 2010

The Security of Loads Regulations

The Trip Inspection Regulations

The Dangerous Goods Transportation Act

The Dangerous Goods Transportation Regulations

The Engineering and Geoscience Professions Act

The Railway Act

The Final Offer Arbitration (Railway) Regulations

The Short Line Railway Financial Assistance Regulations

The Railway Line (Short Line) Financial Assistance Regulations

The Sand and Gravel Act

The Saskatchewan Grain Car Corporation Act

The Traffic Safety Act – but only with respect to:

1. All of Part IV, other than Section 20; and,
2. *The Commercial Vehicle Hours of Service Regulations*

Public Works and Services Act – Jointly assigned to the Minister of Highways and Infrastructure and the Minister of Central Services except with respect to clauses 4(2)(a) to (g), (i) to (l), (n) and (o) and section 8, which are jointly assigned to the Minister of Central Services, the Minister of Education, the Minister of Health and the Minister of Highways and Infrastructure

The Executive Government Administration Act – ministry not responsible for the Act, but the following regulations pursuant to the Act:

1. *The Short Line Railway Financial Assistance Regulations*
2. *The Ministry of Highways and Infrastructure Regulations*; and,
3. *The Railway Line (Short line) Financial Assistance Regulations* (Enacted in June 2004)

