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MINISTER OF INFRASTRUCTURE

Room 203  
Legislative Building  
Winnipeg, Manitoba, CANADA  
R3C 0V8

Her Honour the Honourable Janice C. Filmon, C.M, O.M.  
Lieutenant Governor of Manitoba  
Room 235, Legislative Building  
Winnipeg, Manitoba  
R3C 0V8

May It Please Your Honour:

I have the privilege of presenting for the information of Your Honour, the Annual Report of the Department of Infrastructure for the fiscal year ending March 31, 2017.

Respectfully submitted,

*Original signed by*

Honourable Ron R. Schuler  
Minister of Infrastructure





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MINISTER OF INFRASTRUCTURE

Room 203  
Legislative Building  
Winnipeg, Manitoba, CANADA  
R3C 0V8

Son Honneur l'honorable Janice C. Filmon, C.M., O.M.  
Lieutenant-gouverneure du Manitoba  
Palais législatif, bureau 235  
Winnipeg (Manitoba)  
R3C 0V8

Madame la Lieutenant-Gouverneure,

J'ai le privilège de vous présenter, à titre informatif, le rapport annuel du ministère de l'Infrastructure pour l'exercice qui s'est terminé le 31 mars 2017.

Le tout respectueusement soumis.

*Original signé par*

Monsieur Ron R. Schuler  
Ministre de l'Infrastructure



Honourable Ron R. Schuler  
Minister of Infrastructure  
Room 203, Legislative Building  
Winnipeg, Manitoba  
R3C 0V8

Dear Minister Schuler:

It is my privilege to submit for your approval the 2016/2017 Annual Report for the Department of Manitoba Infrastructure.

Respectfully submitted,

*Original signed by*

Bramwell Strain  
Deputy Minister



Monsieur Ron R. Schuler  
Ministre de l'Infrastructure  
Palais législatif, bureau 203  
Winnipeg (Manitoba)  
R3C 0V8

Monsieur le Ministre,

J'ai l'honneur de vous présenter, en vue de son approbation, le rapport annuel du ministère de l'Infrastructure pour l'exercice 2016-2017.

Le tout respectueusement soumis.

*Original signé par*

Bramwell Strain  
Sous-ministre



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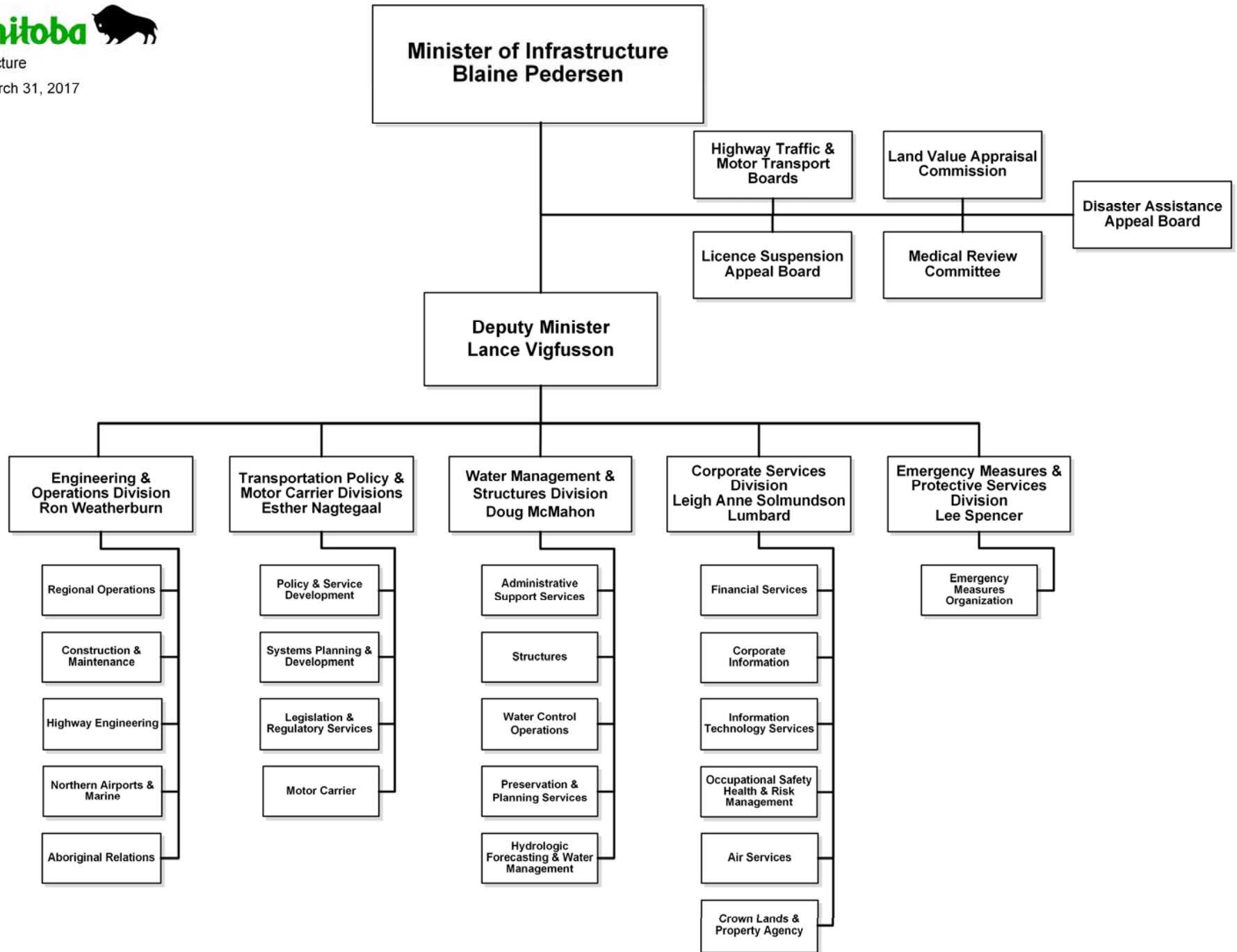
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# Preface

## Report Structure

The Annual Report is organized in accordance with the departmental appropriation and organization structures that reflect the department's authorized votes approved by the Legislative Assembly. The report includes information at the Main and Sub-Appropriation levels relating to the department's objectives, actual results achieved, financial performance and variances, and provides a five-year historical table giving the departmental expenditures and staffing. Expenditures and revenue variance explanations previously contained in the Public Accounts of Manitoba are now provided in the Annual Report.

## Vision

Connect and Protect Manitoba.

## Mission

Ensure safe, reliable and sustainable infrastructure and services for Manitoba and its communities.

## Department Highlights

Maintained and improved:

- Provincial Highways - 19,100 km of roads which includes 8,500 km of structural pavement, 4,600 km of asphalt surface semi-pavement and 6,000 km of gravel roads
- Highway Bridges - 1,800 bridges and overpasses and 1,680 bridge sized large culverts
- Water Control - 13,000 thru-dike culverts, 4,750 km of drains, 3,350 crossings over drains, 90 dams, 61 reservoirs, 345 water control structures, 8 diversions, 19 community ring dikes, 425 km of linear river diking and 41 pumping stations

## Statutory Responsibilities

C44 The CentrePort Canada Act

C340 The Crown Lands Act

Sections 1 to 4, clauses 7.3(2)(a) and (b), sections 9, 11 to 13.1, 15 and 20, subsections 23(1) and (2), sections 24 to 26, 30 and 34 and 34.1; Section 5 to subsection 7.1(1) and subsections 7.3 (1), (3) and (5), sections 7.6, 8, 14, 16 to 18, 21, 22 and subsection 23(3) insofar as they relate to the disposition of Crown lands and agricultural Crown lands, other than setting fees or rents or issuing work permits

D104 The Drivers and Vehicles Act

D110 The Dyking Authority Act

E80 The Emergency Measures Act

E85 The Emergency 911 Public Safety Answering Point Act

G70 The Government Air Services Act

G80 The Government House Act

G110 The Ground Water and Water Well Act (as it relates to the planning, construction or operation of provincial water control works)

H40 The Highways and Transportation Act

H50 The Highways Protection Act

H60 The Highway Traffic Act

H65 The Highways and Transportation Construction Contracts Disbursement Act

L30 The Lake of the Woods Control Board Act

L40 The Land Acquisition Act

O31 The Off-Road Vehicles Act



- P20     **The Provincial Parks Act**  
Sections 1 and 16, subsection 21(1), section 22, clauses 32(b), (f), (i), (j), (k), 33(u) and subsection 34(1) and the Debt Certificate Regulation, M.R. 140/96
- P300    **The Public Works Act**
- R15     **The Provincial Railways Act**
- R32     **The Red River Floodway Act**
- T140    **The Trans-Canada Highway Act**
- W60     **The Water Power Act** (as it relates to the planning, construction or operation of provincial water control works)
- W70     **The Water Resources Administration Act**
- W80     **The Water Rights Act** (as it relates to the planning, construction or operation of provincial water control works)
- W100    **The Water Supply Commissions Act**
- W140    **The Wild Rice Act**  
Sections 1 and 2, subsection 8(2), 10 to 13, 15, 16, 18 to 23 and clause 31(e)

# Préface

## Structure du rapport

Le rapport annuel est organisé selon les structures de l'organisation et des postes budgétaires du ministère, lesquels reflètent les crédits autorisés de ce ministère, approuvés par l'Assemblée législative. Le rapport comprend des renseignements sur les principales affectations budgétaires, ainsi que sur les sous-crédits, relativement aux objectifs du ministère, à ses résultats réels, à ses rendements et ses écarts financiers. Il présente en outre un tableau chronologique de la dotation en personnel et des dépenses des cinq dernières années. Les explications relatives aux écarts budgétaires en matière de dépenses et de recettes qui étaient auparavant comprises dans les Comptes publics du Manitoba sont maintenant présentées dans le rapport annuel.

## Vision

Relier et protéger les collectivités du Manitoba.

## Mission

Veiller à la sécurité, à la fiabilité et à la durabilité de l'infrastructure et des services offerts au Manitoba et à ses collectivités.

## Points saillants du ministère

Entretien et amélioration :

- Routes provinciales — 19 100 km de routes dont 8 500 km en revêtement structural, 4 600 km en semi-revêtement d'asphalte et 6 000 km en chaussées en gravier.
- Ponts routiers — 1 800 ponts ou viaducs et 1 680 grands ponceaux de la taille d'un pont.
- Régularisation des eaux — 13 000 ponceaux de digues, 4 750 km de canaux de drainage, 3 350 voies de passage au-dessus des canaux de drainage, 90 barrages, 61 réservoirs, 345 ouvrages de régularisation des eaux, 8 ouvrages de dérivation, 19 digues circulaires communautaires, 425 km de digues linéaires de rivières et 41 postes de pompage.

## Responsabilités prévues par les lois

C44 *Loi sur la Société CentrePort Canada*

C340 *Loi sur les terres domaniales*

[les articles 1 à 4, les alinéas 7(.3(2)a) et b), les articles 9, 11 à 13.1, 15 et 20, les paragraphes 23(1) et (2) ainsi que les articles 24 à 26, 30, 34 et 34.1; de les articles 5 à 6.1, les alinéas 7(1)a), b), d) et e), les paragraphes 7(2) à (6), les paragraphes 7.1(1), 7.3(1) et (3) à (5), les articles 7.6, 8, 14, 16 à 18, 21 et 22 ainsi que le paragraphe 23(3) dans la mesure où ils ont trait à l'aliénation de terres domaniales et de terres domaniales agricoles, à l'exclusion de l'établissement de droits et de loyers et de la délivrance de permis d'exploitation]

D104 *Loi sur les conducteurs et les véhicules*

D110 *Loi sur l'administration des digues*

E80 *Loi sur les mesures d'urgence*

E85 *Loi sur les centres téléphoniques de sécurité publique — service d'urgence 911*

G70 *Loi sur le Service aérien du gouvernement*

G80 *Loi sur le Palais du gouvernement*

G110 *Loi sur les eaux souterraines et les puits*

[en ce qui a trait à la planification, à la construction et à la gestion des ouvrages d'aménagement hydraulique de la province]

H40 *Loi sur la voirie et le transport*

- H50 *Loi sur la protection des voies publiques*
- H60 *Code de la route*
- H65 *Loi sur l'acquittement du prix des contrats de construction conclus avec le ministère de la Voirie et du Transport*
- L30 *Loi sur la Commission de contrôle du lac des Bois*
- L40 *Loi sur l'acquisition foncière*
- O31 *Loi sur les véhicules à caractère non routier*
- P20 *Loi sur les parcs provinciaux*  
[les articles 1 et 16, le paragraphe 21(1), les articles 22 et 30, les alinéas 32b), f), i), j) et k), l'alinéa 33u) et le paragraphe 34(1) ainsi que le Règlement sur le certificat de créance, R.M. 140/96]
- P300 *Loi sur les travaux publics*
- R15 *Loi sur les chemins de fer provinciaux*
- R32 *Loi sur le canal de dérivation de la rivière Rouge*
- T140 *Loi sur la route transcanadienne*
- W60 *Loi sur l'énergie hydraulique*  
[en ce qui a trait à la planification, à la construction et à la gestion des ouvrages d'aménagement hydraulique de la province]
- W70 *Loi sur l'aménagement hydraulique*
- W80 *Loi sur les droits d'utilisation de l'eau*  
[en ce qui a trait à la planification, à la construction et à la gestion des ouvrages d'aménagement hydraulique de la province]
- W100 *Loi sur les commissions d'approvisionnement en eau*
- W140 *Loi sur le riz sauvage*  
[les articles 1 et 2, le paragraphe 8(2), les articles 10 à 13, 15, 16, 18 à 23 ainsi que l'alinéa 31e)]

# Corporate Services Division

## Mandate

Provide executive financial and corporate services. Coordinate the departmental administration and planning process, policies and programs; manage the communication and planning programs, and provide for the departmental occupational safety and health, and risk management programs. Develop and administer corporate financial policy and oversight, provide centralized accounting and financial services; coordinate information systems activities, Air Services (life and fire), and oversight of the Crown Lands and Property Agency. Provide administrative oversight for the Highway Traffic and Motor Transport Boards, the License Suspension Appeal Board and the Medical Review Committee, pay indemnities for the Land Value Appraisal Commission and Disaster Assistance Appeal Board.

## Minister's Salary

Provides for the additional compensation to which an individual appointed to the Executive Council is entitled.

### 1 (a) Minister's Salary

Expenditures by Sub-Appropriation	Actual 2016/17 \$(000)	FTE	Estimate 2016/17 \$(000)	Variance Over(Under) \$(000)	Expl. No.
Salaries & Employee Benefits	51	1.00	51	0	

## Executive Support

### Objective

To provide executive management direction and monitoring for the department.

To provide administrative support for the Minister and Deputy Minister.

### Activity Identification

Advises the Minister on all aspects of policy affecting the department.

Coordinates and manages the activities of the department.

Provides administrative support for the offices of the Minister and Deputy Minister.

### 1 (b) Executive Support

Expenditures by Sub-Appropriation	Actual 2016/17 \$(000)	FTE	Estimate 2016/17 \$(000)	Variance Over(Under) \$(000)	Expl. No.
(1) Salaries & Employee Benefits	876	10.00	892	(16)	
(2) Other Expenditures	108		140	(32)	
<b>Total Sub-Appropriation</b>	<b>984</b>	<b>10.00</b>	<b>1,032</b>	<b>(48)</b>	

# Corporate Information and Strategic Initiatives

## Objective

To develop, monitor and evaluate management policies, systems and procedures.

To meet the needs of internal clients for planning, information management, administrative policy and project support.

## Activity Identification

Provide corporate management direction through the Office of the Assistant Deputy Minister, Corporate Services Division.

Provide internal client services in the following areas:

- Coordinate annual departmental planning activities, as well as integrating performance measurement activities.
- Manage the development and coordination of the department's major information documents and records, including annual plans, briefing books and accomplishment reports.
- Provide a department-wide source of multi-purpose corporate, strategic and issue related information.
- Lead the development of administrative policies and procedures as required, and provide specialized administrative services such as Freedom of Information, Privacy Protection Act (FIPPA) management.
- Provide department-wide management of disclosures by employees under The Public Interest Disclosure (Whistleblower Protection) Act.

## 2016/2017 Major Accomplishments

Continued expansion of the corporate service client base, offering services such as coordination and composition of all types of documentation, including but not limited to ministerial responses, briefing material, advisory notes, speeches, presentations and submissions.

Ongoing development of a department-wide shared access system for storing information/documents from all areas of the department.

Responded to requests for assistance with coordination, compilation and composition of informational materials and other communications related services.

### 1 (c) Corporate Information and Strategic Initiatives

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$(000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$(000)</b>	<b>Variance Over(Under) \$(000)</b>	<b>Expl. No.</b>
(1) Salaries & Employee Benefits	1,422	15.00	1,583	(161)	
(2) Other Expenditures	456		592	(136)	
<b>Total Sub-Appropriation</b>	<b>1,878</b>	<b>15.00</b>	<b>2,175</b>	<b>(297)</b>	

## Financial Services

### Objective

To provide central financial management services in accordance with governing legislation and to interpret and provide support related to financial administration policies and procedures.

To maintain an active comptrollership function by ensuring that financial and administrative policies, procedures and reporting systems are developed and administered to effectively meet departmental management, central government and external requirements.

### Activity Identification

Manage the department's financial processes and provide for financial oversight of the department's assets and resources.

Oversee comptrollership services provided to the department, including coordination of compliance and attest audits, planning and execution of departmental reviews, and providing advice and challenge services.

Provide accounting services for the processing of financial documents, appropriation monitoring, general ledger accounting, functional direction and financial systems development support.

Provide asset accounting for the department's general and infrastructure assets.

Provide financial planning and review for the compilation of the estimates and cash flows, budget analysis and a corporate review/challenge role.

Maintain key activities essential to fulfilling requirements under The Financial Administration Act, The Appropriations Act(s), Treasury Board directives and central government and departmental policies.

### 2016/2017 Major Accomplishments

- Provided advice and support with respect to interpretation and application of central government directives and policies.
- Undertook various comptrollership activities to ensure that financial and administrative policies, services and reporting systems were compliant with corporate comptrollership practices and requirements.
- Provided ongoing support to branches on improving financial forecasting and reporting processes.
- Continued to strengthen the financial function by hosting training days, in person meetings and conference calls for departmental financial officers and contacts.

#### 1 (d) Financial Services

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$ (000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$ (000)</b>	<b>Variance Over(Under) \$ (000)</b>	<b>Expl. No.</b>
(1) Salaries & Employee Benefits	1,514	21.00	1,544	(30)	
(2) Other Expenditures	221		352	(131)	
<b>Total Sub-Appropriation</b>	<b>1,735</b>	<b>21.00</b>	<b>1,896</b>	<b>(161)</b>	

# Information Technology Services

## Objective

Provide leadership, guidance, cost effective solutions and services to meet the business needs of the department clients through end to end project management, business analysis, business unit liaison and support, consultation and systems/applications management.

## Activity Identification

Work with the branches and business units to prepare the department's information and communication technology (ICT) systems plans. Manage implementation of the plan by working closely with Business Transformation and Technology (BTT), Manitoba Finance.

Provide information management and project management support to all branches and business units in the department. Support business units from the conception of a business improvement opportunity and from the identification of a new or changed business requirement through implementation of the best solution, and management of the resulting systems.

Provide data stewardship, business resumption support, and general security awareness as it applies to information and communication technology within the department and within the government.

Provide software license management for the department.

Identify business requirements and conduct business process analysis and recommend changes or improvements as appropriate.

Create and administer Information Technology policy.

Provide technical support for the department's intranet web sites.

Maintain the department's internet web sites.

## 2016/2017 Major Accomplishments

- Provided direction, guidance, consulting services in support of major/critical departmental information systems.
- Continued work on the IT Portfolio Management to coordinate, evaluate and align IT projects with the priorities of the department.
- Continued to provide information technology planning, information systems analysis, project management services, implementation, ongoing support and technical expertise in the design, development and maintenance of computer systems in support of the department's vision and mission.
- Identified more effective, efficient and appropriate approaches for the department and the key components of the organizational system by providing action plans and recommendations for achieving enhanced results.
- Continued to develop applications and increase user adoption of SharePoint collaboration technology through empowerment, training and showcases.
- Continued to provide ongoing business applications and desktop support to end users.

### 1 (e) Information Technology Services

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$(000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$(000)</b>	<b>Variance Over(Under) \$(000)</b>	<b>Expl. No.</b>
(1) Salaries & Employee Benefits	1,484	16.00	1,821	(337)	
(2) Other Expenditures	126		484	(358)	1
<b>Total Sub-Appropriation</b>	<b>1,610</b>	<b>16.00</b>	<b>2,305</b>	<b>(695)</b>	

*Explanation:*

1. Lower information technology costs coupled with lower general operating costs.



# Occupational Safety, Health and Risk Management

## Objective

Manage risks to the safety, health and well being of employees, visitors and the public arising out of the work activities performed by or on behalf of the department. Examines risk mitigation and management strategies that protect departmental infrastructure and physical assets.

## Activity Identification

Responsible for developing and maintaining safety, health and risk management programs, policies and procedures.

Provide consultative and support services in risk management, workplace safety, occupational health and wellness, incident and injury claims management.

Develop and implement musculoskeletal injury prevention programs, policies and training curriculum.

Develop and implement health and wellness programming.

Audit work areas for compliance with programming.

Conduct COR (Certificate of Recognition) safety program audits to ensure full compliance with applicable federal and provincial workplace safety and health acts and regulations.

Coordinate the development and testing of the department's Business Continuity Plan.

## 2016/2017 Major Accomplishments

- Fatigue awareness training provided to operational staff prior to flood/construction.
- Continue to provide Occupational Safety, Health and Risk Management programming to Central Services Division in the Department of Finance.
- Ergonomic Assessments being completed by staff.
- Automation of the Workers Compensation Board (WCB) billing process and a drastic reduction in the time needed to process.
- Provided support and technical guidance for staff to ensure legislative and regulatory compliance.
- Workshop facilitation on the topics of risk management and business continuity for organization and staff development, departmental management training groups and divisional business areas.
- Partnership with SAFE Work Manitoba to develop and promote the SAFE Work Certified program for self insured organizations.
- Introduced health and wellness programming which include fitness programs during the lunch hour, commuter challenge event, and the annual walking/biking program.

<b>Program Activities</b>	
255	Claims received – damaged to MI's property or third party property
127	Worker Compensation Board Claims reported and accepted
5	COR (Certificate of Recognition) audits
22	Ergonomic Assessments Completed
852	Hearing Screening Assessments Completed
<b>Injury Statistics</b>	
94	Incidents – Injuries with no medical attention or lost time
35	Recorded Doctor – Injuries involving medical attention, with no lost time
92	Lost Time Claims – Injuries involving medical attention with lost time
<b>Work Days Lost and WCB Costs</b>	
1679	Work Days Lost
\$1,115,941.90	WCB Costs

**1 (f) Occupational Safety, Health and Risk Management**

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$(000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$(000)</b>	<b>Variance Over(Under) \$(000)</b>	<b>Expl. No.</b>
(1) Salaries & Employee Benefits	619	9.00	695	(76)	
(2) Other Expenditures	96		52	44	
<b>Total Sub-Appropriation</b>	<b>715</b>	<b>9.00</b>	<b>747</b>	<b>(32)</b>	

## Government Air Services

Manitoba's Air Services Branch provides specialty aviation transportation services including forest fire suppression, aerial surveillance, critical care Lifeflight and Southern Inter-Facility Air Ambulance, general transportation of personnel and cargo for departments, agencies, Crown corporations including the coordination and certification of government flights in private sector aircraft.

### Activity Identification

**Air Ambulance** – In conjunction with Manitoba Health, Air Services provides Lifeflight air ambulance services within and outside of the province, using two (2) Cessna Citation jets. Additionally, the branch utilizes one (1) De Havilland Twin Otter as the aviation platform in the Southern Air Ambulance Inter-facility Transport Program.

**Fire Suppression** – One of Air Services' major responsibilities is meeting Manitoba's aerial surveillance and forest fire suppression needs in conjunction with Manitoba Conservation, using a combination of six (6) Bombardier CL-215/415 Water Bombers, three (3) Cessna 310, one (1) backup Piper Navajo Birddog aircraft and three (3) turbine powered De Havilland Single Otter aircraft.

**Manitoba Hydro** – Air Services provides aviation support to Manitoba Hydro's Kelsey and Laurier River generating stations utilizing one (1) Thompson based De Havilland Twin Otter aircraft. When the aircraft is not being utilized for servicing the generating stations, Air Services ensures this aircraft is available for use by other departments and agencies.

### 2016/2017 Major Accomplishments

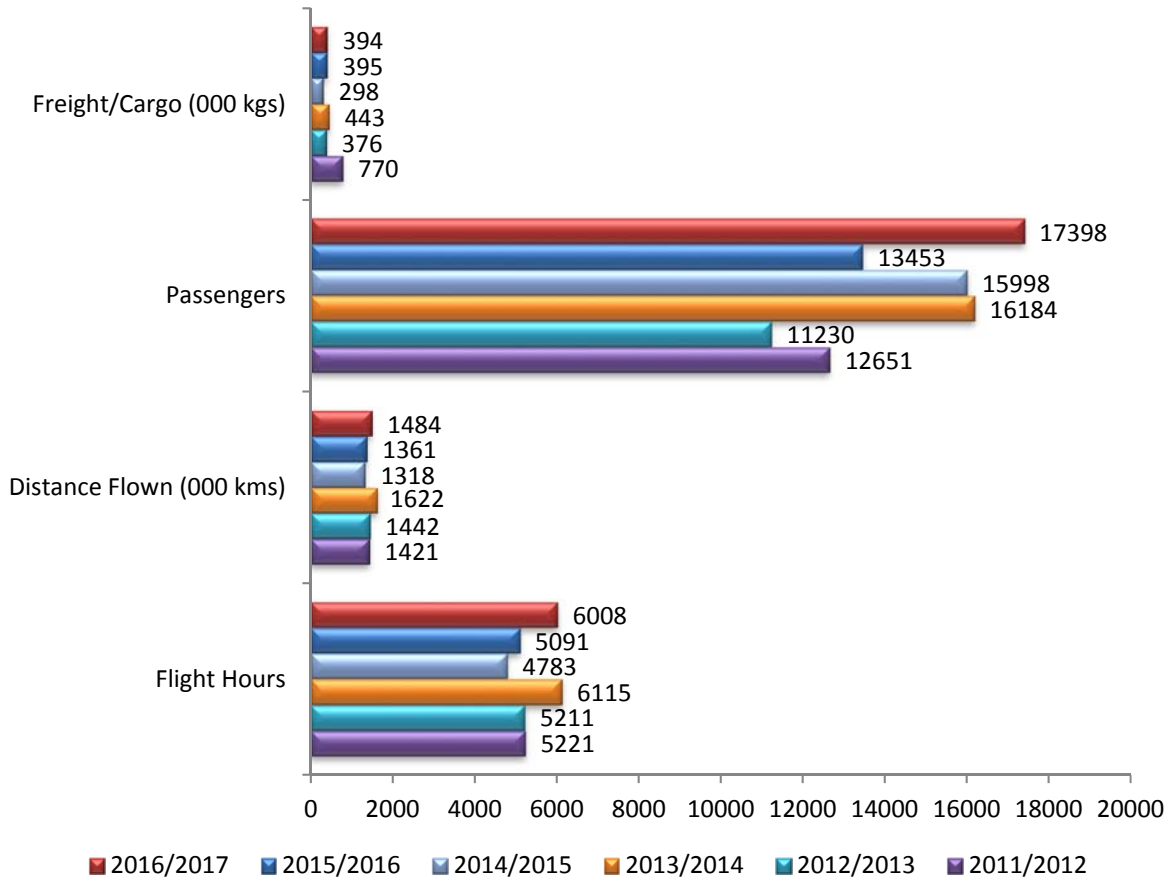
Currently, government air operators such as Manitoba's Air Services Branch, conduct their respective flight operations in compliance with Canadian Aviation Regulations which limits program delivery. The federal aviation regulating body (Transport Canada) has agreed to support Manitoba's initiative to develop aviation regulations for "state" governmental air operators. Manitoba's draft of state aviation regulations is currently under review by Transport Canada.

### 2016/2017 Service Volumes

22	Provincially owned aircraft
11	4 CL-415 and 7 CL-215 Water Bombers (5 CL-215's to be disposed)
3	C-310 Birddog aircraft
2	Citation Jet aircraft
3	Single Otter aircraft
2	Twin Otter aircraft
1	Navajo aircraft
7	Managerial staff
43	Pilots
33	Aircraft maintenance/avionics engineers
8	Financial/Administrative support personnel

Note: The operation and financial models of Air Services are based on cost recovery of all programs and services.

## Aircraft Utilization Summary



### Medical Services Program

Lifelight Air Ambulance Program accounted for 605,933 km of the total air distance travelled in 2016/2017, compared to 526,268 km in 2015/16, an increase of 79,665 km.

Lifelight Air Ambulance transported 254 patients in-Province in 2016/2017, compared to 462 in 2015/2016, a decrease of 208 patients.

Lifelight Air Ambulance transported 81 patients out-of-Province in 2016/2017, compared to 81 in 2015/2016, no changes.

### Fire Suppression Program

Forest fire suppression activities accounted for 468,395 km of the total air distance travelled in 2016/2017, compared to 505,709 km in 2015/16, a decrease of 37,314 km.

Water bombing drops totalled 3,772 in 2016/2017, compared to 4,874 drops in 2015/16, a decrease of 1,102 drops.

### Southern Air Ambulance Inter-Facility Transport Program (SAAIFTP)

Southern Air Ambulance Inter-Facility Transport Program accounted for 211,167 km of the air distance travelled in 2016/2017, compared to 123,133 km in 2015/16, an increase of 88,034 km.

Southern Air Ambulance Inter-Facility Transport Program transported 482 patients in 2016/2017, compared to 335 in 2015/16, an increase of 147 patients.

## Manitoba Hydro Program

Manitoba Hydro Program accounted for 153,745 km of the total air distance travelled in 2016/2017, compared to 103,491 km in 2015/16, an increase of 50,254 km.

Manitoba Hydro transported 149,455 kg of freight/cargo in 2016/2017, compared to 111,894 kg of freight/cargo in 2015/16, an increase of 37,561 kg.

Manitoba Hydro transported 6,654 passengers in 2016/2017, compared to 5,121 in 2015/16, an increase of 1,533 passengers.

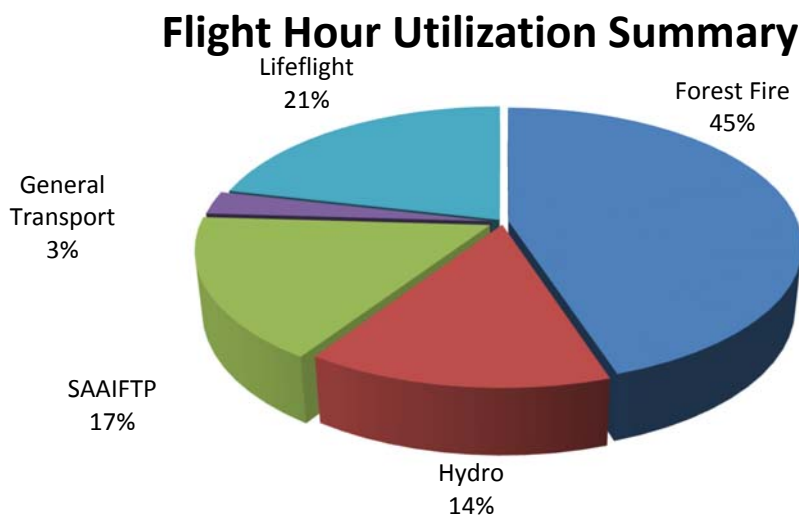
## General Air Transportation Program

Air Services provides limited general transport of governmental personnel and cargo in provincially operated aircraft; combining flights between the various departments whenever possible.

General air transportation accounted for 45,078 km of the total distance travelled in 2016/2017, compared to 103,033 km in 2015/16, a decrease of 57,955 km.

## Co-ordination of Government Charter Flights

Air Services arranged 929 government charters with private sector carriers in 2016/2017, compared to 861 charters in 2015/16, an increase of 68 charters. These numbers do not include the coordination activity related to the Lifeflight and SAAIFTP programs.



### 1 (g) Government Air Services

Expenditures by Sub-Appropriation	Actual 2016/17 \$(000)	FTE	Estimate 2016/17 \$(000)	Variance Over(Under) \$(000)	Expl. No.
(1) Salaries & Employee Benefits	9,429	91.00	9,634	(205)	
(2) Other Expenditures	5,865		9,678	(3,813)	1
(3) Less: Recoverable from Other Appropriations	(14,195)		(18,373)	4,178	1
<b>Total Sub-Appropriation</b>	<b>1,099</b>	<b>91.00</b>	<b>939</b>	<b>160</b>	

#### Explanation:

1. Lower flight activity resulted in lower expenditures and under recoveries.

# Land Value Appraisal Commission and Disaster Assistance Appeal Board

## Objective

### Land Value Appraisal Commission

An administrative tribunal established under The Land Acquisition Act to review government land purchases and expropriations in accordance with The Expropriation Act.

### Disaster Assistance Appeal Board

The board's operation is governed by The Emergency Measures Act.

## Activity Identification

### Land Value Appraisal Commission

Determines and certifies due compensation for the acquisition of land by any designated authority (Provincial and Municipal Government, Manitoba Hydro) with the power of purchase or expropriation.

Reviews land agreements handled by Crown Lands and Property Agency with values in excess of predetermined amounts in an administrative matter rather than an adjudicatory role.

Provides written "reasons" with respect to decisions involving contentious expropriation applications. These "reasons" are reported in the Canada Law Book – "Land Compensation Reports".

### Disaster Assistance Appeal Board

Reviews appeals filed under The Emergency Measures Act, The Red River Floodway Act, The Water Resources Administration Act (Shellmouth Dam Programs) and the Individual Flood Protection Initiative Programs.

Conducts appeal hearings in The City of Winnipeg and throughout the province.

Issues written decisions on all contentious appeals.

## 2016/2017 Major Accomplishments

### Land Value Appraisal Commission

As of March 31, 2016 the Commission had 61 outstanding applications. For the period April 1, 2016 to March 31, 2017, the Commission received 113 applications under The Land Acquisition Act and The Expropriation Act. The applications are as follows:

	<u>Received</u>	<u>Closed</u>	<u>Outstanding</u>
The Land Acquisition Act	27	24	6
The Expropriation Act	86	12	134

The Commission closed a total of 36 files. Of the 36 files, the Commission issued Certificates for the following:

- 28 for Agreements/Offer to Sell and Conditional Release – under The Land Acquisition Act and The Expropriation Act.
- 1 for Contentious Cases under The Expropriation Act
- 5 Appeals were withdrawn
- 2 files closed one duplicate appeal, one no contact

The Commission held public hearings in connection with land being acquired for the Province of Manitoba and for the City of Winnipeg. All hearings were held in the City of Winnipeg.

The Commission issues its reasons for decisions, which are reported in the “Land Compensation Reports”, published by the Canada Law Book Inc.

#### Disaster Assistance Appeal Board

As of March 31, 2016, the Board had 23 outstanding appeals. Nine of the appeals were filed under The Emergency Measures Act, nine filed under the Shellmouth Dam Artificial Flooding Program, and five of the appeals were filed under the Individual Flood Protection Initiative Programs. For the period of April 1, 2016 to March 31, 2017 the Board received 16 appeals under The Emergency Measures Act, The Water Resources Administration Act (Shellmouth Dam Programs), and the Individual Flood Protection Initiative Programs. The appeals are as follows:

	<u>Received</u>	<u>Closed</u>	<u>Outstanding</u>
The Emergency Measures Act	7	9	7
The Water Resources Administration Act (Shellmouth Dam Program)	5	4	10
Individual Flood Protection Initiative Programs	4	8	1

The Board closed 21 appeals between April 1, 2016 and March 31, 2017 as follows:

- 13 appeals were confirmed;
- 3 appeals were allowed in whole;
- 2 appeals were varied;
- 2 appeals were withdrawn;
- 1 appeal was closed.

There were no appeals filed under The Red River Floodway Act.

This year, the Board has had representation at the following educational/information conferences or workshops:

- The Manitoba Council of Administrative Tribunals – Twelfth Annual Conference; and
- Justice Marshall Rothstein of The Supreme Court of Canada.

#### **1 (h) Land Value Appraisal Commission**

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$ (000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$ (000)</b>	<b>Variance Over(Under) \$ (000)</b>	<b>Expl. No.</b>
Other Expenditures	27		36	(9)	

*Note: Includes expenditures for Disaster Assistance Appeal Board*

# Crown Lands and Property Agency

## Objective

The Crown Lands and Property Agency (CLPA) represents the Government of Manitoba in its land dealings with the public. Its mandate is to conduct the government's real estate business in a fair, open and transparent manner in accordance with applicable legislation, including but not limited to The Crown Lands Act, The Provincial Parks Act, The Land Acquisition Act and The Expropriation Act, The Wild Rice Act, The Highways and Transportation Act, The Water Resources Administration Act and The Public Works Act. CLPA serves as an in-house real estate services provider for departments and agencies of the Manitoba government, and a "one stop shop" or single point of service for the public in land dealings with the province.

## Activity Identification

CLPA's services include:

- reviewing applications from the public to buy or lease Crown lands;
- processing renewals and assignments of Crown land leases and permits;
- acquiring land for infrastructure projects and other public purposes by agreement or expropriation;
- selling or leasing surplus provincial Crown land and buildings by offer or tender;
- providing real estate appraisal and consulting services for government departments and other public entities; and
- maintaining the Crown Lands Registry, which serves as a corporate inventory of the government's land holdings and a registry of leasehold, mortgage and other private interests in Crown land.

## 2016/2017 Major Accomplishments

The 2016/2017 fiscal year was CLPA's eleventh year of operation. Highlights for the year include:

- Continuation of the acquisition and expropriation of land for CentrePort Canada Way;
- Continuation of the issuance of easements, permits and sale of property for the Manitoba Hydro Bipole Project;
- Continuation of the Assiniboine River Dike Compensation program and the Portage Diversion Compensation programs for flooding in 2011 and 2014 flooding events;
- Continuation of the acquisition and expropriation of property for the PTH 59 and PTH 101 Interchange Project commenced in 2015;
- Defence of high profile contested hearing at the Land Value Appraisal Commission in conjunction with Civil Legal Services;
- Several projects for acquisition of land for road and drain works on behalf of Manitoba Infrastructure;
- Continuation of the acquisition of land for the Emerson Port of Entry project on behalf of the department;
- Preliminary ground work for acquisition for PTH 5 in the City of Dauphin;
- Continuation of the Management Team initiated Change Management program which developed a map of defined goals and objectives of Intended Outcomes that the Agency strives to achieve;
- Continuation of the Legacy Systems Project initiated jointly with the Information Technology Services Branch of Manitoba Infrastructure and the Business Transformation and Technology Division of Manitoba Finance, to upgrade or replace the outdated and largely unsupported information technology (IT) systems that the Agency inherited from its predecessors; and



- Continuation of digitizing hardcopy records in the agency's custody to safeguard the records and facilitate easy access by authorized users. The digitization process is currently focusing on CLPA's Crown Lands Records and Appraisal/Acquisition/Paralegal business sections.

### 2016/2017 Service Volumes

90	Land acquisitions completed, totalling \$2.6 million for 212 acres of property
43	Property sales completed for Departmentally held lands and structures, totalling \$2.1 million
1	Expropriations
235	Files processed (includes plan certificates and easements)
108	Crown Land Sales completed
450	Lease assignments processed
59	New leases secured
292	New dispositions
292	Lease renewals concluded
159	Security interests registered
61	Appraisal reports completed

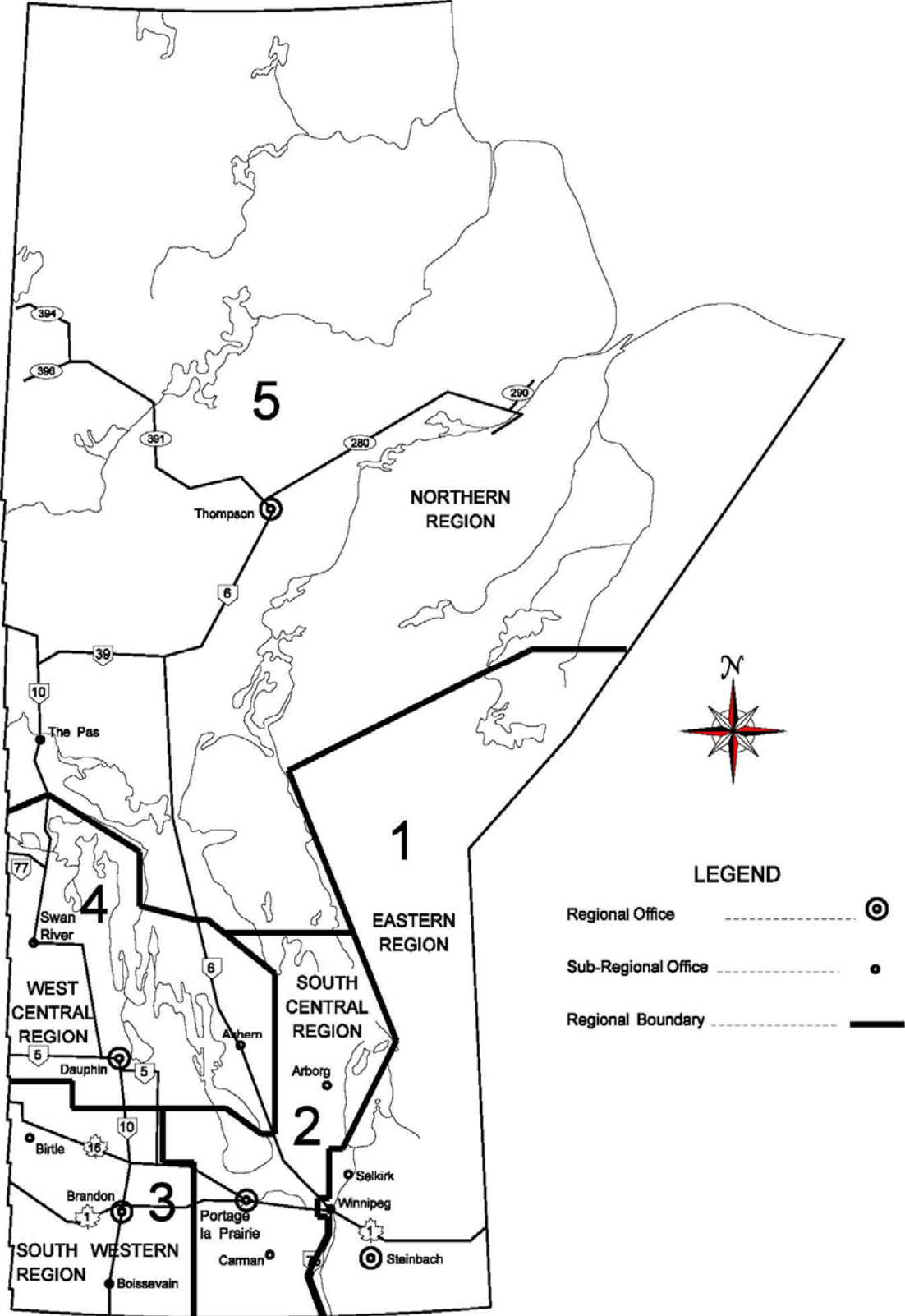
### 2016/2017 Revenue Generated and Collected on behalf of Client Departments

Summary of Sales, Leases and Permits			
Branch or Program (Client Dept.)	# Charges Invoiced	Revenue \$000s	Notes
Lands Branch (Conservation)	1,570	\$2,178.0	Recorded centrally in Consolidated Fund as revenue . . . under Conservation
Parks Program (Conservation)	32,318	\$7,909.4	
<b>Subtotal</b>	<b>33,888</b>	<b>\$10,087.40</b>	

Branch or Program (Client Dept.)	# Charges Invoiced	Revenue \$000s	Notes
Agricultural Crown Lands (MAFRD)	4,635	\$3,525.0	. . . under Agriculture
<b>Subtotal</b>	<b>38,523</b>	<b>\$13,612.40</b>	
Land Acquisition Branch – Sales & Leases	64	2,187.0	. . . under various depts.
<b>TOTAL</b>	<b>38,587</b>	<b>\$15,799.4</b>	

*Note: The revenue shown above is revenue collected by the Agency for client departments and does not represent the Agency's own revenue.*

REGIONAL MAP



# Highways, Transportation and Water Control Programs

## Mandate

### Engineering and Operations Division

Provides for the design, construction, operations and administration of the provincial highway network, winter road network and all provincial northern airport and marine facilities.

### Water Management and Structures Division

Ensures safe and effective provincial highway and water control infrastructure and structures through the delivery of inspection, planning, design, maintenance, rehabilitation and construction activities; and provides water management through operation of the provincial water control system, flood forecasting, and development and implementation of emergency response plans.

The Division's infrastructure portfolio includes: bridges, grade separation structures, large culverts, thru-dike culverts, drains, dams, reservoirs, water control structures, diversions and pumping stations.

### Transportation Policy

Advance government's strategic initiatives and priorities through policy, planning, and legislation. This is accomplished through the following branches: Transportation Policy and Service Development, Transportation Systems Planning and Development, Legislation and Regulatory Services.

### Motor Carrier

Enhances safety, protect infrastructure, and enable economic development through innovation and collaborative stewardship. This is accomplished by the following programs: Motor Carrier Strategic Initiatives, Motor Carrier Safety and Permit Programs, Motor Carrier Enforcement Programs.

### Boards and Committees

Regulates motor carriers, administers The Highways Protection Act, The Highway Traffic Act and The Off-Road Vehicles Act. Provides an appeal procedure for citizens whose driving privileges have been suspended.

## Engineering and Operations: Division Executive Office

### Objective

The Division Executive Office provides executive management and policy direction to the Engineering and Operations Division. It oversees and guides, and has corporate responsibility for, the effective and efficient delivery of programs and standards for Manitoba highways, northern airports and marine operations, including construction, maintenance, preservation, and operations/stewardship.

### Activity Identification

Provides management of the department's road construction, maintenance and preservation programs delivered through the five regions and specialized Head Office branches.

Provides management of the department's provincial airport system and marine operations.

Provides administrative support to branch managers.

Provides direction related to ongoing stewardship functions which preserve the safety, integrity, operational effectiveness, and legislative compliance associated with all infrastructure assets under the purview of the division.

Monitors effectiveness of standards, services and facilities within the jurisdiction of the division.

Provides support, as required, to the Deputy Minister and other divisions across Manitoba Infrastructure pertaining to corporate planning and areas where integrated services may be desired or necessary.

Sets operational policy for divisional activities, in accordance with national standards and industry best practices where applicable.

### 2016/2017 Major Accomplishments

The annual highway maintenance, preservation, and capital programs continue to operate effectively and efficiently with sound policies and decision making that has allowed the aging network condition to move forward in a positive direction.

Other major accomplishments include:

- Integration of East Side Road Authority mandate, staff and projects.
- Continued co-ordination and delivery of Operation Return Home and Lake St. Martin Channel Project responsibilities (cross-divisional effort with other Manitoba Infrastructure divisions, co-departmental effort with FAM/IMR, and involving cost-sharing with Canada).

**2 (a) Division Executive Office**

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$(000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$(000)</b>	<b>Variance Over(Under) \$(000)</b>	<b>Expl. No.</b>
(1) Salaries & Employee Benefits	1,203	14.00	1,564	(361)	1
(2) Other Expenditures	243		137	106	2
(3) Less: Recoverable from Other Appropriations	(217)		(246)	29	
<b>Total Sub-Appropriation</b>	<b>1,229</b>	<b>14.00</b>	<b>1,455</b>	<b>(226)</b>	

*Explanation:*

- 1. Variance is due to staff vacancies.*
- 2. Over the last three years actual expenditures for transportation, supplies & services, and other operating costs have been higher than budgeted.*

## Operations and Contracts: Special Operations

### Objective

Provide specialized work functions which are critical to both the Preservation and Maintenance programs and Capital Investment projects.

### Activity Identification

Special Operations is responsible for the delivery of specialized services required by the Preservation and Maintenance programs and Capital Investment projects. This includes the organization, management, and supervision of seasonal specialty crews involved in high performance chip seals, preservation seal, asphalt mixing, pavement marking, and rout & seal programs. Special Operations also participates in staff development training and undertakes unique projects such as the division's Building Program, Spring Road Restriction Road Enforcements and liaises with Emergency Measures Organization in the event of disaster response situations.

### 2016/2017 Major Accomplishments

#### Asphalt Mixing Plant

Mixed over 42,500 tonnes of material for maintenance at an average cost of \$75.00 per/t.

#### High Performance Chip Seals

Between the Winnipeg and Brandon Seal Coat Crews they sealed 768 kilometers of road at a cost of \$8,989,000.

#### Pavement Marking

We had four crews painting centerline (Winnipeg, Brandon, Dauphin and a Private Contractor) and they painted over 25,800 lineal kilometers.

#### Rout & Seal

Did over 338,550 lineal meters of rout & seal with the two Winnipeg crews.

#### Building Program Division

Delivered 12 Major Contracts for six new equipment sheds, four new equipment sheds with attached offices and two salt storage sheds \$3.5 million, along with \$660,000 of Preservation Projects on existing building and yard improvements.

### 2 (b-1) Special Operations

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$ (000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$ (000)</b>	<b>Variance Over(Under) \$ (000)</b>	<b>Expl. No.</b>
(1) Salaries & Employee Benefits	519	7.00	569	(50)	
(2) Other Expenditures	148		212	(64)	
<b>Total Sub-Appropriation</b>	<b>667</b>	<b>7.00</b>	<b>781</b>	<b>(114)</b>	

## **Operations and Contracts: Contracts**

### **Objective**

Provide expert service and advice, develop standards/policies that form the framework for regional staff and other branches to work under. In conjunction, with respect to capital and preservation project programming, contract administration, asset management, and the procurement of materials and services for construction, preservation, and maintenance projects throughout the province. Provide central management for the construction and maintenance of the winter road network.

### **Activity Identification**

Contract Services procures construction services and materials for all large capital construction projects and maintenance works across the Engineering and Operations division and the Water Management and Structures division. This includes contract document preparation, advertising, tendering and contract award.

Contract Services takes a lead role in setting policy for all procurement and contract administration processes and issues across both divisions. The branch also takes a lead role in the assessment and negotiation of contractor claims as well as risk management related issues.

Contract Services also manages the development of the Capital and Preservation programs, the Construction Management System and provides reports on programming plans/delivery and other associated information requests regarding these programs.

Contract Services oversees the asset management of highway infrastructure, including the Pavement Management System.

Contract Services also manages the efficient and consistent delivery of the Winter Roads Program with support from the regions and other branches. This includes developing operating policies, road specifications, coordinating program information, contract administration and inspection, as well as managing related federal-provincial cost-sharing agreements.

### **2016/2017 Major Accomplishments**

#### **Contract Services**

The Contract Services Branch awarded 236 Purchase Orders valued at \$74.7 million as well as 99 bonded contracts valued at \$177.5 million. A further 199 non-bonded contracts valued at \$35.1 million were awarded either by Contract Services or the corresponding branch or region.

Continued to strengthen the department's relationship with the Manitoba Heavy Construction Association (MHCA) through activities of the Joint Specification Committee and supporting efforts being pursued by the new Infrastructure Innovations Council. Continued to reach out to the Association of Consulting Engineering Companies to discuss contract issues of mutual interest.

Established an online bidding portal with [www.MERX.com](http://www.MERX.com) for all large scale construction and maintenance contracts. The branch will continue to expand the scope of online bidding to include the purchase of materials and equipment needed for program delivery. Contract Services expects that this initiative will save government several hundred thousand dollars annually by limiting or eliminating administrative errors made by bidders in the tendering process.

Implemented new Bidding Procedures and tender documents as well as revised General Conditions for all construction services in early 2017. The branch continues to review an updated General Conditions document with a view to modernizing contract administration processes.

Revised its Tendering and Contract Administration Manual to support staff at all levels in the appropriate application of government policy and procedure respecting procurement and contracting.

Supported the ongoing implementation and review of the Government Wide Contract Policy respecting Legislative and Safety Requirements.

Supported the implementation of procurement requirements related to the New West Partnership Trade Agreement.

Supported the contractual and legal transition of the East Side Road Agency agreements into the department.

### Infrastructure Programs & Asset Management

Prepared the 2017/2018 to 2021/2022 Multi-Year Highway Capital Program and supported the preparation of other capital programs prepared by other branches.

Prepared the annual Preservation Program for 2017/2018.

Prepared annual reports and coordinated project cash flow projections for the existing Federal-Provincial cost-share programs involving highway capital and preservation programs. Prepared proposed projects for consideration in new federal programs.

Continued work on the Highway Asset Management Project – Move Forward Plan, the implementation plan in response to the gap analysis on highway capital programming and asset management identified in the Highway Asset Management Study.

Managed the Pavement Management System that houses and analyzes pavement condition data, analyzes year-to-year trends in condition data, forecasts future pavement conditions and selects a set of appropriate pavement preservation treatments and associated project lists based on specified levels of funding and performance targets.

Provided Construction Management System (CMS) training to new staff and user support to the 300 active users.

### 2 (b-2) Contracts

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$ (000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$ (000)</b>	<b>Variance Over(Under) \$ (000)</b>	<b>Expl. No.</b>
(1) Salaries & Employee Benefits	1,241	23.40	1,904	(663)	1
(2) Other Expenditures	258		196	62	
<b>Total Sub-Appropriation</b>	<b>1,499</b>	<b>23.40</b>	<b>2,100</b>	<b>(601)</b>	

*Explanation:*

1. Variance is due to staff vacancies.



## Operations and Contracts: Construction Support Services

### Objective

Provide expert technical service, advice, support and training for the department's construction, maintenance, water control, structures and airports staff in a manner which incorporates quality, sustainability, fairness and consistency along with the protection of the public interest.

### Activity Identification

Consulting: At every step of the highway construction project process, from inception to completion, work with regional engineering staff and contractors to guide and direct actions where necessary to protect results and ensure consistent quality and fairness.

Training: Provide regional engineering staff with the knowledge and instruction needed to ensure that construction projects are delivered in a timely manner and with optimum results.

Evaluation: Employing technical expertise, experience and comparative knowledge, evaluate actual results of highway construction projects and identify the appropriate mitigation, resolution or future improvements to be adopted.

Specialized Equipment: Through sound research, assessment, procurement and management practices, ensure that the right specialized survey, communications, and related equipment and technology hardware and software is available at the time, in the right condition, for staff with the right training for its use.

### 2016/2017 Major Accomplishments

#### Training Development and Recruitment Section (TDR)

##### *Co-op Education Programs*

For 2016/17 a total of 126 students were hired as part of TDR's Civil Engineering, Civil Engineering Technology/Technician Co-op Education Program, and High School initiatives, including Engineering Access Program (ENGAP) at the University of Manitoba and the ACCESS Civil Engineering Technology Program at Red River College, in support of the department's Employment Equity and Diversity Program.

##### *Internal Training*

Internal levels of training courses completed in 2016/17: 61 tests have been completed in the self-instructional Level 1 (Math, Survey and Materials) and Level 2 (Math), and 270 employees have completed internal training courses including: Essentials of Supervision 1 through 5; Effective Communication strategies; Substance Abuse Awareness; Time Management; Managing Under the Collective Agreement; Materials 2 - A, B and C; Survey 2 and 3; and Design 3 (undertook coordination, design, and facilitation of the Design 3 course again this year and moving forward).

##### *Project Managers Conference*

Coordinated and facilitated the Project Managers Conference where 140 employees participated in 3 days of educational content. This year's theme "Power of the Past, Force of the Future" focused on knowledge transfer between experienced project management and the new work force. Along with introducing and educating on new technologies/practices, change management strategies, and improvements required to maximize time in the field, the conference provided attendees with an opportunity to share their experiences and learn from others in similar positions from across the province.

## Quality Assurance

Quality Assurance continues to promote the electronic capturing of test results with respect to density and aggregate testing and for asphalt plant operation for easy entry and uploading into MAS (Materials Analysis System). The use of this system is growing and approaching 100%.

### *Performance Graded Asphalt Cement (PG)*

The department is moving ahead with the use of PG oil in its bituminous pavements. In the 2016/2017 construction season approximately 1/3 (37%) of all paving projects utilized two types of PG oil - PG 58-34 and PG 58-40. The department will be continuing with this type of oil into the future with approximately 50% of all paving projects scheduled for the 2017/2018 construction season. Quality Assurance and Materials Branch will continue to monitor the long term performance of this type of oil.

### *Warm Mix Asphalt*

The department has been experimenting with warm mix additives in its hot mix asphalt. Evotherm and Zycotherm are two additives that will be approved on our products list for next construction season. WMA additives has allowed bituminous pavement to be placed in cooler temperatures along with being able to be mixed at lower temperatures at the asphalt plant thus saving on energy costs. More products will continue to be trailed over the 2017/2018 construction season.

### *Bituminous Paving Projects*

Quality Assurance was involved with 26 paving projects, completing 19 paving projects and 19 contract reviews during the 2016/17 construction season. There were approximately 980,000 tonnes of bituminous pavement placed during the 2016/17 construction season, with an estimated 1.1 million tonnes to be placed in 2017/2018.

## Geomatics Research and Development

- Continued evaluation of new and emerging survey data collection technologies including:
- Unmanned Aircraft Systems (UAS) with onboard Real Time Kinematic (RTK) Global Positioning System (GPS). Terrestrial LiDAR (Light Detection and Ranging) scanning of rock cuts.
- Mobile LiDAR scanning of rock cuts
- Mobile LiDAR for preliminary survey of highways, structures and urban projects
- Provided Terrestrial LiDAR, Mobile LiDAR, Aerial Photogrammetry and Remote Bathymetry remote sensing services on a province wide basis.
- Upgrade one Mobile Mapping (LiDAR) system.
- Purchase Leica P40 Terrestrial Laser Scanner. Received certification on Aerial Photogrammetry Processing Software (Pix 4D).
- Provided survey services for Shoal Lake Freedom Road Project.

## Geomatics

- Along with providing operational support to the department's construction program, continued deployment and support of the following survey equipment to the Engineering and Operations (E&O) and Water Management and Structures (WMS) Divisions:
  - 75 Lightly Managed Laptops
  - 42 Robotic Total Stations
  - 78 Global Navigation Satellite System (GNSS) Receivers
  - 89 Data Collectors

### Construction Support Services

- Prepared custom training material and documentation on survey procedures, guidelines, specifications and software
- Provided Survey training for 47 staff
- Provide GNSS training for 40 staff
- Provide Survey II training for 16 staff
- Provide Survey III training for 16 staff
- Performed audits of various provincial projects for survey quality control throughout the province
- Performed approximately 530 kilometers worth of control surveys throughout the province
- Provided continued assistance with various projects for other divisions within the department
- Performed six Northern Airport surveys
- Performed seven Bridge Surveys
- Provided Survey support for Remote Road Operations for several projects (Rice River Road, St. Theresa Point, Wasagamack and Berens River)
- Provided survey support for potential 2017 spring flooding

### Civil Design

- Continued providing support on Civil Design related software (Microstation, Geopak, Descartes, etc.)
- Provided support on LiDAR processing
- Assisted Regions on various design projects
- Provided GIS support to Water Management and Structures Division
- Progressing with the implementation of a new electronic file management system (Project Wise)
- Provide Computer Aid Design (CAD)/Design Support to Remote Roads Operations projects.
- Provide CAD/Design Support for the Shoal Lake Freedom Road project

### **2 (b-3) Construction Support Services**

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$(000)</b>	<b>Estimate 2016/17 FTE</b>	<b>Estimate 2016/17 \$(000)</b>	<b>Variance Over(Under) \$(000)</b>	<b>Expl. No.</b>
(1) Salaries & Employee Benefits	1,290	14.00	951	339	1
(2) Other Expenditures	120		102	18	
<b>Total Sub-Appropriation</b>	<b>1,410</b>	<b>14.00</b>	<b>1,053</b>	<b>357</b>	

#### *Explanation:*

1. Over the last three years salary costs have been higher than budgeted in this program.

# Operations and Contracts: Operational Services

## Objective

Provide provincial maintenance operations and road preservation with the framework of business policies and procedures, management tools and supporting technologies. Coordinate the provision of highway condition information to public stakeholders.

## Activity Identification

Operational Services provides guidance via technical training, technologies, consulting, specialized purchasing, business policies and procedures, management tools, and evaluation services to support the efficient and cost-effective delivery of infrastructure maintenance operations. This includes providing public highway condition information, organizing the Maintenance Career Training Program for staff development, providing direction and guidance on rating field inventories, planning budgets, work tracking and analyzing maintenance work activities.

Operational Services is also responsible for liaising with the Rural Municipalities for annual gravel road contracts and implementing performance measurements along with researching new initiatives related to these operations.

## 2016/2017 Major Accomplishments

### Provincial Road Initiatives

- Provided Maintenance Management System setup and support to over 100 users throughout the province.
- Prepared the annual Provincial Maintenance Program Budget.
- Responsible for the Provincial Maintenance Career Training Program which ensures all entry level staff and permanent employees are adequately trained prior to performing maintenance services. The Program consists of three Levels of classroom and operational training designed to ensure safety and maximize efficiency. Responsible for the Provincial Maintenance Operator Trainer Program which provides instruction and development of staff to deliver specialized equipment and safety training.
- Responsible for the administration of Gravel Road Agreements with the Rural Municipalities.
- Highway Condition Information is available by recorded message 24-hours a day at: 204-945-3704 or toll free at 1-877-627-6237. Messages are updated 24-hours a day, 7-days a week all year round. Highway Condition Information can also be obtained on the Internet at <http://www.gov.mb.ca/roadinfo> or [www.manitoba511.ca](http://www.manitoba511.ca)
- Upgrades to the Remote Weather Information System continued. Fifteen camera only sites were added to the existing 18 weather plus camera sites, bringing the provincial total to 33 monitoring locations. All sites provide real time images of actual road conditions intended for use by maintenance staff as well as display on the Manitoba 511 website.
- Smartphone mobile applications were developed for Manitoba 511 to provide the motoring public with vital information concerning winter travel on provincial highways.
- Use of an enhanced weather forecasting service provides maintenance staff with local area forecasts enabling them to provide fast and efficient service when responding to winter weather events.
- Conducted research into new procedures and technologies to improve the safety and maintenance of the provincial road network. Such research includes testing and evaluation of longer lasting snow plow blades and tow behind snow plows.

**2 (b-4) Operational Services**

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$(000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$(000)</b>	<b>Variance Over(Under) \$(000)</b>	<b>Expl. No.</b>
(1) Salaries & Employee Benefits	769	11.60	801	(32)	
(2) Other Expenditures	95		62	33	
<b>Total Sub-Appropriation</b>	<b>864</b>	<b>11.60</b>	<b>863</b>	<b>1</b>	

## **Operations and Contracts: Capital Project Branch**

### **Objective**

Capital Projects is responsible for the delivery of large scale, time sensitive roadway infrastructure projects.

Since 2013, Capital Projects has acted as a project management office to ensure effective infrastructure delivery through the rigorous implementation of project management principles to the entire project life cycle. Capital Projects is responsible for employing innovative and alternative infrastructure delivery methods where appropriate, and streamlining application of traditional delivery methods for the planning, design, and construction of the largest scale projects undertaken by Manitoba Infrastructure to date.

### **Activity Identification**

Capital Projects is responsible for scoping the department's largest capital projects. It develops project work plans that set goals, objectives, milestones and deliverables for the planning, design and construction for all projects assigned to it. Capital Projects is also responsible for directly managing externally delivered projects with input from a wide cross-section of department management and technical staff. Capital Projects also sets the overall project management framework for select internally delivered projects and oversees implementation.

Capital Projects monitors the progress of all projects assigned to it, managing risk, change and issues as they develop. For internally delivered projects, Capital Projects facilitates and coordinates the varied resources directly involved with delivery. For externally delivered projects, they investigate the various delivery methods available and make recommendations for specific delivery methods for specific projects. They are also responsible for developing new practices and procedures for alternative delivery methods that do not have a past history in the department.

### **2016/2017 Major Accomplishments**

- Continued preliminary engineering work to raise PTH 75 to mitigate disruption caused by flooding in the Red River Valley.
- Continued the planning process to reconstruct PTH 100 and bring it up to current engineering standards.
- Continued negotiations with the Department of National Defence related to the extension of CentrePort Canada Way.
- Continued with a Design-Build process to construct the PTH 59 and 101 interchange. Extensive work was completed in 2015/16.

The team also completed a review of bituminous paving practices and published a new concrete pavement specification. An initiative to improve our concrete pavements by adopting the most recent advancements in concrete pavement practises was initiated. As a result of this initiative, Manitoba became an early adopter in North America in the use of the Super Air Meter to build highway pavements.

## 2 (b-5) Capital Projects

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$(000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$(000)</b>	<b>Variance Over(Under) \$(000)</b>	<b>Expl. No.</b>
(1) Salaries & Employee Benefits	1,467	9.00	680	787	1
(2) Other Expenditures	476		240	236	1
<b>Total Sub-Appropriation</b>	<b>1,943</b>	<b>9.00</b>	<b>920</b>	<b>1,023</b>	

### *Explanation:*

1. Over expenditure was primarily due to inclusion of east side road operations in this branch while the related budget was provided in 15-2 (e-1) Eastern Region Office (Region 1).

## 2 (b-6) Recoverable from Other Appropriations

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$(000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$(000)</b>	<b>Variance Over(Under) \$(000)</b>	<b>Expl. No.</b>
Less: Recoverable from Other Appropriations	(3,017)		(2,184)	(833)	1
<b>Total Sub-Appropriation</b>	<b>(3,017)</b>	<b>0.00</b>	<b>(2,184)</b>	<b>(833)</b>	

1. Over Recovery was primarily due to inclusion of East Side Road operations in this branch while the related budget was provided in 15-2e.Regional Offices.

## Water Management and Structures: Division and Administrative Support

### Objective

Provide direction on managing the water-related and highway structures asset inventory including inspection, maintenance, preservation, operation and new construction activities.

Oversee hydrological forecasting and water management programming, services and operations.

Manage the provincial flood mitigation programs and projects.

Coordinate and manage the division's role in emergency response operations on flood and other division related issues.

Provide support for partnership initiatives related to flooding, flood protection and other strategic initiatives.

Contribute to development of the department's Multi-Year Highway Capital programs.

Lead the development of the department's Water-Related Capital program.

Provide direction related to on-going stewardship functions which preserve the safety, integrity, operational effectiveness, and legislative compliance for all infrastructure assets under the purview of the division.

Provide strategic planning, policy development and operational policy support to the division.

Provide technical advice and services to government departments, agencies and other jurisdictions on hydraulics, soils investigation and analysis, geotechnical design, bridge materials, innovative technologies, structural and related engineering.

### 2016/2017 Major Accomplishments

- Preservation Programs
- Prepared for potentially significant spring flooding
- Developed policy options and discussion papers to address water management issues
- Participated in inter-departmental teams to develop water management programs

### 2 (c-1) Division and Administrative Support

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$(000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$(000)</b>	<b>Variance Over(Under) \$(000)</b>	<b>Expl. No.</b>
(1) Salaries & Employee Benefits	1,571	16.00	1,382	189	
(2) Other Expenditures	198		300	(102)	
<b>Total Sub-Appropriation</b>	<b>1,769</b>	<b>16.00</b>	<b>1,682</b>	<b>87</b>	



## Water Management and Structures: Structures

### Objective

Safe bridges and structures that contribute to the efficient operation of the provincial transportation and agricultural drainage networks through the delivery of planning, design, rehabilitation, inspection, maintenance and construction activities.

The provincial structure inventory consists of bridges, underpasses, overpasses, large culverts and overhead sign structures.

### Activity Identification

#### Design

- Design and prepare detailed drawings and specifications for structure capital projects.
- Rate the load-carrying capacity of bridges and structures on the highway network for increased allowable highway loading and review permit overload applications.
- Conduct soils investigation and monitoring for various bridge sites throughout the province.
- Manage engineering service providers retained by the department for preliminary, detailed design, contract administration and construction inspection services.

#### Construction

- Provide contract administration, resident engineer and construction inspection oversight for structure capital projects.

#### Preservation and Planning

- Plan, manage and inspect existing bridges to assess current condition.
- Plan and manage the delivery of the annual bridge preventative maintenance program and the minor structure rehabilitation program.
- Provide input into and assist in the development of the department's Multi-Year Highway Infrastructure Capital Program based upon inspection and condition assessment of the existing structure inventory on the highway network.
- Manage bridge material inventory and bridge inventory information.

Continue to research and use innovative new materials, technology and design practices that have the potential to extend the service life of the structural inventory and to ensure sustainable and environmentally compatible design solutions.

Lead emergency response for bridge and structure related issues, and provide support to provincial emergency response during flood events.

Provide technical advice and recommendations to other government agencies on soils investigation, geotechnical design, structural design, bridge materials and innovative technologies, structures contract administration and construction inspection, bridge inspection and maintenance.

## 2016/2017 Major Accomplishments

Managed the delivery of the Highway Structures Capital Program including major multi-year projects such as:

- Reconstruction of the PTH 59 and 101 interchange
- New bridges over Assiniboine River and CP Railway mainlines on First Street in Brandon
- New overpass structures on Roblin Overpass at PTH 100, Winnipeg
- Major rehabilitation of PTH 8 and PTH 101 Overpass, Winnipeg
- New bridge over Whitemouth River on PTH 1E - eastbound lanes
- New bridge over Plum River on PTH 75 – northbound lanes
- Major rehabilitation of Winnipeg River bridge on PR 313 at Lac du Bonnet
- New structure at Powerview Creek on PTH 11 at Pine Falls, including slope stabilization
- New culvert at Hazelridge Drain on PTH 12; no longer load restricted
- Urgent repairs to Assiniboine River bridge on PTH 34
- New bridge over Pigeon River on East Side Road
- Urgent repairs at Symington Overpass on PTH 1E

Continued with replacement of flood affected structures including:

- New bridge over Antler River on PTH 83
- New bridge over Gopher Creek on PTH 83
- Eight new bridges on various provincial roads in southwestern Manitoba
- Assiniboine River bridge on PTH 41 at St. Lazare; removed sediment to restore flow, river training and slope protection

## 2016/2017 Service Volumes

\$173.9 M	Bridges and structures capital program expenditures (92.5% of target)
26	Bridges and structures constructed and/or rehabilitated
945	Bridges and structures with Level 2 inspections (97.3% of target)
1,369	Bridges and structures with Level 1 inspections (45% of target)
40	Engineering service provider (ESP) assignments managed
25	Detailed designs completed and drawings produced
41	Geotechnical designs, soil investigations and monitoring at structures
4,141	Highway Overload Permit applications reviewed (bridge loading review)

### 2 (c-2) Structures

Expenditures by Sub-Appropriation	Actual 2016/17 \$(000)	FTE	Estimate 2016/17 \$(000)	Variance Over(Under) \$(000)	Expl. No.
(1) Salaries & Employee Benefits	3,223	33.00	3,246	(23)	
(2) Other Expenditures	487		412	75	
<b>Total Sub-Appropriation</b>	<b>3,710</b>	<b>33.00</b>	<b>3,658</b>	<b>52</b>	

# Water Management and Structures: Water Operations

## Objective

Effective and efficient delivery of the water-related maintenance, preservation and capital programs.

## Activity Identification

### Design

- Engineering design activities for water-related maintenance, preservation and capital programs including structure rehabilitation and public safety infrastructure.
- Manage consultants retained for environmental assessment and monitoring, preliminary and detailed design, contract administration and construction inspection services.
- Lead the environmental assessment and regulatory approvals process of maintenance, preservation and capital works undertaken within the Water Management and Structures Division.
- Hydraulic support activities for the structures program.
- Develop design standards for flood protection and water control and conveyance structures.
- Provide design support to other branches in the department for projects with water-related components.

### Construction

- Provide contract administration and construction inspection oversight for water-related capital projects.

### Preservation and Planning

- Develop and manage condition inspection programs for water-related assets to assess current condition.
- Develop and manage emergency response and preparedness plans, and operation manuals for the provincial dams and flood protection infrastructure
- Develop and manage risk-based prioritization models for water-related assets for use in developing the preservation and capital programs.

Research and utilize innovative new materials, technology and design practices that have the potential to extend the service life of the water-related inventory and to ensure sustainable and environmentally compatible design solutions.

Provide technical advice and recommendations to other government agencies on soils investigation, geotechnical, hydraulic and structural design and analysis, contract administration and construction inspection, condition inspection and risk indexing, and public safety for flood protection, water control and conveyance structures.

Provide engineering leadership and operational support in flood fighting/response.

## 2016/2017 Major Accomplishments

Engineering design activities, maintenance, preservation and capital programs for water-related assets including major multi-year projects such as:

- Assiniboine River Dikes
- Portage Diversion
- Shellmouth Dam
- Fairford Dam (Safety Improvements)
- Minnedosa Dam
- Lake St. Martin and Lake Manitoba Outlets
- St. Adolphe Dike Expansion
- St. Jean Dike (Riverbank Stabilization)

Delivery of a \$34.5 million Water Related Capital Program.

## 2016/2017 Service Volumes

40	Design and construction surveys managed
14	Geotechnical analysis and design – drains, dikes, dams
11	Preliminary design – provincial waterway bridge rehabilitation or replacement
65	Preliminary and detailed design – drains, crossings and associated structures
24	Preliminary and detailed design – dams, diversion structures, dikes and associated structures
4	Design – safety improvements
64	Environmental submissions completed – drains, bridges/culverts, dikes, dams, diversion structures
9.5	Kilometres of drain reconstruction completed
8.5	Kilometres of dike reconstruction/repair/stabilization
27	Provincial waterway culvert crossings rehabilitated or replaced
17	Dams, diversion and pump stations rehabilitated or major safety improvements undertaken
72	Engineering service provider assignments managed

### 2 (c-3) Water Operations

Expenditures by Sub-Appropriation	Actual 2016/17 \$(000)	FTE	Estimate 2016/17 \$(000)	Variance Over(Under) \$(000)	Expl. No.
(1) Salaries & Employee Benefits	3,652	39.00	3,394	258	
(2) Other Expenditures	730		626	104	
<b>Total Sub-Appropriation</b>	<b>4,382</b>	<b>39.00</b>	<b>4,020</b>	<b>362</b>	

# Water Management and Structures: Hydrologic Forecasting and Water Management

## Objective

Effective surface water management and flood mitigation through planning, hydrologic forecasting, and operation of water control structures.

## Activity Identification

Provide hydrologic reporting and forecasting service to facilitate efficient flood damage reduction and real-time surface water management in Manitoba.

Provide technical reviews of proposed developments, development plans, Crown land use and sales to minimize potential future flood damages.

Provide technical reviews of proposed river and lake shoreline developments and development plans to minimize potential future erosion and flood damages.

Administer permits and authorizations under The Water Resources Administration Act relating to designated flood areas, provincial waterways, and designated reservoir areas.

Direct operation of the provincial flood control infrastructure network, including the Red River Floodway, Shellmouth Dam, Portage Diversion, and Fairford River Water Control Structure.

Lead and participate in studies on flood mitigation, agricultural drainage and water control infrastructure.

Support activities related to flood response and coordination; water-related infrastructure; surface water management issues; shoreline, riverbank, and gully erosion as it affects provincial assets.

Manage Manitoba's hydrometric program and a number of climate stations.

Provide hydrological analysis for flood protection levels, water-related infrastructure and provincial bridge and culvert design.

Represent Manitoba's interests on inter-provincial and trans-boundary water-related issues.

## 2016/2017 Major Accomplishments

- Oversaw the completion of the Assiniboine River and Lake Manitoba Basins Flood Mitigation Study and the Lake Manitoba and Lake St. Martin Outlet Channels Conceptual Study.
- Investigated development proposals to determine impact on provincial water infrastructure and on private and Crown lands.
- Provided accurate and timely hydrologic forecasts and information to the public.
- Conducted successful operation of provincial water control structures flood and drought mitigation.
- Conducted engineering analyses for various water management problems and projects.
- Conducted and/or updated flood frequency analyses at hydrometric stations across the province for the calculation of design flows and flood levels.
- Continued technical hydraulic work for the development of emergency preparedness plans for provincial dams.

- Continued review and oversight by the Diking Commissioner of the City of Winnipeg's primary diking system.
- Participated in the Shoreline Erosion Technical Committee to review proposals for shoreline erosion projects along the shores of Lake Winnipeg and other bodies of water.
- Continued the migration to and maintenance of an electronic database of maps, plans, field/survey information and reports regarding provincially-owned water control infrastructure and water management studies.

### 2016/2017 Service Volumes

301	Hydrologic technical service assignments
321	Hydrometric stations operated or funded
15	New weather stations
18	Upgraded weather stations
3	Flood outlooks
2	Daily flood reports
31	Lake and river flood sheets
1,387	Daily river and lake levels
373	Wind effect forecast maps
51	Designated flood area permits
441	Private and Crown Land reviews
204	Development, Licencing and Environment Act proposal review
91	Provincial waterway and designated reservoir area permits
266	Other direct requests from the public for development review

### 2 (c-4) Hydrologic Forecasting and Water Management

Expenditures by Sub-Appropriation	Actual 2016/17 \$(000)	FTE	Estimate 2016/17 \$(000)	Variance Over(Under) \$(000)	Expl. No.
(1) Salaries & Employee Benefits	2,546	30.00	2,637	(91)	
(2) Other Expenditures	309		396	(87)	
<b>Total Sub-Appropriation</b>	<b>2,855</b>	<b>30.00</b>	<b>3,033</b>	<b>(178)</b>	

### 2 (c-5) Recoverable from Other Appropriations

Expenditures by Sub-Appropriation	Actual 2016/17 \$(000)	FTE	Estimate 2016/17 \$(000)	Variance Over(Under) \$(000)	Expl. No.
Less: Recoverable from Other Appropriations	(5,248)		(4,370)	(878)	1
<b>Total Sub-Appropriation</b>	<b>(5,248)</b>	<b>0.00</b>	<b>(4,370)</b>	<b>(878)</b>	

*Explanation:*

1. Over-recovery was primarily the result of an increase to the recovery rate to better reflect costs related to capital programs.

## Motor Carrier

### Objectives:

The Motor Carrier Division (MCD) is responsible for ensuring the safety of Manitoba's commercial motor carriers and the public in a manner that enhances safety, protects infrastructure and enables economic development through innovation and collaborative stewardship. This is achieved through the administration of the following programs:

- Commercial Vehicle Safety and Permits
- Motor Carrier Enforcement Programs
- Motor Carrier Strategic Initiatives

### Activity Identification:

Commercial Vehicle Safety and Permits (CVSP) enhances public safety, protects infrastructure and promotes the economy by administering safety related programs and services for motor carriers. Specific activities include:

- Permit Services: issues permits facilitating the movement of oversize and overweight vehicles for motor carrier that are not otherwise permitted by an applicable Act or Regulation; collects single trip registration fees and fuel tax; provides the public with information on legal weights and dimensions.
- Carrier Profiles: assess safety risks, monitors/measures the performance of motor carriers; assigns safety ratings to carriers; provides general (to the public) and detailed (to motor carriers and stakeholders) motor carrier information.
- Safety Fitness Program: issues safety fitness certificates to all National Safety Code carriers; monitors insurance records for public liability, property damage and cargo for commercial vehicles; documents the type and which carriers haul dangerous goods.
- Short-Line Intra-Provincial Railways: regulates/monitors the safety performance of short-line intra-provincial railways.

Motor Carrier Enforcement Programs (MCEP) promotes safe and sustainable surface transportation by ensuring industry compliance with relevant legislation and standards. Specific activities include:

- Roadside enforcement: enforce applicable Acts and Regulations by conducting inspections, investigations and safety monitoring at provincial weigh stations and through highway patrol; officers attend federal and provincial court.
- Facility Audit and Investigations: conducts facility audits at the motor carrier corporate level to verify compliance; facilitates improvement in motor carrier safety operations by using an administrative sanctioning process; provides education to stakeholders; officers present evidence at judicial and quasi-judicial proceedings.
- Contribute to the development and implementation of Acts, Regulations and policies; develops and delivers comprehensive training programs for other motor carrier enforcement agencies in Manitoba.

Motor Carrier Strategic Initiatives (MCSI) enhances public safety, protects infrastructure and promotes the economy by planning, developing and delivering policies and programs to provide solutions for motor carrier stakeholders. Specific activities include:

- Advanced Permitting and Routing System: provides an effective system to deliver the permit program; delivers system improvements; provides training and technical support to users; provides information to assist in planning.
- Trucking Productivity Improvement Fund: supports development of the Manitoba economy through the implementation of partnership agreements based on user-pay and cost-recovery principles; evaluates and enhances the program on an ongoing basis.
- Research, Analysis, Policy and Program Development: develops and implements strategic initiatives that enhance divisional performance and effectively respond to new and emerging issues that impact motor carrier stakeholders; develops and maintains a strategic plan and business plan for the division.

### **2016/2017 Major Accomplishments:**

- Continued the project to renew the Advanced Routing and Permitting System (ARPS) with the next generation of software for permitting and routing over dimensional and overweight (OD/OW) vehicles on Manitoba's road network. In 2016/2017 approval for a hosted implementation was received and contract negotiations with the vendor commenced. This renewal will provide service enhancements to motor carriers in Manitoba such as online permit issuance and 24/7 issuance for some permit types.
- Extended National Safety Code (NSC) standards to monitor and ensure the safe operation of a greater number of motor vehicles on Manitoba highways by supporting implementation of Bill 41, The Highway Traffic Amendment Act.
- Completed 3,970 truck inspections province-wide, resulting in 998 vehicles being placed out of service for various mechanical or driver qualification defects (25 per cent out of service rate), removing unsafe vehicles and/or drivers from Manitoba's roadways.
- Twenty-four Motor Carrier Enforcement Officers (MCEO) completed advanced driver training provided by the Winnipeg Police Service (WPS).
- Certification training was provided in the North American Standard Inspection process, to deliver the Commercial Vehicle Safety Alliance roadside inspection program. Eight MCEO hired in 2015, as well as four WPS members successfully completed this intensive four week program to ensure that Manitoba's MCEOs are performing inspections up to North American standards.
- Transport Canada delivered dangerous goods inspection training to 23 MCEOs and two WPS members. This training will help officers to assess whether dangerous goods carriers are hauling goods safely and using proper safety precautions are being followed. A further 17 MCEO were trained in advanced dangerous goods inspections, as applied to intermediate bulk containers. The on-highway inspection focuses on training, documentation, safety marks, packaging, general requirements and design, and further promotes on-road safe operations by the motor carrier industry.
- Continued a review of the Carrier Profile System; examined how different jurisdictions have developed and administered National Safety Code Standard 7 (Carrier Profiles), Standard 14 (Safety Ratings) and Standard 15 (Facility Audits). The results of this review are being shared with the Compliance and Regulatory Affairs Committee of the Canadian Council of Motor Transport Administrators as part of a national initiative that will attempt to address jurisdictional differences related to these three standards and helping to harmonize requirements for carriers.
- The Trucking Productivity Improvement Fund (TPIF) Program initiated a pilot project for some types of agreements, which will improve efficiency and reduce the reporting requirements for businesses who participate in the program.



- In collaboration with Business Transformation Technology and Manitoba Infrastructure's Corporate Services Division, the useful life of ARPS was extended by implementing a new fax service, as well as the recent regulatory changes designed to protect road infrastructure during vulnerable periods, while supporting increased weights for commercial trucks when the roads have extra strength.
- Continued the update of the Commercial Operators Regulatory Education (CORE) program, which will provide motor carriers and operators of regulated vehicles with a valuable resource providing up-to-date regulatory requirements for operating in Manitoba. Industry stakeholders were provided advance copies of the new guide to provide feedback, and further ensure that the final product will fully meet their needs. The new guide will be available online in summer 2017.
- Initiated a modernization of the Vehicle Weights and Dimensions on Classes of Highways Regulation (MR575/88), which will reduce regulatory requirements to a single size and weight standard for most legal vehicle configurations thereby increasing clarity of the regulation for industry.
- Initiated a complete revision of the Motor Carrier Division website to improve its usefulness for regulated stakeholders and the general public.
- Established the Manitoba Electronic Screening (Weigh Scale Bypass) Working Group in partnership with the Manitoba Trucking Association. The group will review existing electronic bypass programs in order to recommend a program to allow carriers with superior safety records to bypass weigh stations in Manitoba on a managed basis.
- Began the roll-out of a comprehensive employee performance management program.
- Continued to provide training to divisional staff on developing a learning plan and using a learning plan to set learning objectives, to provide for career advancement and for succession planning.
- Continued initiatives to improve corporate work culture through teambuilding events, learning events and workplace wellness initiatives.
- Construction began on a new weigh station at Carroll, Manitoba on PTH 2. The site, to be operational in late 2017, will serve as a base of operations for enforcement activities in the southwestern part of the province.
- In the first full fiscal year of operations since receiving authority under The Tax Administration and Miscellaneous Taxes Act to enforce provisions related to the International Fuel Tax Agreement, MCEO issued 97 charges against carriers for failing to comply with the licensing requirements. The efforts of MCEOs to curtail illegal operators in this regard ensures that fuel tax revenues are recouped from out of province carriers using Manitoba's highways.
- There were a total of 1,323 written warnings issued in the fiscal year. The warnings are issued from various HTA and regulatory offences. Written warnings enable the division to educate carriers about regulatory requirements in lieu of issuing offence notices.
- Renewed an agreement with Manitoba Sustainable Development to permit watercraft inspections to be undertaken at MCD weigh stations at strategic locations in the province. This cooperative venture is designed to help prevent the spread of aquatic invasive species, such as Zebra Mussels, between bodies of water by recreational boaters.

## 2016/2017 Service Volumes:

<b>ENFORCEMENT</b>	
Number of Vehicles Processed	330,878
<b>PROSECUTORIAL</b>	
Fuel Tax License	146
Agricultural Lighting	2
Overweight	1,236
Over dimensional	227
Public Service Vehicle	21
Faulty Equipment & Safety	314
Dangerous Goods	91
Licensing	207
Provincial Hours of Service	64
Violation of Oversize/Overweight Permit	105
No valid annual safety inspection on vehicle	391
Federal Hours of Service	67
Load Securement	227
Trip Inspection	23
Other (Driver Related)*	233
Unknown	0
<b>Total</b>	<b>3,354</b>
<b>PERMIT</b>	
Single Trip Permits	11,120
Designated/Regulated Commodity Permits	34
Motive Fuel Permits	9,478
Transit Licenses	88
Overweight Permits	12,094
Productivity Permits (Overweight Trips Reported) **	86,879
Over dimensional Permits	33,866
Misc. Permits (Admin Fees)	6,513
Other Jurisdictional Permits	5,346
<b>Total</b>	<b>165,418</b>
<b>CARRIER PROFILE</b>	
Active NSC Carriers as at March 31	19,474
Active NSC Vehicles as at March 31	60,716
New NSC Carrier Records	1,707
For-hire Carriers monitored for PL/PD Insurance	2,776
OOP Incidents transmitted electronically through CDE	2,258
OOP Incidents received electronically through CDE	18,958
U.S Inspections received electronically	5,702
Number of Manitoba CVSA Inspections recorded	4,526
Number of Manitoba CVSA Inspections that were OOS	1,049
Number of Manitoba Drivers that were OOS	71
Number of Safety Rating Changes	89
New Safety Fitness Certificates issued***	3,097
Safety Fitness Certificates renewed	5,895
Performance Rating Letters sent	1,719
Inspection Letters sent	807
Warnings Issued	1,323

<b>FACILITY AUDIT</b>	
NSC Standard #15 Facility Audits conducted	117
<b>SHORT-LINE RAILWAY</b>	
Short-line Railways monitored	5
Track inspections	4
Signalized crossing inspections	19
Dangerous goods inspections	1
Passive crossing inspections	220
Locomotive power inspections	7
Rail car inspections***	77
Rules inspections	2
Notices/Orders Issued	1
Accidents/Incidents reported	11
Investigations conducted	2
<b>REVENUE (\$)</b>	
Revenue through Consent Disposition	350
Revenue for Safety Rating Audits	18,558
Fine and Costs	1,428,262
Single Trip Permits	269,104
Designated/Regulated Commodity Fees	750
Motive Fuel Permits	214,969
Transit Licenses	792
Overweight	717,064
Productivity Permits (Overweight) New – Collected on behalf of TPIF**	438,117
Over dimensional	849,843
Other (Administrative Fees for Permits includes Wpg & Brandon)	159,945
Other Jurisdictional Permits	396,319
<b>Total</b>	<b>4,494,073</b>

\* Identifies driver related offences which do not appear in any categories under prosecution statistics, e.g. fail to comply, fail to report, seat belts, etc.

\*\*In Fiscal Year 2016/2017, the Trucking Productivity Improvement Fund Program (TPIF), began to report the program stats based on the Fiscal Year that revenue was generated in. In previous annual reports, the TPIF program shifted the reporting period by one month in order to report the data based on the Fiscal Year that the revenue was entered and invoiced.

\*\*\*Incorrect statistics were reported for two categories in 2015/16. In 2015/16, the number of new safety fitness certificates issued should have been reported as 3,638; in 2015/16, the number of rail car inspections should have been reported as 76.

**Incident** - An accident, conviction or inspection | **NSC** – National Safety Code | **OOP** – Out-of-Province | **OOS** - Out of Service | **TPIF** – Trucking Productivity Improvement Fund

## 2 (d) Motor Carrier

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$(000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$(000)</b>	<b>Variance Over(Under) \$(000)</b>	<b>Expl. No.</b>
(1) Salaries & Employee Benefits	5,474	73.00	5,693	(219)	
(2) Other Expenditures	1,472		1,387	85	
<b>Total Sub-Appropriation</b>	<b>6,946</b>	<b>73.00</b>	<b>7,080</b>	<b>(134)</b>	

## **Regional Offices**

### **Objective**

To effectively develop and deliver the road design, construction, maintenance and preservation programs in the region, ensuring that projects and activities are carried out to departmental standards and incorporate the principles of sustainable development.

To provide front-line management and support related to on-going stewardship functions which preserve the safety, integrity, operational effectiveness and legislative compliance associated with all highway infrastructure assets under the purview of the division.

### **Activity Identification**

Coordinate engineering, construction and preservation supervision and maintenance operations for highway programs in the region and provide support to other areas/branches where applicable (Water Management and Structures, Northern Airports and Marine Operations, Contract Services (winter roads), etc.) Monitor contract work to ensure quality control and adherence to specifications and standards.

Liaise with central offices to ensure uniformity and consistency with respect to policy, standards, procedures, and communications with stakeholders, including the media. Prepare project proposals and priorities within the region and provide timely information and updates on issues as required.

Manage and conduct road maintenance and preservation activities in an environmentally sound and economically sustainable manner by reclaiming and recycling materials, by operating equipment in a cost-effective manner and by providing for effective material storage and waste management.

Coordinate and manage all regional non-program work with respect to land development, utility installations, environmental issues, right-of-way and adjacent control area usage, including illegal signs and structures, noise attenuation, and other use applications and issues. Actively promote and participate in innovative alternative capital funding partnerships for provincial roads.

Manage all resources including staff, equipment, material, financial, occupational safety and health, risk management, and general budget and administration services for the region.

## 2016/2017 Major Accomplishments

### Eastern Region Office (Region 1)

Eastern Region successfully delivered \$81 million in Capital projects including:

#### PTH 75 Flood Protection Project

- The PTH 75 flood protection project continued to advance with the completion of the initial widening stage between St. Jean Baptiste and Morris. The purpose of the project is to maintain traffic availability on PTH 75 during periods of high water.
- Construction started on the Plum River bridge replacement on the northbound lanes at St. Jean Baptiste.

#### PTH 1 Bituminous Pavement Project

- Resurfacing of PTH 1 from PTH 12 to the Brokenhead River has provided a new driving surface for the eastbound lanes and paved shoulders for the westbound lanes. Paved shoulders for eastbound lanes will be completed in 2017.

#### Removal of Illegal Signs

Eastern Region continued its goal of the removal of illegal signs, removing 500 of them from Manitoba Infrastructure right-of-ways.

#### Maintenance

Maintenance forces expended a total of \$27.68 million in 2016/2017 as follows

- \$11.3 million on Summer Maintenance and \$10.5 million on Winter Maintenance
- \$5.6 million on additional road maintenance and repairs, as well as road preservation treatment preparation from Capital Funding
- \$86,000 on Maintenance related training
- \$209,000 repairing assets damaged in traffic incidents and performing work for others

#### Preservation

- 18 kilometers of road were sealcoated (High Performance Chip Seal)
- 131 kilometers of road were micro surfaced

### South Central Region Office (Region 2)

Successfully delivered a Capital Infrastructure Program totalling \$54.9 million including major projects:

- Bituminous pavement (includes shoulders) on PTH 1 from PTH 13 to PR 248 (westbound). Grading, base, bituminous and concrete rubblization were completed in 2016 at a cost of \$13.19 million. Some drainage and seeding work to be performed in 2017 at an approximate cost of \$0.15 million. Total project cost is \$13.3 million.
- Bituminous pavement (includes shoulders) on PTH 1 from PTH 13 to PR 248 (eastbound). Total work completed in 2015 cost \$16.55 million, and total work completed in 2016 cost \$0.15 million. Total project cost is \$16.7 million.
- Bituminous pavement (includes shoulders) on PTH 1 from PTH 16 to PTH 34 (westbound). Aggregate crushing in 2015 cost \$2.2 million, grade widening and bituminous work in 2016 cost \$13.7 million. Total project cost is \$15.9 million.
- Intersection improvements on PTH 6 at Lake Francis. Aggregate crushing and drainage excavation completed in 2015 cost \$0.4 million, the majority of the grading, base, bituminous and intersection work were completed in 2016 at a cost of \$1.9 million, with top lift paving and drainage work to be completed in 2017 with an estimated cost of \$0.2 million. Total project cost is \$2.5 million.

- Bituminous pavement on PTH 6 from PR 248 to PR 415 (St Laurent). Grade widening, roadway pulverization, base and bituminous work were completed in 2016 at a cost of \$6.82 million, with the remaining work performed as a planned carryover in 2017 at an approximate cost of \$4.0 million. Total project cost is \$10.8 million.
- Bituminous pavement on PTH 7 from PR 236 to PTH 17. Culvert jacking completed in 2015 cost \$0.8 million, the grade widening, base and bituminous work were completed in 2016 at a cost of \$7.23 million, with minor remaining work completed in 2017 with an estimated cost of \$0.2 million. Total project cost is \$8.2 million.
- Grading on PTH 14 from 0.8 km east of PR 306 to 2.8 km east of PR 306. Curve realignment grading work was completed in 2016 at a cost of \$2.33 million.
- Bituminous pavement on PTH 17 from PR 233 to PR 325 in the vicinity of Fisher Branch. Majority of work was completed in 2014/2015 at a cost of \$9.1 million, remaining work was completed in 2016 at an estimated cost of \$1.1 million. Total project cost is \$10.2 million.
- Bituminous pavement (includes grade reconstruction and base) on PTH 67 from PTH 6 to PR 236. Majority of work completed in 2015 at a cost of \$11.5 million, minor drainage work and seeding completed in 2016 at a cost of \$0.9 million. Total project cost is \$12.4 million.
- Culvert replacements on PTH 68 from 2.4 km west of PTH 7 to PTH 8. Majority of construction was completed in 2015 at a cost of \$1.7 million, majority of remaining work was completed in 2016 at a cost of \$0.8 million, final work to be performed as a carryover in 2017 at an approximate cost of \$0.1 million. Total project cost is \$2.6 million.

Successfully delivered \$27.1 million in Preservation and Maintenance (summer and winter):

- Summer and Winter Maintenance \$23.4 million.
- Preservation projects \$2.73 million (gravel road restoration, spot grade improvements etc.).
- Construction projects \$1.0 million (micro prep, chip seal prep, spring breakup, etc.).

Winter Maintenance Operations continued to provide service to the travelling public with earlier start times and corridor plowing.

### **South Western Region Office (Region 3)**

Successfully delivered a Capital Infrastructure Program totalling \$54 million, including the following major projects:

- PTH 3 from Saskatchewan boundary to south junction of PTH 83 was completed for \$5.3 million. Work included base and bituminous pavement.
- PTH 5 from PTH 2 to 15.0 km north of PTH 2 was completed for \$2.4 million. Work included grade widening, base and bituminous pavement including paved shoulders. The grade was raised in order to provide additional flood protection for Spruce Woods Park. Total project cost is \$3.15 million.
- PTH 10 from 4.5km north of PTH 24 to PTH 16 was partially completed for \$2.3 million. Work included a fraction of the aggregate production and the partial grading of the two curves, accesses and service roads. Remaining work to be completed in 2017.
- PTH 16 from PR 359 to south junction PTH 83 (Binscarth to east of Foxwarren) was completed at a cost of \$1.5 million. Work completed included three remaining Rural Municipality road intersection realignments. Total project cost is \$3.5 million.
- PTH 16 from PR 478 to 1.2km south east of PR 359 construction continued and was partially completed at a cost of \$7 million. Work included grade widening, intersection improvements, road reclaiming, bituminous pavement and the realignment of PTH 41 and PR 359. Remaining work involves the realignment and lowering of a section of PTH 16 as well as another lift of bituminous pavement over the length of the project. Remaining work to be completed in 2017.

- PTH 42 at 1 km west of north junction PTH 83 was completed for a cost of \$0.2 million. Work included completing the remaining slope stabilization work for the concrete culvert jacking project. Total project cost is \$1.2 million.
- PTH 83 from 0.8 km north of PTH 24 to PR 355 was partially completed at a cost of \$4.8 million. Work included aggregate production, culvert jacking, grade widening and completing the curve realignments. Remaining work to be completed in 2017.
- PR 251 from PR 452 (Waskada) to PTH 21 was partially completed at a cost of \$1.15 million. Work included production of all the aggregate. Roadwork to commence and be completed in 2017.
- PR 254 at 1.8 km north of PTH 1 was completed for \$0.15 million. Work included the installation of the last drainage tube as well as the final grading. Total project cost is \$0.5 million.
- PR 256 from PTH 2 to 3.2 km north of PR 255 was completed at a cost of \$14 million. Work included grade widening, base, bituminous pavement and concrete curb and gutter through Cromer. Total project cost is \$16.9 million.

Summer Operations in Region 3 turned out to be an average year, with maintenance staff dealing with some isolated trouble spots but minor in comparison to the previous year.

Winter Operations started out calm but, by mid-December, the weather changed as the Region received several heavy snow falls followed by persistently strong winds. Unprecedented road closures resulted from the extreme intensity of the storms. Snow fall accumulations were the highest seen for many years.

Maintenance expended approximately \$21 million for summer and winter operations, along with approximately \$8 million for preservation and capital projects.

Approximately 72 km of micro surfacing was accomplished in the Region at an approximate cost of \$4.5 million.

Continued work on repairs to 2014 flood damaged roads, detours and bridges. Flood mitigation efforts in the City of Brandon also continued with the slopes on PTH 1A near the Assiniboine River being protected with cable concrete for \$0.2 million. The City of Brandon also continued with cost shared enhancements to the dike system and internal drainage components in order to achieve protection for a 1 in 300 year flood event.

#### **West Central Region Office (Region 4)**

Successfully delivered a Capital Infrastructure Program totalling \$29.8 million, including major projects:

- Surfacing of PTH 10 from the LP Access to Cowan.
- Crushing and stockpiling of aggregates for the anticipated surfacing of PTH 5 from Grandview to east of PR 584.
- Completion of spot road improvements on PR 513 at various locations between PTH 6 and Dauphin River First Nation.
- Construction of bridge detour and riverbank stabilization at the Ochre River on PTH 5.
- Ditch clean out and installation of erosion control devices on PR 274 south of Gilbert Plains
- Emergent culvert replacement on PTH 6 south of Fairford.
- Reconstruction of 20 km of shoulders on PTH 5 in the vicinity of Ste. Rose.

Successfully delivered \$17.8 million in Preservation and Maintenance (summer and winter) program.

Delivered \$0.4 million in right-of-way maintenance to improve spring run-off and reduce localized flooding.

Winter Maintenance Operations continued to provide enhanced service to the travelling public, including select weekend road patrol and earlier start times, primarily on commuter routes.



## Northern Region Office (Region 5)

Successfully delivered a Capital Infrastructure Program totalling \$52 million, including completion of the following major projects:

- Grading on PTH 10 between PTH 39 and Cranberry Portage for a total of 16.4 km.
- Completed grading work and began bituminous pavement on PTH 10 from the Flin Flon Airport access to the east junction of PTH 10A for a total of 17 km. Work included numerous roadside safety improvements replacing w-beam guardrail on Schist and White Lake causeways and new cable guardrail installations.
- Bituminous Pavement on PTH 39 between Gyles Access (PR 616) to Reed Lake Access (PR 627) for a total of 40.8 km.
- Completed grading including Bituminous Pavement (one lift) on PTH 39 (new location) 6 km west of PR 596 to 10 km east of PR 596 for a total of approximately 8 km.
- Asphalt Surface Treatments (AST) was completed on PR 327 from PTH 60 into the community of Easterville for a total of 21.3 km.

The Region commenced several other projects that have been substantially completed in 2016/2017 that will be finalized in 2017/2018, including:

- Grading including base on PR 280 from km 85 to km 105 as well as spot grading for an additional 118 km on PR 280 from the Keeyask Jct to PR 290. Grading work made several geometric improvements removing sharp hill crests and improving the road surface. These projects are part of a cost share agreement with Manitoba Hydro.
- AST including grade, base and gravel on the Split Lake Access Road (PR 632) from PR 280 to Split Lake for a total of 6.1km.
- Culvert Replacements (nine locations including large installation at Manitoba Basin Creek) on PTH 39 and PR 392 commenced with culvert jacking this past winter and will wrap-up in the summer of 2017.
- Grade widening including base on PTH 39 from 21.5 km east of PR 392 to 35.3 km east of PR 392 for 13.8 km.

Discussions continue between the department and Manitoba Hydro on the mutual interest to keep PR 280 in favourable condition during the construction of Hydro's projects.

Successfully delivered approximately \$23 million in Preservation and Maintenance (summer and winter), including:

- Micro surfacing on PTH 6 for 3.5 km near Williams River
- Continued route and seal on PTH 6

## 2016/2017 Service Volumes

### Eastern Region Office (Region 1)

#### Capital/Preservation/Maintenance

- 4,301 Km of road maintained
- 182 Km of roads constructed/reconstructed (incl. resurfacing, micro, etc.)
- 22 Contracts/construction orders administered

#### Technical Service Engineering

- 2 Functional Designs completed
- 10 Detailed Designs completed
- 5 Engineering Service Provider contracts managed
- 209 Underground Agreements and Addendums reviewed and approved
- 182 Utility approvals
- 267 Crossing applications processed
- 500 Illegal signs removed

#### Human Resource Activities

- n/a Full time competitions/appointments/hires
- n/a Co op students/grade 11/12 students/project specific hired
- n/a Secondments/acting status/temporary reclass

#### Other Administration

- 9,881 Financial transactions
- 104 Ministerial letters/Briefings/Issue Updates
- 131 Safety Meetings
- 20 Health and Safety Yard Audits
- 8 Accident Investigations
- 0 Health and Safety Stop Work/Improvement Orders

### South Central Region Office (Region 2)

#### Capital/Preservation/Maintenance

- 4,438 Km of road maintained (includes approx. 100 km of Main Market Roads - Harwill, Red Rose, and Snake Creek.)
- 238 Km of roads constructed/reconstructed (includes resurfacing, micro, etc.)
- 29 Contracts/construction orders administered

#### Technical Service Engineering

- 4 Functional Designs completed
- 6 Detailed Designs completed
- 11 Intersection Warrant Analysis
- 5 Guardrail Designs and installations
- 11 Culvert Installation Detail Designs
- 23 Water and Sewer Line Agreements
- 82 Subdivision Reviews
- 6 Subdivision Drainage Impact Study Reviews
- 24 Manitoba Telecom Service (MTS) Agreements
- 35 Centra Gas Agreements
- 32 Hydro Agreements
- 4 Tile Drainage Impact Study Reviews
- 138 Highway Traffic Board Applications
- 7 Environmental Applications
- 13 External Environmental Proposals (Review and Comments)
- 3 Subdivision Traffic Impact Study Reviews
- 10 Sketch Plans for ROW Purchase/Lease Completed
- 14 Pavement Structure and Surfacing Design Memos

- 4 Soil Survey/Pavement Coring Requests
- 5 Requests Submitted to WM&S for "Q" Values
- 14 Crown Land Reviews

#### **Human Resource Activities**

- n/a Full time competitions/appointments/hires
- n/a Co op students/grade 11/12 students/project specific hired
- n/a Secondments/acting status/temporary re-class

#### **Other Administration**

- 9,837 Financial transactions
- 62 Ministerial letters/Briefings/Issue Updates
- 3,336 Safety Meetings (includes daily tailgate meetings, etc.)
- 18 Health and Safety Yard Audits (Maintenance)
- 146 Incident Investigations
- 1 Internal Certificate of Recognition Audit
- 57 Inspections
- 13 Pre Construction Meetings
- 11 Dangerous Occurrences

### **South Western Region Office (Region 3)**

#### **Capital/Preservation/Maintenance**

- 5,033 Km of road maintained
- 62 Km of roads constructed/reconstructed
- 50/0 Culverts/bridges replaced
- 23 Contracts/construction orders administered

#### **Technical Service Engineering**

- 20 Detailed Designs completed
- 0 Functional Designs completed
- 20 Sketch plans for ROW purchase/lease completed
- 0 Location Plan completed
- 2 Engineering Service Provider contract managed
- 183 Utility approvals
- 176 Crossing applications
- 8 Geophysical Licenses
- 98 Subdivisions Reviewed
- 5 Drainage Impact Study Reviews
- 24 External Environmental proposals (review and comment)
- 7 Environmental applications
- 2 Onsite Geotechnical Assessment conducted with Materials Engineering Branch
- 87 Illegal Signs Removed
- 26 Pavement Structure and Surfacing Design memos requested
- 6 Soil Survey/Pavement Coring (total 135 km) Requisitions submitted
- 6 Requests submitted to MWS for "Q" Values
- 52 Material Requisitions
- 2 Departmental Quarry Pit Management meetings conducted
- 11 Pit Permit Registrations
- 7 Exemption Certificates Issued
- 27 Aggregate Summary Reports submitted to Materials Engineering Branch
- 5 Aggregate Res. Man. Fee Reports submitted to Materials Engineering Branch
- 3 Contractor Permit Verifications through Integrated Mining and Quarry System

### **Human Resource Activities**

- 2/15/17 Full time Regular Competitions/Full time departmental hires/Appointments-hires
- 19/4/28/0 Co-op students/Grade 11-12 students/students/project specific hired
- 3 Supportive Employment successfully placed
- 30/23 Acting Status/Temporary Reclasse

### **Other Administration**

- 9,326 Financial transactions
- 64 Ministerial letters/Briefings/Issue Updates
- 137 Safety Meetings
- 19 Health and Safety Yard Audits
- 0 Improvement Orders
- 29 Injury and near miss incidents reported
- 12 Work Site Inspections
- 15 Pre-construction Meetings

## **West Central Region Office (Region 4)**

### **Capital/Preservation/Maintenance**

- 3,462 Km of road maintained
- 60 Km of roads constructed/reconstructed
- 17 Culverts/bridges replaced
- 23 Contracts/construction orders administered
- 1 Co-operative projects (RM's, Towns, etc.)

### **Technical Service Engineering**

- 9 Detailed Designs completed
- 54 Utility approvals
- 45 Crossing applications processed
- 2 Subdivision application processed
- 12 Engineering Service Provider contracts managed
- 1 Functional Design completed
- 4 External Environmental proposals (review and comment)
- 11 Environmental Applications
- 14 Illegal signs removed
- 45 Crown Land sales applications processed

### **Human Resource Activities**

- 24 Full-time competitions/appointments/hires
- 37 Co-op students/grade 11/12 students/project specific hired
- 46 Secondments/acting status/temporary re-class

### **Other Administration**

- 7,997 Financial transactions
- 37 Ministerial letters/Briefings/Issue Updates
- 201 Safety Meetings
- 38 Health and Safety Yard Audits
- 1 Improvement Order
- 33 Work Site Inspections
- 19 Pre-construction Meetings
- 41 Injury and near miss incidents reported

## Northern Region Office (Region 5)

### Capital/Preservation/Maintenance

3,595	Km of road maintained (including winter roads)
155	Km of roads constructed/reconstructed
42	Culverts replaced
25	Contracts/construction orders administered (newly opened)
3	Co-operative project
0	Km of road seal coated

### Technical Service Engineering

6	Detailed Designs completed
0	Functional Design completed
5	Utility approvals
13	Crossing applications processed
8	Traffic Board Applications
2	Access Removal
5	Guardrail Installations and Repairs
5	Environmental applications
0	External Environmental Reviews
2	Crown Land Reservation Requests and ROW Requests
3	Requests for Legal Survey
10	Materials Requisitions
28	Aggregate Summaries
3	Pavement Design Requests

### Human Resource Activities

11/14/14	Full-time competitions/appointments/hires
11/22/3	Co-op students/grade 11/12 students/project specific hired
0/9/8	Secondment/acting status/temporary reclass
6	Development plans ongoing

### Other Administration

5,152	Financial transactions
52	Ministerial letters/Briefings/Issue Updates
75	Safety Meetings
16	Health and Safety Yard Audits
1	Health and Safety Stop Work/Improvement Orders
32	Injury and near miss incidents reported

## 2 (e-1) Eastern Region Office (Region 1)

Expenditures by Sub-Appropriation	Actual 2016/17 \$(000)	FTE	Estimate 2016/17 \$(000)	Variance Over(Under) \$(000)	Expl. No.
(a) Salaries & Employee Benefits	2,769	39.00	3,465	(696)	1
(b) Other Expenditures	21,062		678	20,384	2
<b>Total Sub-Appropriation</b>	<b>23,831</b>	<b>39.00</b>	<b>4,143</b>	<b>19,688</b>	

#### Explanation:

1. Under expenditure was primarily related to inclusion of Estimates for east side road operations while expenditures occurred in 2(b-5) Capital Projects and 2(g-1) Planning and Design.

2. Primarily due to write down of east side road assets upon transfer to Manitoba Infrastructure.

**2 (e-2) South Central Region Office  
(Region 2)**

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$(000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$(000)</b>	<b>Variance Over(Under) \$(000)</b>	<b>Expl. No.</b>
(a) Salaries & Employee Benefits	2,114	33.00	2,472	(358)	
(b) Other Expenditures	379		474	(95)	
<b>Total Sub-Appropriation</b>	<b>2,493</b>	<b>33.00</b>	<b>2,946</b>	<b>(453)</b>	

**2 (e-3) South Western Region Office (Region 3)**

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$(000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$(000)</b>	<b>Variance Over(Under) \$(000)</b>	<b>Expl. No.</b>
(a) Salaries & Employee Benefits	2,638	38.00	2,791	(153)	
(b) Other Expenditures	445		519	(74)	
<b>Total Sub-Appropriation</b>	<b>3,083</b>	<b>38.00</b>	<b>3,310</b>	<b>(227)</b>	

**2 (e-4) West Central Region Office (Region 4)**

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$(000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$(000)</b>	<b>Variance Over(Under) \$(000)</b>	<b>Expl. No.</b>
(a) Salaries & Employee Benefits	1,974	30.00	2,285	(311)	
(b) Other Expenditures	391		409	(18)	
<b>Total Sub-Appropriation</b>	<b>2,365</b>	<b>30.00</b>	<b>2,694</b>	<b>(329)</b>	

**2 (e-5) Northern Region Office (Region 5)**

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$(000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$(000)</b>	<b>Variance Over(Under) \$(000)</b>	<b>Expl. No.</b>
(a) Salaries & Employee Benefits	1,907	30.00	2,305	(398)	
(b) Other Expenditures	354		497	(143)	
<b>Total Sub-Appropriation</b>	<b>2,261</b>	<b>30.00</b>	<b>2,802</b>	<b>(541)</b>	

**2 (e-6) Recoverable from Other Appropriations**

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$(000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$(000)</b>	<b>Variance Over(Under) \$(000)</b>	<b>Expl. No.</b>
Less: Recoverable from Other Appropriations	(5,341)		(3,778)	(1,563)	1
<b>Total Sub-Appropriation</b>	<b>(5,341)</b>	<b>0.00</b>	<b>(3,778)</b>	<b>(1,563)</b>	

*Explanation:*

1. The over-recovery in regional offices was primarily due to an increase in the recovery rate from 25 per cent to 40 per cent.

## Other Jurisdictions

### Objective

To provide specialized services to other government departments, and other jurisdictions such as cities, towns, villages, municipalities, local government districts, government agencies, crown corporations and the federal government.

### Activity Identification

Provides road construction and maintenance services to other jurisdictions on a 100 per cent cost recoverable basis.

Provides specialized equipment services not readily available from the private sector on a 100 per cent cost recoverable basis.

Provides for construction programs of other jurisdictions to be incorporated into provincial construction projects on a 100 per cent cost recoverable basis.

Provides for repairs to highway installations, structures and pavements damaged by accidents and utility installation on a 100 per cent cost recoverable basis.

### 2 (f) Other Jurisdictions

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$(000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$(000)</b>	<b>Variance Over(Under) \$(000)</b>	<b>Expl. No.</b>
(1) Gross Expenditures	1,759	2.00	2,816	(1,057)	1
(2) Less: Recoverable from Other Appropriations	(134)		(1,200)	1,066	1
<b>Total Sub-Appropriation</b>	<b>1,625</b>	<b>2.00</b>	<b>1,616</b>	<b>9</b>	

#### *Explanation:*

1. Fewer services provided to other Government departments and third parties resulted in lower expenditures and recoveries.

## **Planning, Design and Property Services: Planning and Design**

### **Objective**

Highway Planning and Design Branch provides specialized engineering, environmental, and technical services in the areas of Highway Geometric Design, Roadside Development, Environmental Services, and Geographic Support to advance provincial priorities related to infrastructure program delivery, network stewardship, and highway planning.

### **Activity Identification**

Manage the environmental approval process on behalf of the Engineering and Operations Division (E&O) and the Water Management and Structures Division (WM&S) and provide policy direction and support in the area of construction related environmental needs.

Manage the access and development control program on the provincial highway system for the department.

Establish policies, procedures and guidelines and provide policy direction for the placement of utilities on and adjacent to the provincial highway system.

Manage the department's developer pay program for on-highway improvements required as a condition of access/development permits and subdivision approvals.

Manage the E&O and WM&S consultant registry for the procurement of external services providers.

Manage the E&O and WM&S environmental liabilities site remediation program.

Review land development proposals adjacent to the provincial highway system and provide recommendations related to their compatibility with current and future highway system requirements. On-going support and technical advice to the Transportation Policy Division, relative to long-range highway network planning and related land use policy decisions.

Review and comment on Traffic Impact Studies required as a condition of access/development permits and subdivision approvals.

Provide drafting and mapping services and maintain central plan files for highway engineering drawings and legal plans.

Provide policy direction, technical training, and support in the area of highway geometric design.

Undertake quality assurance reviews of highway designs.

Establish geometric design standards, policies, and procedures.

Prepare highway design criteria and bridge width criteria for provincial highways.

Undertake functional design studies for the department as a means of facilitating long range highway planning.



## 2016/2017 Major Accomplishments

Provided roadway geometric design support and technical review for various highway upgrading and network expansion projects such as PTH 16 west of Russel.

Developed regulatory submissions for the Lake Manitoba and Lake St. Martin Outlet Channels project.

Managed the PTH 75 Pembina-Emerson Port of Entry functional design study and represented the department on the Expansion and Redevelopment of the Emerson Port of Entry project.

Managed the PTH 10 (18<sup>th</sup> Street) Daly Overpass preliminary/functional design study.

Continued conversion of various land related records from microfilm archiving to a digital archiving system.

Provided expertise in the areas of geometric design, environment, public consultation and property acquisition for the PTH 59/PTH 101 Design-Build project.

Released a new version of Manitoba's Official Highway Map.

Managed the Department's Consultant procurement process and provided support and advice to the Engineering and Operations Division, Water Management and Structures Division, and Transportation Policy Division in the procurement of engineering and engineering support services.

Provided project management for several in-house and outsourced functional design studies for future highway upgrading projects.

## 2016/2017 Service Volumes

Applications and Projects	
226	Administered access/structure applications on Provincial Roads
379	Reviewed access/structure applications on Provincial Truck Highways
42	Represented the Department at Highway Traffic Board Hearings
4	Represented the Department at Public Utilities Board Hearing
3	Co-ordinated developer pay on-highway improvement projects
40	Bridge width and Geometric Design Criteria (GDC) reviews
102	Managed environmental pre-screening and approval process for highway and airports and marine, northern winter roads, and water control and structure projects
53	Reviewed non-highway (The Environment Act, The Oil and Gas Act and The Dangerous Good Handling and Transportation Act) proposals
3	Conducted Phase I and Phase II Environmental Site Assessment and EM 31 Surveys under the Environmental Liabilities Program
728	Undertook land development related reviews
90	Reviewed design submissions for approval prior to construction.
45	Reviewed and approved Engineering Service Provider (ESP) assignment requests under the Procedure for the Procurement of ESP

## 2 (g-1) Planning and Design

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$(000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$(000)</b>	<b>Variance Over(Under) \$(000)</b>	<b>Expl. No.</b>
(1) Salaries & Employee Benefits	1,870	28.50	2,076	(206)	
(2) Other Expenditures	269		292	(23)	
<b>Total Sub-Appropriation</b>	<b>2,139</b>	<b>28.50</b>	<b>2,368</b>	<b>(229)</b>	

## **Planning, Design and Property Services: Property Services**

### **Objective**

Property Services Branch provides specialized technical services in support of securing right-of-way requirements for departmental transportation and water control infrastructure falling under the Engineering & Operations Division and the Water Management & Structures Division, respectively. Managing surface disposition of departmental road rights-of-way and other real property under the department's control, and effective right-of-way management through highway declarations, abandonments, closings and identification of right-of-way available for disposition.

### **Activity Identification**

Manage the development and coordinate the implementation of operational policies, processes and guidelines for divisional staff in connection with securing right-of-way for departmental roads and water control facilities and managing certain uses thereof consistent with related legislation.

Manage the ongoing coordination and monitoring of activities involved in securing right-of-way for highway and water control facilities, and submit an annual report to Treasury Board on provincial highway right-of-way acquisition expenditures under the delegated authority for right-of-way acquisition.

Manage the surface disposition of departmental road right-of-way and other real property under the department's control, including maintenance of an internal database.

Manage the closing of undeveloped government road allowances in connection with Manitoba's Treaty Land Entitlement program, and provide comments on related policy documents created by the Department of Sustainable Development and the Department of Indigenous and Municipal Relations.

Provide expertise regarding the declaration, abandonment and closing of highways and ensure the regulations are amended on a regular basis to reflect changes in the provincial highway network.

Provide policy direction, technical training and advice to internal staff and external stakeholders in the areas of right-of-way management and right-of-way acquisition/disposition.

## 2016/2017 Major Accomplishments

Implemented a newly formalized Department Procedure Manual for both pre and post construction considerations relating to highway declaration/abandonment/road closings, in partnership with Transportation Policy divisional requirements.

Prepared documentation for formal acceptance of land from Canada required for public roads through various First Nations, and also provided advice and technical support in connection with:

- Matters relating to expropriation and settlements for water control and highway projects.
- Disposal of the surplus portions of former CP Rail land acquired for the CentrePort Canada Way (CCW) project and other matters relating to CCW development, i.e. potential leasing of land for signs, road closures, highway declaration and waterline installation.
- Outstanding land agreements with Norway House, Hollow Water, Skownan, Sapotawayak, Rolling River, Swan Lake, Cross Lake, Brokenhead, God's Lake, Rocky Lake, Jackhead, Mathias Colomb, Long Plain, Little Saskatchewan, Lake St. Martin and Opaskwayak First Nations.
- The provincial initiative "Operation Return Home", regarding various issues related to the required Addition-to-Reserve process for affected reserve communities.
- Working Groups
  1. Establishing the department's involvement in the Pembina-Emerson Port of Entry improvements, involving Public Works Canada, State of North Dakota, and private land interests
  2. Assisting the University of Manitoba to establish a site on provincial crown land for development of the Churchill Marine Observatory in Churchill
  3. In conjunction with Manitoba Hydro to facilitate the transfer of Keeyask Hydro Dam access roads (located north and south of the structure) to Manitoba Infrastructure for declaration as PR 280

## 2016/2017 Service Volumes

1	Annual report to Treasury Board under revised Delegated Authority for Right-of-way Acquisition Expenditures
1	Amended Regulations under The Highways and Transportation Act declaring departmental roads
2	Orders of the Minister closing departmental roads
4	Reviewed Recommendations-to-Council prepared by the Crown Lands and Property Agency (CLPA) in connection with expropriations, re-vestments of closed roads and sales of surplus land
42	Processed dispositions of land under Transportation's control (i.e. lease, sale, transfer, encroachment, utility easement agreements prepared by CLPA/Civil Legal Services)
129	Processed Requests for Services originated by Regions (103) and Water Control (26)
3	Processed advance purchase requests
1056	Researched and responded to inquiries regarding property-related issues
12	Reviewed draft Agreements

**2 (g-2) Property Services**

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$(000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$(000)</b>	<b>Variance Over(Under) \$(000)</b>	<b>Expl. No.</b>
(1) Salaries & Employee Benefits	303	4.00	309	(6)	
(2) Other Expenditures	22		14	8	
<b>Total Sub-Appropriation</b>	<b>325</b>	<b>4.00</b>	<b>323</b>	<b>2</b>	

**2 (g-3) Recoverable from Other Appropriations**

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$(000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$(000)</b>	<b>Variance Over(Under) \$(000)</b>	<b>Expl. No.</b>
Less: Recoverable from Other Appropriations	(167)		(148)	(19)	
<b>Total Sub-Appropriation</b>	<b>(167)</b>	<b>0.00</b>	<b>(148)</b>	<b>(19)</b>	

# Northern Airports and Marine Services

## Objective

To provide and maintain safe, efficient and effective provincial airport and marine infrastructure and services to Manitoba in a reliable and sustainable manner through our innovative, committed and caring workforce.

Our vision is to connect Manitoba's northern communities by maximizing the safety, efficiency and reliability of Manitoba's airport and ferry services.

## Activity Identification

**Operations:** responsible to operate and maintain provincially owned airports and ferries to provide vital transportation of passengers, freight and medical services to isolated communities. Provides leadership and direction to obtain or ensure the continuance of the province's operating certificates to support transportation services for passengers, freight and medical assistance as governed by the Aeronautics Act and Canada Shipping Act.

**Infrastructure:** responsible for program planning and project delivery for the construction and rehabilitation of airports, ferries, buildings and docking facilities to sustain stakeholder service level demands and meet Transport Canada regulations and standards. Supports services such as commercial traffic, medical assistance, forest protection, tourism, mining, and economic development. Negotiates federal cost-shared contribution agreements for investments into provincial infrastructure.

**Regulation and Compliance:** responsible to protect Manitoba's investment in airport and marine infrastructure through the administration, implementation, and communication of compliance and regulatory programs that enhance safety and promote uniformity with provincial, federal and international standards. Implements aviation and marine regulations ensuring alignment with provincial strategies, policies and practices while promoting economic growth and development in Manitoba communities.

**Administration:** responsible to promote and encourage a culture of learning to develop staff that will operate in a respectful and professional manner. Adhere to effective team principles and maintain current state technical competency to effectively deliver the program's mandate. Fosters an environment that encourages the recruitment, development and training of Aboriginal and non-Aboriginal employees to enhance the social well being of remote community citizens. Responsible for operational grant programs and revenue generating such as the Airport Space Lease Program, Landing Fees Program and the Manitoba Airports Assistance Program.

**Safety and Risk Control:** responsible to establish, implement, coordinate, and evaluate a safety, health and risk management program for Northern Airports and Marine Services (NAMO) multi-functional professional, technical, service, and field employees operating primarily in northern Manitoba. Conducts annual program audits and period inspections of airport and marine facilities, construction and maintenance projects and activities. Coordinates and/or delivers training and testing services. Manages the Safety Management System (SMS) as regulated and enforced by Transport Canada.

## **2016/2017 Major Accomplishments**

Phase 4 of the SMS has been validated on-site. An independent baseline audit of the SMS program as it relates to the 22 certified airports was completed. The required services involved validating compliance or identifying non-compliance with SMS procedures (implementation and maintenance requirements established by Northern Airports and Marine Services), as well as compliance with Canadian Aviation Regulations 107.01 to 107.04. This baseline audit was completed in November of 2013. Phase 4 had an audit of all operations authorized by the respective airports' certificates. The certificated operations audit verified that "operational" processes, procedures, analysis, inspections and training comply and conform to all activities authorized by the operator's certificate and those documented within the Airport Operations Manual. Supported by interviews and observations, these audits were comprised of factual verifications and address management policies, controls and procedures concerning all critical safety activities. This audit of all functions authorized by the airports' respective certificates has been undertaken.

SNC Lavalin has completed the detailed design and tender package for the South Indian Lake ferry landing. (Phase I) The tender was released publicly and awarded to Sigfusson Northern. Construction has been completed and the ice deflector is in operation. This project will provide permanent protection for the ferry from ice flows, currently being provided by the out of service MV Charles Robert. Once both phases are completed, this project will reduce ferry landing maintenance requirements for year round ferry service, and will provide a permanent slipway to allow more efficient and cost effective hull and machinery inspections over the life of the vessel. Phase II landing development is scheduled for 2017/2018. Property purchase was completed at 53 Vimy Road in Selkirk which lays the groundwork for a new marine equipment shop. Construction to be completed in 2017/2018.

Capilano Maritime Design Ltd. completed the detailed design for a new cable ferry. This went to public tender and was awarded to Kinetic Machinery of Selkirk. Construction has been completed and is awaiting transportation to Norway House. The new ferry will replace the existing Cable Ferry James Apetagon located at Sea Falls. The Cable Ferry James Apetagon will be relocated to Matheson Island replacing the CF Ingemar Carleson II to meet Transport Canada regulations.

Provided 18 students in remote communities with summer employment through the Northern Internship Program at both airport and marine locations.

## **2016/2017 Service Volumes**

### Airport Improvements

In addition to regular operation and maintenance of the airports, a number of capital upgrading projects were implemented. Preliminary engineering has been completed for the rehabilitation of the Red Sucker Lake runway and installation of new navigational aids; detailed design work is complete and a submission for Federal funding has been approved for \$7.5 million. The tender was released publicly and awarded to Hugh Munro Construction and construction is underway. Upgrading of various airport HVAC and equipment shops is also underway. Wildlife/security fencing has been completed at Brochet and preparations for fencing at Shamattawa has commenced. Additional fencing projects are being planned for the 2017/2018 fiscal year. Detailed designs have been completed for a new terminal in Norway House and tender is pending. Detailed design has been completed for a new equipment shop at Island Lake and tender was released publicly and awarded to Arnason Industries and construction is underway. Gods River Airport has received approval for upgrading navigation aids from Transport Canada funded programs for approximately \$1.1 million. Tender was released publicly and awarded to Montcreif Construction and construction is underway.

TREK Geotechnical completed geotechnical investigations at Oxford House, Pukatawagan, and Gods Lake Narrows which lay the ground work for future runway rebuilds. Investigations have been completed for future navigational aids involving Automated Weather Observation Systems (AWOS). The tender was released publicly and awarded to Spencer Navigation. Installation of the system is underway. This will allow the department to decommission Northern Airports and Marine Services' altimeter program while enhancing safety and weather reporting at airports.

#### Manitoba Airports Assistance Program

Since 1972, the department has been providing annual grants to assist municipal airport commissions in Manitoba in operating and maintaining safe airports for recreational flying, aerial seeding, crop spraying, and for emergency backup in the event of an accident. Eligible airports with paved runways receive \$2,400, while airports with unpaved runways receive \$1,200 to assist with airport operating costs. There are presently 37 municipal airports eligible for this grant, 19 of which receive \$2,400, 16 receive \$1,200 and two airports receive grants of \$4,800 and \$15,000 respectively. The total value of the current program is \$ \$84,600.

#### **2 (h) Northern Airports and Marine Services**

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$(000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$(000)</b>	<b>Variance Over(Under) \$(000)</b>	<b>Expl. No.</b>
(1) Salaries & Employee Benefits	1,027	15.00	1,312	(285)	
(2) Other Expenditures	511		498	13	
<b>Total Sub-Appropriation</b>	<b>1,538</b>	<b>15.00</b>	<b>1,810</b>	<b>(272)</b>	



# Materials Engineering

## Objective

To provide specialized standards for research, testing and evaluation toward the design and maintenance of sustainable and structurally competent highway embankments and pavements.

## Activity Identification

Provide policy direction, technical training, and support in the areas of geotechnical and pavement design, material specifications, aggregate management, and material testing.

### Aggregate Resource Management

Provide information to optimize the cost-effective supply of aggregate resources for the construction, preservation and maintenance programs, and liaise with external agencies to address the department's aggregate needs.

### Central Laboratory Testing Facilities

Provide specialized materials testing services to ensure compliance with specifications and develop testing standards to address local conditions.

### Geotechnical Design

Provide and manage geotechnical investigations and studies for embankment stability, as well as groundwater and erosion assessment and protection.

### Mobile Operations

Provide data collection services for pavement surface condition and for pavement structural capacity and pavement management.

### Pavement & Materials Design, Analysis and Assessment

Provide pavement structural designs for the construction and rehabilitation of pavements, and undertake structural assessments to determine spring restriction needs and the impact of special hauling proposals.

Develop and manage field and laboratory pavement assessment projects.

Design and evaluate bituminous and concrete products for pavements and embankments.

Manage the Approved Products List (APL) that evaluates and describes the construction and maintenance materials approved for procurement.

## 2016/2017 Major Accomplishments

### Mobile Operations

Two laser profilers were used for the Bituminous Smoothness Specification enforcement on 13 capital bituminous and concrete paving projects profiling a total of 450 lane kilometers. The surface condition automated survey was completed with a third laser profiler equipped with a rut bar, measuring twelve thousand kilometers of provincial highways and roads for ride and rut. Acquisition of the Laser Crack Measuring System (LCMS) to collect ride, rut and crack data, developed by Pavemetric equipment, from Fugro Roadware and preparation for the new data processing software and data storage are in progress. This equipment will automate Manitoba Infrastructure's crack data collection and eliminate manual data collection for pavement management purposes.

The Falling Weight Deflectometer (FWD) is being used for network and project level pavement structural evaluation. As of March 31, 2017, approximately 87 per cent of the network testing had been completed. Data were also collected from four construction project sites and eight research sites. The new trailer mounted (FFWD) Fast Falling Weight Deflectometer (FFWD), purchased in August 2015, can collect data faster than the old equipment that has passed its service life, started data collection starting June 2017.

Six mobile labs conducted testing on 26 capital bituminous paving projects and 11 maintenance mix locations. A seventh permanent lab was set up at our Mobile Operations headquarters (Miller Road) to effectively service bituminous paving projects close to Winnipeg. Pre-engineering coring and coring for forensic investigations were completed on various projects throughout the province. The soil drill truck was used on various projects to determine in-situ soil conditions for pavement designs and some special projects. A new mobile soils testing lab is currently being built to service construction projects. The Density Gauge Program provided radiation safety training for staff within all five regions. The program provided, serviced and calibrated 38 units for use on capital grading and bituminous paving projects.

### Geotechnical Design

The Geotechnical Section has identified 127 geohazard sites, (locations where unstable ground or slope conditions could threaten provincial roads or highways); 37 of these sites are considered to be current threats and are actively monitored by the Geotechnical Section; 28 sites are monitored with geotechnical instrumentation; and 16 sites, including the two worst landslides along PTH 34 and PTH 83, have data acquisition equipment to continuously monitor geotechnical parameters. The Geotechnical Section operates a system to monitor for dangerous conditions at the PTH 83 landslide, using remotely operated instruments and communication equipment. Landslide movements are continuously monitored at the Materials Engineering office in Winnipeg without the need to go to the site.

Progress was made on the geohazard management project to track key information about geohazards and other geotechnical sites along Manitoba Infrastructure roads and highways. A key component of the project is a geohazard site database, which is up-to-date for all sites in regions 1 and 2 and about half of the sites in region 3. The database summarizes key information for geotechnical sites Materials Engineering has been involved with, dating back to 1960. The intent is to incorporate Geographic Information System (GIS) functions into the database.

Representative geotechnical initiatives in 2016/2017 were:

- geotechnical support to the PTH 75 south of Morris flood proofing project and the interchange project at PTH 59 and PTH 101;
- a site investigation and geotechnical engineering support for the Shoal Lake access road;
- design of slope stabilization measures for PR 305 at Rat River Bridge and PTH 11 near Whitemouth;
- site investigations at slope failures at two locations on PTH 59 near St. Pierre, PR 204 in East Selkirk, PR 408 near Seven Sisters, and PR 243 near Morris.

### Pavement & Materials Design, Analysis and Assessment

The Mechanistic/Empirical Pavement Design Guide (MEPDG) software AASHTOWare Pavement ME Design, launched by The American Association of State Highway and Transportation Officials (AASHTO), is being evaluated for suitability in Manitoba condition and is being used.

The branch has completed or taken the following steps:

- Update the truck traffic data, with the help from the University of Manitoba (U of M). Determine mechanistic properties for different pavement materials with assistance from the U of M.

- Developed and currently manage a database of materials properties for exchanging information among Canadian agencies.
- Prepared an AASHTOWare Pavement ME Design program implementation plan.
- Evaluation, calibration and validation of the Pavement Performance Prediction Models. Started analysis of the long-term pavement performance of Manitoba provincial highways for different functional classes (Expressways, Primary Arterials, and Secondary Arterials) and pavement types (portland cement concrete and asphalt concrete). Started to summarize field volumetric properties of asphalt mixes and field densities & moistures for unbound materials.
- Use the program on a trial basis for pavement design pending calibration which is in progress.
- On-going use of the program to select asphalt binder to be used in different layers of bituminous pavement at different project locations.
- Participate in the Pavement ME design trials by the Canadian User Group, discuss issues/progress at the user group meeting and present at the Transportation Association of Canada (TAC) Annual Conferences.
- Following the issues, research and updates surrounding the program.

Based on the research, a rational (science based) method for determining the starting and ending dates of the Winter Seasonal Weights (WSW) program has been developed. This weather based criteria for starting and ending the WSW replaced the existing calendar based starting and ending dates to take advantages of cooler weather without increasing pavement damage. A new policy has been developed and was implemented in winter 2014. The policy has been reviewed to protect pavements from undue damage due to unusual weather patterns and variable climate. A later latest start date and an earlier earliest end date than that in the previous policy have been established in consultation with different stakeholders and implemented. The province has been divided into three climate zones by splitting former Zone 2 into two zones for the purpose of implementing the WSW because of differing weather in the Thompson and northern areas than The Pas area. This allowed for a longer period of WSW in the Thompson and northern areas than The Pas area. The Spring Road Restriction (SRR) policy has also been reviewed to protect pavements from undue damage due to unusual weather patterns and variable climate. An earlier earliest start date and a later latest end date than that in the previous policy have been established in consultation with different stakeholders and implemented. The duration of the SRR is now fully variable (not limited to 56 days, as specified in the previous policy). The province has been divided into three climate zones for the purpose of implementing the SRR which are same as the WSW implementation zones. This allowed for a later start and a later end of the SRR in the Thompson and northern areas than The Pas area. The spring road restrictions and winter seasonal weights websites contents have been updated to reflect current policies.

A research project with the U of M to examine the roadway roughness at shallow culvert locations and to develop cost-effective solutions for the construction and repair of such installations has been completed in the last fiscal year. A number of pilot projects to further verify the recommendations is underway. A research project to evaluate design parameter and specifications for Granular A Base material has been completed with assistance the U of M in the last fiscal year. Pilot projects have been planned for the field verification of the proposed new specification of the A base. A research project with the U of M to examine the feasibility of adopting Superpave Mix Design System is in progress.

Materials Engineering Branch (MEB) prepared and is using a procedure for penetration grade pay adjustment for asphalt binder that does not meet the specified requirements. MEB also reviewed the Performance Grade Asphalt Cement Specification and is recommending a partial implementation of Multiple Stress Creep Recovery (MSCR) specification to ensure that supplied asphalt binder perform as intended.

MEB reviewed the Corrosion Inhibited Liquid De-icers specification and proposed standardized method to evaluate performance of new liquid de-icers for the next winter season.

Specification for Asphalt Release Agents was published on the Approved Products List (APL) to ensure that future construction tenders specify the use of non-petroleum based lubricants, cleaners or release agents on equipment surfaces in direct contact with asphalt concrete mix to eliminate issues with mat quality when diesel fuels.

MEB planned testing for Tensile Strength Ratio (TSR) on asphalt mixes at the beginning of all MI projects to identify aggregate pits or pit layers with moisture susceptible aggregates. Identification of moisture susceptible pits pit layers will enable MI to make informed decision about moisture related performance of asphalt mixes.

Several products have been or are being evaluated to be included in the approved product lists. These include: Zydex – Zycotherm (to improve moisture and cold weather performance), Uniform Chip Seal (a new pavement preservation technology to reduce windshield damage claims), Cypher Environmental - Dust Stop (to increase strength and reduces dust on gravel roads), MacSeal 6690-4 – Hot Pour Joint Sealant (to seal crack), Mastic One - Crack Seal for Large Depressed Cracks, Pounder - HF500M-HR with AS (Emulsion with anti strip for moisture susceptible maintenance mix), McAsphalt - Clean Bond Coat, WarmGrip and Evotherm P25 (low-odor warm mix asphalt additive with liquid anti-strip capabilities), HF150P with SBS polymer and latex modifies (for seal coat), etc.

A research project on Comparative Performance of Thin Bituminous Pavement and AST has been established in Region 3. This project will be monitored for long term performance evaluation. The branch is also evaluating concrete aggregate durability, performance of superpave asphalt binder, long term performance of cement treated granular base, short/long term concrete pavements and the performance of non-corrosive dowels and tie bars in concrete pavement.

MEB started using the AASHTO 1993 and Pavement ME Design Methods for bituminous pavement rehabilitation designs to replace the Benkelman Beam deflection based method. MEB is also in the process of reviewing several input parameters for the AASHTO 1993 method, including elimination of the Shell equations to calculate the deign traffic loading, for pavement design. The Branch also developed a design tool for use of the FWD deflection data to determine the structural capacity of an existing pavement and design for rehabilitation/reconstruction. The branch is also working to update the pavement incremental damage cost analysis program to replace the Benkelman Beam data with the FWD data and to update the traffic and highway loading classification. The branch is updating the existing and developing new technical standards related to design, investigation, analysis, testing and monitoring.

The branch and region 1 are working together to develop a specification for the drainable stable base material based upon pilot projects, which is important to extend the service life of concrete pavements. The branch participated/participating in the preparation/review of several Vehicle Weights and Dimensions Policies/Standards/Regulations which include: changes to MR575/88 regarding non-RTAC vehicles, over-arching principles, Medium Spread Tridem Trailer Axle Weight Allowance, Tridem Steer-Tridem Drive Axles Concrete Pumpers, Carrier Style Concrete Pumpers, and Tow Trucks. The Branch has participated in the technical evaluation/review of pavement, materials and geotechnical issues associated with PTH 59/PTH 101 interchange (design-build) project

The Branch has participated in the TAC's study "Guide to Load Management for Weak Pavement Structures" and report on Wide Base Tires. The Branch is also participating in the U.S. Long Term Performance Program (LTPP) study for warm mix asphalt.

MEB, in collaboration with the Cement Association of Canada (CAC), Athena SMI and Massachusetts Institute of Technology, performed Environmental Life Cycle Assessment (LCA) and Life Cycle Cost Analysis (LCCA) of a concrete pavement constructed in 2015 PTH 75, Manitoba.

A five year collaborative research program has been established with the University of Manitoba as the Municipal Infrastructure Chair to develop/recommend solutions for issues that are of common interest to MI, City of Winnipeg, Municipalities and Industry.

## 2016/2017 Service Volumes

1960	Responses to Aggregate information requests
857	Aggregate site visits/updates
14,453	Lab tests conducted in Central Lab (Winnipeg)
4538	Lab tests conducted in Central Lab (Brandon)
100	Pavement Structural Designs issued
505	Pavement Overweight Impact Analysis and Permit Evaluation conducted
35	Major geotechnical projects under investigation/design/monitoring
22	Asphalt Mix Designs performed
8	Concrete Mix Designs performed

### 2 (i) Materials Engineering

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$ (000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$ (000)</b>	<b>Variance Over(Under) \$ (000)</b>	<b>Expl. No.</b>
(1) Salaries & Employee Benefits	2,761	38.40	2,953	(192)	
(2) Other Expenditures	428		430	(2)	
(3) Less: Recoverable from Other Appropriations	(1,194)		(1,513)	319	
<b>Total Sub-Appropriation</b>	<b>1,995</b>	<b>38.40</b>	<b>1,870</b>	<b>125</b>	

# Transportation Policy

## Objective

Transportation Policy Division advances government's transportation priorities by providing strategic analysis and advice that supports good transportation-related decision making by the Deputy Minister, Minister, Cabinet, and Premier. This is accomplished by the following branches:

- Transportation Policy and Service Development
- Transportation Systems Planning and Development
- Legislative and Regulatory Services

## Activity Identification

Protecting Manitoba's transportation interests:

- Advancing Manitoba's transportation interests in federal policy and regulatory initiatives related to aviation, railways, marine ports, trade corridors, trade gateways and border crossings.
- Collaborating with provincial governments across Canada on national transportation policy and strategy development.
- Preserving the function, safety and efficiency of the provincial transportation system by collaborating with municipal governments on land use and development.

Leading in the development of the transportation system:

- Developing policies and implementing strategic initiatives that supports transportation service provision, safety and promotes socio-economic prosperity.
- Providing analysis and advice on policy and legislative initiatives.
- Developing and administering standards for infrastructure development and highway network management.
- Undertaking economic analysis of transportation infrastructure investments, including the development of business cases and conducting return-on-investment assessments for capital investments.

Policy and legislative development and stakeholder engagement:

- Leading in the development of policy, legislation and regulation that enhances safety, sustainability and socio-economic development.
- Consulting with stakeholders and the public to build relationships, communicate initiatives, and solicit input.

## 2016/2017 Major Accomplishments

### Transportation Policy and Service Development

Transportation Policy and Service Development Branch leads and supports high profile, strategic policy and service development initiatives in transportation.

#### Key Branch Activities:

- Supported the government's objectives relating to the CentrePort Canada Inland Port Initiative, including leading the intra-governmental coordination requirements on the prospective sale of Manitoba lands in the CentrePort Canada footprint. The Branch also represents Manitoba on the CentrePort Canada Single Window Taskforce.

- Developed international and inter-jurisdictional partnerships including managing Manitoba Infrastructure's interaction with key institutions such as North America's Strategy for Competitiveness (NASCO) and Western Transportation Advisory Council (WESTAC). This broad role included supporting senior political and executive presence at a range of national and international conferences, events, and meetings in support of Manitoba's objectives.
- Supported the government's objectives on Churchill Gateway development. This included continued provincial lead of a \$60 million tri-party project to rehabilitate the Hudson Bay Rail Line.
- Continued to coordinate the government's roles and objectives on the development of the Churchill Marine Observatory, a planned University of Manitoba research facility.
- Conducted specific service development activities for stated government priorities in the issue areas of short line railway programming and airports policy/programming.
- Led departmental policy integration for support to central government policy platforms relating to sustainable development and climate change policy, energy policy and trade policy (including the New West Partnership integration requirements) amongst several others.

Advanced Manitoba's interests on federal and inter-provincial/territorial policy and program matters, including:

- Led Manitoba's interaction on a major federal statutory review and comprehensive long term transportation strategy. This involved leading the development of a common advocacy front between the prairie provinces so as to optimize the federal legislative amendments to support Manitoba shippers' rail service needs.
- Supported and participated in processes and working groups related to the national Council of Ministers and Deputy Ministers Responsible for Transportation and Highway Safety. The Branch's participation involved project work on the following:
  - Transportation and the Environment Task Force (Chair);
  - Transportation Working Group for the Pan Canadian Framework on Climate Change;
  - Transportation Statistics and Policy Issues Working Group (Co-chair);
  - Multimodal Transportation Data, Performance and Forecasting Working Group (Co-chair);
  - Task Force on Rail Safety - Liability and Compensation Harmonization; and,
  - Working Group on Abandoned Vessels and Wrecks.

### **Transportation Systems Planning and Development**

Transportation Systems Planning and Development has a mandate to strategically plan and develop Manitoba's transportation system to advance government's transportation priorities.

#### **Key Branch Activities:**

##### Federal Programs and National Policy Development

- Supported and participated in processes and working groups related to the National Council of Ministers and Deputy Ministers Responsible for Transportation and Highway Safety. The branch's participation involved project work on the following:
  - Transportation Economics Community of Practice
  - Transportation and the Economy Task Force
  - Intelligent Transportation Systems Community of Practice (Chair)
  - Transportation and the Environment Task Force
  - National Highway System Task Force
- Prepared business cases and conducted return-on-investment assessments for several highway projects submitted to Canada for cost-shared infrastructure funding via the New Build Canada Fund.
- Supported northern and arctic transportation planning and development via participation in national fora including the Network of Expertise of Transportation in Arctic Waters and the Permafrost Network.

### Border Planning and Policy Development

- Led consultations with Canadian and U.S. federal border agencies, state and local governments and stakeholders to plan and coordinate bi-national infrastructure improvements at the Pembina-Emerson Port of Entry.
- As a member of the Executive Committee of the Canada/U.S. Transportation Border Working Group, advanced national transportation border policies and programs.
- Advanced regional border planning priorities as Chair of the Western Border Forum – a network of transportation and border representatives from States and Provinces along the Canada/U.S. border east of the Great Lakes.
- Worked with local transportation stakeholders to develop a Manitoba-based pilot project for cargo pre-clearance.

### Capital Region Transportation System Development

- As a member of the Capital Region Transportation Working Group, supported community efforts to develop a regional transportation planning and coordination model.
- Working with the Partnership of the Manitoba Capital Region and the Federation of Canadian Municipalities, undertook a sustainable transportation feasibility study of regional transit services.
- Coordinated various planning activities in the CentrePort Canada inland port, including providing technical and planning support to potential investors, landowners and transportation system participants.

### Highway Infrastructure Protection

- Undertook numerous reviews of municipal development plans and zoning by-laws so as to preserve the function, safety and efficiency of the provincial transportation system.

### Transportation System Development

- Initiated a planning study to optimally integrate Intelligent Transportation Systems technologies into the provincial highway network.
- Led a study recommending preferred alignments and costs to connect York Landing and War Lake / Ilford to the provincial highway network.
- Supported the department's strategic highway network by identifying redundant highway sections as candidates for transfer to local authorities.

### **Legislative and Regulatory Services (LRS)**

Legislative Regulatory Services leads the review and development of legislation and regulation under the authority of the Minister of Infrastructure with a focus on transportation safety. The branch undertakes research and policy analysis; explores and monitors emerging issues and trends in safety, technology and infrastructure; provides advice and guidance on Manitoba Infrastructure's statutes and regulations; represents MI on inter-provincial and inter-departmental committees; serves as liaison to Manitoba Public Insurance (MPI) for the delivery of driver and vehicle licensing programs on behalf of the Manitoba Government; and engages stakeholders, including municipalities, MPI, law enforcement agencies, the Canadian Council of Motor Transport Administrators, etc., in policy and legislative development and to address joint concerns and pursue common goals and research initiatives.



## Key Branch Activities:

### Cannabis and Drug Impaired Driving

Legislative and Regulatory Services provided subject matter expertise and policy support for the transportation related provisions of the Cannabis Harm Prevention Act which was introduced in March 2017 and received royal assent in June 2017. The Cannabis Harm Prevention Act will help ensure police agencies are better equipped to deal with drug-impaired drivers. Specifically, the new legislation:

- allows for 24-hour driver's license suspensions if a police officer believes the driver is under the influence of a drug and unable to safely operate a motor vehicle;
- requires the registrar of motor vehicles to determine if graduated licensed drivers who receive the 24-hour suspension should face further consequences;
- prohibits the consumption of cannabis in or on a vehicle that is on a highway; and
- restricts the transportation of cannabis in vehicles to ensure it is inaccessible to the driver and passengers, similar to existing rules for transporting alcohol.

### Manitoba Road Safety Committee

The Manitoba government established the Manitoba Road Safety Committee to reduce traffic fatalities and injuries on Manitoba roads. The committee is considering current and emerging vehicle technologies, infrastructure designs, road safety policy and legislation, enforcement strategies, and the emergence of new road safety issues such as distracted driving, and the legalization of cannabis and drug impaired driving. The committee is also working to prioritize road safety issues, foster greater cooperation and collaboration among stakeholders, including enforcement and advocacy partners, and focus resources to maximize results. LRS acts as a secretariat to the committee and coordinates and supports the committee's activities.

### Modernized Helmet Standards

In February 2017, Manitoba updated and modernized motorcycle, bicycle, and off-road vehicle helmet standards by amending the Motorcycle Helmets Regulation, the Bicycle Helmets Regulation, and the Off-Road Vehicles Regulation. LRS conducted policy work to identify and remove outdated standards, identify modern replacement standards, and assess the impact on stakeholders to ensure Manitobans have access to the most advanced helmets to reduce the risk and severity of head injuries.

## 2 (j) Transportation Policy

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$ (000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$ (000)</b>	<b>Variance Over(Under) \$ (000)</b>	<b>Expl. No.</b>
(1) Salaries & Employee Benefits	2,529	33.00	2,871	(342)	
(2) Other Expenditures	635		1,451	(816)	1
(3) Less: Recoverable from Other Appropriations	-		(55)	55	
<b>Total Sub-Appropriation</b>	<b>3,164</b>	<b>33.00</b>	<b>4,267</b>	<b>(1,103)</b>	

#### *Explanation:*

1. Various planned projects were put on hold and CentrePort land sale negotiations have delayed anticipated expenses beyond the 2016/2017 fiscal year.

# Traffic Engineering

## Objective

To enhance the safety and efficiency of vehicular traffic and all modes of active transportation on the provincial highway network, which includes bridges and other jurisdictions, by providing specialized traffic operations, engineering support, standards and data.

## Activity Identification

Manage and direct the installation, maintenance and operation of all traffic control devices including traffic signals, major signs, flashing lights and pedestrian corridors, and traffic barriers (guardrails).

Establish standards/policies for the installation and maintenance of all traffic control devices and Intelligent Transportation System (ITS) technologies.

Manage and direct speed limit reviews and provide recommendations to the Highway Traffic Board respecting speed limits on provincial routes.

Provide expertise respecting traffic control within Manitoba Infrastructure and to other departments as well as jurisdictions.

Manage and direct the illumination of provincial highways.

Manage and direct the traffic monitoring program including the production of an annual report and map on traffic flows on the provincial highway system.

Maintain a database of traffic collision records on provincial highways to assist in the identification of problem areas, and the development and evaluation of mitigation measures.

Manage railway crossing safety on the provincial road network.

Support external clients (municipal authorities, special event coordinators, utilities, developers, film producers, commercial transportation industry, etc.) in developing and using safe traffic control plans.

Provide policy direction, technical training, and support in the areas of traffic safety and traffic management.

## 2016/2017 Major Accomplishments

Successfully installed two permanent traffic signal installations to facilitate new intersections and construction activities. Successfully installed one railway signal uninterruptable power supply system.

Traffic data was collected at 79 counting stations, including 27 Permanent Count Stations (PCS), approximately 1,500 short-term counting locations, seven Weigh-In-Motion (WIM) sites, 45 Automatic Vehicle Classification (AVC) sites and approximately 240 intersection locations.

The Branch reviewed speed zone change requests at various locations throughout the province with appropriate reports submitted to the Highway Traffic Board for its consideration. The branch has been monitoring the effects of the 110 km/h speed limits posted on PTH 1, west of Virden to the Saskatchewan border and on PTH 75, north of the U.S. border to south of St. Jean Baptiste, since summer 2009.

The Branch maintains a database that includes the contributing factors, configuration and location of collisions on the provincial highway system. With records dating from 1991 to present year, this database can be used for map creation and report a generation of collisions statistics. The branch also maintains a 5-year history of traffic accident reports.

The branch led a project involving multiple cross discipline stakeholders to develop school traffic safety guidelines.

The branch continues to compile background information toward the development of a Road traffic safety plan for Manitoba, in keeping with similar efforts being undertaken across other transportation agencies throughout Canada.

## 2 (k) Traffic Engineering

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$(000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$(000)</b>	<b>Variance Over(Under) \$(000)</b>	<b>Expl. No.</b>
(1) Salaries & Employee Benefits	1,852	21.00	1,732	120	
(2) Other Expenditures	264		267	(3)	
(3) Less: Recoverable from Other Appropriations	(317)		(777)	460	1
<b>Total Sub-Appropriation</b>	<b>1,799</b>	<b>21.00</b>	<b>1,222</b>	<b>577</b>	

### *Explanation:*

1. Under-recovery is primarily the result of a decrease to the recovery rate from 39 per cent to 15 per cent to better reflect costs related to this program.

# Motor Transport Board and Highway Traffic Board

## Objective

To ensure all Manitobans are provided with adequate transportation services at a reasonable cost through the administration of a regulatory system under The Highway Traffic Act, governing motor carriers and public service vehicle operators.

To ensure the safety of the traveling public and protection of highway infrastructure through the administration of The Highways Protection Act, and provide uniformity throughout the province in relation to speed limits, traffic control devices, highway classifications, weight limits, bridge restrictions and parking, under The Highway Traffic Act.

## Activity Identification

Determines operating authorities for inter-city bus, inter-municipal liveries and short line railway industries involved in public service vehicle (PSV) operations.

Monitors and establishes transportation rates and charges for PSV scheduled bus carriers, charter bus carriers and inter-municipal livery operators and determines sanctions on motor carriers and PSV operators for breaches of regulations.

Establishes control lines to regulate access and development adjacent to Provincial Trunk Highways and reviews and processes applications for access on to limited access highways and development adjacent to these highways.

Provides decisions on speed limits and traffic control devices; make decisions on changes to weight limits, and highway classifications on provincial and municipal roads.

Conducts public hearings on current issues; makes orders and regulations, and provides policy input to the Minister.

## 2016/2017 Major Accomplishments

<b>Motor Transport Board</b>	
23	General/Public Meetings
28	Operating Authorities issued/amended
5	School bus requests
170	PSV operating authorities renewed
<b>Highway Traffic Board</b>	
44	Public Hearings Held (Winnipeg and rural areas)
390	Structure and Access Applications administered
20	Speed limits/traffic control devices/by-laws
12	On-site inspections
17	Regulation sections written
2	Public Utility Board Appeals

## 2 (L-1) Motor Transport and Highway Traffic Boards

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$(000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$(000)</b>	<b>Variance Over(Under) \$(000)</b>	<b>Expl. No.</b>
(a) Salaries & Employee Benefits	178	3.00	336	(158)	
(b) Other Expenditures	91		113	(22)	
<b>Total Sub-Appropriation</b>	<b>269</b>	<b>3.00</b>	<b>449</b>	<b>(180)</b>	

# Licence Suspension Appeal Board and Medical Review Committee

## Objective

The Licence Suspension Appeal Board (LSAB) is the means of appeal for individuals whose driver licences and/or permits have been suspended under The Highway Traffic Act or as a result of court imposed suspensions excluding the prohibition period ordered under the Criminal Code of Canada.

The Medical Review Committee provides a means of appeal for individuals whose driver licences have been suspended, cancelled or declassified based on medical reasons.

## Activity Identification

The primary function of the LSAB is to hear appeals of individuals who have had their driver licences suspended by the Courts or the Registrar of Motor Vehicles. The Highway Traffic Act further provides for the board to hear appeals for suspensions, cancellations, or denials of Driving School Permits, Driving School Instructor Permits, Automobile Dealer Permits, Salesman Permits, Safety Inspection Station Operator Permits and Mechanic Permits.

The board must determine if it is satisfied that exceptional hardship will result if the suspension, cancellation or disqualification remains in effect or that the revocation of the suspension, cancellation or disqualification is not contrary to the public interest. If satisfied, the board may by-order revoke a suspension, cancellation or disqualification in whole or in part and direct a driver's licence or permit to be issued.

The Medical Review Committee hears appeals to determine whether the standards, as set out by The Canadian Medical Association, The National Safety Code, and Manitoba Legislation, are applied in a fair and equitable manner and whether an exception to the rule may be made. The committee may by-order confirm, quash or vary the decision of the Registrar of Motor Vehicles.

## 2016/2017 Service Volumes

<b>Licence Suspension Appeal Board</b>		
<b>1323</b>	<b>Total Applications Received</b>	
	1137	Winnipeg
	39	Brandon
	143	North
<b>841</b>	<b>Decisions Rendered</b>	
	1	Full Remission
	418	Granted or Partial Grant of Request
	422	Denied (Contrary to Public Interest, No Exceptional Hardship or both)
<b>482</b>	<b>Remaining Applications</b>	
	81	Pending further information from Appellant
	205	Did not appear, abandoned, adjourned; or cancelled
	24	Refunded – no jurisdiction
	172	Other (expired, passed away, pending)

## 2 (L-2) Licence Suspension Appeal Board and Medical Review Committee

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$(000)</b>	<b>Estimate 2016/17 FTE</b>	<b>Estimate 2016/17 \$(000)</b>	<b>Variance Over(Under) \$(000)</b>	<b>Expl. No.</b>
(a) Salaries & Employee Benefits	380	4.00	371	9	
(b) Other Expenditures	76		49	27	
<b>Total Sub-Appropriation</b>	<b>456</b>	<b>4.00</b>	<b>420</b>	<b>36</b>	

# Infrastructure Works

## Mandate

Provides for the construction and maintenance of provincial all-weather and winter roadways, northern airports and ferry operations, municipal assistance programs, flood mitigation initiatives, and maintenance and preservation of water-related assets.

## Maintenance and Preservation of Provincial Trunk Highways, Provincial Roads and Related Projects

### Objective

To protect public investment in highway infrastructure and ensure that the traveling public and commercial vehicles are provided with safe, efficient and convenient movement by maintaining roads, bridges and traffic control devices to acceptable standards.

### Activity Identification

Provides repairs to paved surfaces, including shoulders.

Conducts gravel surface work including dragging, re-gravelling and dust control.

Carry out roadside maintenance, including mowing, weed control and litter pick-up

Provides maintenance of signs, guardrails, guide posts and traffic control devices.

Deliver the maintenance, inspection and preservation program for highway bridges and other highways structures.

Inspect existing bridges and structures to assess current condition.

Conducts winter maintenance activities including snow plowing, sanding and salting.

### 2016/2017 Major Accomplishments

#### Best Practices

##### Winter Levels of Service

During the 2016/2017 winter season, the maintenance program was delivered in accordance with the Winter Levels of Service (WLOS) continued. The focus remained concentrated on corridor plowing between towns and villages as opposed to stopping at predetermined boundaries. WLOS information, winter driving tips and maps were available on the Provincial Road and Traveller Information website to provide added information to the motoring public.

##### 511 Road and Traveller Information Website

The new 511 Road Condition system which including the updated 511 voice recording system, editing, website maps, and 24/7 support performed well. Additional traffic camera installations were completed and approximately 30 cameras will be available for the upcoming winter season. 511 Manitoba mobile app has been completed and is available for download free of charge.

## Maintenance Career Training Program

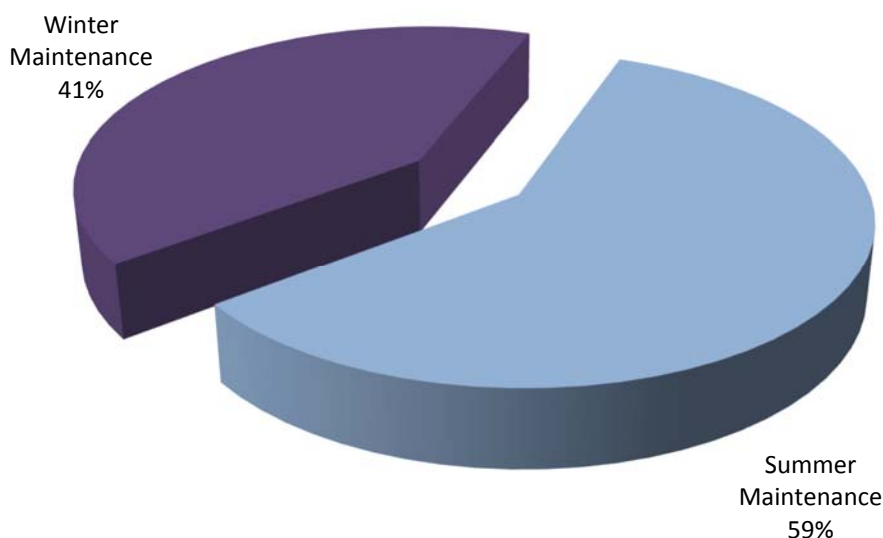
The Maintenance Career Training Program was developed and implemented to address the ongoing training requirements needed to deliver the annual provincial maintenance program. The program is comprised of three levels. Delivery continued for Level 1 and 2 training. Level 3 training was fully implemented for winter maintenance activities with the summer activities portion was delivered in May 2016. That milestone marked the first intake of maintenance employees to complete all three levels. The program is experiencing a great deal of success with over 700 MI employees receiving training to-date of which 113 have completed all three levels.

## 2016/2017 Service Volumes

Maintenance and Preservation Major Activities		
Work Activity	Work Accomplishment	Cost
Maintenance Patching	922,100 square meters	\$8,422,133
Spot Road Improvements	Various Locations	\$6,273,403
Seal Coat	2,853,000 square meters	\$7,259,388
Microsurfacing	328 kilometers	\$17,518,293
Pavement Marking	784,017 litres	\$4,890,279
Dragging Gravel Roads	253,789 pass kilometers	\$6,791,440
Gravelling (includes community main access, stabilization)	307,881 cubic meters 12,313 kilolitres	\$14,921,870
Snow Plowing	1,309,142 pass kilometers	\$7,683,558
Winter Ice Control	179,094 kilometers treated	\$7,926,367

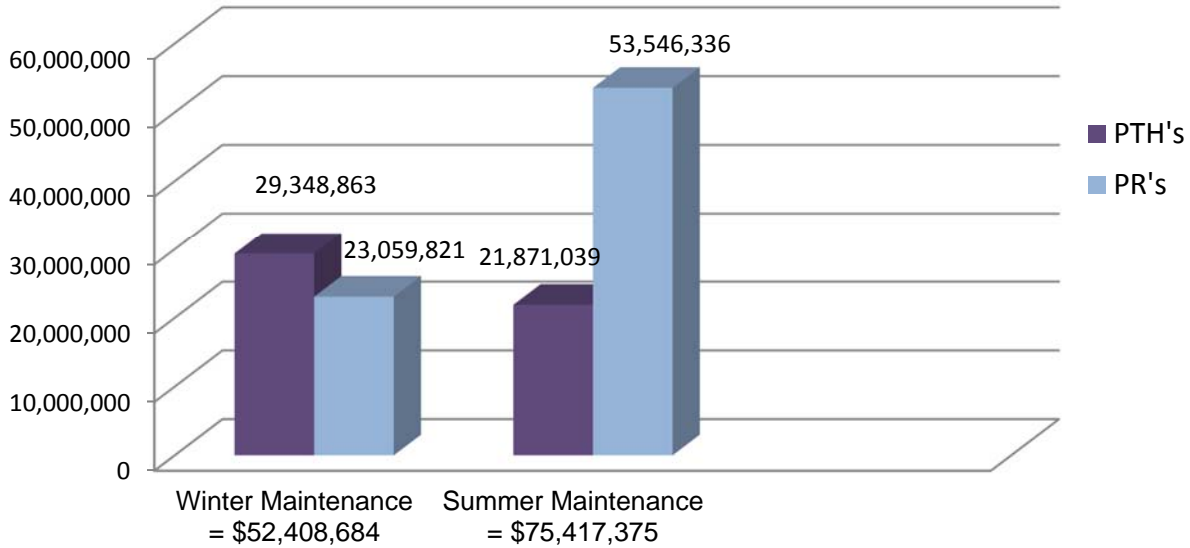
The following graphs show maintenance expenditure by major activity and by PTH and PR Systems:

### 2016/2017 Maintenance Expenditures by Major Activity





**2016/2017 Maintenance Expenditures by Major Activity on  
Provincial Trunk Highways and Provincial Roads - \$127,826  
\$(000s)**



**3 (a) Maintenance and Preservation of Provincial Trunk Highways, Provincial Roads and Related Projects**

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$(000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$(000)</b>	<b>Variance Over(Under) \$(000)</b>	<b>Expl. No.</b>
(1) Gross Expenditures	176,939	1,020.30	171,834	5,105	1
(2) Less: Recoverable from Other Appropriations	(342)		(1,500)	1,158	2
(3) Less: Recoverable from Part B - Capital	(25,529)		(25,266)	(263)	
<b>Total Sub-Appropriation</b>	<b>151,068</b>	<b>1,020.30</b>	<b>145,068</b>	<b>6,000</b>	

*Explanation:*

1. Variance is due to increases in the maintenance and preservation programs as a result of:
  - greater maintenance costs due to increased winter storm activity in 2016/2017;
  - greater maintenance costs on PR 280 as a result of heavy road use by Manitoba Hydro;
  - greater preservation costs in support of an increase in the capital program.
2. Variance is due to lower recoverable maintenance costs.

# Maintenance and Preservation of Waterway Control Projects

## Objective

Effective and efficient delivery of the maintenance and preservation programs for water related assets to support their optimum operation.

## Activity Identification

Deliver the water related maintenance and preservation program.

Operate and maintain water-related systems and networks.

Conduct condition inspections and assessments of water related assets.

Support flood operational response.

Act as the primary contact for stakeholders regarding water related asset issues.

Maintain the provincial hydrometric stations program.

Deliver the provincial ice jam mitigation program.

Support activities to ensure efficient management of water related assets.

Support activities to ensure efficient, effective hydrologic forecasting and water management strategies.

## 2016/2017 Service Volumes

928	Inspections (Level 1) - bridges and dams on the provincial waterway
95	Engineering Inspection (Level 2) – dams, dikes, diversion structures
5	Special Inspection (Level 3) – dams, dikes, diversion structures
17	Hydraulic designs completed
10	Geotechnical investigation and monitoring – drains, bridges/culverts, dams, dikes, diversion structures
25	Culvert crossings replaced
98	Thru dike/grade crossings replaced
7	Provincial waterway bridge rehabilitation projects completed
191	Provincial waterway bridges repaired or maintained
30	Kilometres of minor drain rehabilitation completed
1,011	Kilometres of drains, dams and dikes maintained (includes vegetation management)
13,671	Hours of pumping station operation
42.5	Kilometres of ice broken or cut through the provincial ice jam mitigation program
321	Hydrometric stations operated and funded through cost sharing agreements

### 3 (b) Maintenance and Preservation of Waterway Projects

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$(000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$(000)</b>	<b>Variance Over(Under) \$(000)</b>	<b>Expl. No.</b>
(1) Gross Expenditures	15,420	32.00	16,623	(1,203)	
(2) Less: Recoverable from Other Appropriations	(1,084)		(1,880)	796	1
(3) Less: Recoverable from Part B - Capital	(4,032)		(4,892)	860	1
<b>Total Sub-Appropriation</b>	<b>10,304</b>	<b>32.00</b>	<b>9,851</b>	<b>453</b>	

*Explanation:*

1. Delays in environmental approval and engineering designs resulting in lower recoveries.

## Flood Mitigation Initiatives

### Objective

Manage and administer flood protection programs for communities, homes, cottages, farm and business buildings which are prone to flooding.

Provide enhanced hydrologic forecasting and flood mitigation.

### Activity Identification

Administer Individual Flood Protection programs that provide financial assistance for flood mitigation projects to protect individual homes, cottages, farms and businesses.

Administer and provide engineering support for Community Flood Protection Programs

Collection of Light Detection and Ranging (LiDAR) topographic data on a watershed basis to be used in water management planning and flood risk assessment.

Acquisition and integration of flood forecasting data management software, flood forecasting models and hydraulic modelling tools.

### 2016/2017 Service Volumes

6	Communities flood protected
169	Residential homes, farms, businesses and cottages flood protected

### 3 (c) Flood Mitigation Initiatives

Expenditures by Sub-Appropriation	Actual 2016/17 \$(000)	FTE	Estimate 2016/17 \$(000)	Variance Over(Under) \$(000)	Expl. No.
Other Expenditures	2,080		3,677	(1,597)	1

*Explanation:*

1. Flood mitigation activities were lower than anticipated.

## Northern Airports and Marine Services Operations

### Objective

To provide for the safe and effective operation of provincial airports in remote northern Manitoba communities to serve their transportation and emergency needs.

### 3 (d) Northern Airports and Marine Services

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$(000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$(000)</b>	<b>Variance Over(Under) \$(000)</b>	<b>Expl. No.</b>
Northern Airports Operations	12,289	70.00	12,237	52	
Marine Services Operations	3,831	30.05	3,998	(167)	
Less Recoverable from Part B - Capital	(298)		(325)	27	
<b>Total Sub-Appropriation</b>	<b>15,822</b>	<b>100.05</b>	<b>15,910</b>	<b>(88)</b>	

## Winter Roads

### Objective

To effectively develop and deliver the road construction, maintenance and enhancement for winter roads to remote communities; ensuring that the program is carried out to departmental standards and incorporate the principles of sustainable development.

### Activity Identification

Coordinate engineering, construction and supervision, and maintenance operations for the winter road network. Monitor contract work to ensure quality control and adherence to specifications and standards.

Liaise with central office branches to ensure uniformity and consistency with respect to policy, standards, procedures, and communications with stakeholders, including the media. Prepare project proposals and priorities for the winter road program and provide timely information and updates on issues as required.

Conduct construction and maintenance activities in an environmentally sound and economically sustainable manner.

Manage all financial, occupational safety and health, risk management, human resource, and general administration for the winter road program region.

### 2016/2017 Major Accomplishments

- Continued work on site line improvements and creek crossing repairs.
- Construction of geometric and road surface improvements along the Winter Road between Norway House and Island Lake. This work included minor relocations, road surface capping/levelling over extremely uneven terrain. Brushing to improve curve alignments, visibility and hill flattening to decrease vertical gradients. These improvements improve driver safety and comfort, as well as improve the constructability/reliability of the Winter Road in an effort to officially open roads for public use earlier in the future.
- Re-alignment of the 3 km Garden Hill by-pass ice road to a land based winter road away from the school zone.

### 2016/2017 Service Volumes

Contract Services resumed responsibility for the Winter Road contracts on the East Side of Lake Winnipeg (formerly East Side Road Authority), and now administers 18 winter road construction orders which cover a total distance of approximately 2,200 km and provide employment for approximately 250 people.

#### 3 (e) Winter Roads

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$(000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$(000)</b>	<b>Variance Over(Under) \$(000)</b>	<b>Expl. No.</b>
Other Expenditures	8,857		9,625	(768)	1

*Explanation:*

1. Adverse winter weather conditions resulted in delayed construction of winter roads.

# Emergency Management and Public Safety

## Objective

To act as the Manitoba government's coordinating agency for emergency management, as established by The Emergency Measures Act.

To establish and build the Manitoba government's capacity to coordinate, manage and participate in multi-agency emergency response situations, and enhance interoperability among responding agencies.

To prepare a provincial emergency preparedness program and plan.

To support post-disaster recovery of private individuals, farms, small businesses, non-profit organizations, municipalities, and Manitoba government departments.

To foster a climate of cooperation among all sectors and levels of government involved with the protection of public safety in Manitoba.

To work cooperatively with other governmental and non-governmental agencies to develop policies and programs that enhances public safety.

To continuously improve all aspects of emergency management in Manitoba.

## Activity Identification

Implements a system of integrated all-hazards emergency management in Manitoba that will prevent or limit loss of life; serious harm to the health, safety, or welfare of people; and damage to property or the environment.

Coordinates emergency planning and management via the development of the all-hazards Manitoba Emergency Plan as well as supplementary plans for specific hazards. This is done through close and frequent interaction with other departments of government.

Evaluates emerging threats and hazards to public safety, and develops flexible and innovative operational steps in response to these challenges. This is carried out through four major areas of activity: mitigation, preparedness, response and recovery.

When these areas of activity are coordinated as part of an encompassing strategic approach to public safety, an "all-hazards" approach to emergency management is advanced. From this strategic direction, an effective tactical system involving multiple departments and agencies is created whereby a wide range of potential events – from the national to the local level – can be managed through a flexible, adaptable and scalable management structure.

Manages the Manitoba government's Business Continuity Planning program.

Provides briefings as required to Cabinet on major public safety emergencies and disasters.

Provides briefings on major public safety emergencies and disasters to all parties when requested.

Reviews and approves municipal emergency plans and programs.

Provides emergency management training at no cost to provincial, municipal, and First Nations officials, and other emergency management personnel.

Administers the Disaster Financial Assistance program and participates in recovery activities.

Administers the Shellmouth Dam Flooding Compensation program and Red River Floodway Compensation program.

Participates in federal/provincial/territorial policy and program discussions to advance and improve a comprehensive national system of emergency management that serves Manitoba's emergency management priorities.

Establish frameworks, mutual aid and assistance agreements, and partnerships for the protection of public safety and security in Manitoba.

Develops networks for the communication of risk to critical infrastructure sectors.

Provides technical oversight and the licensing of 9-1-1 Public Safety Answering Points in the province.

## **2016/2017 Major Accomplishments**

### Emergency Coordination and Disaster Recovery

*2016 June 24-26 Heavy Rains* - Two severe storm cells passed through the Whiteshell Provincial Park and surrounding areas on June 24-26, 2016. The storms produced heavy rains that created overland flooding in the region. Sustainable Development issued a voluntary evacuation notice for West Hawk Lake, Caddy Lake and the south shore of Falcon Lake in an effort to prevent cottagers and private residents from becoming stranded in the area due to deteriorating road conditions.

Manitoba Emergency Measures Organization (EMO) co-ordinated Manitoba government emergency response information and resource support in cooperation with Sustainable Development, Manitoba Infrastructure, RCMP D Division, Manitoba Hydro, and MTS.

The 2016 June 24-26 Heavy Rains Disaster Financial Assistance (DFA) Program covers Whiteshell Provincial Park and the Rural Municipality of Whitemouth. To date, a total of 17 private claims have been received and nine have been inspected.

*2016 June Fire* – A fire burning near Easterville and Chemawawin Cree Nation prompted evacuations of approximately 1500 people from these communities. Manitoba EMO provided overall coordination support and initiated communication flows in accordance with established fire/smoke evacuation protocols. It also provided daily situation updates to government and key stakeholder partners and maintained situational awareness with the federal Government Operations Centre.

Responding agencies included Sustainable Development Fire Program (fire suppression); Office of the Fire Commissioner (value protection); Indigenous and Municipal Relations (declared State of Local Emergency and facilitated Easterville evacuation); Manitoba Health, Seniors and Active Living - Office of Disaster Management (health linkages); Communications Services Manitoba (media and public information); RCMP D Division (evacuation support, access control, security); Indigenous and Northern Affairs Canada and Canadian Red Cross (evacuation of Chemawawin Cree Nation); Manitoba Hydro (critical infrastructure); MTS (critical infrastructure); and Norway House Animal Rescue, St. John Ambulance Therapy Dog Program, and volunteer groups (care for companion animals and pets).



*2016 May Fires* – Fires near Beresford Lake and Caddy Lake prompted the mandatory evacuation of nearby cottages, cabins, and campgrounds. Approximately 30 residents from Ingolf, Ontario also evacuated to temporary accommodations in Manitoba. Sustainable Development Fire Program, Southeast Whiteshell Fire Department, and Office of the Fire Commissioner established an Emergency Coordination Centre (ECC) in Whiteshell Provincial Park for fire suppression and evacuation coordination. Manitoba EMO deployed staff to the Whiteshell EOC for liaison and planning support, and provided overall provincial response coordination and communication support. Other responding agencies included Manitoba Families (emergency social services) and RCMP D Division.

*2014 Summer Heavy Rains* - Much of southwestern Manitoba was impacted by flooding over the spring and summer of 2014. Wet conditions in the spring were capped off by a large, widespread rain event on June 27-30 across much of western Manitoba and eastern Saskatchewan. This event caused significant overland flooding and resulted in washed-out roads, threatened infrastructure, flooded homes, and caused evacuations. The heavy rains also resulted in significant flows on the lower Assiniboine River from Portage la Prairie to Winnipeg, similar to those of the 2011 Spring Flood.

The Government of Canada has agreed that the 2014 June 27-30 Heavy Rains is eligible for cost-sharing under the federal Disaster Financial Assistance Arrangements (DFAA) and has provided \$37,449,548 to date.

To date, \$90,500,935 has been paid under the 2014 June 27-30 Heavy Rains DFA program. A total of 1,341 private claims were received and 1,332 (99%) have been paid and closed. A total of 94 public claims were received and 73 have been paid and closed.

*2014 Spring Flooding* - Spring run-off in April and higher-than-normal precipitation in some areas of the province through April and May resulted in persistent high flows on streams and rivers as well as high lake levels. The 2014 Spring Flood DFA program covers areas of the southwest, south-central, Parkland, and Interlake regions of Manitoba.

The Government of Canada has agreed that the 2014 Spring Flood is eligible for cost-sharing under the federal DFAA and has provided \$1,971,548 to date.

To date, \$5,745,454 (\$3,650,968 for standard claims) has been paid under the 2014 Spring Flood DFA program. A total of 33 private claims were received and all have been paid and closed. A total of 21 public claims were received and 17 have been paid and closed.

*2011 Spring Flood* - In 2011, flooding occurred across Manitoba on an unprecedented scale resulting from the spring thaw and rains. This extraordinary flooding took place in most major watersheds, rivers and lakes in the province and continued to impact the lives of Manitobans into the winter.

The 2011 Spring Flood DFA program covers most impacted regions of Manitoba, including Dauphin Lake; however, it does not cover private sector damages caused by Lake Manitoba or the Hoop and Holler controlled release.

The Government of Canada has agreed that the 2011 Spring Flood is eligible for cost-sharing under the Disaster Financial Assistance Arrangements (DFAA) and has provided \$350 million to date.

A total of 4,522 private claims, including First Nations, were received and \$170,267,148 has been paid. 16 private claims remain open and assistance will continue to be released as work is completed. 4,506 private claims (99 per cent) have been closed, of which 247 have appealed. A total of 188 public claims, including First Nations, were received and \$202,757,388 has been paid. 16 public claims remain open and assistance will continue to be released as work is completed. 172 public claims (91 per cent) have been paid and closed, of which, one municipality has appealed.

*Shellmouth Dam Compensation Programs* - Manitoba EMO administers two flood compensation programs: the 2011/2012 Shellmouth Dam Compensation Program and the 2014 Shellmouth Dam Compensation Program. These programs provide compensation for damages solely caused by artificial flooding from the Shellmouth Dam operations.

The Steering Committee (Manitoba EMO, Manitoba Infrastructure, and Manitoba Agriculture representatives) authorized payments totaling \$1,539,162 for the 2011/2012 program. The largest approved claim was for \$341,090 and the others varied from \$650 to approximately \$105,000. A total of 93 were received. Seventy-five claims have been closed and 18 claims remain open. eight claims are being appealed with the Disaster Assistance Appeal Board. Ninety-two claims have been received and are open for the 2014 program.

### Planning and Preparedness

*Local Authorities Emergency Planning and Preparedness Regulation* - This regulation under The Emergency Measures Act came into effect December 20, 2016. The regulation confirms the requirement that municipal emergency programs comply with national standards set out in the Canadian Standards Association Z1600 or National Fire Protection Association 1600, and requires that persons appointed as municipal emergency coordinators complete minimum training requirements set out in the regulation. There are “grandfathering” provisions to allow a three year transition.

*Community Emergency Preparedness Award* - The Manitoba Community Emergency Preparedness Awards were presented to the Town of Snow Lake, Rural Municipality of East St. Paul, and City of Steinbach. The purpose of this award is to recognize the dedicated efforts and successes of communities as they work to protect their residents, the environment, infrastructure, property and economic stability; motivate communities to strive for stronger emergency management programs; and bring attention to the importance of emergency management in Manitoba. This award recognizes four levels of achievement in community preparedness modeled on Canadian and international best practices and standards.

*Training Program Renewal* – Manitoba EMO provides emergency management training for individuals and small teams fulfilling emergency management roles at the municipal level, in Manitoba government departments and agencies, with select critical service providers and non-governmental organizations (NGOs). As part of the training program renewal project initiated in 2014, Manitoba EMO launched its Learning Management System and developed two new courses for online delivery. Additional online courses as well as advanced level classroom courses are under development.

*Manitoba Government's Business Continuity Planning (BCP) Program* – Manitoba EMO leads the Manitoba government's BCP Program. In 2016/2017, departments completed the two-year planning cycle for the first time. Departments will start the next two-year cycle in 2017/18. The planning cycle helps standardize continuity planning work among departments. The planning cycle leads departments through completing hazard and risk assessments, a business impact analysis using a tool developed by Business Transformation and Technology, business continuity strategies and plans, and exercises to test those plans. The BCP Program has adopted the Canadian Standards Association Z1600 standard in emergency management and business continuity.

*Environmental Emergencies Annex to the Manitoba Emergency Plan and Exercises* – Manitoba EMO completed a final version of an Environmental Emergencies Annex in partnership with other Manitoba government departments and with review by stakeholders. Manitoba EMO then hosted a tabletop exercise to validate the annex. The exercise focused on roles and responsibilities of all levels of government, and coordination of information and actions during a response. Exercise participants included nine Manitoba government departments or branches, a provincial crown corporation, three federal departments, three municipalities and a private sector rail company.

*Flood Annex and Wildland Urban Interface Fires Annexes to the Manitoba Emergency Plan* – Manitoba EMO updated annexes to reflect changes in department structures and incorporate lessons learned through previous emergency responses.

*Scenario-Based Flood Planning for Red River and Assiniboine River Basin and Exercises* – To prepare for potential spring flooding, Manitoba EMO developed tabletop exercises for Cabinet. Exercises scenarios were based on the Red River and lower Assiniboine River and focused on flood management, evacuations, disaster financial assistance, and flood insurance.

*Engagement with Brandon University's Applied Disaster and Emergency Studies (ADES) Program* – The Chief Emergency Management Officer of Manitoba EMO continued to serve as a member of the ADES Advisory Board. Staff also presented to students in ADES classes.

*Staff Learning and Development* – 64 per cent of staff and management have completed learning plans. 95 per cent of staff and management have completed training in ICS 100 and 73 per cent in ICS 200. An increasing number of staff have completed advanced EOC training.

## **2016/2017 Service Volumes**

During 2016/2017, Manitoba EMO had 10 DFA programs that were open or ongoing.

Manitoba EMO delivered four emergency management classroom courses, training 95 people. The online Learning Management System had 386 learners registered and 208 people trained over two courses. Manitoba EMO also conducted eight regional emergency management workshops.

Manitoba EMO administers an incident management application used by the Manitoba Emergency Coordination Centre, Manitoba government departments, and partner agencies during emergency response. Manitoba EMO also makes this application available to municipalities to assist them in coordinating their emergency responses within the municipality and with the Manitoba government. In 2016/2017, seven municipalities received access and training to use this application. Forty municipalities now have access to the application.

Manitoba EMO has a variety of clients and provides them with emergency management advice and assistance. These client groups include:

- 14 Manitoba government departments;
- 137 municipalities;
- 50 Northern Affairs communities;
- 63 First Nations communities; and,
- Numerous non-governmental agencies such as the Canadian Red Cross, Salvation Army, and Mennonite Disaster Services.

#### 4 (a) Emergency Measures Organization

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$(000)</b>	<b>FTE</b>	<b>Estimate 2016/17 \$(000)</b>	<b>Variance Over(Under) \$(000)</b>	<b>Expl. No.</b>
(1) Salaries & Employee Benefits	2,203	25.00	2,187	16	
(2) Other Expenditures	551		567	(16)	
<b>Total Sub-Appropriation</b>	<b>2,754</b>	<b>25.00</b>	<b>2,754</b>	<b>0</b>	

## Costs Related to Capital Assets

### Objective

Provides for costs related to capital assets.

Activity Identification.

Amortization related to general and infrastructure tangible capital assets.

Interest related to general and infrastructure tangible capital assets.

### 5 Costs Related to Capital Assets

Expenditures by Sub-Appropriation	Actual 2016/17 \$(000)	FTE	Estimate 2016/17 \$(000)	Variance Over(Under) \$(000)	Expl. No.
(a) Air Services					
(1) Amortization Expense	7,375		7,625	(250)	
(2) Interest Expense	6,294		6,401	(107)	
(3) Less: Recoverable from Other Appropriations	<u>(7,176)</u>		<u>(7,176)</u>		
<b>Subtotal (a)</b>	6,493		6,850	(357)	
(b) General Assets					
(1) Amortization Expense	6,059		6,401	(342)	
(2) Interest Expense	<u>4,235</u>		<u>4,192</u>	<u>43</u>	
<b>Subtotal (b)</b>	10,294		10,593	(299)	
(c) Infrastructure Assets - Provincial Roads and Highways					
(1) Amortization Expense	190,256		190,180	76	
(2) Interest Expense	173,411		176,924	(3,513)	1
(3) Less: Recoverable from Other Appropriations	<u>(16,817)</u>		<u>(16,817)</u>		
<b>Subtotal (c)</b>	346,850		350,287	(3,437)	
(d) Infrastructure Assets - Water Related					
(1) Amortization Expense	5,903		5,792	111	
(2) Interest Expense	<u>9,448</u>		<u>10,696</u>	<u>(1,248)</u>	2
<b>Subtotal (d)</b>	15,351		16,488	(1,137)	
<b>Total Costs Related to Capital Assets</b>	<b>378,988</b>		<b>384,218</b>	<b>(5,230)</b>	

#### Explanation:

1. Primarily related to east side road projects not proceeding as planned.
2. Delays in environmental approvals and project designs.

## Emergency Expenditures

Provides for expenditures related to forest fires, flooding and other natural disasters. Includes a provision for environmental emergency response expenditures, disaster assistance and other related expenditures and partial reimbursement to government departments for property losses not covered by insurance.

### 27-1 Emergency Expenditures

<b>Expenditures by Sub-Appropriation</b>	<b>Actual 2016/17 \$(000)</b>	<b>Estimate 2016/17 FTE \$(000)</b>	<b>Variance Over(Under) \$(000)</b>	<b>Expl. No.</b>
Total Other Expenditures	105,856	51,800	54,056	1

***Explanation:***

1. Over-expenditure was due to an increase in provisions related to prior year events.

## Capital Investment

### Objective

To acquire and maintain capital assets including highways infrastructure assets which are administered by this department for the Manitoba government.

### Activity Identification

General Assets: Provides for acquisition of physical assets; major building construction and building renovation projects and the acquisition and maintenance of government aircraft.

Infrastructure Assets: Provides for the construction and enhancement of provincial highways, bridges, airport runways, water control structures, the Floodway Expansion and the East Side Road project.

#### B15 Capital Investment

Expenditures by Sub-Appropriation	Actual 2016/17 \$(000)	Estimate 2016/17 FTE \$(000)	Variance Over(Under) \$(000)	Expl. No.
(a) General Assets				
(1) Transportation Capital Projects and Equipment	13,052	14,000	(948)	
(2) Air Services Capital Projects	<u>1,129</u>	<u>5,200</u>	<u>(4,071)</u>	1
<b>Subtotal (a)</b>	<b>14,181</b>	<b>19,200</b>	<b>(5,019)</b>	
(b) Infrastructure Assets				
(1) Highway Infrastructure	520,124	540,000	(19,876)	2
(2) Airport Runway Capital	1,405	2,000	(595)	3
(3) Water Related Infrastructure	<u>36,479</u>	<u>45,000</u>	<u>(8,521)</u>	4
<b>Subtotal (b)</b>	<b><u>558,008</u></b>	<b><u>587,000</u></b>	<b><u>(28,992)</u></b>	
<b>Total Capital Investment</b>	<b><u>572,189</u></b>	<b><u>606,200</u></b>	<b><u>(34,011)</u></b>	

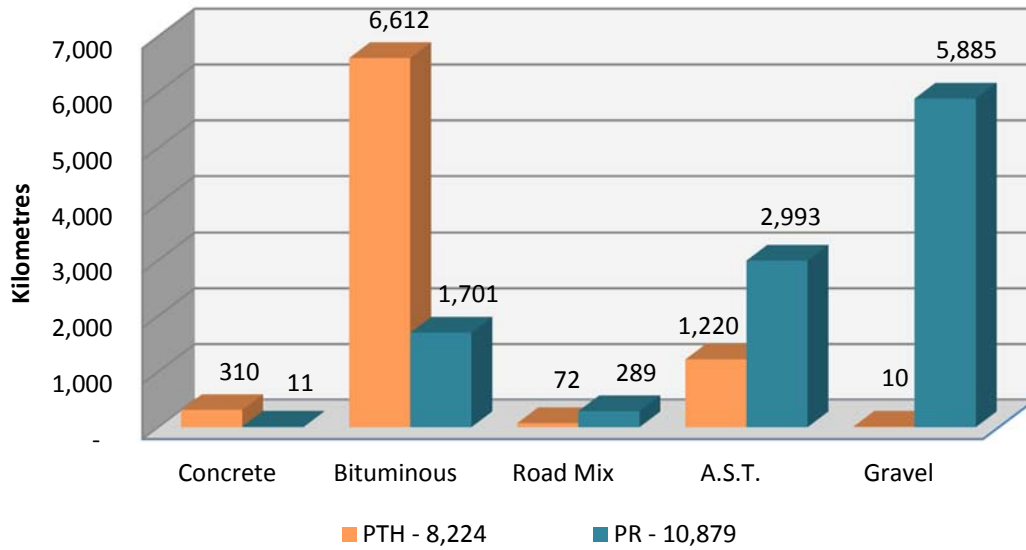
#### Explanation:

1. Decrease due to postponement of planned capital projects.
2. Decrease due to less activity as a result of realigning east side road projects.
3. Decrease due to less activity as a result of delays in receiving goods.
4. Delays in construction due to environmental approvals and design.

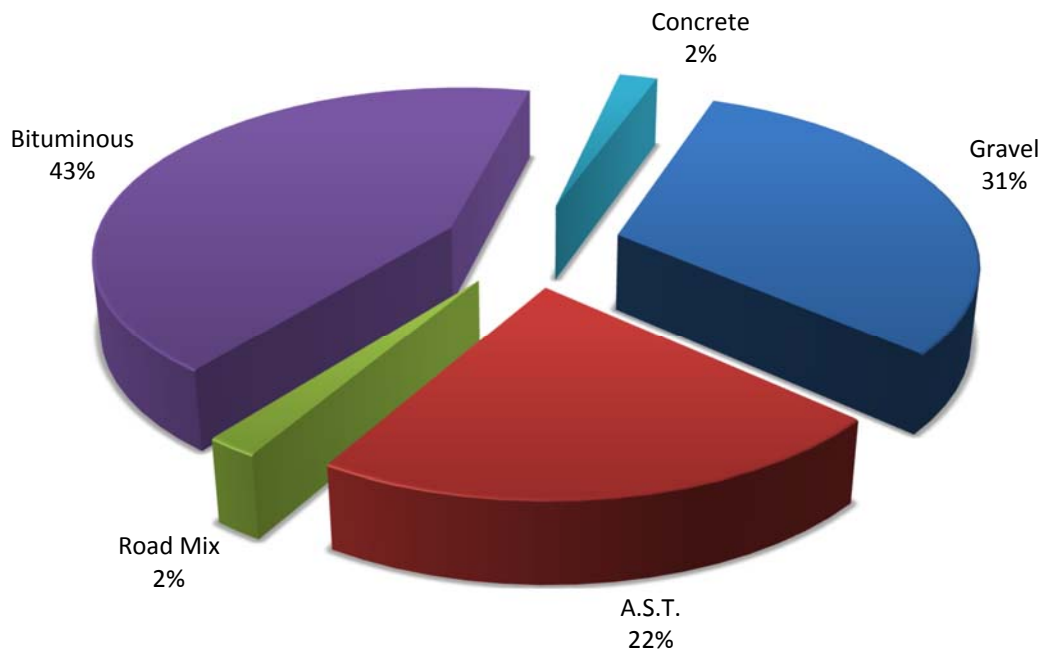
## 2016/2017 Summary of Surface Types

The following graphs show section distance kilometers of surface type by highway and road systems and percentages of surface types of the total highway and road systems:

### Provincial Trunk Highways and Roads

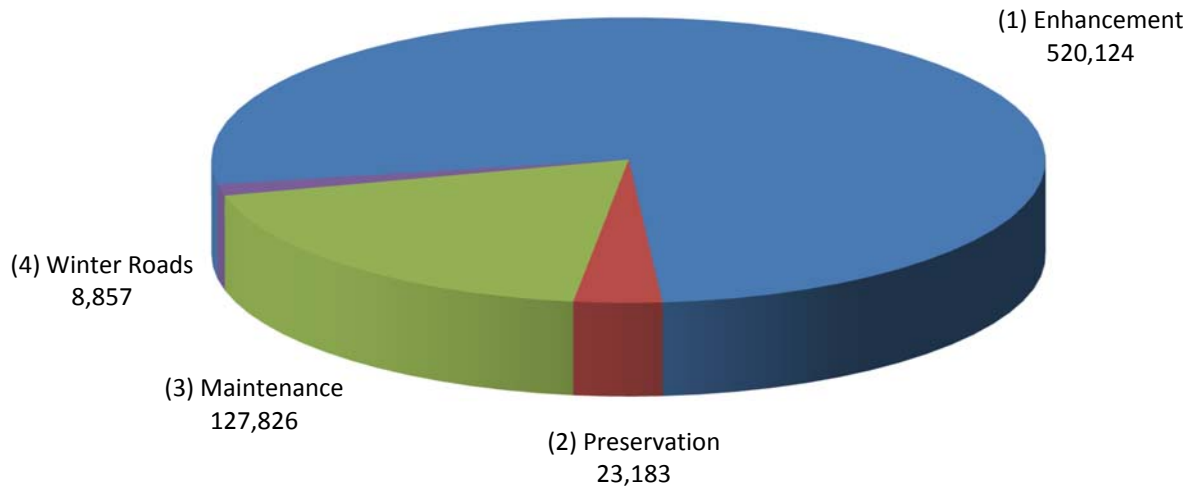


### Percentage of Total Highways and Road Systems





**Road Related Expenditures - \$679,990  
\$(000s)**



(1) Enhancement activities or projects are those that add to the existing highway infrastructure (increase the accounting useful life of the asset) or add a new asset. These projects or activities are proactive in nature and are funded from the annual Part “B” program (see page 102).

Examples of enhancement activities include:

- Construction of New Highways or Roads
- Widen Grade and Shoulder Gravel
- Granular Base Course
- High Performance Chip Seal
- Culvert Replacement
- Bituminous Pavement
- Concrete Pavement
- Microsurfacing

(2) Preservation costs are those costs related to treatments, repairs and/or replacements of highway infrastructure fixtures to ensure the asset life expectancy is met and generally extended without enhancing the assets original structural design capacity. The treatments, repairs and/or replacements generally are of a proactive nature in the form of preventative maintenance activities and are funded from the annual Part “A” program (see page 86).

Examples of preservation activities include:

- Rout and Crackfill
- Sealcoating
- Bituminous Levelling

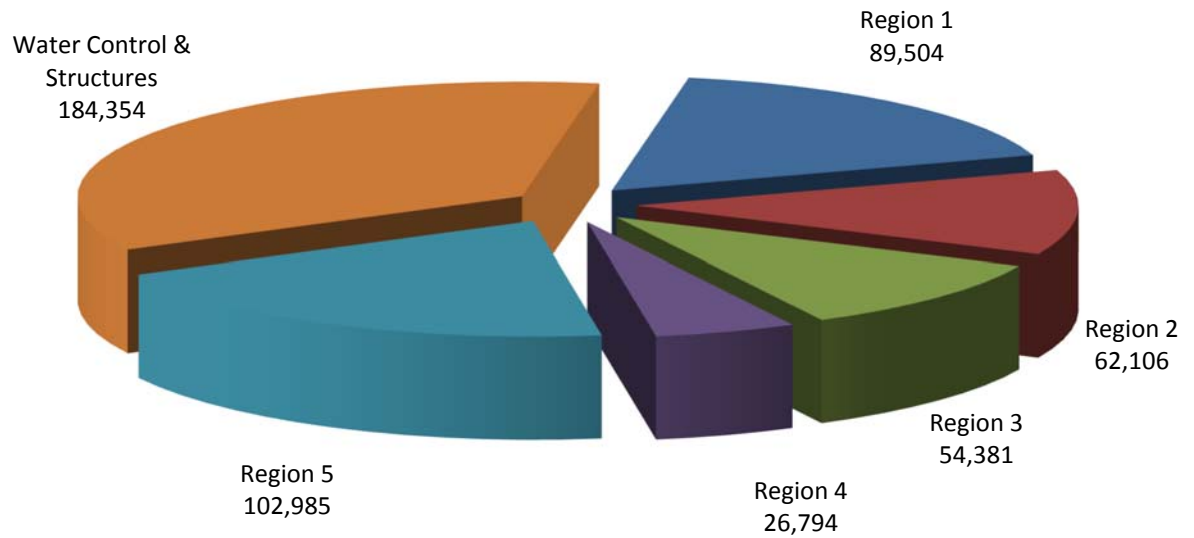
(3) Maintenance costs relate to servicing, repairing and/or treatments provided to ensure the continuing safe and efficient use of Manitoba's transportation asset infrastructure on an annual basis. Those services, repairs and/or treatments generally are of a reactive nature and are funded from the annual maintenance program - Part "A" (see page 86).

Examples of maintenance activities include:

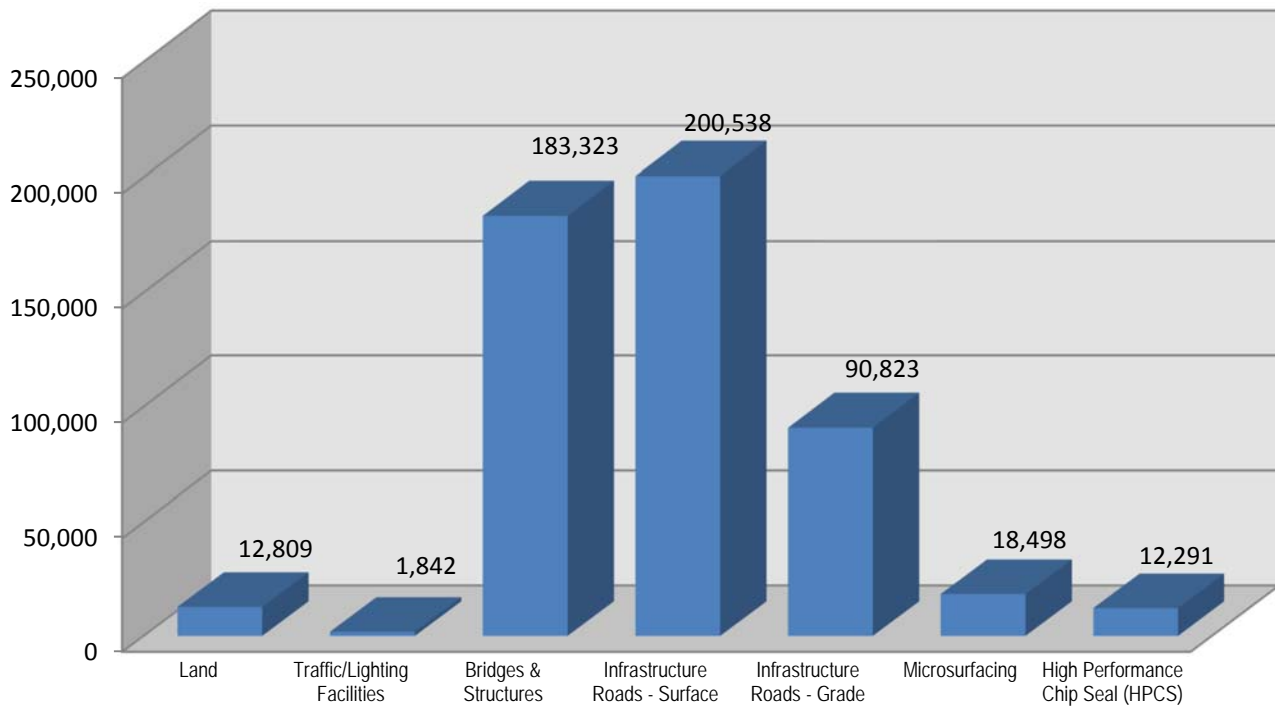
- Snow Clearing
- Patching
- Sanding
- Salting and De-icing
- Brushing
- Gravel Road Maintenance

(4) The department has been funding and administering the construction and maintenance of winter roads through contracts with First Nations and other local groups since 1979 (see page 93).

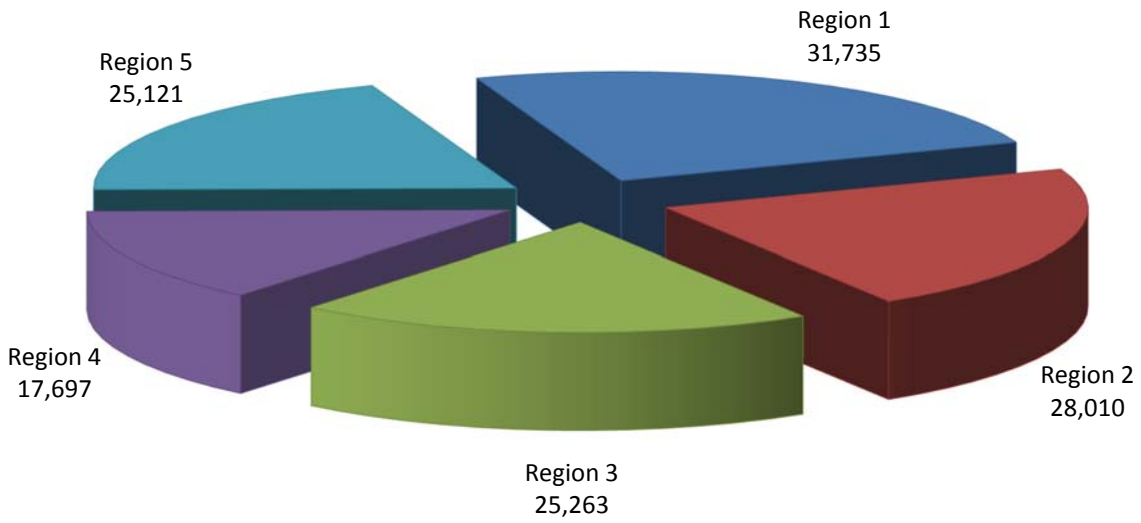
**Enhancement Expenditures by Branch - \$520,124  
\$(000s)**



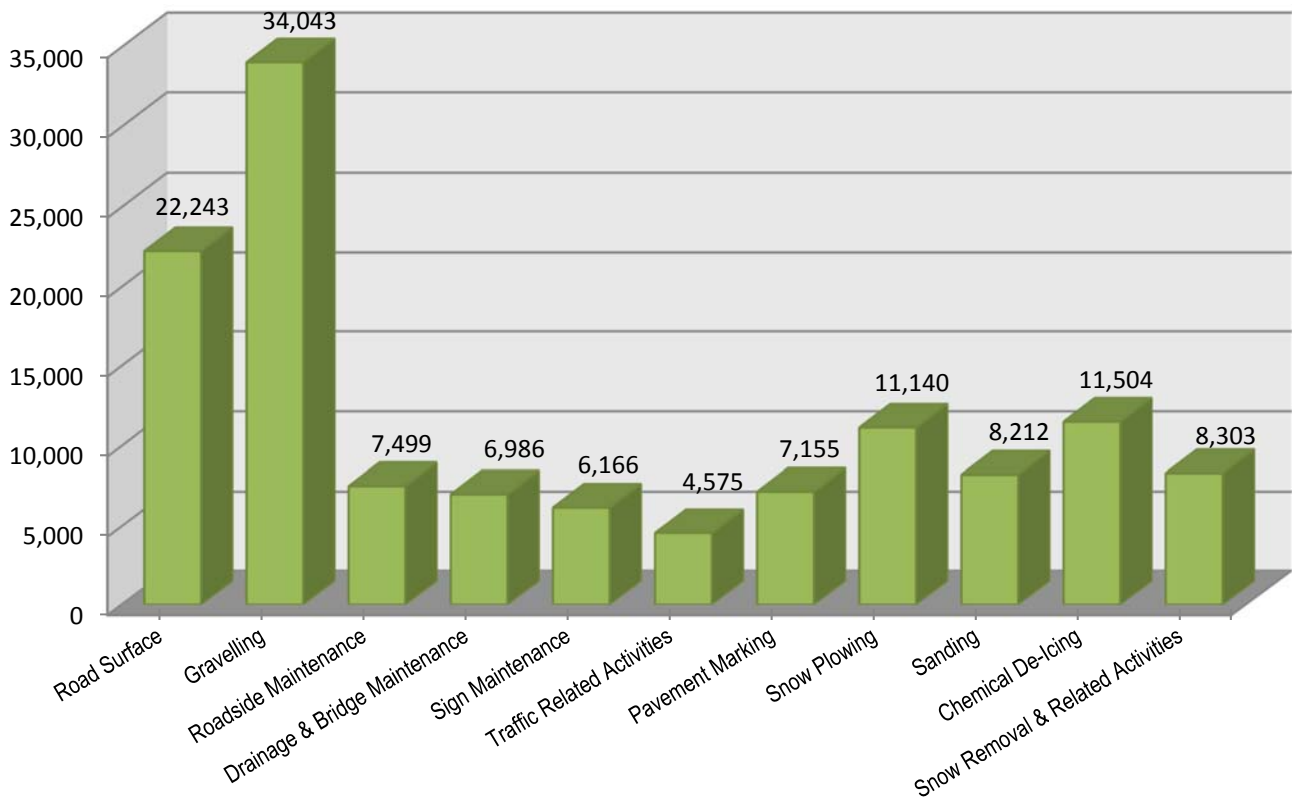
**Enhancement Expenditures by Activity - \$520,124  
\$(000s)**



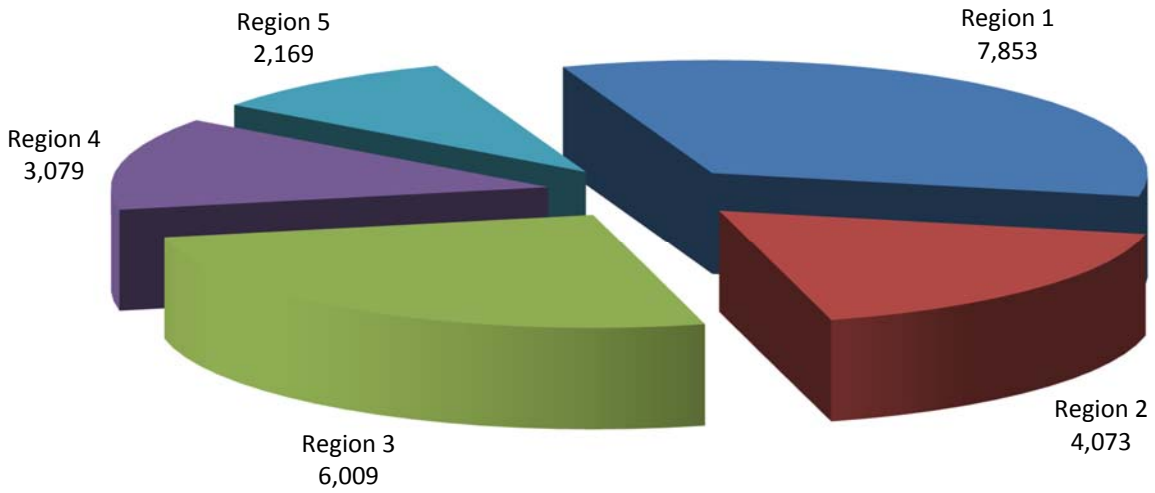
**Maintenance Expenditures by Region - \$127,826  
\$(000s)**



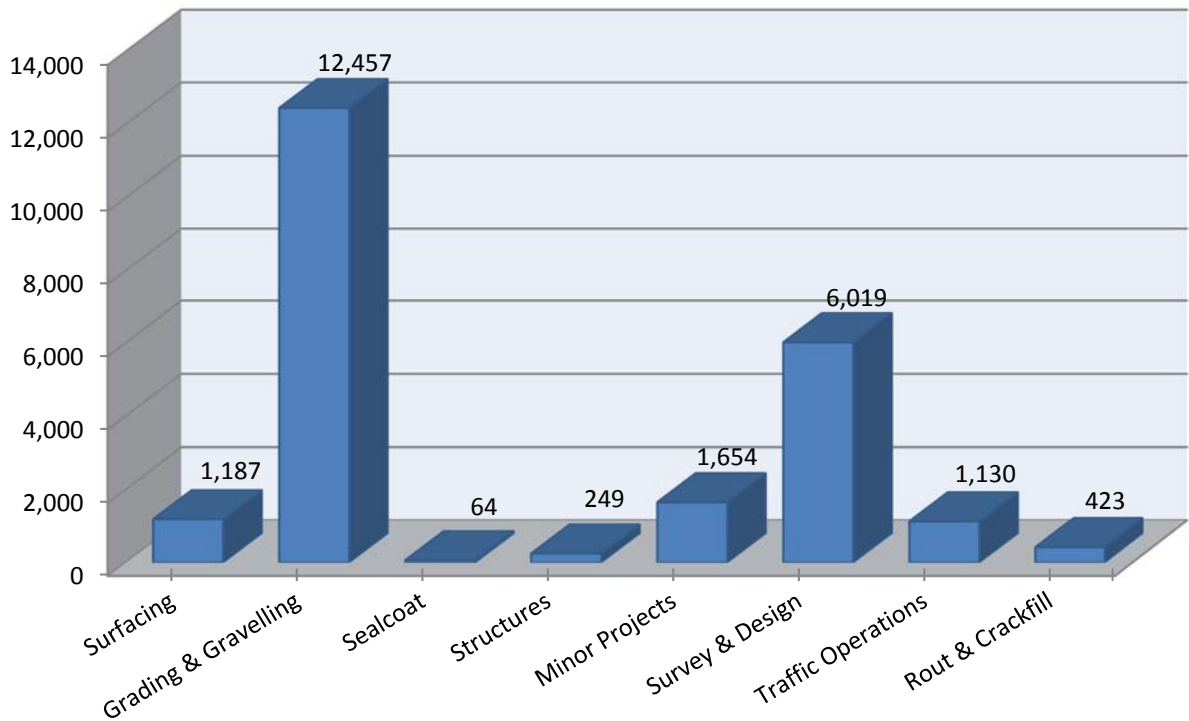
**Maintenance Expenditure by Activity - \$127,826  
\$(000s)**



**Preservation Expenditures by Region - \$23,183  
\$(000s)**



**Preservation Expenditures by Activity - \$23,183  
\$(000s)**



**PART A – OPERATING EXPENDITURE**  
**DEPARTMENT OF INFRASTRUCTURE AND TRANSPORTATION**  
**RECONCILIATION STATEMENT**

\$(000s)

<b>DETAILS</b>	<b>2016/17 ESTIMATES</b>
2016/2017 MAIN ESTIMATES	\$625,093
Allocation of functions from:	
- Internal Services Adjustments	1,596
<b>2016/2017 ESTIMATE</b>	<b>\$626,689</b>

**Department of Infrastructure**

**Expenditure Summary**

for fiscal year ended March 31, 2017

with comparative figures for the previous fiscal year (\$000s)

Estimate 2016-17			Actual 2016-17	Actual 2015-16	Increase (Decrease)	Expl No.
	15-1	Administration and Finance				
51	(a)	Minister's Salary:	51	36	15	1
	(b)	Executive Support:				
892		1. Salaries and Employee Benefits	876	787	89	
140		2. Other Expenditures	108	138	(30)	
	(c)	Corporate Information and Strategic Initiatives				
1,583		1. Salaries and Employee Benefits	1,422	1,772	(350)	
592		2. Other Expenditures	456	580	(124)	
	(d)	Financial Services:				
1,544		1. Salaries and Employee Benefits	1,514	1,510	4	
352		2. Other Expenditures	221	247	(26)	
	(e)	Information Technology Services:				
1,821		1. Salaries and Employee Benefits	1,484	1,428	56	
484		2. Other Expenditures	126	125	1	
	(f)	Occupational Safety, Health and Risk Management:				
695		1. Salaries and Employee Benefits	619	605	14	
52		2. Other Expenditures	96	88	8	
	(g)	Government Air Services:				
9,634		1. Salaries and Employee Benefits	9,429	9,518	(89)	
9,678		2. Other Expenditures	5,865	6,651	(786)	2
(18,373)		3 Less: Recoverable from other appropriations	(14,195)	(14,968)	773	
36	(h)	Land Value Appraisal Commission:	27	57	(30)	
-	(i)	Crown Lands and Property Agency:	-	-	-	
9,181	Total 15-1		8,099	8,574	(475)	
	15-2	Highways and Transportation Programs				
	(a)	Division Executive Office:				
1,564		1. Salaries and Employee Benefits	1,203	1,119	84	
137		2. Other Expenditures	243	218	25	
(246)		3. Less: Recoverable from other appropriations	(217)	(188)	(29)	
	(b)	Operations and Contracts:				
		1. Special Operations:				
569		(a) Salaries and Employee Benefits	519	518	1	
212		(b) Other Expenditures	148	164	(16)	
		2. Contracts:				
1,904		(a) Salaries and Employee Benefits	1,241	1,552	(311)	3
196		(b) Other Expenditures	258	274	(16)	
		3. Construction Support Services:				
951		(a) Salaries and Employee Benefits	1,290	1,108	182	
102		(b) Other Expenditures	120	232	(112)	
		4. Operational Services:				
801		(a) Salaries and Employee Benefits	769	726	43	
62		(b) Other Expenditures	95	103	(8)	
		5. Capital Project Team:				
680		(a) Salaries and Employee Benefits	1,467	539	928	4
240		(b) Other Expenditures	476	86	390	5
(2,184)		6 Less: Recoverable from other appropriations	(3,017)	(1,700)	(1,317)	6
	(c)	Water Management and Structures:				
		1. Division and Administrative Support				
1,382		(a) Salaries and Employee Benefits	1,571	1,008	563	7
300		(b) Other Expenditures	198	109	89	
		2. Structures				
3,246		(a) Salaries and Employee Benefits	3,223	3,400	(177)	
412		(b) Other Expenditures	487	631	(144)	
		3. Water Operations				
3,394		(a) Salaries and Employee Benefits	3,652	2,946	706	8
626		(b) Other Expenditures	730	649	81	
		4 Hydrologic Forecasting and Water Management				
2,637		(a) Salaries and Employee Benefits	2,546	1,917	629	9

Department of Infrastructure

Department of Infrastructure

Expenditure Summary

for fiscal year ended March 31, 2017

with comparative figures for the previous fiscal year (\$000s)

Estimate 2016-17		Actual 2016-17	Actual 2015-16	Increase (Decrease)	Expl No.
396	(b) Other Expenditures	309	634	(325)	10
(4,370)	5 Less: Recoverable from other appropriations	(5,248)	(4,666)	(582)	
	(d) Motor Carrier:				
5,693	1. Salaries and Employee Benefits	5,474	5,304	170	
1,387	2. Other Expenditures	1,472	1,370	102	
	(e) Regional Offices:				
	1. Eastern Region Office - Region 1:				
3,465	(a) Salaries and Employee Benefits	2,769	3,376	(607)	
678	(b) Other Expenditures	21,062	703	20,359	11
	2. South Central Region Office - Region 2:				
2,472	(a) Salaries and Employee Benefits	2,114	2,202	(88)	
474	(b) Other Expenditures	379	364	15	
	3. South Western Region Office - Region 3:				
2,791	(a) Salaries and Employee Benefits	2,638	2,868	(230)	
519	(b) Other Expenditures	445	497	(52)	
	4. West Central Region Office - Region 4:				
2,285	(a) Salaries and Employee Benefits	1,974	1,991	(17)	
409	(b) Other Expenditures	391	465	(74)	
	5. Northern Region Office - Region 5:				
2,305	(a) Salaries and Employee Benefits	1,907	1,930	(23)	
497	(b) Other Expenditures	354	327	27	
(3,778)	6. Less: Recoverable from other appropriations	(5,341)	(4,814)	(527)	
	(f) Other Jurisdictions:				
2,816	1. Gross Expenditures	1,759	2,467	(708)	
(1,200)	2. Less: Recoverable from other appropriations	(134)	(74)	(60)	
	(g) Planning, Design and Property Services:				
	1. Planning and Design:				
2,076	(a) Salaries and Employee Benefits	1,870	2,013	(143)	
292	(b) Other Expenditures	269	299	(30)	
	2. Property Services:				
309	(a) Salaries and Employee Benefits	303	245	58	
14	(b) Other Expenditures	22	20	2	
(148)	3. Less: Recoverable from other appropriations	(167)	(128)	(39)	
	(h) Northern Airports and Marine Services:				
1,312	1. Salaries and Employee Benefits	1,027	1,055	(28)	
498	2. Other Expenditures	511	475	36	
	(i) Materials Engineering:				
2,953	1. Salaries and Employee Benefits	2,761	2,769	(8)	
430	2. Other Expenditures	428	417	11	
(1,513)	3. Less: Recoverable from other appropriations	(1,194)	(1,452)	258	
	(j) Transportation Policy:				
2,871	1. Salaries and Employee Benefits	2,529	2,567	(38)	
1,451	2. Other Expenditures	635	840	(205)	
	(k) Traffic Engineering:				
1,732	1. Salaries and Employee Benefits	1,852	1,594	258	
267	2. Other Expenditures	264	278	(14)	
(777)	3. Less: Recoverable from other appropriations	(317)	(267)	(50)	
(55)	4. Less: Recoverable from other appropriations	-	(47)	47	
	(l) Boards and Commissions:				
	1. Motor Transport and Highway Traffic Boards:				
336	(a) Salaries and Employee Benefits	178	233	(55)	
113	(b) Other Expenditures	91	132	(41)	
	2. Licence Suspension Appeal Board and Medical Review Committee:				
371	(a) Salaries and Employee Benefits	380	321	59	
49	(b) Other Expenditures	76	62	14	
46,405	Total 15-2	60,844	41,781	19,063	



**Department of Infrastructure**

**Expenditure Summary**

for fiscal year ended March 31, 2017

with comparative figures for the previous fiscal year (\$000s)

Estimate 2016-17			Actual 2016-17	Actual 2015-16	Increase (Decrease)	Expl No.
	15-3	Infrastructure Works				
	(a)	Maintenance and Preservation of PTH's, PR's and related projects:				
171,834		1. Gross Expenditures	176,939	176,863	76	
(1,500)		2. Less: Recoverable from other appropriations	(342)	(1,180)	838	12
(25,266)		3. Less: Recoverable from Part B - Capital Investment	(25,529)	(28,851)	3,322	13
	(b)	Maintenance and Preservation of Waterway Control Projects:				
16,623		1. Gross Expenditures	15,420	20,880	(5,460)	14
(1,880)		2. Less: Recoverable from other appropriations	(1,084)	(844)	(240)	
(4,892)		3. Less: Recoverable from Part B - Capital Investment	(4,032)	(4,434)	402	
3,677	(c)	Flood Mitigation Initiatives	2,080	2,764	(684)	
	(d)	Northern Airports and Marine Services Operations				
11,737		1. Northern Airports Operations	12,289	11,546	743	
4,498		2. Marine Services Operations	3,831	3,901	(70)	
(325)		3. Less: Recoverable from Part B - Capital Investment	(298)	(266)	(32)	
9,625	(e)	Winter Roads:	8,857	8,288	569	
184,131		Total 15-3	188,131	188,667	(536)	
	15-4	Emergency Management and Public Safety				
	(a)	Emergency Measures Organization				
2,187		1. Salaries and Employee Benefits	2,203	2,322	(119)	
567		2. Other Expenditures	551	522	29	
2,754		Total 15-4	2,754	2,844	(90)	
	15-5	Costs Related to Capital Assets				
	(a)	Air Services:				
7,625		1. Amortization Expense	7,375	8,467	(1,092)	
6,401		2. Interest Expense	6,294	6,638	(344)	
(7,176)		3. Less: Recoverable from other appropriations	(7,176)	(8,023)	847	
	(b)	General Assets:				
6,401		1. Amortization Expense	6,059	5,468	591	
4,192		2. Interest Expense	4,235	3,827	408	
	(c)	Infrastructure Assets - Provincial Roads and Highways:				
190,180		1. Amortization Expense	190,256	173,344	16,912	
176,924		2. Interest Expense	173,411	159,113	14,298	
(16,817)		3. Less: Recoverable from other appropriations	(16,817)	(16,817)		
	(d)	Infrastructure Assets - Water Related:				
5,792		1. Amortization Expense	5,903	4,624	1,279	
10,696		2. Interest Expense	9,448	9,843	(395)	
384,218		Total 15-5	378,988	346,484	32,504	15
626,689		Total Infrastructure and Transportation	638,816	588,350	50,466	

## Expenditure Variance Explanations

Comparison of the 2016/2017 actuals to the 2015/2016 actuals

- 1. 15-1(a): Minister's Salary – \$15 INCREASE**  
The Minister's salary was established by regulation made the Manitoba Commissioner for MLA Pay, Allowances, and Retirement Benefits.
- 2. 15-1(g)2: Government Air Services: Other Expenditures – \$(786) DECREASE**  
Lower flight activity in 2016/17.
- 3. 15-2(b)2: Contracts: Salaries and Employee Benefits – \$(311) DECREASE**  
Decrease is due higher vacancy rate in 2016/17.
- 4. 15-2(b)5: Capital Projects Team: Salaries and Employee Benefits – \$928 INCREASE**  
Increase due to transition of east side road operations into the department; costs were recoverable from Part B – Capital Investment.
- 5. 15-2(b)5: Capital Projects Team: Other Expenditures – \$390 INCREASE**  
Increase due to transition of east side road operations into the department; costs were recoverable from Part B – Capital Investment.
- 6. 15-2(b)5: Capital Projects Team: Recoverable from other appropriations – \$(1,317) INCREASE**  
Increase is due to the recovery of work related to the east side roads.
- 7. 15-2(c)1: Division and Administrative Support: Salaries and Employee Benefits – \$563 INCREASE**  
Increase was primarily due to retirements, general salary increase, and special pay increases for employees within the Manitoba Association of Government Engineers.
- 8. 15-2(c)3: Water Operations: Salaries and Employee Benefits – \$706 INCREASE**  
Increases are primarily due to retirements, general salary increase, and special pay increases for employees within the Manitoba Association of Government Engineers.
- 9. 15-2(c)4: Hydrologic Forecasting and Water Management: Salaries and Employee Benefits – \$629 INCREASE**  
Increase was primarily due to retirements, general salary increase, and special pay increases for employees within the Manitoba Association of Government Engineers.
- 10. 15-2(c)4: Hydrologic Forecasting and Water Management: Other Expenditures – \$(325) DECREASE**  
Expenditures in 2015/16 included costs related to temporary office trailers, relocation of staff and legal costs that are no longer paid out of this branch.
- 11. 15-2(e)1: Eastern Region Office - Steinbach: Other Expenditures – \$20,359 INCREASE**  
The increase relates to east side road asset write down due to the realignment of projects.
- 12. 15-3(a)2: Maintenance and Preservation of PTH's, PR's and related projects: Recoverable from other appropriations – \$838 DECREASE**  
Variance is due to lower recoverable maintenance and preservation costs.
- 13. 15-3(a)3: Maintenance and Preservation of Provincial Trunk Highways, Provincial Roads and Related Projects: Recoverable from Part B - Capital Investment – \$3,322 DECREASE**  
Variance is due to lower recoverable maintenance and preservation costs.
- 14. 15-3(b)1: Maintenance and Preservation of Waterway Control Projects: Gross Expenditures – \$(5,460) DECREASE**  
Decrease is due to delays in environment approvals and engineering designs.
- 15. 15-5: Costs Related to Capital Assets – \$32,504 INCREASE**  
Amortization and interest increase due to growth of asset portfolio year over year as infrastructure work was completed.

**Revenue Summary**

for fiscal year ended March 31, 2017

with comparative figures for the previous fiscal year (\$000s)

Actual 2015- 2016	Actual 2016- 2017	Increase/ (Decrease)	Expl. No.		Actual 2016- 2017	Estimate 2016- 2017	Variance	Expl. No.
<b>Government of Canada:</b>								
8,175	4,187	(3,988)	A1	(a)	4,187	7,621	(3,434)	B1
242	242			(b)	242	244	(2)	
4	4			(c)	4	10	(6)	
130	-	(130)		(d)		0		
1,076	891	(185)		(e)	891	0	891	B2
2,564	12,072	9,508	A2	(f)	12,072	39,079	(27,007)	B3
<b>12,191</b>	<b>17,396</b>	<b>5,205</b>		<b>Total Government of Canada</b>	<b>17,396</b>	<b>46,954</b>	<b>(29,558)</b>	
<b>Other Revenue:</b>								
157,424	160,488	3,064	A3	(a)	160,488	152,270	8,218	B4
8,186	3,513	(4,673)	A4	(b)	3,513	8,280	(4,767)	B5
20,718	20,915	197		(c)	20,915	19,742	1,173	
148	175	27		(d)	175	104	71	
6,373	9,969	3,596	A5	(e)	9,969	838	9,131	B6
<b>192,849</b>	<b>195,060</b>	<b>2,211</b>		<b>Total Other Revenue</b>	<b>195,060</b>	<b>181,234</b>	<b>13,826</b>	
<b>205,040</b>	<b>212,456</b>	<b>7,416</b>		<b>TOTAL DEPARTMENTAL REVENUE</b>	<b>212,456</b>	<b>228,188</b>	<b>(15,732)</b>	

## Revenue Variance Explanations

Comparison of the 2016/2017 actuals to the 2015/2016 actuals.

### GOVERNMENT OF CANADA

**A1. Winter Roads – \$(3,988) DECREASE**

The amount of costs shareable with Canada were lower than expected which resulted in a decrease in revenue from Canada.

**A2. Infrastructure Renewal– \$9,508 INCREASE**

Higher shared cost program expenditures in 2016/2017 versus 2015/16 resulted in greater revenue from Canada.

### OTHER REVENUE

**A3. Automobile and Motor Carrier Licences and Fees – \$3,064 INCREASE**

Increase in volume of transactions resulted in higher revenue.

**A4. Cost Recovery from Municipalities and Other Third Parties – \$(4,673) DECREASE**

Fewer cost recoverable expenditures were incurred in 2016/2017 as they vary based on work requests from third parties as well as the department's capacity to undertake the work.

**A5. Sundry - \$3,596 INCREASE**

Primarily related to revenue transferred to the department as a result of the transition of East Side Road Authority - \$5,314 and Manitoba Floodway - \$1,901, offset by settlement of South Perimeter Bridge for \$3,750 in 2015/16.

## Revenue Variance Explanations

Comparison of the 2016/2017 actuals to the 2016/2017 estimates.

### GOVERNMENT OF CANADA

**Winter Roads – \$(3,434) DECREASE**

**B1.** The amount of costs shareable with Canada were lower than expected which resulted in lower than expected revenue from Canada.

**B2. Airport Capital Assistance Program – \$891 INCREASE**

No revenue was budgeted in the 2016/2017 estimates.

**B3. Infrastructure Renewal – (\$27,007) DECREASE**

Expenditures in 2016/2017 eligible to be shared with Canada were less than expected which resulted in lower than expected revenue from Canada.

### OTHER REVENUE

**B4. Automobile and Motor Carrier Licences and Fees – \$8,218 INCREASE**

Increase in volume of transactions resulted in higher than expected revenue.

**B5. Cost Recovery from Municipalities and Other Third Parties – \$(4,767) DECREASE**

Fewer cost recoverable expenditures were incurred in 2016/2017 than planned.

**B6. Sundry – \$9,131 INCREASE**

Primarily related to trust fund balances transferred to core government from East Side Road Authority - \$5,314 and Manitoba Floodway - \$1,901, Air Services revenue of \$1,793 from Manitoba Hydro and \$0.6 in Northern Airport fees.

**Department of Infrastructure****Revenue Summary**

for fiscal year ended March 31, 2017

with comparative figures for the previous fiscal year (\$000s)

**Emergency Expenditures**

Actual 2015- 2016	Actual 2016- 2017	Increase/ (Decrease)	Expl. No.		Actual 2016- 2017	Estimate 2016- 2017	Variance	Expl. No.
13,583	141,249	127,666	1	<b>Government of Canada:</b>				
				Other: Emergency Expenditures	150,355	152,559	(2,224)	2
				<b>Other Revenue:</b>				
0	3	3		Sundry	3		3	3
<b>13,583</b>		<b>127,669</b>		<b>TOTAL REVENUE</b>	<b>150,358</b>	<b>152,559</b>	<b>(2,201)</b>	

*Explanation:*

1. Revenue increase in 2016/2017 is due to increase in shareable costs for various events under the Disaster Financial Assistance Arrangements (DFAA).
2. Actual shared cost expenditures were lower than anticipated in 2016/2017 which resulted in lower revenue from Canada, due to the timing of federal approval for the DFAA in 2016/2017.
3. Municipality contribution for community Flood Protection Program .

**MANITOBA INFRASTRUCTURE**  
**FIVE YEAR EXPENDITURE AND STAFFING SUMMARY BY APPROPRIATION (\$000)**  
For the fiscal years ended March 31, 2013 - March 31, 2017\*

MAIN APPROPRIATION	Actual/* Adjusted Expenditures									
	2012/13		2013/14		2014/15		2015/16		2016/17	
	FTEs	\$000s	FTEs	\$000s	FTEs	\$000s	FTEs	\$000s	FTEs	\$000s
15-1 Corporate Services	158.00	7,740	168.00	8,484	169.00	8,949	165.00	8,574	163.00	8,099
15-2 Highways, Transportation and Water management Programs	586.90	46,563	573.90	44,251	561.90	49,996	582.90	43,089	599.90	60,844
15-3 Infrastructure Works	1,068.35	195,566	1,066.35	176,782	1,077.35	182,350	1,159.35	188,667	1,150.35	188,131
15-4 Emergency Management and Public Safety	24.00	2,440	24.00	2,614	24.00	2,476	25.00	2,775	24.00	2,754
15-5 Costs Related to Capital Assets		300,311		326,207		361,905		346,484		378,988
<b>TOTAL APPROPRIATIONS</b>	<b>1,837.25</b>	<b>552,620</b>	<b>1,832.25</b>	<b>558,338</b>	<b>1,832.25</b>	<b>605,676</b>	<b>1,932.25</b>	<b>589,589</b>	<b>1,937.25</b>	<b>638,816</b>

\* Actual expenditures have been adjusted for comparative purposes.  
Adjustments are for:

i) 2015 / 2016: Transfer of Protective Services to Justice

ii) 2014 / 2015: Transfer of Accommodation Services to Finance  
Transfer of Procurement Services to Finance  
Transfer of Office of the Lieutenant Governor to Finance

\*Adjusted figures reflect historical data on a comparable basis in those appropriations affected by reorganization

**MANITOBA INFRASTRUCTURE  
EMERGENCY EXPENDITURES 27-1  
FIVE YEAR EXPENDITURE SUMMARY BY APPROPRIATION (\$000)  
For the fiscal years ended March 31, 2013 - March 31, 2017**

APPROPRIATION	Actual/*Adjusted Expenditures									
	2012/13		2013/14		2014/15		2015/16		2016/17	
	FTEs	\$000s	FTEs	\$000s	FTEs	\$000s	FTEs	\$000s	FTEs	\$000s
Disaster Assistance		128,347		197,496		127,012		61,350		8,563
Forest Fires		40,667		47,460		24,092		43,629		27,661
Miscellaneous						20,092		13,220		69,632
<b>TOTAL</b>		<b>169,014</b>		<b>244,956</b>		<b>171,196</b>		<b>118,199</b>		<b>105,856</b>

\*Adjusted figures reflect historical data on a comparable basis in those appropriations affected by a reorganization.

## Manitoba Infrastructure 2016/2017 Annual Report Performance Measures

The following section provides information on key performance measures for the department for the 2016/2017 reporting year. All Government of Manitoba departments include a Performance Measurement section, in a standardized format, in their Annual Reports. Performance indicators in departmental Annual Reports are intended to complement financial results and provide Manitobans with meaningful and useful information about government activities, and their impact on the province and its citizens.

What is being measured and using what indicator?	Why is it important to measure this?	What is the starting point? (baseline data and year)	What is the 2016/2017 (current year) result or most recent data?	What is the trend over time?	Comments/recent actions/report links
<p>The ride condition of Manitoba's paved highways as measured by the International Roughness Index (IRI) in terms of kilometers and percentage in Good and Poor condition.</p>	<p>Improvements to this measure demonstrate better highways for the travelling public and commercial carriers indicating a commitment to providing a great safe transportation network and public infrastructure.</p>	<p>10/11 International Roughness Index (IRI):</p> <p>Good – 9,352 km or 73.4%</p> <p>Poor – 3,315 km or 26.0%</p> <p>No data – 70 km or 0.6%</p>	<p>16/17: International Roughness Index (IRI):</p> <p>Good – 9,679 km or 75.1%</p> <p>Poor – 3,159 km or 24.5%</p> <p>No data – 47 km or 0.4%</p>	<p>'Good' road conditions are increasing compared to the 10/11 baseline year.</p>	<p>The IRI was developed by the World Bank in the 1980's and is used to measure the quality of ride or surface smoothness of pavement.</p> <p>The Transportation Association of Canada (TAC) developed the 'Performance Measures for Highway Road Networks' report in March 2012 to identify performance measures and to recommend best practices.</p> <p>The key performance measure identified was IRI and it has been categorized as; very good (&lt;1), good (&gt;1 &lt;1.75), fair (&gt;=1.75&lt;2.8), and poor (&gt;2.8).</p> <p>For reporting purposes very good, good, and fair have been combined to represent 'good.'</p>
<p>The number of Km of highways renewed is measured by the length of surfaced highways being annually upgraded and/or renewed, and based on the</p>	<p>MIT is responsible for approximately 13,000km of surfaced highway network. The length of highway that is renewed every year is an indicator of the</p>	<p>11/12 – 1,220km 12/13 – 1,330km 13/14 – 1,050km 14/15 – 1,230km 15/16 – 1,420km 16/17 – 1,160km (target)</p>	<p>16/17 – 960km</p>	<p>Fluctuating</p>	<p>The amount of surfaced highway being renewed fluctuates mainly due to the multiyear nature of many of our surfacing projects, weather and contractor availability.</p>



<b>What is being measured and using what indicator?</b>	<b>Why is it important to measure this?</b>	<b>What is the starting point? (baseline data and year)</b>	<b>What is the 2016/2017 (current year) result or most recent data?</b>	<b>What is the trend over time?</b>	<b>Comments/recent actions/report links</b>
completed projects in the annual Highway Capital Program	health of the highway network				
Condition of provincial dams using an Asset Condition Risk Index	Public safety and cost effective asset management	2009 Average Condition Risk Index = 2.24	2016/17 Condition Risk Index = 2.18	Minor change in condition	Scale of 1 to 5; higher score is poor condition and higher risk
Inspection frequency on provincial dams	Public safety and cost effective asset management	2009 (first full year of this program): 83 engineering inspections completed  2011 (first full year of the routine maintenance inspection program): 139 routine maintenance inspections completed	2016/17: 77 engineering inspections and 221 routine maintenance inspections completed	Improvement in achieving target frequency for routine inspection and on target for frequency of engineering inspections	Frequency target varies from year to year as some sites are on a bi-annual inspection schedule
Inspection frequency on provincial dikes	Public safety and cost effective asset management	2009: 14 engineering inspections completed	2016/17: 18 engineering inspections completed	Target frequency achieved	Frequency target varies from year to year because sites are on a bi-annual inspection schedule by region
Inspection activity related to provincial bridge assets	Public safety and cost effective asset management	2015/16: <ul style="list-style-type: none"> <li>• 1,305 bridges and structures with Level 1 inspections</li> <li>• 646 bridges and structures with Level 2 inspections</li> </ul>	2016/17: <ul style="list-style-type: none"> <li>1,369 bridges and structures with Level 1 inspections</li> <li>945 bridges and structures with Level 2 inspections</li> </ul>	Targeting inspection frequency to meet provincial policy	Department is working towards having a condition index for this asset class

## **The Public Interest Disclosure (Whistleblower Protection) Act**

The Public Interest Disclosure (Whistleblower Protection) Act came into effect in April 2007. This law gives employees a clear process for disclosing concerns about significant and serious matters (wrongdoing) in the Manitoba public service, and strengthens protection from reprisal. The Act builds on protections already in place under other statutes, as well as collective bargaining rights, policies, practices and processes in the Manitoba public service.

Wrongdoing under the Act may be: contravention of federal or provincial legislation; an act or omission that endangers public safety, public health or the environment; gross mismanagement; or, knowingly directing or counseling a person to commit a wrongdoing. The Act is not intended to deal with routine operational or administrative matters.

A disclosure made by an employee in good faith, in accordance with the Act, and with a reasonable belief that wrongdoing has been or is about to be committed is considered to be a disclosure under the Act, whether or not the subject matter constitutes wrongdoing. All disclosures receive careful and thorough review to determine if action is required under the Act, and must be reported in a department's annual report in accordance with Section 18 of the Act.

The following is a summary of disclosures received by Manitoba [department name] and [list the special operating agencies under the department] for fiscal year 2016/2017:

<b>Information Required Annually (per Section 18 of The Act)</b>	<b>Fiscal Year 2016/2017</b>
The number of disclosures received, and the number acted on and not acted on. <i>Subsection 18(2)(a)</i>	1 disclosure was received
The number of investigations commenced as a result of a disclosure. <i>Subsection 18(2)(b)</i>	1 investigation was commenced as a result of a disclosure
In the case of an investigation that results in a finding of wrongdoing, a description of the wrongdoing and any recommendations or corrective actions taken in relation to the wrongdoing, or the reasons why no corrective action was taken. <i>Subsection 18(2)(c)</i>	No wrongdoing was found under the act