



**MANAGEMENT'S DISCUSSION  
AND ANALYSIS**

**ON FORM 51-102F1**

**YEAR ENDED**

**AUGUST 31, 2017**

**October 26, 2017**



## TABLE OF CONTENTS

<b>INTRODUCTION</b> .....	1
Caution Concerning Forward-Looking Information .....	1
Our Business .....	1
Financial Strategy and Rate Regulation .....	2
Selected Annual Financial Information .....	3
Financial Highlights .....	8
Significant Financial Matters .....	11
<b>RESULTS OF OPERATIONS</b> .....	16
Revenue .....	16
Operating Expenses .....	19
Other (Income) and Expenses (Including Income Tax Expense) .....	21
Net Movement in Regulatory Deferral Accounts Related to Net Income (Loss) .....	22
Movements in Rate Stabilization Account .....	23
Other Comprehensive Income (Loss) .....	25
Amounts Considered for Rate Setting Purposes .....	26
Financial Outlook .....	27
Earnings and Cash Flow Coverage .....	29
Related Party Transactions .....	30
<b>SUMMARY OF QUARTERLY RESULTS</b> .....	31
Quarterly Financial Information (unaudited) .....	31
Discussion of Quarterly Results .....	32
<b>LIQUIDITY AND CAPITAL RESOURCES</b> .....	32
Cash flows for the year ended August 31, 2017 .....	33
Liquidity and Financing Strategy .....	34
Credit Ratings .....	36
Cash Requirements .....	38
Capital Management .....	42
Financial Instruments and Risk Management .....	43
<b>CHANGES IN ACCOUNTING POLICIES</b> .....	46
Future Accounting Pronouncements .....	46
<b>CRITICAL ACCOUNTING ESTIMATES AND JUDGMENTS</b> .....	48
<b>DISCLOSURE CONTROLS AND PROCEDURES AND INTERNAL CONTROL OVER FINANCIAL REPORTING</b> .....	51

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
**(in millions of dollars)**

---

## **INTRODUCTION**

This management's discussion and analysis (MD&A) relates to the consolidated financial condition, results of operations, comprehensive income and cash flows for the year ended August 31, 2017 (fiscal 2017) of NAV CANADA (also referred to in this MD&A as we, our, us or the Company). It should be read in conjunction with our audited consolidated financial statements and the accompanying notes for the year ended August 31, 2017 (fiscal 2017 financial statements) as well as our 2017 Annual Information Form dated October 26, 2017 (fiscal 2017 AIF). Additional information about NAV CANADA, including our financial statements for fiscal 2017 and the year ended August 31, 2016 (fiscal 2016) and our fiscal 2017 AIF are filed on the System for Electronic Document Analysis and Retrieval (SEDAR) at [www.sedar.com](http://www.sedar.com).

Our financial statements are prepared in Canadian dollars (CDN) and in accordance with International Financial Reporting Standards (IFRS). Our Audit & Finance Committee reviewed this MD&A and our Board of Directors (the Board) approved it before it was filed.

### **Caution Concerning Forward-Looking Information**

This MD&A and, in particular, but without limitation, sections "INTRODUCTION – Significant Financial Matters: Air Traffic and Customer Service Charges", "RESULTS OF OPERATIONS – Revenue: Customer Service Charges", "RESULTS OF OPERATIONS – Financial Outlook", "LIQUIDITY AND CAPITAL RESOURCES – Cash Requirements: Pension Plans" and "LIQUIDITY AND CAPITAL RESOURCES – Cash Requirements: Capital Expenditures and Other Investments" of this MD&A, contain certain statements about NAV CANADA's future expectations. These statements are generally identified by words like "anticipate", "plan", "believe", "intend", "expect", "estimate", "approximate" and the like, as well as future or conditional verbs such as "will", "should", "would" and "could", or negative versions thereof. Because forward-looking statements involve future risks and uncertainties, actual results may be quite different from those expressed or implied in these statements. Examples include geopolitical unrest, terrorist attacks and the threat of terrorist attacks, war, epidemics or pandemics, natural disasters, weather patterns, environmental concerns, cyber security attacks, labour negotiations, arbitrations, workforce recruitment, training and retention, general aviation industry conditions, air traffic levels, the use of telecommunications and ground transportation as alternatives to air travel, capital market and economic conditions, the ability to collect customer service charges and reduce operating costs, the success of our investment in space-based aircraft surveillance through Aireon LLC (Aireon), credit losses on investments, changes in interest rates, changes in laws, tax changes, adverse regulatory developments or proceedings and lawsuits. Some of these risks and uncertainties are explained under "Risk Factors" in our fiscal 2017 AIF. The forward-looking statements contained in this MD&A represent our expectations as of October 26, 2017 and are subject to change after this date. Readers of this MD&A are cautioned not to place undue reliance on any forward-looking statements. We disclaim any intention or obligation to update or revise any forward-looking statements included in this document whether as a result of new information, future events or for any other reason, except as required by applicable securities legislation.

### **Our Business**

NAV CANADA is the private sector, non-share capital company that operates Canada's civil air navigation system (ANS). With operations across Canada, we provide air navigation services to aircraft owners and operators within Canadian-controlled airspace. These services include air traffic control, flight information, weather briefings, airport advisories, aeronautical information and electronic navigation aids.

The core business of the Company is to manage and operate the ANS and related services in a safe, efficient and cost effective manner. Our mandate covers both Canadian airspace and airspace delegated to Canada under international agreements.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
**(in millions of dollars)**

---

**Financial Strategy and Rate Regulation**

In establishing new customer service charges or revising existing charges, we must follow the charging principles set out in our governing legislation, the *Civil Air Navigation Services Commercialization Act* (ANS Act), which prevents us from setting customer service charges higher than what is needed to meet our financial requirements for the provision of air navigation services. Pursuant to these principles, the Board approves the amount and timing of changes to customer service charges. The Board also approves the Company's annual budget where the amounts to be recovered through customer service charges for the ensuing year are determined. Our aim is essentially to achieve breakeven financial results on the consolidated statement of operations on an annual basis. Due to seasonal and other fluctuations in air traffic and given that our costs are predominantly fixed in nature, our quarterly financial results may not achieve a breakeven position, after recording adjustments to the rate stabilization account. This is illustrated in the table under the heading "SUMMARY OF QUARTERLY RESULTS – Quarterly Financial Information (unaudited)".

As noted above, customer service charges are set based on the Company's financial requirements, which take into account estimated air traffic volumes and planned expenses. Since actual revenue and expenses will differ from these estimates, methods to accumulate the variances are required so that they may be taken into account when setting future customer service charges. There is also a need to absorb the immediate effect of unpredictable factors – mainly fluctuations in air traffic volumes resulting from unforeseen events. We meet these objectives through the use of a "rate stabilization" mechanism.

In preparing our consolidated financial statements we reflect the impact of rate regulation. As such, the timing of recognition of certain revenue and expenses differs from what would otherwise be expected for companies that are not subject to regulatory statutes governing the level of charges. For example, we adjust our net income (loss) through transfers to or from the rate stabilization account, based on variations from the amounts that were used when establishing customer service charges. If our actual revenue exceeds actual expenses, the excess is reflected as a credit to the rate stabilization account and is returnable to customers through future customer service charges. Similarly, if actual revenue turns out to be less than actual expenses, the revenue shortfall is reflected as a debit to the rate stabilization account and is recoverable from customers through future customer service charges (see "RESULTS OF OPERATIONS – Movements in Rate Stabilization Account").

In addition, for certain transactions where the timing of the cash flows differs significantly from the accounting recognition, the Company recognizes regulatory deferral account debits and credits in order to adjust the accounting recognition to the period in which they will be considered for rate setting. These transactions are generally considered for rate setting when the amounts are expected to be realized in cash.

When determining the level of customer service charges, we consider the Company's current and future financial requirements (see "RESULTS OF OPERATIONS – Net Movement in Regulatory Deferral Accounts Related to Net Income (Loss)" and "RESULTS OF OPERATIONS – Amounts Considered for Rate Setting Purposes").

Our financial strategy is to fulfil our essential services mandate based on a sound financial foundation, reflected in part through high credit ratings in the financial markets. Maintaining this strong foundation requires a prudent approach that balances the interests of our key stakeholders while complying with our statutory and contractual obligations.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
(in millions of dollars)

**Selected Annual Financial Information**

The following table shows selected consolidated financial information of the Company for fiscal 2017, fiscal 2016 and the fiscal year ended August 31, 2015 (fiscal 2015). This information has been derived from the Company's consolidated financial statements.

	Years ended August 31		
	2017	2016	2015
Revenue <sup>(1)</sup>	\$ 1,291	\$ 1,393	\$ 1,334
Net income (loss) after rate stabilization and regulatory deferral account adjustments	\$ -	\$ -	\$ -
<b>Total assets</b>	<b>\$ 2,441</b>	<b>\$ 2,517</b>	<b>\$ 2,677</b>
<b>Total regulatory deferral account debit balances</b>	<b>\$ 1,475</b>	<b>\$ 1,708</b>	<b>\$ 1,131</b>
<b>Total current liabilities</b>	<b>\$ 671</b>	<b>\$ 233</b>	<b>\$ 441</b>
<b>Total non-current financial liabilities<sup>(2)</sup></b>	<b>\$ 1,232</b>	<b>\$ 1,748</b>	<b>\$ 1,719</b>
<b>Total non-current liabilities, including non-current financial liabilities</b>	<b>\$ 2,875</b>	<b>\$ 3,488</b>	<b>\$ 2,891</b>
<b>Total regulatory deferral account credit balances</b>	<b>\$ 342</b>	<b>\$ 476</b>	<b>\$ 448</b>

<sup>(1)</sup> Revenue in the table above is presented before rate stabilization adjustments and net of the one-time customer service charges refund in fiscal 2017.

<sup>(2)</sup> Non-current financial liabilities include long-term debt and derivative liabilities. See note 17 to our fiscal 2017 financial statements.

**Revenue:**

Effective September 1, 2016, the Company implemented lower revised service charges (7.6% on average) which resulted in decreased revenue from customer service charges. The decrease was partially offset by an increase in air traffic of 5.1% as compared to fiscal 2016. In addition, the Company recorded a one-time refund to customers of approximately \$60, representing 4.6% of billings for fiscal 2017 air navigation service charges. Revenue from service and development contracts for the sale of air traffic management technology solutions and other miscellaneous revenue decreased by \$3, partially offset by an increase in conference centre sales. See "RESULTS OF OPERATIONS – Revenue" for more details on revenue balances.

During fiscal 2016, the Company experienced an increase in air traffic of 4.1% as compared to fiscal 2015. This increase resulted in increased revenue from customer service charges of \$53. In addition, revenue from service and development contracts and other miscellaneous revenue increased by \$6.

**Net income (loss), after rate stabilization and regulatory deferral account adjustments:**

In keeping with the Company's financial strategy and rate stabilization mechanism, breakeven financial results were achieved in fiscal 2017, fiscal 2016 and fiscal 2015. See "RESULTS OF OPERATIONS" for further details on net income (loss) after rate stabilization and regulatory deferral account adjustments.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
**(in millions of dollars)**

---

**Total assets:**

Total assets as at August 31, 2017 were \$2,441 which is a decrease of \$76 compared to August 31, 2016 primarily due to:

- a \$278 decrease in current investments as a result of the maturity and receipt of the remaining principal balances of \$293 of Master Asset Vehicle II (MAV II) Class A-1 and A-2 notes, restructured asset-backed commercial paper (ABCP) and investment in other notes, partially offset by the release of fair value provisions on these investments of \$14. The proceeds were used to reduce debt levels, to fund the Company's pension plan, and to fund a portion of the capital asset program; and
- a \$23 decrease in intangible assets;

partially offset by:

- a \$103 increase in cash and cash equivalents (see "LIQUIDITY AND CAPITAL RESOURCES – Cash flows for the year ended August 31, 2017");
- a \$59 increase in the investment in preferred interests of Aireon primarily due to completion of the tranche 4 and tranche 5 investments and an increase in preferred dividends receivable during the year, partially offset by unrealized foreign exchange losses as a result of fluctuation in the Canadian dollar against the U.S. dollar;
- a \$41 increase in property, plant and equipment;
- an \$11 increase in employee benefits related to the Company's long-term disability (LTD) plans resulting from lower benefit expense than contributions paid; and
- a \$7 carrying value as at August 31, 2017 of the Company's investment in equity-accounted investee (See "INTRODUCTION – Significant Financial Matters: Investment in Equity-Accounted Investee").

Total assets as at August 31, 2016 were \$2,517 which is a decrease of \$160 versus August 31, 2015 primarily due to:

- a \$111 decrease in cash and cash equivalents;
- a \$28 decrease in accounts receivable and other, mainly due to the receipt in Q1 fiscal 2016 of recoverable input tax credits arising from the termination of the capital lease transaction in fiscal 2015;
- a \$22 decrease in intangible assets; and
- a \$19 drawdown of the debt service reserve fund due to lower funding requirements arising from the Company's reduction in debt issued under the Master Trust Indenture (defined below);

partially offset by:

- a \$15 increase in property, plant and equipment;
- a \$9 increase in the investment in preferred interests of Aireon primarily due to an increase in preferred dividends receivable during the year; and

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
**(in millions of dollars)**

---

- a \$5 increase in investments mainly due to positive fair value adjustments of \$7, partially offset by the receipt of proceeds of \$2 from other ABCP.

**Total regulatory deferral account debit balances:**

See "RESULTS OF OPERATIONS – Net Movement in Regulatory Deferral Accounts Related to Net Income (Loss)" and "RESULTS OF OPERATIONS – Other Comprehensive Income (Loss)".

Total regulatory deferral account debit balances as at August 31, 2017 decreased by \$233 compared to August 31, 2016 primarily due to:

- a \$231 decrease in the regulatory deferral account related to pension re-measurements as a result of a 20 basis point increase in the discount rate (\$135), a return on plan assets greater than the expected return based on the discount rate (\$64) and positive experience on the defined benefit obligations (\$32); and
- a \$41 decrease in the regulatory deferral account related to derivative liabilities as a result of unrealized fair value gains of \$38 on forward-dated interest rate swap agreements maturing in April 2019 and the settlement of the foreign exchange forward contract entered into to hedge the Company's tranche 4 investment in preferred interests of Aireon;

partially offset by:

- a net increase of \$26 in regulatory deferrals related to supplemental pension re-measurements primarily due to actuarial losses and negative experience on the defined benefit obligation;
- an \$11 increase in regulatory deferrals related future income taxes, mainly as a result of the increase in the fair value of the Company's investment in preferred interests of Aireon; and
- a net increase of \$3 in regulatory deferrals related to other post-employment re-measurements which includes the deferral of curtailment expense of \$11 incurred on the elimination and settlement of severance benefits for employees represented by collective agreements for three unions (see "INTRODUCTION – Significant Financial Matters: Collective Agreements").

Total regulatory deferral account debit balances as at August 31, 2016 increased by \$577 versus August 31, 2015 primarily due to:

- a \$477 increase in the regulatory deferral related to pension re-measurements as a result of a 70 basis point decrease in the discount rate (\$828), partially offset by a return on plan assets greater than the expected return based on the discount rate (\$265) and actuarial gains from demographic changes (\$61), and positive experience on the defined benefit obligations (\$25);
- a \$51 increase in the regulatory deferral account debit balance of realized hedging transactions as a result of a \$51 loss on the settlement in February 2016 of interest rate swaps to hedge the Series MTN 2016-1 General Obligation Notes issued in the same month;
- a \$41 increase in the regulatory deferral account related to derivative liabilities as a result of unrealized fair value losses of \$54 on forward-dated interest rate swap agreements maturing in April 2019, partially offset by the maturing of forward-dated interest rate swap agreements in February 2016 which had unrealized losses of \$13 as at August 31, 2015; and
- a net increase of \$7 in regulatory deferrals related to supplemental pension re-measurements primarily due to a 70 basis point decrease in the discount rate.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
**(in millions of dollars)**

---

**Total current liabilities:**

The Company's total current liabilities as at August 31, 2017 increased by \$438 compared to August 31, 2016 primarily due to:

- a \$350 increase in the current portion of long-term debt due to the reclassification of the \$350 Series MTN 2013-1 General Obligation Notes that mature in April 2018 to current debt;
- accrual of the \$60 one-time refund of customer service charges as discussed in the Revenue section above; and
- a \$28 increase in trade and other payables.

The Company's total current liabilities as at August 31, 2016 decreased by \$208 versus August 31, 2015 primarily due to:

- a \$200 decrease in the current portion of long-term debt as a result of the maturity of the \$450 Series MTN 2006-1 General Obligation Notes which were repaid with proceeds from the issuance of the \$250 Series MTN 2016-1 General Obligation Notes and surplus cash; and
- a \$14 decrease in derivative liabilities as a result of the cash settlement of forward-dated interest rate swap agreements in February 2016, when the hedged \$250 Series MTN 2016-1 General Obligation Notes were issued;

partially offset by:

- a \$7 increase in trade and other payables.

**Total non-current liabilities (including non-current financial liabilities):**

The Company's total non-current liabilities as at August 31, 2017 decreased by \$613 compared to August 31, 2016 primarily due to:

- a \$474 decrease in long-term debt due to the reclassification of the \$350 Series MTN 2013-1 General Obligation Notes that mature in April 2018 to current debt, the redemption of \$100 of the \$350 Series MTN 2009-1 General Obligation Notes in December 2016 and the \$25 principal payment on the Series 97-2 amortizing revenue bonds (see "LIQUIDITY AND CAPITAL RESOURCES – Liquidity and Financing Strategy");
- a \$108 net decrease in employee benefit liabilities including a \$148 decrease in accrued pension obligations partially offset by a \$28 increase in supplemental pension obligations and an increase of \$17 in severance benefit obligations; and
- a \$42 decrease in derivative liabilities related to forward-dated interest rate swap agreements due to positive fair value adjustments;

partially offset by:

- a \$10 increase in the deferred income tax liability related to the Company's investment in preferred interests of Aireon, mainly as a result of the increase in the fair value of the investment due to additional investments made during fiscal 2017.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
**(in millions of dollars)**

---

The Company's total non-current liabilities as at August 31, 2016 increased by \$597 versus August 31, 2015 primarily due to:

- a \$567 increase in employee benefit liabilities including a \$549 increase in accrued pension obligations; and
- a \$54 increase in derivative liabilities related to forward-dated interest rate swap agreements due to negative fair value adjustments;

partially offset by:

- a \$25 decrease in long-term debt due to the \$25 principal payment on the Series 97-2 amortizing revenue bonds.

The explanation above does not reflect the fact that the Company was able to reduce its debt by \$200 on refinancing of the \$450 Series MTN 2006-1 General Obligation Notes in February 2016 as this was reclassified to current liabilities in fiscal 2015.

**Total regulatory deferral account credit balances:**

See "RESULTS OF OPERATIONS – Net Movement in Regulatory Deferral Accounts Related to Net Income (Loss)" and "RESULTS OF OPERATIONS – Other Comprehensive Income (Loss)".

Total regulatory deferral account credit balances as at August 31, 2017 decreased by \$134 compared to August 31, 2016 primarily due to:

- a \$127 decrease in regulatory deferrals related to employee benefit pension contributions to adjust the total pension benefit expense to the level of going concern pension contributions to be recovered through rate setting; and
- a \$38 decrease in the rate stabilization account as a result of the initial Board-approved adjustment for fiscal 2017;

partially offset by:

- a net increase of \$23 in regulatory deferrals related to the Company's investment in Aireon from the deferral of unrealized positive fair value adjustments and dividends earned, partially offset by the deferral of unrealized foreign exchange losses;
- an \$8 regulatory deferral of LTD contributions resulting from lower benefit expense than contributions paid; and
- a \$4 deferral of the unrealized gain on the Company's remaining 50% interest in Searidge Technologies Inc. (Searidge), partially offset by the Company's share of the net assets of Searidge for the year ended August 31, 2017.

Total regulatory deferral account credit balances as at August 31, 2016 increased by \$28 versus August 31, 2015 primarily due to:

- an \$88 increase in the rate stabilization account as a result of favourable variances from planned results of \$57 and the initial Board-approved adjustment for fiscal 2016 of \$31; and
- a net increase of \$6 in regulatory deferrals related to the Company's investment in Aireon from the deferral of dividends earned, partially offset by the deferred gain on the hedge of the fourth tranche investment;

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
(in millions of dollars)

partially offset by:

- a \$61 decrease in regulatory deferrals related to employee benefit pension contributions to adjust the total pension benefit expense to the level of pension contributions to be recovered through rate setting.

**Financial Highlights**

**Results of operations for the year ended August 31, 2017**

	Years ended August 31		
	2017	2016	Change
Revenue	\$ 1,291	\$ 1,393	\$ (102)
Operating expenses	1,330	1,238	92
Other (income) and expenses	97	116	(19)
Income tax expense	14	2	12
Net income (loss), before rate stabilization and regulatory deferral account adjustments	(150)	37	(187)
Net movement in regulatory deferral accounts			
Rate stabilization adjustments:			
Favourable variances from planned results	(60)	(57)	(3)
Customer service charges refund	60	-	60
Initial approved adjustment <sup>(1)</sup>	38	(31)	69
	<u>38</u>	<u>(88)</u>	<u>126</u>
Other regulatory deferral account adjustments:			
Employee benefit pension contributions	127	61	66
Other employee benefits	(1)	(3)	2
Investment in preferred interests, before tax	(25)	(9)	(16)
Investment in equity-accounted investee	(4)	-	(4)
Income tax	14	1	13
Realized hedging transactions	1	1	-
	<u>112</u>	<u>51</u>	<u>61</u>
	<u>150</u>	<u>(37)</u>	<u>187</u>
Net income (loss), after rate stabilization and regulatory deferral account adjustments	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

<sup>(1)</sup> The Company approved a \$38 transfer out of the rate stabilization account to be recorded in fiscal 2017 (fiscal 2016 – \$31 transfer into the rate stabilization account), in order to achieve planned breakeven results of operations. The adjustment was transferred evenly out of the rate stabilization account throughout the fiscal year.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
**(in millions of dollars)**

---

In keeping with our financial strategy and rate stabilization mechanism, the Company achieved breakeven financial results for the fiscal year. Excluding rate stabilization and other regulatory deferral account adjustments, the Company recorded a net loss of \$150 (year ended August 31, 2016 - net income of \$37). Excluding the customer service charges refund, the Company achieved positive financial performance in fiscal 2017 as compared to its approved budget, as reflected by the \$60 of favourable variances from planned results shown above. This was primarily due to revenue \$56 higher than planned and regulatory deferrals of \$57, partially offset by operating expenses \$28 higher than planned and other expenses \$25 higher than planned.

The favourable variances from planned results were offset by the recording of a one-time refund of customer service charges of \$60, representing 4.6% of billings for fiscal 2017 air navigation service charges. This refund is expected to be returned in the fiscal year ending August 31, 2018 (fiscal 2018).

The net movement in regulatory deferral accounts for the year ended August 31, 2017 was a net income of \$150 as compared to a net expense of \$37 in the prior fiscal year. The change of \$187 is primarily due to the recognition of the \$60 customer service charges refund and the planned transfer out of the rate stabilization account of \$38 compared to the transfer into the rate stabilization account of \$31 in fiscal 2016 and \$61 more of regulatory adjustments for certain transactions to adjust the accounting recognition to the periods in which they will be considered for rate setting.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
(in millions of dollars)

As shown below, cash and cash equivalents increased by \$103 during the year ended August 31, 2017 and the Company experienced negative free cash flow of \$51, which is a non-GAAP (Generally Accepting Accounting Principles) financial measure.

The Company utilized its available cash in fiscal 2017 to reduce debt levels by \$125, make solvency deficiency payments of \$44 and increase its investment in preferred interests of Aireon by \$36. These decreases were offset by the receipt of \$293 of the remaining principal balances of MAV II notes, ABCP and other notes (See "LIQUIDITY AND CAPITAL RESOURCES – Cash flows for the year ended August 31, 2017" for additional information on non-GAAP financial measures, the definition of free cash flow and further discussion of cash flows.)

	Years ended August 31		
	2017	2016	Change
<b>Cash flows from:</b>			
Operations <sup>(1)</sup>	\$ 143	\$ 246	\$ (103)
Investing <sup>(1)</sup>	98	(99)	197
Financing <sup>(1)</sup>	(135)	(259)	124
<b>Cash flows from operating, investing and financing activities</b>	<b>106</b>	<b>(112)</b>	<b>218</b>
Effect of foreign exchange on cash and cash equivalents	(3)	1	(4)
<b>Increase (decrease) in cash and cash equivalents</b>	<b>103</b>	<b>(111)</b>	<b>214</b>
Cash and cash equivalents, beginning of period	119	230	(111)
<b>Cash and cash equivalents, end of period</b>	<b>\$ 222</b>	<b>\$ 119</b>	<b>\$ 103</b>
<b>Free cash flow (non-GAAP financial measure):</b>			
Cash flows from:			
Operations <sup>(2)</sup>	\$ 143	\$ 246	\$ (103)
Capital expenditures <sup>(2)</sup>	(157)	(128)	(29)
Investment in preferred interests <sup>(2)</sup>	(36)	-	(36)
Income tax payment on investment in preferred interests <sup>(2)</sup>	(5)	-	(5)
Proceeds from sale of investment in subsidiary <sup>(2)</sup>	4	-	4
<b>Free cash flow</b>	<b>\$ (51)</b>	<b>\$ 118</b>	<b>\$ (169)</b>

<sup>(1)</sup> See "LIQUIDITY AND CAPITAL RESOURCES – Cash flows for the year ended August 31, 2017" for discussion of the changes in cash flows from the prior fiscal year.

<sup>(2)</sup> See the statement of cash flows in our fiscal 2017 financial statements.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
(in millions of dollars)

---

### Significant Financial Matters

The following items have significant financial importance to the Company:

#### 1. Rate Stabilization Account

As at August 31, 2017, the rate stabilization account (see "RESULTS OF OPERATIONS – Movements in Rate Stabilization Account") had a credit balance of \$131, which is above its target of \$101 for fiscal 2017 (see "RESULTS OF OPERATIONS – Amounts Considered for Rate Setting Purposes").

The rate stabilization account decreased by \$38 during fiscal 2017. This decrease was largely due to the \$38 initially approved transfer out of the rate stabilization account. During fiscal 2017, the Company had favourable variances from planned results of \$60. These favourable results are offset by the recognition of the customer service charges refund of \$60 that was recorded in fiscal 2017 and is expected to be returned in fiscal 2018. Rate stabilization adjustments are described under "RESULTS OF OPERATIONS – Movements in Rate Stabilization Account". The customer service charges refund is described below in "INTRODUCTION – Significant Financial Matters: Air Traffic and Customer Service Charges".

#### 2. Air Traffic and Customer Service Charges<sup>1</sup>

Over the course of fiscal 2017, air traffic volumes increased by 5.1% year-over-year. Not including the effect of the extra day for leap year in February 2016, year to date traffic was 5.3% higher than in fiscal 2016. The approved budget for the fiscal year had assumed growth of 1.1%. The Company's current forecast for air traffic growth for fiscal 2018 is 4.2%.

We continuously monitor our financial requirements and air traffic, and regularly update our financial forecasts to account for changes in the economic environment. On a quarterly basis, we review the most current information available from aviation industry sources as well as forecasts of macro-economic indicators; we then modify our forecasts accordingly and consider the need for a change in rates.

On August 11, 2017, the Company issued an announcement detailing the implementation of revised service charges. Based on the current strength of the rate stabilization account and our positive financial outlook for fiscal 2017 (see "RESULTS OF OPERATIONS – Financial Outlook"), the revised charges, effective September 1, 2017, decrease rates on average by 3.5% and also implement a temporary one-year rate reduction of 0.4%. This effectively continues the 3.9% temporary rate reduction that was implemented last year.

The Company will also return to its customers approximately \$60 in a one-time refund representing 4.6% of billings for fiscal 2017 air navigation service charges. The refund was accrued, resulting in a decrease to revenues and to the rate stabilization account during fiscal 2017 (see "RESULTS OF OPERATIONS – Revenue" and "RESULTS OF OPERATIONS – Movements in Rate Stabilization Account"). This refund is expected to be returned in fiscal 2018.

#### 3. Pension Plans

The Company continues to meet the funding requirements of its two defined benefit registered pension plans in accordance with the regulations of the Office of the Superintendent of Financial Institutions Canada (OSFI). Actuarial valuations for funding purposes are performed annually as at January 1 and are required to be filed with OSFI by June of the same year. The funding regulations require actuarial valuations to be performed on both a going concern and a solvency basis.

---

<sup>1</sup> Note: See "INTRODUCTION – Caution Concerning Forward-Looking Information", page 1

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
**(in millions of dollars)**

---

Going concern contributions for the annual period beginning July 1, 2017 are based on the January 1, 2017 actuarial valuations, with a retroactive adjustment to the beginning of the calendar year. The actuarial valuations performed as at January 1, 2017 reported a going concern surplus of \$242 (2016 - deficiency of \$76). A statutory solvency surplus of \$334 was reported as at January 1, 2017 based on the assumption that the September 1, 2016 plan text restatement, which included the plan termination amendment that is currently subject to OSFI's review (see (b) below), was in effect on the valuation date. Had the amendment not been included, there would have been a statutory solvency deficiency of \$289 as of January 1, 2017 (2016 - deficiency of \$306).

As at August 31, 2017, the Company has put in place letters of credit totaling \$477 to meet its cumulative pension solvency funding requirements on a pre-amendment basis. Outstanding letters of credit represent 9% of solvency liabilities on a post-amendment basis and 8% on a pre-amendment basis. The Company has funded its calendar 2017 solvency funding requirements of \$58 with \$14 of letters of credit and cash contributions of \$44. Beginning July 1, 2017, solvency contributions will be determined on a pre-amendment basis while discussions with OSFI are ongoing. The Company anticipates using letters of credit to fund its solvency funding requirements.

All of the Company's eight collective agreements include the following significant changes in the pension area, which were achieved either through negotiation or arbitration in the fiscal years ended August 31, 2013, 2014 and 2015:

- (a) All new employees represented by the Canadian Air Traffic Control Association (CATCA) Unifor Local 5454, the Air Traffic Specialists Association of Canada (ATSAC) Unifor Local 2245, the Canadian Federal Pilots Association (CFPA), the Canadian Association of Financial Officers (ACFO), the International Brotherhood of Electrical Workers Local 2228 (IBEW) and Unifor Local 1016 as at January 1, 2014, are required to join Part B of the NAV CANADA Pension Plan (NCP), which has a non-contributory defined benefit design. Previously, new employees represented by these unions had the alternative of joining Part A of the NCP, which has a contributory defined benefit design and under which pension benefits are automatically indexed to inflation. Effective October 1, 2014, all new employees represented by the Professional Institute of the Public Service of Canada (PIPSC) are required to join Part B of the NCP. Effective December 1, 2014, all new employees represented by the Public Service Alliance of Canada (PSAC) are required to join Part B of the NCP. Previously, new employees represented by PIPSC and PSAC were required to join Part A of the NCP. Part B of the NCP provides for a lower level of benefits that are not indexed. Part B was introduced effective January 1, 2009 and has been mandatory for new non-unionized employees since that time. The Company expects that its current service pension costs will decline significantly over time, as new employees join Part B of the NCP.
- (b) In the unlikely event of plan termination, the automatic Consumer Price Index (CPI) indexing of pension benefits for active (non-retired) members under Part A of the NCP will be replaced by fixed rate indexing to the extent that surplus assets would remain. Therefore, automatic CPI indexing for these members will no longer be considered as part of the annual actuarial valuation of the NCP's solvency liabilities. However, automatic CPI indexing of pensions will continue to be paid to all current retirees and to all plan members who retire under Part A, as long as the NCP remains in operation. The arbitration decisions and/or settled agreements also require that CATCA, ATSAC, CFPA, ACFO, IBEW, Unifor Local 1016, PIPSC and PSAC would have to agree to the termination of the NCP, in respect of their members, before such a termination could occur.

This change should not have any effect on employees or pensioners; however, it will significantly improve the solvency position of the NCP, thereby reducing the Company's required solvency funding requirements, which are currently being met with a combination of cash contributions and letters of credit.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
**(in millions of dollars)**

---

(c) Other pension changes have been introduced that (i) remove, for future service, the automatic CPI indexing of pension benefits between members' pre-retirement departure dates and pension commencement dates; and (ii) restore as pensionable the 1% non-pensionable wage increase that had been agreed to in the 2005 CATCA and 2006 ATSAC rounds of bargaining and certain non-pensionable wages that had been agreed to in the 2011 IBEW round of bargaining.

The Company has communicated with OSFI, and OSFI has indicated that they agree with (a) and (c) above, but resolution of (b) remains outstanding. While the Company waits for clarification on OSFI's view of (b), it has filed its required actuarial funding valuation report as at January 1, 2017 on the basis that (b) is approved. The Company will continue to pursue implementation of (b) in a manner available to plan sponsors under the *Pension Benefits Standards Act, 1985*. The arbitration decisions acknowledge that union leadership has joined the Company in the past in making representations to OSFI to support the changes in (b) above and will continue to do so at any future meeting with OSFI, or subsequent related processes.

The differences in the reported surplus or deficit positions between the accounting and funding valuations (going concern and solvency) are primarily due to: (a) different discount rates used to value the obligations of the plans based on each valuation's required actuarial methodology; (b) the use of three year averaging of solvency ratios to determine the statutory solvency surplus or deficit for funding purposes; (c) the use of asset smoothing over five years for the going concern valuation, while the solvency and accounting valuations are based on market values of assets and liabilities at a point in time (as of their respective measurement dates); and (d) the different dates at which the valuations are performed.

We use an annual measurement date of August 31 to determine the accounting surplus or deficit and to establish pension costs for the coming fiscal year. The Company's pension plans had an accounting deficit of \$1,295 as at the annual measurement date of August 31, 2017 and an accounting deficit of \$1,415 as at August 31, 2016. The \$120 decrease in the deficit position during the year ended August 31, 2017 is primarily due to actuarial gains of \$205 and solvency deficiency contributions of \$44, partially offset by actuarial accounting expense exceeding Company contributions by \$127. The \$205 of actuarial gains are primarily due to a \$117 actuarial gain from a 20 basis point increase in the discount rate to 3.60% from 3.40% at August 31, 2016, a return on plan assets \$64 greater than the expected return based on the discount rate at August 31, 2016 and \$24 due to positive experience on the defined benefit obligations.

Further information on the Company's pension plans is discussed under the heading "LIQUIDITY AND CAPITAL RESOURCES – Cash Requirements: Pension Plans".

#### **4. Collective Agreements**

Approximately 87% of our workforce is unionized under eight collective agreements. During the fiscal year, the Company announced the ratification of new collective agreements with three of its unions: CATCA; ATSAC; and PIPSC.

The collective agreement with CATCA covers approximately 1,900 air traffic controllers, comprising approximately 45% of our represented workforce; the collective agreement with ATSAC covers approximately 620 air traffic specialists, comprising 15% of our represented workforce; and the collective agreement with PIPSC covers approximately 460 employees in the engineering, computer service, physical science, purchasing, economic and social science specialties, comprising 11% of our represented workforce. The two year agreement with CATCA will run until March 31, 2019. The two year agreements with ATSAC and PIPSC will expire on April 30, 2019. All three agreements provide for wage increases, productivity enhancing changes and premium adjustments.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
**(in millions of dollars)**

---

In addition, for CATCA and ATSAC, employees have the option to continue with the current severance provision or be paid out their accumulated severance with an additional incentive. Those who choose to have their severance paid out will no longer accrue severance. As a result, as at August 31, 2017, the Company has recorded a curtailment expense on its defined severance benefits plan of \$5 and \$3, respectively, which is included in salaries and benefits expense. The cash settlements of \$22 and \$11 (estimated) to curtail the respective severance benefits are expected to occur in fiscal 2018.

The collective agreement with PIPSC also provides for the curtailment of severance benefits for all employees with no further accrual of benefits. As a result, the Company recorded a curtailment expense on its defined severance benefits plan of \$3 which is included in salaries and benefits expense. The estimated cash settlement of \$11 to curtail the severance benefits is expected to occur in fiscal 2018.

Subsequent to August 31, 2017, the Company announced the ratification of its collective agreement with ACFO, which represents approximately 24 financial specialists. The two year agreement covers the period February 7, 2018 to February 6, 2020 and provides for wage increases in each of the two years.

The Company is currently in negotiations with two unions, comprising approximately 7% of our represented workforce whose collective agreements expired April 30, 2017 and June 30, 2017. The remaining two collective agreements (comprising 21% of our represented workforce) have contract expirations of December 31, 2017.

Should OSFI approve the plan termination amendment discussed under "INTRODUCTION – Significant Financial Matters: Pension Plans" (which formed part of the arbitration panels' decisions as well as the negotiated settlements referred to), each collective agreement shall then be subject to a re-opening of negotiations on wages. That is, the parties would return to the bargaining table and discuss whether or not additional compensation is appropriate. In most instances, an arbitration panel would retain jurisdiction over the matter should the parties be unable to agree on an appropriate outcome.

**5. Investment in Space-Based Aircraft Surveillance through Aireon:**

In November 2012, the Company entered into agreements (the November 2012 agreements) setting out the terms of its participation in Aireon, a joint venture with Iridium Communications Inc. (Iridium). Aireon's mandate is to provide global satellite-based surveillance capability for air navigation service providers (ANSPs) around the world through Automatic Dependent Surveillance-Broadcast (ADS-B) receivers built as an additional payload on the Iridium NEXT satellite constellation. It is expected that Iridium's launch schedule will enable Aireon to commence operations in calendar year 2018.

The Company's overall investment in Aireon was implemented in five stages. As at August 31, 2017, the Company has completed all stages, investing a total of \$150 U.S. (\$187 CDN) (August 31, 2016 - \$120 U.S. (\$157 CDN)). The Company is represented by six out of the eleven directors on Aireon's board of directors.

In December 2013, the November 2012 agreements were amended to provide for the making of an aggregate investment of \$120 U.S. (\$150 CDN) in Aireon by three additional major ANSPs, namely ENAV (Italy), the Irish Aviation Authority (IAA), and Naviair (Denmark) (collectively the Additional Investors).

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
**(in millions of dollars)**

---

In accordance with the amended agreements, a portion of Iridium's existing common equity interest in Aireon will be redeemed for a payment from Aireon of \$120 U.S. (\$150 CDN) to finalize the ownership interests of all of Aireon's investors. Upon this redemption and the related conversion of all preferred interests into common equity interests, NAV CANADA will hold 51% of the fully diluted common equity interests of Aireon, ENAV will hold 12.5%, and each of IAA and Naviair will hold 6%, with the remaining 24.5% being retained by Iridium. This redemption is expected to occur by August 31, 2021.

As at August 31, 2017, the Company's total fully diluted common equity interest on a post conversion basis is 40.9% (August 31, 2016 – 36.5%).

**6. Investing and Financing Activities**

During the year ended August 31, 2017, the Company received the remaining \$285 principal balance of MAV II notes, the remaining \$7 principal balance of the ABCP and the remaining balance of its investment in other notes of \$1 for total proceeds of \$293.

On December 16, 2016, the Company redeemed \$100 of the \$350 Series MTN 2009-1 General Obligation Notes with proceeds from the MAV II notes and surplus cash.

In August 2017, the Company entered into a bond forward transaction in the amount of \$137 in order to mitigate a portion of the potential impact of rising interest rates on the cost of refinancing the Series MTN 2013-1 General Obligation Notes that will mature on April 19, 2018. The Company intends to cash settle this transaction in April 2018 and offset any gain or loss at that time against a portion of the cost of refinancing the above mentioned notes.

**7. Investment in Equity-Accounted Investee**

Searidge is a privately-held corporation that provides software development and technology solutions in support of the air traffic control and airport operations market.

On April 28, 2017, the Company sold a portion of its investment in Searidge for proceeds of \$4. As a result of the sale, the Company now owns 50% of the issued and outstanding shares of Searidge. The Company previously owned 70%.

The Company has determined that its 50% interest in Searidge gives rise to joint control based on the contractual terms of the arrangement that require unanimous consent of all parties involved in key decisions over relevant activities. The Company has classified its investment as a joint venture as the Company has an interest in the net assets of Searidge based on the legal form and substance of the arrangement.

As a result of the sale, the Company has recorded a gain of \$7 in the statement of operations (see "RESULTS OF OPERATIONS – Other (Income) and Expenses (Including Income Tax Expenses)"). Of this gain, \$2 is classified as realized representing the 20% sold, and \$5 is classified as unrealized relating to the Company's remaining 50% interest. The \$5 is being deferred for regulatory purposes until realized in cash (see RESULTS OF OPERATIONS – Net Movement in Regulatory Deferral Accounts Related to Net Income (Loss)).

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
(in millions of dollars)

**RESULTS OF OPERATIONS**

**Revenue**

The following table provides a breakdown of our revenue by category. Our fiscal 2017 AIF and the notes to our fiscal 2017 financial statements provide more information about the different categories of our customer service charges.

	Years ended August 31			
	2017	2016	Change	%
Enroute	\$ 676	\$ 715	\$ (39)	(5%)
Terminal	488	485	3	1%
Daily / annual / quarterly	84	84	-	-
North Atlantic and international communication	46	49	(3)	(6%)
	1,294	1,333	(39)	(3%)
Customer service charges refund	(60)	-	(60)	(100%)
Total customer service charges	1,234	1,333	(99)	(7%)
Other	57	60	(3)	(5%)
	<u>\$ 1,291</u>	<u>\$ 1,393</u>	<u>\$ (102)</u>	<u>(7%)</u>

Other revenue consists of service and development contracts, conference centre sales at our facility in Cornwall (Ontario), the sale of civil aeronautical publications and other miscellaneous revenue.

Revenue for fiscal 2017 was \$1,291 compared to \$1,393 for fiscal 2016. The \$102 decrease is primarily due to:

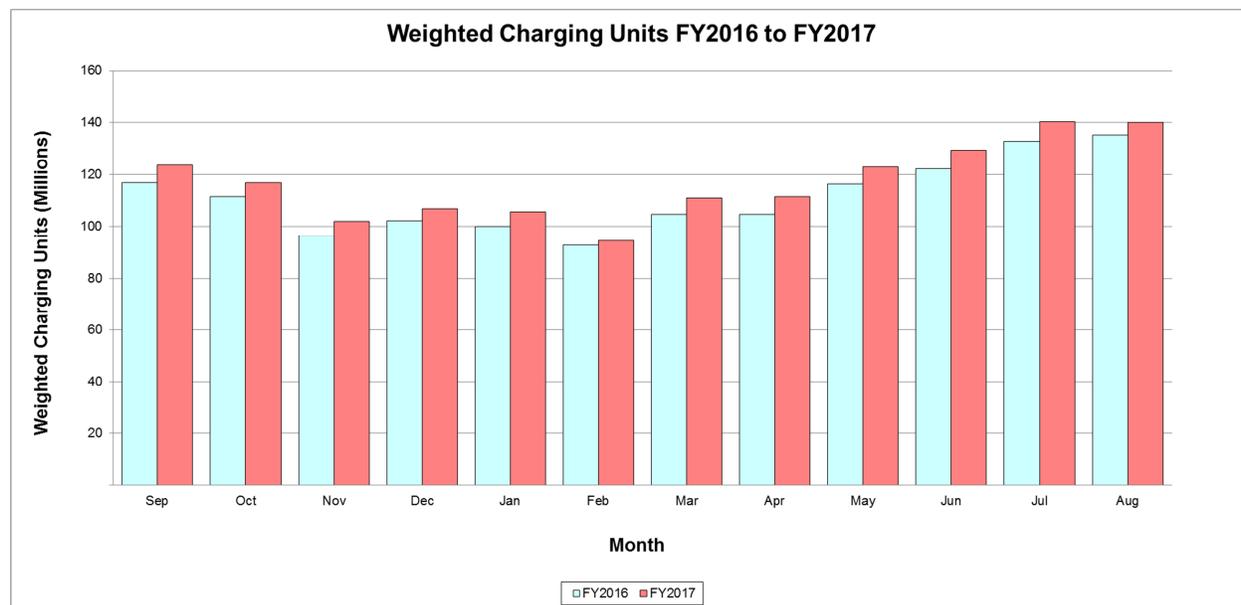
- a \$39 decrease in customer service charges revenue arising from lower revised service charges (7.6% on average) that became effective September 1, 2016, partially offset by an increase of 5.1% in air traffic volumes during fiscal 2017;
- a further decrease in customer service charges revenue of \$60 as a result of a one-time refund representing 4.6% of billings for fiscal 2017 air navigation service charges; and
- a \$3 decrease in other revenue due to a decrease in revenue from service and development contracts and other miscellaneous revenue, partially offset by an increase in conference centre sales revenue.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
(in millions of dollars)

**Air Traffic**

Air traffic increased by 5.1% in fiscal 2017 when compared to fiscal 2016 (5.3% higher not including the effect of the leap year in February 2016). This increase is illustrated in the following chart showing air traffic by month since September 2015.

The chart illustrates the seasonal variations in traffic. The chart shows traffic in “weighted charging units”, which reflect the number of flights, aircraft size and distance flown.



Future air traffic volumes may be influenced by numerous factors, including the rate of economic growth or decline, changing air passenger demand, aircraft capacity utilization levels, fuel costs, changes in air carrier operations, air carrier competition, airline restructurings and insolvencies, terrorist activities, epidemics or pandemics, weather patterns, natural disasters, environmental concerns, demographic patterns and other factors.

**Customer Service Charges<sup>2</sup>**

The levels of our customer service charges are a function of our costs, the required level of service, air traffic volumes and revenue from non-aeronautical sources (see “RESULTS OF OPERATIONS – Amounts Considered for Rate Setting Purposes”).

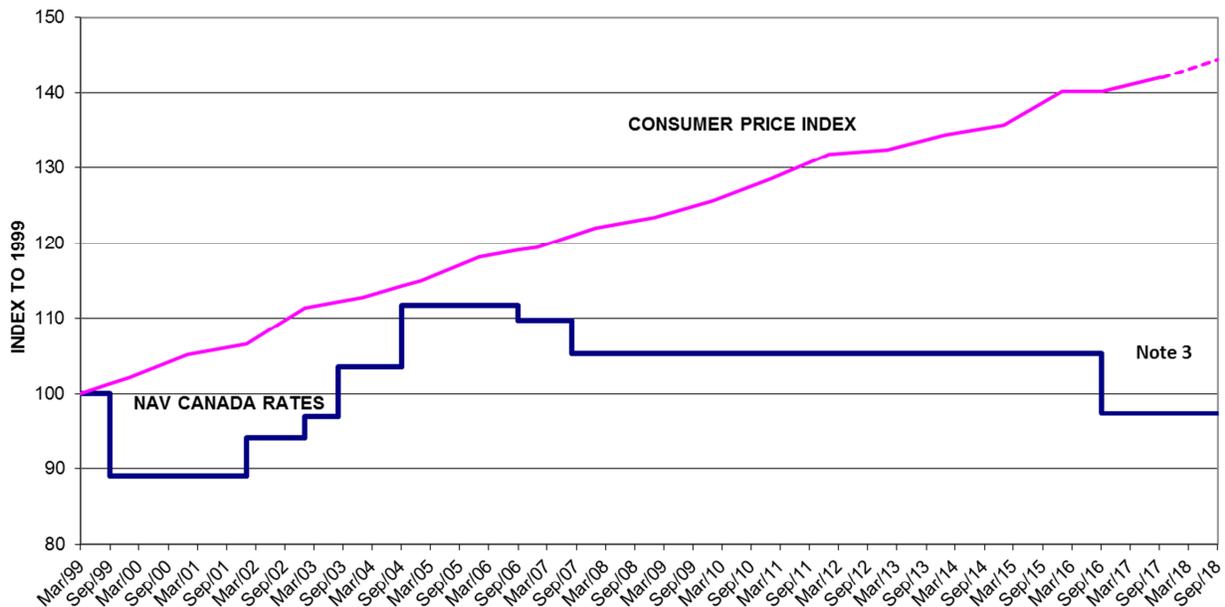
Our business operates 24 hours a day, 365 days a year, providing an essential, national and international safety infrastructure. Given that the majority of our costs are predominantly fixed in nature and are directly related to service delivery, we have relatively few opportunities to significantly reduce these costs further without reducing service, which is not acceptable in most cases. We continue to focus on cost management, productivity improvements and opportunities for new revenue sources from licensing or sales of technology and other sources. This is assisting in keeping customer service charges as low as possible, while continuing to meet our safety and service obligations.

<sup>2</sup> Note: See “INTRODUCTION – Caution Concerning Forward-Looking Information”, page 1

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
(in millions of dollars)

The following chart illustrates the evolution of our levels of customer service charges over time. The chart also depicts the revised customer service charges that became effective September 1, 2016 and September 1, 2017. On average, customer service charges at August 31, 2017 were approximately 3% lower than they were when fully implemented in March 1999, which is approximately 46 percentage points less than the change in the CPI since March 1999. Effective September 1, 2017, the revised customer service charges are on average 3% lower than when they were first implemented on a full cost recovery basis in March 1999.

**HISTORY OF NAV CANADA RATE CHANGES<sup>(1)</sup>  
VERSUS CONSUMER PRICE INDEX<sup>(2)</sup>**



1. Average changes since charges were fully implemented on March 1, 1999
2. Consumer Price Index - Growth assumed to be 2.0 per cent for 2017 and beyond
3. NAV CANADA proposed a further refund of \$60M, equivalent to a reduction of 4.6% in rates. This is in addition to the 3.9% rate reductions effective September 1, 2017 which effectively continues the 3.9% temporary one-year rate reduction that expired on August 31, 2017.

As can be seen in the chart above, the Company has not had an overall rate increase since fiscal 2005, and has implemented four rate decreases since the rates were implemented in 1999. The chart also depicts the service charges that came into effect September 1, 2017 (discussed below).

We continuously monitor our financial requirements and air traffic, and regularly update our financial forecasts to account for changes in the economic environment. On a quarterly basis, we consider the need for a change in rates.

On August 11, 2017, the Company issued an announcement detailing the implementation of revised service charges. Based on the current strength of the rate stabilization account and our positive financial outlook for fiscal 2017 (see "RESULTS OF OPERATIONS – Financial Outlook"), the revised charges, effective September 1, 2017, decrease rates on average by 3.5% and also implement a temporary one-year rate reduction of 0.4%. This effectively continues the 3.9% temporary rate reduction that was implemented last year.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
(in millions of dollars)

The Company will also return to its customers approximately \$60 in a one-time refund representing 4.6% of billings for fiscal 2017 air navigation service charges. The refund was accrued, resulting in a decrease to revenues and to the rate stabilization account during fiscal 2017 (see "RESULTS OF OPERATIONS – Movements in Rate Stabilization Account"). It is expected to be returned in fiscal 2018.

**Operating Expenses**

	Years ended August 31			
	2017	2016	Change	%
Salaries and benefits	\$ 925	\$ 858	\$ 67	8%
Technical services	112	112	-	-
Facilities and maintenance	72	70	2	3%
Depreciation and amortization	147	141	6	4%
Other	74	57	17	30%
	<u>\$ 1,330</u>	<u>\$ 1,238</u>	<u>\$ 92</u>	<u>7%</u>

Salaries and benefits expense for the year ended August 31, 2017 increased by \$67 compared to the year ended August 31, 2016 due to a \$31 increase in pension current service costs, compensation levels \$27 higher, and a \$12 increase in overtime hours as well as the \$11 curtailment expense incurred on the elimination and settlement of severance benefits for employees represented by the CATCA, ATSAC and PIPSC collective agreements as discussed in "INTRODUCTION – Significant Financial Matters: Collective Agreements". These increases in costs were partially offset by lower fringe benefit costs of \$11 (excluding pension) primarily due to positive experience on LTD benefits. The Company uses a regulatory approach to determine the net impact charged to net income (loss) for its pension costs. The objective of this approach is to expense the cost of the Company's cash current service and special payment contributions (going concern pension contributions). Going concern pension contributions were lower for the year ended August 31, 2017 and an adjustment to reduce pension expense to the cash going concern pension contributions was recorded as a net increase in regulatory deferral adjustments (see "LIQUIDITY AND CAPITAL RESOURCES – Cash Requirements: Pension Plans").

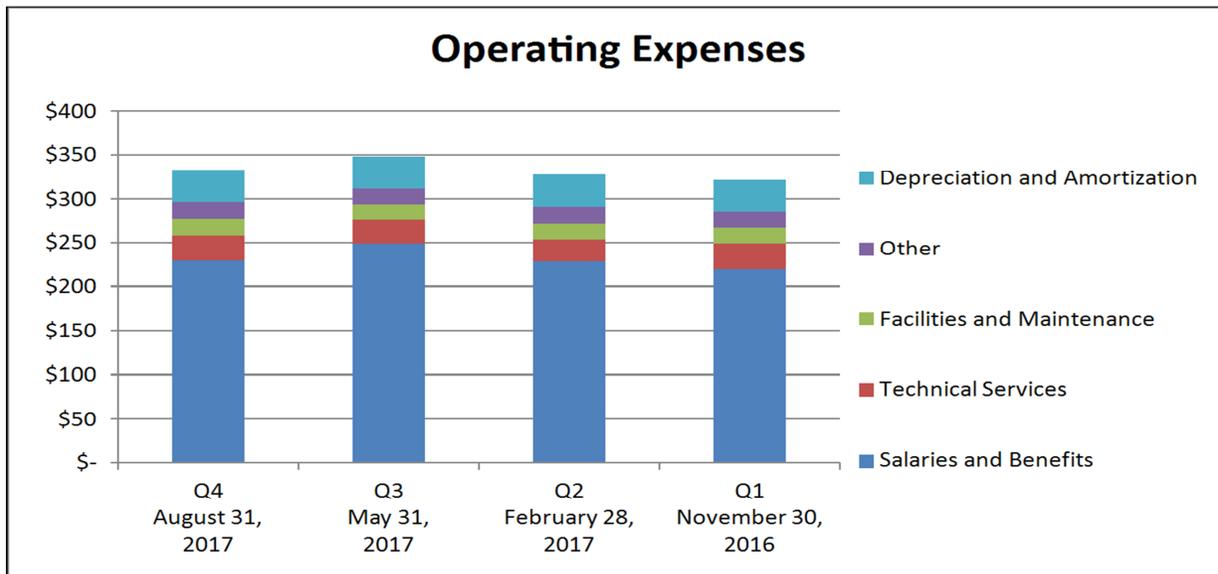
Depreciation and amortization increased by \$6 in fiscal 2017 as a result of an increased cost base of property, plant and equipment and intangible assets compared to fiscal 2016.

Other operating expenses for the year ended August 31, 2017 increased by \$17 compared to the year ended August 31, 2016. The increase is due to increased travel and relocation costs as well as higher professional fees. In addition, the Company received a \$7 refund of commodity taxes previously paid in fiscal 2016. In fiscal 2017, there is no refund offsetting expenses.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
(in millions of dollars)

---

As illustrated in the table below, the majority of our operating expenses are incurred evenly throughout the year.



The increase in salaries and benefits expense in Q3 fiscal 2017 compared to Q2 fiscal 2017 is primarily due to the \$9 curtailment expense accrued as a result of the voluntary elimination and settlement of severance benefits for employees represented by the CATCA collective agreement. In Q4 fiscal 2017, the curtailment expense was adjusted to \$11. The adjustments reflect the voluntary elections received from employees represented by CATCA, as well as an additional curtailment expense for the voluntary elimination and settlement of severance benefits for employees represented by the ATSAC collective agreement and the elimination and settlement of severance benefits for employees represented by the PIPSC collective agreement.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
(in millions of dollars)

**Other (Income) and Expenses (Including Income Tax Expense)**

	Years ended August 31		
	2017	2016	Change
Finance income			
Interest income	\$ (3)	\$ (2)	\$ 1
Net change in fair value of financial assets at FVTPL <sup>(1)</sup>			
MAV II, ABCP and other investments	(15)	(9)	6
Investment in preferred interests	(37)	(10)	27
	<u>(52)</u>	<u>(19)</u>	<u>33</u>
Total finance income	<u>(55)</u>	<u>(21)</u>	<u>34</u>
Net interest costs relating to employee benefits	55	43	(12)
Other finance costs			
Interest expense	80	93	13
Redemption premium	10	-	(10)
	<u>90</u>	<u>93</u>	<u>3</u>
Other (gains) and losses			
Foreign exchange (gains) and losses	12	1	(11)
Realized gain on sale of investment in subsidiary	(2)	-	2
Unrealized gain on sale of investment in subsidiary	(5)	-	5
Share of net loss of equity-accounted investee	1	-	(1)
Other (gains) and losses	1	-	(1)
	<u>7</u>	<u>1</u>	<u>(6)</u>
	<u>\$ 97</u>	<u>\$ 116</u>	<u>\$ 19</u>
Income tax expense	<u>\$ 14</u>	<u>\$ 2</u>	<u>\$ (12)</u>

<sup>(1)</sup> The net change in fair value of financial assets at FVTPL includes interest and dividend income related to those financial assets.

The net change in fair value of financial assets at FVTPL increased by \$33 compared to fiscal 2016, as a result of recording positive fair value adjustments on MAV II, ABCP and other investments of \$14 in fiscal 2017 compared to positive fair value adjustments of \$8 in fiscal 2016. Positive fair value adjustments on the investment in preferred interests of \$26, along with dividend income of \$11 were recorded in fiscal 2017 compared to dividend income of \$10 in fiscal 2016.

The \$12 increase in net interest costs relating to employee benefits in fiscal 2017 is primarily due to higher pension interest income than in fiscal 2016, partially offset by higher pension finance costs.

The \$3 decrease in other finance costs in fiscal 2017 is a result of \$13 lower interest costs on long-term debt due to lower debt levels in fiscal 2017 compared to fiscal 2016, partially offset by the redemption premium of \$10 related to the early redemption of \$100 of the \$350 Series MTN 2009-1 General Obligation Notes.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
(in millions of dollars)

Other losses of \$7 were recorded in fiscal 2017 compared to a loss of \$1 in fiscal 2016. The change is mainly due to recording unrealized foreign exchange losses of \$12 on the investment in Aireon in fiscal 2017 due to the fluctuation of the Canadian dollar against the U.S. dollar, compared to \$1 in fiscal 2016. These losses were offset by realized gains of \$2 and unrealized gains of \$5 on the sale of a portion of the Company's investment in Searidge in fiscal 2017.

Income tax expense increased by \$12 in fiscal 2017 compared to fiscal 2016, mainly as a result of the increase in future income tax expense related to the Company's investment in preferred interests of Aireon.

**Net Movement in Regulatory Deferral Accounts Related to Net Income (Loss)**

The net movement in regulatory deferral accounts related to net income (loss) represents the regulatory accounting adjustments, including the rate stabilization mechanism, to adjust the accounting recognition of certain transactions to the periods in which they will be considered for rate setting.

	Years ended August 31		
	2017	2016	Change
Rate stabilization account	\$ 38	\$ (88)	\$ 126
Other regulatory deferral accounts			
Employee benefit pension contributions	127	61	66
Other employee benefits	(1)	(3)	2
Investment in preferred interests, before tax	(25)	(9)	(16)
Investment in equity-accounted investee	(4)	-	(4)
Income tax	14	1	13
Realized hedging transactions	1	1	-
	<u>\$ 150</u>	<u>\$ (37)</u>	<u>\$ 187</u>

The movements in the rate stabilization account are detailed in the table below under "RESULTS OF OPERATIONS – Movements in Rate Stabilization Account".

The net movement in the employee benefit pension contributions regulatory deferral account for the year ended August 31, 2017 increased by \$66 compared to the same period in fiscal 2016. Regulatory adjustments to adjust the total pension benefit expense to the level of pension contributions to be recovered through rate setting were \$127 in fiscal 2017 compared to \$61 in fiscal 2016. Included in the fiscal 2017 regulatory deferral related to pension contributions of \$127 is \$44 of solvency deficiency contributions which are expected to be recovered by the fiscal year ending August 31, 2020. Our approach is to recover going concern contributions in the current year.

The net movement in other employee benefits regulatory deferral accounts increased by \$2 in fiscal 2017 compared to fiscal 2016. The increase is primarily due to the curtailment expense of \$11 incurred as a result of the curtailment and settlement of severance benefits for employees represented by the CATCA, ATSAC and PIPSC collective agreements and an increase of \$2 for non-vesting accumulating sick leave benefits, partially offset by a decrease of \$10 primarily due to deferral of positive experience on LTD benefits. For LTD contributions, our approach is to recover the Company's annual cash contributions to the plans. Our recovery approach for non-vesting accumulating sick leave benefits is to recover the sick leave benefits when they are used and paid in cash. Vested accumulating sick leave benefits are recovered in the period in which employees render service. Re-measurements of other post-employment benefits and the supplemental pension benefits are recovered over the expected average service period of the plan members.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
(in millions of dollars)

The \$16 increase in the investment in preferred interests regulatory deferral account for the year ended August 31, 2017 was primarily due to higher regulatory deferral of positive fair value adjustments of \$27, partially offset by higher unrealized foreign exchange losses of \$11 due to the fluctuation of the Canadian dollar against the U.S. dollar. The impacts to net income (loss) related to the Company's investment in preferred interests of Aireon are deferred until realized in cash through the receipt of dividends net of tax.

The net movement in the investment in equity-accounted investee regulatory deferral account relates to the deferral of the unrealized gain of \$5 on the Company's remaining 50% interest in Searidge, partially offset by the Company's share of net assets. The impacts to net income (loss) related to the Company's investment in Searidge are deferred until realized in cash net of tax.

The net movement in the income tax regulatory deferral accounts includes the deferral of future income tax liabilities related to the Company's investment in preferred interests of Aireon as well as its remaining 50% interest in Searidge. The increase in fiscal 2017 of \$13 compared to fiscal 2016 includes an increase of \$12 to the future income tax liability related to the investment in preferred interests of Aireon and \$1 related to the investment in Searidge.

The realized hedging transactions regulatory deferral account is comparable to fiscal 2016. The recovery approach for interest rate hedging transactions is to defer the impacts until the debt instrument is issued and to recognize the realized gain or loss over the term of the debt instrument that was hedged, using the effective interest rate method.

**Movements in Rate Stabilization Account**

Our rate stabilization mechanism and accounting are described at the beginning of this MD&A and in notes 1 and 8 of our fiscal 2017 financial statements. The table below shows the movements in the rate stabilization account.

	Years ended August 31		
	2017	2016	Change
Credit balance on the statement of financial position, beginning of period	\$ 169	\$ 81	\$ 88
Variances from planned results:			
Revenue higher than planned	56	38	18
Operating expenses (higher) lower than planned	(28)	20	(48)
Other (income) and expenses (higher) lower than planned	(25)	3	(28)
Net movement in other regulatory deferral accounts	57	(4)	61
Total variances from planned results	60	57	3
Customer service charges refund	(60)	-	(60)
Initial approved adjustment	(38)	31	(69)
Net movement in rate stabilization account recorded in net income (loss)	(38)	88	(126)
Credit balance on the statement of financial position, end of period	\$ 131	\$ 169	\$ (38)

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
**(in millions of dollars)**

---

The \$38 decrease in the rate stabilization account during the year ended August 31, 2017 is primarily due to:

- the \$60 one-time refund to customers representing 4.6% of billings for fiscal 2017 air navigation service charges;
- the initial approved adjustment of \$38, representing the anticipated net loss at the time the fiscal 2017 budget was approved;
- operating expenses that were \$28 higher than planned, primarily due to higher salaries and benefits expense as a result of higher pension current service costs due to a 50 basis point decrease in the discount rate from when the fiscal 2017 budget was approved, the curtailment expense of \$11 related to the elimination and settlement of severance benefits for employees represented by the CATCA, ATSAC and PIPSC collective agreements, and higher overtime costs, partially offset by increases in technical services and facilities and maintenance expenses; and
- other (income) and expense that was \$25 higher than planned as a result of foreign exchange losses of \$12, future income taxes \$12 higher than planned and the redemption premium of \$10, partially offset by gains of \$7 on the sale of a portion of the Company's investment in Searidge and positive fair value adjustments \$4 higher than planned;

partially offset by:

- net movement of \$57 in regulatory deferral accounts that was more favourable than planned primarily due to:
  - a regulatory deferral credit for pensions that was \$34 higher than planned primarily due to a 50 basis point decrease in the discount rate from when the fiscal 2017 budget was approved;
  - a regulatory deferral credit for future income taxes related to the Company's investments in preferred interests of Aireon and equity-accounted investee that were \$13 higher than planned;
  - a regulatory deferral credit for retiring allowances of \$11 that was not budgeted for due to the deferral of the curtailment expense related to the elimination and settlement of severance benefits for employees represented by the CATCA, ATSAC and PIPSC collective agreements; and
  - a net regulatory deferral credit related to the Company's investment in preferred interest of Aireon, primarily as a result of unrealized foreign exchange losses due to the fluctuation of the Canadian dollar against the U.S. dollar;

partially offset by:

- a regulatory deferral debit of \$8 to adjust LTD benefits expense to the annual cash contributions for LTD plan funding requirements as a result of plan contributions exceeding benefits expense; and
- a regulatory deferral debit of \$5 to defer the impacts to net (income) loss related to the Company's investment in Searidge that was not budgeted for; and
- revenue that was \$56 higher than planned, prior to the recording of the refund, as a result of an increase of 5.1% in air traffic volumes.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
(in millions of dollars)

**Other Comprehensive Income (Loss)**

The accounting recognition of other comprehensive income (loss) amounts are offset by regulatory deferrals in order to defer the accounting recognition to the periods in which they will be considered for rate setting. These transactions are generally considered for rate setting when the amounts are expected to be realized in cash, with the exception of the cash flows related to hedging instruments, which are considered for rate setting in the same period as the underlying hedged transaction, and re-measurements of unfunded defined employee benefit plans, which are considered for rate setting over the employees' average expected remaining service period.

	Years ended August 31		
	2017	2016	Change
Items that will not be reclassified to income or (loss):			
Re-measurements of employee defined benefit plans	\$ 209	\$ (492)	\$ 701
Net movement in regulatory deferral accounts	(209)	492	(701)
	-	-	-
Items that will be reclassified to income or (loss):			
Amortization of loss on cash flow hedge to net income (loss)	1	-	1
Changes in fair value of cash flow hedges	38	(95)	133
Net movement in regulatory deferral accounts	(39)	95	(134)
	-	-	-
Total other comprehensive income (loss)	\$ -	\$ -	\$ -

Re-measurement gains of employee defined benefit plans in the year ended August 31, 2017 of \$209 are primarily due to actuarial gains of \$121 due to a 20 basis point increase in the discount rate to 3.60% from 3.40% at August 31, 2016, a return on plan assets \$64 greater than the expected return based on the discount rate at August 31, 2016 and \$24 due to positive experience on the defined benefit obligations. For fiscal 2016, the net re-measurement losses of \$492 were mainly a result of actuarial losses of \$858 due to a 70 basis point decrease in the discount rate to 3.40% from 4.10% at August 31, 2015, partially offset by a return on plan assets \$265 greater than the expected return based on the discount rate, actuarial gains of \$63 from demographic changes and \$37 due to positive experience on the defined benefit obligations.

In fiscal 2017, positive fair value adjustments of \$38 were recorded primarily on the Company's interest rate hedges related to the re-financing of debt instruments that will mature in fiscal 2019. In fiscal 2016, negative fair value adjustments of \$44 were recorded on the same interest rate hedges. In addition, during Q2 fiscal 2016, the Company cash-settled interest rate hedges related to the re-financing of debt instruments that matured in February 2016. A loss of \$51 on the forward-dated interest rate swap agreements was recognized in other comprehensive income (loss) and is being reclassified to net income (loss) using the effective interest rate method over the 30-year term of the hedged Series MTN 2016-1 General Obligation Notes.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
(in millions of dollars)

**Amounts Considered for Rate Setting Purposes**

As discussed under "INTRODUCTION – Financial Strategy and Rate Regulation", when establishing customer service charges the Board considers the Company's current and future financial requirements as well as:

- (a) the current and anticipated balance in the rate stabilization account as compared to its target balance; and
- (b) the recovery of pension contributions on a cash basis.

The table below shows the balance of the rate stabilization account as compared to its target balance and the amount of regulatory pension expense cumulatively lower than contributions.

	August 31 2017	August 31 2016	Change
(a) Rate stabilization account credit balance	\$ 131	\$ 169	\$ (38)
Fair value variances on ABCP investments	-	11	(11)
Face value variance on MAV II Class A-2 notes when purchased in fiscal 2011	-	3	(3)
Credit loss provisions on ABCP investments	-	-	-
Net non-credit related fair value variances from face value	-	14	(14)
"Notional" balance of the rate stabilization account <sup>(1)</sup>	131	183	(52)
Target balance of the rate stabilization account <sup>(2)</sup>	(101)	(100)	(1)
Excess of the rate stabilization account from its target balance	(A)\$ 30	\$ 83	\$ (53)
(b) Pension contributions in excess of pension expense	(53)	(136)	83
Regulatory credit balance - recovery of contributions	9	136	(127)
Regulatory expense cumulatively lower than contributions	(B)\$ (44)	\$ -	\$ (44)
Amount to be (recovered) returned over time through rate setting	(A + B)\$ (14)	\$ 83	\$ (97)

As at August 31, 2016, the amount to be returned over time through rate setting was \$83. As at August 31, 2017, the amount to be recovered over time through rate setting is \$14.

<sup>(1)</sup> Due to the receipt of the remaining proceeds from the maturity of ABCP investments in Q2 fiscal 2017, there is no further requirement to "notionally" adjust the balance of the rate stabilization account.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
(in millions of dollars)

(2) The long-term target credit balance of the rate stabilization account is 7.5% of total planned annual expenses net of other (income) and expenses, excluding non-recurring items, on an ongoing basis. For fiscal 2017, the target balance was \$101.

**Financial Outlook<sup>3</sup>**

The Company's status as a privatized, non-share capital corporation where key stakeholders are involved but none have control, is a key strength of our model. Our financial results demonstrate the success of this model and our determined efforts to continue as a global industry leader.

Our success is evident in our safety and service levels, in our initiatives to control costs while improving productivity and in our successful and continuing modernization of the ANS. These initiatives, combined with increases in air traffic volumes, have produced positive financial performance in the past several years. Our financial performance has allowed the Company to avoid overall rate increases for the past thirteen years and to reduce them four times over that period.

Global political and economic conditions can quickly change. While we remain optimistic about long-term outlooks for aviation and air traffic growth, we strive to be prepared for changing conditions and will continue to monitor our financial requirements on an ongoing basis.

Presented below are the Company's current projected annual consolidated results before rate stabilization for fiscal 2018 compared to fiscal 2017 results.

	Fiscal 2018	Fiscal 2017	Change	%
<b>Before rate stabilization</b>				
Revenue	\$ 1,392	\$ 1,291	\$ 101	8%
Operating expenses and other (income) and expenses, including other regulatory adjustments	<u>1,408</u>	<u>1,329</u>	<u>79</u>	<u>6%</u>
Net income (loss) before rate stabilization adjustments	<u>\$ (16)</u>	<u>\$ (38)</u>	<u>\$ 22</u>	

**Revenue**

Revenue for fiscal 2018 is expected to increase by approximately 7.8% or \$101 from \$1,291 in fiscal 2017. In fiscal 2018, there is no customer service charges refund offsetting revenue like that accrued at August 31, 2017 and air traffic growth is forecasted to be 4.2%. As discussed in "INTRODUCTION – Significant Financial Matters: Air Traffic and Customer Service Charges", the revised charges, effective September 1, 2017, effectively continue the 3.9% temporary rate reduction that was implemented in fiscal 2017.

In our Q3 fiscal 2017 MD&A, we had disclosed anticipated revenue of \$1,292 for fiscal 2017 which is comparable to actual results.

<sup>3</sup> Note: See "INTRODUCTION – Caution Concerning Forward-Looking Information", page 1

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
**(in millions of dollars)**

---

**Operating Expenses and Other (Income) and Expenses**

Operating expenses and other (income) and expenses before rate stabilization for fiscal 2018 are expected to be \$1,408. This is an increase of 5.9% or \$79 compared to fiscal 2017 due to:

- higher compensation levels;
- increased operational requirements in the areas of technical services and facilities and systems maintenance;
- lower positive fair value adjustments on investments; and
- the effects of inflation;

partially offset by:

- decreased finance costs as a result of lower debt levels in fiscal 2018 compared to fiscal 2017; and
- lower expected regulatory pension expense, due to lower expected going concern pension contributions on which the regulatory pension expense is based (presented on the statement of comprehensive income as higher pension current service costs and net interest costs that are more than offset by the higher regulatory deferral).

Across the Company, we remain focused on cost saving measures that are consistent with safety, which is our top priority. Our efforts are aimed at managing staffing levels and discretionary expenses, as well as continuing to implement process improvement initiatives and efficiencies.

In our Q3 fiscal 2017 MD&A, we had disclosed anticipated operating expenses and other (income) and expenses, before rate stabilization of \$1,332 for fiscal 2017. While this is comparable to actual results, fiscal 2017 results include a decrease in other finance costs, a decrease in fringe benefits (excluding pension) as a result of positive experience on the Company's LTD benefit plan and unrealized foreign exchange losses on the Company's investment in preferred interest of Aireon compared to forecasted gains. The decrease in fringe benefits and change in unrealized foreign exchange losses were offset by regulatory accounting.

**Cash Flows**

Given the expected net cash flows from operations and cash flows from investing and financing activities in fiscal 2018, the Company's cash position is currently expected to decrease to \$74 as at August 31, 2018 from \$222 as at August 31, 2017. This cash outlook is based on anticipated annual cash inflows from operating activities of \$78 which is net of the \$60 customer service charges refund to customers and the estimated \$44 settlement of the curtailed severance benefits, offset by cash outflows from investing and financing activities of \$160 and \$66, respectively. Investing activities include cash outflows for capital expenditures of \$164, partially offset by the receipt of income taxes receivable of \$4. Financing net cash outflows are primarily comprised of \$375 for the repayment of long-term debt, partially offset by the issuance of \$275 in medium term notes, a release of \$25 from the debt service reserve fund and net proceeds from bank loans of \$11. As discussed below, the Company has adequate existing sources of financing to cover all of its anticipated cash flow requirements.

In our Q3 fiscal 2017 MD&A, we had disclosed an anticipated cash position of \$207 by the end of fiscal 2017. Our cash position at the end of fiscal 2017 is \$15 higher primarily due to lower capital expenditures of \$10 and higher cash inflows from operations of \$4 compared to forecast.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
**(in millions of dollars)**

---

**Rate Stabilization Account**

As noted above, the Company has implemented revisions to its customer service charges, effective September 1, 2017 which effectively continue the 3.9% temporary rate reduction that was implemented in fiscal 2017.

The Company currently anticipates that the rate stabilization account will have a credit balance of \$115 at the end of fiscal 2018, resulting from estimated revenue of \$1,392 and total operating expenses and other (income) and expense (including other regulatory adjustments) of \$1,408 (before rate stabilization). The target balance of the rate stabilization account in fiscal 2018 is \$104.

In our Q3 fiscal 2017 MD&A, we had forecast an anticipated rate stabilization account credit balance of \$129 at the end of fiscal 2017 which is comparable to the actual balance of \$131 as at August 31, 2017.

**Earnings and Cash Flow Coverage**

During a fiscal year, quarterly revenue will reflect seasonal or other fluctuations in the airline industry and therefore our net results vary from quarter to quarter. Our mandate to operate on essentially a financial breakeven basis results in a planned earnings coverage ratio – calculated on the basis of earnings before interest divided by interest expense – that is close to one-to-one. However, the seasonal nature of our revenue may result in an earnings coverage ratio of less than one-to-one for any interim period.

For the twelve months ended August 31, 2017, the Company achieved breakeven financial results. Our interest cost was \$90. Consolidated earnings (after rate stabilization) before interest were \$90, which equals our interest requirement for the fiscal year and meets our one-to-one target. Depreciation and amortization expense for this period was \$147. Our cash flow coverage was 2.63 times our interest requirement for this period.

Earnings coverage ratio and cash flow coverage are non-GAAP financial measures and do not have any standardized meaning prescribed by IFRS. The earnings coverage ratio and cash flow coverage are provided pursuant to and in compliance with National Instrument 44-102 *Shelf Distributions* of the Canadian Securities Administrators. The Company calculates the earnings coverage ratio on the basis of earnings before interest expense on financial liabilities at amortized cost (interest expense) divided by interest expense. Cash flow coverage is calculated on the basis of earnings (after rate stabilization) before interest expense, depreciation and amortization divided by interest expense. Under the *Income Tax Act* (Canada), NAV CANADA, excluding its subsidiaries, is not subject to income taxes and accordingly, no deduction for income taxes has been made. After the application of rate regulated accounting, the provision for income taxes related to our taxable subsidiaries is insignificant.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
**(in millions of dollars)**

---

We maintain a debt service reserve fund and an operations and maintenance reserve fund under our Master Trust Indenture and we are subject to liquidity covenants under our General Obligation Indenture, designed to cover 12 months interest on borrowings and 25% of our annual operating and maintenance expenses. As at August 31, 2017, we were in full compliance with our debt indentures, including the Master Trust Indenture's requirements regarding the reserve funds, the flow of funds and with the rate covenants, as well as the liquidity and other provisions of the General Obligation Indenture.

**Related Party Transactions**

The Company's related parties include its key management personnel, subsidiaries, joint ventures and registered pension plans for its employees. During the year ended August 31, 2017, total amounts paid by us to these related parties, directly or indirectly, were \$149 (year ended August 31, 2016 - \$127) primarily related to contributions to the Company's registered pension plans of \$135 (year ended August 31, 2016 - \$112). Total amounts received or receivable from these related parties during the year ended August 31, 2017 were \$26 (year ended August 31, 2016 - \$28) primarily related to reimbursement for certain costs from the Company's pension plans and accrued dividend income on the investment in preferred interests of Aireon. As at August 31, 2017, the Company has accounts receivable of \$1 (August 31, 2016 - \$3) and an accrued dividend receivable of \$32 (August 31, 2016 - \$25) from Aireon. As at August 31, 2017, the Company has a long-term loan receivable of \$2 outstanding from Searidge. Additional details of these transactions are disclosed in note 21 of our fiscal 2017 financial statements.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
(in millions of dollars)

**SUMMARY OF QUARTERLY RESULTS**

**Quarterly Financial Information (unaudited)**

	Three months ended			
	Q4 August 31 2017	Q3 May 31 2017	Q2 February 28 2017	Q1 November 30 2016
Revenue	\$ 331	\$ 332	\$ 296	\$ 332
Operating expenses	333	348	328	321
Other (income) and expenses	44	16	15	22
	(46)	(32)	(47)	(11)
Income tax expense	5	3	5	1
Net income (loss) before net movement in regulatory deferral accounts	(51)	(35)	(52)	(12)
Net movement in regulatory deferral accounts related to net income (loss), net of tax				
Rate stabilization adjustments	46	2	(3)	(7)
Other regulatory deferral account adjustments	47	25	21	19
	93	27	18	12
Net income (loss) after net movement in regulatory deferral accounts	\$ 42	\$ (8)	\$ (34)	\$ -

	Three months ended			
	Q4 August 31 2016	Q3 May 31 2016	Q2 February 29 2016	Q1 November 30 2015
Revenue	\$ 405	\$ 337	\$ 309	\$ 342
Operating expenses	316	319	\$ 307	\$ 296
Other (income) and expenses	27	34	\$ 25	\$ 30
	62	(16)	(23)	16
Income tax expense	1	-	\$ 1	\$ -
Net income (loss) before net movement in regulatory deferral accounts	61	(16)	(24)	16
Net movement in regulatory deferral accounts related to net income (loss), net of tax				
Rate stabilization adjustments	(32)	(16)	\$ (19)	\$ (21)
Other regulatory deferral account adjustments	20	24	\$ 4	\$ 3
	(12)	8	(15)	(18)
Net income (loss) after net movement in regulatory deferral accounts	\$ 49	\$ (8)	\$ (39)	\$ (2)

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
**(in millions of dollars)**

---

### Discussion of Quarterly Results

The quarterly variations in revenue mainly reflect seasonal fluctuations. Typically, revenue is highest in our fourth quarter (June to August) as a result of increased air traffic in the summer months. The second quarter (December to February) typically has the lowest air traffic volumes. Air traffic for Q4 fiscal 2017 was 5.0% higher on average than in Q4 fiscal 2016. Effective September 1, 2016, the Company implemented revisions to its service charges resulting in reductions on average of 7.6%. In addition, in Q4 fiscal 2017, the Company recorded a \$60 refund of customer service charges.

The majority of our operating expenses are incurred evenly throughout the year. The increase in operating expenses in Q3 fiscal 2017 is primarily due to the curtailment expense recorded to salaries and benefits incurred as a result of the voluntary elimination and settlement of severance benefits for employees represented by the CATCA collective agreement.

Other (income) and expenses fluctuate primarily due to:

- fair value adjustments on investments, including the investment in preferred interests of Aireon, which change based on market factors and changes in expectations of credit losses;
- fair value changes on hedging instruments;
- changes in net interest costs relating to employee benefits as a result of changes in annual discount rates; and
- changes in foreign exchange (gains) or losses as a result of the strengthening or weakening of the Canadian dollar compared to foreign currencies in which the Company transacts, mainly the U.S. dollar.

Net movement in regulatory deferral accounts related to net income (loss) fluctuates due to:

- changes in the rate stabilization account based on variances from planned results and the initial approved adjustment;
- changes in employee benefit pension contributions and expense;
- changes in other employee benefits, including positive or negative LTD experience and funding requirements;
- changes in the investment in preferred interests of Aireon, before tax;
- changes in the investment in equity-accounted investee;
- changes in income taxes; and
- changes in unrealized hedging transactions.

### LIQUIDITY AND CAPITAL RESOURCES

The following sections explain how we manage our cash and capital resources.

Our non-cash current assets are less than our current liabilities. This results from accounts receivable collections that are more rapid than the settlement of accounts payable and accrued liabilities. Should our working capital requirements increase, the Company has adequate credit facilities and cash as noted below.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
(in millions of dollars)

We establish customer service charge base rates to achieve a financial breakeven position on the statement of operations on an annual basis, after considering regulatory adjustments. The inclusion of non-cash depreciation and amortization expenses in the calculation of service charge rates typically leads to positive cash flows from operations. Our strategy is to use these positive cash flows to fund capital expenditures and to replenish our working capital, if required. In addition, our strategy is to maintain a financial structure and credit ratings that will allow the Company to access the capital markets to meet debt maturities as they come due. Should we believe that conditions are not appropriate to undertake a refinancing at a particular time or should we experience a temporary downturn in revenue from seasonal or other factors, the Company has sufficient cash and committed credit facilities at its disposal.

As at August 31, 2017, we had \$222 of cash and cash equivalents and committed credit facilities of \$1,190, of which \$411 was available for unrestricted use (see "LIQUIDITY AND CAPITAL RESOURCES – Liquidity and Financing Strategy").

**Cash flows for the year ended August 31, 2017**

	Years ended August 31		
	2017	2016	Change
<b>Cash flows from:</b>			
Operations	\$ 143	\$ 246	\$ (103)
Investing	98	(99)	197
Financing	(135)	(259)	124
<b>Cash flows from operating, investing and financing activities</b>	106	(112)	218
Effect of foreign exchange on cash and cash equivalents	(3)	1	(4)
<b>Increase (decrease) in cash and cash equivalents</b>	103	(111)	214
Cash and cash equivalents, beginning of period	119	230	(111)
<b>Cash and cash equivalents, end of period</b>	<b>\$ 222</b>	<b>\$ 119</b>	<b>\$ 103</b>
<b>Free cash flow (non-GAAP financial measure):</b>			
Cash flows from:			
Operations	\$ 143	\$ 246	\$ (103)
Capital expenditures <sup>(1)</sup>	(157)	(128)	(29)
Investment in preferred interests <sup>(1)</sup>	(36)	-	(36)
Income tax payment on investment in preferred interests <sup>(1)</sup>	(5)	-	(5)
Proceeds from sale of investment in subsidiary <sup>(1)</sup>	4	-	4
<b>Free cash flow</b>	<b>\$ (51)</b>	<b>\$ 118</b>	<b>\$ (169)</b>

<sup>(1)</sup> See the statements of cash flows of our fiscal 2017 financial statements.

As shown above, cash and cash equivalents increased by \$103 for the year ended August 31, 2017 and the Company experienced negative free cash flow of \$51, which is a non-GAAP financial measure. Non-GAAP financial measures do not have any standardized meaning prescribed by IFRS and therefore may not be comparable to similar measures presented by other issuers. The Company defines free cash flow as cash generated from operations, less capital expenditures and investments in Aireon and equity related investments. Management places importance on this indicator as it assists in measuring the impact of its investment program on the Company's financial resources.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
**(in millions of dollars)**

---

Cash flows from operations for the year ended August 31, 2017 decreased by \$103 from the year ended August 31, 2016, primarily due to lower receipts from customer service charges of \$50, higher payments to employees and suppliers of \$45 and solvency deficiency payments of \$44, partially offset by lower going concern special payment contributions of \$20, lower interest payments of \$9 and higher other receipts of \$7.

Cash flows from investing activities for the year ended August 31, 2017 were inflows of \$98 compared to outflows of \$99 in the year ended August 31, 2016. During the year ended August 31, 2017, we received \$293 of proceeds from MAV II notes, other notes and restructured ABCP compared to \$3 received in the year ended August 31, 2016. Additionally, proceeds of \$4 were received from the sale of a portion of the Company's investment in Searidge. These cash inflows were partially offset by cash investment (excluding capitalized interest) of \$157 in capital projects compared to \$128 in the year ended August 31, 2016. In addition, we invested an additional \$36 in investments in preferred interests and made an income tax payment of \$5 related to that investment. In fiscal 2016, the Company received recoverable input tax payments of \$26 on termination of the cross border transaction. No similar payment was received in fiscal 2017.

Cash outflows from financing activities for the year ended August 31, 2017 were \$135 compared to \$259 for the year ended August 31, 2016. The outflows were a result of the early redemption of \$100 of the \$350 Series MTN 2009-1 General Obligation Notes at a redemption price of \$110 and the annual \$25 principal repayment of the Series 97-2 amortizing revenue bonds.

For the year ended August 31, 2016, our cash and cash equivalents balance decreased by \$111. This was primarily due to repayment of the \$450 Series MTN 2006-1 General Obligation Notes, the payment of \$51 to settle interest rate swap agreements, investment in capital projects of \$128 (excluding capitalized interest) and the annual \$25 principal repayment of the Series 97-2 amortizing revenue bonds. These cash outflows were partially offset by the issuance of the \$250 Series MTN 2016-1 General Obligation Notes (\$248 net of transaction costs), cash inflows from operations of \$246, the receipt of \$26 in recoverable input tax payments on termination of the cross border transaction and a \$19 drawdown of surplus funds from the debt service reserve fund.

### **Liquidity and Financing Strategy**

As a corporation without share capital, the Company finances its operations with borrowed money. When the Company was created, we developed a financing plan called the Capital Markets Platform. All borrowings were incurred and secured under a master trust indenture (the Master Trust Indenture), which initially provided a total drawn and undrawn borrowing capacity of \$3,000. The Master Trust Indenture provides for a gradually escalating reduction of the initial borrowing capacity over 33 years.

In February 2006, we entered into a separate trust indenture (the General Obligation Indenture), which established a borrowing program that qualifies as subordinated debt under the Master Trust Indenture. As subordinated debt, General Obligation Notes are not subject to the mandatory annual debt reduction provisions of the Master Trust Indenture. Provided that we meet an additional indebtedness test, we are not limited in the amount of debt we can issue under the General Obligation Indenture. Under the terms of the General Obligation Indenture, no new indebtedness may be incurred under the Master Trust Indenture. Therefore, as bonds mature or are redeemed under the Master Trust Indenture, they will be replaced with General Obligation Notes or borrowings under our credit facility described below.

Borrowings under the Master Trust Indenture are secured by an assignment of revenue and a security interest over the debt service reserve fund and revenue account maintained under the Master Trust Indenture. The General Obligation Indenture is unsecured but contains positive and negative covenants similar to the Master Trust Indenture.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
(in millions of dollars)

We are exposed to re-financing risk with respect to our bond and note maturities, including the \$25 annual amortizing payment due on the Series 97-2 amortizing revenue bonds. We mitigate this risk by maintaining committed credit facilities in an amount sufficient to meet our refinancing needs in the event of temporary capital market disruptions or lack of access to the market for any reason. The Company also has a Base Shelf Prospectus in place that is valid until December 6, 2017.

The Company has a revolving credit facility with a syndicate of Canadian financial institutions and separate letter of credit facilities for pension funding purposes. As at August 31, 2017, the credit facilities are utilized as follows:

Credit facilities:	
Credit facility with a syndicate of Canadian financial institutions <sup>(1) (2)</sup>	\$ 675
Letter of credit facilities for pension funding purposes <sup>(3)</sup>	515
Total available credit facilities	1,190
Less: Outstanding letters of credit for pension funding purposes <sup>(3)</sup>	477
Less: Outstanding letters of credit for other purposes <sup>(2)</sup>	12
Undrawn committed borrowing capacity	701
Less: Operations and maintenance reserve fund allocation <sup>(3)</sup>	290
Credit facilities available for unrestricted use	\$ 411

<sup>(1)</sup> The Company's credit facility with a syndicate of Canadian financial institutions in the amount of \$675 is comprised of two equal tranches maturing on September 12, 2019 and September 12, 2021. Subsequent to August 31, 2017, these maturity dates were extended to September 12, 2020 and September 12, 2022. The credit facility agreement provides for loans at varying rates of interest based on certain benchmark interest rates, specifically the Canadian prime rate and the Canadian bankers' acceptance rate, and on the Company's credit rating at the time of drawdown. A utilization fee is also payable on borrowings in excess of 25% of the available facility. The Company is required to pay commitment fees, which are dependent on the Company's credit rating. The Company is in compliance with the credit facility covenants as at August 31, 2017.

<sup>(2)</sup> At August 31, 2017, \$12 was drawn from an uncommitted revolving credit facility (including letters of credit with a value of \$3 issued on behalf of Searidge). In connection with this facility, an allocation of \$25 with a Canadian financial institution has been made under its \$675 committed credit facility.

<sup>(3)</sup> The letter of credit facilities for pension funding purposes are comprised of four facilities with Canadian financial institutions totalling \$515, which will mature on December 31, 2017, unless extended. At August 31, 2017, \$477 was drawn for pension solvency funding purposes.

<sup>(4)</sup> The operations and maintenance reserve fund may be used to pay operating and maintenance expenses, if required (see also "LIQUIDITY AND CAPITAL RESOURCES – Financial Instruments and Risk Management: Reserve Funds and Financial Instruments").

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
(in millions of dollars)

The table below shows our long-term debt, liquidity and investments profile.

	August 31 2017	August 31 2016
<b>LONG-TERM DEBT:</b>		
Bonds and notes payable		
Under the Master Trust Indenture	\$ 500	\$ 525
Under the General Obligation Indenture	1,100	1,200
	<u>1,600</u>	<u>1,725</u>
Adjusted for deferred financing costs and discounts	(5)	(6)
Total bonds and notes payable	1,595	1,719
Less: current portion	(375)	(25)
Total non-current loans and borrowings	<u>\$ 1,220</u>	<u>\$ 1,694</u>
<b>LIQUIDITY (excludes MAV II, restructured ABCP and other notes shown below):</b>		
Cash and cash equivalents	\$ 222	\$ 119
Debt service reserve fund	95	94
	<u>\$ 317</u>	<u>\$ 213</u>
Undrawn committed borrowing capacity <sup>(1)</sup>	<u>\$ 701</u>	<u>\$ 716</u>
<b>MAV II, RESTRUCTURED ABCP AND OTHER NOTES:</b>		
Face value <sup>(2)</sup>	\$ -	\$ 293
Fair value variance from face value	-	(14)
	<u>\$ -</u>	<u>\$ 279</u>

<sup>(1)</sup> \$411 of this borrowing capacity is available as described in the previous table (August 31, 2016 - \$446).

<sup>(2)</sup> Proceeds of \$293 were received during the year ended August 31, 2017.

### Credit Ratings

The Company's debt obligations have been assigned the following credit ratings:

Rating Agency	Senior Debt	General Obligation Notes	Outlook
DBRS Limited (DBRS)	AA	AA (low)	Stable
Moody's Investors Service (Moody's)	Aa2	Aa2	Stable
Standard & Poor's (S&P)	AA	AA-	Stable

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
**(in millions of dollars)**

---

DBRS issued a press release on September 13, 2017 confirming the Company's ratings and outlook. DBRS stated that the Company's "credit profile is supported by a solid operating framework, strong traffic conditions and declining debt; however, pension deficiencies remain large and significant user-fee reductions are expected to push the debt service coverage ratio (DSCR) down to a level that DBRS views as inconsistent with the rating, albeit only for one year".

The DBRS report cited the following strengths of the Company as determinants of the rating they assigned:

- Legislated monopoly to provide essential service;
- Statutory right to set rates within guidelines;
- Strong powers to enforce payments;
- Competitive fee structure;
- Sizeable contingency reserve funds.

They also identified the following challenges faced by the Company:

- Inherent risks associated with the air travel business;
- Large pension deficit;
- Essentiality of services limits ability to cut costs;
- Counter-cyclical fee setting approach.

On March 27, 2017, Standard & Poor's (S&P) issued a press release affirming the Company's ratings and stable outlook. The press release noted the Company's credit strengths as holding a monopoly over an essential transportation service, legislated ability to levy user charges on airlines to meet financial requirements and sound debt service coverage ratios (DSCRs). They noted that the Company's weaknesses are a high but declining debt burden, air traffic demand exposure and a large solvency-based pension deficit.

S&P stated that "they expect the Company's rate reductions to erode its financial metrics temporarily." They went on to state, "nevertheless, we expect its financial profile to improve beginning in fiscal 2019, thanks to growing traffic and steady rate levels." They stated that they believe the Company has adequate liquidity but noted their expectation that "NAV CANADA will secure additional letter of credit capacity to fund any incremental pension funding requirements, thereby keeping its unrestricted borrowing capacity relatively stable over the next two years."

S&P noted that the Company's legislated perpetual monopoly is over civil air navigation in Canadian-controlled airspace and stated "accordingly, its air traffic volumes depend not on any one region, but the entire country and international airspace assigned to Canada by treaty. S&P therefore consider the Company's service area to be more diversified than that of airport operators, pointing to greater cash flow stability in support of debt service obligations."

On February 27, 2017, Moody's issued a credit opinion affirming NAV CANADA's base line credit assessment at aa2 and its senior and subordinated ratings at Aa2. Moody's noted the Company's following credit strengths:

- Essential infrastructure asset for the Canadian air transportation system;
- Monopoly provider of civil air navigation services over a very large airspace;
- Legislated right to establish and levy rates and charges as needed to meet financial requirements resulting in good degree of cash flow predictability;
- Continued strong traffic growth;
- Manageable capital expenditure program.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
**(in millions of dollars)**

---

They also noted the following credit challenges:

- Defined benefit pension plan creates recurring calls on cash;
- Periods of weak debt service coverage ratio when the Company depletes its rate stabilization account.

They stated that “the rating outlook is stable, reflecting our expectation that NAV CANADA will be prudent and take into account its overall financial position and upcoming obligations when contemplating a rate decrease and vice versa that it will implement the necessary rate increases if traffic growth does not materialize.”

A credit rating is not a recommendation to buy, sell, or hold securities and may be subject to revision or withdrawal at any time by the rating organization. Our fiscal 2017 AIF contains more detailed information about the credit ratings, including each rating agency's rationale for assigning the given rating.

We are also exposed to risks related to the level of our credit ratings. Specifically, our credit facility agreement contains a pricing scale that is based on our credit ratings. If our senior debt ratings were to fall below AA (or equivalent) and/or our General Obligation Indenture debt ratings were to fall below AA- (or equivalent) our cost of borrowing under the facility would increase, as would the commitment fees payable under the facility.

#### **Cash Requirements**

The following information about our contractual obligations and other commitments summarizes certain of our liquidity and capital resource requirements.

#### **Pension Plans<sup>4</sup>**

Required pension contributions to the Company's pension plans are determined by annual actuarial valuations for funding purposes performed as at January 1 (see below under “Pension Contributions (Going Concern and Solvency)”). Our latest actuarial valuations (for funding purposes) as at January 1, 2017 were completed and filed with OSFI in June 2017.

**Pension Plans' Accounting Deficit:** The Company's pension plans had an accounting deficit of \$1,295 as at the annual measurement date of August 31, 2017 and an accounting deficit of \$1,415 as at August 31, 2016. The \$120 decrease in the deficit position during the year ended August 31, 2017 is primarily due to actuarial gains of \$205 and solvency deficiency contributions of \$44, partially offset by actuarial accounting expense exceeding Company contributions by \$127. The \$205 of actuarial gains are primarily due to a \$117 actuarial gain from a 20 basis point increase in the discount rate to 3.60% from 3.40% at August 31, 2016, a return on plan assets \$64 greater than the expected return based on the discount rate at August 31, 2016 and \$24 due to positive experience on the defined benefit obligations.

The accounting deficit of \$1,415 at August 31, 2016 increased from a deficit of \$866 at August 31, 2015, mainly due to actuarial accounting expense exceeding Company contributions by \$63 and net actuarial losses of \$485. The \$485 of net actuarial losses were primarily due to an actuarial loss of \$836 due to a 70 basis point decrease in the discount rate, partially offset by a return on plan assets \$265 greater than the expected return based on the discount rate, actuarial gains of \$61 from demographic changes and \$24 due to positive experience on the defined benefit obligation.

---

<sup>4</sup> Note: See “INTRODUCTION – Caution Concerning Forward-Looking Information”, page 1

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
(in millions of dollars)

The market-based discount rate used to determine pension obligations is based on the yield on long-term high quality corporate bonds, with maturities matching the estimated cash flows of the plan. A 0.25% decrease in the discount rate would increase the accounting deficit by approximately \$334. Conversely, a 0.25% increase in the discount rate would decrease the deficit by approximately \$311.

**Pension Expenses:** Annual pension benefit costs can increase by approximately \$22 from a 0.25% decrease in the discount rate used in actuarial calculations, or decrease by approximately \$22 from a 0.25% increase in the discount rate.

**Regulatory Recovery of Pension Costs:** The Company uses a regulatory approach for pension costs to determine the net impact charged to net income (loss). The objective of this approach is to expense the cost of the Company's going concern cash contributions to the funded pension plans. In fiscal 2017, the Company made solvency deficiency contributions of \$44 which are being deferred and are expected to be recovered by the fiscal year ending August 31, 2020.

The funding of employee benefits as compared to the expense, net of regulatory adjustments, recorded in the consolidated statement of operations for the Company's funded pension plans is as follows:

	August 31 2017	August 31 2016
Consolidated statement of operations		
Pension current service costs <sup>(1)</sup>	\$ 174	\$ 143
Net finance costs <sup>(1)</sup>	44	30
Less: Regulatory deferrals	(127)	(61)
	91	112
Company cash contributions		
Going concern current service payments	91	92
Going concern special payments	-	20
Solvency deficiency payments	44	-
	135	112
	\$ (44)	\$ -

<sup>(1)</sup> Pension current service costs do not include \$2 related to the Company's unfunded pension plan (year ended August 31, 2016 - \$2) and net finance costs do not include \$2 related to the Company's unfunded pension plan (year ended August 31, 2016 - \$2).

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
**(in millions of dollars)**

---

**Pension Contributions (Going Concern and Solvency):** The actuarial valuations for funding purposes of the pension plans performed as at January 1, 2017 reported a going concern surplus of \$242 (January 1, 2016 – a deficit of \$76).

The regulations governing the funding of federally regulated pension plans include a solvency test, which assumes the plans are terminated as at the valuation date. The actuarial valuations performed as at January 1, 2017 reported a statutory solvency surplus of \$334 based on the assumption that the September 1, 2016 plan text restatement, which included the plan termination amendment that is currently subject to OSFI's review, was in effect on the valuation date. Had the amendment not been included, there would have been a statutory solvency deficiency of \$289 as of January 1, 2017 (January 1, 2016 – a statutory solvency deficiency of \$306).

The Company has the option of meeting its pension solvency funding requirements with letters of credit or cash contributions. Pension funding regulations came into effect in April 2011 permitting solvency special payments to be replaced by letters of credit provided the total value of the letters of credit does not exceed 15% of the pension plan's assets. These regulations were amended in June 2017 permitting the letters of credit maximum to be based on 15% of solvency liabilities instead of assets. As at August 31, 2017, the Company has put in place letters of credit totaling \$477 to meet its cumulative pension solvency funding requirements on a pre-amendment basis. Outstanding letters of credit represent 9% of solvency liabilities on a post-amendment basis and 8% on a pre-amendment basis.

Going concern pension contributions for fiscal 2017 were \$91 with no requirement for cash special payments. In addition, the Company has funded its calendar 2017 solvency funding requirements of \$58 with \$14 of letters of credit and contributed \$44 in cash special payments. Beginning July 1, 2017, solvency contributions will be determined on a pre-amendment basis while discussions with OSFI are ongoing. On a preliminary basis, going concern pension contributions for fiscal 2018 are expected to be \$91 with no requirement for cash special payments.

The amount of required Company contributions and additional letters of credit for future years will be dependent on the investment experience of plan assets, the discount rates and other assumptions that will be used in future actuarial valuations to determine plan liabilities, as well as any changes in pension plan design or funding requirements that may be enacted.

**Risks Associated with the Defined Benefit Plans:** The nature of these benefit obligations exposes the Company to a number of risks, the most significant of which is funding risk. Funding risk can be expressed as the probability of an unusually high level of required pension contributions or significant fluctuation in required pension contributions.

Adverse changes in the value of plan assets of funded plans, long-term return and inflation expectations, interest rates and life expectancy could have a significant impact on pension funding requirements. The funded plan invests in assets that expose it to a range of investment risks. It has strategies, policies and processes in place to manage these risks.

More specifically, funding risk is managed as follows:

- (i) interest rate and inflation risk are managed via implementation of a liability driven investment strategy that focuses on reducing the interest rate and inflation risk mismatch between the plan assets and its pension benefit obligations; and
- (ii) market risk, credit risk and liquidity risk related to the plan assets are managed through diversification amongst different asset classes, securities, risk factors and geographies while adhering to established investment policies and guidelines.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
(in millions of dollars)

**Contractual Obligations**

A breakdown of contractual obligations for the next five fiscal years and thereafter is presented in the following table.

	Remaining payments – for years ending August 31						Thereafter
	Total	2018	2019	2020	2021	2022	
Derivative liabilities	\$ 13	\$ 1	\$ 12	\$ -	\$ -	\$ -	\$ -
Long-term debt (including current portion) <sup>(1), (2)</sup>	1,600	375	275	25	275	25	625
Interest payments <sup>(2)</sup>	612	77	69	53	46	39	328
Capital commitments <sup>(3)</sup>	141	82	12	15	6	4	22
Operating leases	38	8	8	7	7	6	2
<b>Total contractual obligations</b>	<b>\$ 2,404</b>	<b>\$ 543</b>	<b>\$ 376</b>	<b>\$ 100</b>	<b>\$ 334</b>	<b>\$ 74</b>	<b>\$ 977</b>

Total contractual obligations exclude commitments for goods and services in the ordinary course of business. Also excluded are other long-term liabilities mainly due to reasons of uncertainty of timing of cash flows and items that are non-cash in-nature.

- (1) Payments represent principal of \$1,600. The Company intends to refinance principal maturities at their maturity dates. The Company may choose to repay a portion of these maturities with available cash, and/or may increase the size of a re-financing to generate additional liquidity or for other purposes, and/or may choose to redeem, in whole or in part, an issue in advance of its scheduled maturity date.
- (2) Further details on interest rates and maturity dates on long-term debt are provided in note 16 to our fiscal 2017 financial statements.
- (3) The Company has firm commitments for the acquisition of property, plant and equipment and intangible assets amounting to \$141 as at August 31, 2017 (August 31, 2016 - \$118).

The Company's letters of credit are discussed under the heading "LIQUIDITY AND CAPITAL RESOURCES – Liquidity and Financing Strategy".

The Company's contributions to its pension plans are discussed under the heading "LIQUIDITY AND CAPITAL RESOURCES – Cash Requirements: Pension Plans".

**Capital Expenditures and Other Investments<sup>5</sup>**

Planning capital expenditures in respect of systems, technology, buildings and equipment forms part of our annual budgeting process. As part of this planning, we review proposed capital expenditures against safety, financial and business needs justification criteria, considering the Company's unique status as a provider of essential safety-critical infrastructure.

<sup>5</sup> Note: See "INTRODUCTION – Caution Concerning Forward-Looking Information", page 1

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
(in millions of dollars)

During fiscal 2017 we invested \$171 in capital assets (cash outflows of \$157, excluding capitalized interest of \$3) compared to \$134 in fiscal 2016 (cash outflows of \$128, excluding capitalized interest of \$2). Investments were made in systems enhancements, functional upgrades, equipment upgrades or replacements, facility replacements or refurbishment and other projects to meet safety and other operational requirements.

We anticipate spending approximately \$164 on capital assets in fiscal 2018, including approximately \$44 of directly attributable internal labour and travel costs.

During fiscal 2017, the Company invested \$36 to purchase additional preferred interests in Aireon (see "INTRODUCTION – Significant Financial Matters: Investment in Space-Based Aircraft Surveillance through Aireon").

**Capital Management**

The Company views capital as the sum of its issued long-term debt, retained earnings and accumulated other comprehensive income, regulatory deferral accounts and certain employee benefits, as depicted in the following table. This definition of capital is used by management and may not be comparable to measures presented by other companies.

	August 31 2017	August 31 2016
Bonds and notes payable	\$ 1,595	\$ 1,719
Equity:		
Retained earnings	28	28
Regulatory deferral accounts:		
Debit balances	(1,475)	(1,708)
Credit balances	342	476
Employee benefits:		
LTD (asset) liability	(11)	1
Liability for funded pension benefits	1,198	1,346
Liability for accumulating sick leave	22	21
<b>Total capital</b>	<b>\$ 1,699</b>	<b>\$ 1,883</b>

In addition to tracking its capital as defined above for purposes of managing capital adequacy, the Company also takes into consideration known contingent exposures and obligations such as rate setting decisions made by the Board.

The Company's main objectives when managing capital are:

- (i) to safeguard the Company's ability to continue as a going concern;
- (ii) to provide funds for the ongoing acquisition of systems and equipment necessary to implement and maintain a modern, cost-efficient ANS technology platform;
- (iii) to ensure the funding of reserve funds as well as working capital and liquidity requirements;
- (iv) to ensure the funding of regulatory requirements such as funding defined benefit pension plan contributions;
- (v) to maintain the Company's credit ratings to facilitate access to capital markets at competitive interest rates; and

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
**(in millions of dollars)**

---

(vi) to minimize interest costs incurred by the Company subject to appropriate risk mitigation actions.

Given that the Company has no share capital, these objectives are achieved through a process that determines an appropriate period and level of cost recoveries through customer service charge rate setting, as well as the appropriate amount of debt and committed credit facilities. This process includes the Company's operational and capital budgeting process and considers the overall economic and capital market environments. The level of debt and committed credit facilities are approved by the Board. The Company is not subject to any externally imposed capital requirements.

Management's responses to managing capital during the current economic period, including variable air traffic and pension funding requirements, are addressed in other sections of this MD&A.

There were no changes in the Company's approach to capital management during the year ended August 31, 2017.

### **Financial Instruments and Risk Management**

#### **Reserve Funds and Financial Instruments**

Financial instruments are also discussed in note 17 to our fiscal 2017 consolidated financial statements. Under the Master Trust Indenture, we maintain a debt service reserve fund and an operations and maintenance reserve fund. We are also required to meet certain minimum liquidity levels under the General Obligation Indenture.

The debt service reserve fund is maintained in cash and qualified investments deposited with the Trustee. An amount equal to or greater than one year's debt service (excluding General Obligation Indenture debt) is required to be maintained. The debt service reserve fund also counts toward our minimum cash liquidity level under the General Obligation Indenture, which is one year's interest on all debt.

The operations and maintenance reserve fund requirements are met with an allocation of \$290 in undrawn availability under our committed credit facility. At a fiscal year end the fund must cover at least one quarter of the annual operating and maintenance expenses. This fund also serves to meet the minimum liquidity level under the General Obligation Indenture, which consists of the minimum cash liquidity level mentioned above plus one quarter of the previous year's operating and maintenance expenses.

As at August 31, 2017, we were in full compliance with our debt indentures, including the Master Trust Indenture's requirements regarding the reserve funds, the flow of funds and rate covenants, as well as the liquidity and other provisions of the General Obligation Indenture.

#### **Financial Risk Management**

**Interest Rate Risk:** We are exposed to the risk that net interest expense will increase as a result of changes in market interest rates. One aspect of this risk relates to the possibility that maturing bonds may need to be re-financed at higher interest rates. We mitigate this source of interest rate risk in the following ways:

- maturities of borrowings are currently spread over periods up to and including 2046 so that only a portion of outstanding debt will mature in any given fiscal year;
- a bond forward has been entered into in order to mitigate the potential impact of rising interest rates on the cost of refinancing the Series MTN 2013-1 General Obligation Notes that will mature on April 19, 2018; and

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
**(in millions of dollars)**

---

- forward-dated interest rate swap agreements have been entered into in order to mitigate the impact of fluctuating interest rates on interest costs relating to the Company's expected debt issue in April 2019.

A second source of interest rate risk is that the Company has \$317 invested in financial assets that bear interest at floating rates. Earnings on the financial assets will fall when interest rates decline. In the current low interest rate environment, the Company has positioned itself to benefit from increased earnings on floating rate assets as a result of rising interest rates without an offsetting increase in interest expense.

Interest rate risk relating to our pension plans is discussed above under "LIQUIDITY AND CAPITAL RESOURCES – Cash Requirements: Pension Plans".

**Foreign Exchange Risk:** The Company is exposed to foreign exchange risk on sales and purchases that are denominated in currencies other than the functional currency of the Company. However, the Company invoices and receives the vast majority of its revenue in Canadian dollars and also incurs operating expenses and capital expenditures primarily in Canadian dollars. The majority of the Company's exposure to foreign exchange risk relates to the U.S. dollar (U.S.). The Company does not have a significant exposure arising from other currencies. The Company has \$353 (\$285 U.S.) of net exposure to U.S. dollar foreign exchange risk that is primarily related to the Company's investment in preferred interests of Aireon.

The Company designates certain of its forward contracts as cash flow hedging instruments to hedge the Company's exposure to the impact of exchange rate fluctuations. As at August 31, 2017, the Company has not designated any of its forward contracts as cash flow hedging instruments.

The foreign exchange rate sensitivity is the net amount of foreign exchange rate exposure of the items at the reporting date, less foreign currency hedges. As at August 31, 2017, if the Canadian dollar strengthened or weakened by 10% against the U.S. dollar, all other variables remaining constant, net income (loss) before net movement in regulatory deferral accounts would have been impacted by \$30.

**Other Price Risk:** Other price risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices (other than those arising from interest rate risk or foreign exchange risk), whether those changes are caused by factors specific to the individual financial instrument or its issuer, or factors affecting all similar financial instruments traded in the market.

In order to mitigate the risk of losses arising from investment activities, the Company only invests in highly-rated (see credit risk discussion below) and short-term instruments, excluding Aireon.

The investment in preferred interests of Aireon is subject to price risk. The fair value may fluctuate over time due to, among other things, economic conditions and the expected cash flows of Aireon. Aireon is a start-up company and any such changes in the fair value could be material. A change of 5% in the fair value of the investment in preferred interests would impact finance income (other finance costs) by approximately \$12 U.S. (\$15 CDN) as at August 31, 2017.

The estimated fair value of the Company's investments, including the estimate of expected credit losses, may change in subsequent periods. Any such changes could be material and would be reflected in the statement of comprehensive income as they occur.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
**(in millions of dollars)**

---

**Credit Risk on Investments:** Other than the Company's investment in Aireon, in order to mitigate the risk of losses arising from investment activities, we invest only in highly-rated and short-term obligations. The Company limits investments to obligations of the federal government, certain provincial governments, entities guaranteed by a federal or provincial government or other obligations of entities rated by at least two rating agencies in the top two categories for long-term debt or the highest category for short-term debt. Asset backed securities must be sponsored by a Schedule I bank and may not contain synthetic assets. Our portfolio is diversified, with dollar and percentage limits on investment counterparties. None of the Company's holdings in current investments as at August 31, 2017 are past due or impaired, and all have long-term ratings in either the AAA or AA category or short-term ratings in the highest category (DBRS R1 (high)).

**Collection of Accounts Receivable:** We have strong credit policies. We have established a maximum credit limit of \$4 for our largest air navigation services customers and we have other credit control measures that reduce our credit exposure. Our general payment terms provide for payment periods of 30 days for air navigation services and for payment periods of up to 45 days for some other types of services, but shorter payment terms are imposed where customer circumstances warrant. Our credit policies also require payments in advance or satisfactory security to be posted under certain circumstances.

**Liquidity Risk:** We are also exposed to liquidity risk. We mitigate this risk by monitoring current and expected liquidity requirements, taking into account trends in air traffic and expected contributions to our pension plans, to ensure that we maintain sufficient reserves of cash, cash equivalents, investments and/or available undrawn credit facilities to meet our liquidity requirements in the short and longer term. Under the Master Trust Indenture and General Obligation Indenture, the Company is required to maintain certain reserve funds and liquidity levels, as described in note 16 to our fiscal 2017 consolidated financial statements.

As at August 31, 2017, the Company had \$701 of undrawn availability under its committed credit facilities and had allocated \$290 of this facility to meet its operations and maintenance reserve fund requirement under the Master Trust Indenture. The Company has investments in highly rated short-term obligations in its debt service reserve fund. The Company believes that it has sufficient available liquidity to meet its operating needs.

**Cash Flow Variances arising from Air Traffic levels:** We are exposed to unpredictable changes in air traffic volumes that directly affect the Company's cash flows, such as recessions (2009), terrorist attacks (2001), epidemics (SARS - 2004), air carrier financial difficulties, changes in air carrier operations and changing weather patterns that may cause flights to move into or out of Canadian air space. Future traffic volumes could be influenced by a number of factors, including:

- Economic climate – Air traffic generally is influenced by economic growth or decline. For example, during an economic downturn, growth rates in air traffic generally decline. Since a substantial portion of air traffic is international, traffic volumes are influenced by both Canadian and global economic circumstances. On an annual basis, a 1.0% change in air traffic volumes flown in Canadian airspace corresponds to approximately a \$13 change in our revenue before rate stabilization.
- Aviation fuel prices – As fuel represents a major portion of airline operating costs, a change in the price of fuel can affect air traffic demand to the extent that the change is passed on to consumers.
- Terrorist activities, epidemics, pandemics, natural disasters, environmental concerns or weather patterns may all affect air traffic volumes within the airspace for which the Company provides air navigation services.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
**(in millions of dollars)**

---

Our strategy is to mitigate the immediate impact of a sudden decline in air traffic with the least disruption possible to our customer base. We do this with our rate stabilization mechanism, which reduces short-term volatility in customer service charges. Our rate stabilization account tracks and accumulates revenue and expense variances from planned levels (whether positive or negative), so that they may be factored into the setting of future customer service charges. We also mitigate the impact of sudden declines in air traffic by maintaining substantial liquidity in the form of our reserve funds and unrestricted available credit facilities (see discussion under "Liquidity Risk" above).

**Insurance:** Our aviation liability insurance program was last renewed in the amount of \$5,034 U.S. (\$6,283 CDN) on November 15, 2016. This insurance, placed with syndicates at Lloyd's of London and other international insurers, covers all of our ANS operations liabilities to third parties for both bodily injury and property damage. The Government of Canada maintained a program since shortly after September 11, 2001 that protected the Company from a terrorist-related loss in excess of our own insurance. The Government of Canada ended this program on June 30, 2016. As a result, the Company purchased war liability coverage of \$2,000 U.S. (\$2,496 CDN) per occurrence with \$4,000 U.S. (\$4,992 CDN) in the aggregate for periods subsequent to June 30, 2016. The coverage runs until November 15, 2017, at which time the Company intends to renew it. This coverage is underwritten by a number of international insurers. It is non-cancellable in nature. The cost of this insurance is not significant to the Company.

The Company is contractually obligated to indemnify the Government of Canada for any loss suffered by or claimed against it which is covered by the Company's aviation operations liability insurance.

**Legal Proceedings:** The Company is party to certain legal proceedings in the ordinary course of its business. Management does not expect the outcome of any of these proceedings to have a material adverse effect on the consolidated financial position or results of operations of the Company.

### **CHANGES IN ACCOUNTING POLICIES**

A summary of the Company's significant accounting policies are described in note 3 to the fiscal 2017 financial statements.

Certain pronouncements were issued by the International Accounting Standards Board (IASB) or the IFRS Interpretations Committee that had mandatory effective dates for annual periods beginning on or after January 1, 2016.

The following amendment was adopted by the Company September 1, 2016:

#### IAS 1 – Presentation of Financial Statements

In December 2014, the IASB issued Disclosure Initiative (Amendments to IAS 1 *Presentation of Financial Statements*). These amendments improve the existing presentation and disclosure requirements and encourage entities to apply professional judgment regarding disclosure and presentation in their financial statements. The adoption of these amendments resulted in the removal of certain immaterial disclosures in the Company's consolidated financial statements.

#### **Future Accounting Pronouncements**

The IASB has issued a number of standards and amendments that are not yet effective. The Company continues to analyze these standards and amendments thereto to determine the extent of their impact on its consolidated financial statements. At this time, the Company does not expect to adopt any of these standards or amendments before their effective dates, with the exception of IFRS 9.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
**(in millions of dollars)**

---

IFRS 9 – Financial Instruments

The Company plans to early adopt the requirements of IFRS 9 with a date of initial application of September 1, 2017, applying all of the requirements of IFRS 9 retrospectively (prospectively for hedging requirements) without restatement of comparatives. IFRS 9 replaces IAS 39 – *Financial Instruments: recognition and measurement* and also amends some of the requirements of IFRS 7 – *Financial Instruments: Disclosures*. The adoption of this standard has no impact on the Company's consolidated financial statements on date of adoption or for comparative periods however it does require new disclosures.

This standard introduces a new classification and measurement approach for financial assets that reflects the business model in which the assets are managed and their cash flow characteristics. The principal classification categories for financial assets under IFRS 9 are: measured at amortized cost, FVTPL and fair value through other comprehensive income (FVOCI). The existing IAS 39 categories, loans and receivables and available for sale, are eliminated. IFRS 9 largely retains the IAS 39 requirements for the classification of financial liabilities.

IFRS 9 replaces the “incurred loss” impairment model in IAS 39 with a new “expected credit loss” model. The new model applies to financial assets measured at amortized cost or FVOCI, except for investments in equity instruments, and contract assets.

While the adoption of IFRS 9 will change the classification of several of the Company's financial instruments, the changes in classification do not result in any changes in measurement. As well, the new impairment guidelines do not result in a change in the carrying value of the Company's financial assets at amortized cost.

IFRS 9 also introduces a new general hedge accounting standard which aligns hedge accounting more closely with risk management. The new standard does not result in any changes to the Company's hedging relationships at the transition date but will increase disclosures related to them.

IFRS 15 – Revenue from Contracts with Customers

IFRS 15 introduces a new revenue recognition model for contracts with customers. The model contains two approaches for recognizing revenue, at a point in time or over time, and features a contract-based five-step analysis of transactions to determine whether, how much and when revenue is recognized. New estimates and judgmental thresholds have been introduced, which may affect the amount and/or timing of revenue recognized. The new standard is effective for annual periods beginning on or after January 1, 2018. Earlier application is permitted.

The Company is in the process of assessing the anticipated impact of IFRS 15 on its consolidated financial statements. The Company has formed a project team to evaluate and implement the standard and is conducting a detailed review of its current contracts under the standard's five-step model.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
**(in millions of dollars)**

---

IFRS 16 – Leases

In January 2016, the IASB issued IFRS 16, completing its project to improve the financial reporting of leases. The new standard will replace IAS 17 *Leases*, and it sets out the principles for the recognition, measurement, presentation and disclosure of leases for both parties to a contract. For lessees, IFRS 16 eliminates the classification of leases as either operating or finance leases that exist under IAS 17, and requires recognition of assets and liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value. IFRS 16 substantially carries forward the lessor accounting requirements under IAS 17, maintaining the classification of leases as operating or finance leases, and accounting for the lease according to its classification. IFRS 16 is to be applied retrospectively, using either a full retrospective approach or a modified retrospective approach, for annual periods beginning on or after January 1, 2019. Earlier application is permitted, but only if IFRS 15 has also been adopted. The Company has not yet determined the impact of adopting this new standard.

IAS 7 – Statement of Cash Flows

In January 2016, the IASB issued amendments to IAS 7 as part of the IASB's Disclosure Initiative. These amendments require entities to provide disclosures that enable users of financial statements to evaluate changes in liabilities arising from financing activities, including changes from cash flows and non-cash changes. These amendments are effective for annual periods beginning on or after January 1, 2017. Earlier application is permitted. These amendments do not result in any changes to the Company's consolidated financial statements.

IAS 12 – Income Taxes

In January 2016, the IASB issued amendments to IAS 12. These amendments clarify how to account for deferred tax assets related to debt instruments measured at fair value. These amendments are effective for annual periods beginning on or after January 1, 2017. Earlier application is permitted. These amendments do not impact the Company's consolidated financial statements.

IFRIC 22 – Foreign Currency Transactions and Advance Consideration

This interpretation clarifies that the date of the transaction for the purpose of determining the exchange rate to use on initial recognition of the related asset, expense or income (or part of it) is the date on which an entity initially recognizes the non-monetary asset or non-monetary liability arising from the payment or receipt of advance consideration. IFRIC 22 is effective for annual periods beginning on or after January 1, 2018. Earlier application is permitted. The Company does not expect the interpretation to have a material impact on its consolidated financial statements.

IFRIC 23 – Uncertainty over Income Tax Treatments

This interpretation clarifies the accounting for uncertainties in income taxes. The interpretation is to be applied to the determination of taxable profit or loss, tax bases, unused tax losses, unused tax credits and tax rates, when there is uncertainty over income tax treatments under IAS 12. IFRIC 23 is effective for annual reporting periods beginning on or after January 1, 2019. Earlier application is permitted. The Company has not yet determined the impact of adopting this interpretation.

**CRITICAL ACCOUNTING ESTIMATES AND JUDGMENTS**

The preparation of financial statements in conformity with IFRS requires management to make estimates and judgments that affect the reported amounts of revenue and expenses during the period, the reported amounts of assets and liabilities, and the disclosure of commitments and contingencies at the date of the financial statements. These estimates and judgments are based on historical experience, current conditions and various other assumptions made by management that are believed to be reasonable under the circumstances. By their nature, these estimates and judgments are subject to uncertainty and the amounts currently reported in the Company's consolidated financial statements could, in future, prove to be inaccurate.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
**(in millions of dollars)**

---

The following accounting estimates and judgments are based on management's assumptions and are considered to be critical as they involve matters that are highly uncertain. Any changes from those estimates and judgments could have a material impact on our consolidated financial statements. The estimates and judgments are reviewed on an ongoing basis.

### **Critical Judgments**

#### **Depreciation and amortization methods**

Depreciation and amortization methods for property, plant and equipment and intangible assets are based on management's judgment of the most appropriate method to reflect the pattern of an asset's future economic benefit expected to be consumed. For these purposes, management considers industry standards, manufacturer guidelines and company-specific history and experience, among other factors.

#### **Joint arrangements**

The Company has determined that the structure of its investment in preferred interests of Aireon is a joint venture. Judgment is required in determining the existence of joint control and the classification of a joint arrangement. A party has joint control over an arrangement when unanimous consent is required of the parties sharing control for strategic financial and operating decisions. Joint arrangements that provide all parties with rights to the net assets of the entities under the arrangements are classified as joint ventures. The Company has used judgment in assessing the factors that determine joint control, including identifying Aireon's key strategic financial and operating decisions.

### **Key Sources of Estimates and Assumption Uncertainties**

#### **Employee Benefits**

We account for pension, other post-employment benefits and other long-term benefits as required by IAS 19 *Employee Benefits*.

Under IFRS, the amounts reported in our consolidated financial statements are determined using actuarial assumptions regarding the estimation of future benefit obligations and investment performance of plan assets. These assumptions include, but are not limited to, the discount rate used to estimate the future benefit obligation, the rate of compensation increase, inflation, health-care cost trends and expected average remaining years of service of employees. The amounts impacted are the employee benefits asset and liability on the statement of financial position, salaries and benefits and net finance costs relating to employee benefits on the statement of operations, and re-measurements of employee defined benefit plans on the statement of comprehensive income.

While these assumptions reflect management's best estimates, differences in actual results or changes in assumptions could materially affect employee benefit obligations and future net benefit plan costs.

The most significant assumptions used to calculate the net costs of our employee benefit plans are the discount rate used to determine employee benefit obligations including pensions and pensioner mortality assumptions.

The discount rate is the interest rate used to determine the present value of the future expected cash flows that will be needed to meet employee benefit obligations. It is based on the yield on long-term high quality corporate bonds, with maturities matching the estimated cash flows of the plan.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
**(in millions of dollars)**

---

Funding of the pension plans' deficits (as determined in funding valuations in accordance with OSFI regulations) in prior years resulted in pension contributions significantly higher than pension benefit expenses charged to the statement of operations. Our estimates for future pension contributions are discussed above under the heading "LIQUIDITY AND CAPITAL RESOURCES – Cash Requirements: Pension Plans".

Refer to note 2 of our fiscal 2017 consolidated financial statements for more detailed information on key sources of estimation and uncertainty related to employee benefits.

**Investment in Preferred Interests of Aireon**

The Company's investment in Aireon is in preferred interests, which are redeemable and convertible to common equity interests. Until the Company exercises its right to convert its preferred interests to common interests, it does not have access to Aireon's residual net assets and accordingly this investment is accounted for as a financial instrument. The Company elected to designate the investment in preferred interests as a financial asset at FVTPL. As there is no active market for Aireon's equity instruments and the interests acquired by the Additional Investors have substantially the same characteristics as those acquired by the Company. The Company used the price paid by the Additional Investors as a basis to estimate the fair value of Aireon and its investment in the entity through preferred interests in subsequent reporting periods. The measurement is subject to estimation uncertainty and is dependent on the successful achievement of operational, technical and financial objectives by Aireon and Iridium. See "LIQUIDITY AND CAPITAL RESOURCES – Financial Instruments and Risk Management: Financial Risk Management" (specifically "Other Price Risk").

The Company continues to monitor the status of Aireon in order to determine whether there are any indicators that would impact Aireon's fair value. Changes in the valuation of Aireon as a whole could materially affect the valuation of the investment in preferred interests, with changes reflected in the statement of operations as required. The investment in preferred interests of Aireon is subject to price risk. The fair value may fluctuate over time due to, among other things, economic conditions, the possibility of additional investors and the cash flows of Aireon.

**Property, Plant and Equipment and Intangible Assets**

The Company makes estimates about the expected useful lives of property, plant and equipment and intangible assets. In addition, the componentization of the Company's property, plant and equipment and intangible assets, namely buildings, is based on management's best estimates of what components constitute a significant cost in relation to the total cost of an asset and whether these components have similar or dissimilar patterns of consumption and useful lives for purposes of calculating depreciation and amortization. These estimates are based on data and information from vendors, industry practice and company-specific history. Estimates and assumptions are evaluated annually. Changes to these estimates, which can be significant, could be caused by a variety of factors including changes in expected future usage, physical wear and tear, and company-specific history and experience. Any adjustments necessary would be accounted for through depreciation and amortization expense on a prospective basis.

The estimated useful life for buildings is 15 to 40 years, with an average remaining useful life of 7 years for existing buildings. The estimated useful life for systems and equipment is 3 to 25 years. Air navigation systems and equipment are generally depreciated over 10 to 15 years. Business systems including software, servers and peripherals are generally depreciated over 3 to 8 years. The air navigation right is amortized over a period of 46 years, which is the recovery period established by the Board, acting as the rate regulator. Purchased and internally-developed software are amortized over 5 to 20 years.

**NAV CANADA**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL 2017**  
**(in millions of dollars)**

---

**DISCLOSURE CONTROLS AND PROCEDURES AND INTERNAL CONTROL OVER FINANCIAL REPORTING**

In accordance with National Instrument 52-109 *Certification of Disclosure in Issuers' Annual and Interim Filings*, the Company has filed certificates signed by the Chief Executive Officer and the Chief Financial Officer that, among other things, report on the design and effectiveness of disclosure controls and procedures (DC&P) and the design and effectiveness of internal control over financial reporting (ICFR).

**Disclosure Controls and Procedures**

The Company has designed DC&P to provide reasonable assurance that material information relating to the Company is made known to the Chief Executive Officer and the Chief Financial Officer, particularly during the period in which the annual filings are being prepared, and that information required to be disclosed to satisfy the Company's continuous disclosure obligations is recorded, processed, summarized and reported within the time periods specified by applicable Canadian securities legislation.

Management, under the supervision of the certifying officers, has evaluated the effectiveness of the DC&P and based on that evaluation, the certifying officers have concluded that the DC&P were effective as at August 31, 2017.

**Internal Control over Financial Reporting**

The Company has designed ICFR using the framework established in "Internal Control – Integrated Framework" issued in 2013 by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. In designing and evaluating internal controls, it should be recognized that due to inherent limitations, any controls, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives and may not prevent or detect misstatements.

Management, under the supervision of the certifying officers, has evaluated the effectiveness of ICFR and based on that evaluation, the certifying officers have concluded that the Company's ICFR was effective as at August 31, 2017.

**Changes to ICFR**

There have been no changes to the Company's ICFR during the year ended August 31, 2017 that have materially affected or are reasonably likely to materially affect the Company's ICFR and there were no changes to the Company's ICFR during Q4 fiscal 2017.