

Financial Statements of

**HALIFAX REGIONAL
MUNICIPALITY PENSION PLAN**

Year ended December 31, 2016



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INDEPENDENT AUDITORS' REPORT

To the Members of the Halifax Regional Municipality Pension Committee

We have audited the accompanying financial statements of the Halifax Regional Municipality Pension Plan, which comprise the statement of financial position as at December 31, 2016, and the statement of changes in net assets available for benefits, statement of changes in pension obligations and statement of changes in surplus for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian accounting standards for pension plans and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of the Halifax Regional Municipality Pension Plan as at December 31, 2016, and changes in its net assets available for benefits, changes in pension obligations and changes in surplus for the year then ended in accordance with Canadian accounting standards for pension plans.

Comparative information

The financial statements of the Halifax Regional Municipality Pension Plan as at and for the year ended December 31, 2015 were audited by another auditor who expressed an unmodified opinion on these financial statements on June 6, 2016.

Chartered Professional Accountants, Licensed Public Accountants

June 8, 2017

Halifax, Canada

HALIFAX REGIONAL MUNICIPALITY PENSION PLAN

Financial Statements

Year ended December 31, 2016

Financial Statements

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HALIFAX REGIONAL MUNICIPALITY PENSION PLAN

Statement of Financial Position

December 31, 2016, with comparative figures for 2015

	2016	2015
Net Assets Available for Benefits		
Assets:		
Contributions receivable:		
Employers	\$ 1,034,537	\$ 959,888
Employees	994,751	952,879
Total receivables	2,029,288	1,912,767
Prepaid expenses	10,138	7,668
Investments held by trustee: HRM Master Trust (note 3)	1,674,014,651	1,608,968,452
Total assets	1,676,054,077	1,610,888,887
Liabilities:		
Accounts payable and accrued liabilities	1,024,238	702,589
Net assets available for benefits	\$1,675,029,839	\$1,610,186,298

Accrued Pension Obligations and Surplus

Accrued pension obligations (note 4)	1,607,539,000	1,552,494,000
Surplus	67,490,839	57,692,298
Accrued pension obligations and surplus	\$1,675,029,839	\$1,610,186,298

See accompanying notes to financial statements.

On behalf of the Halifax Regional Municipality Pension Committee:

_____ Member

_____ Member

HALIFAX REGIONAL MUNICIPALITY PENSION PLAN

Statement of Changes in Net Assets Available for Benefits

Year ended December 31, 2016 with comparative figures for 2015

	2016	2015
Increase in assets:		
Investment income (note 3)	\$ 101,966,714	\$ 160,543,590
Contributions:		
Employees'	39,171,975	37,588,699
Employers'	40,456,851	39,076,396
Transfers from other pension plans	954,547	441,066
	80,583,373	77,106,161
Total increase in assets	182,550,087	237,649,751
Decrease in net assets		
Administrative expenses (note 5)	6,597,649	6,731,671
Payments:		
Pension payments	76,601,132	71,396,837
Lump sum payments	34,507,765	7,930,700
	111,108,897	79,327,537
Total decrease in assets	117,706,546	86,059,208
Net increase in net assets available for benefits	64,843,541	151,590,543
Net assets available for benefits, beginning of year	1,610,186,298	1,458,595,755
Net assets available for benefits, end of year	\$1,675,029,839	\$1,610,186,298

See accompanying notes to financial statements.

HALIFAX REGIONAL MUNICIPALITY PENSION PLAN

Statement of Changes in Pension Obligations

Year ended December 31, 2016 with comparative figures for 2015

	2016	2015
Accrued pension obligation, beginning of year	\$1,552,494,000	\$1,454,270,000
Increase in pension obligations		
Interest on accrued pension obligation	110,571,000	105,914,000
Cost of benefits accrued during the year	54,790,000	50,721,000
Net impact of experience gains and losses relating to accrued pension obligation	793,000	20,917,000
Total increase in pension obligations	166,154,000	177,552,000
Decrease in pension obligations		
Benefits paid	111,109,000	79,328,000
Total decrease in pension obligations	111,109,000	79,328,000
Net increase in accrued pension obligations	55,045,000	98,224,000
Accrued pension obligation, end of year	\$1,607,539,000	\$1,552,494,000

Statement of Changes in Surplus

Year ended December 31, 2016 with comparative figures for 2015

	2016	2015
Surplus, beginning of year	\$ 57,692,298	\$ 4,325,755
Net increase in net assets available for benefits	64,843,541	151,590,543
Net increase in accrued pension obligation	(55,045,000)	(98,224,000)
Surplus, end of year	\$ 67,490,839	\$ 57,692,298

See accompanying notes to financial statements.

HALIFAX REGIONAL MUNICIPALITY PENSION PLAN

Notes to Financial Statements

Year ended December 31, 2016

1. Description of the Plan:

The following description of the Halifax Regional Municipality Pension Plan (the "Plan") is a summary only. For more complete information, reference should be made to the Plan Text. The Plan is registered in accordance with the Nova Scotia Pension Benefits Act. Its Provincial registration number is 238063.

(a) General:

The Plan is a defined benefit pension plan. However, it also has a defined contribution component (members of the Current Plan division may elect to make optional contributions in respect of non-regular earnings).

The Halifax Regional Municipality Master Trust (the "Master Trust") acts as the investment vehicle for the Plan and the Halifax Regional Water Commission Employees' Pension Plan (the "HRWC Plan").

The Plan became effective April 1, 1998, as a result of the merger of the following pension plans sponsored by the Halifax Regional Municipality (the "HRM") (the "Prior Plans"):

- Prior City of Dartmouth Employees' Retirement Pension Plan;
- Prior Halifax County Municipality Full-time Retirement Pension Plan;
- Prior City of Halifax Superannuation Plan; and
- Prior Metropolitan Authority Employees' Pension Plan.

Members who were members of the Prior Plans could elect to accrue benefits which closely matched what was provided by their respective Prior Plans. However, effective April 1, 1998 a new set of provisions were developed (the "Current Plan"). Active members and members on long-term disability of all Prior Plans were provided the option to accrue future service under the Current Plan, as well as the option to convert their benefits accrued under Prior Plans prior to April 1, 1998 to the Current Plan terms.

HALIFAX REGIONAL MUNICIPALITY PENSION PLAN

Notes to Financial Statements (Continued)

Year ended December 31, 2016

1. Description of the Plan (continued):

(b) Eligibility for membership:

Full-time employees are eligible to become members of the Plan immediately upon commencement of full-time employment. Part-time employees are eligible to join on the first day of January or July following completion of 12 months of continuous service provided the employee has earned at least 25% of the Years' Maximum Pensionable Earnings ("YMPE") or have 700 hours of employment in the preceding 12 months or as may otherwise be provided by an applicable collective agreement. Participation is compulsory for eligible full-time employees and optional for eligible part-time employees (unless participation is required under a collective agreement). The Mayor and Councilors of the HRM may join the plan on or after taking office with the HRM.

(c) Funding policy:

The Plan requires participating employers and members to make contributions. 2016 contribution rates are reported in Note 7. The contribution rate is equal to the percentage of the member's earnings that is required to pay the cost of providing the member's benefits, as determined by the Plan's actuary.

(d) Service pension:

The service pension available for each division of the Plan can be summarized as follows:

Current Plan

The member will be entitled to a pension equal to 2% of the member's average annual pensionable earnings in the highest 3 consecutive years under the defined benefit provision multiplied by the number of years of credited service in the Plan. The maximum pension payable per year of service is the maximum pension as specified in the Income Tax Act. The member will also be entitled to transfer the value of the optional defined contribution account to a locked-in Retirement Account or it may be left in the Plan to increase the member's pension.

HALIFAX REGIONAL MUNICIPALITY PENSION PLAN

Notes to Financial Statements (Continued)

Year ended December 31, 2016

1. Description of the Plan (continued):

Prior City of Halifax Superannuation Plan

The member will be entitled to a pension equal to 2% of the member's average annual pensionable earnings in the highest 3 consecutive years under the defined benefit provision multiplied by the number of years of credited service in the Plan subject to a maximum of 35 years of credited service. The maximum pension per year of service is the maximum pension as specified in the Income Tax Act.

Prior City of Dartmouth Employees' Retirement Pension Plan

A member who contributed to Plan A, will be entitled to a pension equal to 2% of the member's earnings on which the member has made contributions. A member who retires after completing 25 years of credited service shall be entitled to a supplemental pension so as to provide an annual pension equal to 50% of the member's average earnings during the 60 consecutive months of credited service immediately preceding the member's retirement, death, or termination of employment.

A member who contributed to Plan B, will be entitled to a pension equal to 2% of the member's best five consecutive year average earnings multiplied by the member's credited service subject to a maximum of 35 years. A Plan B member who belongs to the respective bargaining unit of the police or firefighter unions will have a best three consecutive year average earnings used to determine the member's pension.

For both Plan A and Plan B members, the maximum pension per year of service is the maximum pension as specified in the Income Tax Act.

Prior Halifax County Municipality Full-time Retirement Pension Plan

A member will be entitled to a pension equal to 2% of the average of the highest three consecutive years earnings multiplied by the number of years of credited service in the Plan, subject to a maximum of 35 years. The maximum pension payable per year of service is the maximum pension as specified in the Income Tax Act.

HALIFAX REGIONAL MUNICIPALITY PENSION PLAN

Notes to Financial Statements (Continued)

Year ended December 31, 2016

1. Description of the Plan (continued):

Prior Metropolitan Authority Employees' Pension Plan

A member will be entitled to a pension equal to 1.5% of the member's average best five years earnings plus 0.5% of the excess of the member's average best five years earnings over and above the YMPE as defined by the Canada Pension Plan in the year of retirement and the two preceding years, multiplied by the number of years of contribution to a maximum of 70% of the best average five year earnings. Former employees of Dartmouth Transit, Nova Scotia Light and Power, and Halifax Transit Corporation are entitled to pension benefits as defined in the Plan. The maximum pension payable per year of service is the maximum pension as specified in the Income Tax Act.

(e) Survivors' pension & death benefits:

As with the service pension under the Plan, the survivor/death benefits vary depending on the division of the Plan under which the member has earned benefits. Under the Current Plan division, if a member dies before receipt of his/her first monthly pension payment, the member's spouse is entitled to receive either a lump sum payment equal to the commuted value of his/her pension, or an immediate or deferred pension. If the member does not have a spouse, the member's beneficiary is entitled to receive a lump sum payment equal to the commuted value of his/her pension. The spouse or beneficiary would also be entitled to the account of the member under the defined contribution provision of the Plan.

If a member dies within 10 years after retirement and did not have a spouse at retirement, the member's beneficiary will be entitled to a lump sum equal to the value of the pension for the remainder of the 10 year period. If the member has a spouse at retirement, the spouse is eligible for a lifetime pension equal to 66.67% of the pension payable to the member at the time of his/her death.

If both the member and the spouse die before receiving payments which total the member's required contributions plus interest balance at the date of the pension commencement, the remainder of this balance will be payable to the beneficiary or estate.

HALIFAX REGIONAL MUNICIPALITY PENSION PLAN

Notes to Financial Statements (Continued)

Year ended December 31, 2016

1. Description of the Plan (continued):

(f) Termination of membership:

As with the service pension under the Plan, the termination benefits vary depending on the division of the Plan under which the member has earned benefits. Under the Current Plan division, if a member's employment terminates for reasons other than death or retirement, the member will be entitled to:

- an unreduced deferred pension payable at the member's Optional Retirement Date, or an immediate reduced pension, if the member was eligible to retire at the members termination date; otherwise
- an unreduced deferred pension payable at the member's Normal Retirement Date.

If the member is not eligible to retire at the member's termination date, the member has an option to commute the value of the deferred pension and transfer the amount to a locked-in retirement account. The member's Defined Contribution Account balance, if any, would also be transferred to a locked-in retirement account.

If the member elects a deferred pension, the member's Defined Contribution Account balance, if any, with interest to the actual date of pension commencement will be used to increase the pension.

2. Significant accounting policies:

(a) Basis of presentation:

The financial statements are presented in accordance with Accounting Standards for Pension Plans in Part IV of the Chartered Professional Accountants Handbook (CPA), Section 4600 - Pension Plans. Section 4600 provides specific accounting guidance on investments and pension obligations. For accounting policies that do not relate to either investments or pension obligations, the Plan must consistently comply with either international financial reporting standards ("IFRS") in Part I of the CPA Handbook or accounting standards for private enterprises ("ASPE") in Part II of the CPA Handbook. The Plan has elected to comply, on a consistent basis, IFRS. To the extent that IFRS is inconsistent with Section 4600, Section 4600 takes precedence.

The Plan's financial statements are prepared on a going-concern basis and present the aggregate financial position of the Plan as a separate financial reporting entity independent of the participating employers and Plan members.

HALIFAX REGIONAL MUNICIPALITY PENSION PLAN

Notes to Financial Statements (Continued)

Year ended December 31, 2016

2. Significant accounting policies (continued):

(b) Fair value measurement:

Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction on the measurement date.

In determining fair value, the Plan uses the guidance in IFRS 13, Fair Value Measurements ("IFRS 13"). As allowed under IFRS 13, if an asset or a liability measured at fair value has a bid and an ask price, the price within the bid-ask spread that is the most representative of fair value in the circumstances shall be used to measure fair value. The Plan uses closing market price as a practical expedient for fair value measurement.

When available, the Plan measures the fair value of an instrument using quoted prices in an active market for that instrument. A market is regarded as active if quoted prices are readily and regularly available and represent actual and regularly occurring market transactions on an arm's length basis.

If a market for a financial instrument is not active, then the Plan establishes fair value using a valuation technique. Valuation techniques include using recent arm's length transactions between knowledgeable, willing parties (if available), reference to the current fair value of other instruments that are substantially the same, discounted cash flow analysis and other pricing models.

The best evidence of the fair value of a financial instrument at initial recognition is the transaction price i.e. the fair value of the consideration given or received, unless the fair value of that instrument is evidenced by comparison with other observable current market transactions in the same instrument or based on a valuation technique whose variables include only data from observable markets. When transaction price provides the best evidence of fair value at initial recognition, the financial instrument is initially measured at the transaction price and any difference between this price and the value initially obtained from a valuation model is subsequently recognized in profit or loss on an appropriate basis over the life of the instrument but not later than when the valuation is supported wholly by observable market data or the transaction is closed out.

All investment transactions are recorded at the point when the risks and rewards of ownership are transferred. Purchases and sales of publicly traded investments are recorded as of the trade date.

All changes in fair value are recognized in the statement of changes in net assets available for benefits as part of the investment income.

HALIFAX REGIONAL MUNICIPALITY PENSION PLAN

Notes to Financial Statements (Continued)

Year ended December 31, 2016

2. Significant accounting policies (continued):

The fair value of the investment in Master Trust is valued at the unit value supplied by the Master Trust, which represents the Plan's proportionate share of underlying net assets at fair values determined using closing market prices.

While the Plan believes its valuation techniques are appropriate and consistent with other market participants, the use of different techniques or assumptions could result in different estimates of fair value at the statement of financial position date.

Fair value hierarchy

Investment assets and investment-related liabilities are classified and disclosed in one of the following categories reflecting the significance of inputs used in making the fair value measurement:

- Level 1 - quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2 - inputs other than quoted prices included in Level 1 that are observable for the assets or liabilities, either directly (i.e., as prices) or indirectly (i.e., derived from prices); and
- Level 3 - inputs for the assets or liabilities that are not based on observable market data (unobservable inputs).

If different levels of inputs are used to measure the fair value of an investment, the classification within the hierarchy is based on the lowest level input that is significant to the fair value measurement.

(c) Investment transactions, income recognition and transaction costs:

Investment transactions are accounted for on a trade date basis.

Income from investments is reflected in investment activities and is recorded on an accrual basis and includes interest and dividends, as well as gains and losses that have been realized on disposal of investments and the unrealized appreciation and depreciation in the fair value of investments.

Brokers' commissions and other transaction costs are recorded in the statement of changes in net assets available for benefits when incurred.

HALIFAX REGIONAL MUNICIPALITY PENSION PLAN

Notes to Financial Statements (Continued)

Year ended December 31, 2016

2. Significant accounting policies (continued):

(d) Foreign currency translation:

Transactions denominated in foreign currencies are translated into Canadian dollars at the rates of exchange prevailing on the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies at the reporting date are retranslated into Canadian dollars at the exchange rate at that date.

Foreign currency differences arising on retranslation are recognized in the statement of changes in net assets available for benefits as part of investment income.

(e) Contributions:

Basic contributions from employers and members due to the Plan as at the end of the year are recorded on an accrual basis. Service purchases and transfers from other pension plans are recorded and service is created when the purchase amount is received.

(f) Benefits:

Benefit payments to retired members, commuted value payments, refunds to former members and transfers to other pension plans are recorded in the period they are paid. Accrued benefits are recorded as part of the accrued pension obligation.

(g) Administrative expenses:

Administrative expenses, incurred for plan administration and direct investment expenses, are recorded on an accrual basis. Plan administration expenses represent expenses incurred to provide services to the Plan members and employers. Investment expenses represent expenses incurred to manage the Plan investment portfolio.

(h) Use of estimates and judgments:

The preparation of financial statements in conformity with Canadian accounting standards for pension plans requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets and liabilities at the date of the statements and the reported amounts of changes in net assets available for benefits during the year. Actual results could differ from those estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future years affected. Significant estimates and judgments included in the financial statements include Level 2 and 3 investments in the fair value hierarchy and the accrued pension obligation. Actual results could differ from those estimates.

HALIFAX REGIONAL MUNICIPALITY PENSION PLAN

Notes to Financial Statements (Continued)

Year ended December 31, 2016

2. Significant accounting policies (continued):

(i) Basis measurement:

The financial statements have been prepared on the historical cost basis, except for the investment in the HRM Master Trust which is measured at fair value through the statement of changes in net assets available for benefits.

(j) Income taxes:

The Plan is a registered plan, as defined by the Canadian Income Tax Act and, accordingly is not subject to Canadian income taxes.

(k) Functional and presentation currency:

These financial statements are presented in Canadian dollars, which is the Plan's functional currency.

(l) Future changes to accounting policies:

The following standard is not yet effective for the year ended December 31, 2016 and has not been applied in preparing these financial statements:

- IFRS 9, Financial Instruments, introduces new requirements for the classification and measurement of financial assets. The new standard will replace IAS 39, Financial Instruments: Recognition and Measurement and includes guidance on recognition and derecognition of financial assets and liabilities, impairment and hedge accounting. The new standard will come into effect January 1, 2018, with early application permitted. The Master Trust will evaluate the impact of the change to the financial statements based on the characteristics of financial instruments outstanding at the time of adoption.

3. Investments in HRM Master Trust:

The investment in the Master Trust is recorded at its fair value. The Plan's interest in the Master Trust represents 93.99% (2015 - 94.13%) of the Master Trust units. The remaining units are held by the HRWC Plan. The co-mingling of investments does not affect the actuarial liabilities or the net assets available for benefits of the Plan.

The fair value of the investment in the Master Trust is determined as at the date of the statement of financial position as described in note 2(b). The fair value of the investment in the Master Trust is categorized as a Level 2 investment under fair value hierarchy measurement.

HALIFAX REGIONAL MUNICIPALITY PENSION PLAN

Notes to Financial Statements (Continued)

Year ended December 31, 2016

3. Investments in HRM Master Trust (continued):

Section 67 (3) of the *Pension Benefits Act Regulations* requires disclosure of each investment asset that has a fair value greater than two percent of the fair value of all the investment assets of the Plan. The following schedule presents a listing of all investments that have a fair value greater than two percent of the fair value of all investment assets of the Plan.

	Investment type	Market value
Blackrock Active Canadian Equity Fund	Canadian Equities	\$ 74,962,196
Wellington Management Global Total Return Fund	Foreign Bonds	69,873,471
Putnam Canadian Fixed Income Global Alpha Fund	Canadian Bonds	57,329,048
GCM Grosvenor Opportunistic Investments, L.P.	Limited Partnership	44,856,589
ACM Bernstein SICAV Emerging Consumer Portfolio	Foreign Equity	36,535,123
UBS (UK) Real Estate Funds Selection Global Ex Canada, L.P.	Limited Partnership	35,783,937
Minto Multi-Residential Income Partners I, L.P.	Limited Partnership	34,080,977
Macquarie European Infrastructure Fund 4 L.P.	Limited Partnership	33,590,544
		\$ 387,011,885

4. Obligations for pension benefits:

An actuarial valuation was conducted as at December 31, 2015 to determine the present value of the accrued pension obligation using the projected accrued benefit actuarial cost method prorated on service and best estimate assumptions by Aon Hewitt, a firm of consulting actuaries. The next actuarial valuation of the Plan will be required as at a date not later than December 31, 2016 or as at the date of an earlier amendment to the Plan, in accordance with the minimum requirements of the Nova Scotia Pension Benefits Act (the "PBA").

The accrued pension obligation as at December 31, 2016 is based on the actuarial valuation of the Plan as at December 31, 2015 extrapolated to December 31, 2016 by Aon Hewitt. The main components of the change in the present value of the accrued pension obligation from the actuarial valuation as at December 31, 2015 and our projections at December 31, 2016 are as follows:

HALIFAX REGIONAL MUNICIPALITY PENSION PLAN

Notes to Financial Statements (Continued)

Year ended December 31, 2016

4. Obligations for pension benefits (continued):

	December 31, 2016 Extrapolated	December 31, 2015 Extrapolated
Actuarial present value of accrued pension obligation, beginning of year	\$1,552,494,000	\$1,454,270,000
Interest on accrued pension obligation	110,571,000	105,914,000
Cost of benefits accrued during the year	54,790,000	50,721,000
Benefits payments	(111,109,000)	(79,328,000)
Net impact of experience gains and losses relating to accrued pension obligation	793,000	20,917,000
Actuarial present value of accrued pension obligation, end of the year	\$1,607,539,000	\$1,552,494,000

The Plan's net financial position (net assets available for benefits less accrued pension obligation) for accounting purposes will differ from the deficit reported in the actuarial valuation report because of differences in calculation methodologies used. For accounting purposes, management's best estimate of annualized long term returns is used to value future pension obligations. Management's long term rate of return assumption as at December 31, 2016 was 7.25% (2015 – 7.25%). The 2015 actuarial valuation report assumed a more conservative long term annualized rate of return objective of 6.5% (2014 – 6.55%) to value future pension obligations. For accounting purposes, assets are shown at market value. The market value of assets in the 2015 actuarial valuation report is reduced by a reserve of \$94,490,000 (2014 – \$57,116,000) for purposes of including additional conservatism. The reserve helps to offset poor returns in future years for funding purposes.

HALIFAX REGIONAL MUNICIPALITY PENSION PLAN

Notes to Financial Statements (Continued)

Year ended December 31, 2016

4. Obligations for pension benefits (continued):

The Plan's most recent actuarial valuation report as of December 31, 2015 reports a funding deficit of \$176,093,000 (2014 - \$197,233,000). For accounting purposes, the Plan had an accounting surplus of \$67,491,000 as at December 31, 2016 (2015 - \$57,692,000).

Below is a reconciliation of the funding deficit to the accounting surplus as of December 31, 2015.

Funding deficit, December 31, 2015	\$ (176,093,000)
Actuarial asset smoothing amount	94,490,000
Decrease in pension obligations due to differences in discount rate (6.5%) and asset rate of return (7.25%)	139,295,000
Accounting surplus, December 31, 2015	\$ 57,692,000

The 2016 actuarial valuation report will not be complete until after the Plan's financial statements are published.

The assumptions used in determining the actuarial value of accrued pension obligation were developed by reference to expected long-term market conditions. Significant long-term actuarial assumptions used in the extrapolation were:

	2016	2015
Asset rate of return, per annum	7.25%	7.25%
Rate of salary increase, per annum	3.0%	3.0%
	plus an age related scale representing merit increases	
Mortality rates	2014 Canadian Pensioner Mortality Table, Private Sector projected generationally with Scale CPM-B	
Retirement Age	60% at the earliest age at which an unreduced pension is payable, remainder at normal retirement date	

HALIFAX REGIONAL MUNICIPALITY PENSION PLAN

Notes to Financial Statements (Continued)

Year ended December 31, 2016

5. Administrative expenses:

The Plan is charged with administrative and certain other expenses incurred on behalf of the Plan.

	2016	2015
Investment expenses	\$ 4,663,747	\$ 5,283,840
Pension administration expenses	1,325,362	1,009,936
Governance expenses	608,540	437,895
	<u>\$ 6,597,649</u>	<u>\$ 6,731,671</u>

- Investment expenses include all costs associated with investment and risk management.
- Pension administration expenses include all costs associated with pension calculations and plan member service.
- Governance expenses include all costs associated with governance including committee costs, audit, legal, actuarial and consulting fees.

Total Administrative expenses as a percentage of net assets available for benefits is 0.39% (2015 - 0.42%).

6. Investment risk management:

Risk management relates to the understanding and active management of risks associated with all areas of the business and the associated operating environment. Investments are primarily exposed to interest rate, credit, market, liquidity and foreign currency risk. The Pension Committee has set formal policies and operating procedures that establish an asset mix among equity, fixed income investments, private debt, private equity, real estate and infrastructure that require diversification of investments within categories, a set limit on the size of exposure to individual investments, and a requirement to use A-rated counterparties.

(a) Interest rate risk:

Interest rate risk refers to the fact that the underlying assets of the Master Trust's financial position will change with market interest rates changes as fixed income securities are sensitive to changes in nominal interest rates. Interest rate risk is inherent in the management of a pension plan due to prolonged timing differences between cash flows related to the Plan's assets and cash flows related to the Plan's liabilities.

Excluding all other variables, a one percent increase (decrease) in nominal interest rates would decrease (increase) the fair value of the Plan's portion of the Master Trust by

HALIFAX REGIONAL MUNICIPALITY PENSION PLAN

Notes to Financial Statements (Continued)

Year ended December 31, 2016

6. Investment risk management (continued):

\$13,334,860 (2015 - \$15,250,255).

(b) Credit risk:

Credit risk is the risk of loss due to the potential of the issuer of the debt not making agreed payments (principal, interest or both). Counterparty risk is the risk that the counterparty of a contract will not fulfil their contractual obligation. Credit risk is mitigated through the management of the Master Trust assets within generally accepted parameters of safety and prudence, using a diversified investment program. Investments must adhere to specific limitations as outlined in the Halifax Regional Municipality Statement of Investment Policies and Procedures for the Defined Benefit Pension Plan (the "Statement of Investment Policies and Procedures").

The Plan is exposed to credit-related losses in the event of non-performance by counterparties to derivative financial instruments held by the Master Trust. In order to mitigate this risk, the Master Trust deals only with highly-rated counterparties, normally major financial institutions.

Credit risk represents the maximum amount that would be at risk as at the reporting date if the counterparties failed to perform under the contracts, and if the right of offset proved to be non-enforceable. Credit risk exposure on derivative financial instruments is represented by the replacement cost receivable of contracts with counterparties, less any prepayment collateral or margin received, as at the reporting date.

(c) Market risk:

Market risk is the risk that the value of an investment will fluctuate as a result of changes in market prices (other than those arising from foreign currency risk or interest rate risk), whether those changes are caused by factors specific to the individual financial instrument, its issuer, or factors affecting all similar financial instruments traded in the market. The Master Trust's policy is to invest in a diversified portfolio of investments, based on criteria established in the Statement of Investment Policies and Procedures, to mitigate the impact of market risk.

The Master Trust's investments in equities are sensitive to market fluctuations. After the effect of derivative contracts, and without a change in all other variables, a ten percent increase (decrease) in market values of all publicly listed equity, less equity derivatives, would increase (decrease) the fair value of the Plan's portion of the Master Trust by \$55,200,513 (2015 - \$52,730,067).

HALIFAX REGIONAL MUNICIPALITY PENSION PLAN

Notes to Financial Statements (Continued)

Year ended December 31, 2016

6. Investment risk management (continued):

(d) Liquidity risk:

Liquidity risk is the risk of not being able to meet the Plan's cash requirements in a timely and cost effective manner. Liquidity requirements are managed through income generated from the investment in the Master Trust, monthly contributions made by members and participating employers and by investing in publicly traded liquid assets that are easily sold and converted to cash. The sources of funds are used to pay pension benefits, make additional investments and fund operating expenses. The Plan's primary future liabilities include the accrued pension obligation of the Plan.

Approximately 48% (2015 – 48%) of the Master Trust's investments are in liquid securities traded in public markets, consisting of fixed income and equities. Pooled funds consisting of exchange traded equities are approximately 13% (2015 – 14%) of the Master Trust's investments and are liquid within 30 days or less.

(e) Foreign currency risk:

Foreign currency risk arises from the Master Trust's holding of foreign currency denominated investments. Fluctuations in the relative value of the Canadian dollar against these foreign currencies can result in a positive or a negative effect on the fair value of investments. Foreign currency risk is controlled by limiting investments in foreign holdings through the asset allocation guidelines set forth in the Statement of Investment Policies and Procedures, and through hedging the risk with derivative forward contracts.

Assuming the current foreign currency forward contracts remain in place, and without a change in all other variables, a ten percent increase (decrease) in the Canadian dollar against all other currencies would decrease (increase) the fair value of the Plan's portion of the Master Trust by \$67,181,971 (2015 - \$75,557,560).

HALIFAX REGIONAL MUNICIPALITY PENSION PLAN

Notes to Financial Statements (Continued)

Year ended December 31, 2016

7. Funding policy:

(a) Member contribution rates under the defined benefit pension plan are as follows:

	January 1, 2016 to December 31, 2016	January 1, 2014 to December 31, 2015	April 1, 2006 to December 31, 2013
Current plan division:			
Public Safety Occupations hired after April 1, 1998	12.56%	12.31%	10.71%
Public Safety Occupations hire after July 1, 1994 under the former Halifax Plan	12.56%	12.31%	10.71%
Other Public Safety Occupations who elected the "Rule of 75"	12.91%	12.66%	11.06%
Other members	12.21%	11.96%	10.36%
Dartmouth plan division:			
Public Safety Occupations Members contributing at a lower rate	11.72%	11.49%	9.96%
Other members	10.42%	10.19%	8.66%
Other members	11.42%	11.19%	9.66%
Halifax plan division:			
Public Safety Occupations hired after July 1, 1994	12.26%	12.01%	10.41%
Other members	11.91%	11.66%	10.06%
County plan division:			
All members	11.71%	11.46%	9.86%
Metro plan division:			
All members	12.01% up to YMPE 12.91% above YMPE	11.76% up to YMPE 12.66% above YMPE	10.16% up to YMPE 11.06% above YMPE

Members contributing under the Current Plan division also have the option to contribute to a defined contribution provision of 6.3% of their overtime and other non-regular earnings. Police officers contributing under the Current Plan division also have the option to contribute 12.6% of police extra-duty earnings.

HALIFAX REGIONAL MUNICIPALITY PENSION PLAN

Notes to Financial Statements (Continued)

Year ended December 31, 2016

7. Funding policy (continued):

(b) Participating Employers' Required Contributions:

Under the Plan, the cost of most benefits is to be shared equally between the members and participating employers. Participating employers therefore contribute at the same rates as shown in the previous table other than for the following exceptions: for members accruing service under the Prior Dartmouth Plan division, participating employers contribute 1.1 times the members' required contributions. Also, participating employers will only match 12.21% of pensionable earnings out of the 12.91% of pensionable earnings to be contributed by the members in Public Safety Occupations who elected to have the "Rule of 75". Employers will match the 6.3% optional contributions made by members on overtime and other non-regular earnings, but employers do not match the 12.6% optional contributions made by members on police extra-duty earnings.

8. Fair value of financial assets and financial liabilities:

The fair values of investments are as described in Note 3. The fair values of other financial assets and liabilities being receivables, prepaid expenses and accounts payable and accrued liabilities approximate their carrying values due to the short-term nature of these instruments.

9. Fund management:

Investment management is the responsibility of the Master Trust's appointed investment managers and investment staff in the HRM Pension Office subject to compliance with the Statement of Investment Policies and Procedures as approved by the Pension Committee. The investment objective of the Master Trust is to earn an annualized rate of return of at least 6.5% (2015 - 6.55%) over the long term. A strategy of investment in assets of short-term investments, bonds, equities, real estate, infrastructure, private equity, and private debt is aimed at achieving the objective.

HALIFAX REGIONAL MUNICIPALITY PENSION PLAN

Notes to Financial Statements (Continued)

Year ended December 31, 2016

10. Securities lending:

The Master Trust participates in a securities lending program whereby it lends securities that it owns to third parties for a fee through a securities lending agent (“agent”). For securities loaned, the Master Trust receives a fee and the borrower provides readily marketable securities of higher value as collateral to the Master Trust’s agent which mitigates the credit risk associated with the program. When the Master Trust lends securities, the risk of failure by the borrower to return the loaned securities is alleviated by such loans being continually collateralized. If the borrower is unable to return the securities, the agent is authorized to sell the collateral and purchase identical securities to return to the Master Trust. If the collateral is not sufficient and there is a shortfall between the value of the collateral and loaned security that cannot be recovered, the agent is responsible to acquire additional securities for the Master Trust at its costs. As at December 31, 2016, securities with an estimated fair value of \$141,969,077 (2015 \$94,488,837) were loaned out, while collateral held had an estimated fair value of \$150,308,910 (2015 \$100,558,394). The securities lending contracts are collateralized by Government of Canada sponsored agency bonds, Government of Canada bonds and treasury notes, Provincial Government bonds, agency mortgaged back securities, foreign government bonds and treasury notes and Canadian common stocks.

11. Related party transactions:

During the year, the Halifax Regional Municipality provided information technology services and certain computer equipment to the Plan at no charge.

12. Capital management:

The main objective of the Plan is to sustain a certain level of net assets in order to meet its pension obligations. The Pension Committee manages the contributions and plan benefits as required by the Plan and its applicable Regulations. The Pension Committee approves and incurs expenses to administer the Plan. Under the direction of the Pension Committee, the Plan provides for the short term financial needs of current benefit payments while investing member's contributions for the longer term security of pensioner payments. The Pension Committee exercises due diligent practices and has established written investment policies and procedures, and approval processes. Operating budgets, audited financial statements, annual actuarial valuations and reports, and as required, the retention of supplementary professional advisors, are part of the Plan's governance structure.