

# **Newfoundland and Labrador Provincial Court Judges' Pension Plan**

## **Actuarial Valuation as at December 31, 2016 for Funding Purposes**

Report prepared September 2017

Registration numbers: Newfoundland and Labrador #075570  
Canada Revenue Agency #1119015

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# Introduction

This report presents the results of the actuarial valuation as at December 31, 2016 of the Newfoundland and Labrador Provincial Court Judges' Pension Plan (the "Plan"). The Government of Newfoundland and Labrador (the "Government") retained the services of Morneau Shepell Ltd. ("Morneau Shepell") to perform this actuarial valuation. The last complete valuation that was filed with the Newfoundland and Labrador Office of the Superintendent of Pensions and the Canada Revenue Agency was performed as at December 31, 2013.

This report was prepared for the Government of Newfoundland and Labrador, the Newfoundland and Labrador Office of the Superintendent of Pensions, and the Canada Revenue Agency for the following purposes:

- to determine the funded status of the Plan on the going-concern basis;
- to determine the funded status of the Plan on both solvency and hypothetical wind-up bases;
- to estimate the Government contributions required under the Plan during the period from this valuation date up to the next valuation in accordance with the Newfoundland and Labrador *Pension Benefits Act*; and
- to provide the information and the actuarial opinion required by the Newfoundland and Labrador *Pension Benefits Act* and the *Income Tax Act* (Canada).

## Restriction on use of this report

This report was prepared for the Government for the specific purposes noted above. It will also be filed with the Newfoundland and Labrador Office of the Superintendent of Pensions and the Canada Revenue Agency. This report is not intended or necessarily suitable for other parties or for purposes other than those noted above. Use of this report for any other purpose may not be appropriate and, as such, Morneau Shepell is not responsible for consequences of using this report in any other context.

# Section 1 – Actuarial Opinion

This opinion is given with respect to the Newfoundland and Labrador Provincial Court Judges' Pension Plan, registration number 075570 (Newfoundland and Labrador). We performed a valuation of the Plan as at December 31, 2016, based on the Plan provisions and data as at that date. The Government has confirmed that, between December 31, 2016 and the date of this report, no subsequent events, modifications or extraordinary changes to the membership or the Plan that would materially affect the results of this actuarial valuation have occurred.

We hereby certify that, in our opinion, as at December 31, 2016:

- The Plan is fully funded on the going-concern basis. The actuarial value of assets exceeds the actuarial liabilities by \$1,389,900.
- The Plan has a solvency deficiency of \$2,257,700. The solvency deficiency cannot be funded because of funding restrictions on designated plans under Section 8515 of the *Income Tax Regulations* (Canada).
- The Plan assets would have been less than the actuarial liabilities by \$2,007,600 if the Plan had been wound up on the valuation date.
- The solvency ratio of the Plan, as defined under the Newfoundland and Labrador *Pension Benefits Act*, is equal to 80.0%.
- In accordance with paragraph 41(5)(a) of the Regulations to the Newfoundland and Labrador *Pension Benefits Act*, Government is exempt from making any contributions in respect of any solvency deficiency under the Plan.
- The residual normal cost (i.e. the normal cost less member required contributions) is equal to 75.5% of member contributions. The Government should contribute 75.5% of member contributions until the next valuation.

The estimated normal cost and contribution requirements are shown below in Table 1.1.

**Table 1.1 – Estimated Normal Cost**

Plan year	Total normal cost	Member contributions	Government contributions
2017	565,200	322,000	243,200
2018	583,600	332,500	251,000
2019	602,500	343,300	259,200

These contributions conform to the eligibility requirements of the *Income Tax Act* (Canada) if contributed within the fiscal year or remitted within 120 days after the end of the fiscal year. They also conform to the Newfoundland and Labrador *Pension Benefits Act*. This Act requires that the current service Government contributions in addition to the member contributions be remitted to the fund monthly, within 30 days of the month to which they pertain.

In our opinion, for the purposes of this report:

- The membership data on which the valuation is based are sufficient and reliable for the purposes of the valuation.
- The assumptions are appropriate for the purposes of the valuation.
- The methods employed in the valuation are appropriate for the purposes of the valuation.

This report has been prepared, and our opinion given, in accordance with accepted actuarial practice in Canada.

The assumptions that form the going-concern basis used in this report were reasonable at the time this actuarial valuation report was prepared and contributions were determined.

This actuarial valuation was performed in accordance with the going-concern and solvency standards prescribed under the Newfoundland and Labrador *Pension Benefits Act*.

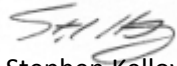
The calculations in the actuarial valuation report have been prepared in accordance with subsection 147.2(2) of the *Income Tax Act* (Canada).

The recommendations and opinions are given exclusively from a financial viewpoint. This valuation report does not constitute a legal opinion on the rights and duties of the Plan administrator, the Government or the members over the pension fund.

Actuarial valuation results are only estimates. Actuarial valuations are performed based on assumptions and methods that are in accordance with sound actuarial principles. Emerging experience differing from these assumptions may result in gains or losses, which may affect future contribution levels. These gains or losses will be revealed in future actuarial valuations.

The next actuarial valuation will have to be performed not later than as at December 31, 2019.

The undersigned are available to provide supplementary information and explanation, as appropriate, concerning this report.



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## Section 2 – Going-Concern Funded Status

### Going-Concern Funded Status

The funded status of the Plan on the going-concern basis is determined by comparing the actuarial value of the assets to the actuarial liabilities. The actuarial liabilities are based on the benefits earned up to the valuation date assuming the Plan continues indefinitely.

**Table 2.1 – Going-Concern Funded Status**

	December 31, 2016	December 31, 2013
	\$	\$
Actuarial value of assets		
Market value	9,003,000	6,078,000
Receivables / (Payables)	128,300	143,200
Total	9,131,300	6,221,200
Actuarial liabilities		
Active members	4,940,600	4,118,300
Retired members and beneficiaries	2,800,800	1,877,400
Total	7,741,400	5,995,700
Actuarial surplus (unfunded liability)	1,389,900	225,500
Funding ratio	118.0%	103.8%

The going-concern statement of financial position shown in Table 2.1 identified a going-concern surplus of \$1,389,900. Please refer to Section 4 for more details on the funding requirement.

### Changes since the Previous Valuation

Changes since the previous valuation are discussed below. The financial impact of these changes is shown below in the section entitled “Reconciliation of Going-Concern Financial Position”.

### Changes in Actuarial Basis

The following changes were made to the going-concern actuarial basis for this valuation:

- The assumed discount rate has decreased from 6.50% as at December 31, 2013 to 6.25% as at December 31, 2016.
- The salary increase assumption has decreased from 3.50% as at December 31, 2013 to 3.25% as at December 31, 2016. Please note this assumption change did not have an impact on the valuation as the salaries for all active members are capped by the ITA limits.
- The ITA limit increase assumption decreased from 3.25% as at December 31, 2013 to 3.00% as at December 31, 2016.
- The assumed post-retirement indexing rate has decreased from 1.20% as at December 31, 2013 to 1.00% as at December 31, 2016.

- The assumed retirement age has changed from age 65 to the later of age 65 and one year following the valuation date.

A summary of the going-concern assumptions and methods used in the valuation can be found in Appendix A.

## Reconciliation of Going-Concern Funded Status

The table below describes the change in the Plan's going-concern funded status since the last valuation:

**Table 2.2 – Reconciliation of Going-Concern Funded Status**

	\$	\$
Actuarial surplus (unfunded liability) as at December 31, 2013		225,500
Expected changes in funded status:		
Interest on surplus (unfunded liability)		46,900
Expected surplus (unfunded liability) as at December 31, 2016		272,400
Contribution in excess (less than) cost of service accrued		(101,300)
Actuarial gains (losses) due to the following experience factors:		
Investment return on market value of assets	757,000	
Investment loss due to prior in-transits not paid	29,700	
Retirement experience	300,900	
Mortality experience	(40,600)	
Termination experience	(27,000)	
Pension indexation experience	21,500	
ITA limit increase experience	155,400	
Other factors	(20,400)	
Total		1,176,500
Other gains (losses)		
Changes in actuarial assumptions		
– Change in assumed ITA limit increases	59,900	
– Change in assumed indexing	146,000	
– Change in assumed discount rate	(240,600)	
– Change in assumed retirement date	77,000	
– Total		42,300
Actuarial surplus (unfunded liability) as at December 31, 2016		1,389,900



## Sensitivity Analysis on the Going-Concern Basis

The table below illustrates the effect of a 1% decrease in the discount rate on the going-concern actuarial liabilities. With the exception of the discount rate, all other assumptions and methods used for the going-concern valuation were maintained.

**Table 2.3 – Sensitivity of Actuarial Liabilities on the Going-Concern Basis**

	<b>December 31, 2016</b>	<b>Discount rate 1% lower</b>
	<b>\$</b>	<b>\$</b>
Actuarial liabilities		
Active members	4,940,600	5,777,300
Retired members and beneficiaries	2,800,800	3,060,700
Total	7,741,400	8,838,000
Increase in actuarial liabilities		1,096,600

## Section 3 – Solvency and Hypothetical Wind-Up Funded Status

### Solvency Funded Status

A solvency valuation is a hypothetical valuation prescribed by the Newfoundland and Labrador *Pension Benefits Act*, which simulates a plan termination at the valuation date. Under the *Pension Benefits Act*, a solvency valuation imposes a ceiling on what may be transferred out of the pension fund upon termination of membership and a floor on required contributions when a plan is required to fund for solvency. A solvency valuation may, however, differ from the valuation required on plan wind-up.

**Table 3.1 – Solvency Funded Status**

	December 31, 2016	December 31, 2013
	\$	\$
Solvency assets		
Market value of assets	9,003,000	6,078,000
Receivables / (Payables)	128,300	143,200
Provision for expenses	(75,000)	(50,000)
Total	9,056,300	6,171,200
Solvency liabilities		
Active members	7,763,900	5,340,700
Retired members and beneficiaries	3,550,100	2,093,300
Total	11,314,000	7,434,000
Assets less liabilities on the solvency basis	(2,257,700)	(1,262,800)
Solvency ratio	80.0%	83.0%

### Solvency Ratio

The solvency ratio is equal to the ratio of the solvency assets to the solvency liabilities as indicated in table 3.1.

### Hypothetical Wind-Up Funded Status

Since all benefits have been valued, if the Plan had been liquidated as at December 31, 2016 and assuming that the asset liquidation value had been equal to the market value, the hypothetical wind-up funded status would have been similar to the solvency funded status shown in table 3.1.

## Sensitivity Analysis on the Solvency Basis

The table below illustrates the effect on the actuarial liabilities of using discount rates 1% lower than those used for the solvency valuation. All other assumptions and methods, as used in the solvency valuation, were maintained.

**Table 3.2 – Sensitivity of Actuarial Liabilities on the Solvency Basis**

	<b>December 31, 2016</b>	<b>Discount rates 1% lower</b>
	<b>\$</b>	<b>\$</b>
Actuarial liabilities		
Active members	7,763,900	9,321,800
Retired members and beneficiaries	3,550,100	3,928,100
Total	11,314,000	13,249,900
Increase in actuarial liabilities		1,935,900

## Incremental Cost on the Solvency Basis

The incremental cost on the solvency basis represents the present value of the expected aggregate change in the solvency liabilities from December 31, 2016 to December 31, 2019, adjusted for expected benefit payments in the inter-valuation period. This incremental cost is \$2,285,000 as at December 31, 2016.

# Section 4 – Normal Cost and Amortization Payments

## Normal Cost

The table below summarizes the estimated going-concern cost of pension benefits being earned in the twelve-month period after the valuation date (the normal cost).

**Table 4.1 – Normal Cost**

	<b>2017</b>	<b>2014</b>
	<b>\$</b>	<b>\$</b>
Normal cost	565,200	379,200
Less member contributions	322,000	234,400
Residual normal cost	243,200	144,800
Residual normal cost as a % of member contributions	75.5%	61.8%

## Reconciliation of Normal Cost

The factors contributing to the change in the normal cost are shown below:

**Table 4.2 – Reconciliation of Government Normal Cost**

	<b>% of member contributions</b>
Government normal cost as at December 31, 2013	61.8
Demographic factors	6.5
Difference in expected and actual ITA limits	(0.1)
Change in assumed ITA limit increases	(4.0)
Change in assumed indexing	(3.4)
Change in assumed discount rate	7.8
Change in assumed retirement	6.9
Government normal cost as at December 31, 2016	75.5

## Sensitivity Analysis on the Going-Concern Basis

The table below illustrates the effect on the normal cost of using a discount rate 1% lower than the one used for the going-concern valuation. All other assumptions and methods, as used in the going-concern valuation, were maintained.

**Table 4.3 – Sensitivity of Normal Cost on the Going-Concern Basis**

	2017	Discount rate 1% lower
	\$	\$
Normal cost	565,200	674,800
Increase in normal cost		109,600

## Government Funding Requirements

Effective January 2017, Government is required to match 75.5% of the required members' contributions in respect of on-going Plan normal costs. The Plan is exempt from the funding requirements set out in the Newfoundland and Labrador *Pension Benefits Act* and Regulations, and therefore is not required to fund the solvency deficiency.

## Maximum Funding Valuation

Because the Plan is a designated plan as defined in section 8515(1) of the *Income Tax Regulations* (Canada) (the "Regulations"), a maximum funding valuation must be performed to determine the maximum eligible Government contributions to the Plan. The assumptions and form of benefits used in this valuation are prescribed in the Regulations.

The following table shows the results obtained from the maximum funding valuation as at December 31, 2016.

**Table 4.4 – Maximum Funding Valuation**

	December 31, 2016
	\$
Actuarial value of assets	
Market value of assets	9,003,000
Receivables	128,300
Total	9,131,300
Actuarial liabilities	
Active members	5,289,400
Retired members and beneficiaries	2,814,100
Total	8,103,500
Assets less liabilities on the maximum funding basis	1,027,800
Normal cost	
Total normal cost	500,700
Less member contributions	265,200
Residual normal cost	235,500
Residual normal cost as a % of member contributions	88.8%

As at December 31, 2016, the going-concern liabilities and normal cost determined using the basis described in Appendix A are less than those determined on a maximum funding basis. Therefore, contributions in accordance with the going-concern results are permissible.

The solvency liabilities exceed those determined on a maximum funding basis. Therefore, the full amount of the solvency deficiency cannot be funded. The Plan is exempt from funding on a solvency basis; however, the Government has the option to fund up to the maximum funding limits set by section 8515(1) of the Regulations.

# Appendix A – Going-Concern Actuarial Basis

## Asset Valuation Method

The actuarial value of the assets used to determine the going-concern funded status is equal to the market value, adjusted for payments due to and payable from the pension fund. This method is the same as the one used in the last valuation.

## Actuarial Cost Method

The actuarial liabilities and the normal cost on the going-concern basis were calculated using the projected accrued benefit (or projected unit credit) actuarial cost method.

The actuarial liabilities are equal to the actuarial present value of benefits earned by members for services prior to the valuation date, taking into account the assumptions as indicated hereafter.

The normal cost is equal to the actuarial present value of benefits expected to be earned by members in the year following the valuation date. The residual normal cost is the excess of the normal cost over members' required contributions.

The valuation method for determining the actuarial liabilities and the normal cost is the same as the one used in the last valuation.

The ratio of the total normal cost to the covered payroll for the period will tend to stabilize over time if the demographic characteristics of the active members remain stable. All other things being equal, an increase in the average age of the active members will result in an increase in this ratio.

For valuation purposes, the age used is the age on the date of the nearest birthday. This is the same method as used in the last valuation.

## Actuarial Assumptions

The main actuarial assumptions used in the going-concern valuation are summarized in the following table. Some assumptions used in this valuation are different from those used in the previous valuation. For comparison purposes, the assumptions used in the last valuation are also included in the table. All rates and percentages are annualized unless otherwise noted.

**Table A.1 – Going-Concern Actuarial Assumptions**

	December 31, 2016	December 31, 2013
Discount rate	6.25%	6.50%
CPI increases	2.25%	2.50%
Salary increases	3.25%	3.50%
Average wage increases	3.00%	3.25%
Post-retirement indexing	1.00%	1.20%
Mortality	Male: 75.0% of the CPM2014 Public Sector Table with generational projection using improvement scale CPM-B  Female: 92.6% of the CPM2014 Public Sector Table with generational projection using improvement scale CPM-B	Male: 75.0% of the CPM2014 Public Sector Table with generational projection using improvement scale CPM-B  Female: 92.6% of the CPM2014 Public Sector Table with generational projection using improvement scale CPM-B
Termination of employment	nil	Nil
Disability	nil	Nil
Retirement	100% retirement at age 65, except Members who have attained age 64 by the valuation date are assumed to retire in one year	100% retirement at age 65 Members who have attained age 65 by the valuation date are assumed to retire immediately
Married %	At retirement or death: 90%	At retirement or death: 90%
Spousal age difference	Male is 3 years older than female	Male is 3 years older than female
Administrative expenses	Implicitly recognized in the discount rate	Implicitly recognized in the discount rate



## Choice of Assumptions

The assumptions have been reviewed in light of current economic conditions.

### Discount rate

The elements considered in the development of the discount rate assumption for going-concern purposes are summarized in the table below:

**Table A.2 – Discount Rate**

	%
Expected rate of inflation	2.25
Expected real return on assets	3.93
Value added for active management	0.19
Value added for rebalancing and diversification	0.47
Expenses	(0.40)
Margin for adverse deviations	(0.20)
Discount rate	6.25 <sup>1</sup>

<sup>1</sup> Figure has been rounded to the nearest 0.05%.

### Post-Retirement Indexing

The assumed rate of post-retirement indexing has been reduced from 1.2% per year to 1.0% per year. This change is based on a stochastic analysis of future CPI expectations, and the resulting average post-retirement indexing that would be granted under the Plan's benefit formula.

# Appendix B – Solvency and Hypothetical Wind-Up Actuarial Basis

## Asset Valuation Method

The actuarial value of the assets used to determine the solvency and hypothetical wind-up funded status is equal to the market value of assets, adjusted for amounts payable and receivable, less an allowance for wind-up expenses. This valuation method is the same as the one used in the last valuation.

## Actuarial Cost Method

The solvency liabilities are determined using the accrued benefit (or unit credit) actuarial cost method. The solvency liabilities are equal to the actuarial present value of all benefits earned by members for services prior to the valuation date assuming the Plan is wound up on the valuation date. This method is the same as the one used in the last valuation.

For valuation purposes, the age used is the age on the date of the nearest birthday. This is the same method as used in the last valuation.

## Actuarial Assumptions

The main actuarial assumptions used in the solvency and hypothetical wind-up valuations correspond to those prescribed by the applicable legislation.

In accordance with Directive #9 to the Newfoundland and Labrador Pension Benefits Act, 1997, the commuted value payable to members assumed to elect a transfer value is not less than the estimated premium required to purchase the accrued pension from an insurance company

These assumptions are summarized in the following table. For comparison purposes, the assumptions used in the last valuation are also included. All rates and percentages are annualized unless otherwise noted.

**Table B.1 – Solvency and Hypothetical Wind-Up Actuarial Assumptions**

	December 31, 2016	December 31, 2013
Discount rates		
➤ Active members less than age 55 <sup>1</sup>	Annuity purchase: 3.21%	Annuity purchase: 3.93%
➤ Pensioners, deferred pensioners and active members age 55 and over	Annuity purchase: 3.21%	Annuity purchase: 3.93%
Increase in maximum pension limit <sup>2</sup>	2.06% for 10 years, 3.17% thereafter	2.26% for 10 years, 3.28% thereafter
Post-retirement indexing	1.20%	1.20%
Mortality	CPM2014 Combined Table with generational projection using improvement scale CPM-B Sex distinct	1994 Uninsured Pensioners Mortality Table with Generational Projection Scale AA. (UP94Gt) Sex distinct
Retirement	Age 65 (Age that maximizes the value of the RPP pension)	Age 65 (Age that maximizes the value of the RPP pension)
Married %	90%	90%
Spousal age difference	Male is 3 years older than female	Male is 3 years older than female
Wind-up expenses	\$75,000	\$50,000

<sup>1.</sup> All members are assumed to elect an annuity purchase due to the tax implications involved with large lump sum transfers.

<sup>2.</sup> The assumed pension payable under the registered portion of the Act is based on the maximum pension limit under the Income Tax Act(Canada), projected to the assumed retirement date.

### Termination scenario

The termination scenario used in the solvency and hypothetical wind-up valuations includes the following assumptions:

- Plan wind-up would not result from Government insolvency.
- All assets could be realized at their reported market value.

This approach is the same as the one used in the last valuation.

### Margin for adverse deviations

As specified by the Standards of Practice of the Canadian Institute of Actuaries, the solvency assumptions do not include a margin for adverse deviations.

## Choice of Assumptions

### Provision for fees

Allowance has been made for administrative, actuarial and legal costs which would be incurred if the Plan were to be wound up, based on sufficient and reliable data. It is assumed that the wind-up date, the calculation date and the settlement date are coincident. Expenses related to the resolution of surplus and deficit issues are not taken into account. The amount of expenses is only an approximation and may differ significantly from real expenses incurred on Plan wind-up, for example, in case of litigation or bankruptcy and eventual replacement by a third-party administrator.

### Incremental Cost

The incremental cost on the solvency basis is based on the actuarial method and assumptions described below. The method used to calculate the incremental cost is as follows:

1. Projected solvency liabilities as at December 31, 2019, plus the expected benefit payments between December 31, 2016 and December 31, 2019, discounted to December 31, 2016;  
Less
2. Solvency liabilities as at December 31, 2016.

The projected liabilities as at December 31, 2019 take into account:

- Expected decrements and related changes in membership status between December 31, 2016 and December 31, 2019;
- Accrual of service to December 31, 2019; and
- Projection of pensionable earnings and the *Income Tax Act* (Canada) maximum pension limit to December 31, 2019.

The actuarial assumptions used to calculate the incremental cost are as follows:

The assumptions used to calculate the projected solvency liabilities as at December 31, 2019 in item 1. above correspond to those used for the solvency valuation as at December 31, 2016, taking into account the method of settlement applicable to each member as at December 31, 2019.

However, we assume that the discount and all other rates remain at the levels applicable as at December 31, 2016 and that select periods are reset as at December 31, 2019 for rate assumptions that are select and ultimate.

We also assume that the standards of practice for the calculation of commuted values and the guidance for estimated annuity purchase costs in effect as at December 31, 2016 remain in effect as at December 31, 2019.

The rates used to discount items in 1. above to December 31, 2019 correspond to those used for the solvency valuation as at December 31, 2016.

No new entrants were considered between December 31, 2016 and December 31, 2019.

# Appendix C – Maximum Funding Actuarial Basis

## Asset Valuation Method

The value of assets used to determine the financial position is the market value, adjusted for payments due to and payable from the pension fund. This method was also used in the previous valuation.

## Actuarial Cost Method

The actuarial liability and current service cost on a going-concern basis were calculated using the “Projected Accrued Benefit (or Projected Unit Credit) Actuarial Cost Method”. The actuarial liability is equal to the present value of benefits earned by members for service prior to the valuation date, taking relevant factors into account as indicated in the assumptions below.

The total current service cost is equal to the present value of benefits expected to be earned by members in the year following the valuation date. The current service cost rate is the current service cost divided by projected payroll for the same period. This rate will tend to be stable over time if the demographic characteristics of the active Plan membership remain stable and the members’ contribution rate does not change. All other things being equal, a reduction in the expected period to retirement will result in an increasing current service cost rate.

The age for valuation purposes has been calculated by rounding to the nearest birthday.

## Actuarial Assumptions

The prescribed actuarial assumptions employed for the maximum funding valuation are summarized in the following table. All rates and percentages are annualized unless otherwise noted.

**Table C.1 – Maximum Funding Valuation Actuarial Assumptions**

	<b>December 31, 2016</b>
Discount rate	7.50%
Increase in Pensionable Earnings	5.50%
Increase in ITA Limits	5.50%
Indexing of Pensions	3.00%
Retirement Age	Age 65
Termination	None
Mortality	
• Pre - Retirement	None
• Post - Retirement	80% of GAM-1983 (unisex-50% male/50% female)
Disability	None
Married %	100%
Spousal Age Difference	Male is 3 years older than female
Form of Payment	Joint and Survivor 66 2/3% (guaranteed for 5 years)

For retirees, the actual Plan indexing and form of benefits are reflected and the mortality assumption is applied on a sex distinct basis.

# Appendix D – Assets

## Source of Information

CIBC Mellon Global Securities Service provides administrative and custodial service for the pension fund. At the valuation date the pension fund was invested by an external group of 5 professional investment management firms in accordance with the investment policy.

We have relied upon the audited financial statements provided by the Province of Newfoundland and Labrador for the following information.

## Changes to Plan Assets

The following table shows changes to the Plan assets during the three years prior to the valuation date, based on the audited financial information provided by Government.

**Table D.1 – Reconciliation of Market Value of Assets**

	2014	2015	2016
January 1	6,078,000	7,025,000	7,728,000
<b>Plus</b>			
Member Contributions	294,000	299,000	321,000
Government Contributions	214,000	185,000	193,000
Investment Income	741,000	485,000	1,015,000
	1,249,000	969,000	1,529,000
<b>Less</b>			
Pensions Paid	199,000	224,000	232,000
Lump Sum Refunds	79,000	0	0
Administration Fees	24,000	42,000	22,000
	302,000	266,000	254,000
<b>December 31</b>	<b>7,025,000</b>	<b>7,728,000</b>	<b>9,003,000</b>

In addition to these amounts, we have included a receivable contribution of \$128,300 in respect of amounts owing to the Plan from Government.

## Target Asset Mix

The Plan's target asset mix is 25% Canadian equities, 55% Global equities, and 20% fixed income.

## Return on Assets

The Plan assets earned the following annualized rates of return, net of investment management fees and other expenses charged to the fund:

**Table D.2 – Investment Return (net of expenses)**

Year	Market Value Basis	Investment Gain / (Loss)*
2014	11.6%	315,000
2015	6.2%	(21,500)
2016	12.6%	482,100

*\* Relative to the 2013 going-concern valuation assumption of 6.50% per year.*



# Appendix E – Membership Data

## Description of Membership Data

Our valuation is based on data provided to us by the Government’s Pensions Administration Division, Department of Finance. The data was compiled as at December 31, 2016.

We have taken the following steps to review the data to ensure its completeness, accuracy and consistency with the data used in the previous valuation:

- > Basic data checks were performed to ensure that age, salary and service data were reasonable for the purposes of the valuation.
- > The membership was reconciled with the previous valuation and queries were submitted to the Government.
- > A reconciliation was prepared in order to follow the changes concerning some of the active members, retirees and vested members.

## Summary of Membership Data

The following tables were prepared using data provided by the Pensions Administration Division, Department of Finance regarding the active members, retirees and former members of the Plan.

**Table E.1 – Plan Membership Summary**

	December 31, 2016	December 31, 2013
<b>Active Members</b>		
Number	18	17
Average age	57.4	56.6
Total pensionable earnings for following year	\$4,053,900	\$3,813,700
Average pensionable earnings for following year	\$225,200	\$224,300
Average years of pensionable service:	7.9	7.1
<b>Pensioners and Survivors</b>		
Number	6	4
Average age	70.9	69.5
Total annual pension	227,900	148,400
Average annual pension	38,000	37,100

**Table E.2 – Changes in Plan Membership**

	<b>Active Members</b>	<b>Retirees and Beneficiaries</b>	<b>Total</b>
<b>Members at December 31, 2013</b>	<b>17</b>	<b>4</b>	<b>21</b>
New members	4		4
Terminations	(1)		(1)
Retirements	(2)	2	
<b>Members at December 31, 2016</b>	<b>18</b>	<b>6</b>	<b>24</b>

# Appendix F – Summary of Plan Provisions

## Introduction

This valuation reflects the provisions of the registered pension plan (“RPP”) portion of the *Provincial Court Judges’ Pension Plan Act* sponsored by the Government of Newfoundland and Labrador, as at December 31, 2016.

The Plan has not been amended since the date of the last valuation at December 31, 2013.

This valuation is based only on the RPP provisions in effect on December 31, 2016. The following is a summary of the RPP’s main provisions in effect on December 31, 2016. It is not intended as a complete description of the Plan.

## Eligibility for Membership

Prior to April 1, 2002 Provincial Court Judges were covered under the Public Service Pension Plan (“PSPP”). On April 1, 2002 active Provincial Court Judges were given a one-time option to transfer their accrued judicial service to the Plan and to accrue future service under the Plan or to remain in the PSPP. Six members chose to transfer to the Plan. All Provincial Court Judges appointed after April 1, 2002 are required to join the Plan.

## Contributions

Provincial Court Judges are required to contribute 9.0% of salary, up to the maximum allowed under the *Income Tax Act* (Canada), to the Registered Plan. Judges’ contributions cease when they have accrued twenty years of pensionable service.

The Government (as Plan sponsor) contributes an amount based on the advice of an actuary.

## Retirement Dates

### *Normal Retirement Date*

A judge is eligible for normal retirement after completing 2 years of service under the Plan and attaining age 65.

### *Early Retirement Date*

A judge may choose to retire as early as age 55 provided he or she has accrued at least five years of service under the Plan.

## Retirement Benefits

### *Normal Retirement*

If a judge retires on their normal retirement date, the judge will be entitled to the following benefit, subject to the maximum benefit allowed under the *Income Tax Act* (Canada).

- 2.0% of their annual salary rate at the date of retirement multiplied by the total years of judicial service to a maximum of twenty years

### *Early Retirement*

If a judge retires early, the judge will be entitled to a pension that is calculated in the same manner as for a normal retirement, however, the benefit will be reduced as follows:

- 6.0% per year for the first 5 years prior to age 65; and
- 4.5% per year for each additional year prior to age 60.

### *Post-Retirement Indexing*

On October 1 the amount of a registered allowance or survivor benefit being paid to a person who has reached age 65 shall be adjusted by multiplying:

- a) the annual amount of the registered allowance or survivor benefit;
- by
- b) 60% of the ratio that the Consumer Price Index for the previous calendar year bears to the Consumer Price Index for the calendar year immediately before the previous calendar year,

but the amount of any increase shall not exceed 1.2% of the annual registered allowance or survivor benefit.

## Maximum Pension under the Income Tax Act

The total pension payable to a member under the RPP portion of the Plan shall not exceed the maximum pension as determined under the *Income Tax Act* (Canada).

## Survivor Benefits

### *Death Before Retirement*

If a member dies after 2 years of service under the Plan and before any pension payments have begun, the member's spouse is entitled to one of the following two benefits:

### *Pre-Retirement Death Benefits*

1. a monthly survivor pension equal to 60% of the judge's entitlement calculated as if the judge had been 65 on the date of death,  
or
2. a lump sum payment equal to the greater of the following:
  - a) the commuted value of the member's entitlement assuming termination,  
or
  - b) the commuted value of the survivor pension noted above.

If there is no eligible spouse, the judge's beneficiary will receive a lump-sum benefit equal to the commuted value of his or her accrued pension deferred to normal retirement date.

### *Death After Retirement*

The normal form of payment is a lifetime pension for members without a principal beneficiary and a joint and survivor 60% pension for members with a principal beneficiary. When monthly pension payments cease, the amount, if any, by which the judge's contributions with interest at the date the pension commenced exceeds the total of all benefit payments made shall be paid to the member's beneficiary.

## Termination Benefits

If a member's service terminates for any reason before the member completes 2 years of service under the Plan, the benefit payable from the Plan is a refund of the member's contributions with interest.

If a member's service terminates for any reason other than death or retirement after the member completes 2 years of service under the Plan, the benefit payable from the Plan is the member's accrued pension deferred to normal retirement date or a transfer of the commuted value of this pension.

# Appendix G – Employer Certification

With respect to the actuarial valuation report on the Provincial Court Judges' Pension Plan Act (Registered Pension Plan) as at December 31, 2016, we hereby confirm that to the best of our knowledge:

- the data regarding Plan members and beneficiaries provided to Morneau Shepell constitutes a complete and accurate description of the information contained in our files;
- copies of the official text of the Plan and all amendments to date were provided to Morneau Shepell;
- the amount of Plan assets as set out in Appendix D provides an accurate and complete description of the Plan's assets; and
- there are no subsequent events nor any extraordinary changes to the membership other than those listed in the December 31, 2016 actuarial valuation report on the Plan, which would materially affect the results.

## Province of Newfoundland and Labrador

James Butt  
Signature

Janice Butt  
Name (printed)

Director, Pensions + Debt Management  
Title

Nov 17/17  
Date

Morneau Shepell is the only human resources consulting and technology company that takes an integrative approach to employee assistance, health, benefits, and retirement needs. The Company is the leading provider of employee and family assistance programs, the largest administrator of retirement and benefits plans and the largest provider of integrated absence management solutions in Canada. Through health and productivity, administrative, and retirement solutions, Morneau Shepell helps clients reduce costs, increase employee productivity and improve their competitive position. Established in 1966, Morneau Shepell serves approximately 20,000 clients, ranging from small businesses to some of the largest corporations and associations in North America. With almost 4,000 employees, Morneau Shepell provides services to organizations across Canada, in the United States, and around the globe. Morneau Shepell is a publicly-traded company on the Toronto Stock Exchange (TSX: MSI). For more information, visit [morneaushepell.com](http://morneaushepell.com).

