March 2010

The Contributory Pension Plan for Salaried Employees of McMaster University Including McMaster Divinity College
Report on the Actuarial Valuation for Funding Purposes as at July 1, 2009

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The Contributory Pension Plan for Salaried Employees of McMaster University Including McMaster Divinity College

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Contents

1. Summary of Results ($000) .................................................................................................................. 1

2. Introduction ........................................................................................................................................ 3
   - Report on the Actuarial Valuation as at July 1, 2009 ................................................................. 3

3. Financial Position of the Plan ........................................................................................................... 8
   - Valuation Results — Going-Concern Basis ................................................................................. 8
   - Valuation Results — Solvency Basis .......................................................................................... 11

4. Funding Requirements .................................................................................................................. 14
   - Current Service Cost .................................................................................................................. 14
   - Special Payments ......................................................................................................................... 15
   - Employer Contributions .............................................................................................................. 16

5. Actuarial Opinion ............................................................................................................................ 18

Appendix A: Plan Assets

Appendix B: Actuarial Methods and Assumptions

Appendix C: Membership Data

Appendix D: Summary of Plan Provisions

Appendix E: Employer Certification
### Summary of Results ($000)

<table>
<thead>
<tr>
<th>Going-Concern Financial Position</th>
<th>01.07.09</th>
<th>01.07.06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoothed value of assets</td>
<td>$1,299</td>
<td>$1,433</td>
</tr>
<tr>
<td>Actuarial liability</td>
<td>$1,555</td>
<td>$1,486</td>
</tr>
<tr>
<td>Funding excess (Funding shortfall)</td>
<td>$(256)</td>
<td>$(53)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Solvency Financial Position</th>
<th>01.07.09</th>
<th>01.07.06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted solvency assets¹</td>
<td>$1,374</td>
<td>$1,441</td>
</tr>
<tr>
<td>Adjusted solvency liability²</td>
<td>$1,374</td>
<td>$1,435</td>
</tr>
<tr>
<td>Solvency excess (deficiency)</td>
<td>$0</td>
<td>$6</td>
</tr>
<tr>
<td>Ratio of solvency assets to solvency liabilities³</td>
<td>0.77</td>
<td>0.99</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wind-Up Financial Position</th>
<th>01.07.09</th>
<th>01.07.06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market value of assets (net of termination expenses)</td>
<td>$1,055</td>
<td>$1,417</td>
</tr>
<tr>
<td>Total wind-up liability</td>
<td>$1,451</td>
<td>$1,473</td>
</tr>
<tr>
<td>Wind-up excess (deficiency)</td>
<td>$(396)</td>
<td>$(56)</td>
</tr>
<tr>
<td>Transfer ratio</td>
<td>0.73</td>
<td>0.96</td>
</tr>
</tbody>
</table>

¹ Including the present value of the next 5 years’ going-concern special payments of $24,000 as at July 1, 2008 and $125,000 as at July 1, 2009 as well as a solvency smoothing adjustment of $194,000 as at July 1, 2009.

² Includes a solvency smoothing adjustment of $(1,000) as at July 1, 2009.

³ Ratio of solvency assets to solvency liabilities is based on the market-value of assets and the solvency liabilities before any adjustment for smoothing.
### Funding Requirements (annualized)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total current service cost</td>
<td>$81.3</td>
<td>$60.6</td>
</tr>
<tr>
<td>Estimated members' required contributions</td>
<td>$(19.8)</td>
<td>$(15.5)</td>
</tr>
<tr>
<td>Estimated employer's current service cost</td>
<td>$61.5</td>
<td>$45.1</td>
</tr>
<tr>
<td>Expense Allowance</td>
<td>$15.0</td>
<td>$5.0</td>
</tr>
<tr>
<td>Total estimated employer's current service cost</td>
<td>$76.5</td>
<td>$50.1</td>
</tr>
<tr>
<td>Employer's current service cost as a percentage of members' required contributions</td>
<td>386%</td>
<td>323%</td>
</tr>
<tr>
<td>Minimum special payments</td>
<td>$28.1</td>
<td>$5.5</td>
</tr>
<tr>
<td>Estimated minimum employer contribution for year</td>
<td>$104.6</td>
<td>$55.6</td>
</tr>
<tr>
<td>Estimated maximum employer contribution for year</td>
<td>$472.5</td>
<td>$106.1</td>
</tr>
</tbody>
</table>
Introduction

Report on the Actuarial Valuation as at July 1, 2009

To McMaster University

At the request of McMaster University, (the “University”), we have conducted an actuarial valuation of The Contributory Pension Plan for Salaried Employees of McMaster University Including McMaster Divinity College (the “Plan”) as at July 1, 2009. We are pleased to present the results of the valuation.

The purposes of this valuation are to determine:

- the funded status of the Plan as at July 1, 2009 on going-concern, solvency and wind-up bases, and

- the minimum and maximum funding requirements from July 1, 2009 until the next valuation.

The next actuarial valuation of the Plan will be required as at a date not later than July 1, 2010 or as at the date of an earlier amendment to the Plan, in accordance with the minimum requirements of the Pension Benefits Act of Ontario.

There is a funding shortfall of $256,000 and no special payments are required for solvency purposes at July 1, 2009. As such, the minimum monthly contributions to be remitted to the Plan from July 1, 2009 to June 30, 2010 are as follows:

Minimum Monthly Employer Contributions

<table>
<thead>
<tr>
<th>For current service: 386% of members' required contributions</th>
<th>PLUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum special payments for funding shortfall: $2,338 per month</td>
<td></td>
</tr>
</tbody>
</table>

Mercer (Canada) Limited
The Contributory Pension Plan for Salaried Employees of McMaster University Including McMaster Divinity College

The maximum contribution that McMaster University may make to the Plan from July 1, 2009 to June 30, 2010 is $472,500 which is comprised of the McMaster University current service cost plus the greater of the funding shortfall and the wind-up deficiency.

The minimum contribution requirements based on this report exceed the minimum contribution requirements recommended in the previous valuation report. Upon filing this report, McMaster University must contribute the excess, if any, of the minimum contribution recommended in this report over contributions actually made in respect of the period following July 1, 2009. This contribution, along with an allowance for interest, is due no later than 60 days following the date this report is filed.

The Plan is not fully funded on a wind-up basis. Even if the sponsor contributes in accordance with the funding requirements described in this valuation report, the assets of the Plan may be less than the liabilities of the Plan upon wind-up due to the following factors:

- the Plan sponsor has elected to exclude the post-retirement future indexing benefits that may become payable in the event of wind-up in determining the minimum solvency deficiency payments; and

- solvency assets and solvency liabilities have been smoothed in determining the minimum solvency deficiency payments.

Emerging experience, including the growth of wind-up liabilities compared to the Plan’s assets (including future contributions and investment returns), will also affect the wind-up funded position of the Plan.

This valuation reflects the provisions of the Plan as at July 1, 2009. The Plan has been amended since the date of the previous valuation as at July 1, 2006 as follows:

- Effective December 12, 2006, the Plan was amended to remove the requirement for University consent for a member to postpone their retirement and receipt of their pension. This amendment is not expected to have a material impact on the accrued liabilities or current service cost.

- The University received an interpretation from the Canada Revenue Agency and consequently the Plan was amended effective January 1, 2007 to prospectively remove professional earnings of the Regional Medical Associates (the “RMA”) from inclusion in earnings for the purpose of contributions and pension benefits for the clinicians.

- Effective July 1, 2009, the Plan was amended to introduce an increase to the employee contribution rate for non-Faculty members.

A summary of the plan provisions, including a description of these amendments, is provided in Appendix D.
We have used the same going-concern valuation assumptions as those used for the valuation of the Plan as at July 1, 2006 with the exception of the following:

- the assumed investment return has been changed from 6.50% per year to 6.30% per year; and

- the mortality table has been updated from UP94 projected to 2015 to UP94 fully generational.

The above changes have resulted in an increase of $56,000 in the actuarial liability and an increase of $4,000 in the total current service cost.

The solvency and wind-up assumptions have been updated to reflect market conditions at the valuation date. The solvency liabilities exclude the value of post-retirement indexing benefits.

The actuarial assumptions and methods used for purposes of this valuation are described in Appendix B. All assumptions made for the purposes of the valuation were independently reasonable at the time the valuation was prepared.

A new Canadian Institute of Actuaries Standard of Practice for determining pension commuted values ("CIA Standard") became effective on April 1, 2009. The new CIA Standard changes the assumptions to be used to value the solvency and wind-up liabilities for benefits assumed to be settled through a lump sum transfer. The financial impact of the new CIA Standard has been reflected in this actuarial valuation.

This report has been prepared on the assumption that all of the assets in the pension fund are available to meet all of the claims on the Plan. We are not in a position to assess the impact that the Ontario Court of Appeal's decision in Aegon Canada Inc. and Transamerica Life Canada versus ING Canada Inc. or similar decisions in other jurisdictions might have on the validity of this assumption.

After checking with representatives of the University, to the best of our knowledge there have been no other events subsequent to the valuation date which, in our opinion, would have a material impact on the results of the valuation.

This report has been prepared, and our opinions given, in accordance with accepted actuarial practice in Canada. It has also been prepared in accordance with the funding and solvency standards set by the Pension Benefits Act of Ontario.

The information contained in this report was prepared for Pension Trust Committee for its internal use and for filing with Financial Services Commission of Ontario and with the Canada Revenue Agency, in connection with our actuarial valuation of the Plan. This report is not intended or necessarily suitable for other purposes.
The Contributory Pension Plan for Salaried Employees of McMaster University Including McMaster Divinity College

This report will be filed with the Financial Services Commission of Ontario and with the Canada Revenue Agency.

Respectfully submitted,

Lorraine Gignac
Fellow of the Society of Actuaries
Fellow of the Canadian Institute of Actuaries

Karen Tang
Fellow of the Society of Actuaries
Fellow of the Canadian Institute of Actuaries

March 24, 2010

Date

March 24, 2010

Date

The Contributory Pension Plan for Salaried Employees of McMaster University Including McMaster Divinity College
Registration number with the Financial Services Commission of Ontario and with the Canada Revenue Agency: 0215400

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This valuation report may not be relied upon for any purpose other than those explicitly noted above or by any party other than the Pension Trust Committee, the University, the Financial Services Commission of Ontario or the Canada Revenue Agency. Mercer is not responsible for the consequences of any other use. A valuation report is a snapshot of a plan's estimated financial condition at a particular point in time; it does not predict a pension plan's future financial condition or its ability to pay benefits in the future.

Over time, a plan's total cost will depend on a number of factors, including the amount of benefits the plan pays, the number of people paid benefits, the amount of plan expenses, and the amount earned on any assets invested to pay the benefits. These amounts and other variables are uncertain and unknowable at the valuation date.

To prepare this report, actuarial assumptions, as described in Appendix B, are used to select a single scenario from the range of possibilities. The results of that single scenario are included in this report. However, the future is uncertain and the Plan's actual experience will differ from those assumptions; these differences may be significant or material. In addition, different assumptions or scenarios may also be within the reasonable range and results based on those assumptions would be different. Actuarial assumptions may also be changed from one valuation to the next because of changes in regulatory requirements, plan experience, changes in expectations about the future and other factors.

Because actual Plan experience will differ from the assumptions, decisions about benefit changes, investment policy, funding amounts, benefit security and/or benefit-related issues should be made only after careful consideration of alternative future financial conditions and scenarios, and not solely on the basis of a valuation report or reports.
Financial Position of the Plan

Valuation Results — Going-Concern Basis

When conducting a valuation on a going-concern basis, we determine the relationship between the respective values of assets and accumulated benefits, assuming the Plan will be maintained indefinitely.
Financial Position

The results of the valuation as at July 1, 2009, in comparison with those of the previous valuation as at July 1, 2006, are summarized as follows:

<table>
<thead>
<tr>
<th>Financial Position — Going-Concern Basis ($000)</th>
<th>01.07.09</th>
<th>01.07.06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market value of assets (adjusted for in-transit items)</td>
<td>$1,105</td>
<td>$1,467</td>
</tr>
<tr>
<td>Smoothing adjustment</td>
<td>$194</td>
<td>$(34)</td>
</tr>
<tr>
<td>Smoothed value of assets</td>
<td>$1,299</td>
<td>$1,433</td>
</tr>
<tr>
<td>Actuarial liability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Present value of accrued benefits for:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>active members</td>
<td>$1,240</td>
<td>$776</td>
</tr>
<tr>
<td>pensioners and survivors</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>deferred pensioners</td>
<td>$315</td>
<td>$710</td>
</tr>
<tr>
<td>Total liability</td>
<td>$1,555</td>
<td>$1,486</td>
</tr>
<tr>
<td>Funding excess / (shortfall) (A)</td>
<td>$(256)</td>
<td>$(53)</td>
</tr>
<tr>
<td>Present value of existing going-concern special payments (B)</td>
<td>$46</td>
<td>$0</td>
</tr>
<tr>
<td>Going-concern deficiency created at this valuation date</td>
<td>$(210)</td>
<td>$(53)</td>
</tr>
</tbody>
</table>
Reconciliation of Financial Position

The Plan's financial position, a funding shortfall of $256,000 as at July 1, 2009, is reconciled with its previous position, a funding shortfall of $53,000 as at July 1, 2006, as follows:

<table>
<thead>
<tr>
<th>Reconciliation of Financial Position ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding excess / (shortfall) as at 01.07.06</td>
</tr>
<tr>
<td>Interest on funding excess / (shortfall) at 6.5% per year to 01.07.09</td>
</tr>
<tr>
<td>Special payments with interest at 6.5% per year to 01.07.09</td>
</tr>
<tr>
<td>Net experience gains (losses) over 2006-2009 *</td>
</tr>
<tr>
<td>Impact of changes in assumptions</td>
</tr>
<tr>
<td>Additional reserve for deferred vested members over age 65</td>
</tr>
<tr>
<td>Data corrections</td>
</tr>
<tr>
<td>Net impact of other elements of gains and losses</td>
</tr>
<tr>
<td>Funding excess / (shortfall) as at 01.07.09</td>
</tr>
</tbody>
</table>

*Net experience gains (losses) are detailed below.

Plan Experience

The main assumptions are compared with actual experience since the previous valuation as at July 1, 2006:

<table>
<thead>
<tr>
<th>Plan Experience ($000)</th>
<th>Impact Gain (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Investment return</td>
<td>$(46)</td>
</tr>
<tr>
<td>Increases in pensionable earnings and YMPE different than assumed</td>
<td>$(33)</td>
</tr>
<tr>
<td>Experience on retirements and mortality</td>
<td>$(6)</td>
</tr>
<tr>
<td>Net experience gains (losses)</td>
<td>$(85)</td>
</tr>
</tbody>
</table>
**Valuation Results — Solvency Basis**

When conducting a solvency valuation, we determine the relationship between the respective values of the Plan's assets and its liabilities on a solvency basis, determined in accordance with the *Pension Benefits Act of Ontario*. The values of the Plan’s assets and liabilities on a solvency basis are related to the corresponding values calculated as though the Plan were wound up and settled on the valuation date.

We have not included the value of post-retirement indexing benefits provided under the Plan. The value of these excluded liabilities is $76,000 at July 1, 2009.

**Financial Position on a Solvency Basis**

The Plan’s solvency position as at July 1, 2009, in comparison with that of the previous valuation as at July 1, 2006, is determined as follows:

<table>
<thead>
<tr>
<th>Solvency Position ($000)</th>
<th>01.07.09</th>
<th>01.07.06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market value of assets (adjusted for in-transit items)</td>
<td>$1,105</td>
<td>$1,467</td>
</tr>
<tr>
<td>Termination expenses</td>
<td>$(50)</td>
<td>$(50)</td>
</tr>
<tr>
<td>a. Solvency assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solvency asset adjustment:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Averaging method adjustment</td>
<td>$194</td>
<td>$0</td>
</tr>
<tr>
<td>Present value of special payments for next five years</td>
<td>$125</td>
<td>$24</td>
</tr>
<tr>
<td>b. Adjusted solvency assets</td>
<td>$1,374</td>
<td>$1,441</td>
</tr>
<tr>
<td>Actuarial liability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Present value of accrued benefits for:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- active members</td>
<td>$1,059</td>
<td>$711</td>
</tr>
<tr>
<td>- pensioners and survivors</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>- deferred pensioners</td>
<td>$316</td>
<td>$724</td>
</tr>
<tr>
<td>c. Solvency liabilities</td>
<td>$1,375</td>
<td>$1,435</td>
</tr>
<tr>
<td>Solvency liability averaging method adjustment</td>
<td>$(1)</td>
<td>$0</td>
</tr>
<tr>
<td>d. Adjusted solvency liability</td>
<td>$1,374</td>
<td>$1,435</td>
</tr>
<tr>
<td>Solvency excess / (deficiency) created as at valuation date (b - d)</td>
<td>$0</td>
<td>$6</td>
</tr>
<tr>
<td>e. Value of excluded benefits</td>
<td>$76</td>
<td>$38</td>
</tr>
<tr>
<td>f. Solvency liabilities before exclusion of benefits and smoothing (c + e)</td>
<td>$1,451</td>
<td>$1,473</td>
</tr>
<tr>
<td>Transfer ratio (a + f)</td>
<td>0.73</td>
<td>0.96</td>
</tr>
<tr>
<td>Ratio of solvency assets to solvency liabilities (a + c)</td>
<td>0.77</td>
<td>0.99</td>
</tr>
</tbody>
</table>

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Payment of Benefits
Since the transfer ratio is less than one, the Plan administrator should ensure that the monthly special payments are sufficient to meet the requirements of the Pension Benefits Act of Ontario to allow for the full payment of benefits. Otherwise, the Plan administrator should take the actions prescribed by the Act.

Financial Position on a Wind-Up Basis
The Plan's hypothetical wind-up position as of July 1, 2009 in comparison with the previous valuation as at July 1, 2006, assuming circumstances producing the maximum wind-up liabilities on the valuation date, is determined as follows:

<table>
<thead>
<tr>
<th>Wind-Up Position ($000)</th>
<th>01.07.09</th>
<th>01.07.06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market value of assets (adjusted for in-transit items)</td>
<td>$1,105</td>
<td>$1,467</td>
</tr>
<tr>
<td>Termination expenses</td>
<td>$(50)</td>
<td>$(50)</td>
</tr>
<tr>
<td>Wind-up assets</td>
<td>$1,055</td>
<td>$1,417</td>
</tr>
<tr>
<td>Present value of accrued benefits for:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ active members</td>
<td>$1,130</td>
<td>$746</td>
</tr>
<tr>
<td>▪ pensioners and survivors</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>▪ deferred pensioners</td>
<td>$321</td>
<td>$727</td>
</tr>
<tr>
<td>Total wind-up liability</td>
<td>$1,451</td>
<td>$1,473</td>
</tr>
<tr>
<td>Wind-up excess (deficiency)</td>
<td>$(396)</td>
<td>$(56)</td>
</tr>
</tbody>
</table>

Impact of Plan Wind Up
In our opinion, the value of the Plan’s assets would be less than its actuarial liabilities if the Plan were to be wound up on the valuation date.

Specifically, actuarial liabilities would exceed the market value of Plan assets by $396,000. This calculation includes a provision for termination expenses that might be payable from the pension fund as well as post-retirement indexing benefits as provided under the terms of the Plan.
Pension Benefit Guarantee Fund (PBGF) Assessment (Ontario)

The PBGF assessment is calculated as follows:

- $1 for each Ontario member: $41
- 0.5% of PBGF assessment base up to 10% of PBGF liabilities: $688
- 1.0% of PBGF assessment base up to between 10% and 20% of PBGF liabilities: $1,325
- 1.5% of PBGF assessment base over 20% of PBGF liabilities: $0
- 2.0% of special PBGF assessment base: $0

PBGF assessment (taking into account the limit per member of $100): $2,054

The PBGF assessment base and liabilities are derived as follows:

<table>
<thead>
<tr>
<th>PBGF Assessment Base and PBGF Liabilities</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PBGF liabilities</td>
<td>$1,375,000</td>
</tr>
<tr>
<td>Total solvency liabilities</td>
<td>$1,375,000</td>
</tr>
<tr>
<td>Ontario asset ratio</td>
<td>100%</td>
</tr>
<tr>
<td>Market value of assets</td>
<td>$1,105,000</td>
</tr>
<tr>
<td>Ontario portion of the fund</td>
<td>$1,105,000</td>
</tr>
<tr>
<td>PBGF assessment base</td>
<td>$270,000</td>
</tr>
<tr>
<td>(a)</td>
<td></td>
</tr>
<tr>
<td>(b)</td>
<td></td>
</tr>
<tr>
<td>(c) = (a) ÷ (b)</td>
<td></td>
</tr>
<tr>
<td>(d)</td>
<td></td>
</tr>
<tr>
<td>(e) = (c) x (d)</td>
<td></td>
</tr>
<tr>
<td>(f) = (a) - (e)</td>
<td></td>
</tr>
</tbody>
</table>
Funding Requirements

Current Service Cost

The estimated value of the benefits that will accrue on behalf of the active members during 2009/2010, in comparison with the corresponding value determined in the previous valuation for 2006/2007, is summarized below:

<table>
<thead>
<tr>
<th>Employer's Current Service Cost ($000)</th>
<th>2009/2010</th>
<th>2006/2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total current service cost</td>
<td>$81.3</td>
<td>$60.6</td>
</tr>
<tr>
<td>Expense provision</td>
<td>$15.0</td>
<td>$5.0</td>
</tr>
<tr>
<td>Estimated members' required contributions</td>
<td>$(19.8)</td>
<td>$(15.5)</td>
</tr>
<tr>
<td>Estimated employer's current service cost</td>
<td>$76.5</td>
<td>$50.1</td>
</tr>
<tr>
<td>Employer's current service cost expressed as a percentage of members' required contributions</td>
<td>386%</td>
<td>323%</td>
</tr>
<tr>
<td>Employer's current service cost expressed as a percentage of pensionable earnings</td>
<td>23.2%</td>
<td>13.1%</td>
</tr>
<tr>
<td>Expected pensionable earnings</td>
<td>$330</td>
<td>$383</td>
</tr>
</tbody>
</table>
An analysis of the changes in the employer’s current service cost follows:

### Changes in Employer’s Current Service Cost

<table>
<thead>
<tr>
<th>Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer’s current service cost as at 01.07.06</td>
<td>323%</td>
</tr>
<tr>
<td>Demographic changes</td>
<td>(28%)</td>
</tr>
<tr>
<td>Change to non-Faculty members’ earnings definition and contribution rates</td>
<td>20%</td>
</tr>
<tr>
<td>Change in assumptions</td>
<td>21%</td>
</tr>
<tr>
<td>Change to expense assumptions</td>
<td>50%</td>
</tr>
<tr>
<td>Employer’s current service cost as at 01.07.09</td>
<td>386%</td>
</tr>
</tbody>
</table>

### Special Payments

#### Going-Concern Basis

The present value as at July 1, 2009 of the going-concern special payments that were established in the previous valuation is $46,000.

Due to the experience loss arising since the previous valuation, a going-concern deficiency of $210,000 was created as at July 1, 2009.

In accordance with the *Pension Benefits Act of Ontario*, each going-concern deficiency needs to be amortized over a period not exceeding 15 years. As such special payments must be increased by $1,882 per month until March 31, 2023 to amortize the going-concern shortfall.

Accordingly, the minimum monthly special payments are as follows:

<table>
<thead>
<tr>
<th>Type of Deficit</th>
<th>Effective Date</th>
<th>Special Payment</th>
<th>Last Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Going-Concern</td>
<td>July 1, 2006</td>
<td>$456</td>
<td>June 30, 2021</td>
</tr>
<tr>
<td>Going-Concern</td>
<td>July 1, 2009</td>
<td>$1,882</td>
<td>March 31, 2023</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>$2,338</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Solvency Basis

No solvency special payments are required.
Total Special Payments

The following minimum monthly special payments must be made to the Plan to eliminate any going-concern funding shortfall as at July 1, 2009, within the periods prescribed by the Pension Benefits Act of Ontario.

Minimum Monthly Special Payments

<table>
<thead>
<tr>
<th>Type of Deficit</th>
<th>Effective Date</th>
<th>Special Payment</th>
<th>Last Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Going-Concern</td>
<td>July 1, 2006</td>
<td>$456</td>
<td>June 30, 2021</td>
</tr>
<tr>
<td>Going-Concern</td>
<td>July 1, 2009</td>
<td>$1,882</td>
<td>March 31, 2023</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>$2,338</td>
<td></td>
</tr>
</tbody>
</table>

Employer Contributions

There is a going-concern funding shortfall of $256,000 and no special payments are required for solvency purposes as at July 1, 2009. As such, we recommend that McMaster University make monthly contributions to the Plan from July 1, 2009 to July 1, 2010 as follows.

Minimum Funding Requirements

The minimum monthly required contributions for the period from July 1, 2009 to June 30, 2010 are as follows:

Monthly Employer Contributions

For current service: 386% of members’ required contributions

PLUS

Minimum special payments for going-concern funding shortfall: $2,338

On the basis of the members’ estimated required contributions, we have estimated the minimum total employer contribution for the period from July 1, 2009 to June 30, 2010 to be $104,600.

Contributions for current service must be made within 30 days following the month to which they apply. Special payments to eliminate a funding shortfall or solvency deficiency must be made in the month to which they apply.

The minimum contribution requirements based on this report exceed the minimum contribution requirements recommended in the previous valuation report. Upon filing this report, McMaster University must contribute the excess, if any, of the minimum contribution recommended in this report over contributions actually made in respect of the period following July 1, 2009. This contribution, along with an allowance for interest, is due no later than 60 days following the date this report is filed.
Maximum Eligible Contributions

The maximum eligible employer contribution is equal to the McMaster University current service cost plus the greater of the funding shortfall and the wind-up deficiency. We have estimated the maximum eligible annual contribution for 2009/2010 to be $472,500 as at July 1, 2009.
Actuarial Opinion

With respect to the Actuarial Valuation as at July 1, 2009
of The Contributory Pension Plan for Salaried Employees of McMaster University
Including McMaster Divinity College
FSCO and Canada Revenue Agency Registration 0215400

Based on the results of this valuation, we hereby certify that, as at July 1, 2009,

- The employer's current service cost for 2009/2010 should be calculated as 386% of members' required contributions.

- The employer's current service cost for 2009/2010 is estimated to be $76,500.

- The Plan would be fully funded on a going-concern basis if its assets were augmented by $256,000. In order to comply with the provisions of the Pension Benefits Act of Ontario, the going-concern funding shortfall must be liquidated by monthly special payments as follows:

<table>
<thead>
<tr>
<th>Minimum Monthly Special Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of Deficit</strong></td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>Going-Concern</td>
</tr>
<tr>
<td>Going-Concern</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

Mercer (Canada) Limited
The Plan has no solvency excess as at July 1, 2009. No special payments are required for solvency purposes.

We have not included in the solvency liabilities the value of post-retirement indexing benefits provided under the Plan.

The Pension Benefits Guarantee Fund annual assessment under Section 37 of the Regulations to the Pension Benefits Act of Ontario for the Plan Year ending June 30, 2009 is $2,054 payable no later than March 31, 2010. The PBGF assessment base is $270,000. The PBGF liabilities are $1,375,000.

The transfer ratio of the Plan is 0.73. The Prior Year Credit Balance on July 1, 2009 is $0. The ratio of solvency assets to solvency liabilities is 0.77.

In our opinion,
- the data on which the valuation is based are sufficient and reliable for the purposes of the valuation,
- the assumptions are, in aggregate, appropriate for the purposes of determining the funded status of the Plan as at July 1, 2009 on going-concern and solvency bases, and determining the minimum funding requirements, and
- the methods employed in the valuation are appropriate for the purposes of determining the funded status of the Plan as at July 1, 2009 on going-concern and solvency bases, and determining the minimum funding requirements.

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

All assumptions made for the purposes of the valuation were independently reasonable at the time the valuation was prepared.

Lorraine Cignac  
Fellow of the Society of Actuaries  
Fellow of the Canadian Institute of Actuaries  
March 24, 2010

Karen Tang  
Fellow of the Society of Actuaries  
Fellow of the Canadian Institute of Actuaries  
March 24, 2010
Plan Assets

Starting November 1, 2002, the Plan assets have been physically separated between this Plan and the Plan 2000. The funds for both plans are held in a Master Trust with a single combined investment approach for the combined funds.

Sources of Plan Asset Data

The pension fund is held in trust by CIBC Mellon and is invested in accordance with the investment policy by a number of investment managers.

We have relied upon the fund statements prepared by CIBC Mellon for the period from July 1, 2006 to July 1, 2009.
Reconciliation of Plan Assets

The pension fund transactions for the period from July 1, 2006 to July 1, 2009 are summarized as follows:

<table>
<thead>
<tr>
<th>Reconciliation of Plan Assets (Market Value - $000)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>As at July 1</td>
</tr>
<tr>
<td>PLUS</td>
</tr>
<tr>
<td>Members' contributions</td>
</tr>
<tr>
<td>University's contributions</td>
</tr>
<tr>
<td>Investment income and net capital gains/(losses)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>LESS</td>
</tr>
<tr>
<td>Lump sum refunds</td>
</tr>
<tr>
<td>Investment expenses</td>
</tr>
<tr>
<td>Administration fees</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>As at June 30</td>
</tr>
</tbody>
</table>

This asset value is adjusted to reflect in-transit contributions of $31,000. The resulting market value is $1,105,000.

We have tested the pensions paid, the lump-sum refunds and the contributions for consistency with the membership data for the Plan members who have received benefits or made contributions. The results of these tests were satisfactory.


**Investment Policy**

The Plan administrator has adopted a statement of investment policy and objectives. This policy is intended to provide guidelines for the managers as to the level of risk which is commensurate with the Plan's investment objectives. A significant component of this investment policy is the asset mix.

The policy target asset mix and the actual asset mix as at July 1, 2009 are provided for information purposes:

<table>
<thead>
<tr>
<th>Distribution of the Market Value of the Fund by Asset Class</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Actual Asset Mix as at 01.07.09</strong></td>
</tr>
<tr>
<td>Canadian Equities</td>
</tr>
<tr>
<td>U.S. Equities</td>
</tr>
<tr>
<td>Non-North American Equities</td>
</tr>
<tr>
<td>Bonds</td>
</tr>
<tr>
<td>Short-term</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
History of Fund Yields

The following table summarizes the yields on the invested Total Fund for the last 20 years:

<table>
<thead>
<tr>
<th>Year</th>
<th>Gains or Losses (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>89-90</td>
<td>0.23</td>
</tr>
<tr>
<td>90-91</td>
<td>8.22</td>
</tr>
<tr>
<td>91-92</td>
<td>10.51</td>
</tr>
<tr>
<td>92-93</td>
<td>13.67</td>
</tr>
<tr>
<td>93-94</td>
<td>2.75</td>
</tr>
<tr>
<td>94-95</td>
<td>16.09</td>
</tr>
<tr>
<td>95-96</td>
<td>13.67</td>
</tr>
<tr>
<td>96-97</td>
<td>21.53</td>
</tr>
<tr>
<td>97-98</td>
<td>15.38</td>
</tr>
<tr>
<td>98-99</td>
<td>4.91</td>
</tr>
<tr>
<td>99-00</td>
<td>9.32</td>
</tr>
<tr>
<td>00-01</td>
<td>2.37</td>
</tr>
<tr>
<td>01-02</td>
<td>(1.25)</td>
</tr>
<tr>
<td>02-03</td>
<td>(2.84)</td>
</tr>
<tr>
<td>03-04</td>
<td>14.89</td>
</tr>
<tr>
<td>04-05</td>
<td>9.96</td>
</tr>
<tr>
<td>05-06</td>
<td>5.94</td>
</tr>
<tr>
<td>06-07</td>
<td>14.51</td>
</tr>
<tr>
<td>07-08</td>
<td>(4.01)</td>
</tr>
<tr>
<td>08-09</td>
<td>(11.71)</td>
</tr>
</tbody>
</table>
Actuarial Methods and Assumptions

Actuarial Valuation Methods – Going-concern Basis

Valuation of Assets

For this valuation, we have continued to use an adjusted market value method to determine the smoothed value of Plan assets. This method smooths each year’s experience gains and losses (the difference between actual and expected investment income) evenly over 5 years.

The asset values produced by this method are related to the market value of the assets, with the advantage that, over time, the market-related asset values will tend to be more stable than market values. To the extent that more capital gains than losses will arise over the long term, the actuarial value will tend to be lower than the market value.

The Plan assets have been physically separated between this Plan and the Plan 2000 since November 1, 2002. In this valuation, we have therefore determined the smoothed value of assets for this Plan.

The smoothed value of the assets for this Plan, determined as at July 1, 2009 under the adjusted market value method, is $1,299,000.
The smoothed value of assets was determined as follows (in $000s):

<table>
<thead>
<tr>
<th></th>
<th>2005/06</th>
<th>2006/07</th>
<th>2007/08</th>
<th>2008/09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Value at July 1st</td>
<td>$1,392</td>
<td>$1,468</td>
<td>$1,179</td>
<td>$1,166</td>
</tr>
<tr>
<td>Payments into Plan</td>
<td>13</td>
<td>60</td>
<td>59</td>
<td>59</td>
</tr>
<tr>
<td>Payments out of Plan</td>
<td>(5)</td>
<td>(565)</td>
<td>(25)</td>
<td>(17)</td>
</tr>
<tr>
<td>Expected return (6.5%)</td>
<td>91</td>
<td>79</td>
<td>78</td>
<td>77</td>
</tr>
<tr>
<td>Investment experience gains/(losses)</td>
<td>(23)</td>
<td>137</td>
<td>(125)</td>
<td>(211)</td>
</tr>
<tr>
<td>Market Value at June 30th</td>
<td>$1,468</td>
<td>$1,179</td>
<td>$1,166</td>
<td>$1,074</td>
</tr>
</tbody>
</table>

1. Market Value of Assets at July 1, 2009 $1,074

LESS

Investment experience gains or losses

2006/07: $(137) x 0.4 $55
2005/06: $(23) x 0.2 $(5)

2. Total Adjustment $(194)

3. Smoothed Value of Assets at July 1, 2009 $1,268
(1. minus 2.)

This smoothed asset value is adjusted to reflect in-transit contributions of $31,000. The resulting smoothed value of asset is $1,299,000.

The return on the smoothed value of assets since the last valuation at July 1, 2006 was 4.58% per year. This rate is less than the assumed investment return of 6.5% by 1.92% per year.

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Valuation of Actuarial Liabilities

Over time, the real cost to the employer of a pension plan is the excess of benefits and expenses over member contributions and investment earnings. The actuarial cost method allocates this cost to annual time periods.

For purposes of the going-concern valuation, we have continued to use the projected unit credit actuarial cost method. Under this method, we determine the actuarial present value of benefits accrued in respect of service prior to the valuation date, including ancillary benefits, based on projected final average earnings. This is referred to as the actuarial liability.

The funding excess or funding shortfall, as the case may be, is the difference between the smoothed value of assets and the actuarial liability. A funding shortfall will be amortized over no more than 15 years through special payments as required under the Pension Benefits Act of Ontario. A funding excess may, from an actuarial standpoint, be applied immediately to reduce required employer current service contributions unless precluded by the terms of the plan or by legislation.

This actuarial funding method produces a reasonable matching of contributions with accruing benefits. Because benefits are recognized as they accrue, the actuarial funding method aims at keeping the plan fully funded at all times. This promotes benefit security, once any unfunded liabilities and solvency deficiencies have been funded.

Current Service Cost

The current service cost is the actuarial present value of projected benefits to be paid under the plan with respect to service during the year following the valuation date.

The employer’s current service cost is the total current service cost reduced by the members’ required contributions.

The employer’s current service cost has been expressed as a percentage of the members’ required contributions to provide an automatic adjustment in the event of fluctuations in membership and/or pensionable earnings.

Under the projected unit credit actuarial cost method, the current service cost for an individual member will increase each year as the member approaches retirement. However, the current service cost of the entire group, expressed as a percentage of the members’ required contributions, can be expected to remain stable as long as the average age of the group remains constant.
Employer's Contribution

Accordingly, the employer's contributions for this purpose are determined as follows:

<table>
<thead>
<tr>
<th>Employer's Contributions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>With a funding excess</strong></td>
</tr>
<tr>
<td>Current service cost</td>
</tr>
<tr>
<td>MINUS</td>
</tr>
<tr>
<td>Any funding excess applied to cover the employer's current service cost</td>
</tr>
</tbody>
</table>

Actuarial Assumptions — Going-Concern Basis

The actuarial value of benefits is based on economic and demographic assumptions. At each valuation, we determine whether, in our opinion, the actuarial assumptions are still appropriate for the purposes of the valuation, and we revise them if necessary.

In this valuation, we have used the same assumptions as in the previous valuation except as noted. Emerging experience will result in gains or losses that will be revealed and considered in future actuarial valuations. For this valuation, we have used the following assumptions.

Economic Assumptions

Investment Return

We have assumed that the investment return on the actuarial value of the fund will average 6.30% per year over the long term. We have based this assumption on an expected long-term return on the pension fund less an allowance for investment and administrative expenses and less a margin for adverse deviations, as described below.

We have assumed a gross rate of return of 7.64% consistent with market conditions applicable on the valuation date, based on estimated returns for each major asset class and the target asset mix specified in the plan's investment policy. Additional returns of 0.25% are assumed to be achievable due to active management (net of investment expenses).

We have allowed for investment management expenses of 0.45% per year, the actual expenses over the last 3 years have been taken into consideration.

We have included a margin for adverse deviations, from all sources, of 1.14% per year. The expected long-term return on the pension fund was determined for the target asset mix specified in the Plan's investment policy consistent with market conditions applicable on the valuation date.
In the previous valuation, the investment return was assumed to be 6.5% per year.

**Expenses**

We have included a provision of $15,000 to meet all administrative expenses charged to the fund, the actual amount of such expenses over the last 3 years have been taken into consideration.

In the previous valuation, we had included an explicit allowance of $5,000 for administrative expenses.

**Inflation**

The benefits ultimately paid depend on the level of inflation. We assumed inflation will be 2.0% per year. This assumption reflects our best estimate of future inflation considering the Bank of Canada’s inflation target and market expectations of long-term inflation implied by the yields on nominal and real return bonds.

**Increases in Pensionable Earnings**

The benefits ultimately paid will depend on each member’s final average earnings. To calculate the pension benefits payable upon retirement, death or termination of employment, we have taken the July 1, 2009 earnings and assumed that such pensionable earnings will increase from July 1, 2010 onward at 5.25% per year.

This is based on:

- an inflation rate of 2.0% per year
- productivity increases of 2.25% per year, and
- merit and promotional increases of 1.0% per year

The current merit and promotional increases component is based on our best estimate of future merit and promotional increases considering current economic and financial conditions. The experience indicates that these assumptions remain appropriate.

**Increases in the YMPE**

Since the benefits provided by the Plan depend on the final average Year’s Maximum Pensionable Earnings (YMPE) under the Canada Pension Plan, it is necessary to make an assumption about increases in the YMPE for this valuation. We have assumed that the YMPE will increase at the rate of 4.25% per year from its 2009 level of $46,300.

This rate represents an assumed rate of inflation of 2.0% per year plus an allowance of 2.25% per year for the effect of real economic growth and productivity gains in the Canadian economy, which is consistent with historical real economic growth.
Increases in the Maximum Pension Permitted under the Income Tax Act

The *Income Tax Act* stipulates that the maximum pension that can be provided under a registered pension plan will be increased, starting in 2010, in accordance with general increases in the average wage.

For this valuation, we have assumed that the maximum pension payable under the Plan will increase as specified in the *Income Tax Act* from $2,444.44 in 2009, and will increase starting in 2010 at the rate of 4.25% per year, the same rate as the YMPE.

Indexation of Pensions in Payment

Pensions in payment are increased each year according to the indexing provisions of the Plan. The increase in pensions is equal to the excess of the 5-year average actual fund rate of return over 4.5%, subject to a cap of the change in CPI for the year. Since our valuation is based on an assumed investment return of 6.3% per year, the assumed post-retirement pension indexing in future is 1.8% per annum. The value of post-retirement indexing is included in the liabilities for all members.

In the previous valuation, the assumed future post-retirement pension indexing was 2.0% per annum.

Interest Credited on Employee-Required Contributions

For this valuation, we have assumed that the interest rate to be credited on employee required contributions will be 6.30% per year, over the long term. This rate is consistent with the assumptions underlying the investment return assumption (6.5% per annum used in the last valuation).

Demographic Assumptions

Retirement Age

We have assumed that 25% of those eligible to retire with an unreduced pension under the Plan terms would do so when first eligible, with the remainder of the members assumed to retire at 65. These rates of retirement have been developed as our expectation of the best estimate rates of retirement based on the plan provisions.
Termination of Employment

Given the demographic characteristics of the remaining active members of the Plan, we have made no allowance for projected benefits payable on the termination of employment before retirement for reasons other than death.

Mortality

The actuarial value of the pension depends on the life expectancy of the member.

The 1994 Uninsured Pension Mortality Table reflects the mortality experience as of 1994 for a large sample of North American pension plans. Applying projection scale AA provides an allowance for improvements in mortality after 1994. This table is commonly used for valuations where the membership of a plan is insufficient to assess plan specific experience and where there is no reason to expect the mortality to differ from that of other pension plans. Both are true for this plan.

While there is strong evidence of continuing improvement in mortality, forecasts of the rate of future improvement are very uncertain. We have used the projection scale AA to reflect future improvements in mortality.

We have assumed mortality rates, both before and after retirement, in accordance with the 1994 Uninsured Pension Mortality Table (UP94) with projection scale AA to reflect future improvements in mortality. According to this table, the life expectancy at age 65, as of the valuation date, is 19.4 years for males and 21.9 years for females.

The previous valuation used UP94 with mortality improvements projected to 2015.

Disability

No allowance has been made for disability retirement on the basis that the impact of including such an assumption would not have a material impact on the valuation results.

Family Composition

Benefits in case of death, before and after retirement, depend on the Plan member’s marital status.

For this valuation, we have assumed that 85% of Plan members will have an eligible spouse on the earlier of death or retirement, and that the male partner will be three years older than the female partner.
Actuarial Valuation Methods and Assumptions — Solvency and Impact of Plan Wind-Up

We have used the market value of the Plan's assets in our valuation of the Plan for solvency purposes. In our determination of the solvency asset adjustment, we have used the same adjusted market value method as used for going-concern funding purposes to determine the smoothed value of assets, as described on page 23 of this report.

To determine the solvency actuarial liability, we have valued those benefits that would have been paid had the Plan been wound up on the valuation date, including benefits that would be immediately payable if the employer's business were discontinued on July 1, 2009, with all members fully vested in their accrued benefits. We have excluded the value of post-retirement indexing benefits provided under the Plan from the solvency liabilities.

We have assumed that members who are eligible for an immediate unreduced pension at July 1, 2009 will have their pension commence immediately on an unreduced basis. Members who satisfy the "Rule of 55" are assumed to retire at the age at which they would attain eligibility for an unreduced pension, assuming a grow-in of age and service. Those "Rule of 55" members who will not meet the unreduced pension eligibility requirement before age 65 are assumed to have their pension commence at age 62 or their current age if older. Pensions, in this case, are reduced by 6% per year for each year the pension is assumed to commence prior to age 65. Retirement at age 62 is assumed to create the largest potential liability for an individual who cannot attain the eligibility criteria for an unreduced pension prior to age 65. Members who do not have 55 points at the valuation date are assumed to retire at age 65. For each individual Plan member, an amount equal to two times accumulated employee contributions with interest is held as a minimum actuarial liability.

Benefits are assumed to be settled through lump sum transfer for 80% of active and deferred vested members below age 55 at the valuation date and 20% of active and deferred vested members age 55 and older at the valuation date. The value of the benefits accrued on July 1, 2009 for such members is based on the assumptions described in Section 3800 — Pension Committed Values of the Canadian Institute of Actuaries Standard of Practice applicable for July 1, 2009 for benefits expected to be settled through transfer in accordance with relevant portability requirements.
Benefits for 80% of active and deferred vested members age 55 or older at the valuation date, 20% of active and deferred vested members below age 55 at the valuation date are assumed to be settled through the purchase of annuities. The value of the benefits accrued on July 1, 2009 for such members is based on an estimate of the cost of settlement through purchase of annuities.

We have estimated the cost of settlement through purchase of annuities in accordance with the Canadian Institute of Actuaries Educational Note: Assumptions for Hypothetical Wind-up and Solvency Valuations with Effective Dates Between December 31, 2008 and December 30, 2009.

In accordance with the Pension Benefits of Ontario, we have not included a provision for adverse deviation in the solvency and wind-up valuations.

In our determination of the solvency liability averaging method adjustment, we have used the average of the rates determined as described above as at each of July 1, 2009, 2008, 2007, 2006 and 2005.

Assumptions are as follows:

<table>
<thead>
<tr>
<th>Actuarial Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortality rates:</td>
</tr>
<tr>
<td>UP94 projected to 2020 for Committed values*</td>
</tr>
<tr>
<td>UP94 projected to 2015 for Annuity proxy</td>
</tr>
<tr>
<td>Interest rates for benefits to be settled through lump sum transfer:</td>
</tr>
<tr>
<td>Wind-up: 3.80% per year for 10 years, 5.80% per year thereafter</td>
</tr>
<tr>
<td>Solvency: 4.74% for 10 years, 5.56% per year thereafter</td>
</tr>
<tr>
<td>Interest rates for benefits to be settled through annuity purchase:</td>
</tr>
<tr>
<td>Wind-up: 4.91% per year for deferred pensions</td>
</tr>
<tr>
<td>Solvency: 4.61% per year for deferred pensions</td>
</tr>
<tr>
<td>Final average earnings:</td>
</tr>
<tr>
<td>Based on actual pensionable earnings over the averaging period.</td>
</tr>
<tr>
<td>Maximum pension limit:</td>
</tr>
<tr>
<td>$2,444.44 per year of service</td>
</tr>
<tr>
<td>Family composition:</td>
</tr>
<tr>
<td>Same as for going-concern valuation</td>
</tr>
<tr>
<td>Termination expenses:</td>
</tr>
<tr>
<td>$50,000</td>
</tr>
<tr>
<td>Annual post-retirement pension increases**</td>
</tr>
<tr>
<td>Wind-up: 0.41% per year</td>
</tr>
<tr>
<td>Solvency: 0.00% per year (excluded)</td>
</tr>
</tbody>
</table>

*Blending 50% / 50% male/female rates for benefits to be settled through lump sum transfer

**Illustrates rate for deferred pension
In a solvency valuation, the accrued benefits are based on the member's final average earnings on the valuation date; therefore no salary projection is used. Also, the employment of each member is assumed to have terminated on the valuation date, therefore, no assumption is required for future rates of termination of employment.

To determine both the solvency and hypothetical wind-up position of the Plan, a provision has been made for estimated termination expenses payable from the Plan's assets in respect of actuarial and administration expenses that may reasonably be expected to be incurred in terminating the plan and to be charged to the plan. In addition, for the purpose of determining the financial position of the Plan on both a solvency and hypothetical wind-up basis, termination expenses also include a provision for transaction fees related to the liquidation of the Plan's assets and for the reduction in the value of the Plan's equity assets resulting from their liquidation. Such fees and liquidation impact are difficult to assess and will vary depending on the nature of the assets held and market conditions at the time assets are liquidated.

Because the settlement of benefits on wind-up is assumed to occur on the valuation date and is assumed to be uncontested, the provision for termination expenses does not include custodial, investment management, auditing, consulting and legal expenses that would be incurred between the wind-up date and the settlement date or due to the terms of the hypothetical wind-up being contested. Expenses associated with the distribution of any surplus assets that might arise on an actual wind-up are also not included in the estimated termination expense provisions.

In determining the provision for termination expenses payable from the Plan's assets, we have assumed that the plan sponsor would be solvent on the wind-up date. We have also assumed, without analysis, that the terms of the Plan as well as applicable legislation and court decisions would permit the relevant expenses to be paid from the Plan.

Actual fees incurred on an actual plan wind-up may differ materially from the estimates disclosed in this report.
Membership Data

Analysis of Membership Data

The actuarial valuation is based on membership data as at July 1, 2009, provided by McMaster University.

We have applied tests for internal consistency, as well as for consistency with the data used for the previous valuation. These tests were applied to membership reconciliation, basic information (date of birth, date of hire, date of membership, gender, etc.), pensionable earnings, credited service, contributions accumulated with interest and pensions to members entitled to a deferred pension. Contributions and lump sum payments were compared with corresponding amounts reported in financial statements. The results of these tests were satisfactory.

Plan membership data are summarized below. For comparison, we have also summarized corresponding data from the previous valuation.
### Membership Data

<table>
<thead>
<tr>
<th></th>
<th>July 1, 2009</th>
<th></th>
<th></th>
<th>July 1, 2006</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
<td>Totals</td>
<td>Males</td>
<td>Females</td>
<td>Totals</td>
</tr>
<tr>
<td><strong>Active Members</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Full-time</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Total salary</td>
<td>$329,988</td>
<td>-</td>
<td>$329,988</td>
<td>$382,615</td>
<td>-</td>
<td>$382,615</td>
</tr>
<tr>
<td>Average salary</td>
<td>$109,999</td>
<td>-</td>
<td>$109,999</td>
<td>$127,538</td>
<td>-</td>
<td>$127,538</td>
</tr>
<tr>
<td>Average pensionable service</td>
<td>14.8</td>
<td>-</td>
<td>14.8</td>
<td>11.8</td>
<td>-</td>
<td>11.8</td>
</tr>
<tr>
<td>Average age</td>
<td>52.6</td>
<td>-</td>
<td>52.6</td>
<td>49.6</td>
<td>-</td>
<td>49.6</td>
</tr>
<tr>
<td>Total employee contributions with interest</td>
<td>$364,451</td>
<td>-</td>
<td>$364,451</td>
<td>$245,280</td>
<td>-</td>
<td>$245,280</td>
</tr>
<tr>
<td><strong>Deferred Pensioners</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>17</td>
<td>21</td>
<td>38</td>
<td>17</td>
<td>24</td>
<td>41</td>
</tr>
<tr>
<td>Total annual pension</td>
<td>$6,626</td>
<td>$8,429</td>
<td>$17,055</td>
<td>$7,137</td>
<td>$31,029</td>
<td>$38,166</td>
</tr>
<tr>
<td>Average annual pension</td>
<td>$507</td>
<td>$401</td>
<td>$449</td>
<td>$508</td>
<td>$1,477</td>
<td>$1,090</td>
</tr>
<tr>
<td>Average age</td>
<td>52.9</td>
<td>48.9</td>
<td>50.7</td>
<td>49.9</td>
<td>47.2</td>
<td>48.3</td>
</tr>
</tbody>
</table>
The membership movement for all categories of membership since the previous actuarial valuation is as follows:

**Reconciliation of Membership**

<table>
<thead>
<tr>
<th></th>
<th>Actives</th>
<th>Deferred Vested</th>
<th>Pensioners and Beneficiaries</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total at 01.07.06</td>
<td>3</td>
<td>41</td>
<td>0</td>
<td>44</td>
</tr>
<tr>
<td>New entrants</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Rehires</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Terminations:</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>▪ Pending</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>▪ transfers/refunds</td>
<td></td>
<td>(3)</td>
<td>(3)</td>
<td></td>
</tr>
<tr>
<td>▪ deferred pensions</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Deaths</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Retirements</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>New Beneficiaries</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Data Corrections</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Total at 01.07.09</td>
<td>3</td>
<td>38</td>
<td>0</td>
<td>41</td>
</tr>
</tbody>
</table>
The distribution of the active members by age and pensionable service as at July 1, 2009, is summarized as follows:

**Distribution of Active Members by Age Group and Pensionable Service as at 01.07.09**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>0-4</th>
<th>5-9</th>
<th>10-14</th>
<th>15-19</th>
<th>20-24</th>
<th>25-29</th>
<th>30-34</th>
<th>35-39</th>
<th>40+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-24</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>25-29</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>30-34</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>35-39</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>40-44</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>45-49</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>50-54</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>55-59</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>60-64</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>65-69</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>
The distribution of the inactive members by age as at July 1, 2009, is summarized as follows:

### Distribution of Inactive Members
**By Age Group as at 01.07.09**

<table>
<thead>
<tr>
<th>Age</th>
<th>Number</th>
<th>Average Annual Pension</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 - 24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 - 29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 - 34</td>
<td>4</td>
<td>$167</td>
</tr>
<tr>
<td>35 - 39</td>
<td>7</td>
<td>$311</td>
</tr>
<tr>
<td>40 - 44</td>
<td>4</td>
<td>$351</td>
</tr>
<tr>
<td>45 - 49</td>
<td>6</td>
<td>$859</td>
</tr>
<tr>
<td>50 - 54</td>
<td>4</td>
<td>$401</td>
</tr>
<tr>
<td>55 - 59</td>
<td>4</td>
<td>$630</td>
</tr>
<tr>
<td>60 - 64</td>
<td>5</td>
<td>$422</td>
</tr>
<tr>
<td>65 - 69</td>
<td>2</td>
<td>*</td>
</tr>
<tr>
<td>70 - 74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>75 - 79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80 - 84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>85 - 89</td>
<td>1</td>
<td>*</td>
</tr>
<tr>
<td>90 - 94</td>
<td>1</td>
<td>*</td>
</tr>
<tr>
<td>95 - 99</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100 +</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>$449</td>
</tr>
</tbody>
</table>

* For individual cells with information on two members or less, the average pensions are not disclosed for confidentiality reasons.
Summary of Plan Provisions

Introduction
The following is a summary of the Plan’s main provisions in effect on July 1, 2009. It is not intended as a complete description of the Plan.

Eligibility for Membership
Members who joined the Plan between January 1, 2001 and January 14, 2003 have been transferred to the Contributory Pension Plan for Salaried Employees of McMaster University Including McMaster Divinity College 2000 ("Plan 2000") following the approval of the asset transfer by the Financial Services Commission of Ontario.

No new entrants are permitted after January 14, 2003.
Retirement

Normal retirement is on the 1st of July next following the member's 65th birthday. However, a member may normally elect to retire immediately on attaining age 65.

A member whose age plus pensionable service equals or exceeds 80 points may retire early and receive an unreduced pension and a bridge benefit. Effective July 1, 2006 the number of points required to retire early and receive an unreduced pension and a bridge benefit is amended for Faculty Members. For these members, the number of points required is as follows:

<table>
<thead>
<tr>
<th>Retirement Date</th>
<th>Points Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 1, 2008 to December 31, 2011</td>
<td>80</td>
</tr>
<tr>
<td>January 1, 2012 to December 31, 2012</td>
<td>81</td>
</tr>
<tr>
<td>January 1, 2013 to December 31, 2013</td>
<td>82</td>
</tr>
<tr>
<td>January 1, 2014 to December 31, 2014</td>
<td>83</td>
</tr>
<tr>
<td>January 1, 2015 to December 31, 2015</td>
<td>84</td>
</tr>
<tr>
<td>January 1, 2016 forward</td>
<td>85</td>
</tr>
</tbody>
</table>

A member may retire early with a reduced pension at any time during the 10-year period preceding his normal retirement date. The reduction will be 0.5% for each month by which actual retirement precedes age 65.

A member may postpone his actual retirement and commencement of pension (with University consent prior to December 12, 2006), but in any event his pension shall commence no later than the 1st of December of the year of attainment of age 71. He will continue to make contributions and his benefits under the Plan will continue to accrue until such postponed retirement date.

Contributions

Each member is required to contribute 3.5% of his regular annual earnings up to the Year's Maximum Pensionable Earnings under the Canada Pension Plan and 5% of his regular annual earnings in excess of the Year's Maximum Pensionable Earnings. Effective at the dates and for the periods shown in the table below member required contribution rates for specific member groups as follows:
The Contributory Pension Plan for Salaried Employees of McMaster University Including McMaster Divinity College

<table>
<thead>
<tr>
<th>Contribution Rate below/above YMPE</th>
<th>Faculty Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.25% / 5.75%</td>
<td>July 1, 2006 to June 30, 2007</td>
</tr>
<tr>
<td>5.0% / 6.5%</td>
<td>July 1, 2007 forward</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contribution Rate below/above YMPE</th>
<th>Non Faculty Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5% / 5.0%</td>
<td>July 1, 2006 to June 30, 2009</td>
</tr>
<tr>
<td>5.5% / 7.0%</td>
<td>July 1, 2009 forward</td>
</tr>
</tbody>
</table>

Effective July 1, 1997, member required contributions will be limited to the lesser of:
(a) the maximum amount permitted under the Income Tax Act in that calendar year; and
(b) 250% of the maximum annual pension payable under the Plan.

Effective July 1, 2006, member required contributions will be limited to the lesser of:
(a) the maximum amount permitted under the Income Tax Act in that year; and
(b) the contribution arising when the applicable employee contribution rate is applied to the Maximum Annual Salary under the Plan.

The Maximum Annual Salary is the salary rate that produces an annual pension amount equal to the maximum pension limit under the Income Tax Act for that year. The Maximum Annual Salary for 2009 is $136,112.

**Pension Benefits**

The amount of annual pension payable to a member at his unreduced retirement age will be:
(a) 1.4% of Best Average Salary up to the Average Year's Maximum Pensionable Earnings times years of pensionable service, plus

(b) 2.0% of Best Average Salary in excess of the Average Year's Maximum Pensionable Earnings times years of pensionable service.

Best Average Salary means the annualized average of the 48 highest months of earnings while a Plan participant. Average Year's Maximum Pensionable Earnings means the pro-rated average Yearly Maximum Pensionable Earnings, in the same 48 months as are used to calculate Best Average Salary.

Pensions in payment will be increased from January 1st each year on a pro-rated basis (using the number of months the pensioner has been retired in the twelve months) by the excess over 4.5% of the average annual rate of return earned on the assets of the Plan over the previous five Plan Years, subject to a maximum of that year's rate of increase in the Consumer Price Index. Effective July 1, 1997, if there is any year where the percentage calculated under the excess interest formula exceeds the rate of increase in

Mercer (Canada) Limited
the Consumer Price Index, the excess will be used to provide a supplementary increase to the pensions in pay for which the annual pension increase in any of the three previous years was based on the excess interest formula, provided that the supplementary increase will be limited to 100% of CPI increases in each of the three preceding years.

In addition, members on LTD will have their salary adjusted each July 1st by the percentage increase applied to pensions in payment. This increase will be applied from the later of July 1, 1990 or the July 1st following disability.

**Bridge Benefits**

Faculty members who first attain 80 points between July 1, 1996 and December 31, 1996 and who elect to retire on December 31, 1996, will receive a bridge benefit equal to the greater of $7,500 or $249.29 per year of credited service. The bridge benefit is payable from the member's early retirement date and ceases at age 65 or death, if earlier.

Faculty members who first attain 80 points prior to July 1, 1996 and who elect to retire between July 1, 1996 and June 30, 1997 or who first attain 80 points between July 1, 1996 and December 31, 1996 and who elect to retire between January 1, 1997 and June 30, 1997, will receive a bridge benefit equal to $249.29 per year of credited service. The bridge benefit is payable from the member's early retirement date and ceases at age 65 or death if earlier.

Staff members who retire at the request of the University between June 30, 1996 and December 31, 1996 and who have attained 80 points, will receive a bridge benefit equal to $249.29 per year of credited service. The bridge benefit is payable from the member's early retirement date and ceases at age 65 or death, if earlier.

Effective July 1, 1997, members who retire early and have attained 80 points will receive a bridge benefit equal to $19.00 per month per year of credited service accrued to June 30, 1996 to a maximum of 20 years of service. The bridge benefit is payable from the later of the member's early retirement date and age 60 and ceases payment on attainment of age 65 or death, if earlier.

**Minimum Benefits**

If the member's total Required Contributions plus net interest are greater than 50% of the commuted value of a member's retirement and bridge pensions, the excess amount will be refunded to the member as a lump sum payment. In addition, the member will receive a refund of his voluntary contributions with interest, if any.
Maximum Benefits
The total annual pension payable from the Plan upon retirement, death or termination of employment cannot exceed the member's pensionable service multiplied by the lesser of:

(a) $2,444.44 or such other maximum prescribed for this purpose under the Income Tax Act; and

(b) 2.0% of the average of the best 3 consecutive years of regular annual salary.

Survivor Benefits

Death Before Retirement
On the death of a member prior to retirement, his beneficiary or estate is entitled to receive a death benefit equal to his required contributions accrued to December 31, 1986 accumulated with net interest on the fund, and his beneficiary or estate shall receive the commuted value of the member’s pension accrued after December 31, 1986, plus any required contributions made after December 31, 1986, accumulated with net interest on the fund, in excess of 50% of the commuted value.

In addition, his beneficiary or estate will receive a refund of his voluntary contributions with interest, if any.

Death After Retirement
The benefit is payable for life, but guaranteed for seven years in any event. In the case of a member with a spouse, 50% of the benefit is continued to the spouse for life and at least the remainder of the guaranteed seven years’ payments will be made. There is no required adjustment in respect of this surviving spouse’s benefit.

Prior to July 1, 1997, the normal form of benefit was as described above with a five-year guarantee in place of the seven-year guarantee.

Alternative forms of pension are available in actuarial equivalent amounts and for members who have a spouse and who retire after December 31, 1987, the automatic form of pension will be an actuarially reduced benefit which continues 60% of the pension to a surviving spouse for life.
Termination Benefits

If a member terminates employment prior to retirement, he may elect to receive one of the following:

a) A refund of his Required Contributions, with Net Interest on the Fund.

b) A transfer of the greater of twice his Required Contributions plus Net Interest and the commuted value of his deferred pension to another locked-in registered pension vehicle.

c) A deferred pension, payable at Normal Retirement Date, equal to the pension earned up to the date of termination.

A member who has met the minimum locking-in criteria under the Pension Benefits Act of Ontario, determined separately for service and benefits before and after January 1, 1987, may elect only (b) or (c). Such member may, however, receive a return of Required Contributions with Net Interest prior to January 1, 1965 subject to a 5% withdrawal charge.

In addition, a member is entitled to a refund of the excess of his Required Contributions plus Net Interest over 50% of the commuted value of the deferred pension described in (c) above. The excess is measured separately for required contributions with interest and pension benefits accrued before and after January 1, 1987.

In addition, a member is entitled to a refund of his voluntary contributions with Net Interest, if any.
Appendix E

Employer Certification

With respect to the report on the actuarial valuation of The Contributory Pension Plan for Salaried Employees of McMaster University Including McMaster Divinity College, as at July 1, 2009, I hereby certify that, to the best of my knowledge and belief:

- a copy of the official Plan documents and of all amendments made up to July 1, 2009, were provided to the actuary;

- the membership data provided to the actuary include a complete and accurate description of every person who is entitled to benefits under the terms of the Plan for service up to July 1, 2009; and

- all events subsequent to July 1, 2009 that may have an impact on the results of the valuation have been communicated to the actuary.

March 15, 2010
Date

Signed

Lilac Scime
Name

Mercer (Canada) Limited