

**TEACHERS' PENSION PARTNERS' BOARD**  
**REPORT OF THE 2003 REVIEW COMMITTEE**

**December 2004**

## **TEACHERS' PENSION PARTNERS' BOARD REPORT OF THE 2003 REVIEW COMMITTEE**

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### **BACKGROUND**

In 1993, the Province and the Nova Scotia Teachers' Union reached an agreement that was intended to restore the financial health of the Teachers' Pension Plan. The text of that Agreement is attached to this report as Appendix 1. The Province agreed to pay \$300 million to the plan plus an additional \$10 million per year for 10 years. The NSTU agreed to a reduction in indexing to the level of CPI - 1% with a cap of 6% as a maximum indexing-based increase. This reduction applied to both pensions in pay and for future recipients. An increase in contributions to the plan was also made by both parties. Funding level objectives were set for the assets of the plan to reach 65% of plan liabilities by 2003 and 70% by 2033, along with a positive funding trend line so that a longer-term objective of full funding could be achieved.

The Province and the NSTU also agreed that they would administer the plan in a partnership arrangement, given effect through the Teachers' Pension Partners' Board, although the Minister of Finance remained as Trustee of the plan and responsible for day to day administration. The Province also guaranteed the payment of pensions under the same terms as the guarantee for the Public Service Superannuation Plan. It was agreed that the status of the plan would be reviewed in 2003 and that governance arrangements would also be subject to future review.

### **THE 2003 REVIEW COMMITTEE**

Since late 2002, a Committee of the Teachers' Pension Partners' Board, comprising both Provincial and NSTU officials, has conducted a review of the plan as required by the 1993 Agreement. The Committee has assessed the progress made over the period since 1993 and the long-term outlook for the plan. Within this context, the Committee has also examined the subject of further changes in plan governance, particularly the concept of joint trusteeship for the plan.

### **THE CURRENT SITUATION**

The Committee's review indicated that under current plan rules and based on the reasonable assumptions used by the plan's actuary, Mercer Human Resource Consulting, in the valuation of the plan, the funding objective of 65% by 2003 had been met. The analysis indicated, however, that even though a funding level of 81% at the end of 2003 was well in excess of the target for 2003, that level could not be sustained. Increasing numbers of retirements of "baby boomers" and poor investment returns in the early 2000s have resulted in a funding trend line that is negative.

Actuarial analysis showed the existing gap between pension liabilities and assets widening in the future and demonstrated that the longer term objective of a 70% funding level by 2033 would not be met. Under present rules and assumptions, the 2032 funding level would decline to less than 60% and continue to decline even more rapidly after that date. The Committee's conclusion was that further action on the part of the NSTU and the Province was necessary to secure the financial health of the pension plan. The gravity of the situation is clearly illustrated by Figure 1 in Appendix 2. This chart was prepared by the plan actuaries, Mercer Human Resource Consulting, based on data from their Actuarial Valuation at the end of 2003.

More specifically, the Committee concluded that the optimal outcome of its work would be to identify a course of action which attempted to achieve a permanent solution to the plan's financial problems even though that might be more costly to all parties than a temporary or short-term measure. The Committee also concluded that further financial changes to the plan should be linked to a move towards joint trusteeship.

## **OPTIONS REVIEWED**

While many possible courses of action regarding aspects of plan assumptions, financing, and benefits were assessed, the review process selected three alternatives for detailed consideration. These options were subjected to detailed analyses by the plan's actuary based on both the plan's present actuarial assumptions and alternate assumptions such as other projected rates of investment return.

These options and their results, in summary form, were as follows.

### **Option 1:**

- an increase in contribution rates (1% each by members and the Province)
- post-retirement inflation indexing for periods of active membership between 2005 and 2009 (up to five years) to be contingent on the plan's return on investment exceeding the rate of return in the actuarial assumptions
- post-retirement indexing for all other periods of active membership on a CPI - 1% basis

### **Results:**

- a negative funding trend line with the present assumed rate of return or any lesser rate
- even with a higher assumed rate of return, the plan would remain far short of full funding for decades into the future
- inflation indexing for the period 2005-2009 would be uncertain if it occurred at all

### **Option 2:**

- existing contribution rates to be maintained
- for members active on or after January 1, 2005, post-retirement inflation indexing for all service to be contingent on the plan's return on investment exceeding the rate of return in the actuarial assumptions

- for pensioners or members inactive on January 1, 2005, indexing to be calculated on a CPI - 1% basis
- the Province to make a lump sum payment on January 1, 2005 equal to the difference between no indexing and CPI - 1% indexing for all past service for active members

Results:

- a positive funding trend line with the present assumed rate of return
- with the present assumed rate of return, the plan would reach full funding c. 2011
- inflation indexing for the period in the future would be uncertain if it occurred at all

Option 3:

- existing contribution rates to be maintained
- for members active on January 1, 2005, post-retirement inflation indexing for past service to be contingent on the plan's return on investment exceeding the rate of return included in the actuarial assumptions but be on a 100% of CPI basis for future service
- for pensioners or members inactive on January 1, 2005, indexing to be calculated on a CPI - 1% basis
- the Province to make a lump sum payment on January 1, 2005 equal to the difference between no indexing and CPI - 1% indexing for all past service for active members

Results:

- a flat funding trend line with the present assumed rate of return or any lesser rate
- even with a higher assumed rate of return, the plan would not reach full funding until c. 2016
- inflation indexing of active members' past service would be uncertain if it occurred at all

As measures of the review process, see Figures 2 through 4 in Appendix 2 which illustrate the results of this stage of Mercer's analyses.

In light of these results, as a variation of Option 2, the Committee moved to an approach using contingent indexing conditional on funding levels with two essential goals:

(i) a short-term objective of restoring plan funding levels to the low 90% range. This level was considered to be a desirable target level since it would likely achieve fiscal stability for the plan in the near-term while minimizing the impacts on plan beneficiaries and sponsors. Critical elements in attainment of this higher funding level are: (a) a reduction of liability by making inflation indexing contingent on the funding level rather than on attainment of an actual rate of return that exceeded the actuarial assumption and (b) a payment by the Province matching the actuarial value of the indexing foregone by teachers.

(ii) a long-term objective of a mechanism to provide self-stabilization within the plan. Such self-regulation could be triggered by having payment of inflation indexing contingent on the attainment of specific target funding levels.

Further actuarial assessment of these concepts which involved testing alternate assumptions about inflation rates, investment return rates, and real rates of return for valuation purposes (see Figure 5 in Appendix 2), indicated this model has the capacity to meet the essential objectives.

In summary form, the critical results are:

- a funding level in excess of 90% which would support inflation indexing based on 50% of CPI (presently approximately equal to CPI - 1%) would exist upon the proposed transition from present plan rules to the proposed revisions in the rules
- a continuously positive funding trend line into the future with the present assumed rate of return and other present actuarial assumptions
- attainment of a 100% funding level to support full inflation indexing c. 2025, a date eight years sooner than the date selected for the long-range target of 70% funding when the 1993 agreement was reached.

With this model, objectives are met in a way which provides equal distribution of benefits, costs, and risks. As a result of that proposed distribution, the Committee believes it should be accompanied by the final step in the evolution of plan governance through the formal implementation of a system of joint trusteeship.

## **RECOMMENDATIONS**

1. The Province will contribute approximately \$142 million to the pension plan. This is the actuarial value of the difference between indexing at CPI minus 1% and 50% of CPI plus the value of unpaid schedule B payments for the period August 2003 to March 2005 inclusive.
2. Effective January 1, 2006 indexing on pensions put in pay on or after that date shall be paid as follows: (referred to as the new rules)
  - a) if the funding level of the plan is 90% or less, no indexing shall be paid
  - b) if the funding level of the plan is between 90% and 100%, at the discretion of the trustees, indexing at 50% of CPI may be paid
  - c) if the funding level is 100% or greater, indexing at full CPI shall be paid, to the extent that it does not reduce the funding level below 100%.
3. Indexing for pensions put in pay between April 1, 2005 and December 31, 2005 (i.e. indexing payable January 2006) will be paid under the current rules (CPI minus 1%) or under the new rules, at the choice of the pensioner. Current pensioners (pensions put in pay before April 1, 2005) may also elect to receive indexing under the new rules or continue with CPI minus 1%. This election may be made at any time up to December 31, 2005. Those who elect the new rules will not be permitted to change back to CPI minus 1% in the future.
4. Notwithstanding the funding level conditions described in 2(a) and 2(b) above, if the funding level of the plan used for the purposes of calculating indexing for 2006 or 2007 is less than 100%, indexing shall be paid at 50% of CPI for those pensions subject to the new rules (pensions

put in pay in January 2006 or subsequently plus pensions for which the member has elected the new rules).

5. In any year in which the funding level of the plan for the purposes of calculating indexing is less than 90%, except 2006 and 2007, the Province will pay into the plan an amount equal to the actuarial value of the indexing not paid.

6. In any year in which the funding level of the plan for the purposes of calculating indexing is greater than 100% , the Province will receive a rebate equal to the actuarial value of the indexing paid. The cumulative value of these rebates shall not be greater than the portion of the \$142 million not attributable to Schedule B plus any amounts paid by the Province pursuant to Recommendation #5 above.

7. Indexing will be paid in January 2006 in the normal way; i.e. based on the twelve month CPI increase to October 2005. It will be calculated and paid again in July 2006 based on the CPI increase from October 2005 to end of April 2006. In 2007 and subsequent years, indexing will be paid in July, based on the increase in CPI measured to the end of previous April.

8. The plan will be jointly trusteeed i.e. half of trustees will be appointed by NSTU, half by Province. There will be a neutral chair of the Board of Trustees jointly appointed by the Partners.

9. For a transition period commencing April 1, 2005 and ending December 31, 2006, or such shorter period as the Partners may agree, pension administration services will continue to be carried out by the Dept of Finance. Every attempt will be made to maintain at least the same level of service as is currently provided.

10. The administration of the plan (benefits delivery and investments) will be carried out by a corporation or similar body, effective January 1, 2007, or at such earlier date as the Partners may agree.

11. The jointly trusteeed board will commit to having the corporation provide benefit delivery and investment management services for a period of three calendar years (2007, 2008, 2009). There will be a legally binding service level agreement between the trustees and the corporation. On December 31, 2008 or any subsequent date, the trustees may give the corporation 12 months' notice of their intention to terminate the service agreement.

12. Effective upon the signing of the trust agreement, the trustees will be free to choose other service providers (e.g. legal counsel, auditor, actuary, consultant) at their discretion .

**Note 1:** The 6% limitation on indexing set by regulation 27(2) will apply to the above; e.g. if CPI is 14%, the rules for 50% CPI, CPI - 1%, and full CPI would each pay indexing of 6%.

**Note 2:** These twelve recommendations constitute an inter-related package and the agreement within the Committee is based on the assumption that all twelve would be adopted together.

## **APPENDIX 1**

### **1993 NSTU – PROVINCE OF NOVA SCOTIA AGREEMENT**

Note: The original 1993 agreement included an additional five pages of data tables in two appendices which are not included with the agreement text reproduced here.

THIS MEMORANDUM OF AGREEMENT made this 13th day of May, 1993.

BETWEEN:

HER MAJESTY THE QUEEN IN  
RIGHT OF THE PROVINCE OF  
NOVA SCOTIA, as represented  
by the Minister of Finance  
(hereinafter referred to as the "Province")

OF THE ONE PART

- and -

NOVA SCOTIA TEACHERS' UNION,  
a body corporate pursuant to the  
Teaching Profession Act, being  
Chapter 462 of the Revised Statutes  
of Nova Scotia, 1989  
(hereinafter referred to as the "Union")

OF THE SECOND PART

WHEREAS the Teachers' Pension Act, being Chapter 461 of the Revised Statutes of Nova Scotia, 1989, as amended, and regulations made thereunder establish a pension plan for persons employed as teachers and their dependents on the terms and conditions set out in the Act and the regulations;

AND WHEREAS the Act establishes, as part of the said plan, the Nova Scotia Teachers' Pension Fund, which is held in trust by the Minister of Finance and from which all pension payments and refunds are payable;

AND WHEREAS the Fund at present experiences an unfunded actuarial liability and it is anticipated that increases in charges payable out of the Fund will occur;

AND WHEREAS the parties have reached certain agreements as to the key terms of an arrangement to address the unfunded liability in the Fund, as well as agreements with respect to the governance and



administration of the plan.

AND WHEREAS the Province and the Union wish to enter into this Memorandum of Agreement for the purpose of recording the principal elements of the agreements which have been reached between them concerning the plan and the Fund;

NOW THEREFORE, for good and valuable consideration, the Province and the Union agree as follows, subject to the enactment of legislation implementing the terms hereof where required, which legislation will be introduced into the Legislature as soon as the Legislature may be in Session and determines to consider it:

1. In this Agreement,

(a) "Act" means the Teachers' Pension Act, being Chapter 461 of the Revised Statutes of Nova Scotia, 1989, as amended, and the regulations made thereunder;

(b) "Fund" means the Nova Scotia Teachers' Pension Fund established by the Act;

(c) "Plan" means the Act and the regulations, as amended from time to time, and includes the Fund as defined herein.

2. The Province will guarantee by legislation on the same basis as is provided in the Public Service Superannuation Act, being Chapter 377 of the Revised Statutes, 1989, as amended, the payment of pensions from the Fund.

3. The Province and the Union agree to the objective of achieving funding of the Plan at levels whereby the assets of the Plan will not be less than sixty-five percent (65%) of the actuarial liabilities of the Plan on or before August 1, 2003, and not less than seventy percent (70%), calculated on the same basis, on or before August 1, 2033.

4. The Province and the Union agree to implement policies and mechanisms designed to achieve improvements in the funding levels referred to in Article 3 beyond the year 2033, with the long term objective being that the assets of the Plan will be not less than one hundred per cent (100%) of the

actuarial liabilities. It is acknowledged that such long term objectives may require payments into the Fund in addition to any matching contributions otherwise required or changes in benefits provided under the Plan. The parties further acknowledge the principle that any future benefit changes shall be fully funded on an actuarial basis.

5. The Province and the Union agree to take the steps necessary to have the regulations under the Act amended to provide that, effective August 1, 1993, every teacher who is employed and the Minister of Finance shall contribute equally to the credit of the Fund an amount aggregating seventeen and one-half percent (17 1/2%) of eligible salary.

6. The Province and the Union agree to take the steps necessary to have the regulations under the Act amended to provide, effective January 1, 1994, the amount authorized to be added to the annual pension payable under the Act in relation to the cost of living will be based upon the Consumer Price Index for Canada, less one percent (1%) to a maximum annual increase in pension payable of six percent (6%). Such increase will be pro-rated in the first year of a teacher's retirement according to the number of months during such year that the teacher was retired. No pension shall decrease as a result of the application of the calculation described in this Article.

7. In recognition of benefit reductions respecting past service of teachers, the Province will pay into the Fund, in addition to its contributions referred to in Article 5, an amount of Three Hundred Million Dollars (\$300,000,000.00) and interest thereon at the rate specified in Appendix I, in accordance with the payment and prepayment options set out in the amortization schedule attached hereto as Appendix I.

8. In recognition of benefits foregone by teachers with respect to future service, the Province will, annually for ten (10) years, make payments into the Fund in the amounts and at the times specified in the schedule attached hereto as Appendix II.

9. The Province and the Union are committed to the principle of joint and equal participation in the governance of the Plan, including matters of benefit and contribution policy, plan administration and participation in the investment policy process. The

parties are further committed to the principle that, except for the payments specifically required by this Agreement, the Province and teachers will share equally in the responsibility for maintaining the fiscal soundness of the Plan and the achievement of funding objectives. The parties are also agreed that the Province and teachers will share equally in any surplus or in any deficit arising in the Fund.

10. The Province and the Union agree that the structure for the governance, administration and management of the Plan will include but not necessarily be limited to the following elements:

(i) the Minister of Finance, (the "Minister") will hold the Fund in trust, and will be the Minister responsible for the Act, with such powers and duties in those capacities as are consistent with the Act and the principles referred to in, and the terms of, this Agreement;

(ii) The Province and the Union will have on-going responsibility to review and decide on matters of policy relating to the Plan, including

(a) the design of the Plan structure, including benefit levels and contribution rates;

(b) management of deficits and disposition of surpluses;

(c) actuarial methods and assumptions used in valuing the Fund;

(iii) a Teachers' Pension Board (the "Board") composed of members one-half of whom will be appointed by the Province and one-half of whom will be appointed by the Union, and a chair to be appointed by the Board, as an additional member of the Board, on the agreement of its members. The Board will be responsible for matters including Plan administration, including the determination of benefit entitlement, and such other matters as are assigned to it from time to time by the Province and the

Union.

(iv) An Investment Advisory Committee, with appropriate representation thereon of the Province and the Union, to be responsible for making recommendations to the Province and the Union in respect of investment policy, selection of investment managers and evaluation of portfolio performance. The Province and the Union agree to review this structure no later than five years following the signing of this Agreement.

11. Subsequent to the execution of this Agreement, the parties will immediately undertake further discussions concerning the governance, administration, and management of the Plan with respect to the roles, structure, policies and procedures to implement the principles and elements referred to in Articles 9 and 10.

12. The Province and the Union agree to the principle of regular review of funding targets, including a comprehensive review in the year 2003 and further reviews every six years thereafter. Beyond the year 2003, the Province will continue to financially recognize losses in benefits resulting from the implementation of Article 6; the exact nature of such recognition will be determined as part of the review process that will be completed by the year 2003, having regard to the funding objectives referred to in Articles 3 and 4.

13. An early retirement package for teachers will, if possible, be devised by the parties on a cost-neutral basis.

14. Amendments to the Plan subsequent to the execution of this Agreement and prior to the implementation of its provisions will be made only by agreement between the Province and the Union.

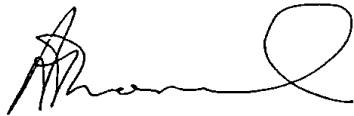
15. The Province and the Union agree to do all such matters and things and to take all such actions and steps as may be reasonably required to implement and give effect to the Agreements evidenced by or referred to in this Memorandum of Agreement.

16. The Appendices to this Agreement form part of this Memorandum of Agreement.


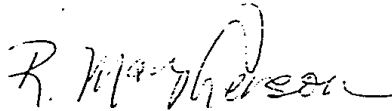
This Memorandum of Agreement and agreements evidenced or contemplated by the terms hereof shall enure to the benefit of and be binding upon the parties hereto and their successors.

IN WITNESS WHEREOF, the parties hereto have executed this Memorandum of Agreement the day and year first above written.

SIGNED, SEALED AND DELIVERED ) Her Majesty the Queen  
in the presence of ) in Right of the  
Province of Nova Scotia

  
Minister of Finance

) Nova Scotia Teachers  
) Union

  
President  
Executive Director

## **APPENDIX 2**

### **FIGURES**

Figure 1 TPP Funded Ratio Projection: 2003 through 2032

Figure 2 Option 1 Funded Ratio Projection: 2005 through 2032

Figure 3 Option 2 Funded Ratio Projection: 2005 through 2032

Figure 4 Option 3 Funded Ratio Projection: 2005 through 2032

Figure 5 Funded Ratio Projection 2005 through 2032 With Contingent Indexing

Figure 1: TPP Funded Ratio Projection: 2003 through 2032  
Source: Mercer Human Resource Consulting, 2 November 2004

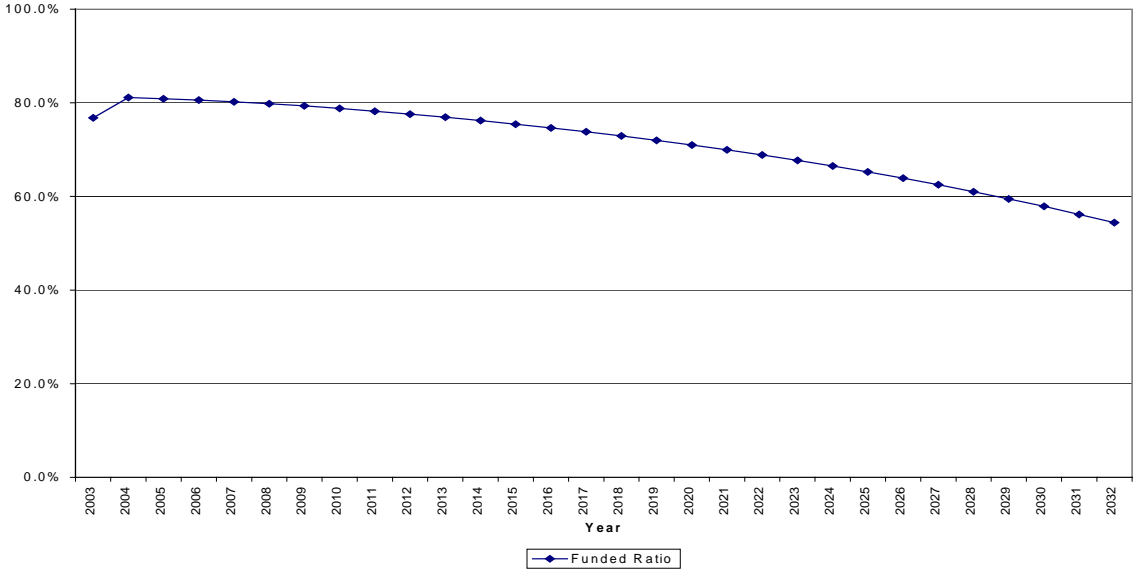


Figure 2: Option 1 Funded Ratio Projection: 2005 through 2032  
 Source: Mercer Human Resource Consulting  
 Prepared for 2003 Review Committee, 29 January 2004

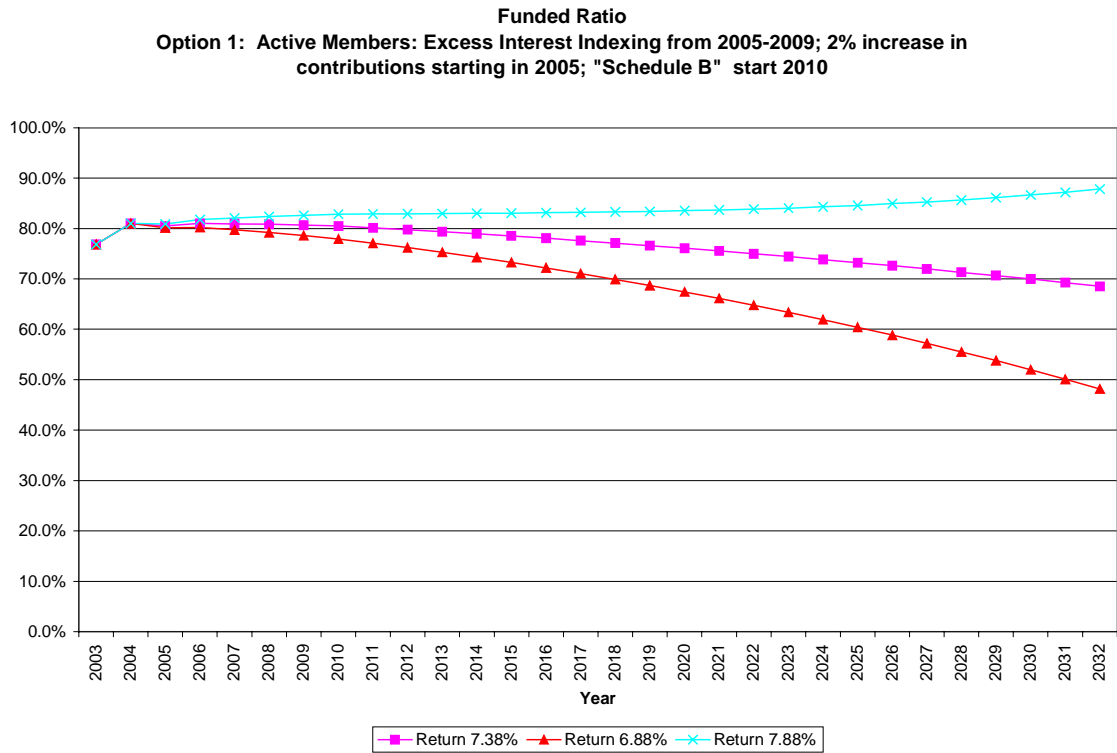




Figure 3: Option 2 Funded Ratio Projection: 2005 through 2032

Source: Mercer Human Resource Consulting

Prepared for 2003 Review Committee, 29 January 2004

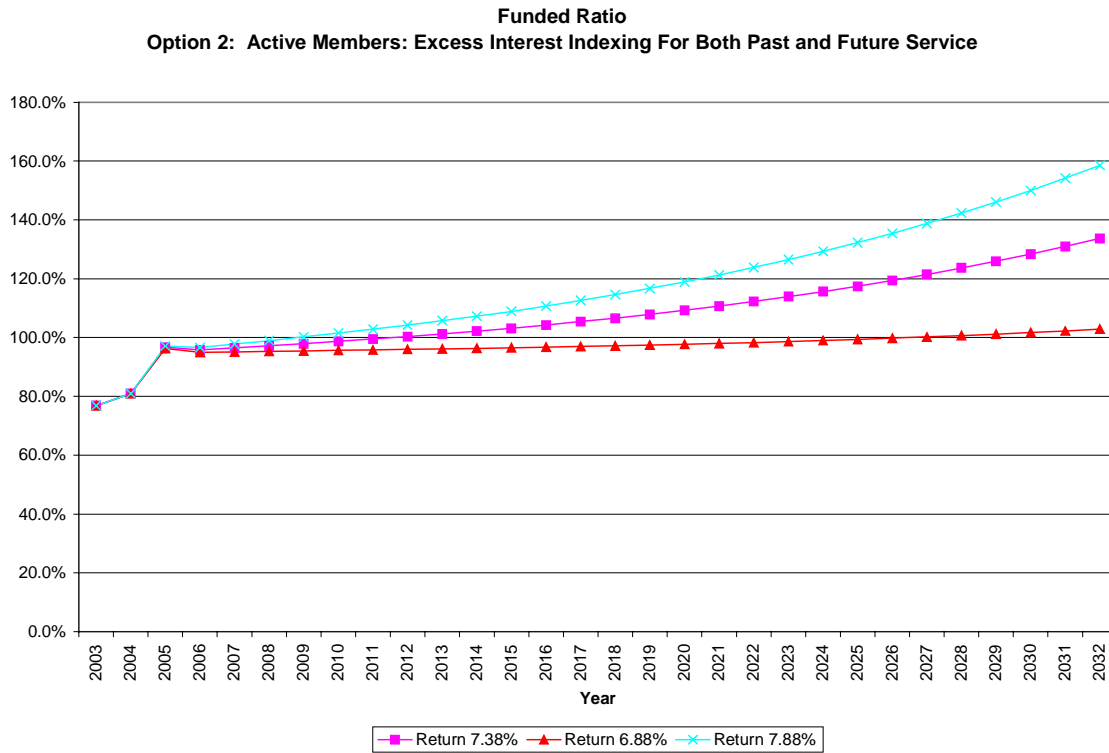


Figure 4: Option 3 Funded Ratio Projection: 2005 through 2032  
 Source: Mercer Human Resource Consulting  
 Prepared for 2003 Review Committee, 29 January 2004

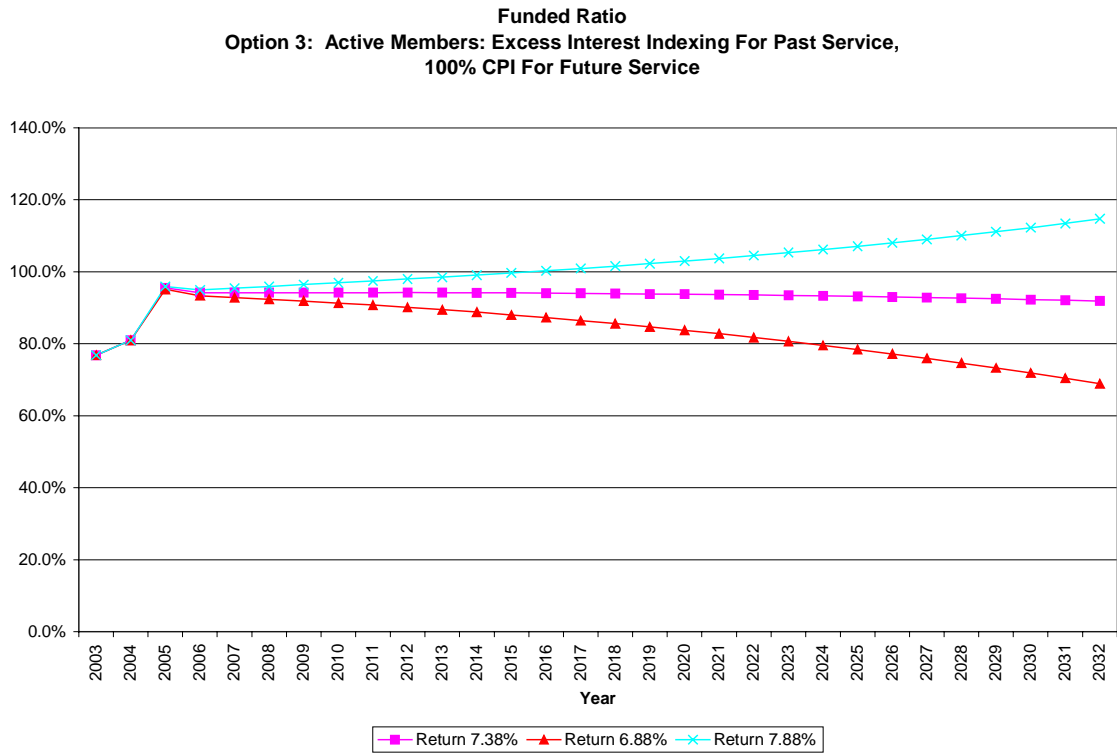
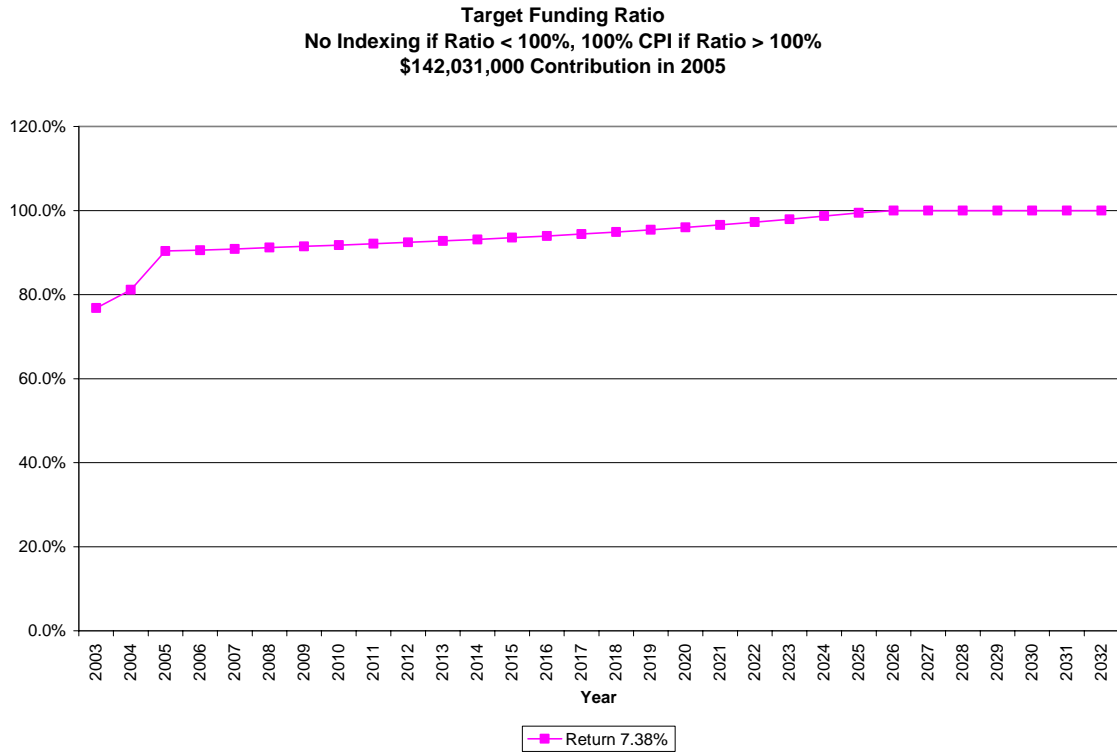


Figure 5: Funded Ratio Projection 2005 through 2032 With Contingent Indexing

Source: Mercer Human Resource Consulting

From data prepared for 2003 Review Committee, 18 October 2004



Note: This test reflect the existing plan assumptions of a valuation real rate of return of 4.25%, a CPI rate of 3.0%, and an investment rate of return of 7.38%.