For Approval:

That the assets backing the defined benefit liabilities in the Academic Staff Pension Plan, excluding the assets backing the excess earnings pensions provided to two pensioners, be invested in an immunized bond portfolio, the cash flows of which will match the expected cash flows of the liabilities, effective July 1, 2010.

Background:

Currently (as of December 31, 2009), a group of 43 special members of the Academic Staff Pension Plan are receiving a defined benefit pension from the General Account. As of December 31, 2009 the general account had a surplus of $537,200 over the actuarial present value of accrued liabilities (see Table 1).

Table 1
General Account as of December 31
Funding Status

	2009[1]	**2008**
Actuarial present value of accrued pension benefits, end of year	5,071,900	5,168,000
Approximate market value of general account, end of year	5,609,100	5,680,000
Surplus	$ 537,200	$ 512,000

The average pensioner age is approximately 89.5 years old. The long-term asset mix is 40% Diversified Equity Fund and 60% Diversified Bond Fund for the component of the General Account that excludes the assets backing up the excess earnings annuities payable to two pensioners. For the excess earnings annuities component, the long-term asset mix is 40% Diversified Equity Fund and 60% Target-Date Funds.

[1] Based on Mercer's actuarial valuation as of December 31, 2009, using existing investment assumptions.

Table 2 below shows the actual composition of the General Account as of April 30, 2010.

Table 2

General Account (Minus excess earnings assets)		
Fund	**Balance**	**Weight (%)**
Diversified Bond	$2,453,812.79	45.43%
Diversified Equity	$2,851,231.83	52.78%
Liquidating Trust	$96,725.47	1.79%
Total	**$5,401,770.09**	100.00%

Excess Earnings Annuities		
Fund	**Balance**	**Weight (%)**
Diversified Equity	$120,773.00	79.12%
TDF 2010	$27,943.33	18.31%
Liquidating Trust	$3,922.22	2.57%
Total	**$152,638.55**	100.00%

Total General Account		
Fund	**Balance**	**Weight (%)**
Diversified Bond	$2,453,812.79	44.18%
Diversified Equity	$2,972,004.83	53.51%
TDF 2010	$27,943.33	0.50%
Liquidating Trust	$100,647.69	1.81%
Total	**$5,554,408.64**	100.00%

Rationale for Change in Investment Strategy

- Given the profile of the pensioners, the current asset mix creates a mismatch between the assets and the liabilities.
- The plan is currently in a surplus position ($537,200 at the end of 2009)[2] and it is prudent to reduce the risk of the portfolio to avoid going into deficit.
- Immunizing the portfolio will ensure that no funding deficit can occur in the future because of market fluctuations (better than expected mortality experience can reduce the surplus though).
- The liabilities are fairly predictable for retired individuals.
- No additional contribution will be required to fully immunize the portfolio.
- Our existing passive bond manager (State Street Global Advisors) is already managing the same type of portfolio for the Administrative Staff Pension Plan.
- Moving to an immunized portfolio is a strategy that our Actuary recommends.

Statutes/Constraints

- Section XI 5(b) of the Pension Plan document states the pension board has authority to make investment decisions with respect to the general account.

[2] On a going-concern basis, using existing assumptions.

- The Ontario Pension Benefits Act requires plan administrators to act with prudence in dealing with the property of another person.

Problems/Issues

- In order to maintain the duration of the portfolio within guidelines and keep the liability payments matched with the asset cash flows, the annual expected pensioner payments will have to be reviewed annually by an Actuary, at a cost of approximately $500 - $1000 per year.
- Immunizing the portfolio will remove the possibility of significantly increasing the surplus going forward.
- We need to monitor custodian fees to ensure that they don't erode the return of the portfolio, given the frequent pension payments.
- Moving to a portfolio that is invested 100% in bonds will cause the expected return of the portfolio to go down, which means that the actuarial surplus as of December 31, 2009 will be completely eliminated, resulting in a deficit of approximately $156,900 (see Table 3).
- The deficit will have to be funded over a 15-year period through monthly payments of approximately $1060.
- Given the positive performance of the portfolio since the beginning of 2010, an interim actuarial valuation could be filed as of July 1, 2010 to reduce the actuarial deficit.
- About $97,000 or 1.8% of the portfolio is currently invested in asset-backed restructured notes (formerly non-bank ABCP). Given that the investment strategy is to hold on to the notes, they won't be divested, initially. The Liquidating Trust holdings will be included in the expected cash flows for 2017.
- The Academic Staff Pension Plan assets don't support granting any ad hoc cost of living improvements in the future, and accordingly no recommendation would be made to the Board of Governors to make ad hoc cost of living improvements.

Table 3
General Account as of December 31, 2009
Impact of Immunizing the Portfolio on Funding Status

	Going-Concern Valuation				Solvency Valuation
	2009 (Excess Earnings Annuities)	2009 (Other Members – Immunized)	2009 (Total General Account – Partly Immunized)	2009 (Status Quo)	2009
Actuarial liabilities	537,000	5,229,000	5,766,000	5,071,900	5,388,000
Market value of assets	178,200	5,430,900	5,609,100	5,609,100	5,609,100
Termination Expenses	0	0	0	0	(45,000)
Surplus (Deficit)	$ (358,800)	$ 201,900	$ (156,900)	$ 537,200	$ 176,100

Implementation

- The target date for the implementation of the new investment strategy is July 1, 2010.

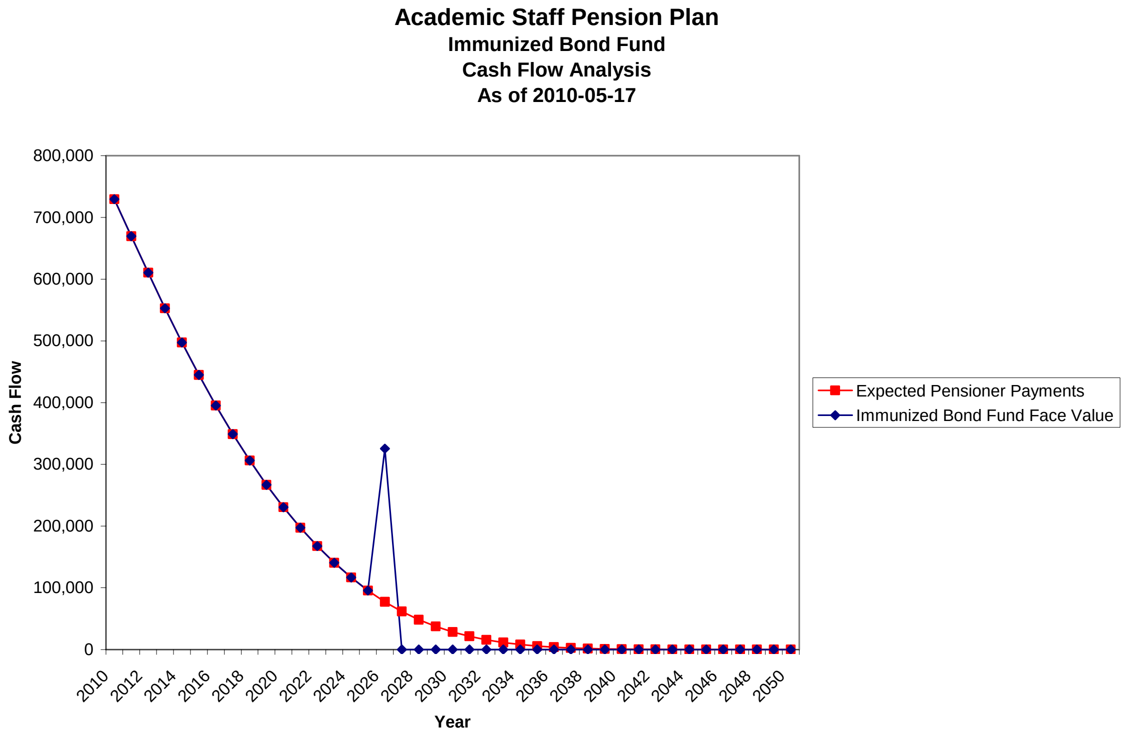
- The Manager shall invest the Immunized Bond Portfolio in a segregated portfolio comprised only of zero-coupon Government of Canada issues (including Crown Corporations) and Canadian Provincial Issues (including provincially guaranteed securities), including money market securities.
- The Manager will establish the target duration of the portfolio by looking at the expected pensioner payments and life expectancy that the Actuary has already provided them with.
- The expected pensioner payments will be used by the Manager to identify which issues to purchase, in order to fully immunize the portfolio through cash flow matching.
- The expected pensioner payments will be funded through maturing zero-coupon bonds.
- On an annual basis the Actuary will provide updated expected pensioner payments to allow the Manager to adjust the target duration and asset cash flows.
- Assets will continue to be compared to liabilities in actuarial valuations. The discount rate is likely to be based on average yield of the bond portfolio.
- The current holdings of the General Account (Diversified Equity and Diversified Bond Fund) will have to be divested. Holdings attributed to pensioners receiving an excess earnings pension (Diversified Equity Fund, Target-Date Fund and Liquidating Trust) won't be divested. The Liquidating Trust holdings won't be divested, initially. The Liquidating Trust holdings will be included in the expected cash flows for 2017.
- No additional contribution will be required to immunize the portfolio. At current market prices (May 17, 2010), immunizing the fund will require purchasing $4,909,093.42[3] of securities, while the General Account balance as of April 30, 2010 was $5,401,770.09, excluding any assets attributed to the excess earnings annuities, for a surplus at inception of $492,676.67 (see Table 4).
- Monthly contributions of approximately $1060 will have to be made to fund the going-concern deficit

Table 4
General Account as of April 30, 2010[4]

Fund	**Balance**
Diversified Bond	$2,453,812.79
Diversified Equity	$2,851,231.83
Liquidating Trust	$96,725.47
Total assets	**$5,401,770.09**
Market Value of Assets to Immunize Pension Payments (May 17, 2010)	$4,909,093.42
Surplus at inception	**$492,676.67**

[3] Assuming a terminal value of $132,210 ($94.29 per unit value) for the Liquidating Trust in 2017.
[4] Excluding assets attributed to pensioners receiving an excess earnings pension.

Chart 1


Academic Staff Pension Plan
Immunized Bond Fund
Cash Flow Analysis
As of 2010-05-17
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
Cash Flow
2010
2012
2014
2016
2018
2020
2022
2024
2026
2028
2030
2032
2034
2036
2038
2040
2042
2044
2046
2048
2050
Year
Expected Pensioner Payments
Immunized Bond Fund Face Value