Questions and Answers

In response to the pension plan town hall meetings held on January 21, 2015

Presenter: Peter Hayes, Eckler Ltd.

UPEI pension plan members recently met to review results of the latest pension valuation and to discuss the plan's funding challenges. The main part of the meeting was a presentation by plan actuary Peter Hayes, of Eckler Ltd, who provided the financial update, and explained why pension fund growth has not kept pace with rising pension costs. A copy of the presentation is available at http://www.upei.ca/hr/pension-and-retirement.

Mr. Hayes also responded to a variety of member questions. Following are responses to key questions raised at the meeting. They have been prepared in consultation with Eckler Ltd., under the direction of the Board Pension Advisory Committee.

1. **Did the removal of mandatory retirement have an impact on the pension plan?**

   The removal of mandatory retirement at age (65) has had little impact on the pension plan to date and is not expected to have a substantive impact over the longer term. Delayed retirement may result in larger pensions due to more years of pensionable service, but that will be offset by a shorter payout period. Those who delay their retirement will contribute to the plan that much longer.

2. **Can you please explain the fees and expenses that are coming out of the plan?**

   The pension plan incurs fees and expenses that are typically in the range of 0.7% to 0.9% of assets each year. The single largest cost is investment management fees paid to external professionals appointed to recommend investment strategies, invest the plan's assets and monitor performance. Also, as a necessary part of running and managing a pension plan, other services, including actuarial, communications, administrative, and custodial are retained on an "as needed" basis.

3. **The pension plan invests in a range of stocks, bonds and real estate—what are the percentages allocated to each of these broad categories?**

   The plan's investments are governed by a Statement of Investment Policies and Procedures that is reviewed by the Pension Investment Review Committee on a regular basis. It is a blueprint that describes how the plan's money is to be invested. It also defines limits that our investment managers must work within, including target ranges for investing in stocks, bonds and real estate.

Over the last several years, the plan's investment mix has shifted from a 60/40 stock/bond mix to a more diversified approach to optimize returns and better manage risk. We've decreased the share of funds invested in bonds because of low rates of return, and we've increased our exposure to real estate, infrastructure investments (these are investments in large physical systems like highways, telecommunications, water and sewage systems) and mortgages.

Our current target investment mix is:

- Canadian equities − 25%
- Global equities− 25%
- Bonds− 25%
- Real estate− 15%,
- Mortgages – 5%
- Infrastructure – 5%.

4. What effect does the decline in oil prices have on our pension plan?

As a defined benefit pension plan—where membership can span 50 to 60 years and more from a member's entry into the plan to the end of life, or a spouse's life—our investment horizon is extremely long term. As a result, we are less concerned with short term fluctuations in the financial markets. That said, we rely on the professional expertise of our investment managers to understand the trends—such as fluctuations in oil prices and their impact on financial markets. With our focus mainly on long term average returns, one bad year is less of a concern.

5. Can you please clarify Slide 27—pensionable payroll payable and the increase in term contracts?

The pension plan's valuation, and specifically future contributions by the University and plan members, are based on the pay of active plan contributors, not the full UPEI payroll. Until 2012/2013, the pensionable payroll increased steadily. More recently, however, there has been a slight decline in the number of active members contributing to the plan.

6. You've outlined several adjustments needed to address challenges the plan is facing, including lower expectations for future investment returns as well as applying a contingency for stock market decline. Do you need to do both?

The two items may appear similar, but they're really not. The contingency is intended to smooth out short-term market fluctuations.

The expectation for future investment returns, on the other hand, gets at expectations over the longer term by making an assumption about the long term average annualized rate of return to be earned by the money currently in the pension fund and by future contributions still to be made.

7. **Do you need to implement these adjustments** *(lower expectation for future investment returns, greater member longevity, and building a contingency for stock market declines)* **at the same time or could they be phased in over time?**

   The adjustments will be effective from the current year and forward. However, given the forecast of declining interest rates, a further adjustment may be warranted.

   Interest rates are used to estimate long term investment returns, as well as the amount of funding needed to provide the pensions that will be paid to members. Low interest rates have the effect of lowering the forecast for long term investment returns (reducing assets) while simultaneously increasing the amount of money needed to fund the pensions that will be paid (increasing liabilities). This double whammy is a primary challenge facing many pension plans across Canada.

   Adjustments for longer life expectancies have been made frequently over the past couple of decades as better data has continued to emerge. Professional actuarial standards, promulgated through 2013 and early 2014, mandate that the most recent data available be used.

8. **As of April 2014, the plan was 97% funded on a going concern basis before applying the smoothing adjustment, and before any assumptions were changed. The plan has performed well historically, however these three very conservative adjustments are being applied – why so conservative?**

   The 97% funding ratio was calculated to demonstrate the value before applying the adjustments. We don't believe we are being overly conservative. In fact, based on the continued slide in interest rates and the recent action of the Bank of Canada, we are concerned that our assumptions may still be too aggressive.

   Similarly, actuarial tables have chronically underestimated improvements in life expectancy. Quite the opposite of being conservative, there remains a significant risk that future improvements remain underestimated even in the newest data, and that further adjustments will be required down the road.

   The characterization of the adjustments as conservative is misguided—there is a very good chance that they don't go far enough, which could have severe consequences down the road.

9. **Don't many investments benefit from low interest rates?**

   There is some relationship between interest rates and performance. In the short term, low interest rates generally have a positive impact on stock market returns, but the opposite is true for bonds and fixed return investments like mortgages. Real estate will not typically generate large returns when interest rates are low, but it can have a stabilizing effect on investment performance over the long term.

10. **The City of Summerside is using a projected 6.25% rate of return and we're using 5.75%. Why are we using different assumptions?**

While Summerside is using more optimistic assumptions, they are an outlier. Most government-sponsored pension plans are facing similar funding challenges and have adjusted their forecasts downward. Historically, governments have either ignored funding problems, or they have relied on unlimited taxing power to resolve issues—neither of which is an option for UPEI. Even governments have started to face reality: public plans in each of the four Atlantic provinces, for instance, have undergone massive changes over the past few years.

UPEI will be better able to manage our financial challenges if we forecast a more conservative 5.75% rate of return and hope to achieve better, than to set a more aggressive projection and achieve less.

11. **Union representatives stressed that three years ago pension changes were negotiated and that the assumptions used in the plan should be negotiated. They reiterated that the average return was 8% and that markets have been performing well.**

    We agree to disagree. Historical returns are not accurate predictors of future performance, and were achieved in an interest rate environment much different than today's. Given the financial challenges the plan faces, we are concerned with not being conservative enough. To manage these challenges effectively, we need to set our assumptions and be prepared for the inevitable periods of volatility and an overall decline in interest rates that may still occur.

12. **Do you have a sense of what a decline of 50 basis points in investment returns would do to our funded status?**

    Using a long term assumption of 5.75%, the funded status of the plan is 84.2%. If we used a long term assumption of 5.25%, the funded status would be 79.0%.

13. **How has the pension plan been impacted by the change in mortality tables and the effect of Canadian baby boomers?**

    The previous mortality tables used were based on U.S. and North American data, and not specifically Canadian. Because Canadians tend to live longer than Americans, Canadian actuaries have updated the mortality tables they are required to use. Using these new tables more accurately reflects the life expectancy of our plan members—and the higher costs associated with longer payouts.

    The effect of baby boomers on the plan is less of an issue. Most in this cohort have been plan members for an extended time, and the payment of their pension benefits has been accounted for in numerous valuations over the years.

14. **Mortality rates in PEI are higher than other provinces (highest cancer rate in the country). Should we be using mortality rates that are more reflective of the region rather than the country as a whole?**

    In a perfect world, we would. As it stands, we use the Canadian mortality table prescribed by the Canadian Institute of Actuaries because local tables have not been developed. We will continue

to monitor the situation and may adopt a different table at some point in the future if more localized mortality tables become available.

15. **What happens to the remainder of my pension if I die before I reach average life expectancy, does it go back to my estate?**

    Death benefits depend on the pension payment option you choose at the time of your retirement. If you have a spouse when you retire, you must choose a form of pension that provides continuing monthly pension payments to your spouse for his or her lifetime. If you don't have a spouse, your pension automatically comes with a 10-year guarantee (if you die within 10 years of retirement, payments will continue to your beneficiary or estate for the remainder of the 10-year period). You may also choose to extend this guarantee period to 15 years (in exchange for a slightly smaller pension) or opt for a smaller guarantee period (in exchange for a slightly larger pension)

    Our pension plan is designed to address one of the biggest risks in retirement—ensuring that you don't outlive your money. In effect, the laws and rules around survivor benefits help safeguard your pension dollars so that they are available to pay you for as long as you (and your spouse) live.

16. **In the presentation, you describe a Scenario Testing Tool the plan is using to help assess changes in assumptions. Can we also assess an increase in rate of return from 5.75% to 6.25%?**

    The scenario testing tool is designed to test thousands of scenarios to see how the plan will perform under a range of conditions (including changes in the interest rate and rate of return assumptions both up and down). The goal is to understand our greatest risks, and to set our assumptions and take actions so that we can mitigate those risks and operate our plan with confidence for the long term.

17. **What effect will the changes in assumptions have on employee contributions?**

    Employee contributions are not impacted by the changes in assumptions. The member contribution rate is fixed and does not change without an amendment to the plan. However, any funding shortfall leads to an automatic increase in contributions for the University. Given that there are limits to the University's ability to contribute without significant effects on the programs it offers, we are in the process of discussing how to address the financial risks for all parties.

18. **Historically, contribution "holidays" have been taken when the plan has had surpluses. Since the union groups were opposed to pension contribution holidays, why did the Administration decide to take the holidays?**

    To be clear, no one favoured contribution holidays, including the University. There are, however, Canada Revenue Agency (CRA) limits to how large a surplus can be carried by the plan. Historically, the limits were not as high as they are today, and they were exceeded by UPEI's plan in the late '90s/early 2000s. In the absence of other actions, the CRA mandated an employer contribution holiday. UPEI's response, on the advice of the Board Pension Advisory

Committee, included plan improvements and a joint contribution holiday that was applied to both member and University contributions.

19. In 2011 we had a deficit of $35 million and were 80% funded vs 84.2% funded in 2014. Why does an extra $1 million per year need to go into the plan?

The $1 million relates primarily to the cost of future pensions still to be earned, which need to be covered by future contributions yet to be made. When we lower our reliance on future investment returns, a greater portion of the cost needs to come from higher contributions.

20. Why was there a 35-year cap on the number of years a member could contribute to the plan?

The 35-year cap, which is no longer in effect, was a Canada Revenue Agency rule at the time. Today, there are no limits on the number of years a member can contribute.

Regardless of whether a member's contributions stop after 35 years of service, membership in the plan continues, and the pension benefit calculations at retirement (which uses the member's highest average salary) would include post-35 year salary. Since the pension liability can continue to grow beyond the 35-year mark, it made sense to remove the 35-year cap on contributions.

21. Three years ago the plan had a higher deficit, why weren't these adjustments applied then?

At the time the adjustments weren't needed because interest rates were forecast to rise, the Canadian mortality tables weren't available, and stock markets were improving. While we continually assess the plan on an ongoing basis, the valuation is an estimate at a point in time and assumptions are reviewed and updated as necessary at each subsequent valuation.

22. How did we get such great returns recently in the midst of the current low interest rate environment?

Market returns over the past five years have been largely driven by governments throughout the world borrowing at very low interest rates and using this to shore up industries and financial markets. But even the largest governments can't increase their debt levels indefinitely. So over the long term, low interest rates create negative pressures on financial markets. Therefore, we make investment return assumptions based on long term averages rather than on results of a few good years.

23. Why did the size of the plan change? How did layoff affect the numbers? Why are all assumptions negative – no positive assumptions (e.g., new School of Engineering)?

The layoffs resulted in a decrease in the number of actively contributing members and, therefore, a decrease in the contributions going into the plan. While the overall impact is not hugely material, it nevertheless means that cost increases are spread over a smaller number of people.

When new employees attracted by the School of Engineering join the pension plan, contributions will flow into the pension fund on their behalf. When that happens, the obligations of the pension plan will increase, as will the assets in the pension fund. The pension plan, as a whole, will benefit from the influx of new members, but not because their contributions provide some kind of relief—but because of the greater economies that come with more members, including better pooling of risk and more efficient deployment of cost.

24. So, can we expect a recovery?

Perhaps, but significant challenges remain. The goal is to safeguard members' pensions, now and in the future.

25. How long has Peter Hayes been the actuary for the UPEI Pension Plan?

Peter Hayes was appointed as the plan's actuary in 1998. He is a principal of Eckler Ltd., Canada's oldest and largest independently-owned actuarial and pension consulting firm. Peter is supported by a professional staff of actuaries in Eckler's Halifax office, and they draw on expertise as needed from Eckler's staff across Canada.

26. Do you expect Eckler's advice to be accepted by Administration? Is it binding on Administration?

Eckler serves a wide range of pension plan clients throughout Canada and internationally, including many plans in the university sector, and brings an enormous amount of experience and expertise to the table. Historically, Eckler's professional advice and recommendations have been provided to the Board Pension Advisory Committee, who then formed recommendations to the Board itself. The PAC's recommendations have traditionally been accepted.