## Quarterly Update on Estimated Solvency Funded Status of Defined Benefit Plans in Ontario

Update as at June 30, 2016

- The median solvency ratio is $\mathbf{8 0 \%}$ (compared to $\mathbf{7 8 \%}$ as at March 31, 2016)
- $21 \%$ of plans had a solvency ratio between $\mathbf{8 5 \%}$ and $\mathbf{1 0 0 \%}$
- $\mathbf{5 \%}$ of plans had a solvency ratio greater than $100 \%$

The 2\% increase in the estimated median solvency ratio since March 31, 2016 was due to the following:

- investment return on the model pension fund of $3.1 \%$ in the second quarter of 2016 caused the ratio to increase by $2 \%$;
- the change in solvency liabilities due to changes in the Commuted Value Discount Rate and the Annuity Purchase Discount Rate was not material and had no effect on the ratio.

Stock markets around the world tumbled on June 24, 2016, one day after the 'Brexit' referendum vote. In addition, bond yields fell significantly as money flowed out of equities and into bonds. By June 30 - one week later - the equity markets had largely recovered, although yields continued to remain depressed compared to pre-Brexit levels. The estimated median solvency ratio reflects market conditions as at June 30, except for prescribed commuted value interest rates which uses pre-Brexit rates. If the commuted value basis had reflected the June 30 market conditions (as would be the case for calculations on July 1), then the median solvency ratio would have been approximately $77 \%$ instead of $80 \%$, a significant reduction in such a short period of time.

The Brexit impact serves as a timely reminder of just how sensitive pension plan solvency positions are to changes in capital market conditions, especially actual returns on invested assets and levels of long-term interest rates. While an on-going monitoring of the funded status is important, it should be understood that short term fluctuations are to be expected and that pension plans are generally long-term vehicles with very long time horizons. Therefore, assessing the health of pension plans (in aggregate) requires that appropriate weight be given to both long-term and short-term measures.

## Assets, Liabilities and Median Solvency Ratio



View accessible description of Assets, Liabilities, and Median Solvency Ratio Line Chart
Distribution of Solvency Ratio


## Methodology and Assumptions:

1. The results reported in the last filed actuarial valuation reports (assets and liabilities) were projected to June 30, 2016 based on these assumptions:

- sponsors would use all available funding excess and prior year credit balance for contribution holidays, subject to any statutory restrictions;
- sponsors would make the normal cost contributions and special payments, if required, at the statutory minimum level;
- the amounts of cash outflow would equal the pension amounts payable to retired members as reported in the last filed valuation report. Plan administration costs were not reflected.

2. The assumed quarterly asset class returns for 2016 are shown in the table below. The model pension fund earned a year-to-date rate of return of $3.3 \%$ to the end of the second quarter of 2016. These rates of return (Canadian \$) were developed based on the following asset mix: $45 \%$ in fixed income, $30 \%$ in Canadian equities, and $25 \%$ in foreign equities.

| 2016 | TSX Canada | MSCI World | FTSE TMX Bond | Total Return on <br> model pension <br> fund |
| :--- | :---: | :---: | :---: | :---: |
| 1st Quarter | $4.5 \%$ | $-7.2 \%$ | $1.4 \%$ | $0.2 \%$ |
| 2nd Quarter | $5.1 \%$ | $1.4 \%$ | $2.6 \%$ | $3.1 \%$ |

3. The estimated solvency liabilities were calculated based on the Canadian Institute of Actuaries Standards of Practice and the Canadian Institute of Actuaries Educational Notes, with these key assumptions:

| Valuation Date | Commuted Value Basis | Annuity Purchase Basis 1 |
| :--- | :--- | :--- |
| Mar 31, 2016 | Interest:$1.90 \%$ for 10 years <br> $3.30 \%$ thereafter <br> Mortality: CPM2014 generational | Interest: $2.86 \%$ |
| June 30, 2016 | Interest: $2.00 \%$ for 10 years, <br> $3.40 \%$ thereafter <br> Mortality: CPM2014 generational | Interest: $2.83 \%$ |

1 based on a medium duration illustrative block

