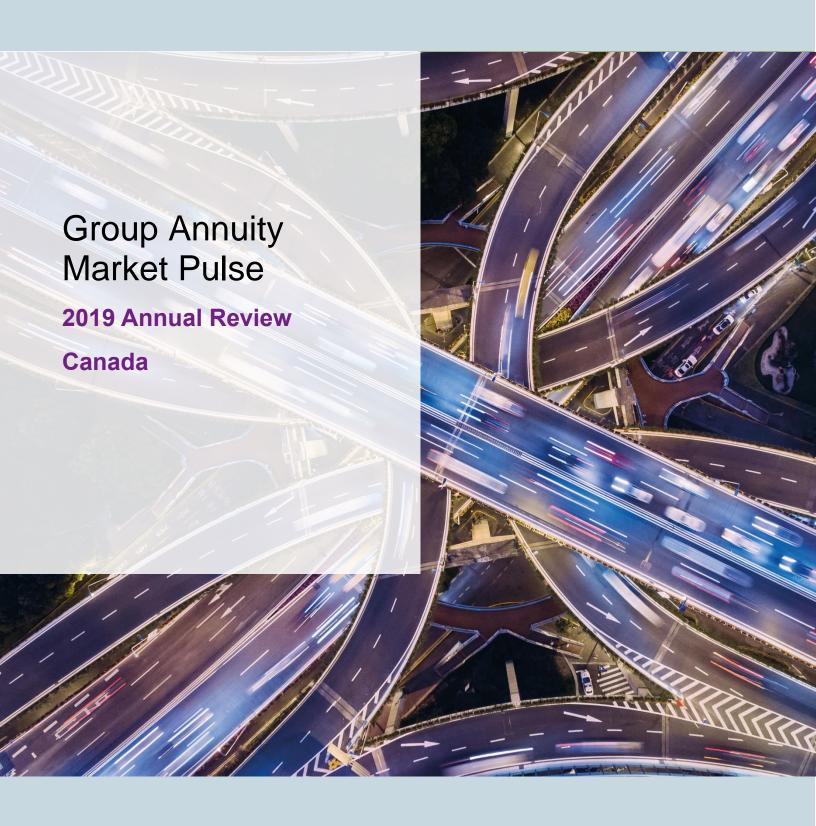
Willis Towers Watson III'IIII



Welcome

We are now entering the 7th year of publishing our *Willis Towers Watson Group Annuity Market Pulse* bulletin and are pleased to release the 2019 Annual Review edition. We have witnessed the Canadian group annuity market evolve significantly in recent years. In fact, 2019 marks the 7th consecutive year of record-breaking activity in this market.

On the following pages, we will provide an overview of current market players and historical group annuity sales volumes. We will then discuss observed pricing and factors influencing pricing competitiveness. This will be followed by an overview of key highlights of 2019. Finally, we will conclude the report with what's trending in 2020 – without spoiling any surprises, this year is shaping up as a landmark year for the Canadian annuity market. There will certainly be a lot to look forward to as we start the new decade.

At Willis Towers Watson, we bring together professionals with extensive expertise and experience in the Canadian group annuity market space to provide the best outcome for our clients. Since 2013, our team has been dedicated to serving clients across the country. We are proud to have advised over 160 clients in assessing whether a group annuity purchase was the right solution for their pension plans – and when it was the case, executing efficiently and in accordance with best practices.

We would be pleased to discuss this topic with you in more depth and discover risk transfer opportunities for your pension plans.



Willis Towers Watson Canadian Group Annuity Purchase Team Success Measures

Protection of personal information through secure channels

160+

clients advised in developing a group annuity purchase strategy \$7B+

of liabilities transferred through group annuity purchases

Ongoing discussions with insurers to be aware of opportunities



Assurance of best practices and use of innovative tools

* Statistics shown above represent group annuity purchase activity since 2013

Innovation

2014: \$500M pension risk restructuring using a self-insurance **captive solution**

2015: First "bridge buy-in" solution

2016: \$350M buy-out transaction for indexed annuities

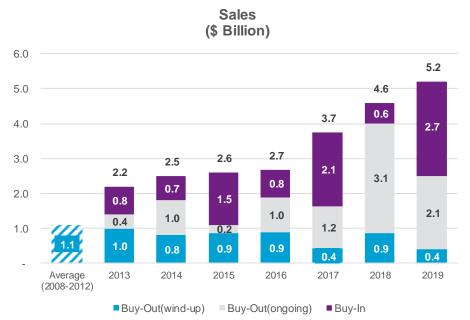
2017: Largest buy-in transaction (\$900M) involving mortality experience data, transfers in kind and three placement partners

2017: First annuity buy-in deal for **active members** -- past and future accruals

2018 and 2019: Strategic advisor to a large organization to establish a life insurance company and reinsure its pension risks

Willis Towers Watson Annuity Purchase Index

For the 7th year in a row, the volume of group annuity purchases continued to grow, reaching \$5.2 billion and over 90 transactions during 2019.



Key Observations:

- The last quarter of 2019 was very active with 33 transactions completed, representing \$2.6 billion.
- 6 transactions worth more than \$300 million each were completed in 2019.
- Over 90% of 2019 transactions were for ongoing plans.
- We are expecting another strong year in 2020, as market conditions drive large transactions.

Notes:

- For 2008 to 2012, the breakdown of sales between buy-in and buy-out for terminated plans and buy-out for ongoing plans is not available. Excludes longevity insurance agreements.
- Source of data: LIMRA, BMO Financial Group, Brookfield Annuity, The Canada Life Assurance Company, Co-operators Life Insurance Company, Desjardins Financial Security, Industrial Alliance, RBC Insurance and Sun Life Financial.

Willis Towers Watson advised on ~33% of transactions (in dollars) since 2013



Who are the market players?

BMO
Brookfield Annuity
Canada Life
Co-operators
Desjardins

Industrial Alliance RBC SSQ (entering in 2020) Sun Life

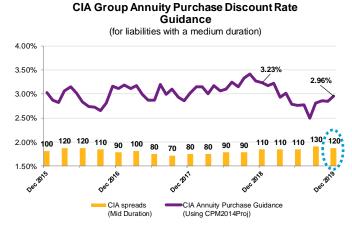
6 insurers recorded a volume of sales greater than \$400 million in 2019, contributing to a healthy competitive landscape while keeping pace with the growing demand



A Look at Group Annuity Pricing

CIA Annuity Purchase Guidance

- The Canadian Institute of Actuaries ("CIA") annuity purchase discount rate guidance is intended to provide actuaries with guidance regarding market pricing for blocks of business of three different durations at a given date. This allows actuaries to select assumptions for actuarial valuation purposes without the need to request annuity quotes from insurers.
- The most recently published CIA annuity purchase discount rate guidance provides for a spread above unadjusted CANSIM V39062 yields of 120 basis points (using the CPM2014Proj mortality table) for non-indexed pensions with a medium duration, resulting in a discount rate of 2.96% as at December 31, 2019 (down from 3.23% as at December 31, 2018).



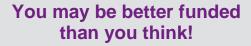
The 27 basis points decrease in the CIA annuity purchase discount rate during 2019 is attributable to the decrease in long-term government of Canada bond yields, partially offset by the increase in the CIA guidance spread of 10 basis points during the year for non-indexed pensions with a medium duration.

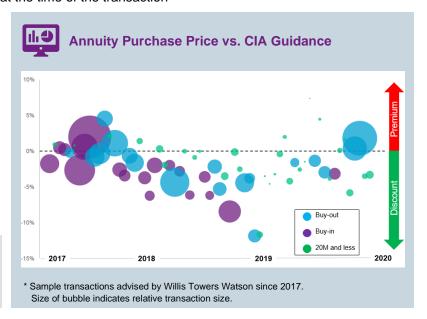
Determinants of Annuity Purchase Pricing

While the CIA annuity purchase discount rate guidance provides information on pricing conditions for illustrative blocks of business, actual pricing can differ from the CIA guidance due to several factors:

- Mortality profile
- The yields on the assets available to the insurer at the time of the transaction
- Group annuity market competitiveness
- Size of transaction
- Plan features and complexity

For most of 2019, we observed that the interplay of the above factors generally resulted in transactions placing at prices below the CIA guidance, thereby improving the financial position of the plan after the annuity purchase. However, since the update to the CIA guidance as at September 30, 2019, annuity pricing in the last quarter of 2019 was more closely aligned with the estimate.





Note:

Details regarding the most recent Canadian Institute of Actuaries ("CIA") group annuity purchase discount rate guidance can be found at www.cia-ica.ca/publications/guidance.

2019 at a Glance

Topic	Observations
Highlights of Annuity Market	 Market continued to grow from \$4.6 billion in 2018 to \$5.2 billion in 2019. 33 transactions totaling over \$2.6 billion were placed in the 4th quarter of 2019 alone. 6 transactions of \$300M or more were completed in 2019 (twice as many as in 2018). Many transactions made the news – Navistar Canada, West Fraser, Wabush Mines, Stelco Inc., Rayonier Advanced Materials, Domtar Corp., Iron Ore Co. and Supremex Inc. Early in 2020, a new longevity deal between Co-operators and the Co-operative Superannuation Society (CSS) was announced covering \$660 million of pension liabilities. 6 out of 8 active insurers concluded the 2019 calendar year with over \$400 million of group annuity sales, indicating an increase in capacity and strong competition among providers.
Recap of Market News	 On April 3, 2019, Great-West Lifeco Inc. announced the merger of its three insurance brands (Great-West Life Assurance Co. and its two subsidiaries London Life and Canada Life) into a single brand: Canada Life. In April 2019, Legal & General Reinsurance (L&G) announced its first buy-in annuity transaction valued at \$200M under their strategic partnership with Brookfield Annuity. Effective January 1, 2020, SSQ Insurance entered the group annuity market.
Recap of Regulatory Updates	 In 2019, pension legislation continued to evolve with more jurisdictions adopting or in the process of allowing for a statutory discharge of the liabilities covered by a buy-out annuity policy issued by a licensed insurance company. More details can be found in: Bill C-97 for members governed by the federal legislation; and Bill 109 for members governed by Nova Scotia. A statutory discharge is already available for members in Quebec, Ontario and British Columbia.
Data Privacy and Cyber Security	 Data privacy and cyber security continues to make the news with large scale data breaches affecting millions of Canadians. Group annuity purchases are transactions for which a significant amount of personal information is collected and shared with third parties. We are witnessing increased awareness and scrutiny by plan administrators and insurers regarding the policies and protocols in place to ensure that personal information is secured and used appropriately.



What's Trending in 2020?

Market Volatility

During 2019, major equity markets generated returns up to ~25% while discount rates dropped by up to ~70 bps. Through the end of February 2020, the markets have not shown signs of smooth sailing as both interest rates and equity markets continued to be very volatile. The aggregate impact on a pension plan may be positive or negative. This type of market volatility provides a good test of whether a pension plan has effective risk management measures and investment strategies in place.

Market volatility sometimes leads to opportunity. This was the conclusion of many plan sponsors who decided to purchase annuities in 2019, as strong equity markets helped pull funded positions higher. Furthermore, the environment of narrowing spreads between annuity purchase rates and accounting discount rates allowed many plan sponsors to execute buy-out transactions with a negligible balance sheet impact. The graph to the right compares accounting discount rates to annuity purchase rates estimated using the CIA annuity purchase guidance. The narrower the spread, the lower the expected balance sheet impact.

Accounting Discount Rates vs. Annuity Purchase Rates

The Accounting Discount Rates are based on market yields on high quality corporate bonds. The Annuity Purchase Rates are also based on market yields but reflect implicit yields offered by insurers. The implicit rates are based on the yields on the assets available to the insurers and the level of profit and margins retained.

The graph below compares the two metrics on a daily basis for a sample pension plan. The annuity purchase rates in the graph are estimated using the CIA guidance. At the end of 2019, the **gap was around 10 bps**.



Demand Increasing – What are the Impacts for Plan Sponsors?

Over the past few years, as demand for group annuities grew from plan sponsors looking to de-risk their pension plans, we were fortunate to also see an increase in supply. In 2019, market capacity remained above demand as many providers increased their capacity. We also observed reinsurers participating in a few large transactions.

However, as we begin 2020 with a healthy pipeline of potential large deals, it is important to consider the potential impact on market pricing should demand overtake supply, including among others:

- 1. Current competitive pricing observed in the market may deteriorate as the year advances;
- 2. Insurers may become increasingly selective as constraints in terms of capacity and operational resources may lead them to decline to bid on a greater number of cases; and
- 3. Smaller plans, more complex plans or those that do not have clean data may find it increasingly difficult to attract interest from insurers.

Although recent years have consistently seen strong activity and favorable pricing towards the end of the year, we believe 2020 may be the first where plans that are able to go to market early in the year with a strong level of data cleanliness and governance readiness may have an advantage over others.

Changes to Commuted Value Standards

Effective August 1, 2020, the actuarial standards of practice for calculating commuted values are changing. The changes could have a significant effect on the commuted value paid to members depending on their profile, the characteristics of the plan (specifically the early retirement provisions), and prevailing bond yields. For many plan sponsors, we expect commuted values to be less costly over time than the equivalent annuity purchase premium for a deferred vested member. As a result, plan sponsors should consider offering to deferred vested members the option to take a lump sum ahead of an annuity purchase transaction.



Predictions for 2020

The table below summarizes our expectations for 2020 compared to what we observed in 2019:

	2019 Observations	2020 Predictions	
Spread over risk-free assets offered by insurers (estimated using the CIA guidance)	Reached multi-year high at 130 bps in Q4 2019 (refer to the figure on page 4)	1	Spread over risk-free assets may drop during 2020
Accounting discount rates vs. annuity purchase rates	Multi-year low at roughly 10 bps in Q4 2019 (refer to graph on page 6)	1	Gap may increase during 2020
Actual annuity premium vs. CIA guidance	During 2019, most transactions were placed at prices below the CIA guidance (refer to graph on page 4)	ŢŢ	Pricing expected to be more in line with CIA guidance during 2020
Demand by plan sponsors	Record volume in 2019 at \$5.2B (refer to page 3)	1	WTW is anticipating another record year in 2020
Supply by insurers	Supply in excess of demand for most of 2019	?	May experience periods of supply challenges during 2020
Overall	Successful year with many clients benefiting from appealing pricing	Σ	Stay tuned for our upcoming publications!

What's Going on Elsewhere?

There has been a lot of activity in other key group annuity markets around the world.



United States

2019 annuity purchase activity exceeded \$30 billion (over 8% growth from 2018), including four jumbo transactions in excess of \$1 billion each. While the market has typically been dominated by buy-out annuity purchases, 2019 was notable for the largest ever plan termination transaction in the US (Bristol Myers-Squibb \$2.5 billion annuity purchase plus \$1.3 billion lump sum) and the two largest buy-ins for about \$850 million each (both non-public transactions).

United Kingdom

Total annuity purchase activity grew to more than £41 billion in 2019, representing more than a threefold increase from the market only two years ago. The market saw the largest buy-in to date, at just below £5 billion, and the second largest longevity swap ever completed, a £7 billion deal. Key themes that will continue to drive activity in the UK during 2020 include:

- Continuation of a very busy market;
- Continuing insurer operational constraints;
- Greater focus on factors other than price such as security, brand and environmental, social and governance issues; and
- Record year for longevity swaps.

Willis Towers Watson Canadian Postal Code Mortality Tool

Intuitively, we know that life expectancy varies significantly between people with different lifestyles. Analysis of health and wealth proxies based on members' postal code, combined with non-geographic predictive factors held on members' records, can help set a customized mortality assumption for a pension plan.

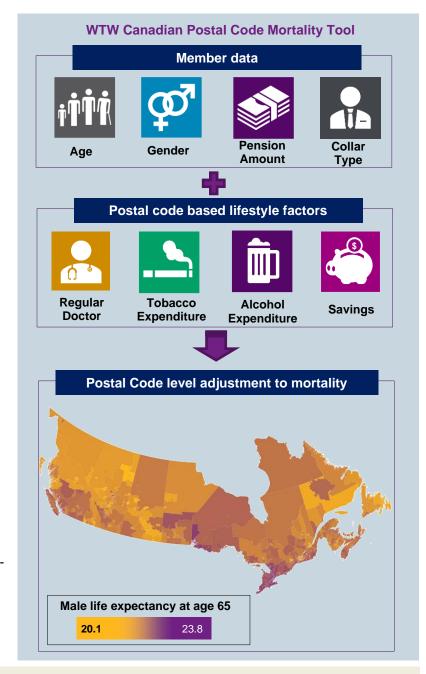
The life expectancy can vary by up to 4 years if you compare the total range of members' lifestyles in Canada. As a point of reference, the effect on pensioner liabilities if there is an additional year of life expectancy amongst a plan's pensioner group is about 3%.

The WTW Canadian Postal Code Mortality Tool uses the recent mortality experience of more than **one million years of member lives across many pension plans in Canada** to provide predictive mortality analytics.

The model identifies mortality differences between different subgroups and enhances the understanding of how longevity risk affects a pension plan's financial sustainability.

In addition, the tool allows plan sponsors with limited mortality experience data to **enhance their mortality assumption** as the model can be used for pension plans with as few as 50 pensioners.

The tool also allows plan sponsors to better estimate the cost of purchasing annuities ahead of going to market and to assess the competitiveness of an annuity purchase premium obtained from insurers during a transaction. The tool therefore levels the playing-field with insurers, who typically use similar predictive models.





Want more information?

This document is not intended to constitute or serve as a substitute for legal, accounting, actuarial or other professional advice. For information on how these issues may affect your organization, please contact your Willis Towers Watson consultant, or:

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About Willis Towers Watson

Willis Towers Watson (NASDAQ: WLTW) is a leading global advisory, broking and solutions company that helps clients around the world turn risk into a path for growth. With roots dating to 1828, Willis Towers Watson has 45,000 employees serving more than 140 countries and markets. We design and deliver solutions that manage risk, optimize benefits, cultivate talent, and expand the power of capital to protect and strengthen institutions and individuals. Our unique perspective allows us to see the critical intersections between talent, assets and ideas – the dynamic formula that drives business performance. Together, we unlock potential. Learn more at willistowerswatson.com.

