

**Related Issuer List at January 17, 2019
(Additions are highlighted)**

Description	Date Added
<u>RBC Common Shares</u>	
Royal Bank of Canada	
<u>RBC Preferred Shares</u>	
4.90% Non-Cumulative First Preferred Shares SERIES W	
4.45% Non-Cumulative First Preferred Shares SERIES AA	
4.60% Non-Cumulative First Preferred Shares SERIES AC	
4.50% Non-Cumulative First Preferred Shares SERIES AE	January 10, 2007
4.45% Non-Cumulative First Preferred Shares SERIES AF	March 6, 2007
4.50% Non-Cumulative First Preferred Shares SERIES AG	April 17, 2007
5.0% Non-Cumulative First Preferred Shares SERIES AJ	September 17, 2008
Non-Cumulative First Preferred Shares SERIES AK	September 17, 2008
Non-Cumulative 5-Year Rate Reset Preferred Shares SERIES AL	October 24, 2008
Non-Cumulative 5-Year Rate Reset Preferred Shares SERIES AZ	February 6, 2014
Non-Cumulative 5-Year Rate Reset Preferred Shares SERIES BB	June 4, 2014
Non-Cumulative 5-Year Rate Reset Preferred Shares SERIES BD NVCC	February 11, 2015
Non-Cumulative 5-Year Rate Reset Preferred Shares SERIES BF NVCC	March 30, 2015
Non-Cumulative Preferred Shares SERIES BH NVCC	June 5, 2015
Non-Cumulative 5-Year Rate Reset Preferred Shares SERIES BI NVCC	July 30, 2015
Non-Cumulative Preferred Shares SERIES BJ NVCC	October 10, 2015
Non-Cumulative 5-Year Rate Reset Preferred Shares SERIES BK NVCC	December 16, 2015
Non-Cumulative 5-Year Rate Reset Preferred Shares SERIES BM NVCC	March 7, 2016
Non-Cumulative 5-Year Rate Reset Preferred Shares SERIES BO NVCC	November 2, 2018
<u>RBC Covered Bonds</u>	
Royal Bank of Canada \$1.5 billion Floating Rate Covered Bonds due March 23, 2020	March 30, 2015
Royal Bank of Canada \$2 billion 1.40% Covered Bonds due April 26, 2019	April 26, 2016
Royal Bank of Canada \$700 million 1.59% Covered Bonds due March 23, 2020	March 30, 2015
<u>RBC Subdebt</u>	
Royal Bank of Canada 2.990% Subordinated Notes due December 6, 2024	December 10, 2012
Royal Bank of Canada 3.04% Cdn NVCC Subordinated Notes due July 17, 2024	July 11, 2014
Royal Bank of Canada 3.45% Cdn NVCC Subordinated Notes due September 29, 2026	September 29, 2014
Royal Bank of Canada 2.48% Cdn NVCC Subordinated Notes due June 4, 2025	June 5, 2015
Royal Bank of Canada 3.31% Cdn NVCC Subordinated Notes due January 20, 2026	January 13, 2016
Royal Bank of Canada 4.650% US NVCC Subordinates Notes due January 27, 2026	January 13, 2016

**Related Issuer List at January 17, 2019
(Additions are highlighted)**

Description	Date Added
<u>External Securities</u>	
BMO Equal Weight US Health Care Hedged to CAD Index ETF	October 2, 2018
BMO Global Insurance Hedged to CAD Index ETF	January 4, 2018
BMO Long-Term US Treasury Bond Index ETF	June 19, 2018
BMO Real Return Bond Index ETF	April 6, 2018
BMO Short Corporate Bond Index ETF	February 21, 2017
BMO Short Provincial Bond Index ETF	October 6, 2017
BMO Short-Term US IG Corporate Bond Hedged to CAD Index ETF	October 5, 2018
BMO Short-Term US Treasury Bond Index ETF	October 1, 2018
BMO SIA Focused Canadian Equity Fund	December 14, 2018
BMO Ultra Short-Term Bond ETF	August 30, 2018
BMO US Preferred Share Index ETF	October 2, 2018
BMO Women in Leadership Fund ETF	June 12, 2018
Cboe Vest S&P 500 Dividend Aristocrats Target Income	August 27, 2018
Cushing Energy & MLP ETF	December 20, 2018
Dorsey Wright MLP Index Exchange Traded Notes	December 18, 2018
Dynamic iShares Active Investment Grade Floating Rate ETF	October 16, 2018
Dynamic iShares Active Tactical Bond ETF	February 23, 2018
Dynamic iShares Active U.S. Mid-Cap ETF	September 26, 2017
EMQQ Emerging Markets Internet & Ecommerce UCITS ETF	October 5, 2018
ETFs Longer Dated Agriculture	December 19, 2017
Evolve Active Core Fixed Income ETF	April 12, 2018
Evolve Active US Core Equity ETF	April 10, 2018
Evolve Automobile Innovation Index ETF	December 18, 2018
Evolve Innovation Index ETF	June 21, 2018
Fidelity U.S. Dividend for Rising Rates Currency Neutral Index ETF	October 12, 2018
Fidelity U.S. High Dividend Currency Neutral Index ETF	September 21, 2018
First Asset 1-5 Year Laddered Government Strip Bond Index ETF	November 3, 2017
First Asset Canadian Buyback Index ETF	November 30, 2017
First Asset Core Canadian Equity ETF	June 3, 2015
First Asset Core US Equity ETF	June 3, 2015

**Related Issuer List at January 17, 2019
(Additions are highlighted)**

Description	Date Added
First Asset Enhanced Government Bond ETF	September 7, 2018
First Asset Enhanced Short Duration Bond ETF	October 5, 2017
First Asset Investment Grade Bond ETF	June 14, 2017
First Asset Morningstar International Value Index ETF	January 31, 2018
First Asset MSCI International Low Risk Weighted ETF	September 6, 2017
First Asset Short Term Government Bond Index Class ETF	February 26, 2018
First Asset US Buyback Index ETF	December 13, 2017
First Trust AlphaDEX Emerging Market Dividend ETF	September 21, 2017
First Trust AlphaDEX U.S. Consumer Staples Sector Index ETF	June 18, 2018
First Trust AlphaDEX U.S. Financial Sector Index ETF	January 16, 2019
First Trust AlphaDEX U.S. Health Care Sector Index ETF	January 10, 2018
First Trust AlphaDEX U.S. Industrials Sector Index ETF	December 31, 2018
First Trust AlphaDEX U.S. Technology Sector Index ETF	August 12, 2016
First Trust Indxx Innovative Transaction and Process ETF	August 29, 2018
First Trust International Capital Strength ETF	August 30, 2018
First Trust Short Duration High Yield Bond ETF (CAD-Hedged)	October 26, 2018
First Trust Value Line Dividend Index ETF (CAD-Hedged)	July 31, 2018
Franklin Liberty Risk Managed Canadian Equity ETF	July 12, 2017
HAN-GINS Cloud Technology UCITS ETF	October 9, 2018
HAN-GINS Innovative Technologies UCITS ETF	October 9, 2018
Horizons Active CDN Bond ETF	July 9, 2018
Horizons Active Preferred Share ETF	June 3, 2015
Horizons US 7-10 Year Treasury Bond ETF	September 12, 2018
IA Clarington Emerging Markets Bond Fund	November 9, 2018
IA Clarington Global Bond Fund	November 9, 2018
Invesco 1-3 Year Laddered Floating Rate Note Index ETF	December 7, 2018
Invesco Corporate Income Defensive ETF	July 25, 2018
Invesco Corporate Income Value ETF	July 25, 2018
Invesco Emerging Markets Debt Defensive ETF	July 25, 2018
Invesco Emerging Markets Debt Value ETF	July 25, 2018
Invesco FTSE RAFI Global Small-Mid ETF	August 1, 2018
Invesco FTSE RAFI U.S. Index ETF II	August 1, 2018
Invesco Investment Grade Defensive ETF	July 25, 2018

**Related Issuer List at January 17, 2019
(Additions are highlighted)**

Description	Date Added
Invesco Investment Grade Value ETF	July 25, 2018
Invesco LadderRite U.S. 0-5 Year Corporate Bond Index ETF	August 1, 2018
Invesco Multi-Factor Core Fixed Income ETF	July 25, 2018
Invesco Multi-Factor Core Plus Fixed Income ETF	July 25, 2018
Invesco Pennsylvania Value Municipal Income Trust	June 20, 2016
Invesco S&P Europe 350 Equal Weight Index ETF	November 29, 2018
Invesco Trust for Investment Grade New York Municipals	June 20, 2016
iShares 1-5 Year Laddered Government Bond Index ETF	October 18, 2018
iShares 1-10 Year Laddered Corporate Bond Index ETF	June 1, 2016
iShares 1-10 Year Laddered Government Bond Index ETF	October 1, 2012
iShares Core MSCI EAFE IMI Index ETF (CAD-Hedged)	May 5, 2015
iShares Edge MSCI Min Vol EAFE Index ETF (CAD-Hedged)	July 18, 2016
iShares Edge MSCI Multifactor EAFE Index ETF	August 16, 2018
iShares Edge MSCI Multifactor USA Index ETF (CAD-Hedged)	December 27, 2018
iShares MSCI Europe IMI Index ETF (CAD-Hedged)	September 28, 2017
Mackenzie Core Plus Global Fixed Income ETF	May 16, 2016
Mackenzie Maximum Diversification US Index ETF	December 2, 2016
Mackenzie US TIPS Index ETF (CAD-Hedged)	July 18, 2018
Manulife Multifactor Developed International Index ETF	January 10, 2019
Pacer Military Times Best Employers ETF	April 11, 2018
PIMCO Investment Grade Credit Fund	October 25, 2017
PIMCO Monthly Income Fund (Canada)	August 7, 2018
Purpose Enhanced US Equity Fund	February 23, 2018
Purpose Gold Bullion Fund	November 21, 2018
Purpose US Dividend Fund	March 19, 2018
RBC 1-5 Year Laddered Canadian Bond ETF	February 18, 2016
RBC 6-10 Year Laddered Canadian Corporate Bond ETF	October 27, 2017
RBC BlueBay Global Diversified Income CAD Hedged ETF	January 8, 2018
RBC Canadian Bond Index ETF	September 29, 2017
RBC Canadian Equity Index ETF	November 3, 2017
RBC Canadian Preferred Share ETF	September 19, 2016
RBC Canadian Short Term Bond Index ETF	December 20, 2017

**Related Issuer List at January 17, 2019
(Additions are highlighted)**

Description	Date Added
RBC Global Government Bond (CAD Hedged) Index ETF	October 19, 2017
RBC International Equity Index ETF	March 28, 2018
RBC PH&N Short Term Canadian Bond ETF	November 27, 2017
RBC Quant Canadian Dividend Leaders ETF	March 8, 2014
RBC Quant Canadian Equity Leaders ETF	July 2, 2015
RBC Quant EAFE Dividend Leaders CAD Hedged ETF	December 9, 2014
RBC Quant EAFE Dividend Leaders ETF	March 8, 2014
RBC Quant EAFE Equity Leaders ETF	July 2, 2015
RBC Quant EAFE Equity Leaders CAD Hedged ETF	July 2, 2015
RBC Quant Emerging Markets Dividend Leaders ETF	December 9, 2014
RBC Quant Emerging Markets Equity Leaders ETF	February 18, 2016
RBC Quant European Dividend Leaders CAD Hedged ETF	December 9, 2014
RBC Quant European Dividend Leaders ETF	December 9, 2014
RBC Quant Global Infrastructure Leaders ETF	September 19, 2016
RBC Quant Global Real Estate Leaders ETF	May 5, 2017
RBC Quant US Dividend Leaders CAD Hedged ETF	January 6, 2015
RBC Quant US Dividend Leaders ETF	August 19, 2015
RBC Quant US Equity Leaders CAD Hedged ETF	October 30, 2015
RBC Quant US Equity Leaders ETF	July 2, 2015
RBC Short Term U.S. Corporate Bond ETF	October 30, 2017
RBC Strategic Global Dividend Leaders ETF	February 18, 2016
RBC Target 2019 Corporate Bond Index ETF	March 30, 2015
RBC Target 2020 Corporate Bond Index ETF	March 30, 2015
RBC Target 2021 Corporate Bond Index ETF	March 30, 2015
RBC Target 2022 Corporate Bond Index ETF	September 19, 2016
RBC Target 2023 Corporate Bond Index ETF	December 7, 2017
RBC Target 2024 Corporate Bond Index ETF	December 5, 2018
RBC U.S. Banks Yield Index ETF	May 18, 2018
RBC US Equity Index ETF	April 2, 2018
RBC Vision Women's Leadership MSCI Canada Index ETF	March 8, 2018
RMR Real Estate Income Fund	June 4, 2014
RWS Holdings PLC	August 30, 2011

**Related Issuer List at January 17, 2019
(Additions are highlighted)**

Description	Date Added
Sarasin IE GlobalSar - Strategic (EUR)	April 19, 2018
TD Canadian Equity Index ETF	December 21, 2018
VanEck Vectors Emerging Markets High Yield Bond ETF	August 17, 2018
Vanguard Canadian Corporate Bond Index ETF	October 23, 2018
Vanguard Canadian Government Bond Index ETF	December 20, 2018
Vanguard Canadian Short-Term Government Bond Index ETF	October 23, 2018
WisdomTree Dynamic Bearish U.S. Equity Fund	January 16, 2019
WisdomTree Europe Hedged Equity Index ETF	August 25, 2017
Xtrackers JPX-Nikkei 400 UCITS ETF (DR)	May 23, 2016