

ROYAL BANK OF CANADA

(a Canadian chartered bank)

2nd Supplementary Notes Base Prospectus dated June 1, 2018

Pursuant to the Programme for the Issuance of Securities

Pages i to 145 (inclusive) of the Notes Base Prospectus dated January 31, 2018 (the "**Notes Base Prospectus**"), as supplemented by the 1st Supplementary Prospectus dated February 28, 2018 of Royal Bank of Canada ("**RBC**" or the "**Issuer**") comprise a base prospectus (the "**Base Prospectus**") for the purposes of Article 5.4 of the Prospectus Directive (as defined herein) in respect of notes ("**PD Notes**" or "**Notes**") to be offered to the public in the Relevant Member States (as defined in the Base Prospectus) and/or to be admitted to the Official List of the Financial Conduct Authority (in its capacity as competent authority for the purposes of Part VI of the Financial Services and Markets Act 2000 as amended, the "**UK Listing Authority**") and admitted to trading on the Regulated Market of the London Stock Exchange plc (the "**London Stock Exchange**"). Pages 146 to 218 (inclusive) of the Notes Base Prospectus, as supplemented by the 1st Supplementary Offering Circular dated February 28, 2018 comprise an offering circular (the "**Offering Circular**"), which has been prepared by the Issuer in connection with the issue of Notes other than PD Notes ("**Non PD Notes**"). The Offering Circular has not been reviewed or approved by the UK Listing Authority and does not constitute a base prospectus for purposes of the Prospectus Directive.

SUPPLEMENTARY PROSPECTUS

Pages 1 to 8 inclusive of this supplement (the "**2**nd **Supplementary Prospectus**") constitute a supplementary prospectus for purposes of Section 87G of the *Financial Services and Markets Act 2000* (the "**FSMA**") prepared in connection with the programme for the issuance of securities established by RBC (the "**Programme**"). The information on page 9 of this supplement constitutes a supplementary offering circular and does not form part of this 2nd Supplementary Prospectus.

Terms defined in the Base Prospectus have the same meaning when used in this 2nd Supplementary Prospectus. The 2nd Supplementary Prospectus is supplemental to, and shall be read in conjunction with, the Base Prospectus and any other supplements to the Base Prospectus issued by RBC.

RBC accepts responsibility for the information in this 2nd Supplementary Prospectus. To the best of the knowledge of RBC, having taken reasonable care to ensure that such is the case, the information contained in this 2nd Supplementary Prospectus is in accordance with the facts and does not omit anything likely to affect the import of such information.

The purpose of this 2nd Supplementary Prospectus is to (a) incorporate by reference in the Base Prospectus the Issuer's unaudited interim condensed consolidated financial statements (the "Second Quarter 2018 Financial Statements"), together with Management's Discussion and Analysis (the "Second Quarter 2018 MD&A") for the three- and six- month periods ended April 30, 2018 set out in the Issuer's Second Quarter 2018 Report to Shareholders (the "Second Quarter 2018 Report to Shareholders (the "Second Quarter 2018 Report to Shareholders"); (b) include a new statement in respect of no significant change; (c) update the Issuer's ratings disclosure in light of the recent ratings changes by DBRS Limited ("DBRS"); (d) to update the statement regarding the BMR (as defined below); (e) to update the Canadian bail-in risk factor in the Notes Base Prospectus in light of the publication of the final regulations implementing the Canadian bail-in regime; (f) following the publication of the Second

Quarter 2018 Report to Shareholders, update paragraph 3 of the section entitled "General Information and Recent Developments" in the Base Prospectus regarding governmental, legal or arbitration proceedings which may have, or have had, a significant effect on the financial position or profitability of the Issuer or of the Issuer and its subsidiaries taken as a whole; and (g) update Element B.12 of the Programme Summary to reflect financial information incorporated by reference and Element B.17 to reflect the DBRS ratings changes by virtue of this 2nd Supplementary Prospectus.

To the extent that there is any inconsistency between (a) any statement in this 2nd Supplementary Prospectus or any statement incorporated by reference into the Base Prospectus by this 2nd Supplementary Prospectus and (b) any other statement in, or incorporated by reference in, the Base Prospectus, the statements in (a) above will prevail.

Save as disclosed in this 2nd Supplementary Prospectus, no significant new factor, material mistake or inaccuracy relating to the information included in the Base Prospectus which is capable of affecting the assessment of PD Notes issued under the Programme has arisen or been noted, as the case may be, since the publication of the 1st Supplementary Notes Base Prospectus dated February 28, 2018.

DOCUMENTS INCORPORATED BY REFERENCE

RBC's Second Quarter 2018 Financial Statements, together with the Second Quarter 2018 MD&A, set out on pages 2 through 87 of the Second Quarter 2018 Report to Shareholders are, by virtue of this 2nd Supplementary Prospectus, incorporated in, and form part of, the Base Prospectus. The remainder of the Second Quarter 2018 Report to Shareholders is either covered elsewhere in the Base Prospectus or is not relevant for investors.

The Second Quarter 2018 Report to Shareholders, which includes the Second Quarter 2018 Financial Statements and Second Quarter 2018 MD&A, has been filed with Morningstar plc (appointed by the Financial Conduct Authority to act as the National Storage Mechanism) and is available for viewing at *http://www.morningstar.co.uk/uk/NSM* and has been announced via the Regulatory News Service operated by the London Stock Exchange.

For the avoidance of doubt, any document incorporated by reference in the Second Quarter 2018 Financial Statements, Second Quarter 2018 MD&A and Second Quarter 2018 Report to Shareholders shall not form part of this 2nd Supplementary Prospectus.

Copies of this 2nd Supplementary Prospectus, the Base Prospectus and the documents incorporated by reference in either of these can be (i) viewed on the website of the Regulatory News Service operated by the London Stock Exchange at *http://www.londonstockexchange.com/exchange/news/market-news/market-news-home.html* under the name of the Issuer and the headline "Publication of Prospectus"; and (ii) obtained on written request and without charge from (a) the Issuer at 13th Floor, 155 Wellington Street West, Toronto, Ontario, Canada M5V 3K7, Attention: Senior Vice President, Performance Management & Investor Relations, and (b) the office of the Issuing and Paying Agent, The Bank of New York Mellon, London Branch, One Canada Square, London E14 5AL, United Kingdom, Attention: Manager, EMEA Corporate & Sovereign. Certain of the documents incorporated by reference in the Base Prospectus or this 2nd Supplementary Prospectus may be viewed by accessing the Issuer's disclosure documents through the Internet (a) at the Canadian System for Electronic Document Analysis and Retrieval at *http://www.sedar.com* (an internet based securities regulatory filing system), and (b) at the U.S. Securities and Exchange Commission's website at *http://www.sec.gov.* These websites are not incorporated in, and do not form part of, the Base Prospectus.

STATEMENT OF NO SIGNIFICANT CHANGE

Since April 30, 2018, the date of the most recently published unaudited interim condensed consolidated financial statements of the Issuer, there has been no significant change in the financial or trading position of the Issuer and its subsidiaries taken as a whole.

ISSUER RATINGS

On April 19, 2018, DBRS affirmed the Issuer's stable outlook. After assessing the impact of the Canadian bailin regime for domestic systemically important banks, which include the Issuer, DBRS lowered the Issuer's debt rating on subordinated debt issued prior to 2014 by one notch, along with the Issuer's large Canadian peers, reflecting the structural subordination to the bail-in instruments. DBRS also noted that a downgrade of any long-term ratings of existing senior obligations is unlikely.

DBRS is not established in the European Union. However, ratings issued by DBRS are endorsed by DBRS Ratings Limited, which is established in the European Union and registered under Regulation (EC) No 1060/2009, as amended.

BENCHMARK REGULATIONS

ICE Benchmark Administration Ltd (IBA) has become an authorised benchmark administrator under the Benchmarks Regulation (*Regulation (EU) 2016/1011*) (BMR).

The seventh paragraph on the cover page of the Notes Base Prospectus is hereby deleted and replaced with the following:

"Amounts payable under the Notes may be calculated by reference to LIBOR, EURIBOR, CDOR, STIBOR, BBSW, CNH HIBOR or HIBOR, which are provided by ICE Benchmark Administration ("IBA"), European Money Markets Institute ("EMMI"), Thomson Reuters, Swedish Bankers' Association, ASX and The Treasury Markets Association ("TMA"), respectively. As at the date of this Base Prospectus, IBA is on the register of administrators and benchmarks established and maintained by the European Securities and Markets Authority ("ESMA") pursuant to article 36 of the Benchmark Regulation (Regulation (EU) 2016/1011 (the "BMR"), but EMMI, Thomson Reuters, Swedish Bankers' Association, ASX and TMA do not appear on such register. As far as the Issuer is aware, the transitional provisions in Article 51 of the BMR apply, such that each of EMMI, Thomson Reuters, Swedish Bankers' Association, ASX and TMA are not currently required to obtain authorisation (or, if located outside the European Union, recognition, endorsement or equivalence)."

CANADIAN BAIL-IN RISK FACTOR

The risk factor on pages 33 and 34 of the Notes Base Prospectus entitled "*Notes may be subject to write-off, write-down or conversion under current and proposed Canadian resolution powers*" is hereby deleted and replaced with the following:

"Senior Notes may be subject to non-payment in full or conversion under Canadian resolution powers

On June 22, 2016 legislation came into force amending the Bank Act, the Canada Deposit Insurance Corporation Act ("**CDIC Act**") and certain other federal statutes pertaining to banks to create a bank recapitalisation regime (the "**Regime**") for domestic systemically important banks ("**D-SIBs**"), which include the Issuer. The expressed objectives of the Regime include (i) reducing government and taxpayer exposure in the unlikely event of a failure of a D-SIB and (ii) reducing the likelihood of such a failure by increasing market

discipline and reinforcing that bank shareholders and creditors are responsible for the D-SIB's risks and not taxpayers.

Pursuant to the Regime and under the CDIC Act, in circumstances where the Superintendent of Financial Institutions has determined that the Issuer has ceased, or is about to cease, to be viable the Governor in Council may, upon recommendation of the Minister of Finance that he or she is of the opinion that it is in the public interest to do so, grant an order:

- Vesting in the Canada Deposit Insurance Corporation ("**CDIC**"), Canada's resolution authority the shares and subordinated debt of the Issuer that are specified in the order ("**Vesting Order**");
- Appointing CDIC as receiver in respect of the Issuer ("Receivership Order");
- Directing the Minister of Finance to incorporate a federal institution designated in the order as a bridge institution and specifying the date and time as of which the Issuer's deposit liabilities are assumed ("Bridge Bank Order"); or
- If a Vesting Order or Receivership Order has been made, directing CDIC to convert all or a portion of certain shares or liabilities of the Issuer into common shares of the Issuer or any of its affiliates ("**Bail-in Conversion**").

Under a Bridge Bank Order, CDIC has the power to transfer certain assets and liabilities of a distressed bank that is subject to such Order to a bridge institution owned by CDIC or a third-party acquiror. Upon exercise of such power, any assets and liabilities of the distressed bank that are not transferred to the bridge institution or third-party acquiror would remain with the distressed bank, which would then be wound up under the *Winding-up and Restructuring Act* (Canada). In such a scenario involving the Issuer, any liabilities of the Issuer, such as the Senior Notes, that are not assumed by the bridge institution or third-party acquiror could receive only partial repayment in the ensuing winding-up of the Issuer.

In connection with Bail-in Conversion powers, the Government of Canada has published regulations under the CDIC Act and the Bank Act (Canada) providing the details of conversion, issuance and compensation regimes for bail-in instruments issued by D-SIBs, including the Issuer, namely the Recapitalization (Bail-in) Conversion Regulations, the Bank Recapitalization (Bail-in) Issuance Regulations and the Compensation Regulations (collectively, the "**Bail-in Regulations**").

The Bail-in Regulations prescribe the types of shares and liabilities that will be subject to a Bail-in Conversion ("**prescribed liabilities**"). In general, any senior debt issued after September 23, 2018 with an initial or amended term to maturity (including explicit or embedded options) greater than 400 days, that is unsecured or partially secured and has been assigned a CUSIP or ISIN or similar identification number would be prescribed liabilities subject to a Bail-in Conversion. Shares, other than common shares, and subordinated debt would also be prescribed liabilities subject to a Bail-in Conversion. Unless they are non-viability contingent capital. However, certain other debt obligations of the Issuer such as structured notes (as defined in the Bail-in Regulations), covered bonds (as defined in section 21.5 of the National Housing Act (Canada)), and certain derivatives would not be subject to a Bail-in Conversion.

Senior Notes issued after September 23, 2018 that do not fall within the definition of "structured notes", and would otherwise be prescribed liabilities would accordingly be subject to a Bail-in Conversion. Subject to certain exceptions, a "structured note" is defined in the Bail-in Regulations as a debt obligation that (a) specifies that the obligation's stated term to maturity, or a payment to be made by its issuer, is determined in whole or in part by reference to an index or reference point, including (i) the performance or value of an entity or asset, (ii) the market price of a security, commodity, investment fund or financial instrument, (iii) an interest rate, and (iv) the exchange rate between two currencies; or (b) contains any other type of embedded derivative or similar feature.

The following debt obligations are not considered "structured notes": (a) a debt obligation in respect of which the stated term to maturity, or a payment to be made by its issuer, is determined in whole or principally by reference to the performance of a security of that issuer; (b) a debt obligation that specifies that the return is determined by a fixed or floating interest rate or a fixed spread above or below a fixed or floating interest rate, regardless of whether the return is subject to a minimum interest rate or whether the interest rate changes between fixed and floating, has no other terms affecting the stated term to maturity or the return on the debt obligation (other than the right of the issuer to redeem the debt obligation or the right of the holder or issuer to extend its term to maturity) and is payable in cash. The Senior Notes may or may not fall within the definition of "structured notes" depending on their terms. The Issuer will only begin to issue Senior Notes that are, on issue, subject to Bail-in Conversion once this Base Prospectus has been updated to reflect applicable additional requirements for such Senior Notes and will indicate at the time of issue that the Senior Notes are subject to Bail-in Conversion.

Notwithstanding the above, Senior Notes issued before September 23, 2018 will not be subject to a Bail-in Conversion under the Bail-in Regulations unless the terms of the Senior Notes are, on or after that day, amended to increase their principal amount or to extend their term to maturity and the Senior Notes, as amended, meet the requirements to be subject to a Bail-in Conversion.

The Bail-in Regulations prescribe that holders of bail-in eligible instruments that are subject to a Bail-in Conversion must receive more common shares per dollar amount converted than holders of any subordinate ranking bail-in eligible instruments or NVCC instruments (including Subordinated Notes) converted."

AMENDMENT TO STATEMENT REGARDING GOVERNMENTAL, LEGAL OR ARBITRATION PROCEEDINGS

Paragraph 3 of the section entitled "General Information and Recent Developments" on page 141 of the Base Prospectus is hereby deleted in its entirety and replaced with the following:

"Other than the matters disclosed under the subsection entitled "Tax examinations and assessments" in Note 23 of the Issuer's 2017 Audited Consolidated Financial Statements set out on page 189 of the Issuer's 2017 Annual Report, and the matters disclosed (with the exception of the subsection entitled "Other matters") in Note 26 of the 2017 Audited Consolidated Financial Statements set out on pages 193 and 194 of the Issuer's 2017 Annual Report and in each case incorporated by reference herein, as updated by the litigation matters disclosed in Note 11 of the Issuer's Second Quarter 2018 Financial Statements set out on page 85 of the Issuer's Second Quarter 2018 Report to Shareholders and incorporated by reference herein, there are no, nor have there been any governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened of which the Issuer is aware) which may have, or have had during the twelve months prior to the date of this document, individually or in the aggregate, a significant effect on the financial position or profitability of the Issuer or of the Issuer and its subsidiaries taken as a whole".

UPDATES TO THE SUMMARY TO THE PROGRAMME

The Summary to the Programme included in the Base Prospectus is made up of disclosure requirements known as "Elements". These elements are numbered in Sections A to E (A.1 - E.7).

Following the release of RBC's Second Quarter 2018 Report to Shareholders, Element B.12 of the Summary to the Programme is updated as set out below:

B.12	Key Historical Financial Information; no material adverse change and no significant change statements:	With the exception of the figures for return on common equity, information in the tables below for the years ended October 31, 2017 and 2016 and for the six-month periods ended April 30, 2018 and 2017 have been extracted from the Issuer's 2017 audited consolidated financial statements and the unaudited interim condensed consolidated financial statements for the six-month period ended April 30, 2018, respectively, which have been prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board and are incorporated by reference in the Base Prospectus. The amounts under return on common equity for the years ended October 31, 2017 and 2016 and for the six-month periods ended
		Quarter 2018 Management's Discussion and Analysis, respectively:

Selected Consolidated Balance Sheet Information							
	As at April 30, 2018	As at October 31, 2017	As at October 31, 2016				
	(in millions of Canadian dollars)						
Loans, net of allowance for loan losses	551,393	542,617	521,604				
Total assets	1,274,778	1,212,853	1,180,258				
Deposits	822,048	789,635	757,589				
Other liabilities	366,329	338,309	340,314				
Subordinated debentures	9,068	9,265	9,762				
Non-controlling interest in subsidiaries	600	599	595				
Equity attributable to shareholders	75,425	73,829	71,017				

Condensed Consolidated Statement of Income Information

	Six-months ended April 30, 2018	Six-months ended April 30, 2017	Year ended October 31, 2017	Year ended October 31, 2016
	(in millions of Canadia	an dollars, except per	share amounts and pe	ercentage amounts)
Net interest income	8,866	8,522	17,140	16,531
Non-interest income ¹	12,016	11,536	23,529	22,264
Total revenue ¹	20,882	20,058	40,669	38,795
Provision for credit losses ²	608	596	1,150	1,546
Insurance policyholder benefits, claims and acquisition expense	1,257	1,273	3,053	3,424
Non-interest expense ¹	11,093	10,646	21,794	20,526
Net Income	6,072	5,836	11,469	10,458
Earnings per share				
– basic	\$4.08	\$3.84	\$7.59	\$6.80
- diluted	\$4.07	\$3.82	\$7.56	\$6.78
Return on common equity (ROE) ^{3,,4}	17.7%	17.7%	17.0%	16.3%

1) Effective Q4 2017, service fees and other costs incurred in association with certain commissions and fees earned are presented on a gross basis in non-interest expense. Comparative amounts have been reclassified to conform with this presentation.

2) Under IFRS 9, PCL relates primarily to loans, acceptances, and commitments, and also applies to all financial assets except for those classified or designated as fair value through profit or loss (FVTPL) and equity securities designated as fair value through other comprehensive income (FVOCI). Prior to the adoption of IFRS 9, PCL related only to loans, acceptances, and commitments. PCL on loans, acceptances, and commitments is comprised of PCL on impaired loans (Stage 3 PCL under IFRS 9 and PCL on impaired loans under IAS 39) and PCL on performing loans (Stage 1 and Stage 2 PCL under IFRS 9 and PCL on loans not yet identified as impaired under IAS 39). Refer to the Credit risk section of the Issuer's Second Quarter 2018 Financial Statements for further details.

3) This measure may not have a standardized meaning under generally accepted accounting principles (GAAP) and may not be comparable to similar measures disclosed by other financial institutions. For further details, refer to the Key performance and non-GAAP measures section of the Issuer's 2017 Management's Discussion and Analysis and the Key performance and non-GAAP measures section of the Issuer's Second Quarter 2018 Management's Discussion and Analysis.

4) Average amounts are calculated using methods intended to approximate the average of the daily balances for the period. This includes Average common equity used in the calculation of ROE. For further details, refer to the Key performance and non-GAAP measures section of the Issuer's Second Quarter 2018 Management's Discussion and Analysis.

Statement of no significant or material adverse change Since October 31, 2017, there has been no material adverse change in the prospects of the Issuer and its subsidiaries taken as a whole.
Since April 30, 2018, there has been no significant change in the financial or trading position of the Issuer and its subsidiaries taken as a whole.

Following the DBRS rating changes, Element B.17 of the Summary to the Programme, in respect of DBRS, is updated as set out below:

B.17	Credit Ratings Assigned to the	The credit ratings assigned to the Issuer are:
	Issuer or its Debt Securities at the Request of or in Cooperation with the Issuer:	(i) A1 (long term senior debt), P-1 (short-term debt), Baa1 (subordinated debt), Baa2 (NVCC subordinated debt), Baa3 (preferred shares and NVCC preferred shares), each with a negative outlook, by Moody's Investors Services, Inc. ("Moody's USA"),
		(ii) AA- (long term senior debt), A-1+ (short-term debt), A (subordinated debt), A- (NVCC subordinated debt), BBB+ (preferred shares) and BBB/P-2 (NVCC preferred shares), each with a negative outlook, by Standard & Poor's Financial Services LLC (" S&P USA ");
		(iii) AA (long term senior debt), F1+ (short-term debt) and AA-(subordinated debt), each with a stable outlook, by Fitch Ratings, Inc. (" Fitch USA "); and
		(iv) AA (long term senior debt), R-1 (high) (short-term debt), A (high) (subordinated debt), A (low) (NVCC subordinated debt), Pfd-2 (high) (preferred shares) and Pfd-2 (NVCC preferred shares), each with a stable outlook, by DBRS Limited (" DBRS ").
		The Senior Notes issuable under the Programme have been generally rated A1 (P-1 for short term debt) by Moody's Canada Inc. (" Moody's Canada ") and AA- by S&P Global Ratings, acting through S&P Global Ratings Canada, a business unit of S&P Global Canada Corp. (" S&P Canada "). <i>Issue specific summary</i>
		[The Senior Notes to be issued [have been/are expected to be] rated: [Moody's Canada: [•]] [S&P Canada: [•]]
		[The Senior Notes to be issued have not been specifically rated.]

SUPPLEMENTARY OFFERING CIRCULAR

This page 9 of this Supplement (the "**2**nd **Supplementary Offering Circular**") constitutes a supplement to the Offering Circular and is prepared in connection with the Programme for the Issuance of Securities established by RBC.

Terms defined in the Offering Circular have the same meaning when used in this 2nd Supplementary Offering Circular. The 2nd Supplementary Offering Circular is supplemental to, and shall be read in conjunction with, the Offering Circular and any other prior supplements to the Offering Circular issued by RBC (together, the "**Offering Circular**").

NEITHER THE OFFERING CIRCULAR NOR THIS 2ND SUPPLEMENTARY OFFERING CIRCULAR TO THE OFFERING CIRCULAR HAVE BEEN REVIEWED OR APPROVED BY THE UK LISTING AUTHORITY AND THE OFFERING CIRCULAR DOES NOT CONSTITUTE A PROSPECTUS FOR THE PURPOSE OF DIRECTIVE 2003/71/EC AS AMENDED.

RBC accepts responsibility for the information in this 2nd Supplementary Offering Circular. To the best of the knowledge of RBC, having taken reasonable care to ensure that such is the case, the information contained in this 2nd Supplementary Offering Circular is in accordance with the facts and does not omit anything likely to affect the import of such information.

This 2nd Supplementary Offering Circular is supplemental to, and should be read in conjunction with, the Offering Circular and the documents incorporated by reference therein. This 2nd Supplementary Offering Circular is to be read in conjunction with the following sections of the 2nd Supplementary Prospectus (as amended herein):

- (i) Documents Incorporated by Reference;
- (ii) Statement of No Significant Change;
- (ii) Issuer Ratings;
- (iii) Benchmark Regulations;
- (iv) Canadian Bail-In Risk Factor; and
- (v) Amendment to Statement Regarding Governmental, Legal or Arbitration Proceedings;

which will be deemed to be incorporated by reference herein, save that references to "**Base Prospectus**" shall be deemed to be to the "**Offering Circular**" and references to "**2**nd **Supplementary Prospectus**" shall be deemed to be to the "**2**nd **Supplementary Offering Circular**".

To the extent that there is any inconsistency between (a) any statement in this 2nd Supplementary Offering Circular or any statement incorporated by reference into the Offering Circular by this 2nd Supplementary Offering Circular and (b) any other statement in, or incorporated by reference in, the Offering Circular, the statements in (a) above will prevail.

Save as disclosed in this 2nd Supplementary Offering Circular, no significant new factor, material mistake or inaccuracy relating to the information included in the Offering Circular which is capable of affecting the assessment of Non PD Notes issued under the Programme has arisen or been noted, as the case may be, since the publication of the Offering Circular.